

CMM 14e-2021

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

The Commission of the South Pacific Regional Fisheries Management Organisation;

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

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

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

NOTING the conservation value of relevant SPRFMO CMMs which will apply to activities anticipated to be undertaken pursuant to this measure, including, *inter alia*, CMM 13-2021 (Exploratory Fisheries) on the Management of New and Exploratory Fisheries in the SPRFMO Convention Area, CMM 03-2022 (Bottom Fishing) on the Management of Bottom Fishing in the SPRFMO Convention Area and CMM 09-2017 (Seabirds) on Minimising Bycatch of Seabirds in the SPRFMO Convention Area;

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

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

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

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



Objectives

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

Definitions

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

Application

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

Details and specification of exploratory fishing activities

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

¹ Also referred to as demersal longline.



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

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

Duration, Catch and Effort Limits

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

Management Measures

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

Authorised Vessels

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



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

Data Collection

15. In undertaking fishing pursuant to this measure, the vessel shall collect all the data required by current CMMs including CMM 02-2022 (Data Standards) and CMM 03-2022 (Bottom Fishing) and, to the extent possible, all the data as set out in the paper submitted to the Scientific Committee (SC8-DW05_Rev2). The vessel shall also collect, to the extent possible, any further data requested by the Scientific Committee for its annual evaluation.
16. The vessel shall tag and release *Dissostichus* spp., continuously while fishing, at a rate of 5 fish per tonne green weight. All released toothfish must be double-tagged, using tags sourced from the CCAMLR secretariat. All toothfish that are not tagged must be retained.
17. The length frequency of tagged toothfish shall reflect the length frequency of the catch. The vessel shall achieve a minimum tag-overlap statistic of 60% for each species of *Dissostichus*.
18. Recaptured tagged fish (i.e. fish caught that have a previously inserted tag) shall not be re-released, even if at liberty for only a short period.

Marine mammals, seabirds, and other species of concern

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

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

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



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

Seal and cetacean bycatch mitigation measures:

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

Shark, skate, and macrourid bycatch mitigation measures:

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

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

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

VME

22. All information specified in CMM 03-2022 (Bottom Fishing) relating to bottom fisheries and all data necessary to assess encounters with VMEs shall be collected to enable assessment and monitoring of the distribution of marine ecosystem in the areas fished.



Monitoring

23. A vessel undertaking fishing pursuant to this measure shall carry a scientific observer on-board, as well as a dedicated assistant experienced in at-sea scientific data collection to assist the observer with biological measurement and data collection. Observer data shall be collected in accordance with the SPRFMO Observer data standard and shall include gear deployment and retrieval data, catch and effort information, biological data collection, and information on marine mammals, seabirds, and other species of concern.
24. The scientific observer shall record all relevant biological data as outlined in CMM 02-2022 (Data Standards) to enable the evaluation of existence of the target species in the research area and evaluate the possible impacts of the exploratory fishery on the target stock, associated or dependent species, and marine ecosystems, as well as record encounters with VMEs, and document the effectiveness of related mitigation measures and how the mitigation measures for marine mammals, seabirds, sharks, skates and other species of concern are followed as specified in paragraph 20.
25. The vessel shall also be equipped with several tamperproof Automatic Location Communicators that meet SPRFMO standards for VMS reporting (every hour) and can respond to polling at any rate if required.
26. Electronic Monitoring (CCTV) will be used to monitor all setting and hauling activities, including monitoring of target and by-catch in the hauling bay. The tamper-proof system shall record sensor and video data overlaid with accurate GPS and timeline stamp on the video record.

Environmental data collection

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

Review

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