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Use of ROP Observer data in the Compliance Monitoring Scheme (CMS), and updates on the scheme to address the imbalance in the CCFS

WCPFC-TCC20-2024-09_rev1[1]
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Submitted by the Secretariat

Purpose

1. This paper presents an update of TCC19 working paper 09. The aim is to provide updated information to assist the Technical and Compliance Committee (TCC) to review processes to refine how data collected through the Regional Observer Programme (ROP) is used in the Compliance Monitoring Scheme (CMS).
2. This year's paper includes updates related to the Revised CMS CMM adopted at WCPFC20 (2023), specifically the scheme to address the imbalance in the CCFS and it will highlight areas for consideration and advice by TCC, to guide the future implementation of the scheme.
3. Additional information related to the matter of ongoing cases is provided in TCC20 Working Paper 10.

Function of the ROP and the definition of WCPFC ROP data

4. The ROP was established pursuant to Article 28 of the Convention "to collect verified catch data, other scientific data and additional information related to the fishery from the Convention Area and to monitor the implementation of the conservation and management measures adopted by the Commission." The ROP has at its core, the collection of independent, verified catch and scientific data at-sea which can also be used for compliance purposes in monitoring CCMs' implementation of CMMs.
5. The ROP is based on the use of the regional, subregional and national observer programmes of its members. Operational rules for the ROP are set out in CMM 2018-05. The TCC and the Scientific Committee (SC) have a joint responsibility to recommend the priorities and

[1] Rev 1 replaces the original posted on 9 September 2024 and incorporates some editorial corrections.

objectives of the ROP to the Commission and to assess the results of the programme (Convention Articles 12 (2f) and 14(2c)).

6. The current required observer coverage rates are:

    - Purse seine vessels 20N and 20S: 100% observer coverage (CMM 2023-01 paragraphs 32 and 33).
    - Longline vessels: a minimum rate of 5% ROP observer coverage (CMM 2018-05, Annex C paragraph 6) and the option provided to certain flag CCMs in the tropical tuna CMM to increase bigeye longline catch limits by committing to increased observer coverage (see TCC20 working paper 15)
    - Transhipments-at-sea: a minimum rate of 100% ROP observer coverage with the observer usually deployed on the receiving vessel (CMM 2009-06, paragraph 13).

7. The Commission has adopted WCPFC ROP Minimum Standard Data Fields and ROP-authorized Programmes are expected to ensure that their programme's observers collect these data during each placement involving WCPFC longline and purse seine ROP trips. The Commission at WCPFC19 in December 2022 adopted new Minimum Data Fields for Observer Transhipment Monitoring as data fields to be collected by transhipment observers during transhipment events and provided to the Commission as of 1 April 2023. ROP Observer Providers can determine the best format for collection of the WCPFC minimum data fields.

8. Since 2016, the Commission has provided additional guidance relevant to ROP data collection and submission through the WCPFC Standards, Specifications and Procedures for Electronic Reporting in the WCPFC – covering operational catch and effort data + observer data (ER Standards for observer data and logbooks). These Standards also incorporate the SPC/FFA harmonised data fields that are used by many observer programmes and include notes to clarify which observer data fields are agreed as WCPFC ROP Minimum Standard Data Fields (WCPFC Field = Y) and which are not presently included (WCPFC Field = N). Consequently, some observers during a ROP trip may record additional observer data and some supplementary notes, for example in their observer journal, but as these are not defined as ROP data (WCPFC Field = N), they are not available for use by the Secretariat in the CMS.

9. WCPFC receives observer data management services through its Scientific Services Provider contract with the Pacific Community – Oceanic Fisheries Programme (SPC-OFP). SPC-OFP also supports its member Pacific Island countries and territories with observer data management, and as a result there is centralized and harmonised observer data processing and management in the WCPO. In accordance with WCPFC rules, SPC will consider observer data to be WCPFC ROP data if the activity of a fishing vessel during a trip meets the definition of being a ROP-defined[2] trip. For ROP-defined trips, the data fields that correspond to WCPFC

[2] CMM 2018-05 paragraph 5: Scope of the Commission ROP
5. *The Commission ROP shall apply to the following categories of fishing vessels authorized to fish in the Convention Area in accordance with the Commission's Conservation and Management Measures 2004-01:*
i)vessels fishing exclusively on the high seas in the Convention Area, and
ii)vessels fishing on the high seas and in waters under the jurisdiction of one or more coastal States and vessels fishing in the waters under the national jurisdiction of two or more coastal States.

ROP Minimum Standard Data Fields will be considered WCPFC ROP data. TCC20 Information Paper 3 overviews SPC's observer data management for WCPFC.

How ROP data is currently used in the CMS

10. The primary use of ROP data in the CMS to date, has been as an independently collected data source which once available to the Secretariat, provides the basis for seeking clarification and requesting investigations by flag CCMs of potential alleged infringements by their vessels. The initial exploration of this use for ROP data in the CMS commenced in 2014/15 when the Secretariat provided supporting files to relevant CCMs based on ROP data.

11. In April 2016, the Secretariat launched the Compliance Case File System (CCFS) with the requirement of providing the Secretariat with a mechanism for the structured and centralized recording of correspondence related to potential alleged infringements of CMMs. As such, the CCFS was originally a tool to support the Secretariat's delivery of tasks under the CMS. However, the eventual design of the CCFS included allowing relevant CCMs to view "cases" and to submit information that they considered relevant to a case.

12. In the initial design of the CCFS the Secretariat took into consideration Convention Article 25(2):

> "*Each member of the Commission shall, at the request of any other member, and when provided with the relevant information, investigate fully any alleged violation by fishing vessels flying its flag of the provisions of this Convention or any conservation and management measure adopted by the Commission. A report on the progress of the investigation, including details of any action taken or proposed to be taken in relation to the alleged violation, shall be provided to the member making the request and to the Commission as soon as practicable and in any case within two months of such request and a report on the outcome of the investigation shall be provided when the investigation is completed.*"

13. In recent years, the CMS CMM (CMM 2023-04) has elaborated the purpose of the CCFS, and currently the stated purpose is that the CCFS is to be maintained "*as a secure, searchable system to store, manage and make available information to assist CCMs with tracking alleged violations by their flagged vessels.*" The measure also confirms which CCMs should have access to a case, directs that notifications should be sent when new cases are created, and guides what the aggregated summary tables generated from the CCFS should contain and what information flag CCMs are to provide in response to each case related to their vessels. In accordance with these rules, and where applicable, ROP observer providers, coastal CCMs, and chartering CCMs can view and provide responses to relevant cases through the CCFS.

14. There are two main groups of cases in the CCFS, which are differentiated by the way that cases are initiated:

    - Observer-initiated cases are cases that are created by queries against the fields in the WCPFC ROP data. Observer-initiated cases may be further grouped based on whether the ROP data is collected on the WCPFC Observer Trip Monitoring Summary (Trip Level Data) or collected based on vessel activity, set-type, species codes and/or fate codes (Set Level Data). There are currently six types of Observer-initiated cases, and data in the CCFS commences from 2015/16.

- CCM-initiated cases (or Article 25(2) cases) are for alleged infringements in which a flag State investigation has been requested by a WCPFC member, in accordance with Article 25(2) of the Convention. These cases are created by the Secretariat individually, based on email communications from one CCM to another CCM to request an explanation or investigation into the conduct of its vessel and/or its nationals. Data commences from 2013.

15. The groupings and subgroupings are illustrated in
16. **Figure** 1 below. Snapshot summaries are included in the next section of the paper which provides further detail about each of the six current Observer-initiated case types and their linkage to reviews of CMM obligations.

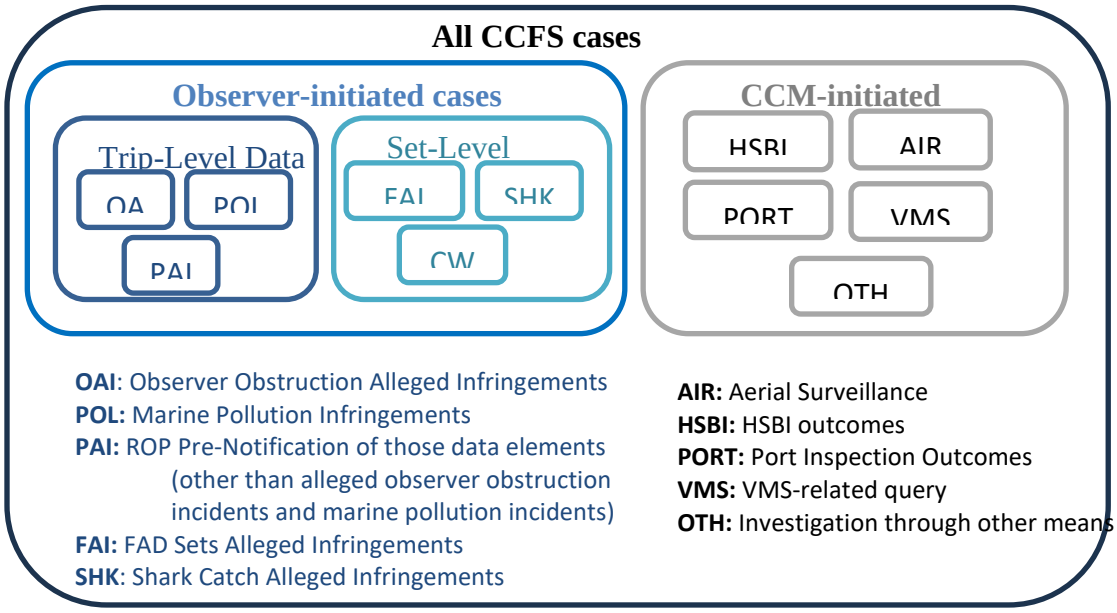


Figure 1: Schematic diagram of current CCFS case types, to illustrate the groupings based on how a case is initiated, and within the Observer initiated group whether the ROP data is based on the observer trip monitoring summary or is based on set-level (operational) data.

17. The processes to update the CCFS through adding new cases based on ROP data, occurs periodically and through procedures that have been developed by the Secretariat and the SPC-OFP who manage the WCPFC scientific data holdings. In the past, the frequency of updates was primarily constrained by the frequency with which the SPC-OFP could provide ROP data to the Secretariat; but more recently the primary constraint has become the availability, within the Secretariat, of IT professionals capable of loading this data and of Compliance staff to review and check draft cases created from the ROP data.[3] For the last couple of years, an update has occurred every three to four months. SPC-OFP prepares an annual report for SC and TCC on *Status of Observer Data Management* (TCC20 Info paper 3)

[3] The current restructure of the Compliance team is expected to assist with realigning capacity to better support ROP data case updates. Additional resources are required from the Commission to support more frequent updates of CCFS based on ROP data.

which including the status of observer data entry, observer data provisions and information on ROP coverage levels currently achieved across WCPFC fisheries.

18. In early 2022, the Secretariat launched an upgraded CCFS with the aim of continuing to enhance and improve the ease of use of the system. The Secretariat continues to welcome CCM's feedback on their experiences with using the CCFS. TCC20 Working Paper 10 provides additional details about CCFS system updates.

19. The Commission is currently progressing work to refine WCPFC's monitoring programs. The reactivated IWG-ROP has a 2024 – 2026 workplan that prioritizes the review and development of draft recommended modifications to ROP data fields with the intention of allowing for more useful consideration of ROP data in the CCFS and in the Compliance Monitoring Scheme processes (TCC20 Working Paper 19). The TS-IWG is progressing the review of the Transhipment CMM (CMM 2009-06) and the scope includes consideration of strengthening monitoring of at-sea transshipment activities (TCC20 working paper 21). The ERandEM-IWG is also progressing work to establish E-monitoring as a tool to meet WCPFC's data needs (TCC20 working paper 20).

Addressing the imbalance in observer coverage between longline and purse seine fisheries in the CCFS

20. **Figure 2** and **Figure 3** below illustrate the expected bias in ROP observer coverage compared to actual effort. With a long-standing WCPFC requirement of 100% observer coverage on Purse Seine vessels as compared to a minimum of 5% ROP coverage on longline vessels, it isn't surprising that purse seine ROP coverage is a significantly higher proportion of fishing effort, than for longline effort.

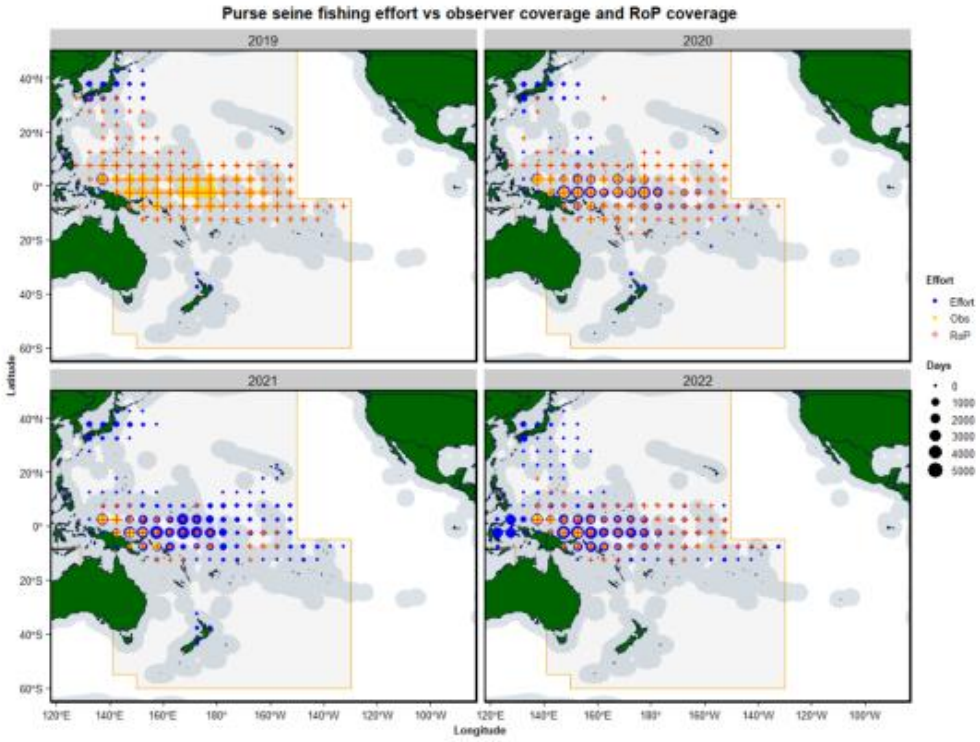


Figure 2: The distribution of purse seine fishing effort and observer effort for 2019-2022

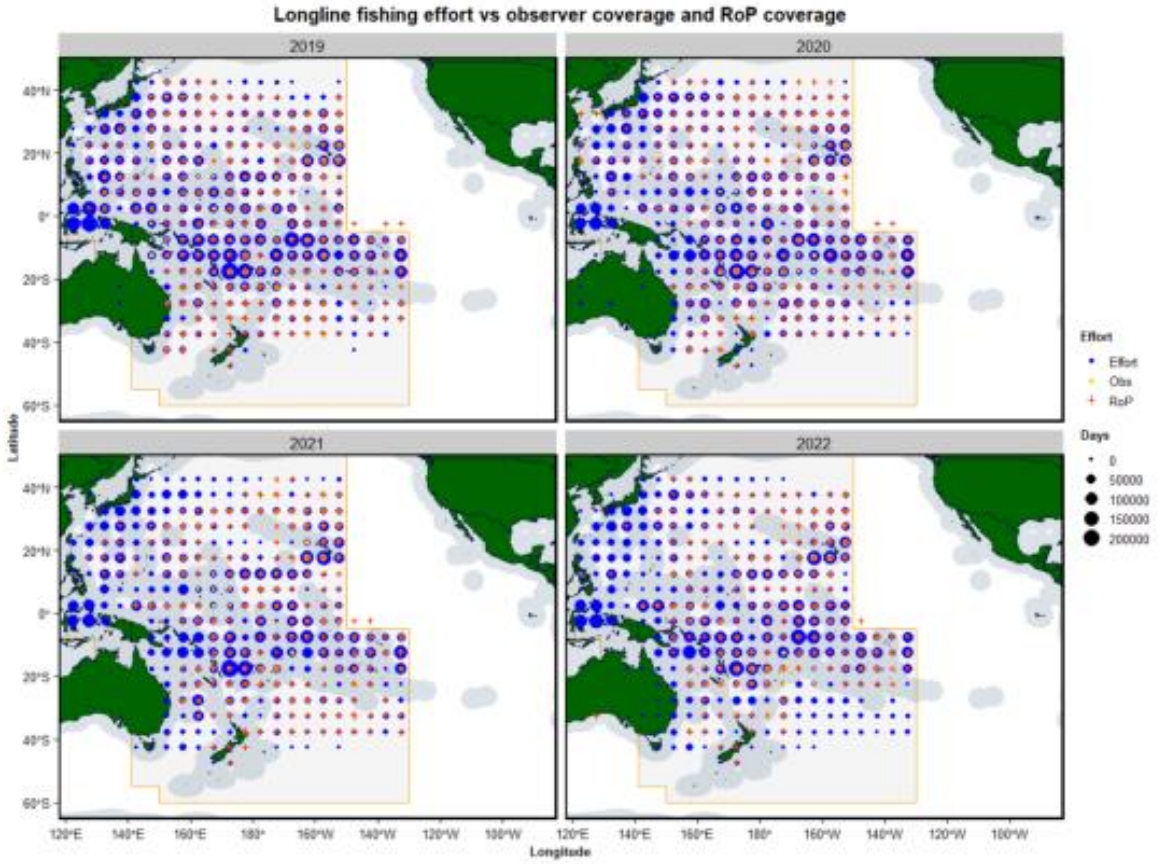


Figure 3: The distribution of longline fishing effort and observer effort for 2019-2022

Table 1: Count of Individual vessels that have generated CCFS cases by event and year and vessel type (Total CCFS cases)

Vessel type	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Bunker	0	0	0	0	0	0	0	0	0	0	0
Fish carrier	0	0	0	0	0	1	0	0	0	0	0
Longliner	0	0	24	28	56	78	68	34	16	4	0
Others	0	0	0	1	0	0	0	0	0	0	0
Pole and line	0	0	0	0	0	0	0	0	0	0	0
Purse seiner	0	0	135	253	241	241	263	204	46	42	0
Support vessel	0	0	0	0	0	0	0	0	0	0	0

21. In **Table 1**, the impact of the observer-initiated cases in the CCFS indicates a potential bias in the CCFS cases towards purse seine vessels. In **Figure 4**, it is apparent that most observer-initiated cases relate to purse seine vessels (where the tropical tuna CMM requires a 100% observer coverage rate). Whereas for CCM-initiated cases (Article 25(2) cases), **Figure 4** shows a greater proportion of cases relate to longline vessels.

