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Annual Report on the Performance of the E-Reporting Standards

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ANNUAL REPORT ON THE PERFORMANCE OF THE E-REPORTING STANDARDS

WCPFC-TCC19-2023-RP09
15 September 2023

Paper by the Secretariat and SPC-OFP

Purpose

1. This paper provides an update on CCM's use of E-reporting technology to submit their data to WCPFC and the extent to which this reporting aligns to the Commission's voluntary E-reporting standards, specifications and procedures for E-reporting.

Introduction

2. The Secretariat is required to report annually on the performance and application of "*The Standards, Specifications and Procedures for E-reporting*" (E-reporting SSPs) and to recommend any improvements or modifications.[1]

3. In 2014, the Commission 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[2]. This work will address risks associated with the lack of documented policies and standards for these technologies.

4. In 2016, the Commission adopted general E-reporting SSPs that, at the time included catch and effort data and observer data E-reporting standards. Once agreed, other forms of E-reporting standards would be included over time. In 2018, the Commission agreed to an administrative process allowing the Secretariat to make minor changes to the SSPs that reflect their decisions. To date, E-reporting SSPs have been adopted for:

   a. Operational catch and effort data in 2016[3];
   b. Observer data in 2017[4]; and
   c. Transhipment notifications and declarations in 2018.[5]

5. Subsequent work of the ERandEM-IWG has focused more on E-monitoring.

[1] Paragraph 7 of the E-reporting SSPs
[2] Meeting information for the ERandEMWG
[3] WCPFC13 Summary Report paragraph 584 and Attachment T
[4] WCPFC14 Summary Report paragraph 401 and Attachment T
[5] WCPFC 15 Summary Report Attachment S

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

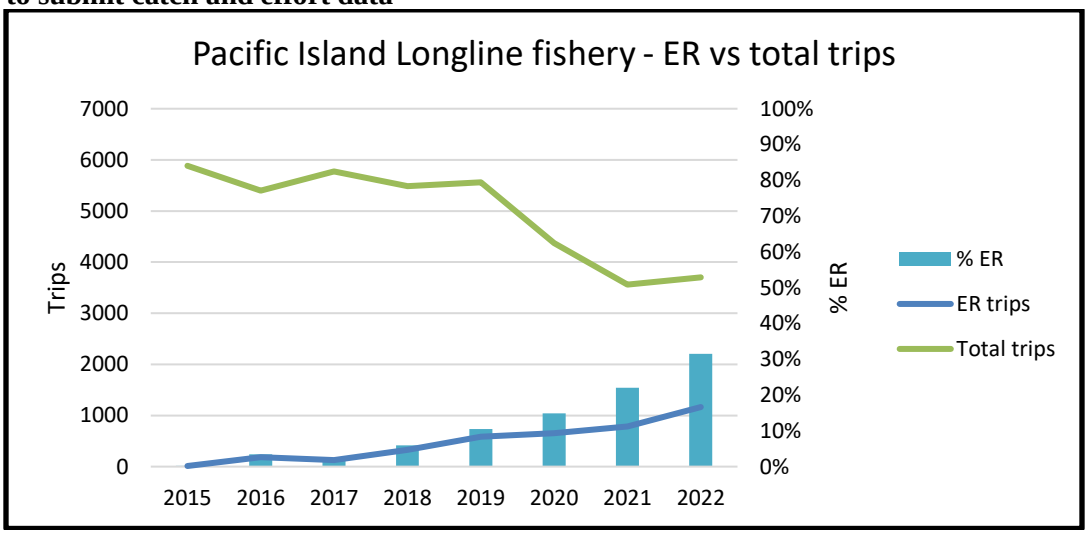
E-reporting Standards for operational level catch and effort data

6. The voluntary uptake of E-reporting to supply operational level catch and effort data has steadily increased over the past six years through SPC's *Onboard* application being installed on vessels.[6] This application applies the *JSON* standard for data transfers into SPC's TUFMAN2 and meets E-reporting SSPs. Alignment to the WCPFC 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 the WCPFC Scientific Service Provider.

7. **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 had the *Onboard* application installed since 2019, and the number of trips during that time. It should be noted that not all these vessels may still be using *Onboard*.

