

## 8<sup>TH</sup> MEETING OF THE SPRFMO COMMISSION

*Port Vila, Vanuatu, 14 to 18 February 2020*

### COMM 8 – Doc 08.1

#### SC Responses to the Performance Review Recommendations

*Scientific Committee*



## Annex 10 SPRFMO SC7- Report

Paragraph	Recommendation of the Panel This only refers to recs seeking action – eg ‘recommends’ or ‘encourages’ or ‘urges’	Resp. body	SC Response	When
Conservation and management				
3.1 –Status of fishery resources				
51 (d)	<b>Recommends</b> that the Commission, Scientific Committee and Members of the Commission accelerate efforts to advance robust stock assessments of Orange roughy and Jumbo flying squid and give priority to collecting the necessary data for stock assessment purposes.	SC	<p>Orange Roughy:</p> <p>In accordance with the SC workplan, progress has been made towards orange roughy stock assessment in SPRFMO. Specifically, new assessments for three socks on the Louisville Seamount Chain were tabled and accepted by SC7, with a precautionary yield forming part of the relevant recommendations to the Commission. New Zealand tabled an assessment for the ORH7A stock, which contains the Westpac Bank proportion in the SPRFMO area. SC7 has provided advice on a range of precautionary catch limits for this portion of the stock to the Commission. Progress towards more robust assessment of Tasman Sea stocks has also been made, with the North West Challenger and potentially Lord Howe Rise, if the time and resources permit to be assessed in 2020 using new length and age data.</p> <p>Jumbo flying squid:</p> <p>Developments have taken place on separate area based stock assessments and genetic studies for jumbo flying squid but there is still work to do including understanding the phenotype dynamics, improving the quantity and quality of fishery data and biological sample collection, and development of a whole stock assessment methodology.</p>	2020



			The SC agreed to develop data templates to support stock assessment and monitor the fishery of jumbo flying squid and organising a workshop on the study of fishing effort dynamics and fishing power estimates.	
51 (e)	<b>Notes</b> that there is little information on the status of non-target and bycatch species or the impact of SPRFMO fisheries on associated or dependent species and <b>Urges</b> , as a first step, that the Commission increase data collection in order to improve understanding of the impacts of fishing on associated and dependent species.	SC	<p>The SC has made considerable progress on understanding potential relative risks to non-target and bycatch species through two ecological risk assessments; one covering 101 deepwater chondrichthyans (sharks, rays and chimaeras) thought to interact with demersal fishing gears and the other covering 159 demersal teleost species.</p> <p>Based on the results of the risk assessment for deepwater chondrichthyans, SC has recommended that biological data collection should be strengthened and that attempts are made to improve the species-level identification of sharks using available guides. The results of the ERA for SPRFMO teleosts have been used to undertake preliminary categorisation of species into the SPRFMO stock assessment framework, as well as to inform efforts towards better stock structure delineation for key species. Future ecological risk assessments are likely to be expanded to include marine mammals, seabirds, marine reptiles and other species of interest or concern. Such ERAs could consider the use of more powerful and quantitative risk assessment methodologies that are able to estimate cumulative impacts across fisheries.</p> <p>Limited progress has been made towards quantitative assessment of seabird interactions and mortality across all gears in the SPRFMO area. The SPRFMO Secretariat has begun compiling bycatch records for annual presentation to the SC.</p>	



