



**TECHNICAL AND COMPLIANCE COMMITTEE
TWENTY-SECOND REGULAR SESSION**

23-29 September 2026
Pohnpei, Federated States of Micronesia (Hybrid)

Scientific Data Available to the Western and Central Pacific Fisheries Commission

**WCPFC-TCC22-2026-38_rev1
September 21, 2026**

Submitted by

Tiffany Vidal¹, Shaazreen Bi¹, Freddie Heather¹

Rev 1: updated the evaluation of shark reporting in operational data, as discards were not fully accounted for in the original paper

¹ Oceanic Fisheries Programme of the Pacific Community

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Executive Summary

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

In 2026, the Scientific Services Provider (SSP) assisted CCMs to transition to standardized data reporting templates (Vidal et al., 2025; Schattschneider et al., 2026). This move marks a step change in the data maturity of the WCPFC and lays the groundwork for greater efficiency and timeliness around processing scientific data provided to the Commission (SciData) moving forward. Although this initiative was about efficiency, the result was an opportunity to examine the SciData requirements closely in an effort to develop comprehensive data standards. This examination was fruitful in that it highlighted potential gaps and areas of the SciData document itself where some additional clarity might be warranted. The submission of the SciData was also an opportunity for CCMs to assess where their reporting may have gaps, relative to the requirements, due to the validation procedures and reporting templates. Together, these examinations were challenging in some ways for both the SSP and CCMs, but ultimately a productive exercise to elevate the quality of the SciData across the board. For these reasons, we have a slightly different lens through which we have prepared this standing paper this year.

As noted in 2025, given the contemporary level of data reporting, there are very few true data gaps to report on; however, there are always opportunities to assess potential avenues to strengthen the data submissions, including the quality of submitted data, which serve as the foundation for the assessment of stock status and management procedures for the key stocks managed by the WCPFC.

In 2025, all but one CCM submitted their annual SciData by the deadline², and in 2026, all submitted their data by the 30 April 2026 deadline³. The review of data gaps in 2025 scientific data provisions includes the assignment of a tier-scoring evaluation level, as has been applied in previous years.

Aggregate catch and effort data for 2025 were provided by the deadline of 30th April 2026 for all but one CCM. The main gap in the provision of 2025 aggregate catch/effort data was:

- the low coverage of operational data available to generate aggregate data for three CCMs (which has been the case in recent years). However, what is new in 2026, is that all three of the CCMs for which ACE data are usually disaggregated for this reason, have submitted aggregated catch and effort data. For one CCM, there remains some unresolved issues with that submission, but even so, this represents an important step forward to addressing a long standing data gap.

The other main data gap, which has also been highlighted in recent years, is the anticipated

² Including a grace period of one week.

³ One CCM had issues with access to the web-portal, but they submitted their data via email initially, and Ecuador has yet to submit data for 2025 via the portal; however, some logbook data have been submitted by Pacific Island countries via Tufman2, suggesting some level of fishing effort in 2025.

under-reporting of key shark species. In general, 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 2025 were provided by the deadline of 30 April 2026 for all but one CCM⁴. The main gaps in the 2025 data submissions include:

- The low coverage in the data provided by three CCMs.
- For 2025, Indonesia was able to split their data submissions into two fleets: large-scale (LS; vessels $\geq 30\text{GT}$) and small-scale (SS). This split was implemented to differentiate between the data collected from monitoring of their larger vessels landing in formal fishing ports from the many small-scale vessels landing at informal landing sites, for which monitoring is more limited. As a result of this reporting shift, higher levels of logbook coverage have been noted for the LS fleet, which is a positive step forward. The challenges with monitoring small-scale vessels is not new, but for those interested, a separate paper has been prepared for SC22 detailing the progress, challenges remaining, and activity planning as part of the WPEA project to continue to address key data gaps for the CCMs of that region (Vidal et al., 2026).

The coverage of 2025 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 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 SC22 Information Paper (Loganimoce and Heather, 2026), 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.

In the coming year the SSP plans to continue development of the data submission templates and web-interface to ease the process and provide additional tools for members to review and verify data. In addition, automation of data processes with robust error checking will be explored to enhance efficiency and reduce preparation time. We are also prioritizing the developing a system for members to more easily access and interact with their data, as this remains an important obstacle for CCMs.

Based on the contents of this paper, **SC22 is invited to:**

- Note that overall data gaps have become increasingly few as the coverage and quality of SciData submissions continue to improve.