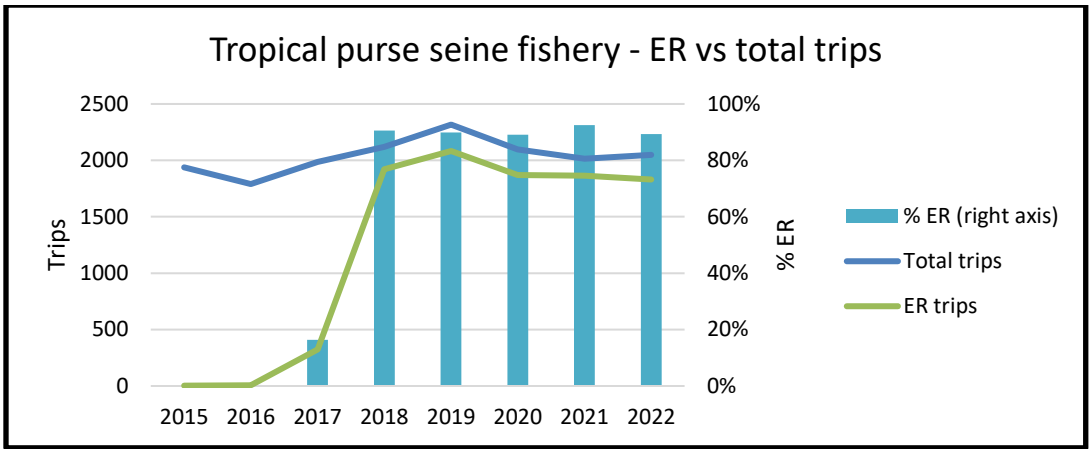
8. **Figures 1 and 2** below show the trend for Pacific Islands (or Small Island Developing States (SIDS)) use of E-reporting for long line and purse seine catch and effort reporting since 2015.

Figure 1: Number and percentage of trips in the Pacific Islands longline fishery that use E-reporting to submit catch and effort data



[6] an 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



9. SPC continues to promote the use of E-reporting (and alignment to the SSPs) through regular training workshops for masters of SIDS vessels on installing and using *Onboard*. Discussions are currently being held on potential training on the use of *Onboard* on longliners in Papua New Guinea and SPC is collaborating with the PNA iFIMS development team to receive their longline data following the *JSON* E-reporting SSPs.

10. CMM 2022-06 relating to Daily Catch and Effort Reporting requires that from 1 January 2024, flag States ensure vessel masters keep daily electronic logs of catch and effort data and provide this electronically to their relevant authority unless exempt.[7] In turn, this information is to be submitted to the Commission and where possible, in accordance with the relevant E-reporting SSPs.

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

11. All national observer programmes from SIDS, and 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 standards for observer data.

12. 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 E-reporting standards for observer data, including Chinese Taipei, Japan, Korea, and USA. Overall, 92% of 2022 longline observer data held in the WCPFC ROP database aligns to the WCPFC E-reporting standard. This is a considerable improvement from 29% in 2017 and a further increase from 75% in 2021.

E-monitoring initiatives

13. There are several E-monitoring initiatives currently underway throughout the region, and the current system used in some SIDS (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 – 2022.[8] The highly variable number of reviews in these years reflects data largely generated from E-monitoring trials.

[7] Paragraph 1 of CMM 2022-06
[8] Status of Observer Data Management, Table 8 WCPFC-SC19-2023/ST-IP-02

Table 3: Annual longline E-Monitoring (EM) data reviews (sets), by national EM programme, 2015–2022

	E-MONITORING DATA (Sets reviewed)							
EM Programme	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Australia	56	420	528	489	525	418	403	344
Fiji	222	621	2170	1510	405			
FSM		311	314	21	30	210	10	
French Polynesia							171	1
Marshall Islands			810	629	310			
Palau		102	159	56				
Solomon Islands			74	25				
Vanuatu			41	43	23			

NOTES: According to data submitted to SPC; 2022 values are provisional

E-reporting Standards for high seas transhipment declarations and notices

14. The Secretariat's Transhipment Electronic Reporting System (TSER) is used for E-reporting of WCPFC high seas transhipment declarations and notifications and meets the E-reporting standards.[9] The Secretariat uses TSER to enter transhipment reports submitted by email from CCMs to WCPFC. Korea and Chinese Taipei have been voluntarily entering their own high seas transhipment reports directly into TSER since February 2020 and September 2019, respectively. More than 70% of transhipment reports submitted by all CCMs are directly entered.

