



**FIRST E- REPORTING AND E-MONITORING INTERSESSIONAL WORKING GROUP
MEETING (ERandEMWG1)
Novotel Hotel, Nadi, FIJI
8 – 10 July 2015**

**CONSULTATION DOCUMENT FOR DEVELOPING A DRAFT WCPFC ELECTRONIC
REPORTING STANDARD**

**WCPFC-2015-ERandEMWG1-04
25 June 2015**

Background

1. In agreeing to the establishment of the ERandEMWG and its workplan, the Commission has recognized that its priority task is to develop draft standards, specifications and procedures for the use of electronic reporting and electronic monitoring technologies in WCPFC fisheries. The benefits of standardised reporting formats for data exchange were articulated in the consultant's paper, WCPFC10-2013-16_rev1. Benefits include but are not limited to
 - a. timely and enhanced data management;
 - b. facilitating data exchange between the Secretariat, CCMs, and regional bodies;
 - c. efficiently managing the increasing amounts of data received by the Secretariat; and
 - d. giving effect to t-RFMO recommendations on data harmonisation.
2. Work on developing data standards complements and supports enhancements to WCPFC's Information Management System (IMS) including the implementation of the Record of Fishing Vessels Standards, Specifications and Procedures (RFV SSPs). The RFV SSPs came into effect on 6 June 2014 and allow CCMs to enter data directly into the RFV via a web portal or via a standard template (MS Excel file) which is then uploaded by the Secretariat into the RFV. The RFV SSPs provides a useful starting point when considering the development of standards for e-reporting, including ROP data, as there are many common data elements.
3. In the consideration of the ErandEmWG workplan, it was also noted that a decision by the Commission to develop data standards can be separated from a decision by the Commission to require certain data/information to be submitted electronically. Furthermore it is expected that the early adoption of electronic reporting and electronic reporting standards by the Commission, will support and accommodate those CCMs that have commenced implementation of a range of these technologies in their fisheries, and will ensure that the Commission's databases and systems are ready to exchange electronic data in an orderly and efficient manner.
4. The Secretariat provided a paper to TCC10 that proposed a way forward to progress the development of draft WCPFC electronic reporting standards (TCC10-2014-16). The paper also provided some suggestions on formats which could be used in the WCPFC electronic reporting data standards including:

- a. Noting that in addition to the RFV and ROP, many of WCPFC's CMMs require CCMs to collect and report against a number of common data elements, which could be standardized within the WCPFC electronic reporting data standards. Some of these include: Time, date information; Country association; Location information; species information; and quantities or other volume requirements.
- b. Formats as described in the RFV SSPs could be used for vessel characteristics (vessel length, vessel type, vessel power etc). These were found to be generally consistent with FAO's International Standard Statistical Classification of Fishing Gears (ISSCFG) (RFV SSPs Att 6) and FAO's International Standard Statistical Classification of Fishery Vessels (ISSCFV) (RFV SSPs Att 5)
- c. ISO 8601 *Data elements and interchange formats* are suggested for elements that capture time, date information (time of shot, time of interaction with species of special interest, time of sighting of a vessel, authorisation to fish etc).
- d. ISO 3166 *Codes for the representation of names of countries and their subdivisions* for references to country (vessel's flag, port of departure, port of landing, observer nationality, master nationality etc). The use of ISO 3166 codes is consistent with the RFV SSPs. United Nations *Code for Trade and Transport Locations* (UN/LOCODE) codes could be used, together with ISO 3166 country codes, for port references. UN/LOCODE is used by national governments for trade related activities and provides codes for over 97,000 locations in 249 countries. UN/LOCODES are considered in the Secretariats list of Port Codes for the purpose of the RFV SSPs (RFV SSPs para 16)
- e. ISO 6709 *Standard representation of geographic point location by coordinates* formats could be used for location information (location of shot, location of haul, location of interaction with species of special interest, location of sighting of a vessel etc).
- f. Species information could use the FAO ASFIS 3-alpha codes. (FAO's ASFIS list of species includes *International Standard Statistical Classification of Aquatic Animals and Plants* (ISSCAAP), taxonomic and a 3-alpha code).
- g. Numbers plus characters could typically be used to capture quantities or other volume requirements together with the unit (bait, catch, hold etc).
- h. The North Atlantic Fisheries Format (NAF) which is used by some flag States and regional fisheries bodies; the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), North East Atlantic Fisheries Commission (NEAFC), Northwest Atlantic Fisheries Organization (NAFO) and the South East Atlantic Fisheries Organization (SEAFO)), is used for fisheries related data transmission. It uses the ISSCFV, ISSCFG, ISSCAAP and ISO-3166 codes. The Secretariat has been advised that a new policy group formed in 2014, the Joint Advisory Group on Data Management (JAGDM), are currently considering new data exchange formats to replace the NAF.

