



**COMMISSION
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STANDARDS FOR ELECTRONIC REPORTING

**WCPFC13-2016-28
2 December 2016**

Paper by ERandEMWG Chair, SPC-OFP and Secretariat

Summary

1. TCC12 received the report of Second Meeting of the Electronic Reporting and Electronic Monitoring Working Group (ERandEMWG2). In addition, to noting and endorsing the ERandEMWG2 recommendations, TCC12 made the following recommendation:
“Taking into account any comments provided by CCMs, TCC12 recommended that WCPFC13 consider adopting the proposed E-reporting standards for operational catch and effort data and observer data and that the standards are maintained and updated by the Secretariat as a result of decisions by the Commission and the revised version published on the WCPFC website”. (TCC12 paragraph 329)
2. Since TCC12, a number of comments from CCMs have been received on the draft Standards, Specifications and Procedures relating to operational catch and effort data and observer data. This paper outlines the changes made and presents a revised version for consideration by the Commission.
3. The draft standards for high seas pocket reporting and for manual reporting for VMS have not been tested and are not included in the latest version. The Secretariat has proposed the establishment of a post in 2017 to contribute to meeting the recommended ERandEMWG-related work (the justification and proposed terms of reference are outlined in **WCPFC13-2016-FAC10-07**).
4. The latest version of the draft Electronic Reporting (ER) standards, specifications and procedures (SSPs) is comprised of parts:
 - i) The original cover for the draft ER standards with some amendments to reflect ERandEMWG2 recommendations and the revised scope and coverage (**Annex A**);
 - ii) the ER standards for operational catch and effort data (Version 2.60) (**Annex A - Attachment 1**),

- iii) the ER standards for observer data (Version 2.50) (**Annex A - Attachment 2**); and
- iv) Electronic Formatting Specifications for submission of the ER data (**Annex A - Attachment 3**).

Discussion - PROGRESSING STANDARDS FOR ELECTRONIC REPORTING

5. Second Meeting of the Electronic Reporting and Electronic Monitoring Working Group (ERandEMWG2) met immediately prior to WCPFC Scientific Committee in Bali, Indonesia from 1-2 August 2016. The group noted the draft Standards, Specifications and Procedures (SSPs) that were initially presented to ERandEMWG1 and are attached to the ERandEM WG2 report as Attachments 1-3 (a copy of the ERandEMWG2 summary report is available in the WCPFC13 meeting documents, under subsidiary body reports with reference **WCPFC-TCC12-2016-17**).
6. Version 1 of the draft SSPs for electronic reporting included
 - operational catch and effort data
 - observer data
 - reporting for HSP1 and EHSP
 - manual position reporting in the event of ALC/MTU failure.
7. The group considered how to progress the SSPs for adoption at WCPFC13 with some CCMs indicating that they had further comments to provide (ERandEMWG2, Recommendation II, III and VI).
8. TCC12 received the report of Second Meeting of the Electronic Reporting and Electronic Monitoring Working Group (ERandEMWG2). In addition, to noting and endorsing the ERandEMWG2 recommendations, TCC12 asked CCMs to provide comments back to SPC and the Secretariat on the draft standards so a revised version could be provided to WCPFC13.
9. Since ERandEMWG2 comments were received from:
 - Japan
 - PNAO
 - Chinese Taipei
 - USA

As agreed at ERandEMWG2, copies of comments received on Attachment 4 to the ERandEMWG2 Summary Report were posted for CCMs review at (<https://www.wcpfc.int/ERandEM-IWG>).

10. Prior to TCC12, the Secretariat also had some informal discussions with Philippines and Chinese Taipei toward testing the reporting standard for HSP1 and with Chinese Taipei towards testing that VMS Manual Reporting and EHSP-SMA reporting, the discussions are still underway.

I. Proposed draft Standards, Specifications and Procedures (SSPs) for electronic reporting in the Western and Central Pacific Fisheries Commission (Annex A)

11. The consultation document contained in Attachment 4 to ERandEMWG2 Summary Report has been updated and a ‘version control’ table included. For ease of review, the changes that were made are shown as **underlined highlighted text**.
12. Changes have been made to amend the scope and coverage of the SSPs and to take into account ERandEMWG Recommendation II which includes:
“...The group noted that the draft standards were expected to be updated based on relevant decisions of the Commission. ERandEMWG recommended that the Secretariat notify CCMs of updates to the draft standards, including the reason for the update, and invite comments before they come into effect. Some CCMs suggested that an annual implementation date would be helpful (eg by 1 June). It was recommended that this process be captured as part of the draft standards.”

