



**SECOND E- REPORTING AND E-MONITORING INTERSESSIONAL WORKING GROUP
MEETING (ERandEMWG2)
The Stones Hotel, Bali, INDONESIA
1 – 2 August 2016**

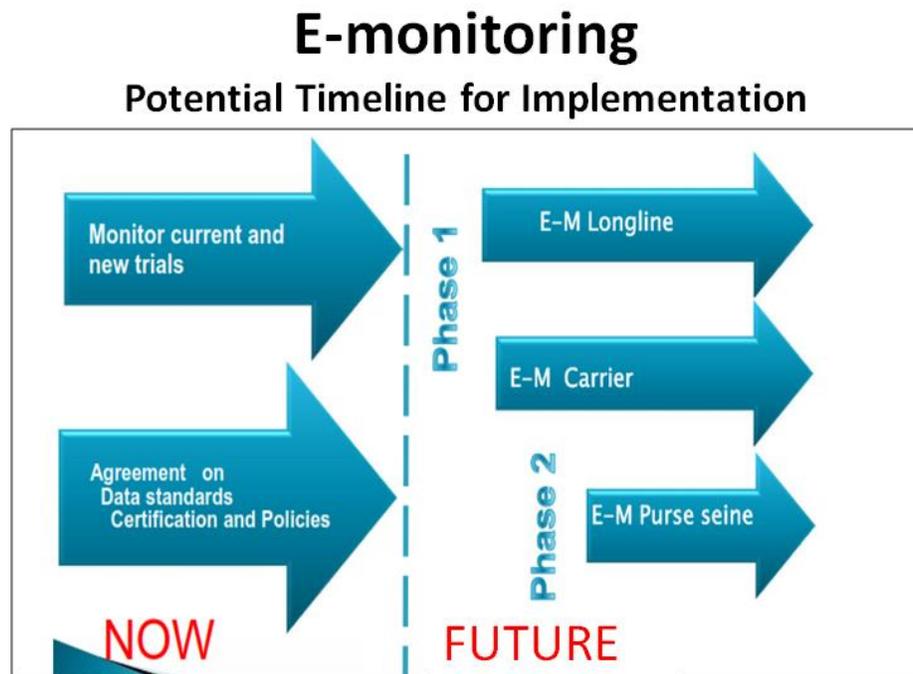
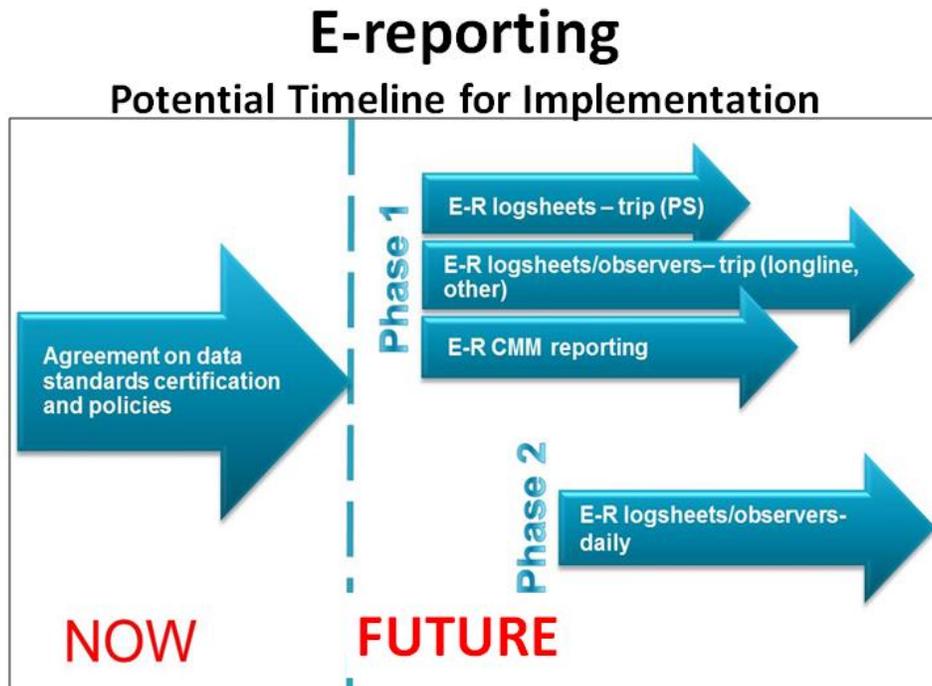
REVIEW OF 2015-16 ACTIVITIES