⁴ Noting, it is unclear whether or not that CCM fished in the Convention Area during 2025.

- Note how the implementation of standardized data submission templates continues to support the reduction in data gaps.

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 WCPFC22, the Commission adopted standardized SciData reporting templates which were implemented in 2026 (see Schattschneider et al., 2026).
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 (logsheets or logbooks) 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 remains some data gaps and areas identified for improvement. 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 relevant data gaps.

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 SC21 (Vidal, 2025).
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 worth mentioning that the continued cooperative nature of all CCMs is very much appreciated.
6. The following table provides a list of the **SC21 recommendations** related to data gaps, and reference to how each recommendation has been addressed over the past year.

SC21 Statistics and Data Theme Recommendations	Summary of Progress
Data Gaps of the Commission⁵	
1. [54] SC21 recognized the importance of reconciling size composition data for stock assessments and recommended continuation of the projects identified as part of phase 2 of this project (Project 127)	This project has been ongoing over the past year with notable updates provided in Hamer et al. (2026) .
2. [55] SC21 requested the SSP circulate a draft pro forma of supporting information to accompany non-ROP size data submissions, for CCMs to review and provide feedback to the SSP.	A pro forma has been developed and circulated to relevant CCMs for input.
3. [57] SC21 requested that the SSP provide a report to SC22 on the development of the pro forma and a summary of CCM responses, with the objective of working towards implementing a standardized pro forma (consistent with the requirements for size data provisions contained in the SciData guidelines) by 2027.	Hamer et al. (2026) reports on the progress of this work and the pro forma development.
4. [69] SC21 supported the development of a standardized data reporting mechanism by the SSP to enhance the efficiency of processing required data submissions under the SciData guidelines. SC21 encouraged CCMs to work with the SSP as it prepares revised templates for consideration at TCC21.	Although the templates were not adopted until WCPFC22, this is included here given its importance. Standardized reporting templates were developed, adopted and ultimately implemented in 2026. This paper details some of the data gaps identified as part of that process and Schattschneider et al. (2026) provides a more comprehensive report on the process and systems developed to support the implementation.
5. [78] SC21 requested the SSP to plan a dedicated workshop in October 2025, to include participation by all interested CCMs, and particularly those CCMs that may have significant cannery data. The workshop objectives are to discuss existing and potential cannery data collections and to develop agreed WCPFC standards for using these data to adjust species composition and catch estimates from the purse seine fishery. Korea has generously offered to host this workshop.	Initial planning discussions for this workshop indicated that in order to get the right people in together to ensure success of this work, additional planning was necessary; hence, the workshop was postponed. SPC-OPF (2026) provides an update on the progress of this project.
6. [96] SC21 endorsed the formation of an informal intersessional working group led by the United States to review CMM 2018-04 for sea turtles, noting that an examination of sea turtle data reporting requirements could be undertaken as part of this review. SC21 requested that this informal intersessional working group report back to SC22 and TCC22 on the outputs of its discussions.	A review of this measure has been undertaken by the US and will be presented during this meeting (WCPFC-SC22-2026-EB-WP09) .
7. [107] SC21 acknowledged the importance of developing a FAD logbook and generally supported the proposed minimum FAD logbook data fields, but recognized the concerns about the logical consistency, redundancy, and availability among logbook data fields. SC21 encouraged CCMs to work through the FAD MO IWG to refine the proposed minimum FAD logbook data fields.	The FAD MO-WG is expected to provide an update on these developments during this meeting (WCPFC-SC22-2026-EB-WP04).
8. [122] SC21 recommended revising section 1.5 in Annex 1 of the SciData guidelines as follows: • ‘Weight of fish caught per set’ to be replaced by ‘Weight of catch per set’ • Add ‘Number of discarded/released individuals per set’ to capture interactions with cetaceans	The SciData document was updated following WCPFC22.
9. [123] SC21 recommended revising the SciData guidelines in Annex 2 table A2.2.4 to add footnotes to the text ‘and other species as determined by the Commission’ in the SPECIES CODE reference text field and in the NOTES columns for the following field: • DISCARDED/RELEASED NUMBER field to align with the requirements for reporting catches of cetaceans under CMM 2024-07 (table A2.2.4).	The SciData document was updated following WCPFC22.
10. [156] SC21 noted that WCPFC21 tasked the ERandEM IWG to develop advice on potential changes to the interim EM standards to improve harmonization across RFMOs, and recommended forwarding SC21-ST-WP-12, ‘Report of the Electronic Monitoring Minimum Standards Harmonization Workshop,’ to the ERandEM IWG for its consideration.	The ERandEM IWG will provide an update on this topic to this meeting (WCPFC-SC22-2026-ST-WP08).

