## SIOFA Scientific Committee Operational Work Plan 2016-2019

The SIOFA Scientific Committee (SC) Operational Work Plan 2016-2019 contains immediate research priorities that are currently in progress or are proposed for the next 1-3 years. Noting that the operational work plan is influenced by the SC Work Plan which is agreed by the Meeting of the Parties, each 'year' refers to the intersessional period between the Meetings of the Parties (notionally occurring annually in June/July). Regarding timeframe for completion, the expected delivery of each task identified in this plan will be to the next SC meeting. Where there is no timeframe identified, it is assumed that this work has not been prioritised for the first year of this work plan (2016-2017) but should be undertaken within the three years to which this plan applies. The Operational Work Plan will be reviewed annually by the SC. The SC may wish to consider the extent to which the Operational Work Plan will be connected to a SIOFA SC budget.

- Year 1: July 2016-July 2017
- Year 2: 2017-2018
- o Year 3: 2018-2019

Operational Work Plan for SIOFA research				
Theme	Research activities	Timeframe for Completion*	Progress SC 2017	For completion by SC-03
1. Scientific data standards for the collection, reporting, verification and exchange of data	<ul> <li>Review of current data holdings and other relevant research</li> </ul>	Year 1 – for SC 02	<ul> <li>Catch and effort data from Australia and FOT; Aggregated catch and effort data for Korea, Japan, CI, EU</li> </ul>	
	<ul> <li>Identify data gap</li> </ul>		<ul> <li>Scientific observer data, including actual locations of VME indicator catches; Consolidation of historical data; Data from non-members</li> </ul>	<ul> <li>Consolidation of historical data, including that from non-members (Secretariat) (SC-03)</li> </ul>
	<ul> <li>List Agencies and States working on data related to SIOFA</li> </ul>		<ul> <li>This relates to mapping process – see below</li> </ul>	

	<ul> <li>Guidelines for evaluating and approving e- monitoring programs for scientific data collection</li> <li>Development of database for compilation of relevant data</li> </ul>	Year 1 – for SC 02	<ul> <li>Paper by AU;</li> <li>Adopted guidelines (Annex XX)</li> <li>Database is built and can accept data; Some data inputted; some refinements are required e.g. field constraints</li> </ul>	<ul> <li>Completion of database refinements, database populated with data submissions and standard data summaries developed (asap)</li> </ul>
	<ul> <li>Development of identifications guides for sponges and corals to enable better collection of data</li> </ul>		<ul> <li>SIOFA members using Australian, NZ, CCAMLR and SEAFO reference documents at present</li> </ul>	• No further work required
	<ul> <li>Development of identifications guides for deepsea sharks to enable better collection of data</li> </ul>		<ul> <li>FAO ABNJ shark guide prepared for SIOF available and being used by some Parties</li> </ul>	<ul> <li>No further work required</li> </ul>
	<ul> <li>Periodic review of scientific data standards as and when required</li> </ul>			<ul> <li>Review of Annex B of CMM 2016-02 'Voluntary observer data' in line with CMM 2016-02 (SC-03)</li> </ul>
	<ul> <li>Trialing of 'smart forms'</li> </ul>		<ul> <li>CI is working with FAO on trial</li> <li>AU uses 'smart forms'</li> </ul>	<ul> <li>Progress report on trial (SC-03)</li> </ul>
2. Advice on vulnerable marine	Contribute information to     FAO VME database	Ongoing	<ul> <li>Process of information exchange has been initiated</li> </ul>	Ongoing
ecosystems	<ul> <li>Mapping of bottom fishing effort and VME occurrence</li> </ul>		<ul> <li>Some data available via submissions</li> </ul>	<ul> <li>Maps of VME encounter/indicator data, (Secretariat in collaboration with ABNJ Deep Seas project)</li> </ul>
	<ul> <li>Develop standard protocols for future</li> </ul>	Year 1 – for SC 02	<ul> <li>Protocol with draft criteria prepared for recommendation to the MoP (Annex XX)</li> </ul>	Review of draft criteria after first     application