II. Standards for Observer data (Annex A - Attachment 1)

13. A summary of the changes made, both minor and substantive, are listed at the front of the document through a ‘version control’ table.
14. The changes received from CCMs mainly sought to align the draft ER standards with the specific text contained in the WCPFC Regional Observer Programme (ROP) minimum data standards, acknowledging the ER standards also cover observer data that are not WCPFC required fields, but are required to be collected by WCPFC coastal-state CCMs.

III. Standards for Operational Catch and Effort data (Annex A - Attachment 2)

15. A summary of the changes made, both minor and substantive, are listed at the front of the document through a ‘version control’ table.
16. The changes received from CCMs mainly sought to align the draft ER standards with the specific text contained in relevant WCPFC reporting requirements, particularly for data already provided to the Commission such as vessel attributes, and in the “Scientific Data to be Provided to the Commission”. Changes also sought to be consistent with international standards where appropriate. This acknowledges that the ER standards also cover the operational catch and effort data that are not WCPFC required fields, but are required to be collected by WCPFC coastal-state CCMs.

IV. Electronic Formatting Specification (Annex A - Attachment 3)

17. A summary of the changes made include the need to address the request from the PNAO (reflected in the ERandEMWG2 Rec IV) to ensure that the North Atlantic Format (NAF) is adequately catered for in the draft E-Reporting standards.
“The ERandEM WG recommends that interested CCMs work with the Secretariat and Scientific and Data Services Provider (SPC-OFP) to ensure all current formats used for submissions to WCPFC, eg North Atlantic Format (NAF), are adequately catered for in the draft E-Reporting standards.” (ERandEMWG2 Rec IV)
18. The changes also acknowledge that JSON¹ has become one of the most commonly used data exchange formats and should be included as one of the options for electronic data submission.
19. Attachment 3 reflects the latest version of Electronic Formatting Specifications which includes a new table outlining the preferred data submission formats, which are pending review and approval.

Next steps

20. Further work needs to be undertaken by the Secretariat, working with interested CCMs, to test and further develop a number of additional ER-standards related to various reporting requirements under conservation and management measures or decisions of the WCPFC. As outlined in WCPFC13-2016-FAC10-07, in 2016, due to the commitments of the Compliance and MCS work programme, the Secretariat has been unable to progress the requested testing of the draft E-reporting data standards related to HSP1 and EHSP-SMA and manual reporting in the event of MTU malfunction. The Secretariat has also been requested to expand the draft E-reporting data standards document to include transshipment reporting requirements (*ERandEMWG2 Summary Report, Rec V*).
21. As additional ER standards are adopted by the Commission, it is expected that these would be incorporated as new attachments within the ER SSPs. Appropriate amendments would subsequently be made to the cover to the SSPs.
22. The Secretariat believes that a more permanent arrangement is desirable to assist the Secretariat with better supporting the E-reporting and E-monitoring related work programme of the Commission but also on an ongoing basis to better equip the Secretariat to provide advice in support of Members E-technology initiatives. This position will also work with CCMs and IT staff on the continued automation of the E-reporting data into Commission databases. Close collaboration is expected with the Scientific and Data Services Provider (SPC-OFP) on the continued development, maintenance and ongoing updating of the Commission E-reporting data standards

¹ <https://en.wikipedia.org/wiki/JSON>

documentation including mechanisms to store this information (metadata database). The position will also advise on the potential implementation of automated reporting and observing technologies as they emerge, and can be utilized by the Commission. A proposed terms of reference for an Electronic Reporting and Electronic Monitoring Technical Coordinator is provided in WCPFC13-2016-FAC10-07. This paper responds to *ERandEMWG2 Rec I*.²

23. TCC12 recommended that the ERandEM WG continue its work under the same terms of reference for another two years. (TCC12 Summary Report, para 330).