15. The Secretariat continues to support CCMs with direct entry of their transhipment reports into TSER, with most CCMs progressing their internal processes, including the development of an Application Programming Interface (API) that will potentially allow them to move to, or improve existing E-reporting of their high seas transhipment reports.

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

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

16. The ERandEM-IWG progressed consideration of framework issues in 2022 that arose during discussions on draft WCPFC Electronic Monitoring SSPs released for CCM comment in March 2022. Once resolved, further progress can be made on the SSPs recognizing that E-monitoring programmes and associated data standards are also being developed by several CCMs and there has been work in this area by FFA, SPC, and PNAO, through the FFA/SPC Data Collection Committee. A summary of work undertaken by the ERandEM-IWG was presented to the Commission in 2022, with 2023 work progressing under the leadership of Dr. Shelton Harley (NZ).

Implementation of observer transhipment reporting

17. In 2022, the Commission adopted data fields for observer transhipment reporting with effect from 1 April 2023. SPC is facilitating the implementation of this new reporting with national observer programmes. The Transhipment and Regional Observer Programme Intersessional Working Groups (TS-IWG and IWG-ROP) are progressing further reviews on required data fields and collection protocols. On completion of this work, it may be necessary to develop additional E-reporting observer data SSPs.

[9] The user manual can be accessed from the WCPFC website at this link: https://www.wcpfc.int/E-reporting/tser.

Improvements to data

18. The Commission periodically identifies improvements to data and how that data is collected that may result in the need to update or develop new E-reporting SSPs. Current areas for potential change are:

a. WCPFC19 taskings to the TS-IWG to consider the transhipment monitoring framework;
b. WCPFC19 and TCC18 taskings to the IWG-ROP to enhance data fields collected by observers;
c. SC19 outcomes:
    i. in relation to the review of the shark CMM, noting the need to advance work to support better data collection, particularly for less commonly caught species interaction and the utility of electronic technologies to complete monitoring and estimation of their interactions;
    ii. noting a report on electronic monitoring of transhipments that utilized a digital scale integrated with the onboard EM system to automatically store transmitted weights; and
    iii. recommending options for reporting of various data fields relating to Fish Aggregation Devices (FADs) be developed by the FAD Management Options IWG (FADMO-IWG) and TCC.

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

19. FLUX is a global electronic standard for the exchange of fisheries-related information. In late 2020, the Secretariat and the European Union (EU) discussed the feasibility of implementing a FLUX node at the Secretariat that would enable a connection for automating exchanges of information with EU systems.[10] In response, the EU provided a grant to support implementation of the FLUX node that would allow their data to update the EU records on the Record of Fishing Vessels (RFV) including the submission of annual fish/did not fish reports, and to enable the EU system to automatically access updates to records on the RFV. This information can be accessed on the RFV itself, however, implementing a FLUX node would simplify this process and align with the existing EU processes amongst its members and other organisations, within and outside of Europe.

20. A grant agreement between the EU and the Secretariat was signed in November 2022 and provides €23,500 to the Secretariat for tasks over two to three years. This funding would secure a consultant to scope and report on the implementation and the feasibility of enabling a FLUX node to connect the EU and WCPFC and, depending on the results of that assessment, the development of a work plan to implement the FLUX node.

21. The Terms of Reference for the consultancy are in the final stages of development by the Secretariat and the tender to recruit a suitable consultant for the work will be issued following TCC19.

Recommendation

22. TCC19 is invited to note the updates in this paper.

[10] The use of E-reporting and exchanges of information through an internationally agreed standard such as FLUX is used to connect the EU with its members and other organisation. The exchange of information simplifies reporting and data sharing and allows cross-checking of data to identify any issues that may otherwise not be seen.