	<ul> <li>protected area designation</li> <li>Development of a bottom fishing impact assessment standard</li> </ul>		<ul> <li>BFIAS prepared for recommendation to the MoP (Annex XX)</li> </ul>	• Review of submitted BFIAS in line with CMM 2016-01 (SC-03)
	<ul> <li>Assessment of likely impact of specific gear types - including review of existing information (see also theme 5 below)</li> </ul>	Year 1 – for SC 02	*Nil	<ul> <li>Progress report from ABNJ Deep Seas Project global analysis (SC-03)</li> </ul>
	<ul> <li>List Agencies and States working on data related to mapping in SIOFA</li> </ul>			<ul> <li>List of agencies and states working on data related to mapping (Parties to provide information to Secretariat who will compile list)</li> </ul>
3. Current and historical status of fishing	<ul> <li>Scientific impact assessments on demersal gillnet operations</li> </ul>		JP reported that they had no data to undertake assessment	<ul> <li>Scientific impact assessments on demersal gillnet operations</li> </ul>
activities	<ul> <li>Scientific impact assessment on other gillnets and developing gillnet fisheries</li> </ul>	Year 1 – for SC 02	• No	<ul> <li>Scientific impact assessment on other gillnets and developing gillnet fisheries</li> </ul>
	Develop advice on reference periods for effort, footprints and spatial control			<ul> <li>Recommendations to the MoP on appropriate SIOFA bottom fishing footprint (by 2020)</li> <li>Recommendations to the MoP on the most appropriate response to the VME encounter (by 2019)</li> </ul>
	<ul> <li>Characterisation of historical and current deepsea shark fisheries (see also theme 5 below)</li> </ul>		<ul> <li>AU paper; ToR agreed for WG for recommendation to the MoP (Annex XX); EU work on characterisation of target fisheries (EU Report)</li> </ul>	<ul> <li>Research workplan for implementation of ERAs and related processes as required by WG (Annex XX) (SC-03)</li> </ul>

<ul> <li>4. Stock <ul> <li>assessments for</li> <li>key targeted</li> <li>species<sup>1</sup></li> <li>Orange roughy</li> <li>Alfonsinos</li> <li>Pelagic</li> <li>armourhead?</li> </ul> </li> <li>Toothfish<sup>2</sup></li> </ul>	<ul> <li>Collection, analysis and reporting of essential biological and fisheries information, including:</li> <li>Age composition data</li> <li>Length and age</li> <li>Growth</li> <li>Reproductive biology</li> <li>Maturity ogives</li> <li>Natural mortality</li> </ul>	Commence in Year 1 (ongoing)	<ul> <li>ToR agreed for WG for recommendation to the MoP (Annex XX)</li> </ul>	<ul> <li>Research work plan for implementation of stock assessments and related processes for alfonsino and orange roughy (Annex XX) (SC-03)</li> <li>Recommendations to the MoP on the status of principal deep-sea resources targeted in line with CMM 2016-01 (2019)</li> </ul>
	<ul> <li>Spatial structure for management purposes</li> </ul>	Year 1 – for SC 02	<ul> <li>ToR for Stock Assessment WG to be recommended to the MoP (Annex XX)</li> </ul>	See above
	<ul> <li>Determination of biological reference points and associated development of harvest strategies</li> </ul>			See above
	<ul> <li>Survey indices/abundance estimates as inputs to assessment model</li> </ul>			See above
	<ul> <li>Analysis of data from existing acoustic surveys</li> </ul>	Year 1 – for SC 02	<ul> <li>ABNJ workshop</li> <li>ToR for intersessional analysis of orange roughy acoustic data building towards stock assessments as part of Stock Assessment (Annex XX)</li> </ul>	<ul> <li>Analysis completed</li> </ul>
	<ul> <li>Evaluation of alternative indices</li> </ul>	Year 1 – for SC 02		

<sup>&</sup>lt;sup>1</sup> Note there are agreed assessment approaches for orange roughy, but not for alfonsino. This will affect speed at which some of this work can be addressed

<sup>&</sup>lt;sup>2</sup> Noting that the SC agreed that the Chairperson would write to the Chair of the CCAMLR SC to discuss collaborating on toothfish stock assessments

	<ul> <li>Conduct a stock assessment for orange roughy in the SIOFA Area</li> <li>Engage with the CCAMLR Secretariat to discuss collaboration on toothfish assessment</li> </ul>	Year 1 – for SC 02 Year 1 – for SC 02	<ul> <li>Will follow on from analysis of data from existing acoustic survey of OR</li> <li>Initiated discussions, on stock assessment and tagging</li> </ul>	See Above (Annex XX) <ul> <li>Progress collaboration with CCAMLR on stock assessment and tagging (France and SC Chair)</li> </ul>
5. Advice on the impacts of fishing on associated and dependent species	<ul> <li>Risk assessment of effects of fishing on non-target, associated and dependent species (see also theme 2 above)</li> </ul>	Year 1 – for SC 02	<ul> <li>AU paper on ERA for deepwater sharks;</li> <li>ToR for WG to be recommended to the MoP (Annex XX)</li> </ul>	<ul> <li>Research workplan for implementation of ERAs and related processes as required by WG (Annex XX) (SC-03)</li> </ul>
	<ul> <li>Seek advice from expert groups, such as Birdlife International and the Agreement for the Conservation of Albatross and Petrels, in relation to risk assessments completed for species in the SIOFA Area</li> </ul>	Year 1 – for SC 02	<ul> <li>SC Chair requested and provided information</li> </ul>	<ul> <li>Recommendations to the MoP on the status of stocks taken as bycatch and caught incidentally (to the extent possible) in line with ERA WG ToR (Annex XX) (by 2019)</li> <li>Request input prior to SC (Secretariat)</li> </ul>
6. Any other advice that the Meeting of the Parties (MoP) requests	This may be updated following the fourth Meeting of the Parties to SIOFA (26- 30 June 2017)			