Consultation Document on draft standards, specifications and procedures for WCPFC electronic-reporting

5. Taking into account the above points and building on the discussions at TCC10, the Secretariat has developed a first draft of a 'consultation document' that seek to develop a set of standards, specifications and procedures for WCPFC electronic-reporting. This document will be discussed and revised and refined during the first meeting of the ERandEMWG.
6. The consultation document covers five reporting requirements under CMMs and other decisions:
 - a. Paragraph 2 of CMM 2010-02 Conservation and Management Measure for the Eastern High Seas Pocket Special Management Area (CMM 2010-02: 02);

- b. Attachment C paragraph 3 of CMM 2014-01 Conservation and Management Measure for Bigeye, Yellowfin and Skipjack tuna in the Western and Central Pacific Ocean (CMM 2014-01: Att C 03);
 - 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) to meet (CMM 2014-02 9a VMS SSPs 5.4 - 5.5);
 - d. Paragraph 3 and Annex 1 of Scientific Data to be Provided to the Commission; and
 - e. WCPFC ROP Minimum Standard Data Fields, as amended by WCPFC11 decisions.
7. The above five reporting requirements were chosen as a starting point, and it is recognized that eventually there are a range of other reporting requirements under other CMMs and WCPFC decisions which would eventually need to be developed, including but not limited to:
- a. CMM 2009-06: advance notifications for high seas transshipment events (paragraph 35 a (iii));
 - b. CMM 2009-06: declarations for high seas transshipment events (paragraph 35 a (iv));
 - c. CMM 2009-06: observer (paragraph 14); and
 - d. Paragraph 4 of Scientific Data to be Provided to the Commission

CONSULTATION DOCUMENT FOR ERandEMWG1

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

Conservation and Management Measure 201x-xx

Scope of application

1. These SSP may apply initially to the following reporting requirements under these conservation and management measures or decisions of the WCPFC:
 - a. Paragraph 2 of CMM 2010-02 *Conservation and Management Measure for the Eastern High Seas Pocket Special Management Area*;
 - b. Attachment C paragraph 3 of CMM 2014-01 *Conservation and Management Measure for Bigeye, Yellowfin and Skipjack tuna in the Western and Central Pacific Ocean*;
 - 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. Paragraph 3 and Annex 1 of *Scientific Data to be Provided to the Commission*;
 - e. *WCPFC ROP Minimum Standard Data Fields*, as amended by WCPFC11 decisions.
2. These SSP, including any agreed amendments, will take effect [six] months after adoption by the WCPFC.

Objectives for the SSP

3. These SSP are a set of data standards that, at a minimum:
 - a. 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;
 - b. provides a basis for the Secretariats preparations to be ready to receive electronic forms of fisheries data and reporting from CCMs;
 - c. takes into account current and developing fisheries monitoring and information management systems in use in WCPFC fisheries; and
 - d. where practicable, is mindful of existing and proposed data standards and formats in other regional bodies and RFMOs.

Responsibilities of CCMs

4. It shall be the responsibility of CCMs who choose to use electronic reporting technologies to ensure compliance with certain WCPFC reporting requirements to:
 - a. submit electronic reported data to the WCPFC Secretariat that includes the minimum required fields and also meets the structure and format specifications of Attachment 1A, 1B, 1C, 3A and 3B as appropriate; and
 - b. submit electronic reported data to the WCPFC Secretariat via email or other electronic means of electronic data files that meet the electronic format specifications of Attachment 2 and 4, as appropriate.¹

Responsibilities of the WCPFC Secretariat

5. It shall be the responsibility of the WCPFC Secretariat to:
 - a. develop and maintain the technical and administrative systems needed to receive electronic reporting from CCMs, which may be submitted via email or other electronic means of electronic data files that meet the electronic format specifications of Attachment 2 and 4;
 - b. acknowledge, within [24 hours] of the next WCPFC official business day following receipt of an electronic report from a CCM, receipt of the data and indicate to the CCM whether the data meet the minimum data requirements and, if applicable, whether they meet the electronic formatting specifications of Attachment 2 and 4;
 - 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; and
 - 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.