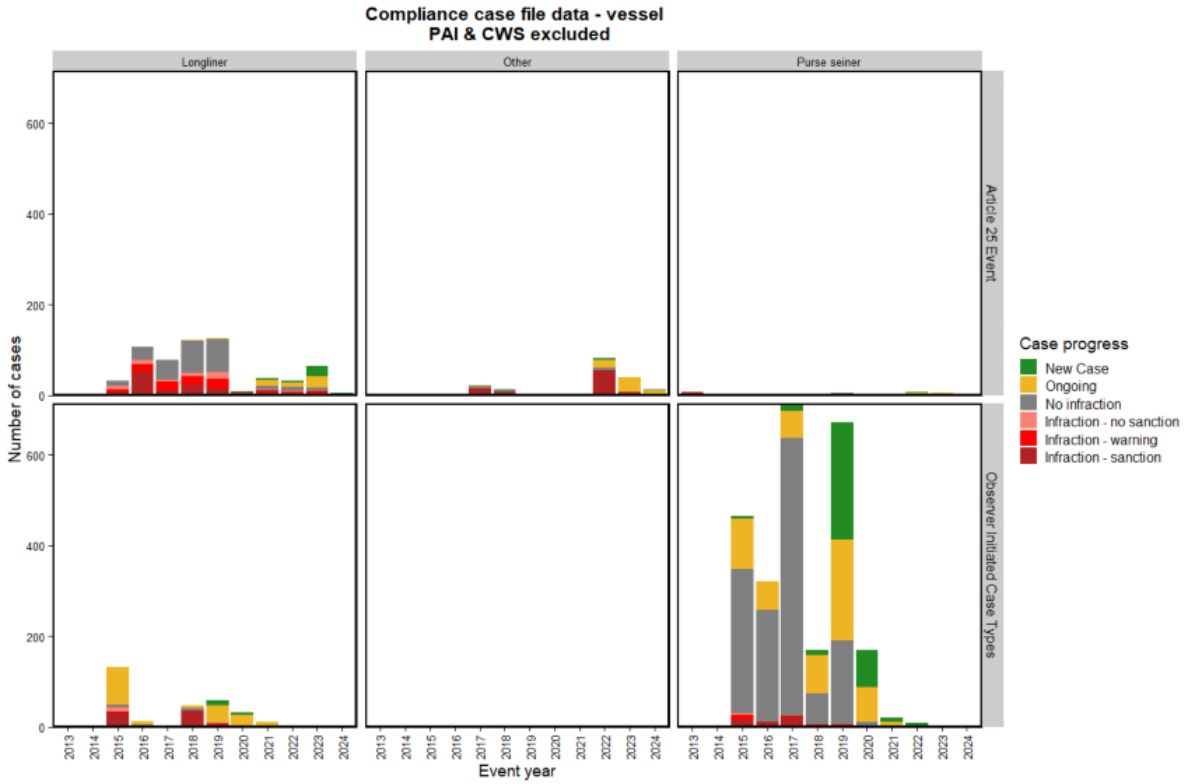


Figure 4: The number of cases by vessel type that are CCM initiated (Article 25(2)) and Observer-initiated, excluding PAI cases by vessel type (Total CCFS Cases)

22. The imbalance between purse seine and longline observer coverage is not a new issue. For example, at WCPFC19 in December 2022, the Commission endorsed the following TCC recommendation: "*TCC18 noted the imbalance between the information available for monitoring compliance between the longline and purse seine fisheries and recommended that the Commission recognise the need to address this imbalance.*"[4]

23. The CMS CMM (CMM 2023-04) was amended by the Commission at WCPFC20 with the inclusion of paragraph 15(b) that tasks the Secretariat to develop and utilize, in consultation with the Scientific Services Provider, a scheme for randomly sampling observer-related cases from the online compliance case file system for the purse seine fishery on a trip basis designed to achieve the level of coverage in the CMR for ROP purse seine trips determined for the longline fishery by the Scientific Services Provider for the most recent year for which this data is available.[5] The amendments in CMM 2023-04 are intended to accord with the CMS principle of fairness[6] by applying a scheme that addresses the issue of imbalance in the CCFS arising from the difference

[4] WCPFC19 Summary Report para 351 (i).

[5] Referred to as "subsampling" or "subset" approach in this paper.

[6] CMM 2023-04 paragraph 3(iii) *Fairness: Promote fairness, including by: ensuring that obligations and performance expectations are clearly specified, that assessments are undertaken consistently and based on a factual assessment of available information; that CCMs are given the opportunity to participate in the process; and that there is a reasonable balance between fisheries and CCMs in the assessment process*;

between the purse seine fishery which has high observer coverage and the longline fishery where the observer coverage as a proportion of effort is low.

Methods used to apply the subsampling approach

24. In early April 2024, the Scientific Services Provider provided the Secretariat with the number and percent of observed trips for purse seine and longline vessels from 2015-2023. These data were used to subset the purse seine trips to get a similar proportion to the longline fishery in accord with the tasking in CMM 2023-04 paragraph 15(b).

Table 2. Purse seine observer coverage estimated from VMS trips from 2015-2023. Data provided by SPC as of 3 April 2024.

Purse seine observer coverage			
Year	Estimated number of trips	Trips observed	Percent trips observed
2023	2,098	1,042	49.6663
2022	2,134	295	13.8238
2021	2,129	299	14.0441
2020	2,433	928	38.1422
2019	2,888	2,189	75.7963
2018	2,207	2,019	91.4816
2017	2,191	1,684	76.8598
2016	2,010	1,493	74.2786
2015	2,177	1,261	57.9237

25. The purse seine observer data and the annual coverage rate they represent from 2015 – 2023 are summarised in **Table 2**. The longline observer data and the coverage rate for the same period is summarised in **Table 3**, and shows an increasing trend over time. Longline observer coverage while increasing, has been relatively stable since 2018. When considering these values, the Secretariat also considered that COVID-19 circumstances meant that observer coverage rates achieved during the period 2020 – 2022 were lower. As such, a decision was made for this year's analysis to use the average longline observer coverage rate from 2018-2023 (6.2%) as the percentage to subset the purse seine trips.

Table 3. Longline observer coverage estimated from VMS trips from 2015-2023. Data provided by SPC as of 3 April 2024.

Longline observer coverage			
Year	Estimated number of trips	Trips observed	Percent trips observed
2023	3,705	234	6.3157
2022	3,759	267	7.1029
2021	3,576	212	5.9284
2020	4,392	279	6.3524
2019	5,593	282	5.0420
2018	5,494	357	6.4979
2017	5,774	286	4.9532
2016	5,401	157	2.9068
2015	5,893	37	0.6278

26. The next step involved allocating each ROP purse seine trip on a WCPFC RFV vessel a unique trip identification number. From the full set of purse seine trips, a random selection of 6.2% was selected and these trips were identified as "*subsample trips*". All the remaining trips were identified as "*excluded trips*". All non-purse seine vessel trips were classified to also be "*subsample trips*".

27. The list of identified "*subsample trips*" was then merged with the CCFS data for further analysis. A data set of the individual case file numbers from the subset of *subsampled trips* was retained for future analyses; this was considered preferable to doing a new random sample each time the analysis is performed. Note that at the time of the analysis there were no 2023 ROP purse seine trips entered into the CCFS, and as such all 2023 purse seine data falls out of the subsample.

Result of applying the subsampling approach to the CCFS

28. Figure 5 and Figure 6 shows the results from applying the subsampling approach to the CCFS by case type origin and by vessel type per year. Figure 5 illustrates the impact on CCM-initiated vs Observer-initiated cases, and it is clear that a large proportion of the observer- initiated cases (but none of the CCM-initiated/Article 25(2) cases) are excluded from the downstream analyses.

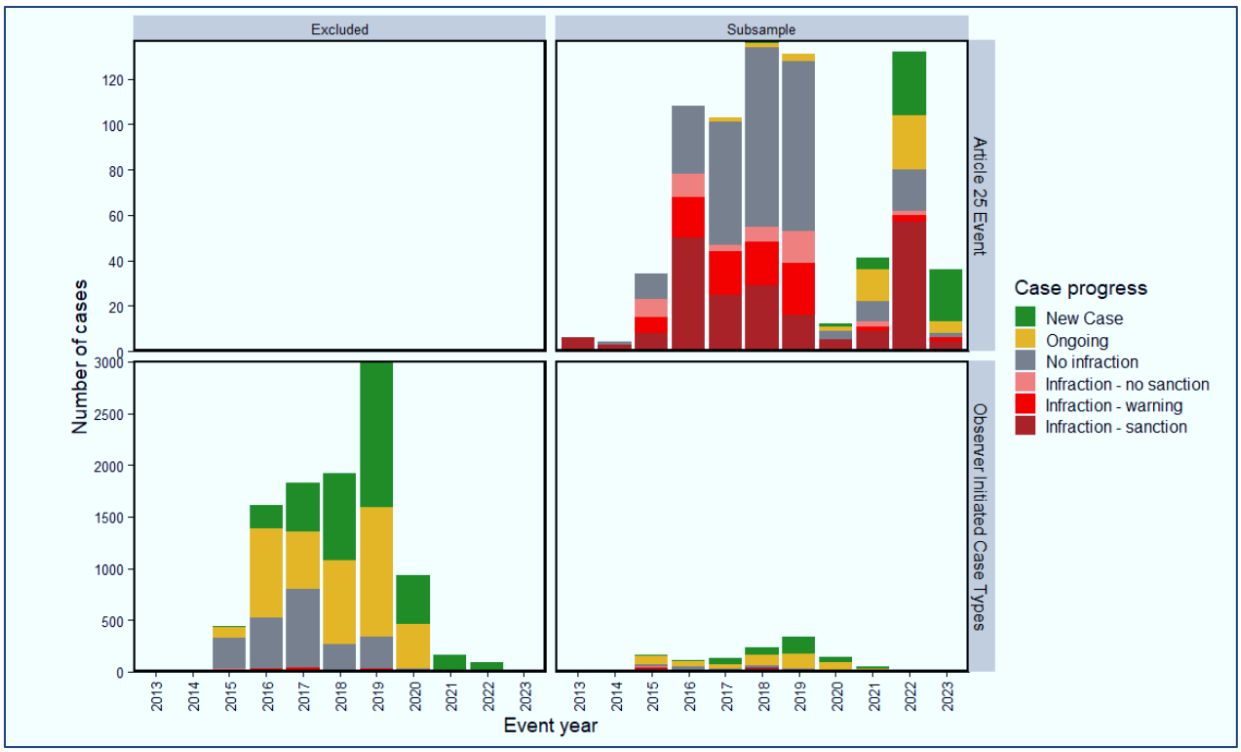


Figure 5. Total CCFS cases by year for the period 2013 – 2023 showing the results of applying the subsampling approach to CCM-initiated cases (Article 25(2) top) and Observer-initiated cases (bottom). Figures on left-side show the total cases per year that were excluded when the subsampling method was applied, and figures on right-side show the results of subsampling.

29. Figure 6 illustrates the impact of the sampling approach on the total set of CCFS cases considering vessel type and shows that only purse seine trips are excluded through the subsampling approach.

In practice, CCM-initiated cases are more frequently arising from inspections of longline vessels and seldom on the purse seine fleet. And in practice, observer-initiated cases are affected by levels of observer coverage, and the purse seine fleet has higher levels of observer coverage and higher levels of observer-initiated cases compared to the longline fleet which has low numbers of observer-initiated cases and low levels of observer coverage. These trends are the core of the issues that purse seine fishing nations (primarily the PNA) have had in recent years with the imbalance in the aggregate tables reporting from the CCFS.

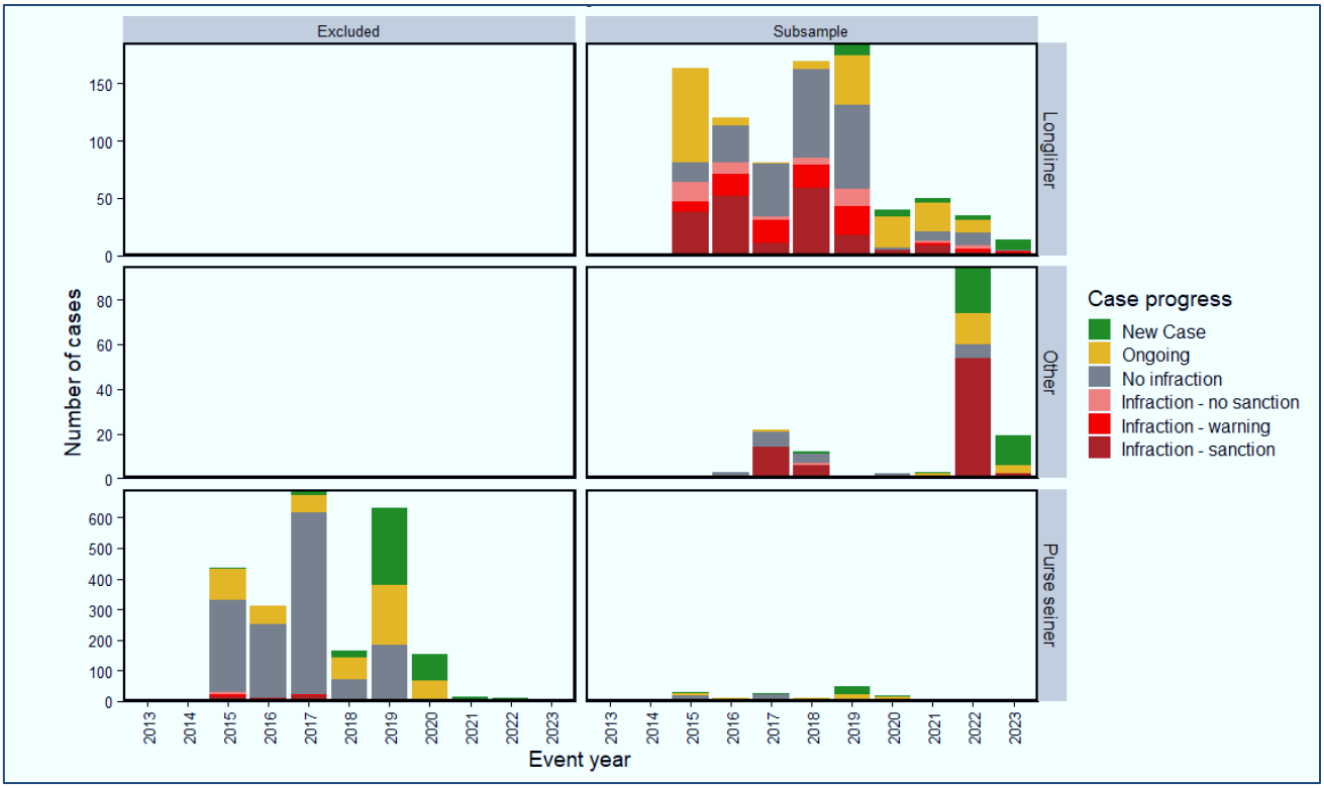


Figure 6. Total CCFS cases by year for the period 2013 – 2023 showing the results of applying the subsampling approach to cases based on longline vessels (top), purse seine vessels (bottom) and Other vessels (middle). Figures on left-side show the total cases per year that were excluded when the subsampling method was applied, and figures on right-side show the results of subsampling.

