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Scientific Data Available to the Western and Central Pacific Fisheries Commission

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Executive Summary

This paper reports on the major developments over the past year with regards data and data management for the Commission, as well as the identification of or progress made toward filling gaps in the provision of scientific data to the Commission.

In 2025, the Scientific Services Provider (SSP) transitioned to a new database platform as part of an upgrade to an antiquated system. This transition had been in the works for several years, and in 2025, the migration and transition was completed. The SSP is now fully operating from the new SQL Server database platform. This transition represents a positive step forward for the work of the Commission. As with all systems transitions of this size and complexity, there have been challenges. The most obvious this year is the timing of the provision of key data products and the resulting delays in associated papers relying on those data products. This transition has allowed us to identify areas for improvement in our work, which will be briefly outlined as part of this paper, to keep CCMs informed and to invite any suggestions on improved work flows and how we work to better assist CCMs around the scientific work of the Commission.

The review of data gaps in 2023 and 2024 scientific data provisions includes the assignment of a tier-scoring evaluation level.

In 2024, all CCMs submitted their annual SciData by the deadline² (i.e., deadline of 30 April 2024). In 2025, all but one CCM submitted their annual SciData by the 30 April 2025 deadline.

Aggregate catch/effort data for 2024 were provided by the deadline of 30th April 2025 for all but one CCM. The main gap in the provision of 2024 aggregate catch/effort data was:

i. the low coverage of operational data available to generate aggregate data for two CCMs (which has been the case in recent years).

The other main data gap, which has been highlighted in recent years as well, is the anticipated under-reporting of key shark species in general. However, the quality of aggregate data provided continues to improve with a reduction in the number of data-gap notes assigned to the aggregate data in recent years.

Operational catch/effort data for 2024, were provided by the deadline of 30 April 2025 for all but one CCM. The main gaps in the 2023 and 2024 data submissions include:

- i. The low coverage in the data provided by two CCMs;
- ii. The non-provision of several required fields in the data submission for one CCM.

The coverage of 2024 operational data for most fleets is nearly 100%, and we expect there will be additional operational data submissions in the coming year to complete some of the existing gaps. In most cases where coverage is not 100%, but annual catch and effort estimates by geographic

² Including a grace period of one week.

area (e.g., aggregate data) have been made available, the combination of the two data sources is sufficient for the scientific work of the Commission to be undertaken (these situations are noted in each of the tables).

Tables providing a breakdown of the coverage levels for each operational data field by year and fleet have been prepared in response to a SC17 recommendation (Williams, 2021). The latest version of these tables are included in a separate SC21 Information Paper (SPC-OFP, 2025a), for the SC to review. SPC-OFP continues to engage with relevant CCMs to resolve some of the gaps presented in these tables, with several gaps resolved over the past year.

CCMs have continued to adjust their annual submissions of operational data to align with Annex 2, 'guidelines for data submission of operational level catch and effort data fields for fisheries', in the *Scientific Data to be Provided to the Commission* (SciData), which facilitated the import into the WCPFC databases this year. However, the format of many data submissions remains a challenge, and a separate paper prepared for SC21 has prepared suggestions to improve and standardize the format of data submissions to facilitate the processing of these critical data (Vidal and Loganimoce, 2025).

Based on the contents of this paper, SC21 is invited to:

- Note that overall data gaps have become increasingly few as the coverage and quality of Sci-Data submissions continue to improve. However, given that the format and lack of standardization of data submissions remains a key challenge, the SC21 consider adopting standardized templates for key data submissions to reduce time required to process these data and improve the timing of the availability of this information for the wider work of the SC.
- Note the availability of JSON standards to facilitate and standardize data submissions for logbook and observer data, for select gear types, to reduce manual data preparation and eventually ease data reporting burdens.
- Recognize the importance of processor (cannery) data for, inter alia, the validation of purse seine tuna species composition, and note the project update with proposal for the advancement of the Project 114 objectives (provided in an SC21 Working Paper on Project 114 (Vidal et al., 2025)).
- Note the SSP's initiative to enhance data access through the development of a data dissemination platform and provide input on key components of such a platform, as appropriate.

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1 Introduction

1. The obligations for provision of scientific data to the Commission are set out in the Scientific Committee (SC) documentation *Scientific Data to be Provided to the Commission* (SciData) and *Standards for the Provision of Operational Catch and Effort Data to the Commission* (SC01 Report, Annex VII) which were adopted by the Western and Central Pacific Fisheries Commission (WCPFC) at its second session in December 2005 (WCPFC2 Report, par. 25). The *Standards for the Provision of Operational Catch and Effort Data to the Commission* were incorporated as ANNEX 1 of the SciData which was further refined and subsequently adopted at the Fourth Regular Session of the Commission, in December 2007 (SC03 Report, 2007). These continue to evolve as deemed appropriate and necessary by the Commission. The latest version of SciData can be found on the WCPFC web site. The main revision to this document in the past year includes:

• At WCPFC21, the Commission adopted the inclusion of additional voluntary operational longline fields as part of the SciData provisions. These fields are detailed in Table A2.1.2. CCMs are encouraged to submit these data fields, where possible.

2. As specified in the recommendations for the provision of data, the Oceanic Fisheries Programme (OFP) of the Pacific Community (SPC), which has been engaged by the Commission to provide scientific services (including the collection, compilation and dissemination of fisheries data) under Article 13 of the Convention, has compiled annual catch estimates, operational (logsheet or logbook) catch and effort data, aggregated catch and effort data, and size composition data on behalf of the Commission. In conducting scientific research and analyses in support of the work of the Commission, the OFP has also compiled other types of data, such as reports of unloadings, observer, port sampling, tagging, oceanographic and various types of biological data.

3. While the catch, effort and size composition data currently available are extensive, there are important gaps. The purpose of this paper is to review recent developments concerning the compilation of data by the OFP, on behalf of the Commission, particularly regarding these important data gaps.

2 Status of Data Gaps

4. Data gaps and other issues related to the provision of data have been reported at each Scientific Committee meeting since the first in 2005 [the first data gaps paper for SC1 (Williams and Lawson, 2005)], and most recently at SC20 (Vidal, 2024).

5. SPC-OFP deal with data issues on a daily basis. There were a number of issues successfully resolved over the past year through engagement directly with CCMs. These issues are too numerous to mention here although it is worthy to mention the continued cooperative nature by all CCMs is very much appreciated.

6. The following table provides a list of the **SC20 recommendations** related to data gaps, and

reference to how each recommendation has been addressed over the past year.

SC20 Statistics and Data Theme Recommendations	Summary of Progress
Data Gaps of the Commission ³	
1. [37] SC20 requested that SSP develop a subset of the key	The SSP has implemented an approach
species, expected to be encountered by each gear type, to im-	where species that were reported in at
prove the evaluation of operational data reporting of key species,	least 10% of all fishing sets by gear and
as reported in SC20-ST-IP-02 (e.g., Table 14). Currently, the cov-	year, since the time where near full op-
erage estimation assumes all key species in the "Scientific Data	erational data have been provided to
to be Provided by the Commission (SciData)" are encountered	the Commission (2018), are expected
by all gear types and evaluates reporting coverage based on that	to be reported in the operational data
assumption.	(see SPC-OFP $(2025a)$). This is consid-
	ered a conservative approach and will
	not identify reporting gaps for the less
	frequent captures of more rare species
	(e.g., some shark species).
2. [38] SC20 requested that SSP develop a proposal to improve	A paper addressing this topic has been
data submission workflows through development of data submis-	prepared for the consideration of SC21
sion standards and templates for consideration by SC21.	(Vidal and Loganimoce, 2025).
3. [76] SC20 requested SSP to prepare a paper for SC21 on pos-	A paper addressing this topic has been
sible sea turtle data reporting requirements for vessels to record	prepared for the consideration of SC21
during fishing operations, for longline and purse seine vessels, to	(SPC-OFP, 2025b).
be incorporated in the annual reporting of Scientific Data to be	
provided to the Commission (SciData).	
4. [78] SC20 recommended that SSP and the WCPFC Secretariat	This topic was discussed at TCC21
develop a paper for TCC20's and the FADMO-IWG's considera-	(SPC-OFP, 2024) and may be pro-
tion, responding to the request to identify the needs for the FAD	gressed through the FAD Management
data fields for the work of the WCPFC (science, management and	Options Intersessional Working Group.
monitoring).	

2.1 Data gaps previously identified

7. In years past, this paper has highlighted outstanding data gaps, with the hopes of potentially addressing these gaps with newly available historical information. At SC20, several CCMs noted that these outstanding issues were unlikely to be resolved, as in many cases, the information may not exist. Therefore, at the request of CCMs, we have removed this section from the paper, but readers are referred to previous versions of this paper should they want to revisit the outstanding data gaps previously identified (e.g., Section 2.1 of Vidal, 2024).

2.2 Coverage levels for each operational data field by year and fleet

8. SC17 noted that the evaluation on data gaps regarding provision of operational catch and effort data required under the Scientific Data to be Provided to the Commission is based on whether the field is included in a data submission, rather than on an evaluation of data quality or completeness. Coverage levels for operational data fields have been reported to the SC ever since (e.g., SPC-OFP, 2025a). It should be noted that even if a data field is included in the data submission, it is

³ Bracketed numbers refer to the corresponding paragraph of the SC20 Summary Report

possible that it may not be provided for each fishing operation, but an evaluation of this level of completeness (coverage) for each data field has not been undertaken to date.

9. SPC-OFP continues to engage with relevant CCMs to resolve data gaps presented in these tables. In some cases, it has been possible to resolve the gaps from other sources of information. For example, where VMS data are available, missing information on the departure and return ports and dates has been generated in the historical operational catch/effort data. It some cases it has been possible to fill in gaps for data fields in the historical data such as 'hooks between floats', where industry has provided information about sub-fleets that operate in a similar manner (with respect to this data field); however, this work is ongoing.

2.3 Progress in the provision of operational data according to SciData guidelines

10. WCPFC19 adopted the SC18 recommendation for the inclusion of tables of the operational level catch and effort data fields for longline, purse seine and pole-and-line gears, as a guideline in Annex 2 of the SciData, 'guidelines for data submission of operational level catch and effort data fields for fisheries'.

11. Several CCMs have continued to align their operational data submissions for 2024 with these guidelines, which has further facilitated this import into the WCPFC databases. The WCPFC SSP is very appreciative of the work done to align to the guidelines and, acknowledging this work is ongoing, will continue to engage with and assist other CCMs to determine whether adjustments to their operational data submissions will be possible.

