TECHNICAL AND COMPLIANCE COMMITTEE
Twentieth Regular Session
25 September to 1 October 2024
Pohnpei, Federated States of Micronesia (Hybrid)

Update from the Intersessional Working Group for the Regional Observer Programme (ROP-IWG)

WCPFC21-2024-16[1]
18 November 2024

Submitted by ROP-IWG Chair Nominee

Purpose

1. The purpose of this paper is to provide an update for WCPFC21 on the ROP-IWG workplan and its activities to date. This paper summarises the focuses and priorities for the forward workplan that have been provided by CCMs.

Updates on SC20 discussions

2. During SC20, the Secretariat presented a paper (SC20-ST-WP-04) for review and discussion. The paper reports on the feedback and suggestions from IWG-ROP participants received in 2024, and requests further feedback from IWG-ROP participants and SC20 and TCC20 participants. This will be used to further consider proposals for changes to MSDF in 2024. During the presentation it was noted that the IWG-ROP Chair was presently vacant, and an interim replacement could be appointed intersessionally and confirmed at WCPFC21. Appreciation was expressed to the former IWG-ROP Chair Mr Harold Vilia (Solomon Islands) for his leadership of the IWG-ROP over the past two years, and SC20 wished him the very best in his future endeavours.

3. SC20 discussed the paper under SC20 Agenda item 3.3.2, but did not record a specific outcome or decision on this matter.

TCC20 outcomes

4. During TCC20, the Secretariat presented the SC20 paper for review and discussion. There were also discussions during TCC20, that led to taskings to the ROP-IWG related to the use of ROP data in the online Compliance Case File System (CCFS). The relevant TCC20 outcomes are provided in the table below.

[1] This paper is an updated version of paper TCC20-2024-19 issued to TCC20 on 17 September 2024. The enclosed substantive update paper was originally tabled to SC20 as SC20-ST-WP-04 Update from the Intersessional Working Group for the Regional Observer Programme – 29 July 2024.

TCC20	1. TCC20 expressed concern over the delay in including cases arising from ROP data in the CCFS and recommends to the Commission that the question of streamlining the inclusion of ROP data in the CCFS be a task for the ROP-IWG. *(ref: TCC20 Outcomes, paragraph 16)*
	2. TCC20 agreed in principle that many of the ROP Minimum Standard data fields were redundant, particularly those related to vessel details, and are better collected through existing processes, such as vessel registration or the RFV. *(ref: TCC20 Outcomes, paragraph 48)*
	3. TCC20 recommended that the Commission at WCPFC21 task the ROP-IWG to prioritize in 2025 the review of the ROP Minimum Standard data fields, the review of the pre-notification process adopted during WCPFC12, and to develop a standardized process for the use of ROP data in the CCFS. *(ref: TCC20 Outcomes, paragraph 50)*
	4. TCC20 recommended to the Commission that it appoint Mr Lucas Tarapik (Papua New Guinea) as ROP-IWG Chair. *(ref: TCC20 Outcomes, paragraph 77)*
	5. TCC20 recommended that the Commission at WCPFC21 schedules an in-person meeting of the ROP-IWG to be held adjacent with TCC21 in 2025. *(ref: TCC20 Outcomes, paragraph 51)*

Additional observations from the nominee ROP-IWG Chair

WCPFC ROP Minimum Standard Data Fields

5. The ROP-IWG has, over the past months, been considering amendments to the WCPFC ROP Minimum Standard Data Fields; the latest draft is enclosed as Annex 1.

6. To assist ROP-IWG participants in further considering next steps for the ROP Minimum Standard Data Fields in advance of further intersessional work in 2025, the nominee ROP-IWG Chair provides the following thoughts and observations:

   a) *It is suggested that no immediate changes be made to the paper formats, with the current Minimum Standard Data Fields (MSDF) remaining in use for these formats until they are phased out over the next few years. MSDF formats for Electronic Reporting (ER) need to be developed with a focus on standardizing minimum data fields to ensure all programs collect essential information. Additionally, ER technology should be standardized for seamless integration with required databases.*

   b) *Currently, a few observer programmes still use paper formats, though this is expected to transition to ER as technology advances. Much of the data is already stored in databases, such as the Regional Fishing Vessel Records (RFV) maintained by the Commission. Linking these databases to observer ER formats could enable auto-population of observer data collections and improve data accuracy by allowing observers to confirm RFV details during their trips.*

   c) *The future of observer data collection is expected to rely increasingly on ER and, in some cases, Electronic Monitoring (EM). MSDF comments apply to ER formats but could also be adapted for paper formats. With ER, dropdown menus could emphasize specific data entries, which would otherwise require multiple fields in paper formats. ER development*

should be encouraged and harmonized to communicate effectively with databases currently used by the Commission and data providers.

d) *Comments on the MSDF regarding EM are preliminary and are only a guide to indicate potential data collection capabilities. Further discussions by the ERandEM-IWG are necessary to define required fields for EM, noting that camera placement will affect what data can be captured. Annex 1A provides some initial thoughts on those MSDF that could be considered for data collection by other mean including EMs, which is intended for discussion in the new year, in association with the ERandEM-IWG. It is not proposed for discussion during WCPFC21.and instead will be informed by WCPFC21.*

Addressing Online Compliance Case File System (CCFS) Matters

6. There are three recommendations from TCC20 which relate to the use of ROP data for Compliance and Monitoring purposes.

7. To assist ROP-IWG participants in further considering next steps in advance of further intersessional work in 2025, the nominee ROP-IWG Chair provides the following thoughts and observations:

a) *The TCC20 recommendations have confirmed that the priorities in the ROP-IWG workplan for 2025, will need to include a review of the Observer Trip Summary Report. The ROP-IWG Chair proposes that as a starting point, priority is given to the non-compliance checklist and work undertaken to try to categorise the nature of Critical Incident Reports – This might include further recommendations to review and amend the Observer Trip Summary Report Form (GEN-3 Form)*

b) *The TCC20 recommendations have confirmed that the priorities in the ROP-IWG workplan for 2025, should include considering the extent to which current national and subregional processes and standards are fit for purpose in providing a timely review and analysis of Critical Incidents Reports (CIRs) and process by respective ROPs before ROP data is transferred to Commission. This will require ROP Observer Programmes to share through the ROP-IWG what are best practices. This review may also need to consider if additional training and support from WCPFC, and subregional agencies, for national observer programmes is needed to support the work of national and sub regional Observer Programmes.*

c) *Noting the TCC20 recommendations, ROP-IWG participants will also need to consider the best way to organize and prioritise the work so as to make good progress in 2025.*

Possible next steps

8. The recommended method of communications by nominee ROP-IWG Chair is for participants to support intersessional electronic email exchanges. The nominee ROP-IWG Chair would welcome views on whether an online meeting in the second quarter of 2025 should be considered. This online meeting would be in addition to the TCC20 recommended meeting in conjunction with TCC21 in Pohnpei.