**WCPFC-2016-ERandEMWG2-03
30 July 2016**

Background

1. The Commission has recognized that a number of members are making progress in trialing and in implementing Electronic Reporting (e-reporting) and Electronic Monitoring technologies, particularly in support of both vessel operational activities and the Regional Observer Programme (ROP). In 2013, a consultancy report on Potential for E-reporting and E-monitoring in Western and Central Pacific Tuna Fisheries was presented to the Commission (WCPFC10-2013/16_rev1). The Commission agreed to further discuss at a workshop in early 2014.
2. WCPFC held the E-Monitoring and E-reporting workshop at FFA Headquarters (Honiara, Solomon Islands) in 31 March – 1 April 2014 to discuss the potential for electronic reporting and electronic monitoring in the WCPO and to consider next steps for progressing these initiatives. The workshop was structured so that the recommendations from the consultancy report could be discussed. A discussion paper on potential impacts on employment opportunities in small-island developing States (WCPFC-EmandErW-2014-05) was also provided as a reference document for the workshop.
3. The workshop noted that a key risk for the Commission is the lack of documented policies and standards for these technologies. The absence of WCPFC standards could result in poor data coordination, increased data storage and transmission complexities, higher data security risk and increased long-term costs to the Commission and CCMs. The workshop also considered what might be potential timelines for implementation of electronic reporting and electronic monitoring technologies in WCPFC fisheries (see Figure 1 below).
4. At WCPFC11 the Commission agreed that a priority task should be the development of 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.

Figure 1. A possible phased approach for the implementation of E-reporting (top) and E-monitoring (below) technologies in the WCPFC



- To facilitate the development of these standards, specifications and procedures the electronic reporting and electronic monitoring working group (ErandEmWG) was established and Kerry Smith (Australia) was confirmed as Chair. The ErandEmWG reports to TCC and SC, as appropriate. The ErandEmWG terms of reference, includes a set of five principles and a workplan to guide the

ErandEmWG. A copy of the terms of reference is provided in Attachment 1. Importantly the work of the ErandEmWG will take into account the current and developing fisheries monitoring and information management systems in use by members, and provide a basis for the Secretariat's preparations to be ready to receive electronic forms of fisheries data and reporting.

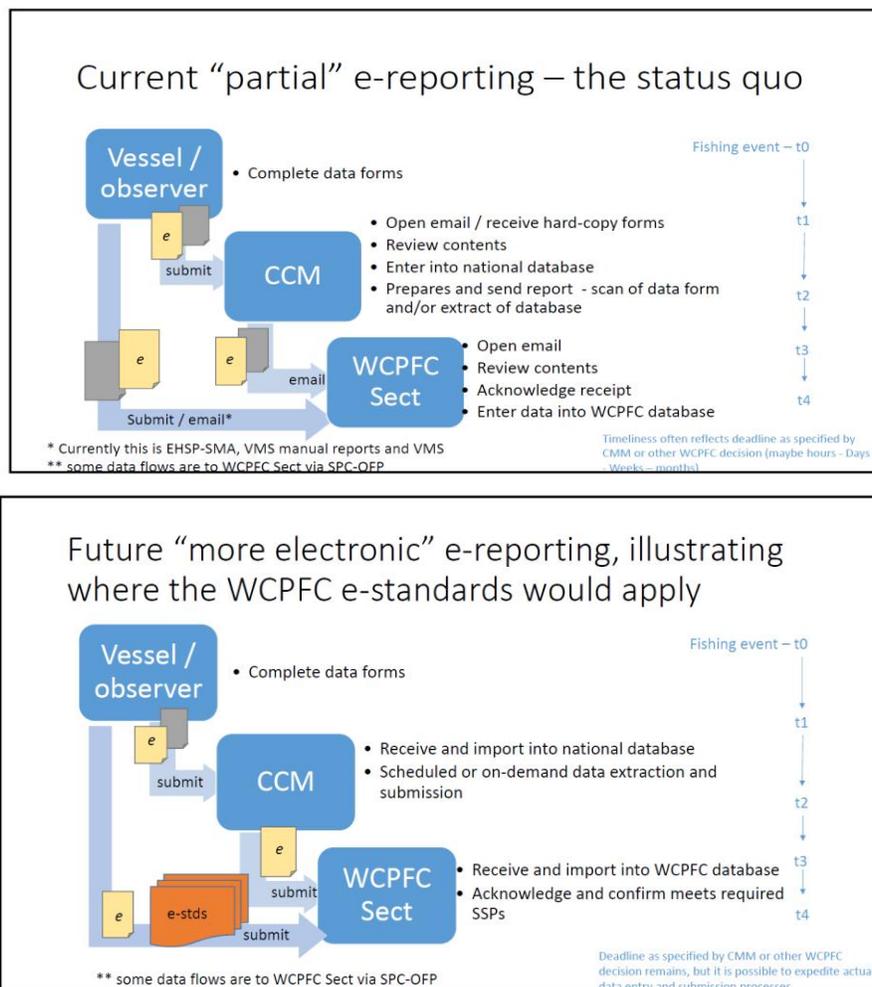
6. In the consideration of the ErandEmWG workplan, it was also noted that a decision by the Commission to develop data standards can be separated from a decision by the Commission to require certain data/information to be submitted electronically. Furthermore it is expected that the early adoption of 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.