12. Even with increased alignment of the information provided in operational submissions, the format of these data submissions creates significant challenges for the SSP, as formats may change year to year, units may not be consistent, and/or codes may be used which require referral to CCM-specific metadata. Individually, these tasks are not notable, but the collective time required to address these small issues across all data submissions becomes significant. Preparing, interpreting, and addressing issues in data submissions is one of the key bottlenecks causing delays in availability of data for the assessments and scientific work of the Commission. Standardizing data submissions is anticipated to have far reaching benefits for the work of this body.

2.4 Data processing

13. When considering the timeliness and quality of scientific data available to the Commission, one of the key challenges is the format of the data submissions. The formats have yet to be standardized by the Commission, and therefore, there is considerable variation among CCMs ranging from order and naming of columns, units reported, lack of standardization around values (e.g., species names versus FAO codes, the language of the submission, variable units of measurements from kg to 100 kg or mt, etc.). In many cases, the submissions from a single CCM may change from year to year.

Therefore, the annual data processing requires considerable time, attention, and development of bespoke data processing and quality scripts.

14. In order to improve the efficiency and data quality control of loading the key data submissions into the WCPFC databases, the SSP has proposed a suite of options for the consideration of SC21 (Vidal and Loganimoce, 2025).

15. The key existing standardized data submission pathway includes the regional e-reporting platforms (e.g., OnBoard and iFIMS for operational data, Ollo and iFIMS for observer data, etc.).

16. The SSP has also developed a suite of JSON standards to facilitate data submission for logbook (longline and purse seine) as well as observer (purse seine) and ER/EM data, on a voluntary basis. Submission of data using these formats are expected to reduce the time spent preparing and processing data submissions, and may reduce reporting errors. The SSP is available to assist interested CCMs in developing a data submission work flow to use this reporting approach.

3 Recent provisions of Scientific Data to the WCPFC

17. Under the policy for the provision of data to the Commission, annual catch estimates and aggregated catch and effort data must be provided by 30 April of the following year (see 7. Time periods covered and schedule for the provision of data).

18. As noted in the Introduction, the tables of data submission presented herein include a column with a 'tier-scoring evaluation score' which will be referred to under the WCPFC compliance monitoring process and reviewed at TCC21 (September 2025).

19. The subsections below detail any recent gaps or issues encountered with each of the key data submission categories.

3.1 Annual Catch Estimates

20. Tables 1 and 2 list the dates on which catch estimates for 2023 and 2024, respectively, were provided, and include notes on the data that have been provided, mainly highlighting gaps or problems in those data (4th column), general notes on the data provided (5th column), and an indicator for the tier-scoring evaluation level (6th column).

21. All CCMs provided annual catch estimates (ACEs) for 2023 by the deadline (30 April 2024), and all but one CCM submitted annual catch estimates for 2024 by the deadline (30 April 2025)⁴. Indonesia and Philippines typically schedule their annual catch estimates review workshops after the submission deadline but once again prepared and submitted provisional 2024 estimates prior to the 30th April deadline this year. We expect revisions to be included in the WCPFC Part 1 Annual Reports for SC21.

 $^{^4}$ $\,$ One CCM submitted thier annual submission on 15 May 2025 $\,$

22. Each year, the quality of estimates provided continues to improve with further reduction in the number of data-gap notes.

- 23. The main gaps in the provision of 2024 ACE data include:
 - i. reporting longline catches in numbers (or kgs) as opposed to metric tonnes, as specified in the SciData;
 - ii. failing to report catches by the areas specified in the SciData (e.g., WCPO versus WCPFC);
 - iii. ACEs reporting lower values than reported in logbook data; and
 - iv. the expected under-reporting of key shark species in general.

3.2 Aggregate catch/effort data

24. Tables 3 and 4 list the dates on which aggregated catch and effort data were provided for 2023 and 2024, respectively. The notes in the 4th column of the table refer to instances where the data provided do not satisfy criteria specified in the guidelines for the provision of Scientific Data to the WCPFC, general notes on the data are provided in the 5th column (these notes are not data gap issues but are informative) and an indicator for the tier-scoring evaluation level in the 6th column.

25. Pacific Island countries provide operational catch/effort (logbook) data [which are aggregated by the OFP] on a regular basis, which provide the basis for their aggregate catch and effort submissions.

- 26. The main gaps in the provision of 2024 aggregate catch/effort data include:
 - i. the low coverage of operational data available to generate aggregate data for the Vietnam and Indonesia fleets (non-binding)⁵; and
 - ii. the expected under-reporting of key shark species in general.

3.3 Operational catch/effort data

27. Tables 5 and 6 show the schedule for the submissions of 2023 and 2024 operational catch and effort data to the WCPFC, respectively. The difficulties in implementing logbook programmes for small-scale fisheries is acknowledged and indicated in these tables. The key gaps in the 2024 data submissions include:

- i. The low coverage in the data provided for the Indonesia and Vietnam fleets;
- ii. Key data fields missing from submissions (e.g., activity dates, positions) causing delays in availability⁶;

 $^{^{5}}$ Developing approaches to improve upon aggregate data submissions has been flagged as a key priority in 2026/2027 for the WPEA-SPF project for all three countries involved

⁶ These key omissions have generally been addressed

- iii. Submission of catches in numbers only, requiring additional work develop average weight estimates to provide best estimates of catch weight for the work of the Commission [nonbinding]; and
- iv. The non-provision of several required fields in the Indonesia data, for example, the hooks set and hooks between floats for the longline fishery.

28. Operational catch/effort data for 2023 were provided before the 30 April 2024 deadline by all CCMs. The submission of 2024 operational data from Indonesia was once again in a format that aligned with Annex 2, 'guidelines for data submission of operational level catch and effort data fields for fisheries', in the SciData, and included catches of several key shark species, showing continued improvements, although the coverage levels remain low.

29. Most of the significant gaps in operational data have been resolved in recent years, as noted in Section 2.2 of Williams (2019). The coverage of operational data for some fleets is not complete (100%), although we expect additional operational data for 2023 and 2024 will be submitted over the next six months. There have also been delays in processing the more challenging data submissions (e.g., submitted as pdfs or formats requiring additional attention); therefore these data will increase coverage for the associated fleets.

30. The provision of historical operational data for the Asian tuna fleets (China, Indonesia, Japan, Korea and Chinese Taipei) remains the main data gap for the WCPFC and it is hoped that these data can be provided in the near future. As reported in previous years, nearly all CCMs have now modified data collection systems and are including a breakdown of the catch (and where relevant, the release) of the key shark species in their operational data submissions, although noting some issues in under-reporting key shark release/discarding.

31. Although reporting of key shark species is understood to be under-reported in the logbook data, there have been notable improvements in recent years, with all CCMs reporting some level of shark catches in their operational data.

3.4 Size data

32. Table 7 and Table 8 show the schedule for the submissions of 2023 and 2024 size data to the WCPFC, respectively. The notes in the 4th column of the table refer to instances where the data provided do not satisfy criteria specified in the guidelines for the provision of Scientific Data to the WCPFC, general notes on the data are provided in the 5th column (these notes are <u>not</u> data gaps, but offer contextual information), and an indicator for the tier-scoring evaluation level in the 6th column. The gaps in the provision of 2023 and 2024 size data include one fleet (US albacore troll) where the logistics of collecting size data are challenging. We also note that provision of size data is only binding at the CCM level (that is, if data are provided for one gear for a particular CCM, then that submission satisfies the provision of size data even if data have not been provided for another gear type for that CCM).

33. In 2024, the Commission tasked the SSP to further review the size data collected for the WCPFC Convention Area (Project 127).For a comprehensive assessment of size data available to the Commission and potential data or knowledge gaps around those data, please refer to Hamer (2025).

34. The main gap, related to size data submissions is the absence of associated metadata describing the statistical and sampling methods that are used to derive the size composition data, as prescribed in the SciData (para 5).

3.5 Overall scientific data submission evaluation

35. Table 9 provides an overall evaluation of each CCM's submission of scientific data to the WCPFC by consolidating the tier-scoring evaluations for each data type (see ANNEX 1 for further information), as requested by TCC11:

Para. 388. TCC11 recommends that WCPFC12 tasks SPC to further refine the tier scoring system to provide, among other things, an indicator of compliance of CCMs as a whole with provision of scientific data.

36. For the submission of 2024 data, 29 of the 34 CCMs/entities (85%) were evaluated as completely satisfying (100%) the binding requirements for the provision of scientific data to the WCPFC. There are some gaps in catch/effort data for one CCM that would normally satisfy the requirements for submissions of aggregate and operational data. The five CCMs that did not achieve 100% (for 2024 data submissions) satisfied at least at 75% of requirements or greater, and three met 99% of the requirements. It should be noted that some of these data gaps (e.g., lack of size data submissions) may be resolved before TCC21.

3.6 Regional Observer Programme (ROP) data

37. The SPC/OFP has been processing observer data on behalf of its member countries for more than 20 years and the Seventh Regular Session of the Commission (6–10 December 2010) approved the continuation of this work in respect of the Regional Observer Programme (ROP) data in the short-medium term (Summary Report - WCPFC7).

38. Panizza et al. (2025) provides a range of observer data summaries and describes the recent developments, future work and initiatives with respect to ROP data management. This paper includes:

- Tables summarizing current coverage of available observer data by gear;
- Tables summarizing observer data by Pacific Island observer providers;
- A table summarizing data generated from E-Monitoring trials that have been provided to the Scientific Services Provider;

• A table summarizing transhipment data received from observers monitoring carrier vessels.

39. In CMM 2012-03, there is a provision for ROP coverage for vessels fishing north of 20°N and landing fresh fish. Evaluation of coverage for this provision highlights a gap in the current data requirements, as there are currently no required data fields to indicate whether a vessel is landing fresh or frozen fish.