⁵ Bracketed numbers refer to the corresponding paragraph of the [SC21 Summary Report](#)

Coverage levels for each operational data field by year and fleet

7. 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., [Loganimoce and Heather, 2026](#)). It should be noted that even if a data field is included in the data submission, it is 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.

8. 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. In 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.

Progress in the provision of operational data according to SciData guidelines

9. 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’.

10. Given the implementation of standardized reporting, submission of mandatory data fields was formalized. In the submission portal, data submissions are subjected to what [Schattschneider et al. \(2026\)](#) referred to as Phase 1 validation checks. One of the key validations is whether or not mandatory data fields have been reported (relative to the SciData requirements), and if not, the data are not passed on to be ingested by the SSP databases. This feature explicitly addresses gaps in required reporting. It also presents challenges when a mandatory data field is missing, unknown, or simply doesn’t align with the reporting options. For this reason, we have proposed some changes to the SciData ([SPC-OFP, 2026](#)) to strengthen reporting clarity for such areas identified in 2026 to strive for a more comprehensive document to support members with their data reporting.

11. The standardized reporting templates are a significant step forward in reporting; however, given the timeframes for the data submission deadline and those associated with the assessment work and evaluation of management procedures, in particular, the timing will always be a strain. Although the reporting templates are expected to have a notable impact in coming years, the aim should be e-reporting to ensure near real-time reporting of data throughout the year, and ideally, much earlier provision of key data sets for scientific work, even if not entirely complete.

12. The key existing standardized data submission pathways include the regional e-reporting

platforms (e.g., OnBoard and iFIMS for operational data, Ollo and iFIMS for observer data, etc.).

13. 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.

Recent provisions of Scientific Data to the WCPFC

14. 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](#)).

15. 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 TCC22 (September 2026).

16. In past years, we have provided the tables below for both the current reporting year (i.e., 2025) and the previous year. This year, we did not receive updates to historical data⁶, so those tables remain unchanged (and are not repeated here; please see [Vidal \(2025\)](#) to review those tables).

17. In addition, these tables have historically been prepared manually. Given the advances with the submission portal, and associated metadata, this year we have largely developed these tables programatically. As noted in prior years, for many of the submissions there are very few real data gaps; however, we will aim to refine this process to minimize manual efforts and to ensure consistency.

Annual Catch Estimates

18. Table 1 lists the dates on which catch estimates for 2025 were provided and includes 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).

19. All but one CCM provided annual catch estimates (ACEs) for 2025 by the deadline (30 April 2025)⁷. Indonesia and Philippines typically schedule their annual data workshops after the submission deadline, however, both prepared and submitted provisional 2025 estimates prior to the 30th April deadline.

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

⁶ This lack of historical updates may be associated with limitations of the web-portal. The portal will be enhanced to enable more streamlined updates for prior years as well, if necessary.

⁷ One CCM submitted data via email by the deadline, but had issues accessing the web-portal which resulted in a late submission there. One CCM has not provided any 2025 data at the time of writing this report.

21. The main gaps in the provision of 2025 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 other areas specified in the SciData (e.g., WCPFC, South Pacific);
- iii) ACEs reporting lower values than reported in logbook data; and
- iv) the expected under-reporting of key shark species in general.

Aggregate catch/effort data

22. Table 2 lists the dates on which aggregated catch and effort data were provided for 2025. 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.

23. 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.

24. Another challenge with the aggregate catch and effort data, albeit not a gap, is the comparison between or reporting of effort from vessels of different size-classes. For example, purse seine days are often reported on, but in order to do so in a meaningful way, we must apply an adjustment factor to the small-scale fleets operating in the WCPFC Convention Area. This adjustment is an added complexity and potential source of error. The SSP will work with CCMs and the Secretariat to explore the possibility of including additional gear codes to distinguish between small-scale and large-scale vessels using similar gears (e.g., purse seine) or to develop agreed adjustment factors to be applied in a more transparent manner.

25. The main gaps in the provision of 2025 aggregate catch/effort data include:

- i) the low coverage of operational data available to generate aggregate data for the Philippines (non-binding)⁸; and
- ii) the expected under-reporting of key shark species in general.

