



**SCIENTIFIC COMMITTEE
NINETEENTH REGULAR SESSION**

Koror, Palau
16 – 24 August 2023

**HEADS OF DELEGATION MEETING
PROVISIONAL AGENDA**

Ngarachamayong Cultural Center
16:00-1700, Tuesday, 15 August 2023

WCPFC-SC19-2023/06 (Rev.04)

1. General Announcements

- 1) SC19 registration: During HOD meeting on 15 August and starting at 7:30am on 16 August.
- 2) Meeting starts at 08:30 every day. Tea breaks are scheduled for 10:00-10:30 and 15:00-15:30, and lunch at 12:00-13:30
 - Wednesday (16th) morning break: early break around 09:10-09:40, after the opening session.
- 3) **Bus**, Meeting schedule and functions --- refer to the *SC19 Meeting Notice*
 - Provisional agenda in **Attachment 1**
 - Indicative schedule in **Attachment 2**
 - Farewell Party: 24 August 2023

4) Opening Ceremony

08:00-08:30	Registration (outside the main entrance)
08:30-09:00	Acting SC Chair Emily Crigler will welcome delegates, open the SC19 and introduce speakers: <ol style="list-style-type: none">1. Prayer2. Josie Tamate, Commission Chair3. Rhea Moss-Christian, Executive Director4. Emily Crigler, SC Acting Chair
09:00-09:10	Group Photo
09:10-09:40	Morning Refreshment Break

5) Other issues?

- a) ODF
- b) IT issues
- c) Screen sharing options
- d) Lunch arrangements

2. Review of Provisional Agenda

- 1) Provisional (Annotated) Agenda – No supplementary agenda item was requested by 30 days before the start of the meeting, assuming the provisional agenda can be adopted.
- 2) Agenda Item 12 – Other Matters
 - Any minor issues can be discussed under *Agenda Item 12 Other Matters?*

3. SC Officers and Theme Conveners

- 1) Current SC officers and theme conveners are listed below.
 - Selection of SC Chair
 - Theme Conveners for 2024: need co-conveners for MI and EB. Any nomination?

Chair	<i>TBD</i>
Vice Chair (Acting Chair)	Emily Crigler (1): emily.crigler@noaa.gov
ST Theme	Valerie Post (6): valerie.post@noaa.gov
SA Theme	Hidetada Kiyofuji (2): hkiyofuj@affrc.go.jp Berry Muller (1): bmuller@mimra.com Michelle Sculley (1): michelle.sculley@noaa.gov
MI Theme	Robert Campbell (14): robert.campbell@csiro.au Laura Tremblay-Boyer (1): Laura.Tremblay-Boyer@csiro.au
EB Theme	Yonat Swimmer (6): yonat.swimmer@noaa.gov Emily Crigler (1): emily.crigler@noaa.gov

- Dr Robert Campbell – final meeting

4. Reporting arrangements

- 1) Lead rapporteurs: Dr Tim Adam (tim.adams@gonedau.com)
 - For the accurate reflection of technical discussions, conveners may select support rapporteurs to provide meeting minutes, especially for technical sessions, to the lead rapporteur.
- 2) Document control
 - a) Submit all new/revised meeting documents, ISG reports, agreed recommendations and decision points to the Science Manager (sungkwon.soh@wcpfc.int) by email.
 - b) All presenters upload their presentation files on the presentation laptop or submit them to the Science Manager by email.
 - c) For lengthy interventions, send the text to the Lead Rapporteur by email.
 - d) Presentation laptop: Folders will be organized by Theme and by Date, which will be controlled by the Science Manager.
- 3) SC19 Summary Report
 - i) Lead rapporteur will produce a draft Summary Report;

- ii) All presenters should submit 1-2 paragraph summary of their presentations to the lead rapporteur, and theme conveners this announcement at the start of their session;
- iii) Theme conveners draft recommendations, clear them in the plenary, and produce agreed text at the end of each theme session (Any designated person or Lead rapporteur assists the clearing process at the head table);
- iv) SC Chair formally adopts all recommendations and decision under Agenda Item 13;
- v) Once a DRAFT Summary Report is available, theme conveners will review their theme report after the SC meeting;
- iv) Secretariat will prepare Executive Summary; and
- v) The Summary Report and Executive Summary will be adopted intersessionally.