4 Recent developments in dissemination of data

4.1 WCPFC data products

- 40. A range of data products have been made available on the WCPFC web site and these include:
 - The WCPFC Tuna Fishery Yearbook presents annual catch estimates in the WCPFC Statistical Area from 1970⁷ to 2023 https://www.wcpfc.int/statistical-bulletins
 - The WCPFC Annual Catch and Effort Estimates (ACE) Tables by fleet include the essential Annual Fisheries Information Tables I – IV and Tabular Annual Fisheries Information Tables 1-5 and Figures 1-3 required in the Annual Report Part 1. https://www.wcpfc.int/ace-by-fleet
 - Annual Catch by EEZ Table by fleet have been provided beginning in 2018, the year from which nearly complete operational data have been provided, enabling the generation of annual catches estimates at the resolution of the EEZ. https://www.wcpfc.int/ace_by_eez
 - The WCPFC Data Catalogue which currently covers data provisions up to 2022. This data product provides a description of the WCPFC data holdings by gear, species and data type (annual catch estimates, aggregate catch and effort data, operational catch/effort data and aggregated size data). http://www.wcpfc.int/wcpfc-data-catalogue-0
 - Public domain aggregate catch/effort data products (six different combinations of time/area). https://www.wcpfc.int/public-domain
 - Public domain by catch data providing tables of aggregated by catch data and associated effort and observer data for the WCPFC using the By catch Data Exchange Protocol (BDEP) approach https://www.wcpfc.int/public-domain-by catch
 - Public domain size data providing tables of aggregated fish SIZE (Length) data provided by Commission Members (CCMs) and Cooperating Non-members (CNMs). The WCPFC public domain SIZE data can be accessed at https://www.wcpfc.int/public-size-data.

⁷ In 2023, the time series presented in the Yearbook was truncated to 1970 for presentation aesthetics. Data for the full time series, extending back to 1950, will continue to be maintained and updated, and are available on the WCPFC website.

4.2 Planned developments

Together, the SSP and the Commission have acknowledged gaps in accessibility of Commission data and recognize this as a priority work area to ensure CCMs can readily access, review, and utilize their data that is managed by the Commission. We plan to implement a data warehouse approach, based on user roles and privileges, to enable a wider-range of data access to support the scientific and compliance needs of the Commission. The timing of development will depend on resourcing, but we are aiming to have the main platform built within two years, with additional customized applications and dashboards to be implemented thereafter. We welcome suggestions on the key features of such a data dissemination platform.

5 References

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6 Tables

COUNTRY / TERRITORY / ENTITY	GEAR(s)	Date submitted	DATA-GAP Notes	General NOTES	TIER-SCORING EVALUATION LEVEL
Australia	LL, PS, PL, HL,TR	30 Apr 2024		G, H	III
Canada	TR	13 Apr 2024			III
China	LL, PS	28 Apr 2024			III
Cook Islands	LL, PS, TR	03 May 2024		G, H	III
Ecuador	PS	30 Apr 2024			III
El Salvador	PS	30 Apr 2024			III
European Union	LL, PS	30 Apr 2024			III
Federated States of Micronesia	LL, PS	12 Apr 2024		G, H	III
Fiji Islands	LL, PL	12 Apr 2024		G, H	III
French Polynesia	LL, PL, OT	12 Apr 2024		G, H	III
Indonesia	LL	30 Apr 2024		F	III
muunesia	PS, PL, HL, TR, GN, OT	30 Apr 2024		F, J	III
lanan	PS, LL	27 Apr 2024		F, C	III
Japan	PL, TR, OT	27 Apr 2024		F	III
Kiribati	LL, PS, OT	12 Apr 2024		G, H	III
Republic of Korea	LL, PS	30 Apr 2024		Н	III
Marshall Islands	LL, PS	12 Apr 2024		G, H	III
Nauru	PS	12 Apr 2024		G, H	III
New Caledonia	LL	12 Apr 2024		G, H	III
New Zealand	LL, PS, TR, PL	30 Apr 2024		G, H	III
Niue				D	III
Palau	LL, PL	12 Apr 2024		D	III
Papua New Guinea	LL, PS	12 Apr 2024		G, H	III
	PS	17 Apr 2024		G, H	III
Philippines	LL	17 Apr 2024		D	III
	HL, RN, OT	17 Apr 2024		F, J	III
Samoa	LL	12 Apr 2024		G, H	III
Solomon I dands	LL	12 Apr 2024		G, H	III
Solombin Talanda	PS, PL	12 Apr 2024		Н	III
Chinese Taipei	LL, PS	30 Apr 2024			III
Tokelau	OT	12 Apr 2024			III
Tonga	LL	12 Apr 2024		G, H	III
Tuvalu	LL, PS, OT	12 Apr 2024		G, H	III
United States	LL, PS, TR, HL, PL	23 Apr 2024		G, H	III
Vanuatu	LL, PS	12 Apr 2024		G, H	III
Vietnam	LL/HL, GN, PS	30 Apr 2024		F, L	III
Wallis and Futuna	LL	12 Apr 2024		D	III

Table 1: Provision of 2023 annual catches estimates to the WCPFC

- 1 Total annual catches were provided by SPECIES, but not broken down by GEAR.
- 2 Marlin catch estimate not provided to the species level.
- 3 Coverage of data used to determine estimates not provided
- 4 Type(s) of data used to determine estimates not provided
- 5 Methods used to determine estimates not provided
- 6 Breakdown of active vessels by GRT size class not provided
- 7 Swordfish catch estimates only provided
- 8 Billfish catch estimates not provided for the longline gear
- 9 Estimates of all main tuna species not provided
- 10 Estimates exclude archipelagic waters catches
- 11 Estimates of shark catch by species have NOT been provided
- 12 Estimates of shark catch by SPECIES provided, but not for all KEY species taken by this fleet
- 13 Estimates of DISCARDs SHOULD BE provided (non-binding)
- 14 Estimates of ALBA CORE, SWORDFISH and STRIPED MARLIN for the South Pacific Ocean have NOT been provided
- 15 Catch estimates for key species not provided in mt

GENERAL NOTES

- A Catches were estimated by the SPC/OFP while assisting with the preparation of the national fisheries report.
- B Catch estimates were taken from the national fisheries report presented at the meeting of the Scientific Committee.
- C Total annual catches can be determined by aggregating operational data that were provided on this date.
- D Fleet(s) inactive for this calendar year in the WCPFC Convention Area
- E National legislation (or policy) requires that time/area strata comprising data for less than three vessels can not be disseminated.
- F Provisional estimates initially provided, and final estimates provided prior to this year's SC meeting.
- G Estimates of all KEY shark species have been provided in AGGREGATE catch/effort data, OPERATIONAL catch/effort data and/or OBSERVER data provisions
- H Estimates of DISCARDs provided in AGGREGATE catch/effort data, OPERATIONAL catch/effort data or OBSERVER data provisions
- I Pending resolution of attribution of catches according to CHARTER arrangements
- J No Discards reported advised that full retention is assumed in these fisheries (except for protected species).
- K Estimates of DISCARDs SHOULD be provided (non-binding)
- L Breakdown of vessels by GRT not provided but brekdown by HP provided and an understanding that most vessels are < 50 GRT

T	No data are provided, or data have been provided but they have been evaluated as 'unusable' (instances where none of the data provided can be used in assessments). This level of data gap is the most severe and has by far the greatest impacts on the scientific work of the Commission.
II	Data have been provided, most of which can be used for the scientific work of the Commission, but (i) there are one or several (minimum-standard) data fields not provided and/or (ii) the coverage of the data is not according to the requirements. In these cases, some of the scientific work of the Commission cannot be undertaken. The % value assigned in this category represents the estimated proportion of the key attribute data provided compared to the full set of key attribute data required as stipulated in the the WCPFC data submission guidelines.
ш	Data have been provided, there are no gaps in the data provided and the coverage of data is according to the requirements.

COUNTRY / TERRITORY / ENTITY	GEAR(s)	Date submitted	DATA-GAP Notes	General NOTES	TIER-SCORING EVALUATION LEVEL
Australia	LL, PS, PL, HL,TR	30 Apr 2025		G, H	Ш
Canada	TR	29 Apr 2025		D	Ш
China	LL, PS	30 Apr 2025	14		III
Cook Islands	LL, PS, TR	30 Apr 2025		G, H	Ш
Ecuador	PS	15 May 2025			III
El Salvador	PS	30 Apr 2025			III
European Union	LL, PS	30 Apr 2025			III
Federated States of Micronesia	LL, PS	30 Apr 2025		G, H	III
Fiji Islands	LL, PL	30 Apr 2025		G, H	III
French Polynesia	LL, PL, OT	30 Apr 2025		G, H	III
Indonesia	LL	30 Apr 2025		F	Ш
machecia	PS, PL, HL, TR, GN, OT	30 Apr 2025		F, J	III
1	PS, LL	30 Apr 2025		F, C	III
Japan	PL, TR, OT	30 Apr 2025		F	III
Kiribati	LL, PS, OT	30 Apr 2025		G, H	111
Republic of Korea	LL, PS	30 Apr 2025	15	B, H	III
Marshall Islands	LL, PS	30 Apr 2025		G, H	III
Nauru	PS	30 Apr 2025		G, H	III
New Caledonia	LL	30 Apr 2025		G, H	III
New Zealand	LL, PS, TR, PL	30 Apr 2025		G, H	III
Niue				D	III
Palau	LL, PL	30 Apr 2025		D	III
Papua New Guinea	LL, PS	30 Apr 2025		G, H	III
	PS	30 Apr 2025		G, H	Ш
Philippines	LL	30 Apr 2025		D	111
	HL, RN, OT	30 Apr 2025		F, J	Ш
Samoa	LL	30 Apr 2025		G, H	III
Solomon I dande	LL	30 Apr 2025		G, H	III
Soonaria	PS, PL	30 Apr 2025		Н	III
Chinese Taipei	LL, PS	30 Apr 2025			Ш
Tokelau	OT	30 Apr 2025			III
Tonga	LL	30 Apr 2025		G, H	111
Tuvalu LL, PS, OT		30 Apr 2025		G, H	111
United States	LL, PS, TR, HL, PL	30 Apr 2025	15	G, H	III
Vanuatu	LL, PS	30 Apr 2025		G, H	III
Vietnam	LL/HL, GN, PS	30 Apr 2025	2	F, L	
Wallis and Futuna	LL	30 Apr 2025		D	111

Table 2: Provision of 2024 annual catches estimates to the WCPFC

- 1 Total annual catches were provided by SPECIES, but not broken down by GEAR.
- 2 Marlin catch estimate not provided to the species level.
- 3 Coverage of data used to determine estimates not provided
- 4 Type(s) of data used to determine estimates not provided
- 5 Methods used to determine estimates not provided
- 6 Breakdown of active vessels by GRT size class not provided
- 7 Swordfish catch estimates only provided
- 8 Billfish catch estimates not provided for the longline gear
- 9 Estimates of all main tuna species not provided
- 10 Estimates exclude archipelagic waters catches
- 11 Estimates of shark catch by species have NOT been provided
- 12 Estimates of shark catch by SPECIES provided, but not for all KEY species taken by this fleet
- 13 Estimates of DISCARDs SHOULD BE provided (non-binding)
- 14 Estimates of ALBA CORE, SWORDFISH and STRIPED MARLIN for the South Pacific Ocean have NOT been provided
- 15 Catch estimates for key species not provided in mt