¹ The Commission may consider additional modes of transmission, such as modes involving direct links between the Commission's and CCMs' databases.

Attachment 1A. Electronic data standard to be used for paragraph 2 of CMM 2010-02 Conservation and Management Measure for the Eastern High Seas Pocket Special Management Area (or its replacement)

EHSP-SMA reporting				
<p>2. Flag States shall require their vessels to submit reports, directly, or through such organisations designated by the flag state to the Commission at least 6 hours prior to entry and no later than 6 hours prior to exiting the E-HSP. Such reports shall also contain estimated catch (kilograms) on board. This information shall immediately be transmitted by the Commission Secretariat to the adjacent coastal states/territories, and shall be considered non-public domain data. The report shall be in the following format: VID/Entry/Exit: Date/Time¹; Lat/Long¹; YFT/BET/ALB/SKJ/SWO/SHK/OTH/TOT(kgs) /TRANSHIPMENT (Y/N)²</p> <p>¹ Of anticipated point of entry or exit. ² WCPFC11 agreed to amend CMM 2010-02 paragraph 2 to add vessel name to reporting requirements</p>				
Field name	Field format	Field description/instructions	Example	Ref. in CMMs
VID	Number (integer)	This number is generated automatically by the WCPFC Record of Fishing Vessels (RFV), and is now a field that in accordance with CMM 2014-03 is displayed, for all vessels on the WCPFC RFV.	10503	2014-03
Entry/Exit	Text	Enter “ENTRY” for reports prior to entry to Eastern High Seas Pocket Special Management Area. Enter “EXIT” for reports made prior to exiting the Eastern High Seas Pocket Special Management Area	ENTRY	2010-02: 02
Date/Time	Number (integer)	Of anticipated point of entry or exit, in UTC and 24 hour format (ISO 8601) [YYYY]-[MM]-[DD]T[HH]:[MM]Z	2014-01-24T23:00Z	2010-02: 02
Latitude	Number (integer)	Positions to degrees and minutes to 3 decimal places (ISO 6709) +/- DDMM.MMMM	- 14.166 <i>(for 14-10-00 S)</i>	2010-02: 02
Longitude	Number (integer)	Positions to degrees and minutes to 3 decimal places (ISO 6709) +/- DDDMM.MMM	- 157.45 <i>(for 157-27-00 W)</i>	2010-02: 02
Yellowfin	Number (integer)	Provide total weight (kg) of YELLOWFIN onboard. Enter “0” if NONE	23	2010-02: 02
Bigeye	Number (integer)	Provide total weight (kg) of BIGEYE onboard. Enter “0” if NONE	16	2010-02: 02
Albacore	Number (integer)	Provide total weight (kg) of ALBACORE onboard. Enter “0” if NONE	0	2010-02: 02

EHSP-SMA reporting

2. Flag States shall require their vessels to submit reports, directly, or through such organisations designated by the flag state to the Commission at least 6 hours prior to entry and no later than 6 hours prior to exiting the E-HSP. Such reports shall also contain estimated catch (kilograms) on board. This information shall immediately be transmitted by the Commission Secretariat to the adjacent coastal states/territories, and shall be considered non-public domain data. The report shall be in the following format:

VID/Entry/Exit: Date/Time¹; Lat/Long¹; YFT/BET/ALB/SKJ/SWO/SHK/OTH/TOT(kgs) /TRANSHIPMENT (Y/N)²

¹ Of anticipated point of entry or exit.