4) Indicative time schedule for the finalization of SC19 Summary Report

Tentative Schedule	Actions to be taken
24 August	Close of SC19 By 4 September, <i>SC19 Outcomes Document</i> will be distributed to all CCMs and observers (within 7 working days, Rules of Procedure).
By 31 August	Secretariat will receive a Draft Summary Report from the rapporteur.
By 7 September	Secretariat will clear the Draft report, and distribute the cleaned report to all Theme Conveners for review.
By 14 September	Theme conveners will review the report and return it back to the Secretariat
By 19 September	The Secretariat will post/distribute the draft Summary Report to all for CCMs' and Observers' review
By 31 October	Deadline for the submission of comments from CCMs and Observers

5. Side meetings

- 1) Japan Trust Fund at 5:30-6:30pm on Thursday, 17 August
- 2) MSC Seminar at lunch time on Thursday, 17 August

6. Informal Small Group (ISG) meetings

PROPOSED Informal Small Groups (ISGs) are listed below for the HOD's review and finalization (**Attachment 3**). Facilitators will lead their relevant ISG meetings along with their schedules and approaches.

ISG-ID	Title/TOR	Agenda	Proposed Facilitator
ISG01 (Data fields)	Proposals for additional or amended data field SC19-ST-WP-03 SC19-ST-WP-05	3.1.1.3	James Larcombe/ Peter Williams
ISG02 (SC Operations)	Future operations of the SC SC19-SA-WP-14 SC19-GN-WP-06	4.7.3 11.1	Robert Campbell/ Graham Pilling Rhea Moss-Christian
ISG03 (TARP)	Tuna Assessment Research Plan (TARP) SC19-SA-WP-15	4.7.4	Keith Bigelow/ Paul Hamer

ISG04 (BRP)	Billfish Research Plan SC19-SA-WP-16	4.7.5	Nicholas Ducharme- Barth/ Paul Hamer
ISG05 (SRP review)	SPR mid-term review SC19-EB-WP-06	6.3.2	Adele Dutilloy/ Paul Hamer
ISG06 (SC Workplan)	SC Work Program and Budget	10.1	Emily Crigler/ SungKwon Soh

				Wed, 16	Thu, 17	Fri, 18	Sat, 19
AM (0.5h)					ISG03 (TARP)		
Lunch (1h)					MSC Seminar ISG04 (BRP)		
PM (0.5h)				ISG01 (data)	ISG05 (SRP Review)		

	Sun, 20	Mon, 21	Tue, 22	Wed, 23	Thu, 24		
AM (0.5h)							
Lunch (1h)	ISG06 (SC Workplan)	ISG02 (SC Ops)					
PM (0.5h)		ISG06 (SC Workplan)					

7. Next meeting venue

- SC20 in 2024: TBD
- SC21 in 2025: TBD

8. Other Matters

**SCIENTIFIC COMMITTEE
NINETEENTH REGULAR SESSION**

Koror, Palau
16 – 24 August 2023

PROVISIONAL AGENDA

WCPFC-SC19-2023/02

AGENDA ITEM 1 OPENING OF THE MEETING

- 1.1 Welcome address
- 1.2 Meeting arrangements
- 1.3 Issues arising from the Commission
- 1.4 Adoption of agenda
- 1.5 Reporting arrangements
- 1.6 Intersessional activities of the Scientific Committee

AGENDA ITEM 2 REVIEW OF FISHERIES

- 2.1 Overview of Western and Central Pacific Ocean (WCPO) fisheries
- 2.2 Overview of Eastern Pacific Ocean (EPO) fisheries
- 2.3 Annual Report – Part 1 from Members, Cooperating Non-Members, and Participating Territories
- 2.4 Reports from regional fisheries bodies and other organizations