30. The next section presents summary information from the CCFS by CMM topic and shows the result of applying the subsampling approach at the CMM topic level.

Analysis of information related to CCFS Observer-initiated cases and the sub-sampling approach

31. The information presented in this section of the paper draws from work in the Secretariat supported by two analytical consultancies during 2023 and 2024, and specifically to develop a comprehensive set of aggregated tables based on CCFS data.

32. This year's update also presents certain figures that are based on the results of the subsampling approach, these figures have light blue shading to assist in distinguishing from the complete CCFS dataset. Note that the subsample dataset is based on CCFS data as of 3rd April 2024. A draft Appendix 3 for the provisional CMR, with the subsampling approach applied, has also been prepared for review by TCC20 (with data as of 3rd April 2024).

33. Note that in 2024, for the purpose of TCC20 dCMR preparations, the Secretariat has used the complete CCFS data set (not the subsampled CCFS data) for the development of the static aggregated tables and the dynamic tables (TCC20-2024-dCMR02). Information presented in this paper that shows the total dataset is based on available ROP data as at the 1st July 2024 and CCM's replies to CCFS cases that had been reviewed by the Secretariat as at the 27th July 2024.

34. The analysis is structured as follows:

    - Overview of the observer-initiated cases in the CCFS
    - Issues with CWS interactions and some pre-notification cases (PAI cases)
    - High seas vs EEZs distribution
    - Trends and potential biases in outcomes
    - Discussion of implications of the sub-sampling approach.

Overview of the observer-initiated cases in the CCFS

35. **Figure 7** and **Table 4** below illustrate the scale of observer-initiated cases in the CCFS which peaked during 2016 – 2019 but has fallen in recent years. Reduced observer placements during the COVID-19 pandemic could be a contributing factor for reduced case numbers for 2021/22. The result of the subsampling approach is shown in **Figure 8** and **Table 5**.

36. **Table 4** and **Table 6** below illustrate the scale of recorded PAI, CWS and FAI cases compared to OAI, SHK and POL cases. **Table 4** also shows that four of the six types of observer-initiated cases showed a trend of initially higher case numbers, which then declined over time. **Figure 9** presents information on the progress of CCFS case investigations by topic which shows larger proportions of *No Infraction* outcomes. The result of the subsampling approach is shown in **Figure 10**.

37. **Table 6** and **Table 7** confirm the trends in total observer-initiated cases that many investigations of cases remain underway, particularly for CWS and PAI cases.

38. Snapshot summaries of trends and data related to FAI, OAI, SHK and POL observer-initiated case types, including how they link to CMM obligations, are provided on Pages 16 – 23. Snapshot summaries and discussion about CWS interactions and PAI notifications are on Pages 24 – 30.

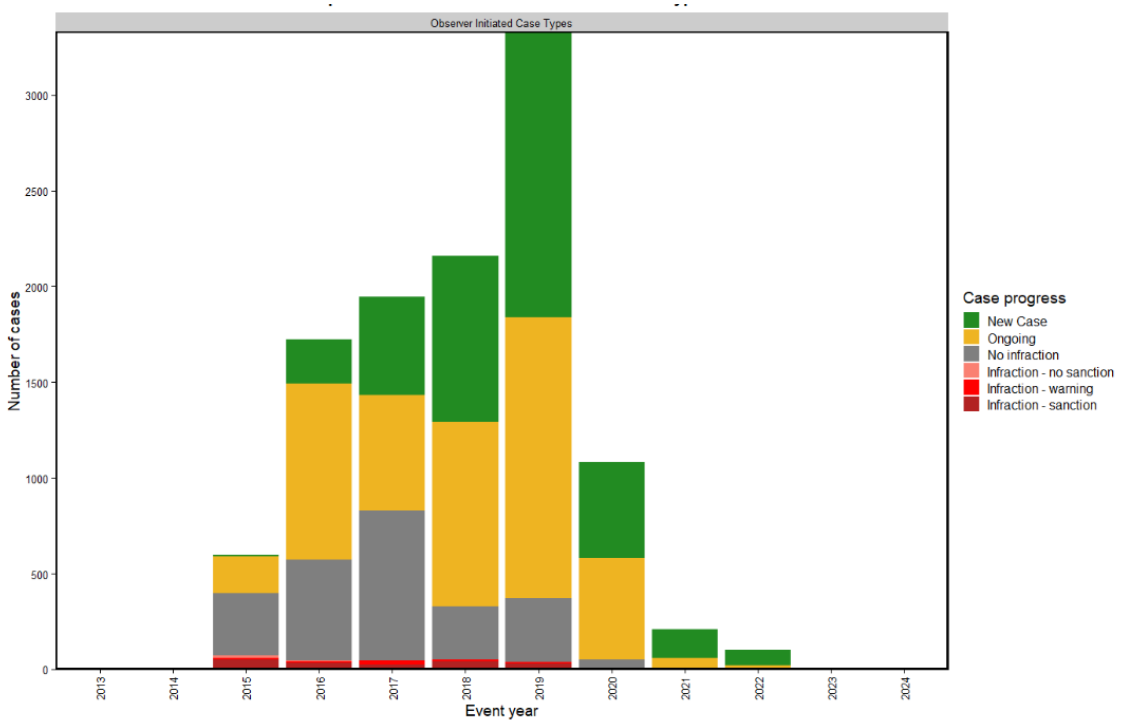


Figure 7: Summary of the total set of observer-initiated cases between 2013 and 2024 showing the case progress and, if completed, the outcome of the investigation

Table 4: The breakdown in the total set of observer-initiated case number by year, with sub-total before including PAI and CWS cases

	Case type	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Observer Initiated Case	FAI	0	0	255	229	645	69	205	4	7	0	0	0
	OAI	0	0	151	63	38	77	80	29	6	3	0	0
	SHK	0	0	191	44	34	72	34	11	0	1	0	0
	POL	0	0	0	0	0	0	412	158	19	10	0	0
	Sub-total	0	0	597	336	717	218	731	202	32	14	0	0
	CWS	0	0	0	478	557	697	1,189	386	104	50	0	0
	PAI	0	0	0	908	671	1,247	1,411	494	73	39	0	0
	Sub-total	0	0	0	1,386	1,228	1,944	2,600	880	177	89	0	0

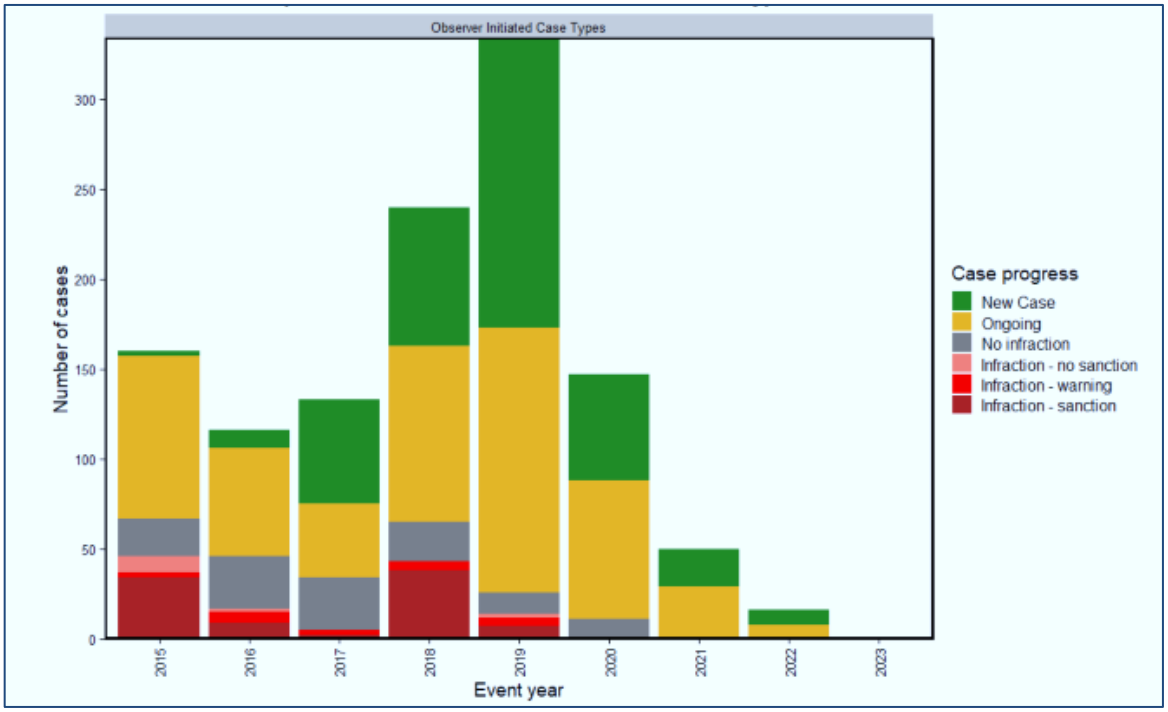


Figure 8: Summary of the observer-initiated cases, after the subsampling approach was applied, between 2013 and 2024 showing the case progress and, if completed, the outcome of the investigation

Table 5: The breakdown in observer-initiated case number by year, with sub-total before including PAI and CWS cases, after the subsampling approach was applied.

	Case type	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Observer Initiated Case	FAI	0	0	15	7	15	2	10	0	3	0	0
	OAI	0	0	25	13	4	13	19	6	2	0	0
	SHK	0	0	120	7	6	39	2	4	0	1	0
	POL	0	0	0	0	0	0	74	38	11	3	0
	Sub-total	0	0	160	27	25	54	105	48	16	4	0
	CWS	0	0	0	24	21	43	81	31	17	6	0
	PAI	0	0	0	65	87	143	148	68	17	6	0
	Sub-total	0	0	0	89	108	186	229	99	34	12	0

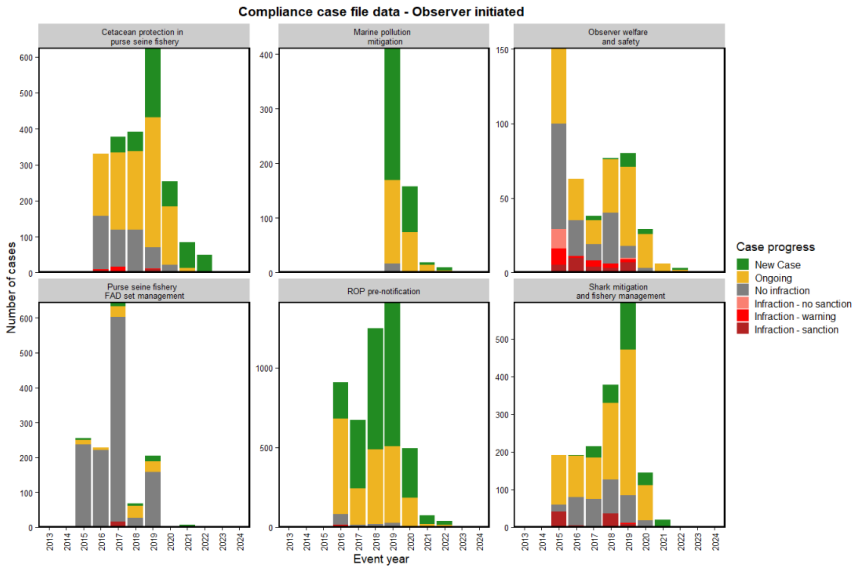


Figure 9: The total number of observer-initiated cases in the compliance case file system by CMM theme type

Table 6: The breakdown in case numbers by year, for the total observer-initiated cases and the case progress, for FAI, SHK, OAI, POL cases

Case progress	2015	2016	2017	2018	2019	2020	2021	2022
New Case	6	0	15	11	261	85	8	6
Ongoing	142	41	44	54	207	79	18	4
No infraction	253	228	603	39	179	8	0	0
Infraction - no sanction	0	0	0	0	1	0	0	1
Infraction - warning	1	0	1	1	2	0	0	0
Infraction - sanction	44	4	16	36	1	1	0	0

Table 7: The breakdown in case numbers by year, for total CWS interactions and PAI cases

Case progress	2016	2017	2018	2019	2020	2021	2022
New Case	228	495	859	1,221	411	143	73
Ongoing	850	541	871	1,207	431	32	16
No infraction	278	169	204	146	37	2	0
Infraction - no sanction	2	1	1	0	0	0	0
Infraction - warning	9	16	5	5	0	0	0
Infraction - sanction	19	6	4	21	1	0	0

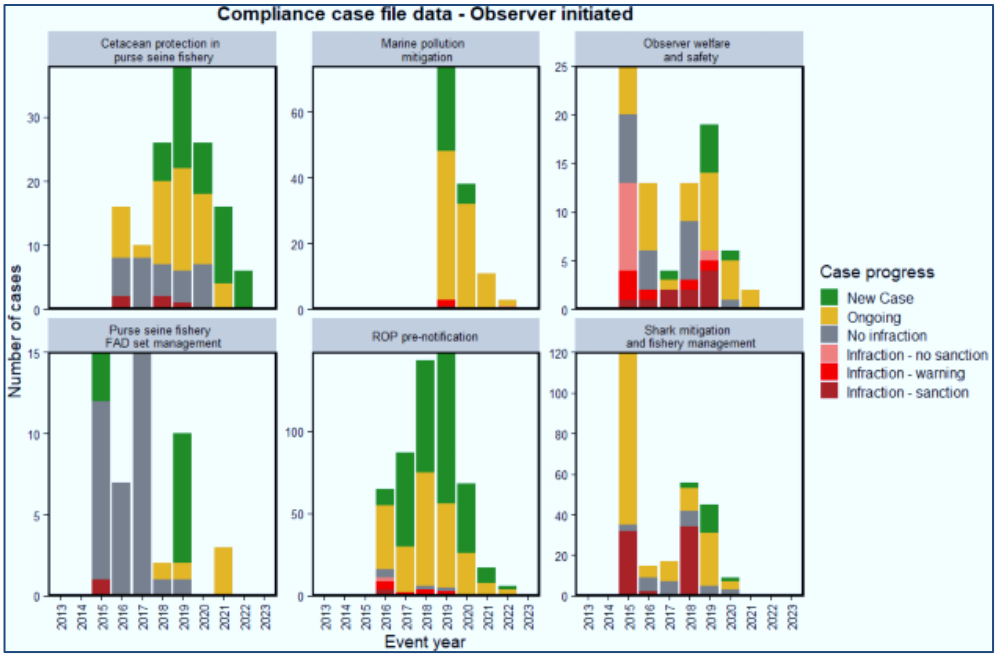


Figure 10: The number of observer-initiated cases in the compliance case file system, after the subsampling approach was applied, by CMM theme type

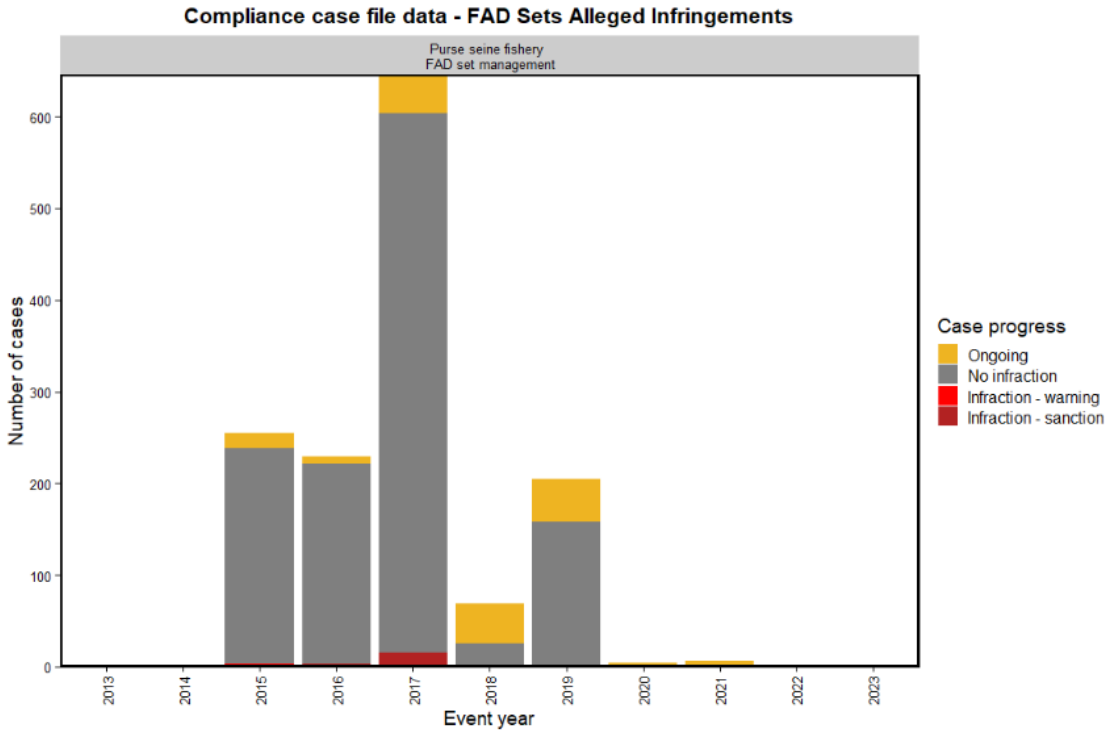
FAI: FAD Set Alleged Infringement case snapshot summary

Data presented in these analyses is based on available ROP data as at the 1st July 2024 and CCMs replies to CCFS cases that had been reviewed by the Secretariat as at the 27th July 2024.

