

TECHNICAL AND COMPLIANCE COMMITTEE Twenty-First Regular Session

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ANNUAL REPORT ON THE PERFORMANCE OF E-REPORTING AND E-MONITORING STANDARDS

WCPFC-TCC21-2025-RP09 25 August 2025

Submitted by the Secretariat and SPC-OFP

Purpose

1. This paper provides an update on CCM's use of electronic reporting (E-reporting) technology to submit data to WCPFC, and the extent to which their reporting aligns to the WCPFC's voluntary E-reporting standards, specifications, and procedures (E-reporting SSPs). This year's update also reports on the continuing development of E-monitoring reporting standards by the ERandEM IWG.

Background

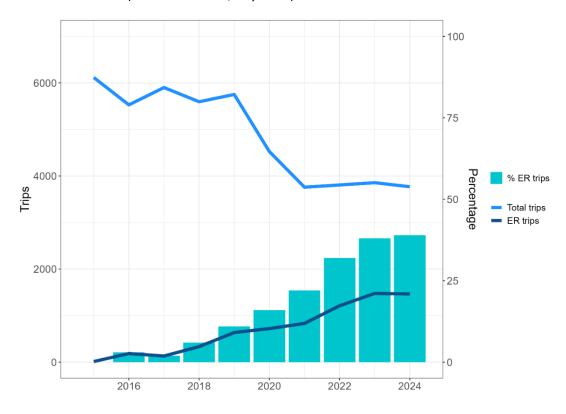
- 2. The Secretariat is required to report annually on the performance and application of the E-reporting SSPs and to recommend any improvements or modifications.
- 3. In 2016, WCPFC adopted general E-reporting SSPs that, at the time, included catch and effort data and observer data E-reporting standards. Other forms of E-reporting standards were expected to be included over time. In 2018, the Commission agreed to an administrative process allowing the Secretariat to make minor changes to the E-reporting SSPs that reflect the Commission's decisions.
- 4. To date, E-reporting SSPs have been adopted for:
 - a. Operational catch and effort data (2016);
 - b. Observer data (2017);
 - c. <u>Transhipment notifications and declarations</u> (2018).

Reporting on the voluntary uptake and performance of the E-reporting standards

E-reporting Standards for operational level catch and effort data

- 5. The voluntary uptake of WCPFC E-reporting of operational level catch and effort data has steadily increased since 2018 through the installation of SPC's *Onboard* application on vessels. This application applies the *JSON* standard for data transfers into SPC's TUFMAN2 which meets E-reporting SSPs. Alignment to the E-reporting standards for operational catch and effort data has already been made mandatory for all purse seine fleets licensed to fish in the PNA waters that supply E-reported logsheet data from the PNA FIMS/iFIMS system to SPC as a WCPFC Scientific Services Provider.
- 6. **Table 1** in **Annex 1** shows the status of implementation of E-reporting for each CCM and whether it aligns to the standards. **Table 2** in **Annex 1** shows the number of individual vessels for each of the Small Island Developing States (SIDS) that have submitted data via the *Onboard* application since 2019, and the number of trips during that time.
- 7. **Figures 1 and 2** below show the trend for Pacific Islands' (or Small Island Developing States (SIDS)) use of E-reporting for longline and purse seine catch and effort reporting since 2015.

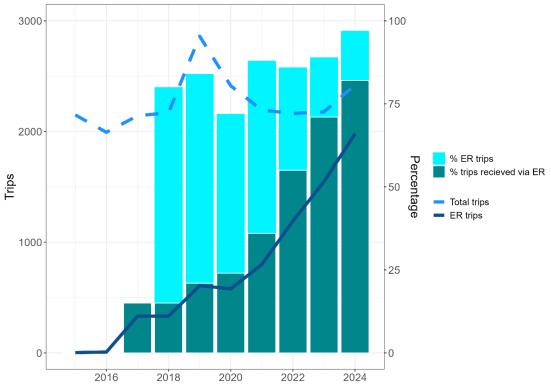
Figure 1: Number and percentage of trips in the Pacific Islands longline fishery that use E-reporting to submit catch and effort data (Source: SPC-OFP, July 2025)



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¹An E-reporting tool that allows longline vessels to collect operational catch and effort data and send this directly to SPC's TUFMAN2 database.