AGENDA ITEM 3 DATA AND STATISTICS THEME

- 3.1 Data gaps
 - 3.1.1 Data gaps of the Commission
 - 3.1.1.1 Data gaps
 - 3.1.1.2 Updates on data-related projects
 - 3.1.1.3 Minimum data reporting requirements
 - 3.1.1.4 Frequent submission of operational catch and effort data
 - 3.1.2 Bycatch estimates of longline fishery
- 3.2 Regional Observer Programme
 - 3.2.1 Review of observer training project for elasmobranch biological sampling (Project 109)
 - 3.2.2 ROP Data Issues
- 3.3 Electronic Reporting and Electronic Monitoring (ER and EM)
- 3.4 Economic data
- 3.5 Baseline period or limit of the Indonesian Large Fish Handline Fishery

AGENDA ITEM 4 STOCK ASSESSMENT THEME

- 4.1 Independent review of recent WCPO Yellowfin tuna assessment

- 4.2 Improvement of MULTIFAN-CL software
- 4.3 WCPO tunas
 - 4.3.1 WCPO yellowfin tuna (*Thunnus albacares*)
 - 4.3.1.1 Research and information
 - a. Review of 2023 yellowfin tuna stock assessment
 - 4.3.1.2 Provision of scientific information
 - a. Status and trends
 - b. Management advice and implications
 - 4.3.2 WCPO bigeye tuna (*Thunnus obesus*)
 - 4.3.2.1 Research and information
 - a. Review of 2023 bigeye tuna stock assessment
 - 4.3.2.2 Provision of scientific information
 - a. Stock status and trends
 - b. Management advice and implications
 - 4.3.3 WCPO skipjack tuna (*Katsuwonus pelamis*)
 - 4.3.3.1 Research and information
 - a. Indicator analysis
 - b. Update of skipjack tuna stock assessment information
 - 4.3.4 South Pacific albacore tuna (*Thunnus alalunga*)
 - 4.3.4.1 Research and information
 - a. Indicator analysis
- 4.4 Northern stocks
 - 4.4.1 North Pacific albacore (*Thunnus alalunga*)
 - 4.4.1.1 Research and information
 - a. North Pacific albacore stock assessment
 - 4.4.1.2 Provision of scientific information
 - a. Status and trends
 - b. Management advice and implications
 - 4.4.2 Pacific bluefin tuna (*Thunnus orientalis*)
 - 4.4.2.1 Research and information
 - a. Update of Pacific bluefin tuna stock assessment information
 - 4.4.3 North Pacific swordfish (*Xiphias gladius*)
 - 4.4.3.1 Research and information
 - a. North Pacific swordfish stock assessment
 - 4.4.3.2 Provision of scientific information
 - a. Status and trends
 - b. Management advice and implications
- 4.5 WCPO sharks
 - 4.5.1 Silky shark (*Carcharhinus falciformis*)
 - 4.5.1.1 Research and information
 - a. Silky shark stock assessment in the WCPO (Project 108)
- 4.6 WCPO billfishes
 - 4.6.1 North Pacific striped marlin (*Kajikia audax*)
 - 4.6.1.1 Research and information
 - a. North Pacific striped marlin stock assessment
 - 4.6.1.2 Provision of scientific information

- a. Status and trends
- b. Management advice and implications
- 4.7 Projects and Requests
 - 4.7.1 Characterization of stock assessment uncertainty (Project 113)
 - 4.7.2 Application of Close-Kin-Mark-Recapture Methods (Project 100c)
 - 4.7.3 Options to provide information to the Scientific Committee
 - 4.7.4 Tuna Research Plan
 - 4.7.5 Billfish Research Plan (Project 112)
 - 4.7.6 Reproductive biology of yellowfin tuna

AGENDA ITEM 5 MANAGEMENT ISSUES THEME

- 5.1 Development of harvest strategy framework for key tuna species
 - 5.1.1 Skipjack tuna
 - 5.1.1.1 Implementation of management procedure for WCPO skipjack tuna
 - 5.1.1.2 Monitoring strategy for WCPO skipjack tuna
 - 5.1.2 South Pacific albacore tuna
 - 5.1.2.1 Target reference point (TRP)
 - 5.1.2.2 SP Albacore operating models
 - 5.1.2.3 SP Albacore management procedures
 - 5.1.3 Mixed fishery MSE framework
 - 5.1.4 Progress of the WCPFC Harvest Strategy Work Plan
- 5.2 Implementation of CMM 2021-01
 - 5.2.1 Review of effectiveness of CMM 2021-01