Recommendation

24. The Commission is invited to
- i) Consider, for adoption, the draft Standards, Specifications and Procedures (SSPs) for electronic reporting in the Western and Central Pacific Fisheries Commission containing
 - Cover document (Annex A)
 - ER standards for Operational catch and effort data (Annex A - Attachment 1)
 - ER standards for Observer data (Annex A - Attachment 2) and
 - Electronic Formatting Specifications for submission of the ER data (Annex A - Attachment 3).
 - ii) Note that additional work needs to be undertaken by the Secretariat in collaboration with interested CCMs to further develop and test the additional draft ER SSPs for:
 - a. Eastern High Seas Pocket-SMA entry and exit reporting (CMM 2010-02 para 2);
 - b. High Seas Pocket One – Special Management Area entry and exit reporting (CMM 2015-01, Attachment C para 3);
 - c. WCPFC9 decision on the Standard format for manual position reporting in the event of ALC/MTU Malfunction or Failure (WCPFC9 Summary Report Attachment H); and
 - d. CMM 2009-06 Conservation and Management Measure for Regulation of Transshipment.and
 - iii) Further note that the timing for the completion of the development and testing of any additional ER SSPs is dependent on additional resourcing being provided to the Secretariat so as to enable their support to the ERandEMWG workplan activities; and

² Recommendation I. ERandEM WG2 noted the use of e-technologies by CCMs in support of their national information management system development and further noted the need to consider how this work could be supported at the regional level. ERandEM WG2 recommended that additional resources are allocated to support the WCPFC Secretariat and the Scientific and Data Services Provider (SPC-OFP) in this regard, and these would be working towards the testing and acceptance of the E-reporting draft data standards referred to paragraph III [of ERandEMWG02 Report]. ERandEM WG tasked the WCPFC Secretariat and SPC to develop a proposal including costings for consideration by FAC.

- iv) Task the ERandEM WG to continue its work under the same terms of reference for another two years.

DRAFT - STANDARDS, SPECIFICATIONS AND PROCEDURES (SSPs) FOR ELECTRONIC REPORTING IN THE WESTERN AND CENTRAL PACIFIC FISHERIES COMMISSION

Version notes

Version	WCPFC decision reference	Description of updates	Effective date (Refer para 4)
[1.0]	[WCPFC13 Summary Report, para xx, Attachment xx]	For adoption of ER SSPs, for operational level catch and effort data and observer data	[xx June 2018]

Objectives for the SSP

1. These SSPs are a set of data standards that, at a minimum:
 - a. provide a basis for those CCMs who are considering the implementation of electronic reporting technologies in their fisheries;
 - b. provides a mechanism, for those CCMs who have commenced implementation of electronic reporting technologies in their fisheries, to have the option of using these technologies to facilitate their implementation of certain reporting requirements to the Commission;
 - c. provides a basis for the Secretariats preparations to be ready to receive a standardized set of electronically reported fisheries data from CCMs and as appropriate from vessels;
 - d. takes into account current and developing fisheries monitoring and information management systems in use in WCPFC fisheries; and
 - e. where practicable, is mindful of existing and proposed data standards and formats in other regional bodies and RFMOs.

Scope of application

2. These SSPs apply initially to the following reporting requirements under these conservation and management measures or decisions of the WCPFC:
 - a. Paragraph 3 and Annex 1 of *Scientific Data to be Provided to the Commission*;

- b. *WCPFC ROP Minimum Standard Data Fields*, latest version is as amended by WCPFC12 decisions.
3. Until decided otherwise by the Commission, other forms of electronically reported data, and as appropriate hard copy formats, will continue to be acceptable forms of reporting from CCMs, and as appropriate from their vessels, to meet agreed reporting requirements under the above listed conservation and management measures or decisions of the WCPFC.
4. These SSPs, including any agreed amendments **or updates**, will take effect [six months] **[on 1 June of the year] following the** adoption **of the relevant decision** by the WCPFC.

Responsibilities of CCMs

5. It shall be the responsibility of CCMs who choose to use electronic reporting technologies to meet certain WCPFC reporting requirements to:
 - a. submit electronically reported data to the WCPFC Secretariat³ that includes the minimum required fields and also meets the structure and format specifications of Attachment **1** and **2** as appropriate; and
 - b. submit electronically reported data to the WCPFC Secretariat that meet the electronic format specifications of Attachment **3**.⁴
6. It shall be the responsibility of CCMs to inform the WCPFC Secretariat of any confidentiality requirements that may need to be taken into account upon receipt of such data.

Responsibilities of the WCPFC Secretariat

7. It shall be the responsibility of the WCPFC Secretariat to:
 - a. develop and maintain the technical and administrative systems that ensure data confidentiality⁵ needed to receive electronically reported data from CCMs, which may be submitted and that meet the electronic format specifications of Attachment 3;
 - b. acknowledge, upon receipt of electronically reported data from a CCM or as appropriate from a vessel, receipt of the data and indicate to the CCM and as

³ It is recognized that some CCMs, who are SPC members, submit data described in Attachment 3A and 3B to WCPFC via SPC-OFD

⁴ The Commission may consider additional modes of transmission, such as modes involving direct links between the Commission's and CCMs' databases.