Figure 2: Number and percentage of trips in the Pacific Islands purse seine fishery that use E-reporting to submit catch and effort data (Source: SPC-OFP, July 2025)



- 8. SPC continues to promote the use of E-reporting (and alignment to the ER SSPs) through regular training workshops for masters of SIDS CCM vessels on installing and using the *Onboard* application. SPC has been collaborating extensively with the PNA iFIMS development team since last year to improve the reception of their longline data following the *JSON* E-reporting SSPs.
- 9. CMM 2022-06 relating to Daily Catch and Effort Reporting took effect on 1 January 2024 and requires that flag CCMs ensure vessel masters keep daily electronic logs of catch and effort data and provide this electronically to their relevant authority unless exempt. In turn, this information is to be submitted to WCPFC, and, where possible, in accordance with the relevant E-reporting SSPs. Implementation of this requirement by CCMs is being assessed this year as part of the Compliance Monitoring Report for Reporting Year 2024.

Uptake of E-reporting Standards for data from the Regional Observer Programme

10. All national observer programmes from SIDS CCMs, the PNA-managed FSM Arrangement observer programme, and US Treaty observer programme have their observer data entered into the SPC-managed TUFMAN2 system. This system produces data for the WCPFC ROP database that is aligned to the WCPFC E-reporting SSPs for observer data.

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² Paragraph 1 of CMM 2022-06

11. All submissions of purse seine observer data held in the WCPFC ROP database continue to align with the WCPFC E-reporting standards for observer data. Several CCMs continue to ensure their longline observer data submissions aligns with the WCPFC E-reporting SSPs for observer data, including Japan, Korea, Chinese Taipei, and USA. Overall, 93% of 2024 longline observer data held in the WCPFC ROP database aligns to the WCPFC E-reporting standard.

E-reporting Standards for high seas transhipment declarations and notices

- 12. The Secretariat's Transhipment Electronic Reporting System (TSER) is used for E-reporting of WCPFC high seas transhipment notifications and declarations and meets the WCPFC E-reporting standards. Korea and Chinese Taipei have been voluntarily entering their own high seas transhipment reports directly into TSER or with automatic interface transfer into TSER from a national reporting system since February 2020 and September 2019, respectively. More than 70% of transhipment reports from all CCMs are received directly by WCPFC via the TSER system. For the remaining reports, the Secretariat enters them into TSER from submissions received via email from CCMs.
- 13. A consultancy undertaken in 2024 confirmed the status and needs of those CCMs not currently reporting directly into the WCPFC TSER system. Most remaining CCMs involved in high seas transhipments that are not already directly entering their data are continuing to progress internal work on this. For some CCMs, their internal work includes the development of an Application Programming Interface (API) that will potentially support their transition to E-reporting. As resources allow, the Secretariat will use this work as the basis for continuing to work with CCMs to increase the level of direct electronic reporting.

Commission activities that may result in changes to E-reporting standards

Update on the development of E-monitoring reporting standards by the ERandEM-IWG

- 14. In 2014, WCPFC established the Electronic Reporting and Electronic Monitoring Working Group (ERandEM-IWG) to facilitate the development of SSPs for electronic reporting and electronic monitoring technologies in WCPFC fisheries as a priority task.
- 15. In 2024, WCPFC21 adopted <u>Interim Electronic Monitoring (EM) Minimum Standards, covering Technical, Data, and Reporting Requirements.</u>
- 16. The Commission then tasked the ERandEM-IWG with several key activities for 2025 including:
 - a. work closely with the ROP IWG to further review EM data requirements based on relevant CMM requirements not already covered in the ROP minimum data fields;
 - b. develop advice on potential changes to the interim EM standards to improve harmonization across RFMOs;
 - c. develop an assurance/audit process for EM standards based on the existing ROP audit model;
 - d. initiate work on EM standards for carrier vessels conducting transhipment with longline vessels.

