

CMM 14h-2025

Conservation and Management Measure for Exploratory Fishing for Toothfish by a Korean-flagged Vessel in the SPRFMO Convention Area

The Commission of the South Pacific Regional Fisheries Management Organization;

RECALLING Article 22 of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean (the <u>Convention</u>) which provides that a fishery that has not been subject to fishing or has not been subject to fishing with a particular gear type or technique for ten years or more shall be opened as a fishery or opened to fishing with such gear type or technique only when the Commission has adopted cautious preliminary Conservation and Management Measures (CMMs) in respect of that fishery and, as appropriate, non-target and associated or dependent species, and appropriate measures to protect the marine ecosystem in which that fishery occurs from adverse impacts of fishing activities;

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

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

NOTING the conservation value of relevant SPRFMO CMMs which will apply to activities anticipated to be undertaken pursuant to this measure, including, *inter alia*, CMM 13-2024 (Exploratory Fisheries) on the Management of New and Exploratory Fisheries in the SPRFMO Convention Area, CMM 03-2023 (Bottom Fishing) on the Management of Bottom Fishing in the SPRFMO Convention Area and CMM 09-2017 (Seabirds) on Minimising Bycatch of Seabirds in the SPRFMO Convention Area;

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

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

NOTING that at its 12th meeting, the Scientific Committee discussed Korea's Fisheries Operation Plan (SC12-DW02 rev3) and:

- a. noted the Republic of Korea proposal and its Fisheries Operation Plan for an exploratory demersal longline fishery for toothfish in the SPRFMO in South Central Pacific Ocean;
- 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. approved the Data Collection Plan included in the proposal; and
- e. advised the Commission that the proposal is acceptable in terms of Articles 2 and 22, CMM 13-2024 (exploratory fisheries), CMM 03-2023 (bottom fisheries) and the BFIAS (Annex 13).

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



Objectives

- 1. To provide for exploratory bottom longline fishing for toothfish in certain areas of the Convention Area for the purpose of conducting scientific research to meet the following objectives:
 - a) Distribution and abundance

The main objective of the research is to determine the distribution and abundance of Antarctic and/or Patagonian toothfish in the southern SPRFMO Area. The proposed research will identify and then target bathymetric features within fishable depths of a study area that straddles SPRFMO strata L, M, N, O, P, Q, R, and S as shown in Annex I, collecting toothfish catch/effort and biological data that will estimate local biomass and eventually support more formal stock assessments.

b) Stock structure

A closely related objective of the research is to better understand the stock structure of toothfish in the southern SPRFMO Area as it relates to adjacent stocks in CCAMLR Subareas 88.1, 88.2, and 88.3. It is necessary to determine the stock structure of toothfish in the southern SPRFMO Area, and the nature of their relationship to toothfish in the adjacent CCAMLR Subareas, in order to properly interpret tag release and recapture data and to properly account for removals in future stock assessments.

c) Bycatch and Vulnerable Marine Ecosystems (VMEs)

A third objective is to collect data on the spatial and depth distributions of bycatch species to complement bycatch mitigation measures. An improved understanding of bycatch distribution and trophic relationships and ecosystem function will build on the development of ecosystem-based fisheries management approaches in the future.

Definitions

- 2. For the purpose of this measure:
 - a. "toothfish" means both Patagonian toothfish (*Dissostichus eleginoides*) and Antarctic toothfish (*Dissostichus mawsoni*);
 - b. "bottom longline" means standardised trotline bottom longline gear as specified in the <u>CCAMLR</u> Gear Library;
 - c. "observer" means any observer from a national observer programme or service provider accredited according to the provisions of CMM 16-2025 (Observer Programme).

Application

- 3. This measure applies to exploratory fishing for toothfish as described in SC12-DW02_rev3 "Korea Operational Plan for Toothfish".
- 4. None of the obligations in this measure exempt a Member or CNCP from complying with any Convention obligation or any other CMMs adopted by the Commission.

Details and Specification of Exploratory Fishing Activities

5. Fishing for toothfish, using the bottom longline method (trotline system), may be conducted in the exploratory fishing research blocks identified in Table 1 below.