AGENDA ITEM 6 ECOSYSTEM AND BYCATCH MITIGATION THEME

- 6.1 Ecosystem and Climate Indicators
- 6.2 FAD impacts
 - 6.2.1 Research on non-entangling and biodegradable FADs (Project 110)
 - 6.2.1.1 Extension to EU supported biodegradable FADs
 - 6.2.2 FAD Management Options IWG Issues
- 6.3 Sharks
 - 6.3.1 Review of conservation and management measures for sharks
 - 6.3.2 Mid-term Review of 2021-2025 Shark Research Plan (Project 97b)
- 6.4 Seabirds
 - 6.4.1 Review of seabird research
 - 6.4.2 Review of CMM on seabirds (CMM 2018-03)
- 6.5 Sea turtles
 - 6.5.1 Review of sea turtle research
 - 6.5.2 Review of Conservation and Management of Sea Turtles (CMM 2018-04)
- 6.6 Cetaceans
- 6.7 Bycatch management

AGENDA ITEM 7 OTHER RESEARCH PROJECTS

- 7.1 Pacific Marine Specimen Bank (Project 35b)
- 7.2 Pacific Tuna Tagging Project (Project 42)
- 7.3 West Pacific East Asia Project
- 7.4 Other Projects

AGENDA ITEM 8 COOPERATION WITH OTHER ORGANISATIONS

AGENDA ITEM 9 SPECIAL REQUIREMENTS OF DEVELOPING STATES AND PARTICIPATING TERRITORIES

AGENDA ITEM 10 FUTURE WORK PROGRAM AND BUDGET

- 10.1 Development of the 2024 work programme and budget, and projection of 2025-2026 provisional work programme and indicative budget

AGENDA ITEM 11 ADMINISTRATIVE MATTERS

- 11.1 Future operation of the Scientific Committee
- 11.2 Election of Officers of the Scientific Committee
- 11.3 Next meeting

AGENDA ITEM 12 OTHER MATTERS

AGENDA ITEM 13 ADOPTION OF THE SUMMARY REPORT OF THE NINETEENTH REGULAR SESSION OF THE SCIENTIFIC COMMITTEE

AGENDA ITEM 14 CLOSE OF MEETING

**SCIENTIFIC COMMITTEE
NINETEENTH REGULAR SESSION**

Koror, Palau
16-24 August 2023

INDICATIVE SCHEDULE

WCPFC-SC19-2023/05 (Rev.03)