Operational catch/effort data

26. Table 3 shows the schedule for the submissions of 2025 operational catch and effort data to the WCPFC. The difficulties in implementing logbook programmes for small-scale fisheries is acknowledged and indicated in these tables. The key gaps in the 2025 data submissions include:

- i) the low coverage of data provided for Indonesia, Philippines, and Vietnam⁹; and

⁸ In 2026, Indonesia, Philippines, and Vietnam all submitted aggregate data; however, there were some unresolved issues with the Philippines submission requiring disaggregation of their ACE data again.

⁹ Noting that Indonesia has separated their small-scale fleets from the large-scale, and has demonstrated increased reporting for their large-scale fleet in 2026.

- ii) submission of vessels that do not align to the vessel reference tables managed by the SSP. In some cases this required the creation of new vessels, which may disrupt individual vessel time series of catch and effort data.

27. It should be noted that Vietnam has submitted operational data for several years in a slightly non-standard format. Work is ongoing to fully integrate these data into the production database, and therefore, operational coverage for Vietnam in the most recent years is typically higher than reported in this document. This integration is expected to be done prior to SC23.

28. Operational catch and effort data for 2025 were provided before the 30 April 2026 deadline by all but one CCM (but see [Schattschneider et al. \(2026\)](#) for details on timing of data revisions).

29. Most of the significant gaps in operational data have been resolved in recent years, as noted in Section 2.2 of [Williams \(2019\)](#). In addition, the implementation of the standardized data submission templates resulted in greater alignment to the standards due to validation procedures associated with the submission process. The coverage of operational data for some fleets is not complete (100%), although we expect additional operational data for 2025 may be submitted over the coming months.

30. The provision of historical operational data for the Asia 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/discardings.

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.

Operational data quality assessment of standardized Dnon-PICT operational data imports

32. In addition to the assessment of operational data coverage, a review of the 2025 standardized operational data imports submitted by non-Pacific Island countries and territories (non-PICTs) was undertaken following implementation of the standardized reporting templates and associated validation and staging processes. The assessment examined record-level completeness and reporting characteristics across the longline, purse seine, pole-and-line and troll operational data imports. Five common operational data quality observations were identified and are summarised below.

- **Mandatory field completeness:** The standardized non-PICT operational data imports demonstrated a high level of completeness across the mandatory Trip-, Activity- and Catch-level fields assessed. Required identifiers, activity information and mandatory catch quantity fields were generally populated across all fishing gears, and only minor gaps were identified

where mandatory fields were missing.

- **Catch reporting practices:** Differences were observed in the way catch quantities were reported among the standardized operational data imports. Some submissions reported retained catches only, whereas others reported both retained and discarded catches.
- **Reference-data consistency:** Departure and unloading port information was generally provided in the standardized operational data imports. However, a small number of submitted port codes could not be resolved to valid WCPFC reference ports during the staging process and were consequently assigned to an ‘unknown’ port category. These cases represent reference-code quality issues rather than missing operational data and provide an opportunity to improve consistency with the WCPFC port reference list.

33. These observations complement the operational data coverage assessment presented in this paper by highlighting common reporting characteristics identified in standardized non-PICT operational data imports and opportunities to further improve the consistency, interpretation and automated quality assessment of operational data submitted to the Commission.

Size data

34. Table 4 shows the schedule for the submissions of 2025 size data to the WCPFC. 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 gaps, but offer contextual information), and an indicator for the tier-scoring evaluation level in the 6th column. The gaps in the provision of 2025 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). The SC may wish to discuss whether additional requirements at the gear or species level may be appropriate to better support the scientific work of the Commission.

35. In 2025, 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 et al. \(2025\)](#). In 2026, this important work was further elaborated on in [Hamer et al. \(2026\)](#).

36. 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). The SSP is working with relevant CCMs to develop a standardized reporting template to support this requirement (see Annex 2 of [Hamer et al., 2026](#)).

Overall scientific data submission evaluation

37. Table 5 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.

38. For the submission of 2025 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 2025 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 TCC22.

Regional Observer Programme (ROP) data

39. 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](#)).

40. [Panizza et al. \(2026\)](#) 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 transshipment data received from observers monitoring carrier vessels.

41. 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.

Dissemination of Commission data

WCPFC data products

42. 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 1970¹⁰.
- 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.
- 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.
- The WCPFC Data Catalogue which currently covers data provisions up to 2024. 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).
- Public domain aggregate catch/effort data products (six different combinations of time/area).
- Public domain bycatch data providing tables of aggregated bycatch data and associated effort and observer data for the WCPFC using the Bycatch Data Exchange Protocol (BDEP) approach
- Public domain size data providing tables of aggregated fish SIZE (Length) data provided by Commission Members (CCMs) and Cooperating Non-members (CNMs).