Cases for alleged infringements related to setting on FADs during the FAD closure period, and as were identified in ROP observer data.

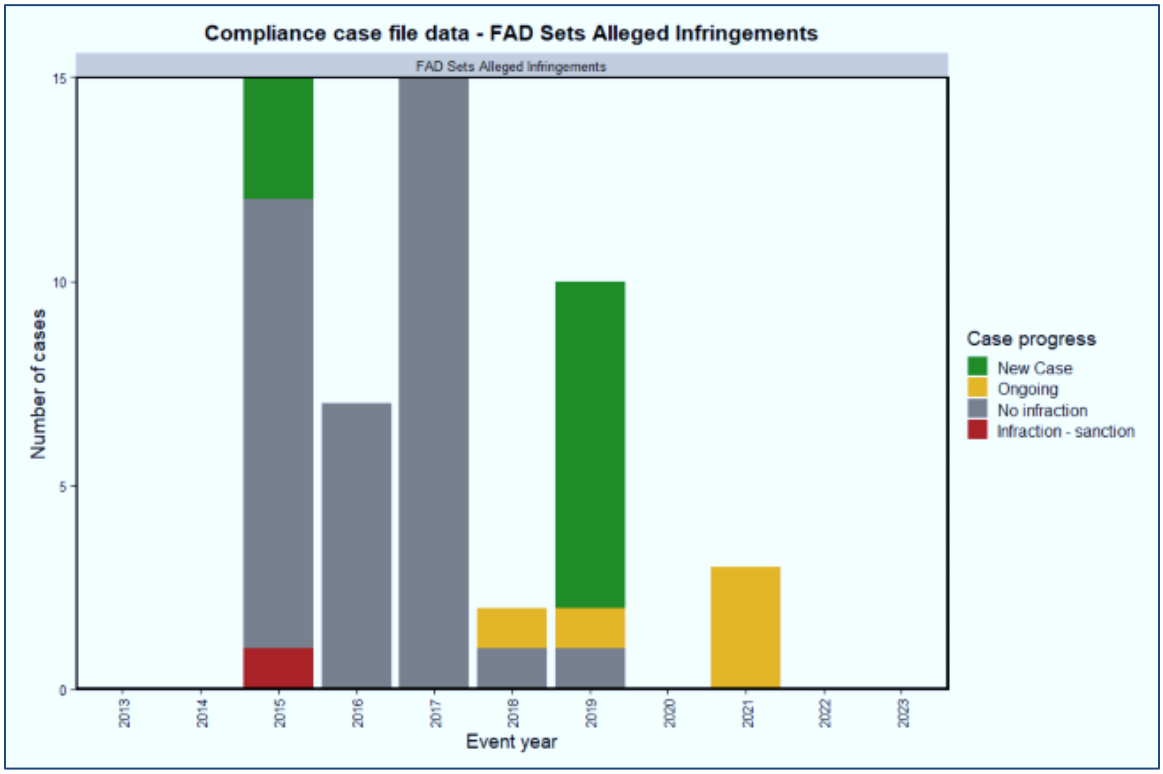
Cases are generated where a ROP observer has reported instances during a WCPFC ROP trip where a purse seine vessel was observed to have made an associated set in a location and during a period, when the said vessel was not expected through the provisions of the TT CMM to be permitted to set on FADs

Obligation: CMM 2023-01 13, 14
(formerly CMM 2021-01 14, 15)



FAI Snapshot Summary: *The total number of observer-initiated FAD set alleged infringement cases (FAI) and the number of ROP observer reports received (value in parenthesis)*

FAI - All											
Status	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
New Case	0	0	6 (0)	0	12 (4)	12 (1)	21 (0)	1 (0)	4 (0)	0	0
Investigation in Progress	0	0	11 (0)	7 (3)	31 (7)	31 (8)	26 (6)	3 (2)	3 (0)	0	0
No infraction	0	0	235 (24)	219 (56)	587 (85)	25 (11)	158 (8)	0	0	0	0
Infraction - no sanction	0	0	0	0	0	0	0	0	0	0	0
Infraction - warning	0	0	1 (1)	0	0	1 (1)	0	0	0	0	0
Infraction - sanction	0	0	2 (2)	3 (3)	16 (16)	0	0	0	0	0	0



FAI Snapshot Summary- subsampled: *The number of observer-initiated FAD set alleged infringement cases (FAI) and the number of ROP observer reports received (value in parenthesis), after the subsampling approach was applied.*

FAI - by vessel type

Sample	Vessel type	Status	2015	2016	2017	2018	2019	2020	2021
Excluded	Purse seiner	New Case	3 (0)		12 (4)	12 (1)	13 (0)	1 (0)	4 (0)
		Investigation in Progress	11 (0)	7 (3)	31 (7)	30 (8)	25 (6)	3 (2)	
		No infraction	224 (22)	212 (56)	572 (70)	24 (10)	157 (7)		
		Infraction - warning	1 (1)			1 (1)			
		Infraction - sanction	1 (1)	3 (3)	16 (16)				
Subsample		New Case	3 (0)				8 (0)		
		Investigation in Progress				1 (0)	1 (0)		3 (0)
		No infraction	11 (2)	7 (0)	15 (15)	1 (1)	1 (1)		
		Infraction - sanction	1 (1)						

OAI: Observer Obstruction Alleged Infringements snapshot summary

Data presented in these analyses is based on available ROP data as at the 1st July 2024 and CCMs replies to CCFS cases that had been reviewed by the Secretariat as at the 27th July 2024.

Observer Trip Monitoring Codes

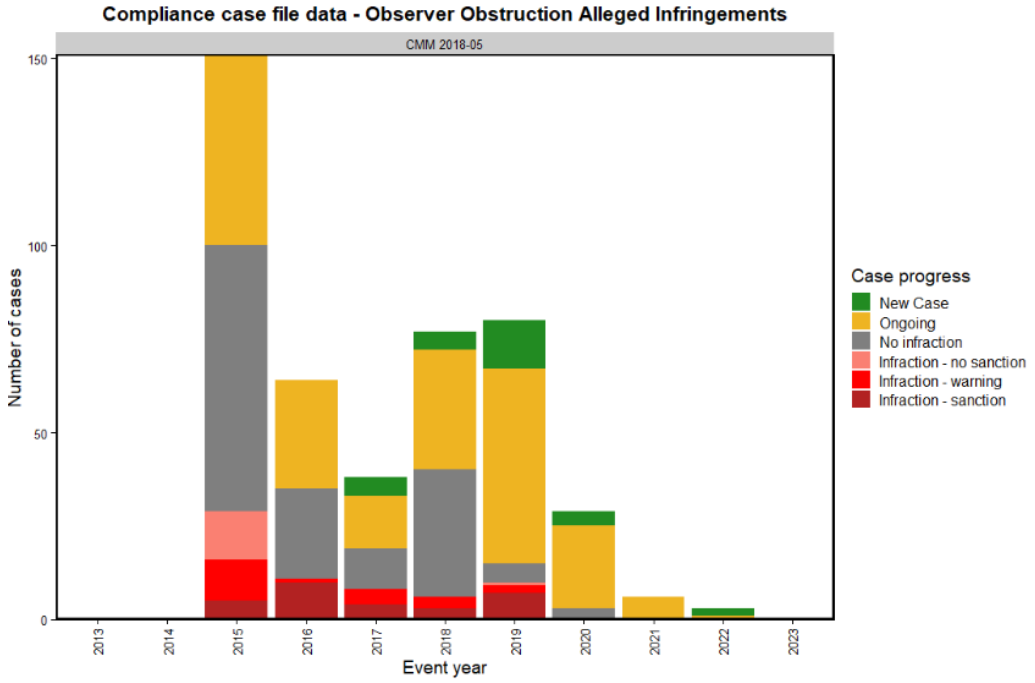
RS-A Did the operator or any crew member assault, obstruct, resist, delay, refuse boarding to, intimidate or interfere with observer in the performance of their duties.

RS-B Request that an event not be reported by the observer.

RS-D Did the operator fail to provide the observer, while on board the vessel, at no expense to the observer or the observer's government, with food, accommodation and medical facilities of a reasonable standard equivalent to those normally available and medical facilities of a reasonable standard equivalent to those normally available to an officer on board the vessel.

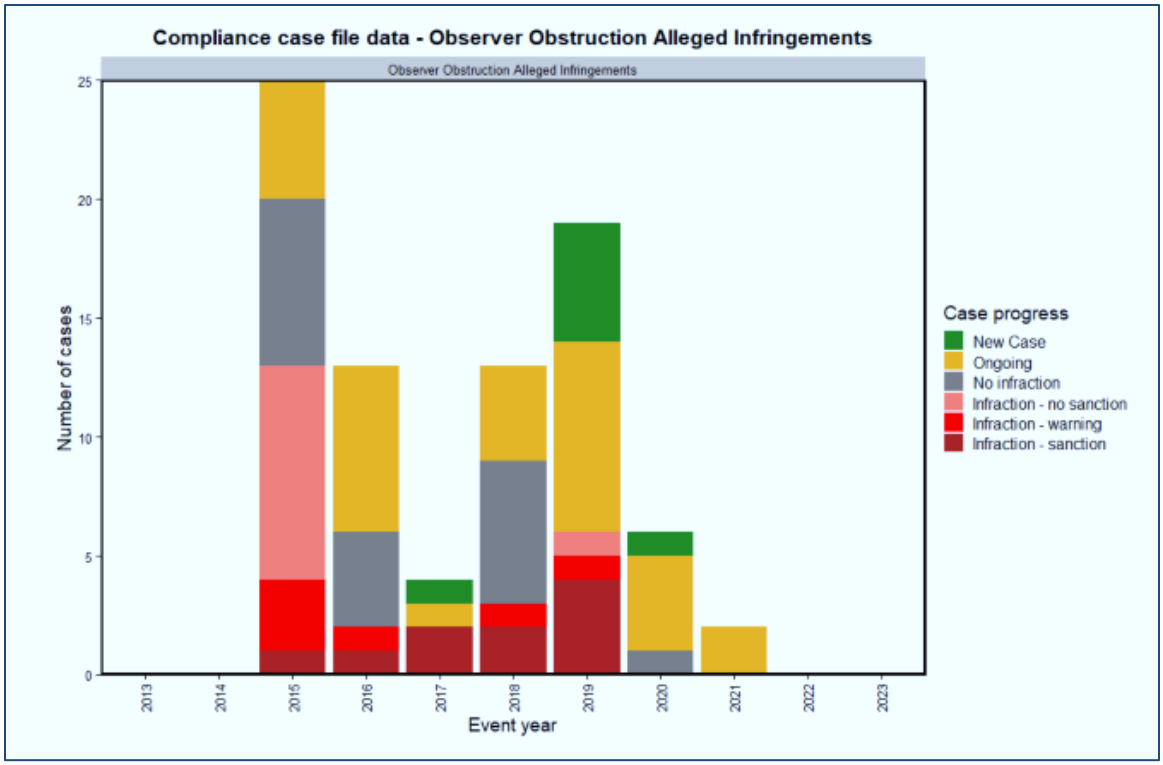
Obligation: CMM 2018-05 15(g))

(formerly CMM 2007-01 14(vii))



OAI Snapshot Summary: *The number of observer-initiated observer obstruction cases (OAI) and the number of ROP observer reports received (value in parenthesis)*

OAI - All											
Status	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
New Case	0	0	0	0	5 (2)	5 (1)	13 (0)	4 (1)	0	2 (0)	0
Investigation in Progress	0	0	51 (3)	29 (3)	14 (4)	32 (10)	52 (16)	22 (11)	6 (0)	1 (0)	0
No infraction	0	0	71 (70)	24 (21)	11 (10)	34 (34)	5 (5)	3 (3)	0	0	0
Infraction - no sanction	0	0	13 (13)	0	0	0	1 (1)	0	0	0	0
Infraction - warning	0	0	11 (11)	1 (1)	4 (4)	3 (3)	2 (1)	0	0	0	0
Infraction - sanction	0	0	5 (5)	10 (10)	4 (4)	3 (3)	7 (6)	0	0	0	0



OAI Snapshot Summary - subsampled: *The number of observer-initiated observer obstruction cases (OAI) and the number of ROP observer reports received (value in parenthesis), after the subsampling approach was applied.*

OAI - by vessel type

Sample	Vessel type	Status	2015	2016	2017	2018	2019	2020	2021	2022
Excluded	Purse seiner	New Case			4 (2)	5 (1)	8 (0)	3 (1)		2 (0)
		Investigation in Progress	46 (3)	22 (3)	13 (3)	28 (10)	44 (11)	18 (11)	4 (0)	1 (0)
		No infraction	64 (63)	20 (17)	11 (10)	28 (28)	5 (5)	2 (2)		
		Infraction - no sanction	4 (4)							
		Infraction - warning	8 (8)		4 (4)	2 (2)	1 (1)			
		Infraction - sanction	4 (4)	9 (9)	2 (2)	1 (1)	3 (3)			
Subsample	Longliner	New Case					3 (0)	1 (0)		
		Investigation in Progress	1 (0)	6 (0)		2 (0)	8 (5)	2 (0)	2 (0)	
		No infraction	5 (5)			4 (4)				
		Infraction - no sanction	9 (9)				1 (1)			
		Infraction - warning	2 (2)	1 (1)		1 (1)	1 (0)			
		Infraction - sanction	1 (1)	1 (1)		2 (2)	4 (3)			
	Others	No infraction		2 (2)						
	Purse seiner	New Case			1 (0)		2 (0)			
		Investigation in Progress	4 (0)	1 (0)	1 (1)	2 (0)		2 (0)		
		No infraction	2 (2)	2 (2)		2 (2)		1 (1)		
		Infraction - warning	1 (1)							
		Infraction - sanction			2 (2)					

SHK: Shark Catch Alleged Infringements snapshot summary

Data presented in these analyses is based on available ROP data as at the 1st July 2024 and CCMs replies to CCFS cases that had been reviewed by the Secretariat as at the 27th July 2024.