9. Written feedback on the proposed next steps ahead of WCPFC21 can be directed to the ROP-IWG Chair nominee Mr Lucas Tarapik (ltarapik@fisheries.gov.pg/ltarapik@gmail.com), cc Deputy

Compliance Manager Eidre Sharp (eidre.sharp@wcpfc.int) and ROP Audit and Certification Consultant Mr Karl Staisch (karl.staisch@wcpfc.int).

ANNEX 1

SCIENTIFIC COMMITTEE
TWENTIETH REGULAR SESSION

Manila, Philippines
14 – 21 August 2024

Update from the Intersessional Working Group for the Regional Observer Programme

WCPFC-SC20-2024-ST-WP-04
29 July 2024

Paper submitted by IWG-ROP Chair and Secretariat

Purpose

1. The purpose of this paper is to provide an update on intersessional progress made to streamline and to facilitate consideration of additional updates Regional Observer Programme (ROP) data fields. The paper also identifies areas of work arising from other IWG work and from SC20 and TCC20 discussions, which will need to be prioritised by CCMs for inclusion in the IWG-ROP Workplan.

2. This paper documents and presents for review the feedback that was received from IWG-ROP participants intersessionally following WCPFC20. Additional feedback will be sought from IWG-ROP participants and from the SC20 participants on priorities and suggested changes and additions to the ROP Minimum Standard Data Fields (MSDF).

Background to IWG-ROP Workplan 2023-2025 tasks

3. The IWG-ROP was established in 2006 in accordance with the terms of reference in CMM 2006-07. In December 2021at WCPFC19, the Commission supported TCC's recommendation that there was a need to reactivate the IWG-ROP to provide advice to assist in Commission discussions, ensuring the ROP can continue to optimizeits contribution to the Commission's independent monitoring and verification programme and achieve the Commission's objectives as set out in the Convention.

4. The IWG-ROP Workplan 2023-2025 aims to consider tasks within the following four main areas during the 2023 – 2024/5 period:

    a. Review the existing ROP data collection, to further identify, and discuss improvements to the current processes that support independent monitoring by Observers,

    b. Review the ROP Observer coverage with considerations to increase coverage,

    c. Recommend ROP Standards, and

    d. Consider use of emerging technologies to support Observer work.

5. The IWG-ROP Chair provided an update to WCPFC20 (WCPFC20-2023-IWGROP) on the activities of the IWG-ROP. The IWG-ROP Chair suggested that **Annex 1** to the WCPFC20 update would provide the basis for intersessional email communications between IWG-ROP participants in 2024, and proposed that the priority work plan tasks would include:

1(b) “Observer data fields for “Species of Special Interest”; and
1(d) “Consider removal of redundant ROP data fields”.

2024 progress to date

6. On 4th April 2024, the IWG-ROP Chair sent an email communication to IWG-ROP participants reiterating that highest priority work is to provide comments or feedbacks on tasks:
    - 1(b) “Observer data fields for “Species of Special Interest”. This can be seen on pages 20 - 22 of the table in Annex 1; and
    - 1(d)“Consider removal of redundant ROP data fields”

    Participants were also reminded that copies of relevant documents circulated by email to the IWG participants will be posted https://www.wcpfc.int/iwg-rop.

7. In response comments and suggestions were received from three IWG-ROP participants:
    a. **New Zealand** – submitting suggestions related to IWG-ROP workplan priority 1(b) and providing suggested additional data fields related to SPECIAL GEAR ATTRIBUTES - seabird mitigation measures which primarily relate to enhancing observer data being collected for seabird mitigation measures on the surface longline fleet.

    b. **United States** - supporting discussing Workplan priorities 1(b) and 1(d) and providing some preliminary views for those discussions. The United States indicated that they would like to reserve the opportunity to revisit and address other ROP workplan priorities in the course of the IWG's work between now and WCPFC21.
        - for Workplan Priority 1(b) and Species of Special Interest: “it would be useful to request a notation on how much gear (eg, 0.5 m line) may be left on a released animal”
        - for Workplan Priority 1(d) and streamlining:
            - support the suggested changes on pages 8-11 (*crew attributes, vessel attributes, and vessel electronics*) that would remove fields from the current WCPFC at sea form streamlining it and requiring the form to be updated accordingly,
            - support having further discussion on the specific fields being considered for placement officers' collection. In some cases, this will require an update to the SPC/FFA Regional Purse-Seine Fisheries Observer Workbook version "REV.2018" - Observer Placement Meeting Record that is used to place WCPFC observers on purse seine vessels, and
            - seek guidance and further discussion on how the following Alternative would result in streamlining "removing the field from observer forms which give more space to add new required fields."

    c. **PNA Office** – provided some general comments:
        - We generally support the proposals to remove fields that are redundant because the information can be sourced elsewhere, including on the WCPFC RFV. At the same time, we think it essential that there should be sufficiently robust fields retained in the MSDF so that an observer record can be reliably linked to a vessel. In that respect, we don’t consider a Vessel Name alone is sufficient for that purpose because Vessel Names are often spelled in different ways. For that reason, we support retaining

either the WIN or the IMO number, or both.