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 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.

References

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¹⁰ 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 to 2024

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Table 1: Provision of 2025 annual catches estimates to the WCPFC

COUNTRY/ TERRITORY/ ENTITY	GEAR(s)	Date Submitted	DATA-GAP Notes	General NOTES	TIER SCORING EVALUATION LEVEL
Australia	LL, OT	29 Apr 2026		G, H	III
Canada	TR	23 Apr 2026		D	III
China	LL	29 Apr 2026			III
Cook Islands	LL, PS	27 Apr 2026		G, H	III
Ecuador		12 Jun 2026			I
El Salvador	PS	28 Apr 2026			III
European Union	LL, PS	29 Apr 2026		D	III
Federated States of Micronesia	LL, PS	27 Apr 2026		G, H	III
Fiji Islands	LL	29 Apr 2026		G, H	III
French Polynesia	LL, OT	22 Apr 2026		G, H	III
Indonesia	DG, HL (LS/SS), HS, LL (LS/SS), OT, PL, PS (LS/SS)	22 Apr 2026			III
Japan	DG, LL, OT, PL, PS	28 Apr 2026			III
Kiribati	LL, PS	30 Apr 2026		G, H	III
Republic of Korea	LL, PS	30 Apr 2026			III
Marshall Islands	LL, PS	22 Apr 2026		G, H	III
Nauru	PS	30 Apr 2026		G, H	III
New Caledonia	LL	29 Apr 2026		G, H	III
New Zealand	HL, LL, PL, PS, TR	30 Apr 2026		G, H	III
Niue				D	
Palau		30 Apr 2026		G, H	
Papua New Guinea	PS	27 Apr 2026		G, H	III
Philippines	HL, HS, OT, PS, RN	29 Apr 2026	2		III
Samoa	LL	27 Apr 2026		G, H	III
Solomon Islands	LL, PS	28 Apr 2026		G, H	III
Chinese Taipei	LL, PS	29 Apr 2026			III
Tonga	LL	27 Apr 2026		G, H	III
Tuvalu	OT, PS	27 Apr 2026		G, H	III
Tokelau	OT	27 Apr 2026		D	
United States	LL, OT, PS, TR	21 Apr 2026			III
Vanuatu	LL, OT, PS	28 Apr 2026		G, H	III
Vietnam	DG, HL, LL, PS	07 May 2026			III
Wallis and Futuna	OT	28 Apr 2026		D	III

Data-Gap notes - ACE data (Table 1)

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 ALBACORE, 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 - ACE data (Table 1)

- 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 cannot 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 breakdown by HP provided and an understanding that most vessels are < 50 GRT.

Table 2: Provision of 2025 aggregate catch and effort data to the WCPFC

COUNTRY/ TERRITORY/ ENTITY	GEAR(s)	Date Submitted	DATA-GAP Notes	General NOTES	TIER SCORING EVALUATION LEVEL
Australia	LL, PS	29 Apr 2026		C, I	III
Canada		13 Apr 2026		E	III
China	LL	29 Apr 2026		C, I	III
Cook Islands	LL, PS	27 Apr 2026		J, O	III
Ecuador	PS			D	I
El Salvador	PS	21 Apr 2026		C	III
European Union	LL, PS	29 Apr 2026		C, I	III
Federated States of Micronesia	LL, PS	27 Apr 2026		J, O	III
Fiji Islands	LL	29 Apr 2026		J, O	III
French Polynesia	LL	22 Apr 2026		J, O	III
Indonesia	LL, PL, PS	22 Apr 2026		T, Q	III
Japan	LL, PL, PS	28 Apr 2026		C, I	III
Kiribati	LL, PS	30 Apr 2026		J, O	III
Republic of Korea	LL, PS	30 Apr 2026		C, I	III
Marshall Islands	LL, PS	22 Apr 2026		J, O	III
Nauru	PS	30 Apr 2026		J, O	III
New Caledonia	LL	29 Apr 2026		J, O	III
New Zealand	LL, PL, PS, TR	30 Apr 2026		C, I	III
Niue		27 Apr 2026		E	
Palau		30 Apr 2026		E	
Papua New Guinea	PS	27 Apr 2026		J, O	III
Phillippines	PS	29 Apr 2026		T, Q	III
Samoa	LL	27 Apr 2026		J, O	III
Solomon Islands	LL, PS	28 Apr 2026		J, O	III
Chinese Taipei	LL	29 Apr 2026		C, I	III
Tonga	LL	27 Apr 2026		J, O	III
Tuvalu	PS	27 Apr 2026		J, O	III
Tokelau		27 Apr 2026		E	
United States	LL, PS, TR	20 Apr 2026		C, B, I	III
Vanuatu	LL, PS	28 Apr 2026		J, O	III
Vietnam	LL, PS	07 May 2026		T, Q	III
Wallis and Futuna		28 Apr 2026		E	