Table 1: Corner positions for the eight exploratory fishing research blocks

Exploratory fishing research block	Latitude	Longitude
L	56° 00.0′ S	155° 00.0′ W
	56° 00.0′ S	150° 00.0′ W
	60° 00.0′ S	150° 00.0′ W
	60° 00.0′ S	155° 00.0′ W
M	56°00.0′ S	145° 00.0′ W
	56° 00.0′S	150° 00.0′ W
	60° 00.0′S	145° 00.0′ W
	60° 00.0′S	150° 00.0′ W
N	52° 00.0′ S	140° 00.0′ W
	52° 00.0′ S	145° 00.0′ W
	60° 00.0′ S	140° 00.0′ W
	60° 00.0′ S	145° 00.0′ W
0	52°00.0′ S	135° 00.0′ W
	52° 00.0′S	140° 00.0′ W
	60° 00.0′S	135° 00.0′ W
	60° 00.0′S	140° 00.0′ W
P	52°00.0′ S	135° 00.0′ W
	52° 00.0′S	130° 00.0′ W
	60° 00.0′S	130° 00.0′ W
	60° 00.0′S	135° 00.0′ W
Q	52°00.0′ S	130° 00.0′ W
	52° 00.0′S	125° 00.0′ W
	60° 00.0′S	125° 00.0′ W
	60° 00.0′S	130° 00.0′ W
R	52°00.0′ S	125° 00.0′ W
	52° 00.0′S	120° 00.0′ W
	60° 00.0′S	120° 00.0′ W
	60° 00.0′S	125° 00.0′ W
S	52°00.0′ S	120° 00.0′ W
	52° 00.0′S	115° 00.0′ W
	60° 00.0′S	115° 00.0′ W
	60° 00.0′S	120° 00.0′ W

6. The Scientific Committee will review results each year at its annual meeting and advise the Commission on progress, including whether any stock indicators show sustainability concerns and what, if any, additional measures might be required to manage bycatch of deepwater sharks or other non-target species.

Total Allowable Catch

7. The annual toothfish total allowable catch shall not exceed 240 tonnes (greenweight) in each of 2025, 2026, and 2027 unless the Scientific Committee at its 2025 or 2026 meetings advises a lower TAC. Catches will be limited to 40 tonnes per stratum (green weight, both species of toothfish combined). The exploratory fishing shall be ceased in that year even if some strata have not been explored, once the annual catch limit of 240 tonnes has been caught. Fish that are tagged and returned alive to the sea shall not be counted against the catch limit.



- 8. When suitable fishable ground has been identified, research fishing sets will be deployed in a cluster composed of up to 5 sets, each containing up to 6,900 hooks. Clusters will be no more than 5 sets, with a maximum of 6,900 hooks for any set, and no more than 17,250 hooks per cluster. Following the successful retrieval of all fishing sets in a cluster, the vessel will move on to a new fishable location before beginning a new cluster. Clusters must be separated by at least 10 nautical miles (approximately 18.52 km) to effectively distribute fishing effort.
- 9. Catch and effort shall be monitored on a set-by-set basis.
- 10. Fishing activity undertaken pursuant to this measure will not be considered to be a precedent for future allocation decisions.

Authorised Vessels

- 11. The fishing vessel *Greenstar* shall be authorized to undertake fishing pursuant to this measure. In the event that *Greenstar* is unavailable, an alternate vessel of similar capability and capacity shall be authorised to undertake fishing pursuant to this measure only after the vessel has been notified by Korea to the Executive Secretary.
- 12. In determining the suitability of an alternate vessel Korea shall consider, inter alia:
 - a) the vessel's ability to conduct the exploratory fishing proposed in paper SC12-DW02_rev3;
 - b) the master and crew's history and track record in comparable research or exploratory fishing;
 - c) the ability of the vessel to provide suitable accommodation, facilities, and operating support for an observer;
 - d) the ability of the vessel to maintain rigorous mitigation of risks to seabirds and marine mammals;
 - e) any history of Illegal, Unreported or Unregulated (IUU) fishing by the vessel. A vessel on the SPRFMO IUU list or the IUU list of another competent regional fisheries management organisation shall not be accepted as an alternate vessel.

Management Measures

- 13. Fishing pursuant to this measure shall only take place in accordance with SC12-DW02_rev3 "Korea Operational Plan for Toothfish".
- 14. Because of the likelihood of shared stocks of toothfish, fishing pursuant to this measure shall, as far as possible, be conducted consistent with relevant measures in force in the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) Area, including the following:
 - a) CCAMLR's protocol for research longline fishing on small, isolated features (see <u>CM 41-10</u>, 2014). Consistent with CCAMLR surveys in adjacent areas, the following rules shall apply:
 - i. clusters of bottom longline sets are allowed, with no rules for minimum separation between sets;
 - ii. no more than 5 sets per cluster;
 - iii. no more than 6,900 hooks shall be in a set;
 - iv. no more than 17,250 hooks shall be in a cluster;
 - v. clusters of sets will not be within 10 nm of a cluster already set within a voyage or a fishing season (pre- and post-spawning). This will be calculated as the minimum distance between any part of any set in any two clusters.