Time	Sun	Mon	Tue, 15 August	Wed, 16	Thu, 17	Fri, 18	Sat, 19	
0830-1000 (1.5h)				8:30-9:10 A1.1 <ul style="list-style-type: none"> Opening prayer Welcome speech Group photo 	A4. Stock Status (2) 4.1 (M) peer review (20m presentation, plus 20m discussion) 4.2 (M) MFCL (5m) 4.7.6 (B) YFT biology (20m presentation including discussion) 4.3.1 (M) YFT and BET CPUE (15m presentation, 5m questions) (5m – buffer time)	A4. Stock Status (4) 4.3.2 (K) BE SA (30m presentation, 10m general question) 4.3.2 (K) BE SA (40m discussion)		
1000-1030				Morning Break (9:10-9:40)	Morning Break (10:00-10:30)			
1030-1200 (1.5h)				9:40-10:10 A1.2 – A1.6 10:10-11:10 A2.1 11:10-11:40 A2.2 11:40-11:50 A2.3 – A2.4 11:50-12:00 A10 SC WP	A4. Stock Status (3) 4.3.1 (M) YFT SA (30m presentation, 10 m general questions) 4.3.1 (M) YFT SA (40m discussion) (10m – buffer time)	A4. Stock Status (5) 4.3.4 (B) SPA indicator (20m presentation and discussion) 4.4 (K) Northern stocks (20m overview of ISC23 outcomes) (20m – buffer time)		
1200-1330				Lunch Break				
1330-1500 (1.5h)			14:00-15:30 Chair and Conveners Meeting 16:00 – Heads of Delegation Meeting	A3. Data (1) 3.1.1.1 and 3.1.1.2 Data gaps of the Commission (30m presentation, 20m discussion) 3.1.1.3 Proposal from AUS (10m presentation, 10 m discussion) Proposal from PNA (10m presentation, 10 m discussion)	A6. EB theme (1) 6.1 Ecosystem and Climate Indicators (30m presentation/discussion) 6.2.1 Research on non-entangling and biodegradable FADs (Project 110) (2x 30m presentation/discussion) 6.3.2 Mid-term Review of 2021-2025 Shark Research Plan (15m presentation/discussion)	A5. MI theme (1) 5.1.1.1 Implementation of Management Strategy for WCPO skipjack tuna (40m) 5.1.1.2 Monitoring strategy for WCPO skipjack tuna (40m)	No meeting	
1500-1530				Afternoon Break				
1530-1730 (2h)				A4. Stock Status (1) 4.7.4 (B) Tuna RP (30m presentation and discussion) 4.7.5 (M) Billfish RP (30m presentation and discussion) 4.3.3a (K) SKJ indicators (20m presentation and discussion) 4.3.3b (K) Update of skipjack SA information (30m presentation)	A6. EB theme (2) 6.2.1 Research on non-entangling and biodegradable FADs (Project 110) (25m presentation/discussion) 6.2.2 FAD Management Options IWG Issues (20m presentation/discussion; 30m presentation/discussion; 30m presentation/discussion)	A5. MI theme (2) 5.1.2.1 South Pacific albacore TRP (60m) 5.1.2.2 South Pacific albacore operating models (60m)		
1730-1830				JTF (1730-1830)				
1900-2100								

Time	Sun, 20	Mon, 21	Tue, 22	Wed, 23	Thu, 24		
0830-1000	A4. Stock Status (6) 4.4.1 (K) NPA SA (20m presentation, 10m discussion) 4.4.2 (K) PBF update (10m discussion) 4.4.3 (K) NP SWO SA (20m presentation, 10m discussion) (20m – buffer time)	A4. Stock Status (7) 4.7.1 (K) Ensemble (P113) (20m presentation, 20m discussion) 4.7.3 (B) Options to provide information to SC (30m presentation and discussion) (20m buffer time)	(8:30-9:00) A4. Stock Status (9) 4.6.1 (B) NP MLS SA (20m presentation, 10m discussion) (9:00-10:00) A3. Data (3.1) Recommendations	A4. Stock Status (11) Recommendations	A4. Stock Status (12) Recommendations		
1000-1030	Morning Break						
1030-1200	A3. Data (2) 3.1.2 Bycatch estimates of longline fishery (10m presentation, 10m discussion) 3.3 EM Transshipment project (15m presentation, 10m discussion)	(16:00-17:00) A10.1 Work program and budget A11.1 Future operations of the SC	A4. Stock Status (10) Recommendations	A5. MI theme (6) Recommendations	A4. Stock Status (13) Recommendations		
1200-1330	Lunch Break						
1330-1500	A5. MI theme (3) 5.1.2.3 South Pacific albacore management procedures (45m) 5.1.3 Mixed fishery MSE framework (45m)	A6. EB theme (3) 6.2.2 FAD Management Options IWG Issues (15m presentation/discussion) 6.3.1 Review of conservation and management measure for sharks (30m presentation/discussion) 6.3.2 Mid-term review of shark research plan (Project 97b) (30m presentation/discussion) 6.4.1 Review of Seabird Research (30m discussion)	A5. MI theme (5) Recommendations	A6. EB theme (5) Recommendations	A6. EB theme (6) Recommendations		
1500-1530	Afternoon Break						
1530-1730	A5. MI theme (4) 5.1.4 Review of the WCPFC HS workplan (60m) 5.2 Review of effectiveness of CMM 2021-01 (60m)	(15:00-16:00) A3. Data (3.1) Recommendations A4. Stock Status (8) 4.7.2 (M) CKMR (20m presentation, 20m discussion) 4.5.1 (M) Silky shark SA (20m presentation, 10m discussion) (20m buffer time)	A6. EB theme (4) 6.4.2 Review of CMM on Seabirds (CMM 2018-03) (20m discussion) 6.5.1 Review of sea turtle research (2018-04) 6.5.2 Review of sea turtle CMM (2018-04) 6.6 Cetaceans (2x 30m presentation/discussion) 6.7 Bycatch management	A7. Other projects A8. Cooperation with other organizations A9. Special requirements A10. Work program and budget A11.1 Future operations of the SC	A10. Work program and budget A11.1 Future operations of the SC A11.2-11.3. Election of officers and next meeting A12. Other matters A13. Adoption of report A14. Close of meeting		
1800-2100							