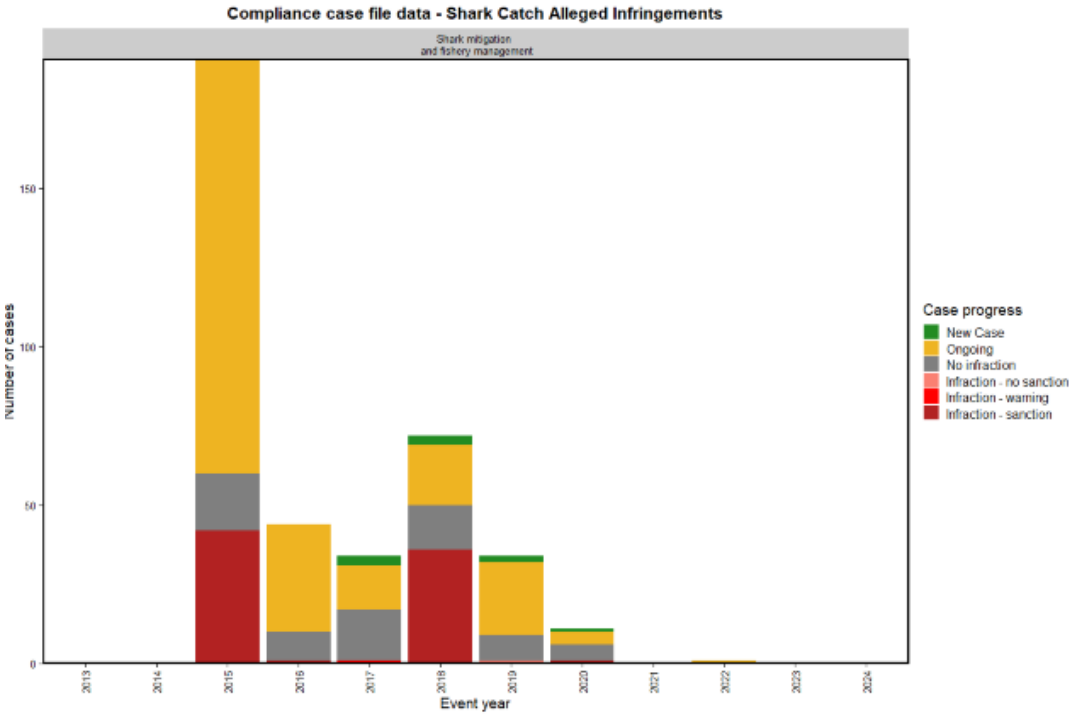
Cases for alleged infringements related to retention of oceanic white tip or silky sharks, or shark fining activity identified in ROP observer data.

Cases are generated where a ROP observer has reported instances during a WCPFC ROP trip where

- fishing vessel has caught an oceanic white tip or silky shark as identified by a specific species code (SP_code) in combination with an observed fate code (FATE_code) indicating retention is whole or in part.
- fishing vessel has caught shark as identified by a species code (SP_code) in combination with an observed fate code (FATE_code) indicating fining activity.

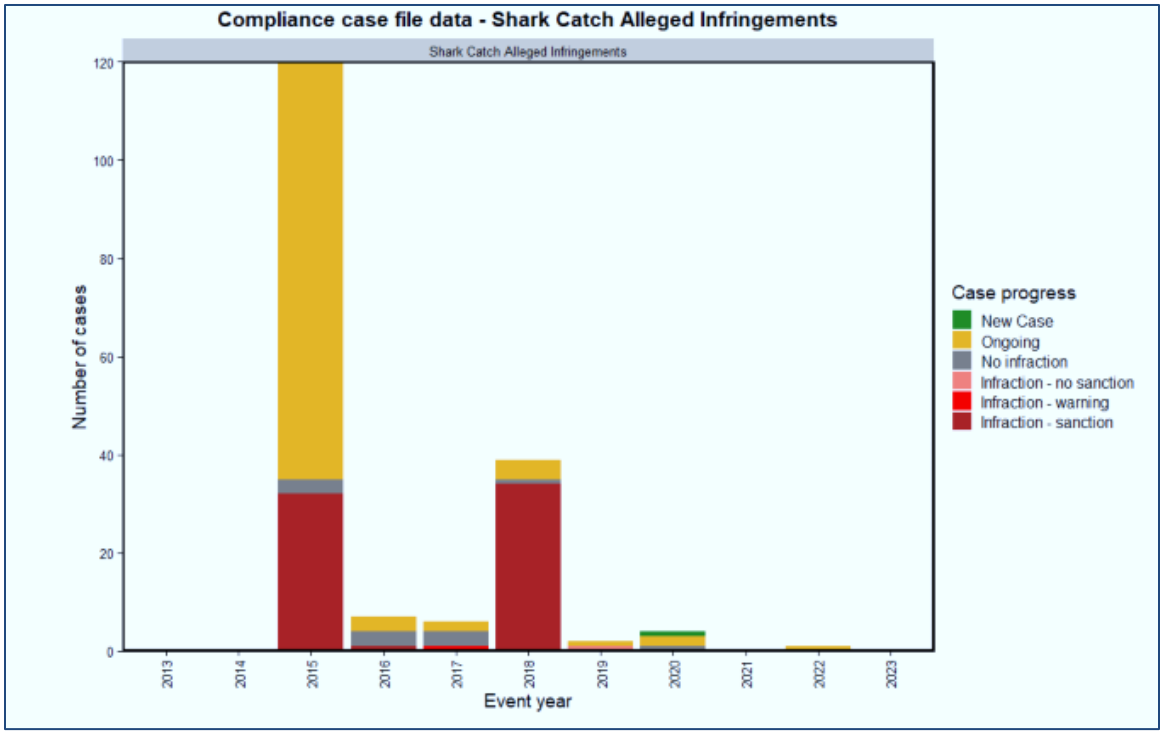
Obligation: CMM 2022-04

(formerly CMM 2010-07: Sharks, CMM 2011-04 Oceanic Whitetip Sharks, CMM 2013-08: Silky Sharks, and CMM 2019-04)



SHK Snapshot Summary: *The number of observer-initiated shark-catch cases (SHK) and the number of ROP observer reports received (value in parenthesis)*

SHK - All											
Status	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
New Case	0	0	0	0	3 (2)	4 (0)	3 (0)	2 (0)	0	0	0
Investigation in Progress	0	0	131 (4)	34 (12)	14 (4)	18 (10)	22 (5)	3 (1)	0	1 (0)	0
No infraction	0	0	18 (18)	9 (9)	16 (16)	14 (14)	8 (8)	5 (5)	0	0	0
Infraction - no sanction	0	0	0	0	0	0	1 (1)	0	0	0	0
Infraction - warning	0	0	0	0	1 (1)	0	0	0	0	0	0
Infraction - sanction	0	0	42 (42)	1 (1)	0	36 (36)	0	1 (1)	0	0	0



SHK Snapshot Summary – subsampled*: The number of observer-initiated shark-catch cases (SHK) and the number of ROP observer reports received (value in parenthesis), after the subsampling approach was applied.*

SHK - by vessel type									
Sample	Vessel type	Status	2015	2016	2017	2018	2019	2020	2022
Excluded	Purse seiner	New Case			3 (2)	4 (0)	3 (0)	1 (0)	
		Investigation in Progress	46 (4)	31 (12)	12 (4)	14 (9)	21 (5)	1 (1)	
		No infraction	15 (15)	6 (6)	13 (13)	13 (13)	8 (8)	4 (4)	
		Infraction - sanction	10 (10)			2 (2)		1 (1)	
Subsample	Longliner	Investigation in Progress	81 (0)	1 (0)	1 (0)	3 (1)	1 (0)		1 (0)
		No infraction	2 (2)	3 (3)	1 (1)	1 (1)		1 (1)	
		Infraction - warning			1 (1)				
		Infraction - sanction	31 (31)	1 (1)		34 (34)			
	Purse seiner	New Case						1 (0)	
		Investigation in Progress	4 (0)	2 (0)	1 (0)	1 (0)		2 (0)	
		No infraction	1 (1)		2 (2)				
		Infraction - no sanction					1 (1)		
		Infraction - sanction	1 (1)						

POL: Marine Pollution Infringements snapshot summary

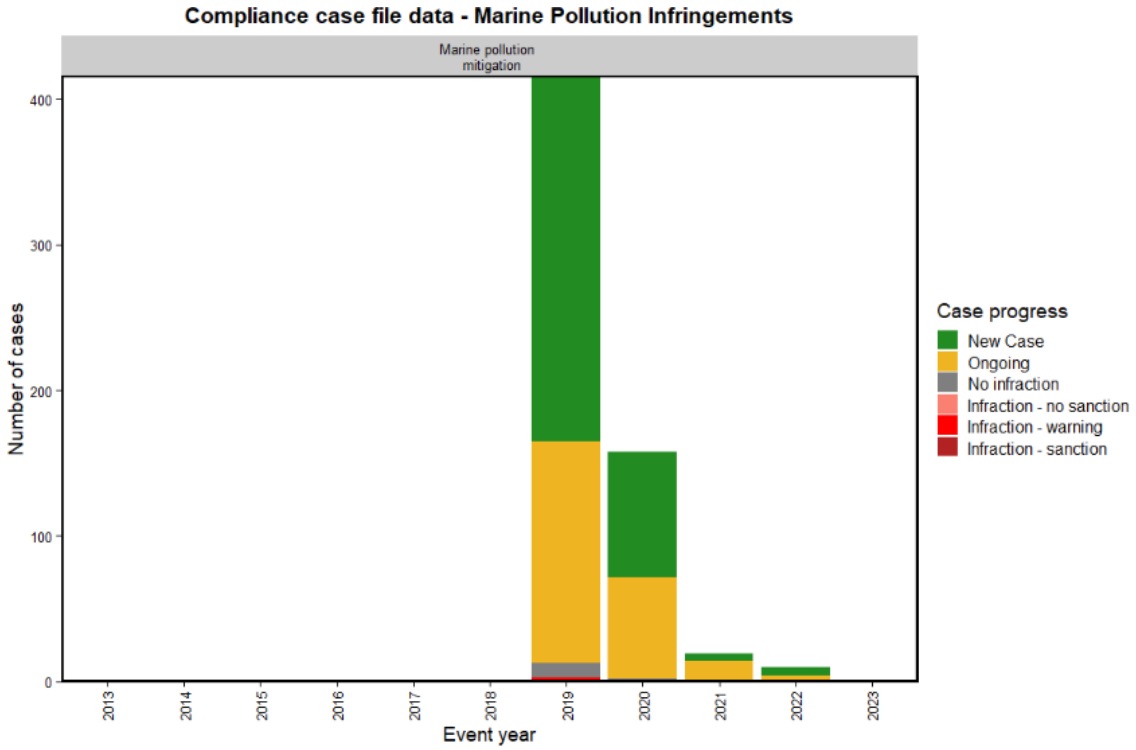
Data presented in these analyses is based on available ROP data as at the 1st July 2024 and CCMs replies to CCFS cases that had been reviewed by the Secretariat as at the 27th July 2024. Subsample is based on CCFS data as at 3rd April 2024.

Observer Trip Monitoring Codes

PN-A Dispose of any metals, plastics, chemicals or old fishing gear
PN-B Discharge any oil
PN-C Lose any fishing gear
PN-D Abandon any fishing gear
PN-E Fail to report any abandoned gear

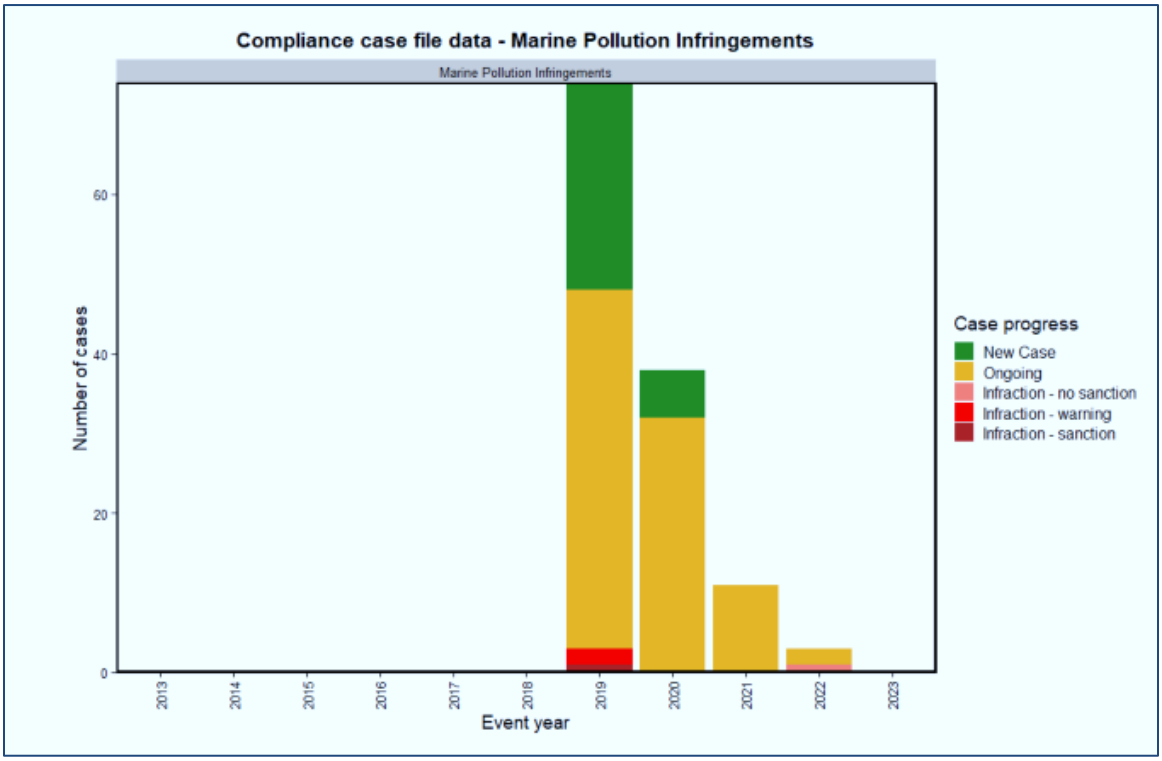
Obligation: CMM 2017-04 02, 03-07*

** Note in paras 03 -07 the obligation is CCMs are encouraged or shall encourage…*
Cases commence in 2019, because CMM 2017-04 had an effective date of 1 January 2019



POL Snapshot Summary: *The number of observer-initiated pollution-related cases (POL) and the number of ROP observer reports received (value in parenthesis)*

POL - All											
Status	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
New Case	0	0	0	0	0	0	280 (35)	109 (10)	11 (0)	0	0
Investigation in Progress	0	0	0	0	0	0	125 (22)	48 (4)	7 (0)	0	0
No infraction	0	0	0	0	0	0	8 (8)	1 (1)	0	0	0
Infraction - no sanction	0	0	0	0	0	0	0	0	0	0	0
Infraction - warning	0	0	0	0	0	0	2 (1)	0	0	0	0
Infraction - sanction	0	0	0	0	0	0	0	0	0	0	0



POL Snapshot Summary - subsampled: *The number of observer-initiated pollution-related cases (POL) and the number of ROP observer reports received (value in parenthesis), after the subsampling approach was applied.*

POL - by vessel type						
Sample	Vessel type	Status	2019	2020	2021	2022
Excluded	Purse seiner	New Case	225 (25)	80 (7)	5 (0)	6 (0)
		Investigation in Progress	107 (24)	38 (5)	3 (0)	1 (0)
		No infraction	10 (10)	2 (2)		
Subsample	Longliner	New Case	8 (4)	4 (1)		
		Investigation in Progress	31 (5)	24 (0)	10 (0)	2 (0)
		Infraction - no sanction				1 (0)
		Infraction - warning	2 (2)			
	Purse seiner	New Case	18 (3)	2 (1)		
		Investigation in Progress	14 (2)	8 (2)	1 (0)	
		Infraction - sanction	1 (1)			

Issues with cetacean and whale shark (CWS) interactions and some pre-notification cases (PAI cases)

39. In recent years, TCC has recognized that PAI and CWS cases should be differentiated from other observer-initiated cases in CCFS. For this reason, **Table 4** and **Table 7** (on pages 12 and 14 above) presents the PAI and CWS case counts separately from the presentation of other CCFS case data.

CWS interactions

40. At TCC18, the Secretariat prepared a paper that outlined the ROP data issues affecting the CWS cases[7] . The issue is that currently the ROP data fields do not permit the observer to categorise the data fields that are inputs to the CCFS to distinguish between interactions where there is no alleged infringement and that are of scientific interest, with those interactions or actions by the crew that could indicate a potential infringement has occurred.

41. The CCFS CWS instances currently reflect a recording by the observer of interactions between the vessel and marine mammals or with whale sharks (an observer on a purse seine vessel has reported a cetacean or whale sharks, as identified by a specific species code (SP_code) in combination with an observed fate code (FATE_code)). The rationale for the collection of the relevant ROP data fields was to provide information for the Commission and CCMs to support both science and compliance monitoring purposes but the current reporting does not achieve this effectively.