Data-Gap notes - Aggregate data (Table 2)

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 swordfish 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 unknown 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 breakdown of Billfish species catch provided
13. The estimation of bigeye in the reported yellowfin-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 not correspond to annual catch estimates
17. Aggregate data provided for the WCP Ocean (Pacific Ocean west 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 (ii) 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 observed data.
22. Aggregate Catch/Effort data for ALBA CORE, SWORDFISH and STRPED MARLIN for the south Pacific Ocean east of the WCPFC 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 SEINE data

General notes - Aggregate data (Table 2)

- 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 cannot 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. This fleet was inactive in the WCPFC Convention Area.
- E) The fleet was inactive in the WCPFC 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 the 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 PROVIDED.
- 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 recognised 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) Flag State advised that there is full retention in their fishery (except for protected species which must be released), so no DISCARDS are observed.
- R) Aggregate Catch/Effort data for ALBACORE, SWORDFISH and STRPED MARLIN for the south Pacific Ocean east of the WCPFC 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 WPEA project.

Table 3: Provision of 2025 operational data to the WCPFC

COUNTRY/ TERRITORY/ ENTITY	GEAR(s)	Date Submitted	DATA-GAP Notes	General NOTES	TIER SCORING EVALUATION LEVEL	Coverage
Australia	LL	29 Apr 2026		E	III	89 %
China	LL	29 Apr 2026		I	III	90 %
Cook Islands	LL	27 Apr 2026		C, J	III	100 %
Cook Islands	PS	27 Apr 2026		C, J	III	99 %
Ecuador	PS	30 Apr 2026		Q	I	... %
El Salvador	PS	22 Apr 2026		E	III	77 %
European Union	LL, PS	29 Apr 2026			III	100 %
Federated States of Micronesia	LL	27 Apr 2026		C, J	III	99 %
Federated States of Micronesia	PS	27 Apr 2026		C, J	III	100 %
Fiji Islands	LL	30 Apr 2026		C, J	III	96 %
French Polynesia	LL	22 Apr 2026		C, J	III	98 %
Indonesia	LL	22 Apr 2026	8	R	II	12 %
Indonesia	PL	22 Apr 2026			III	27 %
Indonesia	PS	22 Apr 2026		E, R	III	12 %
Japan	LL	07 May 2026		E	III	100 %
Japan	PL	28 Apr 2026			III	100 %
Japan	PS	28 Apr 2026		E	III	100 %
Kiribati	LL, PS	30 Apr 2026		C, J	III	100 %
Republic of Korea	LL	30 Apr 2026			III	100 %
Republic of Korea	PS	30 Apr 2026		E	III	100 %
Marshall Islands	LL, PS	22 Apr 2026		C, J	III	100 %
Nauru	PS	30 Apr 2026		C, J	III	100 %
New Caledonia	LL	30 Apr 2026		C, J	III	96 %
New Zealand	LL	30 Apr 2026		E	III	97 %
New Zealand	PL, TR	30 Apr 2026			III	100 %
New Zealand	PS	30 Apr 2026		E	III	100 %
Papua New Guinea	PS	27 Apr 2026		C, J	III	97 %
Philippines	PS	29 Apr 2026		E	III	22 %
Samoa	LL	27 Apr 2026		C, J	III	98 %
Solomon Islands	LL, PS	28 Apr 2026		C, J	III	100 %
Chinese Taipei	LL	29 Apr 2026		E	III	84 %
Chinese Taipei	PS	29 Apr 2026		E	III	100 %
Tonga	LL	27 Apr 2026		R, C, J	III	100 %
Tuvalu	PS	27 Apr 2026		C, J	III	100 %
United States	LL	24 Apr 2026		E	III	100 %
United States	PS	24 Apr 2026		B	III	100 %
United States	TR	22 Apr 2026			III	100 %
Vanuatu	LL	29 Apr 2026		C, J	III	74 %
Vanuatu	PS	29 Apr 2026		R, C, J	III	100 %
Vietnam	LL	07 May 2026	9	R	II	100 %
Vietnam	PS	07 May 2026	9	R	II	2 %

Note:

Operational coverage rates for China, indicated in this table, may be lower than achieved coverage due to conditional chartering arrangements and current challenges accurately attributing logbook data aligned with those arrangements.