- We don't support the rationale that removing fields from observer forms gives more space to add new required fields because the Commission should be planning for electronic reporting of observer data. We think it is sufficient to note that redundant fields should be removed from the MDSF because the information can be sourced elsewhere.
- We don't see the collection of data by a placement officer on a placement format as an alternative to inclusion of data fields in the MDSF because placement data is not provided as Commission data to our knowledge.
- We are not sure why it is proposed to retain the field "Vessel fish hold capacity" when this information is also available on the RFV, although we note that the units for this field in the RFV are volume or weight, whereas the units for the MFSD field are weight.
- We also notice that there is specific and different comment on this measurement for pole and line vessels, and we are not sure why.
- For vessels generally "The total maximum amounts in metric Tons (mT.) that the vessel freezers, wells and other fish storage areas on a vessel can hold."
- For pole and line vessels "Record in metric tonnes the total capacity of the fish holds of the vessel.'
- Lastly, we have provided some specific comments regarding the Observer Trip Monitoring Report, which includes some alternative additional fields, for consideration.

Review of ROP Minimum Standard Data Fields

8. The table in **Annex 1** sets out the data fields from the MSDF as they were approved by the Commission (refer to the WCPFC website). Data field categories are shown in the same order as the MSDF. Fields not suggested for removal have been retained in the table for ease of understanding and can be discussed if required. Areas that will be the subject of future work to review and modify ROP minimum data fields as set out in sections 1 – 4 of the Workplan are shown as placeholders.

9. Changes proposed to the existing ROP MSDF set out in **Annex 1** recognise that some data fields could be deleted as they are or could be collected by alternative mechanisms. The proposals are in accordance with 1d. of the IWG-ROP Workplan 2023-2025 and additional suggestions of IWG participants received in 2024 have been reflected.

10. Other MSDF are not proposed for change, and the additional or alternative suggestions of IWG-ROP participants received in 2024 have also been reflected for consideration. Annex 1 recognises that further work is required by the IWG-ROP to identify the nature of the changes required to achieve the objectives of the taskings from TCC18 (refer to Summary Report pages 27-28, 33-34 and 41-42) and WCPFC19 (refer to Summary Report pages 77-78 and 80-81).

11. Other proposals relating to more substantive taskings to review and modify ROP minimum data fields as set out in sections 1 – 4 of the Workplan are shown as placeholders in **Annex 1** to indicate areas that will be the subject of future work.

12. There are additional areas for future changes to data collection requirements not reflected in the table below. Some were discussed during TCC18 and others arose during TCC19, in broader discussions on the ROP as part of the broader Commission data collection and monitoring framework. Future changes reflect the need to consider:

a. new measures or changes to measures such as the draft measure on Crew Labour Standards being developed and FADMO-IWG proposals that include stronger FAD monitoring;

b. refinements to current data fields collected by ROP observers to allow for more useful consideration of ROP data in the CCFS and in the Compliance Monitoring Scheme processes which includes the currently planned 2023-2024 work that prioritises improvements in ROP minimum standard data fields for Non-target and Associated or Dependent Species (NTADs) to allow for a distinction between an interaction that is of scientific interest from those interactions that are a possible infraction in the CCFS which include interactions or actions by the crew that could indicate a potential infringement has occurred;[1]

c. refinements to ROP minimum standard data fields for sea turtles, seabirds, and mobulids that are relevant to the CMM obligations; and

d. potential refinements to the shark CMM 2019-04 based on interpretation issues arising during CCM's evaluation of annual reporting for RY2021 and RY2022 during TCC19;

e. refinements to ensure a balance and appropriate linkages between new measures and standard, specifications and procedures arising from the work of the ERandEM-IWG including taking account of the five data fields that were identified in the WCPFC agreed ER-standards for observer data[2] for consideration in future reviews of ROP minimum data standards:

    i. VESSEL IDENTIFIER To support electronic reporting of observer data, to consider the inclusion of WCPFC RFV VID, which is currently encouraged, as mandatory field WCPFC field.

    ii. EMBARK_LAT is the actual depart LAT position for the observer trip (if embarking AT SEA)

    iii. EMBARK_LON is the actual depart LON position for the observer trip (if embarking AT SEA)

    iv. DISEMBARK_LAT is the actual depart LAT position for the observer trip (if disembarking AT SEA)

    v. DISEMBARK _LON is the actual depart LON position for the observer trip (if disembarking AT SEA); and

f. use of the ROP to support Commission data collection and monitoring programmes for developing management measures e.g. harvest strategies (refer to TCC19 Summary Report) analytical discussion e.g. harvest strategies.

Next steps

13. Further feedback on this paper is requested from IWG-ROP participants and SC20 and TCC20 participants. This will be used to further consider proposals for changes to MSDF in 2024.
14. It is noted that there may be flow-on effects that mean consequential changes to CMMs or other requirements such as the Electronic Reporting Standards for Observers may be needed.

[1] For further information see TCC19-2023-09 Use of ROP data in the Compliance Monitoring Scheme (CMS)
[2] https://www.wcpfc.int/doc/data-05/e-reporting_ssps

Annex 1

Working Table to facilitate intersessional feedback from IWG-ROP participants in 2023/24 in support of the review the ROP minimum standard data fields (MSDF) – and reflecting additional suggestions and comments from IWG-ROP participants received in 2024

Introduction

The following table sets out proposals for initial change to MSDF for feedback and should be read in conjunction with the IWG-ROP Workplan 2023-2025. and the two sets of Electronic Reporting Standards for observer reporting, which respectively, provide additional details on the taskings for the IWG and on the data reporting standards and requirements already approved by the Commission.

It should be noted:

a. the column ** "How Collected by Observer" indicates the method usually used to collect this information, but other methods of collection may be used; and

b. where an "*Observer Placement Form/format"* has been suggested, this refers to the potential for a form/format to be created by observer providers that could collect this information as part of preparations for placement of an observer. For example, data can be taken from existing data such as the Record of Fishing Vessels for use by the observer. The observer can also check this information for any changes or updates. For example, the collection of phone numbers and other communication addresses currently collected by the observer during the trip can be collected at placement, checked once on board, and then ensures the observer provider has the latest communication information of the vessel in case of any emergency or need to communicate with the observer; this will aid with observer safety. This will also add to the currency and therefore quality of data held by the Commission.

c. *Vessel logs* contain information on catch details and methods used to catch fish. The "Vessel Master" is often the best source of information on vessel dimensions and gear information, observers must rely on vessel captains and crew to give verbal information or documentation when collecting this information during the trip. The verbal information is difficult for observers to verify; therefore, the vessel captain could supply some of this information on their log sheets which can be checked against the RFV, etc.