GENERAL NOTES

- A Catches were estimated by the SPC/OFP while assisting with the preparation of the national fisheries report.
- B Catch estimates were taken from the national fisheries report presented at the meeting of the Scientific Committee.
- C Total annual catches can be determined by aggregating operational data that were provided on this date.
- D Fleet(s) inactive for this calendar year in the WCPFC Convention Area
- E National legislation (or policy) requires that time/area strata comprising data for less than three vessels can not be disseminated.
- F Provisional estimates initially provided, and final estimates provided prior to this year's SC meeting.
- G Estimates of all KEY shark species have been provided in AGGREGATE catch/effort data, OPERATIONAL catch/effort data and/or OBSERVER data provisions
- H Estimates of DISCARDs provided in AGGREGATE catch/effort data, OPERATIONAL catch/effort data or OBSERVER data provisions
- I Pending resolution of attribution of catches according to CHARTER arrangements
- J No Discards reported advised that full retention is assumed in these fisheries (except for protected species).
- K Estimates of DISCARDs SHOULD be provided (non-binding)
- L Breakdown of vessels by GRT not provided but brekdown by HP provided and an understanding that most vessels are < 50 GRT

I	No data are provided, or data have been provided but they have been evaluated as 'unusable' (instances where none of the data provided can be used in assessments). This level of data gap is the most severe and has by far the greatest impacts on the scientific work of the Commission.
=	Data have been provided, most of which can be used for the scientific work of the Commission, but (i) there are one or several (minimum-standard) data fields not provided and/or (ii) the coverage of the data is not according to the requirements. In these cases, some of the scientific work of the Commission cannot be undertaken. The % value assigned in this category represents the estimated proportion of the key attribute data provided compared to the full set of key attribute data required as stipulated in the the WCPFC data submission guidelines.
ш	Data have been provided, there are no gaps in the data provided and the coverage of data is according to the requirements.

COUNTRY / ENTITY	GEAR TYPE	Date Submitted	DATA-GAP Notes	General NOTES	TIER-SCORING EVALUATION LEVEL
Australia	LL, PL, PS, TR	30 Apr 2024		C,I	II
Canada	TR	13 Apr 2024			II
China	LL (DWFN)	28 Apr 2024		Р	III
China	PS	28 Apr 2024		E	II
Cook Islands	LL, PS, TR	03 May 2024		J, O	II
Ecuador	PS	30 Apr 2024		D	II
El Salvador	PS	30 Apr 2024		С	II
European Union	LL	30 Apr 2024		C, F, P, R	II
Luropean onion	PS	30 Apr 2024		С	II
Federated States of Micronesia	LL, PS	12 Apr 2024		J, O	II
Fiji Islands	LL, PL	12 Apr 2024		J, O	II
French Polynesia	LL	12 Apr 2024		J, O	II
Indonesia	LL, PS, PL	30 Apr 2024		Q, O, S, T	II
Indonesia	HL, TR, GN, OT	30 Apr 2024		N, Q	II
	LL	27 Apr 2024		A, F,H, I, L, R	II
Japan	PL	27 Apr 2024		L	II
	PS	27 Apr 2024		L	II
Kiribati	LL, PS	12 Apr 2024		J, O	II
Republic of Korea	LL, PS	30 Apr 2024			II
Marshall Islands	LL, PS	12 Apr 2024		J, O	II
Nauru	PS	12 Apr 2024		J, O	III
New Caledonia	LL	12 Apr 2024		J, O	II
New Zealand	LL, PL, HL, PS	30 Apr 2024		C,I	II
Niue				E	III
Palau	LL, PL	12 Apr 2024		E	II
Dopus New Cuince	LL	12 Apr 2024		E	II
Papua New Guinea	PS	12 Apr 2024		J, O	II
	PS	17 Apr 2024		M, Q	II
Philippines	LL	17 Apr 2024		E	II
	HL, RN, OT	17 Apr 2024		M, N, Q, T	II
Samoa	LL	12 Apr 2024		J, O	II
Solomon le lande	LL	12 Apr 2024		J, O	II
SUDITOTISIANUS	PL, PS	12 Apr 2024		J	III
	LL (DWFN)	30 Apr 2024		H, I, L	II
Chinese Taipei	LL (STLL)	30 Apr 2024		H, I, L	II
	PS	29 Apr 2023		L	III
Tonga	LL	12 Apr 2024		J, O	III
Tuvalu	LL, PS	12 Apr 2024		J, O	II
	LL (American Samoa)	23 Apr 2024		B, I	II
United States	LL (Hawaii)	23 Apr 2024		B, I	III
	PS	23 Apr 2024		J	II
	TR	23 Apr 2024		В	II
Vanuatu	LL, PS	12 Apr 2024		J, O	II
Vietnam	LL/HL	30 Apr 2024	18	M, Q, S, T	II (95%)
VIGUICIII	PS, GN	30 Apr 2024	18	M, Q, S, T	II (92%)
Wallis and Futuna	LL	12 Apr 2024		E, O	II

Table 3: Provision of 2023 aggregate catch and effort data to the WCPFC

- 1 The catch data are in units of weight (kgs or metric tonnes) only, rather than both numbers of fish and weight.
- 2 The catch data are in units of numbers of fish only, rather than both numbers of fish and kilograms.
- 3 The catch data are for sw ordfish only.
- 4 The unit of effort is "days on which a set was made", rather than "days fished or searched".
- 5 The unit of effort is "sets" rather than "days fished or searched".
- 6 The catch/effort data are not stratified by the required categories of school association
- 7 The units of effort are unknow n, or non-standard
- 8 No effort data provided
- 9 The data are aggregated by 5°x5° instead of 1°x1°
- 10 The 5°x5°/month Longline catch and effort data are not stratified by "Hooks between Floats"
- 11 Coverage of data provided is less than 50%
- 12 No breakdow n of Billfish species catch provided
- 13 The estimation of bigeye in the reported yellow fin-plus-bigeye catch has not been undertaken in these data
- 14 The spatial aggregation is non-standard (must be 5°x5° for Longline; 1°x1° for surface fisheries)
- 15 Data have not been "raised" to represent total catch and effort
- 16 Species composition of main tuna species catch does correspond to annual catch estimates
- 17 Aggregate data provided for the WCPO area (Pacific Ocean w est of 150°W) and not the WCPFC Convention Area
- 18 Catches of KEY shark species have been provided, but (i) not all KEY SPECIES COVERED, and/or (i) COVERAGE of shark species catches is considered LOW.
- 19 Annual Catch and Effort estimates by areas of national jurisdiction (EEZs) and High Seas have NOT BEEN PROVIDED.
- 20 Vessel numbers by YEAR, MONTH and AREA used to filter public domain data have NOT BEEN PROVIDED
- 21 Catches of KEY shark species have not been provided, but can potentially be estimated from observer data.
- 22 Aggregate Catch/Effort data for ALBACORE, SWORDFISH and STRPED MARLIN for the south Pacific Ocean east of the WOPFC Area MAY ALSO be provided (non-binding)
- 23 Catches of KEY shark species have not been provided.
- 24 Effort in SETS by SET TYPE not provided for PURSE SENE data

GENERAL NOTES

- A Unraised data stratified by 5°x5°, month and hooks between floats were also provided
- B National legislation (or policy) requires that time/area strata comprising data for less than three vessels can not be disseminated.
- C Aggregate data not provided, but have been generated from Operational data submitted to the WCPFC.
- D Aggregate data not provided or incomplete, but have been generated from annual catch estimates and operational data made available by the
- Coastal States. E This fleet was inactive in the WCPEC Convention Area.
- F Distant-water longline fleet data do not cover the entire Pacific Ocean (required for stock assessments of certain species)
- G Represents a combination of data provided by the flag state (for domestically-based vessels) and coastal states
- H Vessel numbers per Month and Area provided.
- I Catches of KEY shark species provided in their AGGREGATE data
- J Aggregate data have been generated from annual catch estimates and operational data made available to the SPC by their member countries through national bilateral agreements or subregional arrangements (e.g. the US Multilateral Purse Seine treaty managed by FFA).
- K Rending resolution of attribution of catches according to CHARTER arrangements
- L Annual Catch and Effort estimates by areas of national jurisdiction (EEZs) and High Seas HAVE BEEN PROV DED.
- M Aggregate data not provided, but have been generated from Annual catch estimates and operational data provided to SPC directly for stock assessments.
- N "It is recognized that certain members and cooperating non-members of the Commission may have practical difficulties in compiling operational data for fleets comprised of small vessels."
- O Logsheet forms used by this fleet cover the collection of each of the KEY SHARK species and these logsheet data have been aggregated and provided to the WCPFC.
- P OPERATIONAL catch/effort data also provided and satisfies the requirements stipulated under AGGREGATE data.
- Q Rag State advised that there is full retention in their fishery (except for protected species which must be released), so no DISCARDS
- R Aggregate Catch/Effort data for ALBA CORE, SWORDFISH and STRPED MARLIN for the south Pacific Ocean east of the WOPFC Area MAY ALSO be provided (non-binding)
- S Coverage of data provided is less than 50% (non-binding)
- T Aggregate data not provided, but can be estimated from Operational (or trip-level logsheet) data submitted to the WCPFC and landings data collected under the WFEA project.

Т	No data are provided, or data have been provided but they have been evaluated as 'unusable' (instances where none of the data provided can be used in assessments). This level of data gap is the most severe and has by far the greatest impacts on the scientific work of the Commission.
Ш	Data have been provided, most of which can be used for the scientific work of the Commission, but (i) there are one or several (minimum-standard) data fields not provided and/or (ii) the coverage of the data is not according to the requirements. In these cases, some of the scientific work of the Commission cannot be undertaken. The % value assigned in this category represents the estimated proportion of the key attribute data provided compared to the full set of key attribute data required as stipulated in the the WCPFC data submission guidelines.
Ш	Data have been provided, there are no gaps in the data provided and the coverage of data is according to the requirements.