Data-Gap notes - Operational data (Table 3)

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” were not provided.
6. Coverage of data provided is < 50%.
7. Catches of KEY shark species have not been provided.
8. Catches of KEY shark species have been provided, but (i) not all KEY SPECIES COVERED, and/or (ii) COVERAGE of shark species catches is considered LOW.
9. The catch data are in units of weight (kgs or metric tonnes) only, rather than both numbers of fish and weight.
10. Coverage of data provided is > 50% but < 100%.
11. Trip-level data provided instead of data at the fishing operation level, with vessel identifier.

General notes - Operational data (Table 3)

- 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 WCPFC yet to be provided.
- E) Catches of KEY shark species have been provided.
- F) Coverage of operational data is at 100%, but Annual Catch and Effort estimates by areas of national jurisdiction (EEZs) and High Seas ARE AVAILABLE.
- G) *It is recognised that certain members and cooperating non-members of the Commission may have practical difficulties in compiling 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 Reporting systems used by this fleet cover the collection of each of the KEY SHARK species.
- K) Flag State advised that there is full retention in their fishery, so no DISCARDS.
- L) Represents a range of French Polynesian small-scale, artisanal gears taking tuna with a range of fishing methods. Vessels include the poti marara and bonitier fleets.
- M) Operational data provided to the WCPFC for the WCPFC Area south of 20°N and aggregate 1°×1° year/month data provided for WCPFC Area north of 20°N.
- N) National logbook data provided, but does not completely satisfy the WCPFC operational data field requirements.
- O) Trip-level departure, return/landing date information unavailable 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.
- Q) Annual catch estimates not provided, therefore, coverage could not be assessed.
- R) Discard information not included.

Table 4: Provision of 2025 size data to the WCPFC

COUNTRY/ TERRITORY/ ENTITY	GEAR(s)	Date Submitted	DATA-GAP Notes	General NOTES	TIER SCORING EVALUATION LEVEL
Australia	LL	29 Apr 2026		G	III
Canada	TR	23 Apr 2026		A	III
China	LL	29 Apr 2026		A, H	III
Cook Islands	LL, PS	27 Apr 2026		A, K, H	III
Ecuador				H	III
El Salvador	PS	30 Apr 2026		A, H	III
European Union	PS	29 Apr 2026		A	III
Federated States of Micronesia	LL, PS	27 Apr 2026		A, K, H	III
Fiji Islands	LL	30 Apr 2026		A, K, H	III
French Polynesia	LL	22 Apr 2026		A, K	III
Indonesia	HL, HS, LL, PL, PS	27 Apr 2026		A	III
Japan	LL, PL, PS	28 Apr 2026		A, H	III
Kiribati	LL, PS	30 Apr 2026		A, K, H	III
Republic of Korea	LL, PS	30 Apr 2026		A, H	III
Marshall Islands	LL, PS	22 Apr 2026		A, K, H	III
Nauru	PS	30 Apr 2026		A, H	III
New Caledonia	LL	30 Apr 2026		A, K	III
New Zealand	LL, TR	30 Apr 2026		A	III
Niue		28 Apr 2026		G	
Palau		30 Apr 2026		K	
Papua New Guinea	PS	27 Apr 2026		A, K, H	III
Phillippines	HL, HS, PS, RN, TR	29 Apr 2026		A, K, H	III
Samoa	LL	27 Apr 2026		A, K	III
Solomon Islands	LL, PS	28 Apr 2026		A, K, H	III
Chinese Taipei	LL, PS	29 Apr 2026		A, H	III
Tonga	LL	27 Apr 2026		A, K	III
Tuvalu	PS	27 Apr 2026		A, H	III
Tokelau		27 Apr 2026		G	
United States	LL, PS	20 Apr 2026		H	III
Vanuatu	LL, PS	29 Apr 2026		A, K, H	III
Vietnam	GN, PS	07 May 2026		A	III
Wallis and Futuna		28 Apr 2026		G	

Data-Gap notes - Size data (Table 4)

1. Temporal stratification at the YEAR level has been provided only.
2. Spatial stratification is larger than 10° latitude $\times$ 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 latitude/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 - Size data (Table 4)

- A) LENGTH DATA PROVIDED and LENGTH INTERVALS comply with the WCPFC Requirements where data provided (Skipjack tuna – 1 cm, Albacore tuna – 1 cm, Yellowfin tuna – ideally 1 cm, but not more than 2 cm, Bigeye tuna – ideally 1 cm, but not more than 2 cm, Billfish – ideally 1 cm, but not more than 5 cm).
- B) WEIGHT DATA PROVIDED and WEIGHT INTERVALS comply with WCPFC requirements (1 kgs).
- 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 $\times$ 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 5 cm 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.