² WCPFC11 agreed to amend CMM 2010-02 paragraph 2 to add vessel name to reporting requirements

Field name	Field format	Field description/instructions	Example	Ref. in CMMs
Skipjack	Number (integer)	Provide total weight (kg) of SKIPJACK onboard. Enter "0" if NONE	0	2010-02: 02
Swordfish	Number (integer)	Provide total weight (kg) of SWORDFISH onboard. Enter "0" if NONE	0	2010-02: 02
Shark	Number (integer)	Provide total weight (kg) of SHARKS onboard. Enter "0" if NONE	0	2010-02: 02
Other	Number (integer)	Provide total weight (kg) of OTHER CATCHES onboard. Enter "0" if NONE	5	2010-02: 02
Total	Number (integer)	Provide total weight (kg) of all species on board. Enter "0" if NONE	54	2010-02: 02
Transshipment (Y/N)	Text	Enter "Y" if intend to transship in Eastern High Seas Pocket Special Management Enter "N" if do not intend to transship in Eastern High Seas Pocket Special Management	N	2010-02: 02
WCPFC Identification Number (WIN)	Text	Vessel identifier assigned by flag State in accordance with CMM 2004-03, in UPPER CASE	ABC1234	2013-10: 6(a)
Vessel Name	Text	Name of the fishing vessel as indicated on flag State registration, in UPPER CASE	SEA MAPLE II	2013-10: 6(a)

Attachment 1B. Electronic data standard to be used for Attachment C paragraph 3 of CMM 2014-01 Conservation and Management Measure for Bigeye, Yellowfin and Skipjack tuna in the Western and Central Pacific Ocean (or its replacement)

PHILIPPINES HSP1-SMA reporting				
3. Philippines shall require its concerned vessels to submit reports to the Commission at least 24 hours prior to entry and no more than 6 hours prior to exiting the HSP-1 SMA. This information may, in turn, be transmitted to the adjacent coastal States/Territories. The report shall be in the following format: VID/Entry or Exit: Date/Time; Lat/Long				
Field name	Field format	Field description/instructions	Example	Ref. in CMMs
VID	Number (integer)	This number is generated automatically by the WCPFC Record of Fishing Vessels (RFV), and is now a field that in accordance with CMM 2014-03 is displayed, for all vessels on the WCPFC RFV.	10503	2014-03
WCPFC Identification Number (WIN)	Text	Vessel identifier assigned by flag State in accordance with CMM 2004-03, in UPPER CASE	ABC1234	2013-10: 6(a)
Vessel Name	Text	Name of the fishing vessel as indicated on flag State registration, in UPPER CASE	SEA MAPLE II	2013-10: 6(a)
Entry/Exit	Text	Enter “ENTRY” for reports prior to entry to High Seas Pocket 1 - Special Management Area. Enter “EXIT” for reports made prior to exiting the High Seas Pocket 1 - Special Management Area.	EXIT	2014-01: Att C 03
Date/Time	Number (integer)	Of anticipated point of entry or exit, in UTC and 24 hour format (ISO 8601) [YYYY]-[MM]-[DD]T[HH]:[MM]Z	2014-01-24T23:00Z	2014-01: Att C 03
Latitude	Number (integer)	Positions to degrees and minutes to 3 decimal places (ISO 6709) +/- DDMM.MMMM	- 14.166 <i>(for 14-10-00 S)</i>	2014-01: Att C 03
Longitude	Number (integer)	Positions to degrees and minutes to 3 decimal places (ISO 6709) +/- DDDMM.MMM	- 157.45 <i>(for 157-27-00 W)</i>	2014-01: Att C 03

Attachment 1C. Electronic data standard to be used for WCPFC9 decision on the Standard format for manual position reporting in the event of ALC/MTU Malfunction or Failure (WCPFC9 Summary Report Attachment H) (or its replacement)

MANUAL POSITION REPORTING IN THE EVENT OF ALC/MTU MALFUNCTION OR FAILURE				
<i>WCPFC9 agreed standard format for manual position reporting in the event of ALC/MTU Malfunction or Failure:</i>				
<i>1 WIN</i>		<i>5 Latitude – DD-MM-SS (N/S)</i>		
<i>2 Vessel Name</i>		<i>6 Longitude – DDD-MM-SS (E/W)</i>		
<i>3 Date: dd/mm/yy</i>		<i>7 Activity (Fishing/Searching/Transit/Transshipping)</i>		
<i>4 Time: 24 hour format HH:MM (UTC)</i>				
Field name	Field format	Field description/instructions	Example	Ref. in CMMs
VID	Number (integer)	This number is generated automatically by the WCPFC Record of Fishing Vessels (RFV), and is now a field that in accordance with CMM 2014-03 is displayed, for all vessels on the WCPFC RFV.	10503	2014-03
WCPFC Identification Number (WIN)	Text	Vessel identifier assigned by flag State in accordance with CMM 2004-03, in UPPER CASE	ABC1234	2013-10: 6(a)
Vessel Name	Text	Name of the fishing vessel as indicated on flag State registration, in UPPER CASE	SEA MAPLE II	2013-10: 6(a)
Date/Time	Number (integer)	Of anticipated point of entry or exit, in UTC and 24 hour format (ISO 8601) [YYYY]-[MM]-[DD]T[HH]:[MM]Z	2014-01-24T23:00Z	2014-01: Att C 03
Latitude	Number (integer)	Positions to degrees and minutes to 3 decimal places (ISO 6709) +/- DDMM.MMMM	- 14.166 <i>(for 14-10-00 S)</i>	2014-01: Att C 03
Longitude	Number (integer)	Positions to degrees and minutes to 3 decimal places (ISO 6709) +/- DDDMM.MMM	- 157.45 <i>(for 157-27-00 W)</i>	2014-01: Att C 03
Activity	Text	Enter “FISHING” Enter “SEARCHING” Enter “TRANSIT” Enter “TRANSHIPPING”	TRANSIT	WCPFC9 decision