- e. develop advice on an amendment to the CMM 2022-05 Standards, specifications and procedures for the WCPFC RFV, noting this would be required to support implementation.
- 17. Additionally, WCPFC21 tasked the Scientific Committee (SC22) and the Technical and Compliance Committee (TCC22) to provide recommendations to WCPFC23 in 2026 regarding any necessary changes to the interim EM standards, informed by the ERandEM-IWG's work and other relevant inputs.
- 18. On 11 June 2025, WCPFC Secretariat issued a call for nominations for a new Chair of the ERandEM-IWG, following notification from the Federated States of Micronesia that Mr. Dan Gilmete could no longer continue in this role. On 13 August 2025, Ms Lesley Hawn (USA) was appointed on an interim basis as ERandEM IWG Chair.
- 19. While this broader work continues, a range of E-monitoring initiatives are already underway through the region. The current system used in some SIDS CCMs (provided by the Technical Service Provider SATLINK) exports data that aligns to the WCPFC E-reporting Observer Standards. **Table 3** below shows the number of E-monitoring data reviews of longline sets by national EM programmes from 2015 2024. The high variability in the number of reviews can largely be attributed to activity and data generated during E-monitoring trials (years of high review) compared to data generated from EM implementation.

Table 3: Annual longline E-Monitoring (EM) data reviews (sets), by national EM programme, 2015–2024 (Source: SPC-OFP, July 2025)

	E-MONITORING DATA (Sets reviewed)									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Australia	56	420	528	489	525	418	403	344	294	435
Fiji	222	621	2170	1510	484		93	114		
French Polynesia								171	1	
FSM		311	314	21	30	210	10		63	
Marshall Islands			810	629	310					
Palau		102	159	56						
Solomon Islands			74	25						
Vanuatu			41	43	23					

NOTES: According to data submitted to SPC, 2024 values are provisional

Implementation of observer transhipment reporting

- 20. In 2022, the Commission adopted initial data fields and standards for observer transhipment reporting with effect from 1 April 2023. SPC continues to facilitate the interim implementation of this reporting through FFA CCM Regional Observer Programmes, and other CCM national observer programmes are also moving towards implementing this requirement. The Secretariat and SPC are receiving some transhipment observer reports.
- 21. Commission decisions are required to determine the data needed to support new transhipment requirements, which are being reviewed by the Regional Observer Programme Intersessional Working Group (ROP-IWG). Once the data requirements are established, additional WCPFC E-reporting observer data SSPs specific to transshipment observer monitoring can be developed.

Summary of potential improvements to data

- 22. The Commission periodically identifies improvements to data and how that data is collected, potentially necessitating updates or the development of new WCPFC E-reporting SSPs.
- 23. Current areas for potential change include:
 - a) Taskings from WCPFC21, TCC20, and SC20 to the ROP-IWG focused on streamlining and enhancing observer data fields, to support monitoring the implementation of CMMs, including potential infringements.
 - b) WCPFC21 taskings for the Secretariat to establish data exchange arrangements with other Regional Fisheries Management Organizations (RFMOs) concerning transhipment activities, observer reports, and carrier vessel data.
 - c) WCPFC21 also tasked SC22 and TCC22 in 2026 to recommend to WCPFC23 any necessary changes to the interim EM Standards, based on the work of the ER and EM IWG and any other relevant information.
 - d) Possible outcomes from SC21, include from the consideration of the current proposals relating to:
 - i. Sea turtle data reporting requirements for longline and purse seine vessels.
 - ii. Species-based management plans and associated monitoring strategies.
 - iii. Minimum FAD data fields from the FADMO-IWG, and feedback to the IWG to finalize FAD logbook data fields.
 - iv. Appropriate requirements for effective reporting of cetacean interactions in tuna and associated species fisheries. This work may include consideration of data types, collection methods, reporting formats, and alignment with SciData provisions to ensure robust and consistent monitoring across gear types, particularly in support of implementing CMM 2024-07 (CMM for Protection of Cetaceans from Purse Seine and Longline Fishing Operations) and enhancing cetacean interaction data from both longline and purse seine operations.
 - e) Review and addressing of reporting gaps and data needs to enhance the monitoring and verification of vessel-related data and activities through the Compliance Monitoring Scheme (CMS).
 - f) Enhancements to data collection systems specifically targeting environmental and climate-related impacts on fisheries.

