

Measures by the South Pacific Regional Fisheries Management Organisation (SPRFMO) which consider marine ecosystem and biodiversity conservation

By SPRFMO Secretariat

Background

The “Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean” (SPRFMO Convention) came into force in August 2012. Commission Members currently are: Australia, Chile, China, Cook Islands, Cuba, Ecuador, European Union, Denmark in respect of the Faroe Islands, Korea, New Zealand, Peru, Russian Federation, Chinese Taipei, and Vanuatu.

The organisation is mandated to address issues related to the conservation of biodiversity and ecosystems. This is reflected in the preamble of the SPRFMO Convention, where the Contracting Parties are “conscious of the need to avoid adverse impacts on the marine environment, preserve biodiversity, maintain the integrity of marine ecosystems and minimise the risk of longterm or irreversible effects of fishing”; “mindful that effective conservation and management measures must be based on the best scientific information available and the application of the precautionary approach and an ecosystem approach to fisheries management”; and “convinced that the long-term conservation and sustainable use of fishery resources in the South Pacific Ocean and the protection of the marine ecosystems in which those resources occur may best be achieved by the conclusion of an international convention for that purpose”.

The broad scope of the organisation is reflected in a number of Articles of the Convention and in the Conservation and Management Measures (CMMs) adopted by the Commission. This paper refers to those Articles and CMMs that have the most relevance to the Aichi Biodiversity Targets and to the UN Sustainable Development Goal 14.

Fisheries

The major fisheries managed by the SPRFMO are pelagic and located in the East Pacific, off the coast of Latin America; they predominantly target Jack mackerel (*Trachurus murphyi*) and jumbo giant squid (*Dosidicus gigas*).

There also exists a more modest deepsea fishery in the international waters off New Zealand and Australia, catching mainly orange roughy (*Hoplostethus atlanticus*). Bottom fisheries in the South Pacific Ocean started in the 1970s, but, given the current low level of bottom fishing effort, it is generally thought that the deepwater stocks are at present not likely to be subject to overfishing. The Scientific Committee is in the process of developing stock assessment models for orange roughy, and assessments for other species will follow.

Ecosystem and biodiversity considerations in the SPRFMO Convention

Article 3 of the Convention explicitly refers to the need of environmental protection, e.g. requiring that the decision-making by the Commission:

applies the following principles (among others):

- (a)(ii) fishing shall be commensurate with the sustainable use of fishery resources taking into account the impacts on non-target and associated or dependent species and the general obligation to protect and preserve the marine environment;*
- (a)(iv) full and accurate data on fishing, including information relating to impacts on the marine ecosystems in which fishery resources occur, shall be collected, verified, reported and shared in a timely and appropriate manner;*

- (a)(vii) marine ecosystems shall be protected, in particular those ecosystems which have long recovery times following disturbance;*
- (a)(x) pollution and waste originating from fishing vessels, discards, catch by lost or abandoned gear and impacts on other species and marine ecosystems shall be minimised;*

Article 3, paragraph 2 specifies that

- a) The precautionary approach as described in the 1995 Agreement and the Code of Conduct shall be applied widely to the conservation and management of fishery resources in order to protect those resources and to preserve the marine ecosystems in which they occur, and in particular the Contracting Parties, the Commission and subsidiary bodies shall:
 - (i) be more cautious when information is uncertain, unreliable, or inadequate;*
 - (ii) not use the absence of adequate scientific information as a reason for postponing or failing to take conservation and management measures; and*
 - (iii) take account of best international practices regarding the application of the precautionary approach, including Annex II of the 1995 Agreement and the Code of Conduct.**
- b) An ecosystem approach shall be applied widely to the conservation and management of fishery resources through an integrated approach under which decisions in relation to the management of fishery resources are considered in the context of the functioning of the wider marine ecosystems in which they occur to ensure the longterm conservation and sustainable use of those resources and in so doing, safeguard those marine ecosystems.*

In particular, under Article 10.2, the functions of the Scientific Committee include:

- c) provide advice and recommendations to the Commission and its subsidiary bodies on the impact of fishing on the marine ecosystems in the Convention Area including advice and recommendations on the identification and distribution of vulnerable marine ecosystems, the likely impacts of fishing on such vulnerable marine ecosystems and measures to prevent significant adverse impacts on them;*
- d) encourage and promote cooperation in scientific research in order to improve knowledge of the state of fishery resources and the marine ecosystems in the Convention Area including knowledge in relation to fishery resources straddling the Convention Area and areas under national jurisdiction;*

Under paragraph 4, Article 10 details that *“The Commission, taking into account any recommendations from the Scientific Committee, may engage the services of scientific experts to provide information and advice on the fishery resources and marine ecosystems in the Convention Area and any related matters that may be relevant to the Commission’s consideration of conservation and management measures”*.

Article 20 stipulates that the CMMs adopted by the Commission shall include measures to (among others):

- d) protect the habitats and marine ecosystems in which fishery resources and non-target and associated or dependent species occur from the impacts of fishing, including measures to prevent significant adverse impacts on vulnerable marine ecosystems and precautionary measures where it cannot adequately be determined whether vulnerable marine ecosystems are present or whether fishing would cause significant adverse impacts on vulnerable marine ecosystems.*

Furthermore, Article 20 necessitates that in determining a total allowable catch or total allowable fishing effort for any fishery resource, the Commission shall take into account (among other factors) *“catch of non-target and associated or dependent species and impacts on the marine ecosystems in which the fishery resource occurs”*.

Article 20 (paragraph 5) also foresees that *“the Commission shall adopt measures to be applied on an emergency basis, [...] where fishing presents a serious threat to the sustainability of fishery resources or the marine ecosystem in which these fishery resources*

occur or when a natural phenomenon or human caused disaster has, or is likely to have, a significant adverse impact on the status of fishery resources to ensure that fishing does not exacerbate such threat or adverse impact”.

The Convention (Article 22) also establishes high standards for new or exploratory fisheries:

- 1 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 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.*
- 2 Such preliminary conservation and management measures, which may include requirements regarding notification of intention to fish, the establishment of a development plan, mitigation measures to prevent adverse impacts on marine ecosystems, use of particular fishing gear, the presence of observers, the collection of data, and the conduct of research or exploratory fishing, shall be consistent with the objective and the conservation and management principles and approaches of this Convention. The measures shall ensure that the new fishery resource is developed on a precautionary and gradual basis until sufficient information is acquired to enable the Commission to adopt appropriately detailed conservation and management measures.*

No measure will have any effect unless it is properly implemented, monitored and enforced. These requirements are also addressed in detail in the SPRFMO Convention, along with provisions for data reporting, transparency, cooperation, and others.

SPRFMO Conservation and Management Measures

In the short period of its existence, SPRFMO has developed 15 CMMs which address the application of technical measures, requirements for data collection and reporting, as well as monitoring, control and surveillance of the SPRFMO fisheries. In the following, the most relevant CMMs for biodiversity and vulnerable marine ecosystem issues are introduced.

CMM 4.02 on Standards for the Collection, Reporting, Verification and Exchange of Data requires the reporting of discards by species as well as any incidental catches of marine mammals, seabirds, reptiles or other species of concern. Trawl, purse seine and bottom long line fisheries also have to report the presence of benthic materials in the gear and record sensitive benthic species in the catch, particularly vulnerable or habitat-forming species such as sponges, sea-fans or corals.

CMM 4.03 for the Management of Bottom Fishing was adopted in accordance with Article 8 and Article 20 on Conservation and Management Measures (see above). Consequently, this CMM closely follows the relevant UNGA resolutions and promotes the sustainable management of bottom fishing, protection of marine ecosystems and prevention of significant adverse impacts on VMEs. It applies to all gear types likely to come into contact with the sea floor or benthic organisms. CMM 4.03 stipulates the requirement for flag States to prepare a bottom fishing footprint as well as a bottom fishing impact assessment before authorising their vessels to participate in the SPRFMO bottom fisheries. Furthermore, bottom fishing is restricted to the bottom fishing footprint and catches are limited to a level that does not exceed the annual average levels of that Member or CNCP over a historic five-year period from 2002-2006.