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
GENERAL VESSEL AND TRIP INFORMATION FOR ALL VESSEL TYPES			
VESSEL IDENTIFICATION			
Flag State Registration Number	Observer asks to check vessel documentation.	This information is available and collected in the RFV	This information could be collected by a placement officer on a placement format. Therefore, removing the field from observer forms which gives more space to add new required fields
Vessel Owner/Company	Observer asks to check vessel documentation	This information is available and collected in the RFV	This information could be collected by a placement officer on a placement format. Therefore, removing the field from observer forms which gives more space to add new required fields
WCPFC Identification number" WIN markings consistent with CMM 2004-03 WIN format for markings consistent with CMM 2004-03	Observer checks markings on vessel. The (IRCS) Call Sign (Which is usually the same as the WIN number) of the vessel markings should be consistent with the measurements required by CMM 2004-03	This information is available and collected in the RFV.	If the vessel does not have an IRCS (Call sign) the flag State must create and issue a "WCPFC Identification Number" or WIN number and use this as the vessel identifier. In most cases, the IRCS and WIN are the same identifier. If required should be checked when placing the observer on the vessel.
IMO' or Lloyd's Register number 'LR"	Observer asks to check vessel documentation	This information is available and collected in the RFV	This information could be collected by a placement officer on a placement format. Therefore, removing the field

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
			from observer forms which give more space to add new required fields
PNA Office comment: • We generally support the proposals to remove fields that are redundant because the information can be sourced elsewhere, including on the WCPFC RFV. At the same time, we think it essential that there should be sufficiently robust fields retained in the MSDF so that an observer record can be reliably linked to a vessel. In that respect, we don't consider a Vessel Name alone is sufficient for that purpose because Vessel Names are often spelled in different ways. For that reason, we support retaining either the WIN or the IMO number, or both. • We don't support the rationale that removing fields from observer forms gives more space to add new required fields because the Commission should be planning for electronic reporting of observer data. We think it is sufficient to note that redundant fields should be removed from the MDSF because the information can be sourced elsewhere. • We don't see the collection of data by a placement officer on a placement format as an alternative to inclusion of data fields in the MDSF because placement data is not provided as Commission data to our knowledge			
Data Fields in this section recommended to be retained. • Name of Vessel • International Radio Call Sign • Hull markings consistent with CMM 2004-03			**Retain - No suggested changes**
Data field in this section recommended to be added. • **WCPFC RFV VID**			Using a vessel identifier field ("VID") removes the redundancy of including all vessel attributes with each trip record and ensures standardisation and consistency through referencing the main Vessel Registry database.

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
VESSEL TRIP INFORMATION			
Data Fields in this section recommended to be retained. • Date and time of departure • Port of departure • Date and time of return • Port of return			**Retain - No suggested changes**
OBSERVER INFORMATION			
Data Fields in this section recommended to be retained. • Observer name • Nationality of Observer • Observer Provider- Country or organisation • Date Time & Location of observer Embarkation • Date, time and location of • Disembarkation			**Retain - No suggested changes** **Retain - No suggested changes**

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
Data Fields in this section recommended to be added: • EMBARK_LAT • EMBARK_LON • DISEMBARK_LAT • DISEMBARK _LON			EMBARK_LAT is the actual depart LAT position for the observer trip (if embarking AT SEA) EMBARK_LON is the actual depart LON position for the observer trip (if embarking AT SEA) DISEMBARK_LAT is the actual depart LAT position for the observer trip (if disembarking AT SEA) DISEMBARK LON is the actual depart LON position for the observer trip (if disembarking AT SEA)
CREW INFORMATION			
Identification document-Captain	Observer either asks the captain for his passport or ID details, or if available can get this information from a crew list.	Observers should not need to record what document was used to prove nationality? Many observers do not ask to see nationality proof.	Crew lists are made up for immigration purposes and have these details for all crew which could be collected at time of placement. This may also help the crewing issues being discussed as can be compared at the beginning and end of trip.
Identification document-Fishing Master.	Observer either asks the fishing master for his passport or ID details, or if available can get	Observers should not need to record what document was used to prove nationality?	If needed could be collected on placement, noting that crew lists made up for immigration purposes will sometimes have these details for all

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
	this information from a crew list.	Many observers do not ask to see nationality proof.	crew. which could be collected at time of placement. This may also help the crewing issues being discussed as can be compared at the beginning and end of trip.
PNA comment: (as above for vessel identifiers) USA comment: • support the suggested changes to crew attributes, vessel attributes, and vessel electronics that would remove fields from the current WCPFC at sea form streamlining it and requiring the form to be updated accordingly, • support having further discussion on the specific fields being considered for placement officers' collection. In some cases, this will require an update to the SPC/FFA Regional Purse-Seine Fisheries Observer Workbook version "REV.2018" - Observer Placement Meeting Record that is used to place WCPFC observers on purse seine vessels, and • seek guidance and further discussion on how the following Alternative would result in streamlining "removing the field from observer forms which give more space to add new required fields."			
Data Fields in this section recommended to be retained. • Name of Captain • Nationality of Captain • Name of Fishing Master • Nationality of Fishing Master • Other Crew (Nationality) • Total Crew on board			**Further work required – refer to IWG-ROP workplan 2023-2025 priority task 1c.** Additionally in respect of crew information the IWG-ROP will also need to take into consideration the outcome of work being undertaken by the Intersessional Work on Crew Labour Standards
VESSEL ATTRIBUTES			

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
Length (specify unit)	Observer asks to check vessel documentation or the vessel plan. Observer cannot verify if length is correct.	This information is available and collected in the RFV	This information could be collected by a placement officer on a placement format. Therefore, removing the field from observer forms which give more space to add new required fields
Tonnage (specify unit)	Observer asks to check vessel documentation or the vessel plan. Observer cannot verify if tonnage is correct	This information is available and collected in the RFV	This information could be collected by a placement officer on a placement format. Therefore, removing the field from observer forms which give more space to add new required fields
Engine power (Specify unit)	Observer can get this in several ways, can get it from engine model number info online if available. Most observers ask the engineer who will tell them the HP.	This information is available and collected in the RFV	This information could be collected by a placement officer on a placement format. Therefore, removing the field from observer forms which give more space to add new required fields
PNA comment: (as above for vessel identifiers) USA comment: (as above for crew attributes)			