COUNTRY / ENTITY	GEAR TYPE	Date Submitted	DATA-GAP Notes	General NOTES	TIER-SCORING EVALUATION LEVEL
Australia	LL, PL, PS, TR	30 Apr 2025		C,I	III
Canada	TR	29 Apr 2025		E	III
China	LL (DWFN)	30 Apr 2025		Р	III
China	PS	30 Apr 2025		E	III
Cook Islands	LL, PS, TR	30 Apr 2025		J, O	III
Ecuador	PS	15 May 2025		D	Ш
El Salvador	PS	30 Apr 2025		С	III
European Union	LL	30 Apr 2025		C, F, P, R	Ш
European Onion	PS	30 Apr 2025		С	
Federated States of Micronesia	LL, PS	30 Apr 2025		J, O	II
Fiji Islands	LL, PL	30 Apr 2025		J, O	Ш
French Polynesia	LL	30 Apr 2025		J, O	Ш
Indonesia	LL, PS, PL	30 Apr 2025		Q, O, S, T	Ш
Indonesia	HL, TR, GN, OT	30 Apr 2025		N, Q	II
	L	30 Apr 2025		A, F,H, I, L, R	II
Japan	PL	30 Apr 2025		L	III
	PS	30 Apr 2025		L	III
Kiribati	LL, PS	30 Apr 2025		J, O	II
Republic of Korea	LL, PS	30 Apr 2025			II
Marshall Islands	LL, PS	30 Apr 2025		J, O	II
Nauru	PS	30 Apr 2025		J, O	Ш
New Caledonia	Ш	30 Apr 2025		J, O	II
New Zealand	LL, PL, HL, PS	30 Apr 2025		C,I	II
Niue				E	II
Palau	LL, PL	30 Apr 2025		E	II
Popula New Cuinea	LL	30 Apr 2025		E	II
Fapua New Guinea	PS	30 Apr 2025		J, O	Ш
	PS	30 Apr 2025		M, Q	Ш
Philippines	Ш	30 Apr 2025		E	II
	HL, RN, OT	30 Apr 2025		M, N, Q, T	II
Samoa	LL	30 Apr 2025		J, O	Ш
Solomon Islands	LL	30 Apr 2025		J, O	Ш
SUIUTIUTISIanus	PL, PS	30 Apr 2025		J	Ш
	LL (DWFN)	30 Apr 2025		H, I, L	II
Chinese Taipei	LL (STLL)	30 Apr 2025		H, I, L	II
	PS	30 Apr 2025		L	II
Tonga	L	30 Apr 2025		J, O	II
Tuvalu	LL, PS	30 Apr 2025		J, O	II
	LL (American Samoa)	30 Apr 2025		B, I	
United States	LL (Hawaii)	30 Apr 2025		B, I	Ш
United Otales	PS	30 Apr 2025		J	
	TR	30 Apr 2025		В	Ш
Vanuatu	LL, PS	30 Apr 2025		J, O	II
Vietnam	LL/HL	30 Apr 2025		M, Q, S, T	II
	PS, GN	30 Apr 2025		M, Q, S, T	II
Wallis and Futuna	Ш	30 Apr 2025		E	III

Table 4: Provision of 2024 aggregate catch and effort data to the WCPFC

- 1 The catch data are in units of weight (kgs or metric tonnes) only, rather than both numbers of fish and weight.
- 2 The catch data are in units of numbers of fish only, rather than both numbers of fish and kilograms.
- 3 The catch data are for sw ordfish only.
- 4 The unit of effort is "days on which a set was made", rather than "days fished or searched".
- 5 The unit of effort is "sets" rather than "days fished or searched".
- 6 The catch/effort data are not stratified by the required categories of school association
- 7 The units of effort are unknow n, or non-standard
- 8 No effort data provided
- 9 The data are aggregated by 5°x5° instead of 1°x1°
- 10 The 5°x5°/month Longline catch and effort data are not stratified by "Hooks between Floats"
- 11 Coverage of data provided is less than 50%
- 12 No breakdow n of Billfish species catch provided
- 13 The estimation of bigeye in the reported yellow fin-plus-bigeye catch has not been undertaken in these data
- 14 The spatial aggregation is non-standard (must be 5°x5° for Longline; 1°x1° for surface fisheries)
- 15 Data have not been "raised" to represent total catch and effort
- 16 Species composition of main tuna species catch does correspond to annual catch estimates
- 17 Aggregate data provided for the WCPO area (Pacific Ocean w est of 150°W) and not the WCPFC Convention Area
- 18 Catches of KEY shark species have been provided, but (i) not all KEY SPECIES COVERED, and/or (i) COVERAGE of shark species catches is considered LOW.
- 19 Annual Catch and Effort estimates by areas of national jurisdiction (EEZs) and High Seas have NOT BEEN PROVIDED.
- 20 Vessel numbers by YEAR, MONTH and AREA used to filter public domain data have NOT BEEN PROVIDED
- 21 Catches of KEY shark species have not been provided, but can potentially be estimated from observer data.
- 22 Aggregate Catch/Effort data for ALBACORE, SWORDFISH and STRPED MARLIN for the south Pacific Ocean east of the WOPFC Area MAY ALSO be provided (non-binding)
- 23 Catches of KEY shark species have not been provided.
- 24 Effort in SETS by SET TYPE not provided for PURSE SENE data

GENERAL NOTES

- A Unraised data stratified by 5°x5°, month and hooks between floats were also provided
- B National legislation (or policy) requires that time/area strata comprising data for less than three vessels can not be disseminated.
- C Aggregate data not provided, but have been generated from Operational data submitted to the WOPFC.
- D Aggregate data not provided or incomplete, but have been generated from annual catch estimates and operational data made available by the
- Coastal States. E This fleet was inactive in the WCPEC Convention Area.
- F Distant-water longline fleet data do not cover the entire Pacific Ocean (required for stock assessments of certain species)
- G Represents a combination of data provided by the flag state (for domestically-based vessels) and coastal states
- H Vessel numbers per Month and Area provided.
- I Catches of KEY shark species provided in their AGGREGATE data
- J Aggregate data have been generated from annual catch estimates and operational data made available to the SPC by their member countries through national bilateral agreements or subregional arrangements (e.g. the US Multilateral Purse Seine treaty managed by FFA).
- K Pending resolution of attribution of catches according to CHARTER arrangements
- L Annual Catch and Effort estimates by areas of national jurisdiction (EEZs) and High Seas HAVE BEEN PROV DED.
- M Aggregate data not provided, but have been generated from Annual catch estimates and operational data provided to SPC directly for stock assessments.
- N "It is recognized that certain members and cooperating non-members of the Commission may have practical difficulties in compiling operational data for fleets comprised of small vessels."
- O Logsheet forms used by this fleet cover the collection of each of the KEY SHARK species and these logsheet data have been aggregated and provided to the WCPFC.
- P OPERATIONAL catch/effort data also provided and satisfies the requirements stipulated under AGGREGATE data.
- Q Rag State advised that there is full retention in their fishery (except for protected species which must be released), so no DISCARDS
- R Aggregate Catch/Effort data for ALBA CORE, SWORDFISH and STRPED MARLIN for the south Pacific Ocean east of the WOPFC Area MAY ALSO be provided (non-binding)
- S Coverage of data provided is less than 50% (non-binding)
- T Aggregate data not provided, but can be estimated from Operational (or trip-level logsheet) data submitted to the WCPFC and landings data collected under the WFEA project.

Т	No data are provided, or data have been provided but they have been evaluated as 'unusable' (instances where none of the data provided can be used in assessments). This level of data gap is the most severe and has by far the greatest impacts on the scientific work of the Commission.
=	Data have been provided, most of which can be used for the scientific work of the Commission, but (i) there are one or several (minimum-standard) data fields not provided and/or (ii) the coverage of the data is not according to the requirements. In these cases, some of the scientific work of the Commission cannot be undertaken. The % value assigned in this category represents the estimated proportion of the key attribute data provided compared to the full set of key attribute data required as stipulated in the the WCPFC data submission guidelines.
Ш	Data have been provided, there are no gaps in the data provided and the coverage of data is according to the requirements.

					TIER-SCORING	EVALUATION EL
FLAG STATE / ENTITY	GEAR(s)	Date Submitted	DATA-GAP Notes	General NOTES	KEY ATTRIBUTES	COVERAGE
Australia	LL, PL, PS, TR	30 Apr 2024		E	Ш	100%
Canada	TR	13 Apr 2024			Ш	100%
China	Ш	28 Apr 2024	11			55%*
onnu	PS	28 Apr 2024		Р		100%
Cook Islands	LL, PS	03 May 2024	11	C, J	Ш	100%
Ecuador	PS	30 Apr 2024		I	111	100%
El Salvador	PS	30 Apr 2024			111	100%
European Union	Ш	30 Apr 2024		E	111	100%
	PS	30 Apr 2024				100%
Federated States of Micronesia		12 Apr 2024		C, J, F		100%
	PS			C, J		100%
Fiji Islands	LL, PL	12 Apr 2024		C, J		95%*
French Polynesia		12 Apr 2024		C, J, F		100%
			10150	G, L	111	#
Indonesia	LL, PS, PL	30 Apr 2024	1,2,4,5,6	K, J	11 (96%)	< 10%
				G, K		#
lagan	P5, PL	27 Apr 2024		E, M		100%
Japan		27 Apr 2024	c	E, M		< 10%
			0	E, M		< 10%
Kiribati	DC	12 Apr 2024		C 1 F		05%
	гэ II			E 0		100%
Republic of Korea		30 Apr 2024		E, U F		100%
	11			C 1		100%
Marshall Islands	DS DS	12 Apr 2024		C, J	10	100%
Nauru	PS	12 Apr 2024		C 1		N/A
NewCaledonia	10	12 Apr 2024		C. J		100%
non ou contra	11	12 / p1 2024		F F		95%*
NewZealand	PL TR PS	30 Apr 2024		F.		100%
Niue				A	III	N/A
Palau	Ц	12 Apr 2024		A	III	100%
	L			C, J	Ш	100%
Papua NewGuinea	PS	12 Apr 2024	11	C, J, F	111	100%
	PS	30 Apr 2023		J, K	111	100%
Philippines	Ш	30 Apr 2023	6	A	III	< 10%
	HL, RN, OT			G, K	111	#
Samoa	L	12 Apr 2024	11	C, J	III	100%
	L		11	C, J	Ш	60%*
Solomon Islands	PS	12 Apr 2024		C, J, F	Ш	100%
	PL			C, J	Ш	100%
	LL (DW)			E, F, O	111	95%*
Chinese Taipei	LL (STLL)	30 Apr 2024	11	E, F, O	111	90%*
	PS			F	III	100%
Tonga	L	12 Apr 2024		C, J	Ш	100%
Tuvalu	L	12 Apr 2024		C, J	Ш	< 10%
	PS	12 Apr 2024		C, J	Ш	100%
	LL (American Samoa)			E	Ш	100%
	LL (CNMI, GUAM)			E	111	100%
United States	LL (Hawaii)	23 Apr 2024		E	111	100%
	PL, HL, TR (trop)			G	III	#
	PS			В	111	75%*
	TR (ALB)				111	100%
Vanuatu	Ш	12 Apr 2024	11	C, J, F	111	100%
	PS	12 Apr 2024		C, J, F	111	100%
Vietnam	LL/HL	30 Apr 2023	6	G, H, K, F, N	111	< 10%
	PS, GN	30 Apr 2023	6	G, H, K, F, N	111	< 10%
Wallis and Futuna	L LL	12 Apr 2024		A		N/A

Table 5: Provision of 2023 operational data to the WCPFC

- 1 For LONGLINE GEAR "Branchlines between floats" not provided
- 2 For LONGLINE GEAR "Hooks per set" not provided
- 3 "Activity" not provided
- 4 "Time of set" not provided
- 5 For PURSE SEINE GEAR categories of "School Association" w ere not provided
- 6 Coverage of data provided is < 50%
- 7 Discard information not included
- 8 Catches of KEY shark species have not been provided.
- 9 Catches of KEY shark species have been provided, but (i) not at KEY SPECIES COVERED, and/or (ii) COVERAGE of shark species catches is considered LOW.
- 10 The catch data are in units of weight (kgs or metric tonnes) only, rather than both numbers of fish and weight.
- 11 Coverage of data data provided is > 50% but < 100%
- 12 Trip-level data provided instead of data at the fishing operation level, with vessel identifier.