ANNEX 1

Table 1: Status of E-reporting implementation and alignment to WCPFC E-reporting standards for CCMs

Flag State/ Entity/Territory	Gear(s)	Status of ER Implementation	Aligns to ER Standards (non-binding)	Notes
Australia	LL	100%	NO	"as of 2021, all reporting in the Eastern Tuna and Billfish Fishery (ETBF) is done via electronic logbooks"
China	LL	NO	NO	
	PS	100.0%	YES	Obligation to use the PNA iFIMS eLOG system
Cook Islands	LL	19.0%	YES	SPC-developed E-Reporting *Onboard* system / JSON Standards
	PS	NO	YES	Logbook data are entered directly into SPC Tufman 2 system
Ecuador	PS	NO	NO	
El Salvador	PS	NO	NO	
European Union	LL	100%	NO	"The data hereby included have been obtained from mandatory electronic logbooks for 2022 activity." SC19 EU Annual Report Part 1
	PS	NO	NO	
Federated States of Micronesia	LL	Trials	YES	
	PS	100%	YES	Obligation to use the PNA iFIMS eLOG system
Fiji Islands	LL	2.3%	YES	SPC-developed E-Reporting Onboard system
French Polynesia	LL	73.1%	YES	SPC-developed E-Reporting Onboard system

Flag State/ Entity/Territory	Gear(s)	Status of ER Implementation	Aligns to ER Standards (non-binding)	Notes
Indonesia	LL	NO	NO	
	PS	NO	NO	
Japan	LL	NO	NO	
	PS	Partial	NO	Obligation to use the PNA iFIMS eLOG system in PNA EEZs and adjacent high seas. ER not used elsewhere
Kiribati	LL	Trials	YES	
	PS	100%	YES	Obligation to use the PNA iFIMS eLOG system
Republic of Korea	LL	100%	NO	Full E-Reporting system in place since 2018
	PS	100%	YES	Obligation to use the PNA iFIMS eLOG system
Marshall Islands	LL	Trials	YES	
	PS	100%	YES	Obligation to use the PNA iFIMS eLOG system
Nauru	PS	100%	YES	Obligation to use the PNA iFIMS eLOG system
New Caledonia	LL	35.7%	YES	SPC-developed E-Reporting Onboard system
New Zealand	LL	100%	NO	"… in 2017-2019 the catch/effort reporting system was incrementally replaced by Electronic Reporting (ER)…"
	PS (domestic)	100%	NO	
	PS (tropical)	NO	YES	Logbook data are entered directly into SPC Tufman 2 system

Flag State/ Entity/Territory	Gear(s)	Status of ER Implementation	Aligns to ER Standards (non-binding)	Notes
Niue	LL	(inactive)	YES	
Palau	LL	Trials	YES	
Papua New Guinea	LL	Trials	YES	
	PS	100%	YES	Obligation to use the PNA iFIMS eLOG system
Philippines	PS (domestic)	Partial	YES	Some vessels in this fleet use MARLIN an E-Reporting system which is currently being replaced.
	PS (DWFN)	100%	YES	Obligation to use the PNA iFIMS eLOG system
Samoa	LL	7.6%	YES	SPC-developed E-Reporting Onboard system
Solomon Islands	LL	Trials	YES	
	PS	100%	YES	Obligation to use the PNA iFIMS eLOG system
Chinese Taipei	LL	100%	NO	"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 the PNA iFIMS eLOG system
Tonga	LL	71.4%	YES	SPC-developed E-Reporting Onboard system
Tuvalu	LL	Trials	YES	
	PS	100%	YES	Obligation to use the PNA iFIMS eLOG system
United States	LL	100%	NO	“Electronic reporting of daily fishing logbooks began testing and implementation in 2019 and was mandated for

Flag State/ Entity/Territory	Gear(s)	Status of ER Implementation	Aligns to ER Standards (non-binding)	Notes
				use in the entire Hawaii longline fleet from 2021 onwards"
	PS	100%	YES	Obligation to use the PNA iFIMS eLOG system
Vanuatu	LL	18.5%	YES	SPC-developed E-Reporting Onboard system and fishing company ER system
	PS	100%	YES	Obligation to use the PNA iFIMS eLOG system
Vietnam	LL/HL	NO	YES	Logbook data are entered directly into SPC Tufman 2 system
	PS	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 trips and vessels by flag State that have *Onboard* installed since 2019

Flag State/Territory	Trips	Vessels
Cook Islands	110	12
Fiji	62	10
Federated States of Micronesia	38	18
New Caledonia	397	17
French Polynesia	2606	81
Tonga	276	5
Samoa	36	3