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
Vessel fish hold capacity		PNA Comment: Could be also considered for removal, because this information is also available on the RFV, although we note that the units for this field in the RFV are volume or weight, whereas the units for the MFSD field are weight.	We also notice that there is specific and different comment on this measurement for pole and line vessels, and we are not sure why. - For vessels generally "The total maximum amounts in metric Tons (mT.) that the vessel freezers, wells and other fish storage areas on a vessel can hold." - For pole and line vessels "Record in metric tonnes the total capacity of the fish holds of the vessel.
Data Fields in this section recommended to be retained. • Vessel Cruising Speed • Freezer Type			**Retain - No suggested changes**
VESSEL ELECTRONICS (Indicate "Yes or No)			
Global Positioning System (GPS) (Yes/ No)	Observers view instrument and copy details of units.	All vessels have GPS. This field was introduced when GPS was taking over from Sat-Nav.	All vessels have GPS in some way. Not needed to be collected as GPS is on about every piece of electronic equipment on a vessel, phones, etc.
Weather Facsimile	Observers view instrument and copy details of units.	Introduced when Telex was still being used on board vessels.	Most vessels have a mechanism determining weather, many subscribe to online weather services.

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
Sea Surface Temperature (SST) gauge	Observers view instrument and copy details if required.	This was introduced when SST was changing from a paper format to electronic format. SST is included as an add on in different electronic devices.	SST is an application on different marine electronic devices on a vessel.
Expendable Bathythermograph (XBT)	Observers view instrument and copy details if required	Very few vessels use this device.	This equipment is rare and if recorded could come under the field "Other Electronic Equipment' therefore allowing more space for other fields.
Satellite Communications Services (Phone/Fax/Email adressés and Numbers.)	Observers view instruments; documentation; asks captain/ radio operator; for numbers etc.	This information is available and collected in the RFV	This information should be collected on placement so both the observer and onshore office have the latest vessel communication numbers.
Vessel Monitoring System	Observers are asked to identify the system used and the make and model of the units on board	Collected in RFV as well as VMS Registers. Field was introduced to observer collection when VMS started to be placed on vessels.	All vessels have VMS on board and information is available elsewhere. This information could be collected by a placement officer on a placement format. Therefore, removing the field from observer forms which give more space to add new required fields
Data Fields to be considered for possible removal. • Radar • Track Plotter • Doppler Current Monitor	Observers view instrument and copy details where required	Most vessels that take observers have this all or some of this equipment, These instruments are not being considered for definite removal, but should be considered	This information could be collected by a placement officer on a placement format. Therefore, removing the field from observer forms which give more space to add new required fields

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
PNA comment: (as above for vessel identifiers) USA comment: (as above for crew attributes)			
Data Fields in this section recommended to be retained. • Depth Sounders • Sonar • Radio /Satellite Buoys • Fishery Information Service • Other Electronic Equipment			**Retain - no Changes** Additionally in respect of vessel electronics the IWG-ROP may consider requesting advice from the Scientific Committee about data fields or information that observers could collect to support fishing effort standardization analyses.

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
LONGLINE INFORMATION			
VESSEL ATTRIBUTES			
Data Fields in this section recommended to be retained. • Refrigeration Method			**Retain - no Changes**
GENERAL GEAR ATTRIBUTES			
Data Fields in this section • Mainline length • Mainline Material • Mainline diameter • Branch line Materials			**Further work required – refer to IWG-ROP workplan 2023-2025 priority task 1b.**
SPECIAL GEAR ATTRIBUTES			
Data Fields in this section • Wire Trace • Line Shooter • Automatic Bait Thrower • Automatic Branch Line attached. • Hook Type • Hook Size • Tori line* • Side setting with bird curtains • Weighted branch Lines* • Shark Lines • Blue Dyed Bait • Distance between Weight and Hook • Deep Setting Line Shooter			**Further work required – refer to IWG-ROP workplan 2023-2025 priority task 1b.** New Zealand supported additions for tori lines, night setting, weighted branch lines ((in addition to trip level data collected), and hook shielding devices (see below)

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
• Management of Offal Discharge • Strategic Offal Disposal **Fields that could be considered for removal.** • Mainline hauler • Branch line hauler			**Further work required – refer to IWG-ROP workplan 2023-2025 priority task 1b.**
New Zealand suggested additions	**Additional Data Field Description** - additions primarily relate to enhancing observer data being collected for seabird mitigation measures on the surface longline fleet		
For tori lines: • Condition of Tori Line(s)	Record whether or not the vessel will use at least one tori line **at the trip level** (Yes or No). If yes, measure the length of all overall tori lines to be used, length and number of streamers (both long and short, if applicable), and if streamers cover minimum aerial extent.		

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
• Tori line aerial extent	Where a tori line is recorded to be used at the set level, estimate the total aerial extent during the duration of setting of fishing lines.		
For Night Setting: • Time of Nautical Dawn • Night Setting	Where night setting is used (Yes or No), record the time of nautical dawn in UTC for the location recorded under [Latitude and Longitude of start of Set]. **At the set level,** record whether or not (Yes or No) if fishing lines were set after nautical dawn and before nautical dusk.		
For Weighted Branch Lines (in addition to trip level data collected) • Weighted brand lines (set level)	Record whether or not the vessel uses weighted branch lines **at the set level,** including coverage of gear using weighted branch lines (Yes – 100% of lines, Yes, mixed - specify percentage of overall gear, or No)		
For Hook Shielding Devices • Hook Shielding Devices	Record whether or not the vessel uses Hook Shielding Devices **at**		

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
	the set level, including percentage of overall branch lines with hook shielding devices (Yes – 100% of lines, Yes, mixed – specify percentage of overall gear, or No		
LONG LINE SET INFORMATION			
Data Fields in this section • Date and time of start of set • Latitude and Longitude of start of Set • Date and Time of end of set • Latitude and Longitude of end of Set • Total number of baskets or floats • Number of hooks per basket, or number of hooks between floats • Total number of hooks used in a set. • Line shooter speed • Length of float-line • Distance between branch-lines • Length of branch-lines • Number of light-sticks • Target species • Bait Species • Date and time of start of haul • Date and time of end of haul			**Further work required – refer to IWG-ROP workplan 2023-2025 priority task 1b.**