2015 activities

7. The ERandEMWG held its first meeting in Nadi Fiji from 8 – 10 July 2015. The focus for ERandEMWG1 was on development of draft electronic-reporting data standards. CCMs and subregional agencies provided updates on their trials and implementation of e-technologies. The Secretariat confirmed two CCMs had been working with the Secretariat on a voluntary basis to trial mechanisms within the Secretariat to receive high seas pocket reporting and VMS manual reporting in standard electronic formats. A preliminary discussion took place on strategies for E-monitoring.
8. In relation to the development of draft electronic-reporting standards, the ERandEMWG workplan had anticipated that an *ER sub-working group* consisting of technical experts from Members, the Secretariat and representative from PNAO, SPC, FFA, CDS-IWG Chair and would work electronically on the development of a draft ER standards. However no nominations were received in response to a circular calling for nominations of technical experts. Instead, the Secretariat and SPC-OFP jointly put forward a draft consultative document to assist the ERandEMWG in its work to develop standards, specifications and procedures for WCPFC electronic reporting (WCPFC-2015-ERandEMWG1-04).
9. The consultation document covered 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.
10. The above five reporting requirements were chosen as a starting point, recognizing 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 reporting (paragraph 14); and
 - d. Paragraph 4 of Scientific Data to be Provided to the Commission.

11. Participants generally supported the approach proposed in the Consultation Document, noting that the consultative document and associated attachments provided a good basis for progressing the development of ER SSPs as it was consistent with current requirements relating to data fields and submission and reiterated that the adoption of standards was separate to a decision to require CCMs to report electronically. The ERandEMWG agreed to recommend the draft SSPs to TCC11 for consideration, with the recognition that the SSPs could be further refined prior to WCPFC12. (Attachment 5 to ERandEMWG Summary Report)
12. The Summary Report of ERandEMWG1 includes two diagrams that were prepared by the Secretariat to assist meeting participants in visualizing the flow of data to the Secretariat, either directly from the vessel or via CCMs. The top figure is a representation of the current arrangements where some degree of human intervention is required during the process of receiving and entering CMM reporting into the Commission databases. The lower figure is a representation of a possible future state where as a result of the development of electronic standards, it would mean a minimal degree of human intervention is required (see Figure 2). It is hoped that ER standards will reduce manual data entry errors, reduce delays in data entry and provide a means to explore and implement automatic upload mechanisms for CMM reporting into WCPFC databases.

Figure 2. Illustrative Diagram of current arrangements of data flow to the Commission (top), and a possible future state where as a result of the development of electronic data standards a minimal degree of human intervention is required (below).



13. The outcomes from WCPFC12 were:

540. The Commission noted that further testing and refinement of the five draft electronic data standards developed in 2015 (WCPFC-TCC11-2015-20, Attachment 5) is required by the ERandEMIWG.
541. The Commission agreed that a master list of electronic data standards shall be maintained by the Secretariat with input from the Scientific Services Provider and any updates shall be notified to CCMs on an annual basis.
542. The Commission noted advice from the ERandEM-IWG supported by TCC that a decision to report electronically in future be captured by an amendment to the relevant CMM which also makes reference to the master list.
543. The Commission encouraged the development of Electronic Monitoring by CCMs in areas where data gaps exist such as longline observer coverage and high seas transshipment.
544. The Commission noted that the ERandEM-IWG should meet prior to SC12 in 2016.

2016 activities – so far

14. In March 2016, the ERandEMWG Chair wrote to CCMs recalling, the agreement by a number of CCMs to work with the Secretariat and SPC in relation to testing the draft data standards. The Chair encouraged this work to be undertaken in the first half of 2016. Key priorities for the testing are operational level catch and effort data and observer data. Formal testing of the data standards with respect to EHSP-SMA, HSP1-SMA and MTU failures will be deferred until after ERandEMWG2 and will be able to draw on the experiences from testing in relation to the two larger data sets.
15. The testing process involves CCMs preparing data in the necessary formats and submitting it to SPC and the WCPFC Secretariat. SPC and the WCPFC Secretariat will then work with the CCMs to refine and modify the standards as required. Testing of the standards by users is necessary to ensure that the standards are robust and are suitable for the end user. Electronic reporting is increasingly being used to facilitate effective and efficient data exchange – to this end, CCMs should work to ensure that the standards are suitable for purpose.
16. WCPFC-2016-ERandEMWG2-IP01 by SPC, provides an overview of Electronic-Reporting and Electronic Monitoring activities that SPC has undertaken in 2015/16. This paper overviews the various trials of e-technologies that have been underway and overviews work on the development of process standards for electronic monitoring. A draft Process Standards for the provision of operational OBSERVER data fields collected in the WCPFC longline (LL) fisheries through E-monitoring (EM) systems is presented in WCPFC-2016-ERandEMWG2-04.