42. The data in the CWS Interactions snapshot summary on Pages 26– 28 illustrates the scale of the issue and highlights that the data and experience show the current ROP data definitions are creating unintended consequences in the CCFS.

43. The Commission has acknowledged the CWS cases are an issue and TCC17 (2021) agreed this data would be excluded from consideration of the current trial process of reviewing the Aggregated Tables.[8] . The broader context in the summary information shown below is the reason for this matter being prioritised in the IWG-ROP workplan.

PAI cases

44. The ROP Data based on Observer Trip Monitoring Summary Data is essentially a tick (an answer in the affirmative) by the observer against the relevant Trip Monitoring Summary Codes (commonly this is collected on the FFA/SPC GEN-3 form). Within the CCFS, there are three types of cases that are based on Observer Trip Monitoring Summary Data:

    - **OAI:** Observer Obstruction Alleged Infringements
    - **POL:** Marine Pollution Alleged Infringements
    - **PAI:** The remaining ROP Pre-notification data elements (other than alleged observer obstruction incidents (OAI) and marine pollution incidents (POL)) that were answered in the affirmative by a ROP observer on the WCPFC Observer Trip Monitoring Summary.

[7] See TCC18-2022-17 *Supporting paper for TCC18 consideration of potential improvements to the ROP Minimum Standard Data Fields for impacts of fishing on whale sharks and cetaceans.*
[8] Final CMR, paragraph 10 (December 2021).

45. The reason that the OAI, POL and PAI cases are notified through the CCFS stems from a previous Commission decision from WCPFC12 (December 2015).[9] This decision tasks the SPC-OFP and the Secretariat to prioritise data entry for the observer trip monitoring data and to facilitate the notification of any affirmative answers on the Observer Trip Monitoring Summary to the responsible flag CCM with a view to providing them earlier notification of potential alleged infringements by their vessels. For ease of reference a copy of the 2015 adopted pre-notification process is provided in Annex 1.

46. In the summary snapshots of the data for OAI and POL cases provided on Pages 18-19 and 22-23 above, progress of investigations by flag CCMs is evident, and there is a clear link to specific obligations in CMMs: for OAI it is the ROP CMM 2018-05 15(g)) and for POL it is the marine pollution CMM 2017-04 02 or 03-07. The issue with the other PAI cases, which relate to the remaining Observer Trip Monitoring Summary Data Fields is that these codes presently don't have a clear link to an obligation in a WCPFC CMM or a specific requirement in the Convention.

47. The Commission has acknowledged the PAI cases are an issue and at WCPFC14 accepted the TCC13 recommendation that TCC not consider the information contained in the ROP Pre-notification List for the purpose of assessing any obligations for which it was relevant, except for those cases related to observer interference or obstruction in future years[10] . Following the entry into force on 1 January 2019 of CMM 2017-04, the relevant Observer Trip Monitoring Codes (PN-A to PN-E) are notified as POL cases.

48. The scale of the PAI cases in the CCFS illustrated in the snapshot summary on pages 29-30 quantifies the issue. Resolving the issue of PAI cases is the main priority of the IWG-ROP in its 2023-2025 workplan. In 2024, some suggestions have been made as part of IWG-ROP discussions of ways to utilise debriefing information in supporting reviews of PAI cases.

[9] "Commission Adopted pre-notification process from observer providers to flag CCMs of possible alleged infringements by their vessels and to coastal State CCMs of possible alleged infringements in their waters" (WCPFC12 Summary Report paragraph 569, Attachment U).
[10] WCPFC14 final CMR, December 2017

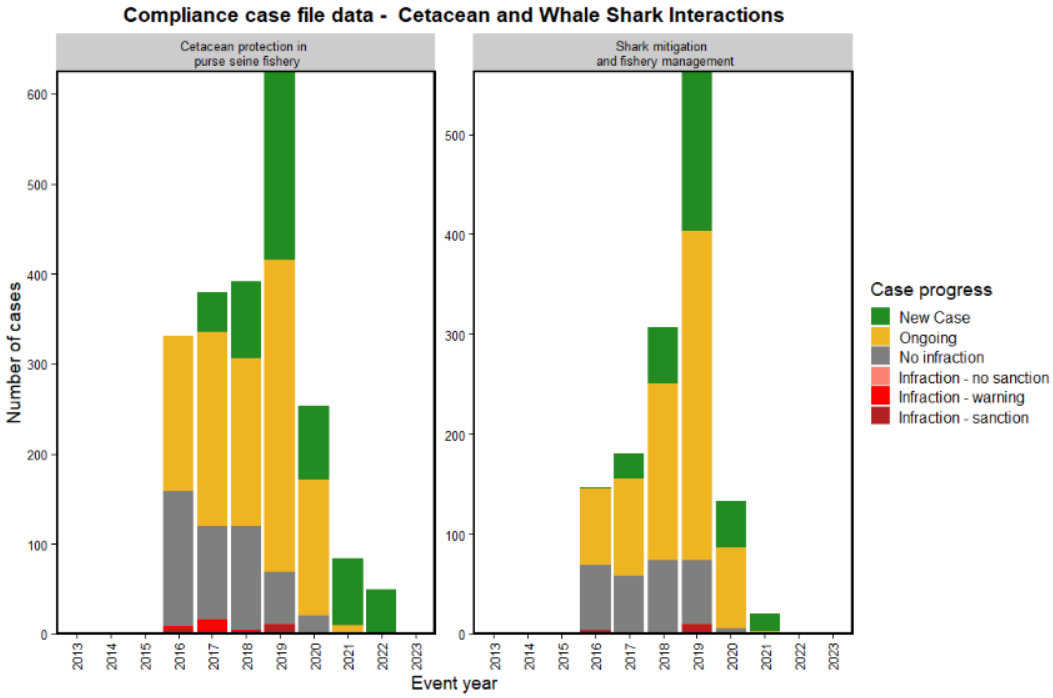
CWS: Cetacean and Whale Shark Interactions snapshot summary

Data presented in these analyses is based on available ROP data as at the 1st July 2024 and CCMs replies to CCFS cases that had been reviewed by the Secretariat as at the 27th July 2024. Subsample is based on CCFS data as at 3rd April 2024.

Relevant WCPFC requirements prohibit purse seine vessels from setting if a whale shark or cetacean is sighted prior to the commencement of the set; required reporting of any incidents of unintentional encircling; and guidelines for safe release.

Cases are generated where a ROP observer has reported instances during a WCPFC ROP trip where a cetacean or whale sharks as identified by a specific species code (SP_code) in combination with an observed fate code (FATE_code) indicates an interaction with the fishing vessel's activity.

Obligations: CMM 2011-03
CMM 2022-04 *(formerly CMM 2012-04 and CMM 2019-04)*

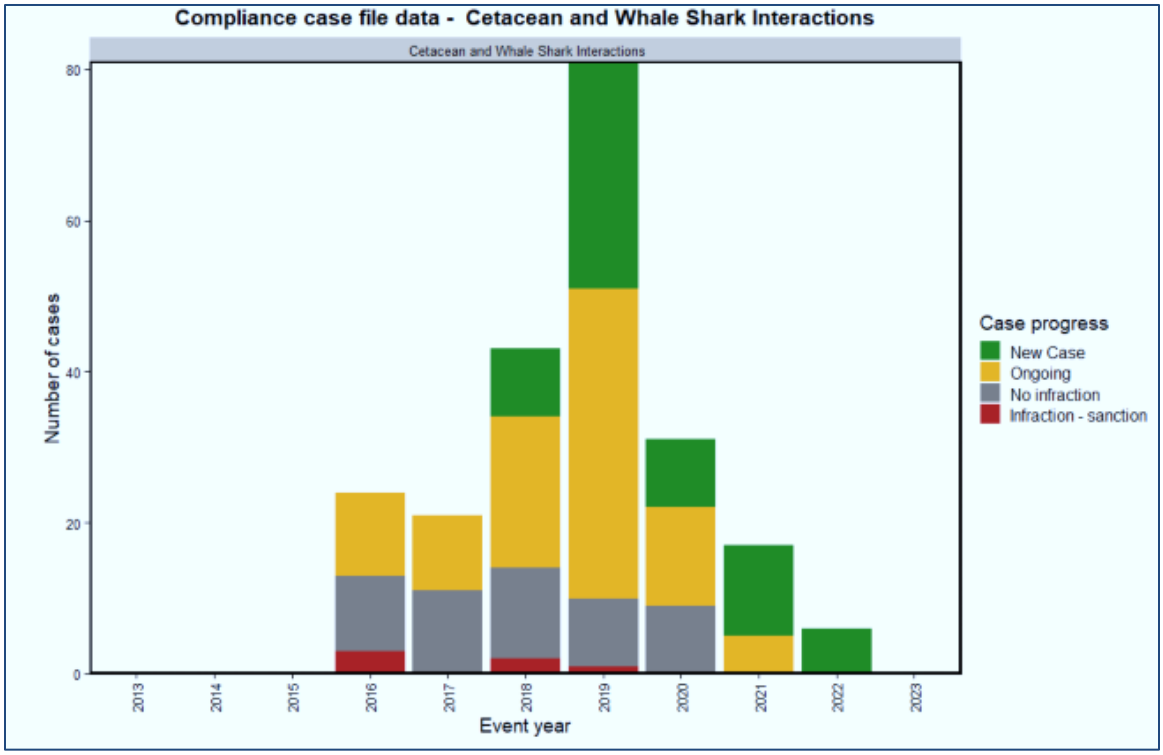


CWS Snapshot Summary: *The number of observer-initiated cetacean and whale shark interactions cases in the purse seine fishery and case progress.*

CWS - All											
Status	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
New Case	0	0	0	1 (0)	70 (18)	142 (4)	372 (4)	128 (14)	91 (1)	50 (0)	0
Investigation in Progress	0	0	0	250 (49)	313 (77)	363 (63)	675 (105)	232 (91)	12 (0)	0	0
No infraction	0	0	0	214 (208)	161 (160)	189 (188)	122 (122)	25 (25)	1 (0)	0	0
Infraction - no sanction	0	0	0	0	0	1 (1)	0	0	0	0	0
Infraction - warning	0	0	0	4 (4)	14 (14)	1 (1)	3 (3)	0	0	0	0
Infraction - sanction	0	0	0	9 (9)	3 (3)	3 (3)	18 (18)	1 (1)	0	0	0

Table 8: The breakdown in total CCFS case numbers by year, for purse seine vessel interactions with cetaceans and whale sharks. The lower half of the table represents new and ongoing cases that are older than 104 weeks.

Theme	2016	2017	2018	2019	2020	2021	2022	Total
Cetacean protection in purse seine fishery	331	377	391	626	253	84	50	2,112
Shark mitigation and fishery management	147	180	306	563	133	20	0	1,349
Total	478	557	697	1,189	386	104	50	3,461
Ongoing >104 weeks								
Cetacean protection in purse seine fishery	173	257	182	536	220	26		1,394
Shark mitigation and fishery management	78	122	201	475	112	2		990
Total	251	379	383	1,011	332	28	-	2,384



CWS Snapshot Summary - subsampled: *The number of observer-initiated cetacean and whale shark interactions cases in the purse seine (and case progress), after the subsampling approach was applied.*

CWS - by vessel type									
Sample	Vessel type	Status	2016	2017	2018	2019	2020	2021	2022
Excluded	Purse seiner	New Case	1 (0)	70 (18)	133 (4)	342 (4)	119 (12)	79 (1)	44 (0)
		Investigation in Progress	239 (43)	303 (76)	343 (60)	634 (96)	219 (85)	7 (0)	
		No infraction	204 (198)	150 (149)	177 (176)	113 (113)	16 (16)	1 (0)	
		Infraction - no sanction			1 (1)				
		Infraction - warning	4 (4)	14 (14)	1 (1)	3 (3)			
		Infraction - sanction	6 (6)	3 (3)	1 (1)	17 (17)	1 (1)		
Subsample		New Case			9 (0)	30 (0)	9 (2)	12 (0)	6 (0)
		Investigation in Progress	11 (6)	10 (1)	20 (3)	41 (9)	13 (6)	5 (0)	
		No infraction	10 (10)	11 (11)	12 (12)	9 (9)	9 (9)		
		Infraction - sanction	3 (3)		2 (2)	1 (1)			

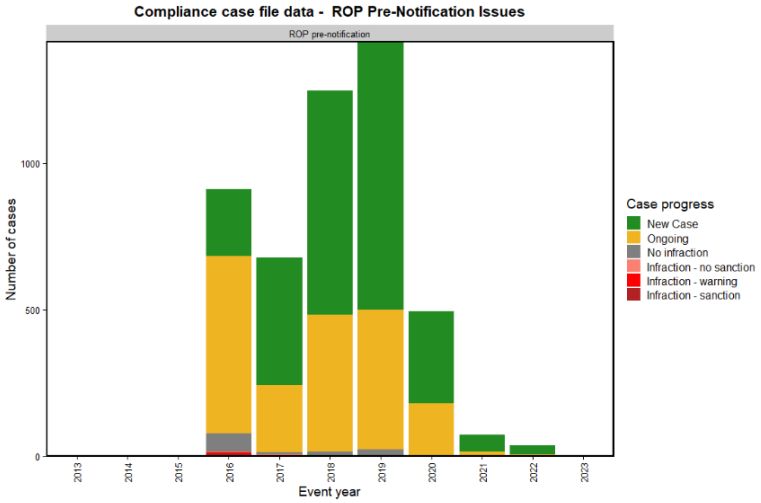
PAI: ROP Pre-Notification of those data elements (other than alleged observer obstruction incidents and marine pollution incidents) snapshot summary

Data presented in these analyses is based on available ROP data as at the 1st July 2024 and CCMs replies to CCFS cases that had been reviewed by the Secretariat as at the 27th July 2024. Subsample is based on CCFS data as at 3rd April 2024.

Observer Trip Monitoring Codes

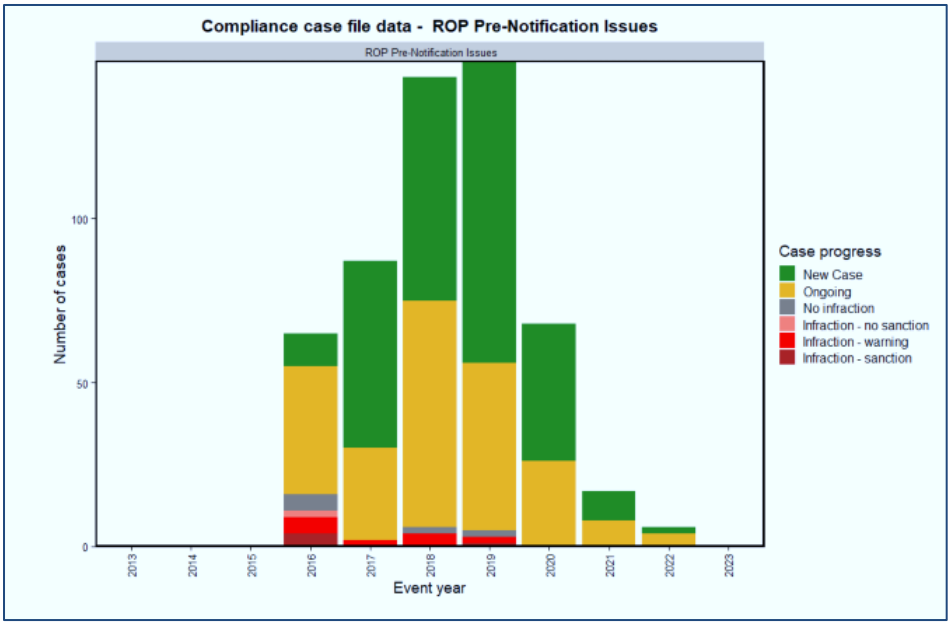
LC-A	Inaccurately record retained 'Target Species' in the vessel logs
LC-B	Inaccurately record 'Target Species' discards
LC-C	Record target species inaccurately (e.g. combine bigeye/yellowfin/skipjack catch)
LC-E	Inaccurately record retained bycatch species
LC-F	Inaccurately record discarded bycatch species
LP-A	Inaccurately record vessel position on vessel logsheets for sets, hauling and catch
LP-B	Fail to report vessel positions to countries where required when entering and leaving an EEZ
NR-A	Fish in areas where the vessel is not permitted to fish
NR-C	Use a fishing method other than the method the vessel was designed or licensed
NR-E	Transfer or tranship fish from or to another vessel
NR-G	Fail to stow fishing gear when entering areas where they were not authorized to fish
SI-B	Interact (not land) with Species of Special Interest
SS-A	Fail to monitor international safety frequencies
WC-A	Fail to comply with any Commission CMMs
WC-B	High-grade the catch