List of Informal Small Group Meetings

ISG-ID	Title/TOR	Agenda	Proposed Facilitator
ISG01 (Data fields)	<p>Proposals for additional or amended data field Para 33, SC18 Summary Report</p> <p>33. <i>Noting the inconsistency in the data reporting requirements between the Scientific Data to be Provided by the Commission (SciData), and other WCPFC reporting obligations (e.g., in CMMs), and the need to improve the data available for stock assessments, SC18 recommended that the Scientific Services Provider undertake a review of the minimum data reporting requirements and report to SC19 in 2023. SC18 requested CCMs to submit proposals for additional or amended data field, with associated justification, before 30th March 2023. For example, the proposal for including FAD minimum data fields recorded by vessel operators in the SciData which was presented to SC18 (PNA paper) should be forwarded to SC19 for consideration.</i></p> <ul style="list-style-type: none"> • SC19-ST-WP-03 Proposal from Australia for additional or amended data fields for collection within WCPFC • SC19-ST-WP-05 FAD Minimum Data Fields to be Recorded by WCPFC Vessel Operators 	3.1.1.3	
ISG02 (SPC suggestion)	<p>Future operations of the SC Para 103, SC18 Summary Report</p> <p>103. <i>SC18 noted the challenge of fully reviewing the key inputs into WCPFC stock assessments and providing feedback within the time available. SC recommended that approaches that may address this issue be discussed at SC19 and recommended that the Scientific Services Provider develop a discussion paper to inform those discussions.</i></p> <ul style="list-style-type: none"> • SC19-SA-WP-14 Options to address time challenges in the review of WCPFC stock assessment inputs • SC19-GN-WP-06 Future Operations of the Scientific Committee • Functions of ODF 	4.7.3 11.1	
ISG03 (TARP)	<p>Tuna Assessment Research Plan (TARP)</p> <ul style="list-style-type: none"> • SC19-SA-WP-15 Draft Tuna Assessment Research Plan (TARP) for 'key' tuna species assessments in the WCPO, 2023-2026 <p>SC19 will</p> <ul style="list-style-type: none"> • Discuss and refine the tuna assessment research plan and suggest modifications to the approach. 	4.7.4	

	<ul style="list-style-type: none"> • Provide feedback on potential gaps in or improvements to the plan, including approaches to better capture SC member activities and plans. • Consider convening a small working group during SC19 to: <ul style="list-style-type: none"> ○ assess the draft TARP, ○ fill identified gaps, ○ identify priority work areas for the development of new SC project proposals for consideration at SC19. • Task the WCPFC Secretariat, with the assistance of the SSP, to review and update the tuna assessment research plan annually. 		
<p>ISG04 (BRP)</p>	<p>Billfish Research Plan</p> <ul style="list-style-type: none"> • SC19-SA-WP-16 <i>Draft billfish research plan (Project 112)</i> <p>The following recommendations are proposed for the SC to consider:</p> <ol style="list-style-type: none"> 1. Given the 4 to 5-year assessment cycle for billfish, the research plan is recommended to encompass two assessment cycles and as such the BRP should run over 2023-2030. 2. It is recommended that SC19 establish an Informal Small Group to evaluate the BRP (ISG-billfish), and maintain this as a standing ISG to evaluate progress against the BRP at subsequent SC meetings. When the ISG develops its terms of reference we suggest that it considers including the following: <ol style="list-style-type: none"> (a) The ISG-billfish rank the projects listed within Table 7 for prioritisation within the billfish research plan¹. (b) The ISG-billfish consider streamlining the projects and merge or remove projects where necessary. (c) The ISG-billfish schedule the projects listed in Table 7. (d) The ISG-billfish develop terms of reference for all projects including stock assessments intended to begin in 2024. 3. It is recommended that all assessments take Table 4 and Table 5 into account when considering metrics for reporting assessment results. 4. It is recommended that standardised CPUE analyses and fishery characterisations be undertaken for black marlin, sailfish and shortbill spearfish and that the SC19 ISG-billfish consider prioritisation and timing for this 	<p>4.7.5</p>	