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
• Total amount of baskets, floats monitored by observer in a single set			
INFORMATION ON CATCH FOR EACH SET			
• **Data Fields in this section** Hook number, between floats • Species code • Length of fish • Length measurement code • Gender • Condition when caught • Fate • Condition when released • Tag recovery information			**Further work required – refer to IWG-ROP workplan 2023-2025 priority task 1b.**
PURSE SEINE INFORMATION AND DATA			
VESSEL AND RELATED ATTRIBUTES			
• Number of onboard support vessels • Aircraft Make/Model, /Colour/Call-sign/Registration			**Retain - No suggested changes** The IWG-ROP may consider requesting advice from the Scientific Committee about data fields or information that observers could collect to support fishing effort standardization analyses.
GEAR ATTRIBUTES			
MSDF in this section are retained.			**Retain - No suggested changes**

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
• Brailer capacity sizes			
Max Depth of Net	Get information from engineer, or if available from net diagram configuration	There is no way the observer can measure this and must ask the engineer or captain.	As the vessel knows this information could be put on Vessel logs to be supplied by vessel or could be collected at placement of observer.
Max length of Net	Get information from engineer, or if available from net diagram configuration	There is no way the observer can measure this and must ask the engineer or captain.	As the vessel knows this information should be put it on Vessel logs to be supplied by vessel or could be collected at placement of observer
Net Mesh Size	Observer measures main body of the net mesh size.	Observers can measure this but unless there are mesh size restrictions why do they need to measure.	As the vessel knows this information put it on Vessel logs to be supplied by the vessel the observer could be asked to verify the log entry by measuring the net mesh size, also a net plan can be collected at placement
Net Strips	FFA & PNA Observer calculates this from info given or asks the engineer	Field not is not a MDSF. But is on many Forms	Why is this field required if net depth is given, observer has no way of verifying his answer. Could also be put on Vessel log sheet if really required?
INFORMATION ON DAILY ACTIVITIES			
MSDF in this section are retained. • Date and time of start of daily activities • Time of activity • Latitude and longitude of activity			**Retain - No suggested changes**

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
Numbers of school floating objects sighted per day	Observer is asked to record every free school or floating object sighted during the day when searching, also record all activities involved with free schools and floating objects. For this to be accurate the observer would need to be on constant watch from 0430 to 1930 every day 15/16 hrs. a day	Information is not reliable as observers do not stay on the bridge all day looking for schools or floating objects. Therefore, figures collected are erroneous and not a true indication.	There are problems with the collection of this field. Observers do not sit on the bridge all day while searching and therefore can miss several school /floating object sightings. Observers tend to count the number and type of schools they investigate or set on during the day, this information is already included in their daily activity columns. If fields are needed a time in hours the observer spent looking for these objects should be added
SCHOOL INFORMATION			
All MSDF in this section are retained. • Method of detection of school • Type of school association			**Retain - No suggested changes** The IWG-ROP may consider requesting advice from the Scientific Committee about data fields or information that observers could collect to support fishing effort standardization analyses

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
SET INFORMATION			
• **Data Fields in this section** Observer's record of date and time of start of set • Observers record of date and time of end of set • Vessel's record of date and time of start of set • Retained catch, by species • Discards, by species • Tag recovery information			**Further work required – refer to IWG-ROP workplan 2023-2025 priority task 1b.**
INFORMATION ON CATCH FOR EACH SET			
All MSDF in this section are retained. • Species code • Length measurement code • Length			**Retain - No suggested changes**

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
POLE-AND-LINE INFORMATION AND DATA			
VESSEL ATTRIBUTES			
MSDF in this section are retained • Vessel fish hold capacity			**Retain - No suggested changes**
GEAR ATTRIBUTES			
MSDF in this section are retained • Automatic poling devices			**Retain - No suggested changes**
INFORMATION ON DAILY ACTIVITIES			
MSDF in this section are retained. • Date and time of start of daily activities • Time of activity, • Latitude and longitude of activity • Type of activity • Numbers of school sighted per day			**Retain - No suggested changes**

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
BAITFISHING INFORMATION			
• All MSDF in this section are retained • Bait species caught • Bait Species purchased • Estimated weight or quantity of bait caught or used			**Retain - No suggested changes**
SCHOOL INFORMATION			
All MSDF in this section are retained • Type of school association • Method of detection of school			**Retain - No suggested changes**
INFORMATION ON CATCH PER SCHOOL FISHED			
All MSDF in this section are retained • Number of crew poling • Time of start of spraying, • chumming and poling • Time of end of spraying, chumming and poling • Retained catch, by species			**Retain - No suggested changes**

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
• Discards, by species • Tag recovery information • Species code • Length measurement code, • Length			

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
SPECIES OF SPECIAL INTEREST **Marine Reptiles, Marine Mammals, Seabirds, Designated Shark Species, Mobulid Rays**			
GENERAL INFORMATION			
Data Fields in this section Type of interaction • Latitude and longitude of interaction • Date and time of interaction • Species code of marine reptile, marine mammal, or seabird.			**Further work required – refer to IWG-ROP workplan 2023-2025 priority task 1b.** *USA suggestion: it would be useful to request a notation on how much gear (eg, 0.5 m line) may be left on a released animal*

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
LANDED ON DECK			
• **Data Fields in this section**Length • Length measurement code • Gender • Estimated shark fin weight by species. • Estimated shark carcass weight by species. • Condition when landed on Deck • Condition when released • Tag recovery information • Tag release information			**Further work required – refer to IWG-ROP workplan 2023-2025 priority task 1b.** Additionally in respect of shark data fields the IWG-ROP will also need to take into consideration that TCC19 highlighted there were interpretation issues related to CMM 2019-04 paragraph 9, and specifically around rules and monitoring for any alternative measures to fins naturally attached.
INTERACTION WITH VESSEL OR GEAR ONLY			
• **Data Fields in this section** Vessel's activity during interaction • Condition observed at start of interaction • Condition observed at end of interaction • Description of interaction • Number of animals sighted			**Further work required – refer to IWG-ROP workplan 2023-2025 priority task 1b.** Additionally in respect of shark data fields the IWG-ROP will also need to take into consideration that TCC19 highlighted there were interpretation issues related to CMM 2019-04 paragraph 9, and specifically around alternative measures to fins naturally attached.