Obligation: [ ]



Case progress	2016	2017	2018	2019	2020	2021	2022
New Case	227	426	760	902	311	55	24
Ongoing	600	231	469	483	179	18	15
No infraction	64	8	13	22	4	0	0
Infraction - no sanction	2	1	0	0	0	0	0
Infraction - warning	5	2	4	2	0	0	0
Infraction - sanction	10	3	1	2	0	0	0

Theme	2016	2017	2018	2019	2020	2021	2022
ROP pre-notification	908	671	1,247	1,411	494	73	39
New cases >104 weeks	227	426	632	887	283	14	



PAI Snapshot Summary – subsampled: *The number of ROP pre-notification issues (other than alleged OAI and POL incidents) and case progress, after the subsampling approach was applied.*

PAI - by vessel type

Sample	Vessel type	Status	2016	2017	2018	2019	2020	2021	2022
Excluded	Purse seiner	New Case	218 (53)	377 (54)	697 (80)	823 (100)	271 (32)	47 (1)	29 (0)
		Investigation in Progress	565 (103)	201 (14)	397 (115)	426 (132)	153 (22)	9 (1)	4 (0)
		No infraction	57 (17)	8 (7)	10 (9)	17 (17)	2 (2)		
		Infraction - no sanction		1 (1)					
		Infraction - sanction	6 (6)	3 (3)	1 (1)	1 (1)			
Subsample	Fish carrier	Investigation in Progress			1 (0)				
	Longliner	New Case		41 (0)	18 (0)	32 (3)	19 (1)	5 (0)	
		Investigation in Progress	9 (1)	10 (0)	48 (2)	13 (2)	13 (0)	7 (1)	4 (0)
		No infraction			1 (0)	1 (0)			
		Infraction - no sanction	2 (2)						
		Infraction - warning	5 (5)	2 (2)	4 (4)	2 (2)			
		Infraction - sanction	3 (3)			1 (0)			
	Purse seiner	New Case	10 (1)	16 (2)	50 (4)	60 (8)	23 (5)	4 (0)	2 (0)
		Investigation in Progress	30 (8)	18 (2)	20 (5)	38 (10)	13 (2)	1 (0)	
		No infraction	5 (2)		1 (1)	1 (1)			
		Infraction - sanction	1 (1)						

Case progress	2016	2017	2018	2019	2020	2021	2022
New Case	10	57	68	92	42	9	2
Ongoing	39	28	69	51	26	8	4
No infraction	5	0	2	2	0	0	0
Infraction - no sanction	2	0	0	0	0	0	0
Infraction - warning	5	2	4	2	0	0	0
Infraction - sanction	4	0	0	1	0	0	0

Theme	2016	2017	2018	2019	2020	2021	2022
ROP pre-notification	65	87	143	148	68	17	6
New cases >104 weeks	10	56	56	58	9		

High seas vs EEZs distribution

49. Figure 11 confirms that the majority of CCFS observer-initiated cases (which may differentiate between the High Seas and EEZs) relate to EEZ waters. This is expected given the 100% observer coverage rate in the purse seine fishery and that purse seine activities occur mostly in EEZ waters.

50. Note that OAI, POL and PAI cases are excluded from the analysis and are not shown in Figure 11 because these pre-notification ROP data fields are recorded at trip level and so do not have coordinates.

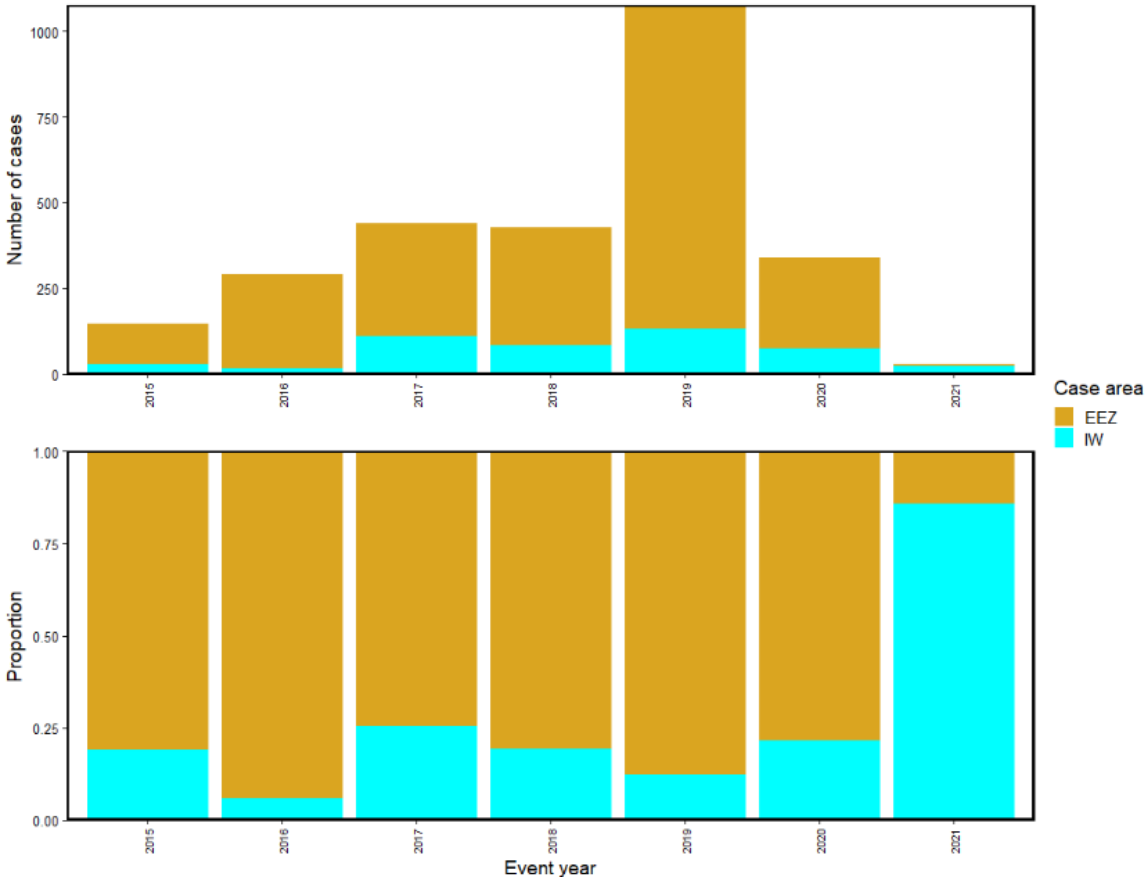


Figure 11: The number of cases (top) and proportion (bottom) emanating from observer-initiated cases within EEZs and the high seas (IW), for SHK, FAI and CWS cases combined.

Trends and potential biases in outcomes based on observer-initiated case data in CCFS

51. Figure 12 provides an alternative illustration of the focus of topics covered by observer-initiated cases in the CCFS over time to that in **Figure 9** (see page 14). Comparatively there is a larger number of recorded FAI cases and CWS cases over time, as compared to OAI, SHK and POL cases. In the subsampled CCFS dataset plot shown in Figure 12, there is a difference in both the scale and in the distribution of cases by case-type and over time.

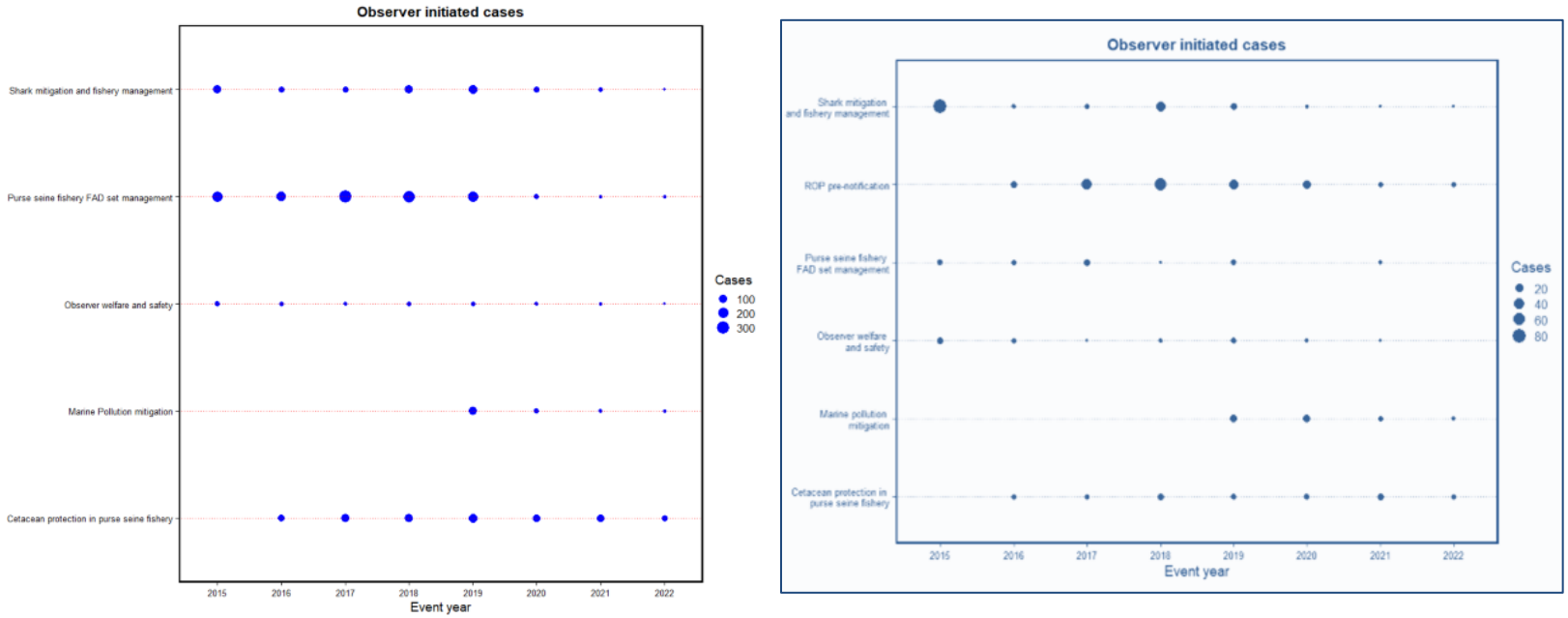


Figure 12: Observer-initiated cases by CMM theme type from 2015 – 2023 (left side is a plot of all CCFS cases, and right-side shows the CCFS subsample)

52. **Figure 13** below presents information on the outcome of flag State investigations as recorded in the CCFS for observer-initiated cases. This provides an alternative illustration to the outcome-related data that is illustrated in the **Figure 9** coloured bar charts (see Page 14). The scale of outcomes indicating with a finding of *No Infraction* suggests there is room for improvement in data inputs and processes related to use of observer data in the CCFS.

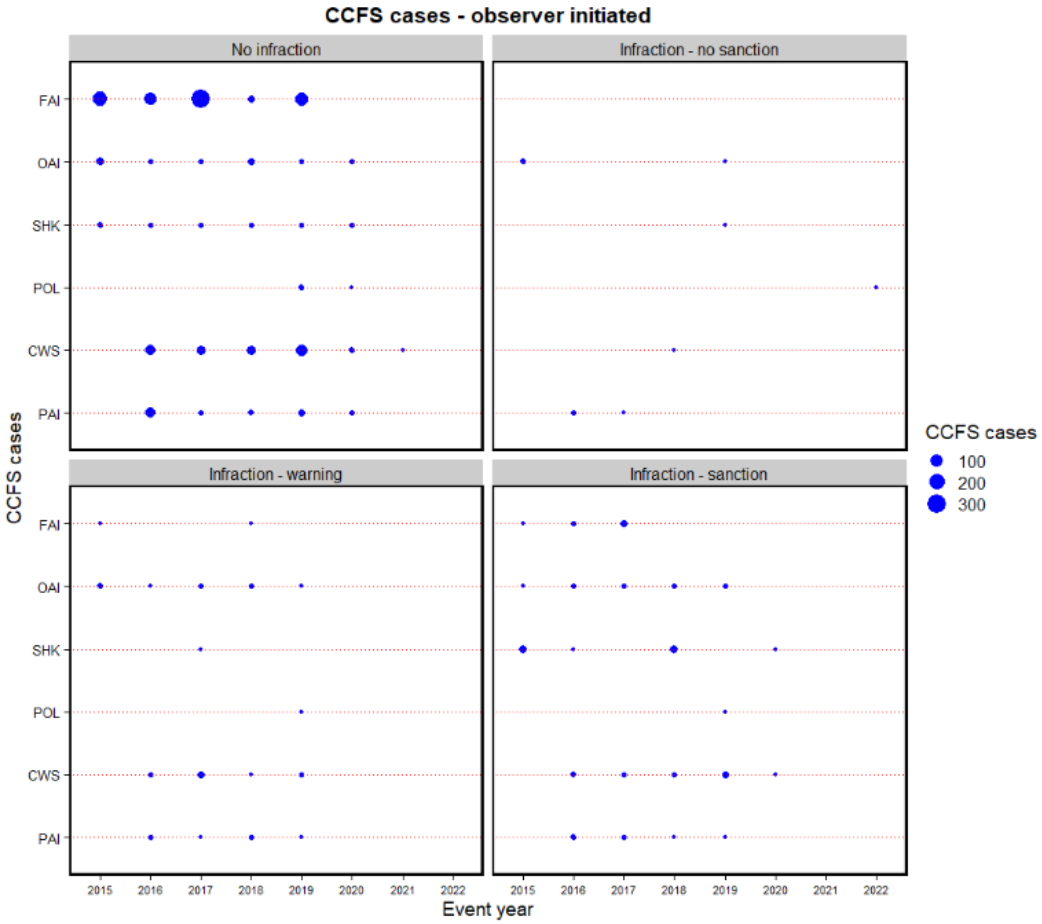


Figure 13: Observer-initiated cases by case type, year and investigation outcomes

53. The information in **Figure 12**, **Figure 13** and **Figure 9** (see page 14) also indicates there are substantive matters which are covered by WCPFC CMMs, but that are not currently covered by observer-initiated cases in the CCFS.

Discussion of implications of the sub-sampling approach

54. Following discussions at TCC19, an assumption was made that the purse seine fishery has 100% observer coverage and that the subsampling of data would be made based on the longline observer coverage rates. However, the observer data at the purse seine trip level has some issues. There may not be true trip destinations based on the VMS data, for example if a transhipment occurs then the trip should stop, and a new trip number is designated, which may not always be the case. In addition, if the observer data are not submitted or are delayed, the trip may still be considered as an observed trip. Finally, in the COVID years, observer coverage dropped substantially. To achieve true balance in the reporting rates this may need more consideration as to how to calculate the overall or annual sampling rate. The Secretariat at this stage has taken a relatively simplified approach to applying a single subsample percentage but seeks more guidance as to how this should be calculated in future.

55. The Secretariat's initial attempt to undertake the subsampling in the absence of clear guidance from TCC and based on the Secretariat's understanding and interpretation of WCPFC20 decisions raised the following issues:

    a) We have made the assumption that the purse seine fishery fully achieves 100% observer coverage rate, which it does not (see Table 2). As such taking a 6.2% sample of the purse seine fishery has resulted in an underestimate of the purse seine trips. For example, in 2021 the effect of COVID circumstances was continuing and purse seine observer coverage was ~14% (see Table 2) and the longline coverage was ~6%(Table 3). So, taking only 6.2% of observer-initiated cases from the purse seine fishery, results in a low bias. TCC needs to provide guidance on how to develop a future subsampling protocol that is more representative of both fisheries.

    b) If we repeat the analysis, we could retain the previous selection (depending on the outcome above) and then randomly select the next year's data which would retain some consistency in the outcomes and results from year to year. If a new analysis is repeated each year, then a new random selection could change the historic view of the outcomes and results.

    c) We took an average over 2018-2023, which seemed appropriate for this initial data exploration. But it may be more appropriate to take the relative coverage from each year rather than as group. However, doing the latter would result in very low sample numbers for 2015-2017.

56. The result of the subsampling is different for different issues. For cetacean and whale shark (CWS) interactions, while the number of cases in the subsample is substantially reduced, the broad overall trends are relatively similar (CWS Snapshot on pages 26 - 28). Conversely, FAD set alleged infringements are somewhat different between the excluded data and the subsample (FAI Snapshot on pages 16 - 17). Observer obstruction cases are relatively similar (OAI Snapshot on pages 18-19) as are ROP pre-notification issues (PAI Snapshot on pages 29 - 30). Marine pollution (POL Snapshot on pages 22 - 23) and shark catch alleged infringements seem to have quite different trends over time between the subsample and the excluded data (SHK Snapshot on pages 20 -21). These outcomes suggest that generally, case type (e.g. CWS, OAI, PAI) with a high number of cases will have the most similar trends between the excluded data and the retained subsample.