GENERAL NOTES

- A No activity in the WCPFC Convention Area during this year
- B Operational Logsheet data provided by FFA on behalf of their member countries on a regular basis
- C Operational Logsheet data provided to SPC by their member countries on a regular basis
- D Operational Logsheet data provided to SPC by their member countries on a regular basis, but authorisation to pass on to WCFFC yet to be provided.
- E Catches of KEY shark species have been provided
- F Coverage of operational data is not 100%, but Annual Catch and Effort estimates by areas of national jurisdiction (EEZs) and High Seas ARE AVALABLE.
- G "It is recognized that certain members and cooperating non-members of the Commission may have practical difficulties in compling operational data for fleets comprised of small vessels."
- H Operational Logsheet data provided to SPC for analyses related to stock assessments.
- I Operational Logsheet data also provided to SPC by their member countries which are coastal states where this PLAG STATE/leet is based
- J Logsheet forms or Logbook E-Reporting system used by this fleet cover the collection of each of the KEY SHARK species.
- K Rag State advised that there is full retention in their fishery, so no DISCARDS.
- L Represents a range of French Polynesia small-scale, artisanal gears taking tuna with a range of fishing methods. Vessels include the poli marara and bonitier fleets.
- M Operational data provided to the WCPEC for the WCPEC Area south of 20"N and aggregate 1"x1" year/month data provided for WCPEC Area north of 20"N
- N National logbook data provided, but does not completely satisfy the WCPFC operational data field requirements as yet.
- O Trip-level departure, return/unloading/transhipment information available within daily records, and/or through VMS.
- P Vessels of this fleet have been chartered to Pacific Island countries in recent years, although chartering arrangements for this year are not yet understood, so available operational data for some vessels are assigned to this flag state.

TIER-SCORING EVALUATION LEVEL

Т	No data are provided, or data have been provided but they have been evaluated as 'unusable' (instances where none of the data provided can be used in assessments). This level of data gap is the most severe and has by far the greatest impacts on the scientific work of the Commission.
II	Data have been provided, most of which can be used for the scientific work of the Commission, but (i) there are one or several (minimum-standard) data fields not provided and/or (ii) the coverage of the data is not according to the requirements. In these cases, some of the scientific work of the Commission cannot be undertaken. The % value assigned in this category represents the estimated proportion of the key attribute data provided compared to the full set of key attribute data required as stipulated in the the WCFFC data submission guidelines.
ш	Data have been provided, there are no gaps in the (minimum standard) data fields provided and the coverage of data is sufficient to be used for undertaking the scientific work of the Commission.

COVERAGE

Coverage has been determined from VMS trip coverage where possible. Where VMS data are incomplete or not a vailable, coverage has been deteremined in some cases by comparing the total target tuna catch from operational data for that gear to the total target tuna catch from ANNUAL CATCHEST IMATES.

*	Instances where coverage of operational data is less than 100%, but annual catch/effort estimates by geographic area have been made available and together with the operational level catch and effort data that has been submitted, is sufficient to allow the scientific work of the Commission to be undertaken
#	"It is recognized that certain members and cooperating non-members of the Commission may have practical difficulties in compling operational data for fleets comprised of small vessels."

					TIER-SCORING EVALUAT LEVEL		
FLAG STATE / ENTITY	GEAR(s)	Date Submitted	DATA-GAP Notes	General NOTES	KEY ATTRIBUTES	COVERAGE	
Australia	LL, PL, PS, TR	30 Apr 2025		E	Ш	100%	
Canada	TR	29 Apr 2025			Ш	100%	
China	L	30 Apr 2025	11	I	Ш	80%	
onna	PS	30 Apr 2025	4	Р	Ш	100%	
Cook Islands	LL, PS	30 Apr 2025		C, J	III	100%	
Ecuador	PS	15 May 2025		1	Ш	100%	
El Salvador	PS	30 Apr 2025			III	100%	
European Union	<u> </u>	30 Apr 2025		E	Ш	100%	
	PS	30 Apr 2025			Ш	100%	
Federated States of Micronesia	Ш	30 Apr 2025		C, J, F	<u> </u>	100%	
	PS	30 Apr 2025		C, J	III	100%	
Fiji Islands	LL, PL	30 Apr 2025		C, J		100%	
French Polynesia	Ш	30 Apr 2025		C, J, F	<u> </u>	100%	
-	OT	30 Apr 2025		G, L		#	
Indonesia	LL, PS, PL	30 Apr 2025	1,2,4,5,6	K, J	II (96%)	< 10%	
	HL, TR, GN, OT	30 Apr 2025		G, K		#	
	PS, PL	30 Apr 2025		E, M	Ш	100%	
Japan	Ш	30 Apr 2025		E, M	III	100%*	
	LL (CS)	30 Apr 2025	6	E, M	III	< 10%	
Kiribati	L	30 Apr 2025		C, J, F, O	Ш	100%	
	PS	30 Apr 2025		C, J, F	III	100%	
Republic of Korea	L	30 Apr 2025		E, O	Ш	100%	
	PS	30 Apr 2025		E	Ш	100%	
Marshall Islands	Ш	30 Apr 2025		C, J	III	100%	
	PS	30 Apr 2025		C, J	Ш	100%	
Nauru	PS	30 Apr 2025		C, J	III	N/A	
New Caledonia	Ц	30 Apr 2025		C, J	Ш	100%	
New Zeeland	L	30 Apr 2025		E, F	Ш	95%*	
	PL, TR, PS	30 Apr 2025		E	III	100%	
Niue				A	Ш	N/A	
Palau	Ц	30 Apr 2025		A	Ш	100%	
Papua New Guinea	Ш	30 Apr 2025		C, J	III	100%	
	PS	30 Apr 2025		C, J, F	Ш	100%	
	PS	30 Apr 2025		J, K	Ш	100%	
Philippines	Ш	30 Apr 2025	6	A	Ш	< 10%	
	HL, RN, OT			G, K	Ш	#	
Samoa	Ш	30 Apr 2025		C, J	Ш	100%	
	L	30 Apr 2025		C, J	Ш	100%	
Solomon Islands	PS	30 Apr 2025		C, J, F	Ш	100%	
	PL	30 Apr 2025		C, J	III	100%	
	LL (DW)	30 Apr 2025		E, F, O	Ш	95%*	
Chinese Taipei	LL (STLL)	30 Apr 2025	11	E, F, O	Ш	95%*	
	PS	30 Apr 2025		F	III	100%	
Tonga	L	30 Apr 2025		C, J	Ш	100%	
Turch	Ш	30 Apr 2025		C, J	Ш	< 10%	
Tuvalu	PS	30 Apr 2025		C, J	III	100%	
	LL (American Samoa)	30 Apr 2025		E	Ш	100%	
	LL (CNM, GUAM)	30 Apr 2025		E	III	100%	
United States	LL (Hawaii)	30 Apr 2025		E	Ш	100%	
or intell ordies	PL, HL, TR (trop)	30 Apr 2025		G	Ш	#	
	PS	30 Apr 2025		В	III	95%*	
	TR (ALB)	30 Apr 2025			Ш	100%	
Variati	L	30 Apr 2025		C, J, F	Ш	100%	
varuatu	PS	30 Apr 2025		C, J, F	<u> </u>	100%	
Vistaam	LL/HL	30 Apr 2025	6	G, H, K, F, N	Ш	< 10%	
VIELINATI	PS, GN	30 Apr 2025	6	G, H, K, F, N		< 10%	
Wallis and Futuna				A	111	N/A	

Table 6: Provision of 2024 operational data to the WCPFC

- 1 For LONGLINE GEAR "Branchlines between floats" not provided
- 2 For LONGLINE GEAR "Hooks per set" not provided
- 3 "Activity" not provided
- 4 "Time of set" not provided
- 5 For PURSE SEINE GEAR categories of "School Association" w ere not provided
- 6 Coverage of data provided is < 50%
- 7 Discard information not included
- 8 Catches of KEY shark species have not been provided.
- 9 Catches of KEY shark species have been provided, but (i) not at KEY SPECIES COVERED, and/or (ii) COVERAGE of shark species catches is considered LOW.
- 10 The catch data are in units of weight (kgs or metric tonnes) only, rather than both numbers of fish and weight.
- 11 Coverage of data data provided is > 50% but < 100%
- 12 Trip-level data provided instead of data at the fishing operation level, with vessel identifier.

GENERAL NOTES

- A No activity in the WCPFC Convention Area during this year
- B Operational Logsheet data provided by FFA on behalf of their member countries on a regular basis
- C Operational Logsheet data provided to SPC by their member countries on a regular basis
- D Operational Logsheet data provided to SPC by their member countries on a regular basis, but authorisation to pass on to WCFFC yet to be provided.
- E Catches of KEY shark species have been provided
- F Coverage of operational data is not 100%, but Annual Catch and Effort estimates by areas of national jurisdiction (EEZs) and High Seas ARE AVALABLE.
- G "It is recognized that certain members and cooperating non-members of the Commission may have practical difficulties in compling operational data for fleets comprised of small vessels."
- H Operational Logsheet data provided to SPC for analyses related to stock assessments.
- I Operational Logsheet data also provided to SPC by their member countries which are coastal states where this FLAG STATE fleet is based
- J Logsheet forms or Logbook E-Reporting system used by this fleet cover the collection of each of the KEY SHARK species.
- K Rag State advised that there is full retention in their fishery, so no DISCARDS.
- L Represents a range of French Polynesia small-scale, artisanal gears taking tuna with a range of fishing methods. Vessels include the poli marara and bonitier fleets.
- M Operational data provided to the WCFFC for the WCFFC Area south of 20"N and aggregate 1"x1" year/month data provided for WCFFC Area north of 20"N
- N National logbook data provided, but does not completely satisfy the WCPFC operational data field requirements as yet.
- O Trip-level departure, return/unloading/transhipment information available within daily records, and/or through VMS.
- P Vessels of this fleet have been chartered to Pacific Island countries in recent years, although chartering arrangements for this year are not yet understood, so available operational data for some vessels are assigned to this flag state.