Observers are required for bottom fishing operations, in particular for bottom trawling where 100% observer coverage is prescribed. Vessels encountering VMEs are instructed to cease bottom fishing activities within five nautical miles of the encounter and to report the encounter to the Secretariat. The Scientific Committee is tasked with assessing VME encounters as well as current and proposed bottom fishing regarding possible significant adverse impacts (SAIs) and recommending measures to prevent such impacts. Finally, the Commission considers whether a proposed bottom fishing activity can be authorised and which measures are required.

SPRFMO has also adopted a **Bottom Fishing Impact Assessment Standard (BFIAS)** which is intended to constitute the standardised approach to be taken by all participants when preparing risk and impact assessments for high seas bottom fishing activities in the SPRFMO area. The BFIAS aims at providing protection for VMEs by ensuring that management decisions are informed by reliable and robust impact assessments based on the best data available. In addition, methods for the identification, location and prediction of VMEs in the South Pacific are under review and development by the Scientific Committee.

Currently only two SPRFMO Members, Australia and New Zealand, have submitted both a bottom fishing footprint and the associated impact assessment. Those Members are therefore the only ones that are currently allowed to fish with bottom gear in the SPRFMO Area but only within their bottom footprint.

CMM 1.02 for Gillnets prohibits the use of large-scale pelagic driftnets and all deepwater gillnets. **CMM 4.09 for Minimising Bycatch of Seabirds** requires that vessels using demersal longlines or trawl gear implement a number of seabird mitigation measures, and record and report data on all interactions with seabirds. The Scientific Committee reviews these data annually and provides advice to the Commission on possible improvements to further mitigate seabird interactions. SPRFMO closely collaborates with ACAP on seabird matters and both secretariats have signed a MoU to that purpose.

CMM 4.13 for the Management of New and Exploratory Fisheries applies to any fisheries that have not been subject to fishing in the previous ten years, or to gear types or techniques not in use for the previous ten years. Exploratory fisheries require the explicit permission of the Commission. The proponent has to submit a Fisheries Operation Plan to the Scientific Committee which includes, among other things, details of non-target and associated or dependent species and the marine ecosystem in which the fishery occurs, the extent to which these would likely be affected by the proposed fishing activity and any measures that will be taken to mitigate these effects. The Scientific Committee is requested to review the Fisheries Operation Plan, provide advice to the Commission, and develop a Data Collection Plan to which the exploratory fishery, once permitted, has to adhere. After three years, the Fisheries Operation Plan expires and a new one may be developed. After 10 years, however, such a fishery can only continue under a CMM adopted by the Commission.

Currently, the Commission has authorised one exploratory fishery in the SPRFMO Convention Area, for toothfish (under CMM 4.14). It

It should be noted that SPRFMO has adopted a number of measures in accordance with Article 27 of the Convention on Monitoring, Compliance and Enforcement which requires that the *“Commission shall establish appropriate cooperative procedures for effective monitoring, control and surveillance of fishing and to ensure compliance with this Convention and the conservation and management measures adopted by the Commission”*. In particular, SPRFMO has adopted CMM 4.04 (Establishing a List of Vessels Presumed to have Carried Out IUU Fishing Activities), CMM 4.05 (Establishment of the Commission Record of Vessels Authorised to Fish), CMM 2.06 (Establishment of a Vessel Monitoring System), CMM 2.07 (Minimum Standards for of Inspections in Port), CMM 4.10 (Establishment of a Compliance and Monitoring Scheme), CMM 3.04 (Relating to Boarding and Inspection Procedures), CMM 3.05 (Regulation of Transshipment and Other Transfer Activities), and CMM 4.15 (Vessels without Nationality).