3.2 Ecosystem Approach				
68 (c)	<p><b>Recommends</b> that the Scientific Committee develop a workplan to progress fisheries management decisions, which takes into account a more holistic ecosystem-based approach. Elements of that workplan could include:</p> <p>A review of available tools and processes to lead to an integrated ecosystem fisheries management approach;</p> <p>Identification of environmental data that will assist in both applying an ecosystem approach and to assessing the effect of climate change impacts and the subsequent consideration of management decisions;</p> <p>A review of the Jack mackerel fishery to determine the impact of the fishery on non-target species and habitat, to identify gaps in habitat, biological and bycatch data, and a programme for collection of that data;</p> <p>Consideration of the use of cost and resource effective ecosystem-based models; and</p> <p>Exploration of cooperation mechanisms with other bodies that may assist or benefit SPRFMO in the development of a relevant ecosystem-based fisheries management approach that is both cost and resource effective for SPRFMO.</p>	SC	<p>The SC multiannual workplan does include many of these elements, although progress towards i., iv and v. could be strengthened.</p> <p>SC reviewed and revised the SPRFMO Bottom Fishery Impact Assessment Standard during 2018-19, with the revised BFIAS being agreed by SC7. Importantly, the scope of the BFIAS has been expanded to require consideration of the impacts of bottom fishing on marine mammals, seabirds, marine reptiles and other species of interest/concern, as well as retaining its requirement for bottom fishing impact assessment to consider the impacts of bottom fishing on deepwater fish stocks and vulnerable marine ecosystems. The revised BFIAS is now more aligned with the objective to implement an ecosystem approach, as required by the SPRFMO Convention.</p> <p>The members of the HMWG have agreed on a Workplan to be developed in the next 5 years including groups of specialists to develop an interdisciplinary ontogeny approach; Retrospective analysis (data bases); Training, sharing and capacity building; Tools and Platforms.</p>	2020-2025
68 (e)	<p><b>Recommends</b> as an initial step that the Scientific Committee identify the research and data collection required for it to develop advice to inform the Commission on what action may be required to take into account the observed or expected impacts associated with a rapidly changing climate.</p>	SC	<p>One of the specific objectives of the Habitat Monitoring Working Group (HMWG) is to study the relationships between jack mackerel habitat and environment (El Niño, Regime shift, Climate change). In this regard, climate is considered to be the most important driving factor in the Humboldt Current System (HCS).</p> <p>The squid WG also recommended that more observer data are needed to estimate the difference in size composition of catch among fishing vessels and the sampling methods could be improved.</p>	



			Considering that climate change may result in substantial changes in ecosystem structure, SC <b>encourages</b> Members to collect and make available environmental data to deliver on the identified environmental indicators associated to support sound decision making on fisheries management.	
<b>3.3 Data Collection and Sharing</b>				
100 (b)	<b>Recommends</b> the Commission and Scientific Committee regularly review data collection requirements to ensure they align with the needs of new or revised CMMs, while recognising the challenges to SPRFMO database management through the addition of new data collection, access and storage requirements and <b>Notes</b> the need for investment in building the capacity of the SPRFMO database to meet these challenges.	COMM FAC SC	The SC <b>acknowledges</b> that a robust, accessible and comprehensive database supports the SC in fulfilling its mandate.  Furthermore, considering the recent development of new CMMs and the added complexity in terms of data requirements on the revised CMMs, the SC <b>agrees</b> with this recommendation and supports the need for investing in building the capacity of the SPRFMO database.	
Commission & Subsidiary Bodies Responses	COMM7: Instructs SC to provide advice to the Commission sufficient to enable its consideration of this recommendation.  FAC: The FAC notes that in order to have a database serving its purpose, the Commission should invest accordingly on the needs of having an operational database.			
100 (c)	<b>Recommends</b> that the Commission strengthen the timelines for the submission and independent verification of catch and effort data for the Jumbo flying squid fishery and <b>Urges</b> such measures to be adopted together with a general management measure for that fishery.	COMM SC	The SC <b>acknowledges</b> that robust catch and effort data is essential for supporting a general management measure for the Jumbo flying squid fishery. Therefore, the SC agreed to develop data templates (including catch and effort data) to support stock assessment and monitor the fishery of Jumbo flying squid.  The SC <b>noted</b> that there are CMMs (CMM 02-2018, CMM 05-2019, CMM 06-2018, CMM 12-2018, CMM 16-2019) that request Members/CNCPs participating squid jigging fishery in the Convention Area to submit data including catch and effort data and transshipment data.  The SC <b>urges</b> the Commission to support the actions related to squid data in the multiannual SC workplan in order to deliver on the verification of catch and effort data.	
Commission Response	COMM7: Instructs SC to provide advice to the Commission sufficient to enable its consideration of this recommendation.			