57. The Observer obstruction (OAI) cases have relatively similar overall trends but some of the detail gets lost in some years when reviewing the data in more detail (OAI Snapshot on pages 18-19). This may or may not be problematic depending on the intent of the reporting based on the subsampled vs complete CCFS dataset. This variation may be important for TCC to carefully consider, given that paragraph 15(c) states that "*Observer-related cases from the sample of trips by purse seine vessels identified under sub-paragraph (b) will be used for CMR, including for the purposes of paragraph 25 and 28*[11]." Note that for the purpose of TCC20 preparations, the Secretariat has used the

[11] CMM 2023-04 paragraph 25. Each dCMR shall reflect information relating to the relevant CCM's implementation of obligations as identified under paragraph 6 as well as any potential compliance issues, where appropriate. Such information shall be sourced from reports submitted by CCMs as required in CMMs and other Commission obligations, such as:

(i) information available to the Commission through data collection programmes, including but not limited to, high seas transshipment reports, Regional Observer Programme data and information,

complete CCFS data set (not the subsampled CCFS data) for the development of the static aggregated tables and the dynamic tables (**TCC20-2024-dCMR02**). The Secretariat seeks further guidance from TCC20 as to how to apply the subsampled dataset for the purpose of paragraph 25 and 28 of CMM 2023-04.

58. Finally, undertaking a new random selection impacts the data, for example in **Figure 14**, we have the same analysis but on two different random samples. This shows that while the broad overall trends are similar, the details differ. As such, if a new selection was done annually the impression the data provides, may change from year to year, which may influence the interpretation of the results. But this interpretation will be based on the subsample chosen and not the interannual trends of the underlying data. For this reason, it may be more informative to retain the random sample and then add to it rather than changing it annually. The Secretariat seeks further guidance from TCC20 on this approach.

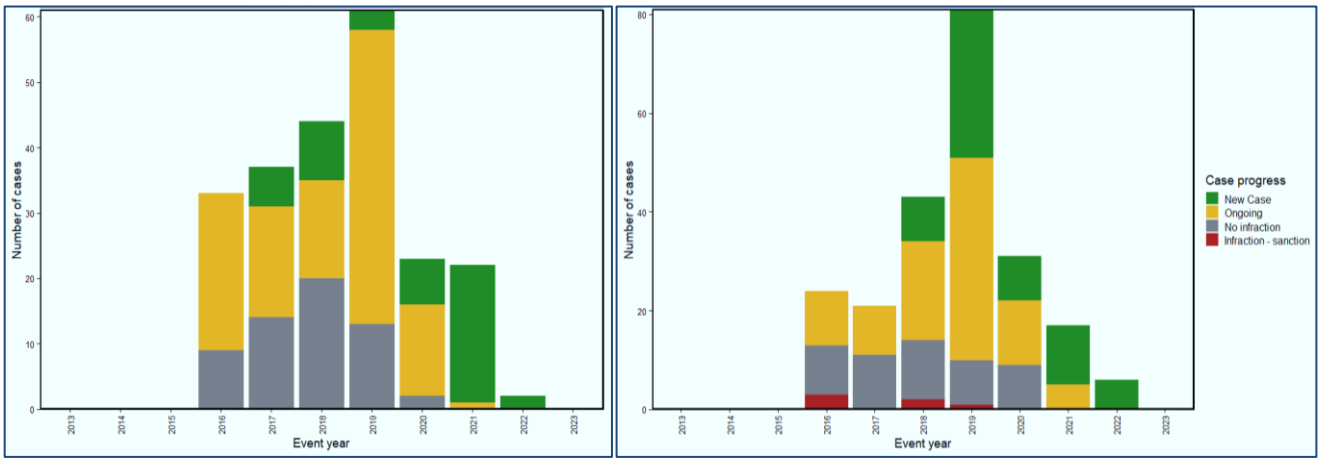


Figure 14. Illustration of the potential implication of random selections showing an analysis specific selection (left-side) and the constant selection used in this paper as the after the subsampling approach was applied (right-side).

Vessel Monitoring System information, High Seas Boarding and Inspection Scheme reports, and charter notifications;

(ii) information contained in an Annual Report which is not available through other means; and

(iii) where appropriate, any additional suitably documented information regarding compliance during the previous calendar year.

CMM 2023-04 paragraph 28. At the same time, the Executive Director shall draw from the online case file system and transmit to:

(i) each flag CCM, the infringement identification relating to alleged violations by its flagged vessels on the online system for the previous year, for that CCM to review with its dCMR. Relevant CCMs, as described in paragraph 13, shall also be provided this same information; and

(ii) all CCMs, aggregated information across all fleets based on the information reported by CCMs pursuant to paragraph 10, for the previous 5 years. The templates attached as Annex II will serve as the basis for the data fields that will be included. This will be used to provide an indicator of potential anomalies in the implementation of obligations by a CCM, with a view towards identifying implementation challenges for that CCM and identifying systemic failures to take flag state action in relation to alleged violations. This information shall be considered by TCC alongside the Draft Report.

Conclusion

59. This paper has presented an update on the subsampling approach set out in the current CMM on CMS (CMM 2023-04) which is intended to address the imbalance in the CCFS from the comparatively different levels of purse seine and longline observer coverage. The results presented in this paper have confirmed that methods described in this paper, resulted in only purse seine trips and observer-initiated cases being excluded from the subsampled dataset. The subsampled dataset retained all CCM-initiated or Article 25(2) cases and longline observer-initiated cases. In terms of the outcomes on CCFS case trends and issues, the analysis in this paper has shown there are different effects for different issues, and there can also be an effect from the random sampling. These differences could affect the interpretation of trends and outcomes, based on reports prepared from the subsampled dataset. The Secretariat seeks guidance from TCC about how the sampling approach should be calculated and how the subsampled dataset should be used for future TCC reporting prepared by the Secretariat which is based on CCFS data.

60. The current exclusion of PAI and CWS cases from consideration in aggregate tables and the fact that CCMs are not progressing CWS and PAI cases will undermine the objective of the CMS and the relevant CMM in the medium to longer term. The range of WCPFC IWG-led work to refine WCPFC's monitoring programs is expected to improve the representation of data for use in the CMS, including in the CCFS. For example, the workplan for the IWG-ROP prioritizes the review and development of draft recommended modifications to ROP data fields with the intention of allowing for more useful consideration of ROP data in the CCFS and in the CMS. Areas of focus over coming years includes advice on improvements to the ROP minimum standard data fields for CWS and PAI cases, as well as around implementation of mitigation measures to protect sea turtles and seabirds to allow for use of ROP data in the CCFS.

61. In addition, the TS-IWG is progressing the review of the Transhipment CMM (CMM 2009-06) and the scope includes considering refining monitoring of at-sea transshipment activities. The ERandEM-IWG is also progressing work to establish E-monitoring as a tool to meet WCPFC's data needs. This work will enhance the ability of the Commission to update data fields to reflect changes to CMMs and more clearly target observer data collection to address scientific and monitoring needs including the identification of potential infringements.

Recommendations

62. TCC20 is invited to:

    a. review the draft Appendix 3 for the provisional CMR, with the subsampling approach applied and provide feedback;

    b. provide guidance to the Secretariat on how to calculate the sub-sample proportion so that it is reflective of both the longline and purse seine observer coverage rates;

    c. provide guidance to the Secretariat on how to handle past years subsampling datasets. Do we either keep current subset selection and add on one year at a time in future years or do a complete new random sample of all years for each year's reporting?

d. consider the information in this paper, including the implications of applying the subsampling approach, and provide guidance to the Secretariat on how to use this subset of data for the other reporting prepared by the Secretariat, including in the dCMR noting paragraph 25 and 28 of CMM 2023-04; and

e. continue to support efforts by the Secretariat to further analyse available information to promote heightened understanding and awareness of fishing impacts in the WCPFC Convention Area.

Annex 1

COMMISSION
TWELFTH REGULAR SESSION
Bali, Indonesia
3-8 December 2015

COMMISSION ADOPTED PRE-NOTIFICATION PROCESS FROM OBSERVER PROVIDERS TO FLAG CCMS OF POSSIBLE ALLEGED INFRINGEMENTS BY THEIR VESSELS AND TO COASTAL STATE CCMS OF POSSIBLE ALLEGED INFRINGEMENTS IN THEIR WATERS:

a) Observer, as part of their usual duties will complete the ROP minimum data elements on the WCPFC Observer Trip Monitoring Summary, or which are included in SPC/FFA General Form 3 (see example below), for each trip;

b) Observer keeps this report/form (and all other data) confidential and returns to home port or disembarkation point;

c) Observer fully disembarks the vessel;*

d) Observer transmits their data and reports per their standard procedures to an authorized observer provider/person for their national or subregional observer programme;

e) Observer arriving back from the vessel in observer's home port, or if required, has to travel back
to home country & awaits debriefing;

f) Observer is debriefed as soon as is practicable after finishing the trip/trips*;

Pre-Notification Process

g) In the event that there is a "YES" noted in the WCPFC Observer Trip Monitoring Summary, or ROP minimum data elements which are included in SPC/FFA General Form 3 the observer provider is expected where practicable, to promptly submit the relevant data to the Commission Secretariat (the data may be provided through the Commission data service provider (SPC-OFP) or provided directly to the Secretariat).

h) In considering the timeliness of the submission of the ROP minimum data elements on the WCPFC Observer Trip Monitoring Summary, or which are included in SPC/FFA General Form 3, the observer provider must ensure the observer is safely disembarked from the vessel and has returned to their home port, and where possible the observer has been fully debriefed.

i) The observer provider may decide that further investigation of a "YES" noted in the WCPFC Observer Trip Monitoring Summary, or ROP minimum data elements which are included in SPC/FFA General Form 3 (or equivalent) is needed before the relevant data is submitted to the Commission Secretariat.

j) If there is only "NO" noted in the WCPFC Observer Trip Monitoring Summary, or ROP minimum data elements which are included in SPC/FFA General Form 3 (or debriefing determines there to be only "NO" noted) the ROP data, including WCPFC Observer Trip Monitoring Summary, or ROP minimum data elements which are included in SPC/FFA General Form 3 would be submitted through usual processes to the Commission Secretariat.

k) The Commission Secretariat will facilitate the provision of certain data fields in the relevant WCPFC Observer Trip Monitoring Summary, or ROP minimum data elements which are included in SPC/FFA General Form 3 and the additional supporting fields *** to the responsible flag CCM and coastal State CCM where applicable. In accordance with the data rules, the information that is provided to flag CCMs and coastal State CCMs will exclude the name of the observer, their nationality and the observer trip ID, but will instead identify the observer provider programme that placed the observer.

l) The authorised Flag state and coastal State official contacts can request from the observer provider** further supporting details for their investigations. Vessel captain/owners/point of contact will communicate with flag State official contacts regarding any alleged infringements.

m) The Commission Secretariat will facilitate the collation of communications related to the outcome of investigations of any "YES" noted in the WCPFC Observer Trip Monitoring Summary, or ROP minimum data elements which are included in SPC/FFA General Form 3, including from the flag CCMs.

*If an observers carries out one or more trips consecutively on the same vessel. That vessel cannot
request through their official contacts a copy of the WCPFC Observer Trip Monitoring Summary, or ROP
minimum data elements which are included in SPC/FFA General Form 3 compiled by that observer until the observer has completely finished his trips on the vessel and has fully disembarked the vessel.

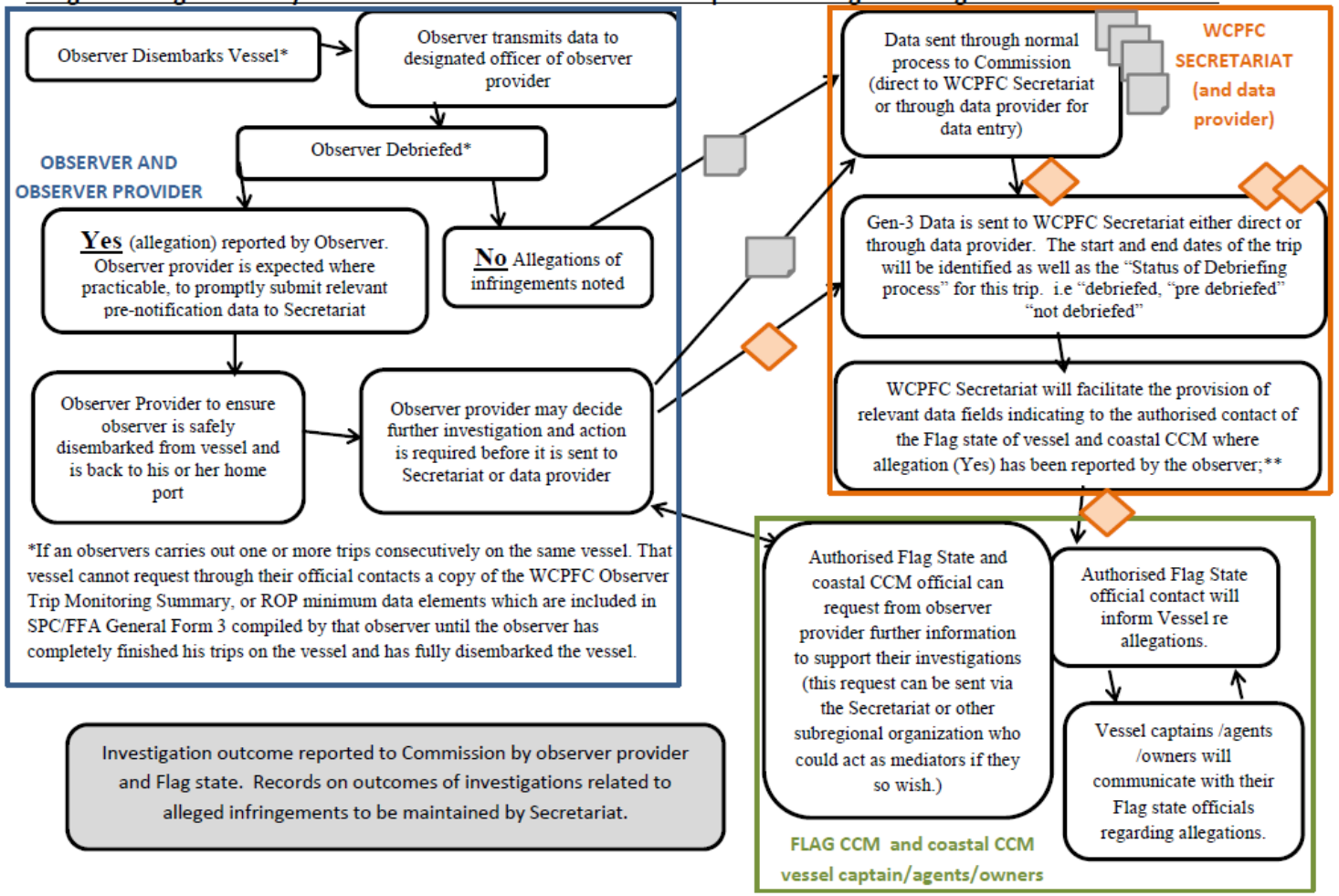
** Request could be sent via the Commission Secretariat or other sub regional organizations who would verify the persons making the request are genuine official contacts and could act as intermediators between the relevant CCM and the provider if they so wish.

*** The Commission agreed that to support the pre-notification process, that there are two additional fields that should be provided by observer providers to support a flag CCMs investigations of any possible alleged infringements. These are:

1. "start date of trip and end date of trip"
2. "status of the debriefing process" i.e, "debriefed", "pre debriefed" or "not debriefed"

Final notes: The Commission agreed that there would be a six month delay before implementation of the pre-notification process commences, and approved the attached flowchart to illustrate the approved pre-notification process.

Schematic of Commission adopted Pre-Notification Process from observer providers to flag CCMs of possible alleged infringements by their vessels and to coastal CCMs of possible alleged infringements in their waters



**Note: that in accordance with the data rules, the information that is provided to flag CCM and as applicable coastal CCM will not include name of observer their nationality and the observer trip ID, but will instead identify the observer provider that placed the observer. The start and end dates of the trip will be identified as well as the "Status of Debriefing process" for this trip. i.e "debriefed, "pre debriefed" "not debriefed"