Update on the potential use of FLUX³ for exchanging information between WCPFC and the European Union

19. The TCC Workplan 2022–2024 prioritised developing the Commission's Information Management System (IMS) to support MCS activities, including exploring FLUX protocol integration for EU data

³ See https://unece.org/trade/uncefact/unflux for more information on FLUX.

- reporting. Funded by a €23,500 EU grant signed in November 2022, a consultant assessed the feasibility of implementing a FLUX node in the IMS. Trackwell, the Commission's VMS provider, conducted the study in 2024, focusing on connecting the EU and WCPFC for Catch and Effort data.
- 20. The study found no technical barriers to developing a FLUX interface compatible with WCPFC e-reporting standards. Implementation was estimated at 2–3 months at a cost of USD \$130,000 upfront and USD \$32,000 annually for maintenance and hosting. The European Union is considering the outcome of this assessment.

Table 1: Status of E-reporting implementation and CCM alignment to WCPFC E-reporting standards in 2024 (Source: SPC-OFP, July 2025)

Flag CCM	Gear(s)	Status of ER Implementation	Submitted to SPC via ER ⁴	Aligns to ER Standards (non-binding)	Notes		
Australia	LL	100%	NO	NO	"as of 2021, all reporting in the [Eastern Tuna and Billfish Fishery] (ETBF) is done via electronic logbooks"		
China	LL	3%	See Table 2 of Annex 1	NO			
	PS	100%		YES	Obligation to use PNA iFIMS eLOG system		
	LL	None identified	See Table 2 of Annex 1	YES	Logbook data are entered directly into SPC Tufman 2 system		
Cook Islands	PS	100%		YES	Logbook data are entered directly into SPC Tufman 2 system		
Ecuador	PS	None identified		NO			
El Salvador	PS	None identified		NO			
European Union	LL	100%	NO	NO	"The data hereby included have been obtained from mandatory electronic logbooks for 2022 activity." SC19 EU Annual Report Part 1		
	PS	None identified					
· cacracca	LL	None identified	See Table 2 of Annex 1	YES			
States of Micronesia	PS	100%		YES	Obligation to use PNA iFIMS eLOG system		
Fiji Islands	LL	9%	See Table 2 of Annex 1	YES	SPC-developed E-Reporting Onboard system		
French Polynesia	LL	89%	See Table 2 of Annex 1	YES	SPC-developed E-Reporting Onboard system		
	LL	Partial	NO	NO	E-PIT system developed for logbook		
Indonesia	PS	Partial	NO	NO	E-PIT system developed for logbook		

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⁴ Submitted to the SSP via integrated data exchange without requirements for manual data entry.