100 (d)	<b>Recommends</b> that the Commission implement more effective and comprehensive bycatch data collection and reporting, particularly but not limited to dependent and associated species in each fishery and identified species of concern, the collection of sufficient biological data to support the development of reliable stock assessments for all fisheries, and the extension of data collection programmes to include environmental data and other data to assist in estimating potential impacts on non-target species.	COMM SC	<p>Data collection and reporting for dependent and associated species is relevant to the 1) management and scientific objectives/research needs; 2) the levels of observer coverage across the different fisheries; and 3) specific issues of concern. Current observer coverage in a number of fisheries is likely to be inadequate for collecting robust information on interactions with bycatch species, many of which (especially seabirds, marine mammals, and other species of concern) are relatively rare events. As a very broad guideline, observer coverage of &lt;10% may be sufficient to identify more common bycatch issues and assist with stock assessments, but will not be sufficient to generate reliable estimates of bycatch for some fisheries. Previous SC reports have described the higher levels of coverage required to provide such estimates (e.g., SC6 <b>advised</b> the Commission that observer coverage of 20% or more may be required to robustly estimate the incidental mortality of Seabirds, Marine Mammals, and Other Species of Concern in some fisheries, and that design should address multiple influencing factors to obtain representative coverage, and <b>sought guidance</b> from the Commission on the nature and certainty of its information needs on the bycatch of Seabirds, Marine Mammals, and Other Species of Concern, so that SC can more precisely advise on observer deployment requirements in SPRFMO fisheries.). Advice may be required from the Commission if there are specific areas of concern for where bycatch data collection and reporting needs to be strengthened.</p> <p>At a general level (for key target stocks), biological data to allow for the development of reliable stock assessments is being collected and submitted in accordance with relevant CMMs.</p> <p>The Habitat Monitoring Working Group has been considering the collation and application of environmental data, which could eventually be used to evaluate impacts on non-target species.</p>	
Commission Response	COMM7: Instructs SC to provide advice to the Commission sufficient to enable its consideration of this recommendation.			



100 (e)	<b>Recommends</b> that the Scientific Committee review and provide advice on any additional data requirements necessary to support the implementation of an effective VME protocol.	SC	SC has an extensive workplan relevant to the implementation of CMM 03-2019 and specific tasks therein (see paragraph 36). Additional data requirements to support implementation of the VME protocol are included within the SC 2020 multiannual workplan.	2020
100 (f)	<b>Recommends</b> that the Commission review, as a matter of priority, dataset sharing processes and procedures, both for data exchange within SPRFMO and externally, and provide specific guidance to the Secretariat with a view to removing impediments to the exchange and sharing of data.	COMM SC	SC discussed the beneficial aspects of better data sharing for SQ and JM. The SC <b>agrees</b> on the benefit of having access to VMS data to support specific scientific advice requested by the Commission. The SC <b>requests</b> the Secretariat to draft a template to access VMS data.	2020
Commission Response	COMM7: Recognises that this has been indicated as a high priority by the Panel and instructs SC to provide advice to the Commission sufficient to enable its consideration of this recommendation as a priority.			
100 (g)	<b>Recommends</b> that the Commission work towards a standardisation of scientific data collection processes and procedures for observers across the different fisheries, and consider mechanisms to harmonise coordination of data collection with other regional and/or sub-regional observer programmes.	COMM SC	The SC <b>notes</b> the progress on the OP accreditation provider as provided by the Secretariat. The SC <b>encourages</b> Members of the Commission to pursue accreditation under the SPRFMO Observer Programme well in advance 31 December 2023. The SC <b>recommends</b> the Commission to consider the mechanisms to harmonise coordination of data collection in observer programmes within the Memorandum of Understanding with those relevant regional and/or sub-regional bodies.	
Commission Response	COMM7: Instructs SC to provide advice to the Commission sufficient to enable its consideration of this recommendation.			
3.4 Quality and provision of scientific advice				
108 (a)	<b>Recommends</b> that the Commission take urgent action to implement management measures for the Jumbo flying squid fishery, and for precautionary measures to be put in place until sufficient information is available to undertake a reliable stock assessment.	COMM SC	The SC <b>noted</b> that steps forward have been made with respect to stock assessment for the jumbo flying squid. The SC also <b>noted</b> that the workshop participants supported a future CMM including data gathering and reporting for the jumbo flying squid fishery with several possible management approaches including catch limits, fishing efforts limits and temporal and spatial closures being discussed, however, there was no agreement on common elements for an appropriate CMM to be developed at this stage. The SC <b>recommends</b> the Commission to consider the current situation on CMM discussion from the squid working group and allow adequate time to develop the elements of the CMM for the Jumbo flying squid fishery.	
Commission Response	COMM7: Recognises that this has been indicated as a high priority by the Panel and instructs SC to provide advice to the Commission sufficient to enable its consideration of this recommendation as a priority.			