Table 5: Overall compliance evaluation for the provision of 2025 scientific data to the WCPFC

Country	GEAR(S)	Annual Catch Estimates	Aggregate CATCH/ EFFORT data	Operational CATCH/ EFFORT data	SIZE data	OVERALL Science data
Australia	LL, OT, PS, TR	100%	100%	100%	100%	100%
Canada	TR	100%	100%	100%	100%	100%
China	LL, PS	100%	100%	100%	100%	100%
Cook Islands	LL, PS, TR	100%	100%	100%	100%	100%
Ecuador	PS	0%	0%	0%	0%	0%
El Salvador	PS	100%	100%	100%	100%	100%
European Union	LL, PS	100%	100%	100%	100%	100%
Federated States of Micronesia	LL, PS	100%	100%	100%	100%	100%
Fiji Islands	LL	100%	100%	100%	100%	100%
French Polynesia	LL, OT	100%	100%	100%	100%	100%
Indonesia	DG, HL (LS/SS), HS, LL (LS/SS), OT, PL, PS (LS/SS)	100%	100%	99%	100%	99.8%
Japan	DG, LL, OT, PL, PS	100%	100%	100%	100%	100%
Kiribati	LL, PS	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	LL	100%	100%	100%	100%	100%
New Zealand	HL, LL, PL, PS, TR	100%	100%	100%	100%	100%
Niue		...	...	...	...	...
Palau		...	...	...	...	...
Papua New Guinea	LL, PS	100%	100%	100%	100%	100%
Phillippines	HL, HS, OT, PS, RN, TR	100%	100%	100%	100%	100%
Samoa	LL	100%	100%	100%	100%	100%
Solomon Islands	LL, PS	100%	100%	100%	100%	100%
Chinese Taipei	LL, PS	100%	100%	100%	100%	100%
Tonga	LL	100%	100%	100%	100%	100%
Tuvalu	LL, OT, PS	100%	100%	100%	100%	100%
Tokelau	OT	...	...	...	...	...
United States	LL, OT, PS, TR	100%	100%	100%	100%	100%
Vanuatu	LL, OT, PS	100%	100%	100%	100%	100%
Vietnam	DG, GN, HL, LL, PS	100%	100%	97%	100%	99.2%
Wallis and Futuna	OT	...	...	...	...	...

Table 6: Explanation of the tier-scoring evaluation level

Tier	Description
III	Data have been provided. There are no gaps in the data provided and the coverage of the data is according to the requirements.
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 WCPFC data submissions guidelines.
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.

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 below¹¹. 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 “III” which indicates fully satisfying the requirements for data submission to ‘III’ which is 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 (Table 6).

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:

- Where data have not been provided by a CCM, then a CATEGORY I level is assigned.
- 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.
- Where data provided by a CCM is deemed incomplete due to some fields missing, a CATEGORY 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

¹¹ 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.

type of scientific data.

KEY Attributes in each Scientific data type for TIER-SCORING EVALUATION					
Annual catch estimates	Aggregate catch/effort data - PS/PL	Aggregate catch/effort data - LL	Operational catch/effort data - PS/PL	Operational 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 example, if a CCM submitted aggregate longline catch/effort data but did not include the catches of key shark species (catch in weight and number = two data field gaps), then the tier-scored percentage index would be $(42-2)/42 = 95\%$, and the assignment would be CATEGORY II (95%).
- The desired coverage of OPERATIONAL DATA is 100% and the coverage for each CCM submission has been listed in a dedicated column for COVERAGE in Table 3. 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 Table 3.

As recommended by TCC11 (<https://meetings.wcpfc.int/node/9336>; 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

- coverage of data types and
- other non-binding requirements listed in this document. This approach is consistent with how TCC reviews and uses the tier-scored 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 ‘I’ scored 100%, the evaluation level ‘III’ 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.