Flag CCM	Gear(s)	Status of ER Implementation	Submitted to SPC via ER	Aligns to ER Standards (non-binding)	Notes		
	LL	None identified	NO	NO			
Japan	PS	Partial		NO	Obligation to use PNA iFIMS eLOG system in PNA EEZs and adjacent high seas. ER not used elsewhere		
	LL	Partial	See Table 2 of Annex 1	YES			
Kiribati	PS	100%		YES	Obligation to use PNA iFIMS eLOG system		
Republic of	LL	100%	NO	NO	Full E-Reporting system in place since 2018		
Korea	PS	100%		YES	Obligation to use PNA iFIMS eLOG system		
Marshall	LL	None identified	NO	YES			
Islands	PS	100%		YES	Obligation to use PNA iFIMS eLOG system		
Nauru	PS	100%		YES	Obligation to use PNA iFIMS eLOG system		
New Caledonia	LL	39%	See Table 2 of Annex 1	YES	SPC-developed E-Reporting Onboard system		
	LL	100%	NO	NO	" in 2017-2019 catch/effort reporting system was incrementally replaced by Electronic Reporting (ER)"		
New Zealand	PS (domestic)	100%	NO	NO			
	PS (tropical)	100%	NO	YES	Logbook data are entered directly into SPC Tufman 2 system		
Niue	LL	(inactive)		YES			
Palau	LL	None identified	NO	YES			

Flag CCM	Gear(s)	Status of ER Implementation	Submitted to SPC via ER9	Aligns to ER Standards (non-binding)	Notes		
Papua New	LL	None identified	NO	YES			
Guinea	PS	100%		YES	Obligation to use PNA iFIMS eLOG system		
Philippines	PS (domestic)	Partial	NO	YES	Some vessels in this fleet use MARLIN an E-Reporting system which is currently being replaced.		
	PS (DWFN)	100%		YES	Obligation to use PNA iFIMS eLOG system		
Samoa	LL	Partial	See Table 2 of Annex 1	YES	SPC-developed E-Reporting Onboard system		
Solomon	LL	None identified	NO	YES			
Islands	PS	100%		YES	Obligation to use PNA iFIMS eLOG system		
Chinese Taipei	LL	100%	See Table 2 of Annex 1	YES	"All tuna longliners have been reporting their fishery data through e-logbook, and the catch and effort data is compiled from e-logbook data." SC19 Chinese Taipei Annual Report Part 1		
	PS	100%		YES	Obligation to use PNA iFIMS eLOG system		
Tonga	LL	89%	See Table 2 of Annex 1	YES	SPC-developed E-Reporting Onboard system		
	LL	None identified	NO	YES			
Tuvalu	PS	100%	YES		Obligation to use PNA iFIMS eLOG system		
United States	LL	100%	NO	NO	"Electronic reporting of daily fishing logbooks began testing and implementation in 2019 and was mandated for use in the entire Hawaii longline fleet from 2021 onwards"		
	PS	100%		YES	Obligation to use PNA iFIMS eLOG system		

Flag CCM	Gear(s)	Status of ER Implementation	Submitted to SPC via ER9	Aligns to ER Standards (non-binding)	Notes
Vanuatu	LL	40%	See Table 2 of Annex 1	YES	SPC-developed E-Reporting Onboard system and fishing company ER system
	PS	100%		YES	Obligation to use PNA iFIMS eLOG system
Vi atra a ma	LL/HL	NO	NO	YES	Logbook data are entered directly into SPC Tufman 2 system
Vietnam	PS	NO	NO	YES	Logbook data are entered directly into SPC Tufman 2 system
Wallis and Futuna	LL	(inactive)		Wallis and Futuna	

Table 2: The number of longline trips and vessels by flag CCM that have submitted data using Onboard E-reporting application 2019-2024 (Source: SPC-OFP, July 2025)

Flag CCM	2019		2020		2	2021		2022		2023		2024	
	Trips	Vessels											
Cook Islands	38	11	21	6	15	5	22	2			4	1	
China	17	11	24	11	6	6			19	10	16	8	
Fiji	25	5	9	1	19	5	1	1	19	10	50	11	
Federated States of Micronesia	20	10	9	6	9	7							
French Polynesia	308	28	336	35	469	56	828	73	1044	77	1036	82	
Kiribati											2	1	
New Caledonia	47	3	50	3	59	5	115	15	167	14	108	9	
Samoa	31	3	5	1							6	1	
Tonga	27	3	15	2	60	3	92	5	120	5	101	4	
Chinese Taipei			1	1	9	3	7	2	21	4	8	2	
Vanuatu	3	1	10	1	1	1							