Attachment 2. Electronic Formatting Specifications

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

- i. Paragraph 2 of CMM 2010-02 *Conservation and Management Measure for the Eastern High Seas Pocket Special Management Area* (CMM 2010-02: 02)
- ii. Attachment C paragraph 3 of CMM 2014-01 *Conservation and Management Measure for Bigeye, Yellowfin and Skipjack tuna in the Western and Central Pacific Ocean* (CMM 2014-01: Att C 03); and
- iii. WCPFC9 decision on the *Standard format for manual position reporting in the event of ALC/MTU Malfunction or Failure* (WCPFC9 Summary Report Attachment H) to meet (CMM 2014-02 9a VMS SSPs 5.4 - 5.5).

A) File type

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

Microsoft Excel file ; Comma separated values (CSV) file ; Text file

B) File name

The name of the file must be: XX_ VID_XXXXXXXXXX_ DDMMYYYY.ssss

where:

- XX – two letter ISO country code (CMM 2014-03 Att 7) of the CCM providing the file
- VID – five digit integer assigned number for a vessels record on the WCPFC Record of Fishing Vessels (RFV) (CMM 2014-03)
- XXXXXXXXXXXX – a ten digit code to represent the type of CMM reporting requirement
 - EHSPSMARPT – CMM 2010-02: 02
 - HSP1SMARPT – CMM 2014-01: Att C 03
 - VMSMNLRPT – VMS manual report for ALC failure or malfunction (CMM 2014-02 9a VMS SSPs 5.4 - 5.5)
- DDMMYYYY – the date of the provision of the file
- ssss – the standard file suffix (xls or xlsx if Excel file; csv if CSV file; txt if Text file)

For example:

CK_5936_EHSPSMARPT_11082013.xlsx (Excel file Eastern High Sea Pocket Special Management Area Report provided by Cook Islands for vessel with VID 5936, on 11 August 2013)

C) File content and structure

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

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

Attachment 3A. Electronic data standard to be used for WCPFC ROP Minimum Standard Data Fields, as amended by WCPFC11 decisions.

Please refer to DRAFT WCPFC E-REPORTING STANDARD DATA FIELDS FOR OPERATIONAL OBSERVER DATA (WCPFC-2015-ERandEMWG1-05) 25 June 2015 - PAPER BY SPC-OFP

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

Please refer to DRAFT WCPFC E-REPORTING STANDARD DATA FIELDS FOR OPERATIONAL LOGSHEET DATA (WCPFC-2015-ERandEMWG1-06) 25 June 2015 - PAPER BY SPC-OFP

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Attachment 4. Electronic Formatting Specifications

These specifications describe the electronic files that CCMs must provide if they choose to 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:

[to be determined]

B) File name

The name of the file must be: XX_XXXX_DDMMYYYY.ssss

where:

- XX – two letter ISO country code (CMM 2014-03 Att 7) of the CCM providing the file
- [to be determined] XXXX – type of report
- DDMMYYYY – the date of the provision of the file
- ssss – the standard file suffix (xls orxlsx if Excel file)

For example:

AU_XXXX_11082013.xlsx (Excel file provided by Australia for XXXX, on 11 August 2013)

C) File content and structure

Each record in the electronic file represents a single report. Each record must have the structure specified in Attachment 3A or 3B, including the same sequence of fields.

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