## 2023 SPC Pre-assessment Workshop Agenda (Version 1a) 25<sup>th</sup>- 28<sup>th</sup> April, Noumea and hybrid.

## **Join Zoom Meeting**

https://spc.zoom.us/j/93767261839?pwd=SlowaHNPcVJNQIBIQIpFQVJwaDRWZz09

**Meeting ID:** 937 6726 1839 **Passcode:** 417833

## **Times are New Caledonia**

Chair: Paul Hamer, pauh@spc.int

Alternates: Graham Pilling, grahamp@spc.int Claudio Castillo Jordan, claudioc@spc.int

Tuesday 25 <sup>th</sup> April (Mon 24 <sup>th</sup> US)	DAY 1: 2023 yellowfin tuna assessment	Presenter initials and presentation number
09:00 – 09:15	<ul> <li>Reminder of TOR and objectives for the SPC preparatory workshop</li> <li>Agenda and meeting format/procedures</li> <li>Any other introductory comments</li> </ul>	PH
09:15 – 10:00 Session 1 (45 mins)	Previous yellowfin tuna assessment summary (10 mins)     Peer review summary – key recommendations and related focus areas for 2023 assessments (15 mins)  Discussion (15 mins)	<ul><li>AM (P1)</li><li>AM/PH (P2)</li></ul>
10:00 – 10.30	BREAK	
10.30-12.00 Session 2 (90 mins)	<ul> <li>Conceptual models of biology and spatial structure</li> <li>Consider information and options for spatial structure and fishery definitions (60 mins)</li> <li>Discussion (20 mins)</li> </ul>	<ul> <li>PH (background and biology) (P3)</li> <li>IS (SEAPODYM) (P4)</li> <li>JP (Size composition) (P5)</li> <li>JM (CPUE patterns) (P6) (15 mins each)</li> </ul>

12.00-13.00 Session 3 (70 mins)	<ul> <li>Data inputs</li> <li>Catch and effort, and raw size data (15 mins)</li> <li>Size composition data treatment - spatial/temporal weighting (15 mins)</li> <li>Basis for CPUE indices (15 mins)</li> <li>Conditional age at length data summary (10 mins)</li> <li>Tagging data summary (10 mins)</li> </ul>	<ul> <li>TT (P7)</li> <li>TP (P8)</li> <li>TT (P9)</li> <li>TT/AM (P10)</li> <li>JS (P11)</li> </ul>
13.10-14.00	Lunch BREAK (50 mins)	
14:00 Session 4 (30 mins)	Biology      Growth     Natural mortality     Maturity/reproductive biology     Movement     Length-weight conversions     Sex specific? (20 mins)  Discussion (10 mins)	• AM (P12)
14.30-15.40 Session 5 (70 mins)	<ul> <li>CPUE analysis</li> <li>Background</li> <li>From VAST to sdmTMB</li> <li>CPUE results so far, peer review related analyses</li> <li>SEAPODYM information (YFT up to 2010)</li> <li>Discussion (20 mins)</li> </ul>	• TT (P13)
15.40-17.00 Session 6 (80 mins)	Model development	AM/JH/ND and all (P14)
17.00	Discussion and wrap up for the day (as needed)	All/PH

Wednesday 26 <sup>th</sup> April (Tuesday 25 <sup>th</sup> US)	DAY 2: 2023 bigeye tuna assessment and external presentations	
09:00 –10.00 Session 7 (60 mins)	<ul> <li>External presentations: age/growth, conversion factors</li> <li>Bomb radiocarbon age validation work (15 mins + 5 mins)</li> <li>Yellowfin sea cage growth experiment (15 mins + 5 mins)</li> <li>Project 90: conversion factors (15 mins + 5 mins)</li> </ul>	<ul><li>AA (P15)</li><li>KO (P16)</li><li>JM (P17)</li></ul>
10.00-10.30 Session 8 (30 mins)	<ul> <li>Previous bigeye tuna assessment summary (15 mins)</li> <li>Implication from yellowfin peer review (10 mins)</li> </ul>	• JD (P18)
10:30 — 11.00	BREAK (30 mins)	
11.00-12.00 Session 9 (60 mins)	Conceptual models of biology and spatial structure  Consider information and options for spatial structure and fishery definitions (40 mins)  Discussion (20 mins)	<ul> <li>PH (background and biology) (P19)</li> <li>IS (SEAPODYM) (P20)</li> <li>JP (Size composition) (P21)</li> <li>JM (CPUE patterns) (P22) (10 mins each, focus on results)</li> </ul>
Session 9 12.00 -13.00 (60 mins)	<ul> <li>Data inputs</li> <li>Catch and effort, and raw size data (15 mins)</li> <li>Size composition data treatment - spatial/temporal weighting (10 mins)</li> <li>Basis for CPUE indices (10 mins)</li> <li>Conditional age at length data summary (10 mins)</li> <li>Tagging data summary (10 mins)</li> </ul>	<ul> <li>TT (P23)</li> <li>TP (P24)</li> <li>TT (P25)</li> <li>TT/AM (P26)</li> <li>JS (P27)</li> </ul>
13.00-14.00	Lunch BREAK (60 mins)	
Session 10 14.00 -14.30 (30 mins)	Biology     Growth     Natural mortality	• JD <b>(P28)</b>