¹ Note: projects from the BRP elevated to the SC workplan for prioritisation will get re-prioritised as per the agreed SC prioritisation process.

	<p>work, once completed if this work is informative, it should be repeated on a five-yearly schedule.</p> <ol style="list-style-type: none"> 5. It is recommended that a stratified sampling program be designed to make biological sampling most efficient and useful. 6. It is also recommended that the SC discuss how to incorporate the SC17 recommendations on Limit Reference Points into the BRP and develop a process to make recommendations to the Commission on agreed LRPs for use within assessments. 7. Lastly, it is also recommended that on all longline logsheets vessels record time as UTC and not ships time so that local time can be estimates. 		
<p>ISG05 (SRP review)</p>	<p>SPR mid-term review</p> <ul style="list-style-type: none"> • SC19-EB-WP-06 <i>Shark research plan 2021-2025 mid-term review (Project 97b)</i> <p>The following recommendations are proposed for the SC19 to consider:</p> <ol style="list-style-type: none"> 1. Recommend reinstating the Informal Small Group on sharks (ISG-sharks) at SC19 for annual ongoing review and amendment of the SRP. This can replace the need for a mid-term review. When the ISG develops its terms of reference we suggest that it considers including the following: <ol style="list-style-type: none"> (a) The ISG-sharks rank the projects listed within Table 5 and Table 6 for prioritisation within the shark research plan². (b) The ISG-sharks consider streamlining the projects and merge or remove projects where necessary. (c) The ISG-sharks develop a schedule for and allocate a start date for the projects listed in Table 5 and Table 6. (d) The ISG-sharks develop terms of reference for all projects including stock assessments intended to begin in 2024. 2. Extend the current shark research plan to 2030 to encompass two assessment cycles. 3. As there are now many sharks being released and cut free, and a number of EEZs have non-retention policies for all sharks, data on sharks is becoming more uncertain rather than improving overtime. This is introducing further challenges to assessing status of key shark stocks. For less common species such as threshers (all species), whale shark and manta and mobulid rays, 	<p>6.3.2</p>	

² Note: projects from the SRP elevated to the SC workplan for prioritisation will get re-prioritised as per the agreed SC prioritisation process.

	<p>integrated stock assessment is unlikely to be possible. For these these stock we suggested attempting simpler fishery characterisations that may provide some indications of trends. Given the data challenges for estimation of stock status of most sharks, other methods should be explored, in particular, close-kin mark recapture (CKMR). It is recommended that the Regional Observer Program sampling protocols should include training of observers to include methods for non-lethal biological sampling and contamination free genetic sampling. Sampling of tissues should begin, under a 'shark sampling plan', to build a sample database for future studies.</p> <ol style="list-style-type: none"> 4. SC19 should note Table 5 and consider any proposed changes. 5. The data gaps and proposed work identified in Table 6 and Table 7 should be considered by the ISG-sharks who should also propose timelines for the agreed work. The ISG should put forward its priority projects to the SC19 to be considered for funding along side other projects using the SC project scoring criteria (SC17 Summary report Table WP-01). 		
<p>ISG06 (SC Project)</p>	<p>SC Work Program and Budget</p> <p>Also input from:</p> <ul style="list-style-type: none"> • Tuna Assessment Research Plan • Shark Research Plan • Billfish Research Plan 	<p>10.1</p>	