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
VESSELS & AIRCRAFT SIGHTINGS			
VESSELS & AIRCRAFT SIGHTINGS			
• All MSDF in this section are retained. • UTC. Date & Time of sighting • Observers Vessel Latitude and Longitude position • Where possible sighted vessel or aircraft Name • Where possible sighted vessel or aircraft call-sign • Flag of sighted vessel if possible • Other vessel markings • Type of Vessel (i.e. Purse-seine - Long line, etc.) • Compass bearing from observers vessels to sighted vessel • Estimated distance from observers vessels to sighted vessel • Activity of sighted vessel i.e., Fishing, Drifting, Steaming etc.			**Retain - No suggested changes.**

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
OBSERVER TRIP MONITORING SUMMARY			
Data Fields in this section Vessel trip summary Code indications (ie SPC/FFA GEN 3 codes)		PNA comment: Much of the vessel trip monitoring summary data are not useful for the purpose of the CCFS. Only RS-a to RS-d, WC-c, PN-a, and perhaps LC-a to LC-f are sufficiently useful for the CCFS. All other vessel trip data in this form is not relevant towards the CCFS purposes. But this not relevant data are useful and can be used to inform the effectiveness and review of certain CMMs implementation	**Further work required – refer to IWG-ROP workplan 2023-2025 priority task 1a.** PNA provided some suggestions on this area
PNA suggested alternative fields to be added • A new check box beside the page no. column to indicate that the checked Y by observers on the form has been verified. • Whether the report has been debriefed; • A summary text box option for the debriefer to provide	Comment: the checkbox will confirm the conclusion that either it was a false positive/ or is a case where compliance actions need to be considered. In doing so, it will provide a level of certainty of whether a case needs to be on the CCFS. The purpose of these fields is so that the debriefer can indicate that the trip data is being reviewed or cleared for CCFS use. If the provided		

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
comments	comments suggest for compliance actions, then that will be taken note of and enter into the CCFS. But if it indicates that the data is cleared with no further consideration, that comments need to be taken note of and not entered in the CCFS.		

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
FAD Data Fields			
Data Fields			**Further work required – refer to IWG-ROP workplan 2023-2025 priority task 1b.** Additionally in respect of FAD data fields the IWG-ROP will also need to take into consideration the outcome of discussions on the Chairs Consultative Draft for CMM 2022-01, and work being undertaken by FAD Management Options IWG.

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
Minimum Data Fields for Observer Transhipment Monitoring - 2023			

CURRENT FIELD	HOW COLLECTED **	RATIONALE FOR REMOVAL	ALTERNATIVE AND/OR COMMENT
Data Fields			**Further work required – refer to IWG-ROP workplan 2023-2025 priority task 1c and 1e.** Additionally, the IWG-ROP will also need to take into consideration the outcome of the Transhipment IWG.

Proposed changes to MSDF considering SC20 and TCC20 discussions for discussion with the ROP-IWG in 2025

LEGEND TO TABLE COLOUR CODING:				
New Fields	Fields with changes	Fields to be removed	Fields no change	Fields to be collected by other means

CURRENT FIELD	HOW USUALLY COLLECTED **	RATIONALE FOR REMOVAL OR RETENTION	ALTERNATIVE AND/OR COMMENT	Possible Other Source for Data Field
GENERAL VESSEL AND TRIP INFORMATION FOR ALL VESSEL TYPES				
VESSEL IDENTIFICATION				
Name of Vessel	Observer checks when boarding	This information is available and collected in the RFV	ER Field collected by Observer Create link to RFV use this field as means to help populate the observer data collection.	EM Field collected by Analyst
Flag State Registration Number	**Observer asks to check vessel documentation.**	**This information is available and collected in the RFV**	**Create link to RFV to get this field** **ER Field collected by Data base link.**	Create link to RFV to get this field EM Field collected by Data base link.

International Radio Call Sign	Observers check call signs painted on the vessel to ensure they are correct size	This information is available and collected in the RFV	ER Field to be collected by observer	EM Field collected by Analyst using the RFV.
Vessel Owner/Company	**Observer asks to check vessel documentation**	**This information is available and collected in the RFV**	**Create link to RFV to get this field** **ER Field collected by Data base link**	EM Field collected by Data base link
Hull markings Consistent with CMM 2004-03	Observers check the markings to ensure they meet the required Commission Standards indicated in CMM 2004-03	Observer checks when on board	ER Field to be collected by observer,	Depends on Camera Placement
WCPFC Identification number" WIN	**Observer checks markings on vessel plus documentation.**	**This information is available and collected in the RFV.**	**ER Field collected by Data base link**	EM Field collected by Data base link
WIN format for markings consistent with CMM 2004-03	**Observer checks markings on vessel hull**	**This information is available and collected in the RFV**	**ER Field collected by Data base link**	EM Field collected by Data base link
International Maritime Organization 'IMO' or Lloyd's Register number 'LR"	**Observer asks to check vessel documentation**	**This information is available and collected in the RFV**	**ER Field collected by Data base link and observer checks documentation**	EM Field collected by Data base link

WCPFC RFV VID **New Field**		**Using a vessel identifier field ("VID") removes the redundancy of including all vessel attributes with each trip record and ensures standardisation and consistency through referencing the main Vessel Registry database.**	**ER Field collected by Data base link**	**EM Field collected by Data base link**

CURRENT FIELD	HOW USUALLY COLLECTED **	RATIONALE FOR REMOVAL OR RETENTION	ALTERNATIVE AND/OR COMMENT	Possible Other Source for Data Field
VESSEL TRIP INFORMATION				
Date and time of departure from Port	Observer Collects information when on board	Retain no suggested changes	ER Field to be collected by observer,	EM Field collected by Analyst
Port of departure	Observer Collects information when on board	Retain no suggested changes	ER Field to be collected by observer,	EM Field collected by Analyst
Date and time of return to port	Observer Collects information when on board	Retain no suggested changes	ER Field to be collected by observer,	EM Field collected by Analyst
Port of return	Observer Collects information when on board	Retain no suggested changes	ER Field to be collected by observer,	EM Field collected by Analyst
OBSERVER INFORMATION				
Observer name	Observer information	Retain no suggested changes	ER Field to be collected by observer	Analysts Name
Nationality of observer	Observer information	Retain no suggested changes	ER Field to be collected by observer	Analyst
Observer provider country and or organization	Observer information	Retain no suggested changes	ER Field to be collected by observer	Analyst