14.30-15.10	Maturity/reproductive biology     Movement     Length-weight conversions     Sex specific? (20 mins)  Discussion (10 mins)  CPUE analysis		TT <b>(P29)</b>
Session 11	Background, VAST to sdmTMB		11 (F29)
(40 mins)	CPUE results so far, and additional analyses (30)		
(reduced as methods covered for yellowfin)	mins) Discussion (10 mins)		
15.10 -16.20	Model development		
Session 12	2023 diagnostic model development	•	JD/JH/ND and all
(70 mins)	Preliminary model results and diagnostics		(P30)
	Proposed next stepwise models		
	<ul> <li>Size data likelihood and related concerns, input sample sizes, data weighting, tag mixing, other sensitivities</li> </ul>		
	Uncertainties and model ensemble options		
	Discussion (20 mins)		
16.20	Discussion and wrap up day (as needed)	All	
Thursday 27 <sup>th</sup> April (Wed 26 <sup>th</sup> US)	DAY 3: MFCL, MSE, and Skipjack assessment follow- up work		
09.00-9.15	Overnight thoughts/follow-ups	PH	
9.15-10.30	MFCL	•	ND <b>(P31)</b>
Session 13	Recent developments and future work for Multifan-		
(75 mins)	CL (25 mins)		
	<ul> <li>Looking forward – future software for tuna assessments – what's next for MFCL (20 mins)</li> </ul>		
	Discussion (20 mins)		
10:30 <b>–</b> 11.00	BREAK		

11.00-11.20 Session 14 (20 mins)	Tuna Management Strategy Evaluation  • Update on progress and 2023 technical workplan (10 mins)  Discussion (10 mins)	• RS/FS (P32)
11.20-13.00 Session 15 (40 mins)	MSE – Skipjack MP  (40 mins)	• RS (P33)
13.00-14.00	Lunch BREAK	
14.00-15.00- Session 16 (60 mins)	MSE – Albacore MSE, OMs and EMs     (40 mins)     MSE – mixed fisheries overview and update     (10 mins) Discussion (10 mins)	<ul><li>RS/FS/NY (P34)</li><li>FS (P35)</li></ul>
15.00-16.00 Session 17 (60 mins)	Skipjack stock assessment follow-up work (40 mins)  (Discussion 20 mins)	• CCJ/JH/PH <b>(P36)</b>
	BBQ on the deck 6pm	
Friday 28 <sup>th</sup> April (Thurs 27 <sup>th</sup> US)	DAY 4: SEAPODYM, Silky shark assessment, tuna research plan, unfinished discussions.	
9.30-10 30 pm Session 18 (60 mins)	SEAPODYM overview and development plan	• IS (P37)
10.30 -11.00	Break	
11.00 -12.30 Session 19 (90 min)	<ul> <li>Previous silky shark assessment summary</li> <li>Available data summary/fishery characterization</li> <li>Plans for catch reconstruction and potential assessment approach.</li> <li>Preliminary analysis</li> </ul>	• PN <b>(P38)</b>

12.30 -13.00 Session 20 (30 min)	Tuna research plan review	• GP (P39)
13.00-14.00	Lunch BREAK	
14.00-15.30 Session 21	<ul> <li>Review on approaches for ensemble model development and characterising uncertainty in WCPFC assessments (30 mins)</li> <li>Unfinished discussions as needed</li> </ul>	• PN ( <b>P40</b> )
15.00 Wrap up and Follow-up	<ul> <li>WRAP UP-Follow-up</li> <li>Note any key recommendations</li> <li>Meeting draft paper circulated for comments</li> <li>Comments received</li> <li>Meeting paper finalized for SC16 submission</li> <li>Aim for end of May</li> </ul>	PH

PH Paul Hamer, AM Arni Magnusson, CCJ Claudio Castillo Jordan, ND Nick Davies, JD Jemery Day, TT Thom Teears, RS Rob Scott, FS Finlay Scott, TP Tom Peatman, KO Kei Okamoto, NY Nan Yao, PN Philipp Neubauer, JSP Joe Scutt Phillips, JH John Hampton, AA Allen Andrews, GP Graham Pilling, IS Inna Senina, JP Joanne Potts.