TIER-SCORING EVALUATION LEVEL

Т	No data are provided, or data have been provided but they have been evaluated as 'unusable' (instances where none of the data provided can be used in assessments). This level of data gap is the most severe and has by far the greatest impacts on the scientific work of the Commission.
II	Data have been provided, most of which can be used for the scientific work of the Commission, but (i) there are one or several (minimum-standard) data fields not provided and/or (ii) the coverage of the data is not according to the requirements. In these cases, some of the scientific work of the Commission cannot be undertaken. The % value assigned in this category represents the estimated proportion of the key attribute data provided compared to the full set of key attribute data required as stipulated in the the WCFFC data submission guidelines.
ш	Data have been provided, there are no gaps in the (minimum standard) data fields provided and the coverage of data is sufficient to be used for undertaking the scientific work of the Commission.

COVERAGE

Coverage has been determined from VMS trip coverage where possible. Where VMS data are incomplete or not a vailable, coverage has been deteremined in some cases by comparing the total target tuna catch from operational data for that gear to the total target tuna catch from ANNUAL CATCHEST IMATES.

*	Instances where coverage of operational data is less than 100%, but annual catch/effort estimates by geographic area have been made available and together with the operational level catch and effort data that has been submitted, is sufficient to allow the scientific work of the Commission to be undertaken
#	"It is recognized that certain members and cooperating non-members of the Commission may have practical difficulties in compling operational data for fleets comprised of small vessels."

FLAG STATE / ENTITY	GEAR(s)	Date Submitted	DATA- GAP Notes	General NOTES	TIER- SCORIN G EVALUAT ION LEVEL
Australia	LL	30 Apr 2024		B, C	Ш
, dou and	PL, PS, TR	30 Apr 2024		J	III
Canada	TR	13 Apr 2024		A	III
China	LL	28 Apr 2024		AН	
	PS	28 Apr 2024		A, H	III
Cook Islands	LL, PS	03 May 2024		A, H, K	
Ecuador	PS	30 Apr 2024		H	
El Salvador	PS	30 Apr 2024		Н	
European Union				L, M, N	
	PS	30 Apr 2024		H	
Federated States of Microne	LL, PS	12 Apr 2024		A, H, I, K	
Fiji I slands	, PL	12 Apr 2024		A, H, K	
French Polynesia		12 Apr 2024		A, H, K	
Indonesia	LL, PS, OT	30 Apr 2024		A K	
Japan	PS	27 Apr 2024		A H	
	LL, PL	27 Apr 2024		A, H, I	
Kiribati	LL, PS	12 Apr 2024		A, H, K	
Republic of Korea	LL, PS	30 Apr 2024		A H	
Marshall Islands	LL, PS	12 Apr 2024		A, H, K	
Nauru	PS	12 Apr 2024		A, H, K	
New Caledonia		12 Apr 2024		A, H, K	
New Zealand	LL, PL, PS, TR	30 Apr 2024		A, H	
Niue	LL			G	
Palau	LL, PL	12 Apr 2024		A, H, K	
Papua New Guinea	LL, PS	12 Apr 2024		<u> A</u> H	
Philippines	PS, HL, RN, OT	30 Apr 2024		A, H, K	III
	L	30 Apr 2024		G	
Samoa		12 Apr 2024		A, H, K	
Solomon I slands	LL, PS, PL	12 Apr 2024		ĄН	III
Chinese Taipei		30 Apr 2024		A, H, I	
·	PS	30 Apr 2024		A, H, I	
Tonga	LL	12 Apr 2024		A, H, K	III
Tuvalu	LL, PS	30 Apr 2024		A, H, N	
	LL (American Samoa)	23 Apr 2024		B, E, F	III
	LL (Hawaii)	23 Apr 2024		B, E, F	
United States	HL			B, E, F, M	
	TR			М	111
	PS	23 Apr 2024		A, H, K	111
Vanuatu		12 Apr 2024		A, H, I, K	
	PS	12 Apr 2024		A, H, I, K	111
Vietnam	LL, PS	30 Apr 2024		М	
	GN	30 Apr 2024		М	
Wallis and Futuna	LL	12 Apr 2024		G	111

Table	7:	Provision	of	2023	size	data to	the	WCPFC
10010	•••	1 10,101011	01	1010	DILC.	aava vo	0110	

- 1 Temporal stratification at the YEAR level has been provided only
- 2 Spatial stratification is larger than 10° latitude x 20° longitude
- 3 There is no breakdown by SCHOOL ASSOCIATION in PURSE SEINE samples provided by the FLAG STATE
- 4 The data were not stratified by latitide/longitude
- 5 LENGTH INTERVAL in data provided does not comply to WCPFC Requirements
- 6 WEIGHT INTERVAL in data provided does not comply to WCPFC Requirements
- 7 No SIZE data provided by the FLAG STATE
- 8 No SIZE data provided by the FLAG STATE, but SIZE data provided for this fleet by COASTAL STATES

GENERAL NOTES

- A LENGTH DATA PROVIDED and LENGTH INTERVALS comply with the WCPFC Requirements where data provided (Skipjack tuna – 1cm, Albacore tuna – 1cm, Yellowfin tuna – ideally 1cm, but not more than 2 cm, Bigeye tuna – ideally 1cm, but not more than 2 cm, Billfish – ideally 1cm, but not more than 5 cm)
- B WEIGHT DATA PROVIDED and WEIGHT INTERVALS comply with WCFPC requirements (1kgs)
- C Weights are gilled-and-gutted (kilograms)
- D Weights are gilled-and-gutted-and-tailed (kilograms)
- E Weights are gilled-and-gutted (pounds)
- F Broad areas which can be equated to 10° latitude x 20° longitude blocks were provided
- G No activity by this fleet in the WCPFC Convention Area
- H Includes data provided through the WCPFC Regional Observer Programme (ROP) data
- I Includes data collected through PORT SAMPLING by COASTAL STATES and provided to SPC on a regular basis.
- J Acknowledged to be small-scale/insignificant fisheries
- K Includes data collected through PORT SAMPLING by FLAG STATE.
- L Swordfish target fishery with swordfish size data provided at 5cm intervals.
- M Data not provided, despite activity in this fishery. However, this gap is not considered a WCPFC compliance issue.
- N No size data collection for this fleet due to the impact of COVID-19

I	No data are provided, or data have been provided but they have been evaluated as 'unusable' (instances where none of the data provided can be used in assessments). This level of data gap is the most severe and has by far the greatest impacts on the scientific work of the Commission.
=	Data have been provided, most of which can be used for the scientific work of the Commission, but (i) there are one or several (minimum-standard) data fields not provided and/or (ii) the coverage of the data is not according to the requirements. In these cases, some of the scientific work of the Commission cannot be undertaken. The % value assigned in this category represents the estimated proportion of the key attribute data provided compared to the full set of key attribute data required as stipulated in the the WCPFC data submission guidelines.
Ш	Data have been provided, there are no gaps in the data provided and the coverage of data is according to the requirements.

FLAG STATE / ENTITY	GEAR(s)	Date Submitted	DATA-GAP Notes	General NOTES	TIER-SCORING EVALUATION LEVEL
Australia	LL	30 Apr 2025		B, C	III
Ausi alla	PL, PS, TR	29 Apr 2025		J	III
Canada		30 Apr 2025		G	III
China	LL	30 Apr 2025		A, H	III
onna	PS	30 Apr 2025		A, H	III
Cook Islands	LL, PS	30 Apr 2025		A, H, K	Ш
Ecuador	PS		7	Н	<u> </u>
El Salvador	PS	30 Apr 2025		Н	
European Union	LL		7	L, M, N	Ш
	PS	30 Apr 2025		Н	Ш
Federated States of Micronesia	LL, PS	30 Apr 2025		A, H, I, K	Ш
Fiji Islands	LL, PL	30 Apr 2025		A, H, K	Ш
French Polynesia	LL	30 Apr 2025		A, H, K	III
Indonesia	LL, PS, OT	30 Apr 2025		A, K	III
lanan	PS	30 Apr 2025		A, H	
Japan	LL, PL	30 Apr 2025		A, H, I	Ш
Kiribati	LL, PS	30 Apr 2025		A, H, K	Ш
Republic of Korea	LL, PS	30 Apr 2025		A, H	Ш
Marshall Islands	LL, PS	30 Apr 2025		A, H, K	III
Nauru	PS	30 Apr 2025		A, H, K	
New Caledonia	LL	30 Apr 2025		A, H, K	
New Zealand	LL, PL, PS, TR	30 Apr 2025		A, H	
Niue				G	III
Palau	LL, PL	30 Apr 2025	*	A, H, K	
Papua New Guinea	LL, PS	30 Apr 2025		A, H	III
	PS, HL, RN, OT	30 Apr 2025		A, H, K	III
Philippines	LL	30 Apr 2025		G	Ш
Samoa	LL	30 Apr 2025		A, H, K	
Solomon Islands	LL. PS. PL	30 Apr 2025		A, H	III
a	LL	30 Apr 2025		A, H, I	Ш
Chinese Taipei	PS	30 Apr 2025		A, H, I	Ш
Tonga	LL	30 Apr 2025		A.H.K	111
Tuvalu	LL PS	30 Apr 2025		A.H.N	III
	LL (American Samoa)	30 Apr 2025		B, E, F	III
	LL (Hawaii)	30 Apr 2025		B, E, F	
United States	HL			B, E, F, M	
	TR			M	
	PS	30 Apr 2025		A, H, K	
	LL	30 Apr 2025		A, H, I, K	II
Vanuatu	PS	30 Apr 2025		A, H, I, K	III
	LL PS	30 Apr 2025		M	
Vietnam	, GN	30 Apr 2025		M	
Wallis and Futuna				G	III