- b) A minimum tagging rate of three fish of each *Dissostichus* species per greenweight (live weight) tonne of retained catch shall be implemented. The rules applied by CCAMLR in the immediately adjacent CCAMLR SSRUs 'north region', where tagged fish were released starting in early 2015, shall be applied (<u>CM 41-01 Annex C</u>). These rules require a minimum tagging size overlap statistic (a comparison between the observed length frequency from vessel biological information and the size composition of fish returned alive with tags, see <u>CCAMLR's calculator</u>) of at least 60% once 30 or more *Dissostichus* of a species have been successfully released with tags.
- 15. Standardised trotline bottom longline gear (see the CCAMLR gear library) shall be used for all fishing pursuant to this measure.
- 16. If 250kg or more of deepwater sharks (all species in class Chondrichthyes combined on all sets within the cluster) are caught in a cluster of sets, then no further clusters will be set within 10 nm of the location of that cluster until the information from that voyage has been reviewed by the Scientific Committee.

Data Collection

- 17. In undertaking fishing pursuant to this measure the vessel shall, to the extent possible, collect all the data as set out in the paper submitted to the Scientific Committee (SC12-DW02_rev3) and any further data requested by the Scientific Committee for its annual evaluation and assessment.
- 18. Any vessel authorised to undertake fishing pursuant to this measure shall be fully capable of complying with SPRFMO data standards and reporting as required under CMM 02-2025 (Data Standards) and CMM 03-2025 (Bottom Fishing), and CCAMLR CM 22-07 (2013) related to encounters with potential VMEs. Korea will submit all data using the CCAMLR C2 catch and effort form for longline to at least the standard required by CMM 02-2025 (Data Standards). In addition, the observer aboard the vessel shall complete, in full, CCAMLR e-Longline forms.

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

- 19. A vessel fishing pursuant to this measure shall use the following mitigation methods:
 - a) the vessel shall use trotline line as described in the <u>CCAMLR gear library</u> with weighting of 5-10kg of steel weights at the end of each branch line;
 - b) tori (streamer) lines shall be deployed above the lines being set;
 - c) all lines shall be set in accordance with CMM09-2017 (Seabirds);
 - d) there shall be no dumping of offal while lines are being set or while lines being hauled;
 - e) discarding shall take place only at the end of a haul or while steaming; and no biological material shall be discarded for at least 30 minutes before the start of any set or during any set;
 - f) discarding may only take place from the opposite side of the vessel from the hauling position;
 - g) a bird exclusion device (BED) shall be used to prevent birds entering the hauling area, to the extent allowed by sea ice and prevailing weather;
 - h) other methods such as water spray, movement, et cetera, shall be used as appropriate to deter aggressive feeders from approaching the line.
- 20. The following information shall be collected for marine mammals, seabirds, turtles, and other species of concern:
 - a. standardised seabird and marine mammal abundance counts should be undertaken by observers during the setting and hauling of each line;
 - b. other opportunistic observations, photography and identification of marine mammals shall be undertaken in collaboration with crew;



- c. the observer shall have a target of observing at least 10% of hooks hauled for marine mammal, seabird and turtle captures;
- d. all marine mammals, seabirds, turtles, and other species of concern captured shall be identified, and photographs taken of all live birds released and any birds colliding with the ship that can be recovered;
- e. all dead birds shall be retained for formal identification and necropsy.
- 21. All information specified in CMM 03-2025 (Bottom Fishing) relating to bottom fisheries and all data necessary to assess potential encounters with VMEs shall be collected to enable assessment and monitoring of the distribution of marine ecosystem in the areas fished.

Monitoring

- 22.A vessel undertaking fishing pursuant to this measure shall carry two observers, as well as a dedicated assistant experienced in at-sea scientific data collection to assist the observers with biological measurement and data collection. Observer data shall be collected in accordance with SPRFMO data standards (CMM 02-2025) and shall include gear deployment and retrieval data, catch and effort information, biological data collection, and information on marine mammals, seabirds, reptiles and other species of concern.
- 23. The scientific observers shall examine the existence of the target species in the research area and evaluate the possible impacts of the exploratory fishery on the target stock, associated or dependent species, and marine ecosystems. The scientific observers shall also record encounters with VMEs and evaluate the effectiveness of related mitigation measures and as well as the mitigation measures for marine mammals, seabirds, turtles, sharks, skates and rays and other species of concern.
- 24. The vessel shall also be equipped with several tamperproof Automatic Location Communicators that meet SPRFMO standards for VMS reporting (every hour) and can respond to polling at any rate if required.

Review

25. This CMM shall expire following the regular meeting of the Commission in 2028.



Annex 1

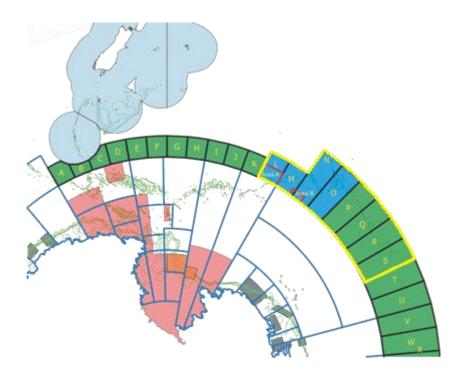


Figure 1: Proposed boundaries of research fishing in the southern SPRFMO Area by the Korean vessel, 2025-2027.