			<p>Developments have taken place on separate area based stock assessments and genetic studies for jumbo flying squid but there is still work to do including understanding the phenotype dynamics, improving the quantity and quality of fishery data and biological sample collection, and development of a whole stock assessment methodology.</p> <p>The SC could not agree on any management measure, while it duly notes the uncertainty on stock status and exploitation rate.</p>	
<b>3.5 Adoption of CMMs</b>				
166 (g)	<b>Recommends</b> that the Commission and its subsidiary bodies strictly apply the procedural and substantive requirements of CMM 13-2018 for all new and exploratory fishery proposals.	COMM CTC SC	<p>To better assess exploratory fishing applications, the SC developed a Checklist for Exploratory Fisheries Proposals during SC6. This checklist was considered very useful and was provided in annex 12 of the SC6 report. SC7 has reviewed the Checklist and agreed to develop interpretative notes for the checklist categories (which came directly from CMM-13) to ensure consistency of review between applications and years as the SC noted that a number of ambiguities remain in the interpretation of aspects of CMM 13-2019. Commission may wish to consider reviewing the measure in collaboration with the SC given its operational experience with application of this measure.</p> <p>The two proposals received in 2019 were assessed rigorously against the checklist. Following some revisions during the meeting, SC7 was able to finalise reviews by the end of the meeting. This avoided the need for any intersessional processes.</p>	2019
Commission & Subsidiary Bodies Responses	<p>COMM7: Instructs SC to provide advice to the Commission sufficient to enable its consideration of this recommendation.</p> <p>CTC: Endorses this recommendation.</p>			
178 (c)	<b>Recommends</b> that the Commission consider the implementation of fishing effort limits in the Jumbo flying squid fishery based on existing fishing capacity as a precautionary interim measure pending further scientific and management advice from the Scientific Committee.	COMM SC	The SC acknowledges that fishing efforts limits is an important management tools and more information and studies are needed to support development of more comprehensive management measures for jumbo flying squid.	
Commission Response	<i>COMM7: Instructs SC to provide advice to the Commission sufficient to enable its consideration of this recommendation.</i>			





Compliance and Enforcement				
4.1 Flag States Duties				
202 (h)	<b>Recommends</b> that the Commission, in conjunction with the Secretariat, consolidate, and make publicly available, a list of capacity building needs and requests identified by Members and CNCs in order to track progress, prioritise the needs and requests, and facilitate the ability of others to meet them.	COMM	The SC recognises the need for capacity building.	
Commission & Subsidiary Bodies Responses	<p>COMM 7: Requests Members and CNCs to advise the Secretariat of their capacity building needs, noting the utility of having these needs consolidated in a single place for consideration by the Commission.</p> <p>Notes that New Zealand has agreed to lead intersessional work on this issue in 2019.</p> <p>Instructs the SC with considering this recommendation in 2019 and providing advice to the Commission on how capacity building needs relevant to the work of the SC might be better managed.</p> <p>CTC: Recommends that the Commission requests Members and CNCs to advise the Secretariat of their capacity building needs, noting the utility of having these needs consolidated in a single place for consideration by the Commission.</p> <p>Notes the need to avoid over-burdening the Secretariat.</p> <p>Notes that capacity building needs may be easier to identify if audit points are developed as per recommendation 202(f).</p> <p>Notes that New Zealand has agreed to lead intersessional work on this issue in 2019.</p> <p>Recommends that the Commission task the Scientific Committee with considering this recommendation.</p>	<p>SC</p> <p>CTC</p>	<p>The SC has received no input for assessing how the capacity building needs concerning the flag States duties may be relevant to the work of the SC.</p> <p>The SC, would like to take takes this opportunity to <b>Note</b> the specific SC capacity building needs as follows:</p> <ul style="list-style-type: none"> <li>• Scientific capacity development: external experts participating in workshops and assessments.</li> <li>• External review of SC activities (Convention Article 10, para 5)</li> <li>• Exchange of practice on identification of seabirds, mammals, sharks.</li> <li>• Advancement of geospatial analysis (VMS + SPRFMO data base synergies) while taking into account that VMS data will not be shared without prior agreement.</li> </ul>	