TERMS OF REFERENCE FOR AN ELECTRONIC REPORTING AND ELECTRONIC MONITORING WORKING GROUP (ErandEmWG)

Background

At WCPFC10, the Commission noted that progress had been made by some members in trialing electronic reporting and monitoring, particularly in support of both vessel operational activities and the Regional Observer Programme (ROP). A workshop was held in late March 2014 to discuss the potential for electronic reporting (ER) and electronic monitoring (EM) in the WCPO and to consider next steps in progressing these initiatives. The workshop identified a priority need to further consider the application of ER and EM in the WCPO and agreed that this work be best facilitated by the establishment of a working group. The workshop further noted that a key risk for the Commission is the lack of documented policies and standards for these technologies, resulting in poor data coordination, increased data storage and transmission complexities, higher data security risk and increased long-term costs.

It is important to note that a decision by the Commission to develop data standards is separate from a decision by the Commission to require certain data/information to be submitted electronically. The adoption of ER and EM standards by the Commission will support and accommodate those CCMs that have commenced implementation of a range of EM and ER 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.

These terms of reference define the objectives, scope and responsibilities of the working group. They set out the expectations of the Commission with respect to the outputs of the working group. These TORs may be subject to review or modification by the Commission.

Objective

1. To consider how EM and ER technologies could benefit the work of CCMs and the Commission, in supporting the objective and implementation of the Convention.

Working group

1. The working group shall be open to all Commission Members and Participating Territories.
2. All CCMs are encouraged to provide input to the work of the working group¹.
3. To the highest degree possible, the working group shall conduct its work electronically or, if convenient and cost effective, in targeted face to face meetings.
4. The working group shall report to TCC and SC, as appropriate, where the advice and recommendations shall be considered.
5. The working group shall consult with or seek advice from technical experts, including port coordinators, as necessary.
6. The working group shall be supported by the Secretariat. In particular, the Secretariat shall provide technical advice and engage relevant stakeholders in providing input into the work of the working group.

Principles

1. In its deliberations, the working group shall be mindful of existing and proposed data standards and formats in other regional bodies and RFMOs.

¹ Which should include industry representatives.

2. The working group shall consider the impacts of ER and EM technologies on the broader work of the Commission/Secretariat and look at ways to minimize data management costs.
3. The working group shall specifically consider impacts of ER and EM technologies on SIDS and endeavour to improve SIDS use of electronic technologies, including supporting trials of these technologies, to further understand their application.
4. The working group shall take into consideration recommendations from Kobe III relating to data harmonisation and exchange.
5. The working group shall not prejudice the rights and obligations of flag CCMs on data collecting and validation.

Workplan

1. As a priority, establish a group of technical experts (sub-working group) to draft standards on electronic reporting for the consideration of the working group, TCC11 and WCPFC12. The sub-working group shall consist of members of the PNAO, SPC, FFA, CDS-IWG chair, Secretariat and other CCM experts as necessary. CCMs, including industry representatives, may join the sub-working group.
2. Hold a workshop to review the draft standards and progress the development of an EM and ER strategy for consideration by TCC11 and WCPFC12, including objectives, scope, roles and responsibilities, timeframes for implementation, including
 - a. identify and assess areas where ER or EM could strengthen current reporting processes
 - b. identify specific WCPFC reporting obligations which could be submitted electronically
 - c. develop a plan of work that includes both design and implementation (potentially phased) for these obligations in particular fisheries taking into consideration
 - i. data confidentiality
 - ii. reviewing/establishing data access, protection, use and dissemination rules and procedures
 - iii. validation of data
 - iv. timeframes for data submission
3. Evaluate the best method to implement the recommendations (e.g. a CMM vs report language etc.) that may be required to accommodate ER and EM technologies
4. Consider steps to progress implementation including but not limited to cost benefit analyses, and capacity building.
5. Undertake other actions relating to the application of ER and EM technologies (e.g., integration with CDS, HSBI, port controls etc) that the Commission may wish to consider.

Timeframe

1. The working group and its progress will be reviewed at WCPFC13.
2. Consistent with outcomes from the ER and EM workshop, a phased in approach to the implementation of these technologies should be considered.

Reference

1. Progressing the development of a WCPFC draft electronic reporting standard, including for ROP – TCC10 Information Paper – WCPFC-TCC10-2014-16 [Progressing ER standards | WCPFC](#)
2. ER and EM Workshop - March 2014 - Chairs report. WCPFC-TCC10-2014-15 [E-Monitoring and E-reporting workshop report | WCPFC](#)