



**COMMISSION**  
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**Billfish Research Plan 2023 – 2027**  
Summary of the Informal Small Group Report on BRP at SC19

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1. The purpose of this paper is to introduce the outcomes of SC19 discussion on the proposed Billfish Research Plan 2023 – 2027 (SC19-SA-WP-16). SC19 agreed to establish an Informal Small Group (ISG-04) to review the details of the paper in the margins of the plenary meeting and the ISG-04 introduced their outcomes to SC19 plenary in the form of the ISG-04 Report (Attachment 2, SC19 Outcomes Document). The following is a brief summary of the ISG-04 Report related to its work plan with some highlights.

***Extension of the BRP to 2030***

2. The ISG-04 supported this BRP be extended to 2030 and an annual ISG on BRP be convened during SC to inform ongoing and future projects planning.

***Evaluate, streamline, schedule and prioritize the projects***

3. A number of projects with similar scope and overlapping themes were listed in Table 7 of the SC19-SA-WP-16, and **Appendix I** provides a list of revised and prioritised billfish stock assessment projects, where Southwest Pacific striped marlin stock assessment is scheduled in 2024. The ISG-04 discussed the need for improved biological data for all billfish species and noted that the ISC has developed and implemented a structured sampling plan for three billfish species in the north Pacific Ocean (SC19-SA-IP-11). The ISG-04 noted the importance of developing a structured sampling plan in collaboration with the ISC and subsequent prioritization and scheduling needed to define which data is collected.

4. Following these discussions, the ISG-04 identified three projects as high priority:

- i) development of a structured biological sampling plan for billfish,
- ii) application of CKMR for SWPO swordfish, and
- iii) a directed longitudinal tagging project for SWPO swordfish.

5. The ISG-04 proposed scheduling the development of the biological sampling plan for 2024, and a TOR was subsequently developed for Project P19X3 *WCPFC billfish biological sampling plan (Appendix II)* and recommended to the Commission. The ISG-04 deferred developing a TOR for exploring the feasibility of applying CKMR to SWPO swordfish pending the results of WCPFC Project 100c. The ISG-04 proposed scheduling the tagging study for 2025/2026 and deferred developing a TOR until SC20.

***Assessment of black marlin, sailfish and shortbill spearfish***

6. The ISG-04 assigned assessment of black marlin, sailfish, and short-billed spearfish as a medium priority item. However, prior to beginning any assessment or analysis of these species, the ISG-04 suggested developing conceptual models for these species to identify the most appropriate modelling approach. The ISG-04 proposed that this characterization/conceptual modelling work could take place in 2025, and development of TOR was deferred until SC20.

**Appendix I: Updated Table 6 for inclusion in revised SC19-SA-WP-16**

| Stock assessment   |          |            |          |   |
|--|----------|------------|----------|---|
| Title  | Priority | Start year | End year | Comments  |
| Assessment 1) North Pacific striped marlin stock assessment                                | High     | 2023       | 2023     | Previous assessment successfully conducted by the ISC   |
| Assessment 2) Southwest Pacific striped marlin stock assessment                            | High     | 2024       | 2024     | Previous assessment successfully conducted by the SPC   |
| Assessment 3) North Pacific swordfish stock assessment                                     | High     | 2023       | 2023     | Previous assessment successfully conducted by the ISC   |
| Assessment 4) Southwest Pacific swordfish stock assessment                                 | High     | 2025       | 2025     | Previous assessment successfully conducted by the SPC   |
| Assessment 5) Pacific blue marlin stock assessment   | High     | 2026       | 2026     | Previous assessment successfully conducted by the ISC   |
| Assessment 6) Modelling approaches for WCPO black marlin, sailfish and shortbill spearfish | Medium   | (2025)     | (2025)   | Develop conceptual models for each species to identify appropriate modelling approaches for low catch low information assessments |

**Appendix II: Updated Table 7 for inclusion in revised SC19-SA-WP-16**

| Biology  |          |            |          |   |
|--|----------|------------|----------|---|
| Title  | Priority | Start year | End year | Comments  |
| Biology 1) Development of a statistically robust sampling plan for the collection of fisheries dependent biological samples (by sex), including but not limited to age, size frequency data, and genetic samples for WCPO swordfish (north and south). | High     | 2024       | 2025     |   |
| Biology 2) Biology of South Pacific striped marlin, blue marlin, black marlin, shortbill spearfish and sailfish in the WCPO from longline fisheries.   | High     | 2025       | 2028     | Collect samples (fin spines and otoliths) and then undertake age growth and reproductive analyses to get growth and maturity parameters to inform productivity rates of this species. Length-weight and length-length conversion factor data collection for SP striped marlin |
| Biology 3) Undertake directed longitudinal tagging of Southwest Pacific swordfish to reduce the uncertainty in movement rate.  | High     | 2025       | 2027     |   |