⁵ In accordance with applicable data confidentiality rules, including Rules and Procedures for the Protection, Access to, and Dissemination of Data Compiled by the Commission (2007 and 2009)

appropriate to the vessel, in a timely manner whether the data meet the minimum data requirements and, if applicable, whether they meet the electronic formatting specifications of Attachment 3;

- c. monitor and report annually to the TCC, and as appropriate the SC, on the performance of these electronic reporting standards and their application and, as necessary, make recommendations for improvements or modifications;
- d. recommend continual improvements to these SSPs, including, where appropriate, standards and codes that are consistent with those used in other international fora, such as the FAO and UN/CEFACT; and
- e. based on relevant decisions of the Commission, incorporate the necessary updates into a proposed revision of the SSPs, notify CCMs of the updates to the SSPs and invite comment before they come into effect; and
- f. ensure the electronic data standards are publically available and is suitably version controlled.

Attachment 1. Electronic data standard to be used for Paragraph 3 and Annex 1 of Scientific Data to be Provided to the Commission

{REFER TO WCPFC13-2016-28 Annex A- Att 1 ER Data standards - Logsheet (v01-12-2016)}

Attachment 2. Electronic data standard to be used for WCPFC ROP Minimum Standard Data Fields, as amended by WCPFC12 decisions.

{REFER TO WCPFC13-2016-28 Annex A - Att 2 ER Data standards - Observer Data (v2-50 -- 20-11-2016 draft)}

Attachment 3. Electronic Formatting Specifications for observer data and logbook data

These specifications describe the electronic files that CCMs must provide if they choose to use electronic reporting technologies to meet the following WCPFC reporting requirements:

- i. Paragraph 3 and Annex 1 of *Scientific Data to be Provided to the Commission*;
- ii. *WCPFC ROP Minimum Standard Data Fields*, as amended by WCPFC11 decisions.

A) File type

The information must be provided in one of the following formats:

- Microsoft Excel file; Comma separated values (CSV) text file;
- Text file (TAB delimited); text file (no delimiters); XML; JSON; NAF

The WCPFC preferred formats for receiving E-Reported operational catch and effort data and observer data are provided below.

Data type / Report	Preferred format for receiving data (in order of preference)		Notes	Status
	E-Reporting	E-Monitoring		
LOGSHEET	1. JSON	[NOT APPLICABLE]		(Pending review and approval)
	2. XML			
	3. NAF			
	4. XLS/CSV			
	5. TXT			
OBSERVER	1. JSON	1. JSON		(Pending review and approval)
	2. XML	2. XML		
	3. XLS/CSV	3. XLS/CSV		
	4. TXT	4. TXT		
	5. NAF	5. NAF		

B) File name

The name of the file must be: **XX DDD VID DEPDATE <Table Name>.EXT**

- **XX** – two letter ISO country code (CMM 2014-03 Att 7) of the CCM providing the file
- **DDD** – type of report (LOG – logbook e-data and OBS – Observers e-data)
- **VID** – five digit integer assigned number for a vessels record on the WCPFC Record of Fishing Vessels (RFV) (CMM 2014-03)
- **DEPDATE** – Departure date of the Vessel trip (format YYYYMMDD)
- **<Table_Name>** – Respective (subset data) table name within this data type (refer to the relevant list of tables in the E-Reporting LOGSHEET and OBSERVER data field standards)
- **EXT** – the standard file extension (according to one of the five available formats)
 - XML

- TXT file – COMMA delimited (CSV)
- TXT file – TAB delimited
- TXT file – No delimiters
- XLS
- JSON
- NAF

Example : FM_OBS_35641_20140214_PS_CATCH.CSV

Represents a comma-delimited file provided by Federated States of Micronesia for an observer trip on-board the vessel identified with WCPFC RFV id as ‘35641’ with a departure date of 14/03/2014; This file is the subset data for this trip corresponding to the PS_CATCH Table in the ER Observer data standards document

C) File content and structure

Each record in the electronic file represents a single report. Each record must have the structure specified in Attachment 1 or 2, including the same sequence of fields.

Sample electronic reporting files with the proper formats are available from the Secretariat.