Table 8: Provision of 2024 size data to the WCPFC

- 1 Temporal stratification at the YEAR level has been provided only
- 2 Spatial stratification is larger than 10° latitude x 20° longitude
- 3 There is no breakdown by SCHOOL ASSOCIATION in PURSE SEINE samples provided by the FLAG STATE
- 4 The data were not stratified by latitide/longitude
- 5 LENGTH INTERVAL in data provided does not comply to WCPFC Requirements
- 6 WEIGHT INTERVAL in data provided does not comply to WCPFC Requirements
- 7 No SIZE data provided by the FLAG STATE
- 8 No SIZE data provided by the FLAG STATE, but SIZE data provided for this fleet by COASTAL STATES

GENERAL NOTES

- A LENGTH DATA PROVIDED and LENGTH INTERVALS comply with the WCPFC Requirements where data provided (Skipjack tuna – 1cm, Albacore tuna – 1cm, Yellowfin tuna – ideally 1cm, but not more than 2 cm, Bigeye tuna – ideally 1cm, but not more than 2 cm, Billfish – ideally 1cm, but not more than 5 cm)
- B WEIGHT DATA PROVIDED and WEIGHT INTERVALS comply with WCFPC requirements (1kgs)
- C Weights are gilled-and-gutted (kilograms)
- D Weights are gilled-and-gutted-and-tailed (kilograms)
- E Weights are gilled-and-gutted (pounds)
- F Broad areas which can be equated to 10° latitude x 20° longitude blocks were provided
- G No activity by this fleet in the WCPFC Convention Area
- H Includes data provided through the WCPFC Regional Observer Programme (ROP) data
- I Includes data collected through PORT SAMPLING by COASTAL STATES and provided to SPC on a regular basis.
- J Acknowledged to be small-scale/insignificant fisheries
- K Includes data collected through PORT SAMPLING by FLAG STATE.
- L Swordfish target fishery with swordfish size data provided at 5cm intervals.
- M Data not provided, despite activity in this fishery. However, this gap is not considered a WCPFC compliance issue.
- N No size data collection for this fleet due to the impact of COVID-19

I	No data are provided, or data have been provided but they have been evaluated as 'unusable' (instances where none of the data provided can be used in assessments). This level of data gap is the most severe and has by far the greatest impacts on the scientific work of the Commission.
=	Data have been provided, most of which can be used for the scientific work of the Commission, but (i) there are one or several (minimum-standard) data fields not provided and/or (ii) the coverage of the data is not according to the requirements. In these cases, some of the scientific work of the Commission cannot be undertaken. The % value assigned in this category represents the estimated proportion of the key attribute data provided compared to the full set of key attribute data required as stipulated in the the WCPFC data submission guidelines.
Ш	Data have been provided, there are no gaps in the data provided and the coverage of data is according to the requirements.

COUNTRY / TERRITORY / ENTITY	GEAR(s)	Annual Catch estimates	Aggregate CATCH/EFFORT data	Operational CATCH/EFFORT data	SIZE data	OVERALL Science Data	
Australia	LL, PS, PL, HL,TR	100%	100%	100%	100%	100%	
Belize	LL	100%	100%	100%	100%	100%	
Canada	TR	100%	100%	100%	100%	100%	
China	LL, PS	100%	100%	97%	100%	99%	
Cook Islands	LL, PS, TR	100%	100%	100%	100%	100%	
Ecuador	PS	100%	100%	100%	0%	75%	
El Salvador	PS	100%	100%	100%	100%	100%	
European Union	LL	100%	100%	100%	0%	75%	
European onion	PS	100%	100%	100%	100%	100%	
Federated States of Micronesia	LL, PS	100%	100%	100%	100%	100%	
Fiji Islands	LL, PL	100%	100%	100%	100%	100%	
French Polynesia	LL, PL, OT	100%	100%	100%	100%	100%	
Indonesia	LL, PS, PL, HL, TR, OT	100%	100%	96%	100%	99%	
Japan	PS, LL, PL, TR, OT	100%	100%	100%	100%	100%	
Kiribati	LL, PS, OT	100%	100%	100%	100%	100%	
Republic of Korea	LL, PS	100%	100%	100%	100%	100%	
Marshall Islands	LL, PS	100%	100%	100%	100%	100%	
Nauru	PS	100%	100%	100%	100%	100%	
New Caledonia		100%	100%	100%	100%	100%	
New Zealand	LL, PS, TR, PL	100%	100%	100%	100%	100%	
Niue	LL	100%	100%	100%	100%	100%	
Palau	LL, PL	100%	100%	100%	100%	100%	
Papua New Guinea	LL, PS	100%	100%	100%	100%	100%	
Philippines	PS, LL, HL, RN, OT	100%	100%	100%	100%	100%	
Samoa	LL	100%	100%	100%	100%	100%	
Solomon Islands	LL, PS, PL	100%	100%	100%	100%	100%	
Chinese Taipei	LL, PS	100%	100%	100%	100%	100%	
Tokelau	OT	100%	100%	100%	100%	100%	
Tonga	LL	100%	100%	100%	100%	100%	
Tuvalu	LL, PS, OT	100%	100%	100%	100%	100%	
United States	LL, PS, HL, PL	100%	100%	100%	100%	100%	
Officed States	TR	100%	100%	100%	100%	100%	
Vanuatu	LL, PS	100%	100%	100%	100%	100%	
Vietnam	LL, GN, PS	100%	100%	97%	100%	99%	
Wallis and Futuna	LL	100%	100%	100%	100%	100%	

Table 9: Overall compliance evaluation for the provision of 2024 scientific data to the WCPFC

7 Annex 1 - Notes on tier-scoring evaluation system

WCPFC11 agreed to adopt the proposal to assign a tier-scoring evaluation system for the provision of scientific data to the WCPFC which clearly distinguishes between the three levels described below⁸. The tier-scoring system developed by the WCPFC science/data service provider (SPC/OFP) is a systematic process used to evaluate scientific data submissions against the requirements in the "Scientific Data to be Provided to the Commission", which attempts to provide some measure of the significance of data gaps to the scientific work of the Commission.

The tier-scoring approach ranges from "LEVEL I" which indicates the most severe gap with little or no submission of data which has by far the greatest impacts on the scientific work of the Commission, and that "LEVEL III" would indicate fully satisfying the requirements for data submission.

- I. No data are provided, or data have been provided but they have been evaluated as 'unusable' (instances where none of the data provided can be used in assessments). This level of data gap is the most severe and has by far the greatest impacts on the scientific work of the Commission.
- II. Data have been provided, most of which can be used for the scientific work of the Commission, but (i) there are one or several (minimum-standard) data fields not provided and/or (ii) the coverage of the data is not according to the requirements. In these cases, some of the scientific work of the Commission cannot be undertaken. Within this level, further distinction on the level of data submission could be made by considering the number of missing data fields in the data provided (for example, a status of FOUR data gaps is considered more serious than a status of ONE data gap).
- III. Data have been provided, there are no gaps in the (minimum standard) data fields provided and the coverage of data is sufficient to be used for undertaking the scientific work of the Commission.

It should be noted that the tier-score evaluation should not be considered a final compliance evaluation by the Commission on data gaps. However, it is recognized that the tier-score evaluation is expected to be amongst the advice and information that will be available to the TCC for its review of compliance with "Scientific data to be Provided to the Commission" decision through the WCPFC Compliance Monitoring process.

The methodology for determining the tier-scoring evaluation score listed in relevant columns of TABLES in this paper are as follows:

1. Where data have not been provided by a CCM, then a CATEGORY I level is assigned.

⁸ WCPFC11 adopted the tier scoring system for evaluating compliance with the provision of scientific data to the Commission, on the understanding that TCC will keep looking at the process of refining the CMR. The tiered scoring system would be sent to the SC for its consideration.

- 2. Where data provided by a CCM is deemed complete, without any gaps in (minimum standard) data fields provided, then a CATEGORY III level is assigned.
- 3. Where data provided by a CCM is deemed incomplete due to some fields missing, a CATE-GORY II level is assigned, and the following procedures are used:
 - a. The table below lists the total number of key attributes required in the submission of each type of scientific data.

	KEY Attributes in each Scientific data type for TIER-SCORING EVALUATION										
	Aggregate Aggregate Operational										
	Annual catch catch/effort data - catch/effort data - catch/effort data - Operational										
	estimates	PS/PL	u	PS/PL	catch/effort data - LL	Size Data					
26 26 42 28 47 9											

- b. For each submission of data, the number of data field gaps are summed and subtracted from the total number of required data fields (by data type and gear) to produce a tier-scored percentage index for category II. For example, if a CCM submitted aggregate longline catch/effort data but did not include the catches of two key shark species (catch in weight and number = four data field gaps), then the tier-scored percentage index would be (42-4)/42 = 90%, and the assignment would be CATEGORY II (90%).
- 4. The required coverage of OPERATIONAL DATA is 100% and the coverage for each CCM submission has been listed in a dedicated column for COVERAGE in Tables 5 and 6. The guidelines for the submission of scientific data indicate in section "4. Catch and effort data aggregated by time period and geographic area" that:

If the coverage rate of the operational catch and effort data that are provided to the Commission is less than 100%, then catch and effort data aggregated by time period and geographic area that have been raised to represent the total catch and effort shall be provided.

If the coverage rate of the operational catch and effort data that are provided to the Commission is less than 100%, then catch and effort data that have been raised to represent the total catch and effort shall also be aggregated by periods of year and areas of national jurisdiction and high seas within the WCPFC Statistical Area.

The guidelines also indicate that "It is also recognized that certain members and cooperating non-members of the Commission may have practical difficulties in compiling operational data for fleets comprised of small vessels..."

Instances where coverage of operational data is less than 100%, but (i) annual catch/effort estimates by geographic area have been made available and together with the operational level catch and effort data that has been submitted, is sufficient to allow the scientific work of the Commission to be undertaken, or (ii) the fleets in question are acknowledged to be "artisanal" in nature, have been distinctly highlighted in Tables 5 and 6.

As recommended by TCC11 (TCC11- Summary Report; Para. 388), this paper attempts to provide an overall evaluation of scientific data to the WCPFC in Table 9. This evaluation only considered binding requirements from the "Scientific data to be provided to the Commission", and did not consider (i) coverage of data types and (ii) other non-binding requirements listed in this document. This approach is consistent with how TCC reviews and uses the tierscored evaluation information. The method for determining the overall evaluation was to take the average evaluation of each data type submission (without weighting). In each case, the evaluation level 'III' scored 100%, the evaluation level 'I' scored 0% and the evaluation level 'II' used the respective score (%) assigned in that data type. Where a CCM had a separate evaluation by gear(s) within a particular data type, then the average evaluation across all gears for that CCM and data type was determined and used.