• **Date** • **Time** • **Location of embarkation if in Port** • **Latitude and Longitude at Trip Start at sea.**	Observer collects information	Retain no suggested changes	ER Fields to be collected by observer	Analysts start time
• **Date** • **Time** • **Location of disembarkation if in Port** • **Latitude and Longitude at Trip Finish at sea.**	Observer collects information	Retain no suggested changes	ER Field to be collected by observer	Analyst finish time
CREW INFORMATION				
Name of captain	Observer can get this from crew list as well as being introduced normally in a briefing before the trip	Retain no suggested changes	ER Field to be collected by observer	Analyst needs confirmation with the viewing Video
Nationality of captain	Crew list	Retain no suggested changes	ER Field to be collected by observer	Analyst needs confirmation with the viewing Video (Video source)
Identification document	**Crew list sometimes indicates, or observer has to ask to see documentation of citizenship.**	**Drop this field**	**No collection required**	**Not Required**
Name of fishing master	Crew List or by introduction	Retain no suggested changes	ER Field to be collected by observer	Analyst needs confirmation with the viewing Video

Nationality of fishing master	Crew list	Retain no suggested changes	ER Field to be collected by observer	Analyst needs confirmation with the viewing Video
Identification document	**Crew list sometimes indicates, or observer has to ask to see documentation of citizenship.**	**Drop this field**	**No collection required**	**Not required**
Other Crew	Crew list	Retain no suggested changes	ER Field to be collected by observer	Analyst can get information with the viewing video
Total number of crew	Crew List	Retain no suggested changes	ER Field to be collected by observer	Analyst can get information with the viewing Hard drive/video
VESSEL ATTRIBUTES				
Vessel cruising speed	Determined by observer after being on board for a few days or can ask Captain.	Retain no suggested changes	ER Field to be collected by observer- If required VMS Tracking can show speeds more accurately	Not able to be determined other than by using VMS
Vessel fish hold capacity	**This is in the RFV and ER links can be used if needed. - Noting that the RFV records Cubic Metres whereas Observers have been collecting information in metric tonnes since 1994. As One Cubic Metre, equals One Metric Tonne. therefore, figures are the same.**	**Field no longer required to be collected by observers**	**RFV has this information in Cubic meters. And can be accessed if needed**	Information from RFV if required

Freezer type	Observer determines from a drop-down list with different freezer methods and types	Retain no suggested changes	ER Field to be collected by observer using drop down list	Not able to be determined Information from RFV if required
Length (specify unit)	This should be in RFV as a mandatory field	**Field no longer required to be collected by observers**	This field could be linked to ER via RFV if needed	Information from RFV if required
Tonnage (specify unit)	This should be in RFV as a mandatory field	**Field no longer required to be collected by observers**	This filed could be linked to ER via RFV if needed	Information from RFV if required
Engine power (Specify unit	This should be in RFV as a mandatory field	**Field no longer required to be collected by observers**	This filed could be linked to ER via RFV if needed	Information from RFV if required
VESSEL ELECTRONICS				
Radars	**Observer collects information on make and Model**	**Field no longer required to be collected by observers**	**No collection required**	**Not able to be determined**
Depth Sounder	Observer collects information if on board (yes no)	Retain no suggested changes	ER Field to be collected by observer	Not able to be determined
Global Positioning System (GPS)	**Observer collects information if on board (yes no)**	**Field no longer required to be collected by observers**	**No collection required**	**Not able to be determined**
Track Plotter	**Observer collects information if on board (yes no)**	**Field no longer required to be collected by observers**	**No collection required**	**Not able to be determined**
Weather Facsimile	**Observer collects information if on board (yes no)**	**Field no longer required to be collected by observers**	**No collection required**	**Not able to be determined**
Sea Surface Temperature (SST) gauge	**Observer collects information if on board (yes no)**	**Field no longer required to be collected by observers**	**No collection required**	**Not able to be determined**

Sonar	Observer collects information on make and Model	Retain no suggested changes	ER Field to be collected by observer	Not able to be determined
Radio/ Satellite Buoys	Observer collects information on Make and Model including number on board	Retain no suggested changes	ER Field to be collected by observer	Can be seen by cameras during Set.
Doppler Current Meter	Observer collects information on make and Model	Retain no suggested changes	ER Field to be collected by observer	Not able to be determined
Expendable Bathythermograph (XBT)	Observer collects information on make and Model maybe used in long line fishery	Retain no suggested changes	ER Field to be collected by observer	Could be seen by cameras during Set
Satellite Communications Services (Phone/Fax/Email numbers)	**Observer collects information on available communications on board. With Wi-Fi this could be expanded with drop down list**	**Retain suggested changes**	**Communications information should be collected at placement for safety reasons, and ER Field to be collected by observer**	Not able to be determined

• **Fishery information services May include-:** • **Weather reports** • **sea surface and sub surface temperatures** • **plankton concentrations** • **currents** • **salinity** • **thermocline depth estimates** • **productive fishing grounds** • **Red tide outbreaks (algae blooms)** • **Dissolved oxygen percentiles.**	**Observer collects information from vessel**	**Retain - however increase the field with a dropdown list of different services a vessel may receive.**	**ER Field to be collected by observer using drop down list of services used by the vessel.**	Not able to be determined
Vessel Monitoring System	Observer collects information on Make and Model	Retain no suggested changes	ER Field to be collected by observer	Not able to be determined can use VMS information if required
Other Electronic Equipment	Observer collects information on Make and Model of anything that is new or different	Retain no suggested changes.	ER Field to be collected by observer	Not able to be determined although cameras may pick up some information.

LONG LINE INFORMATION				
VESSEL ATTRIBUTES				
Refrigeration Method	Observer collects information of types of refrigeration	Retain suggested changes.	ER Field to be collected by observer using drop down list of refrigeration types.	Not able to be determined although cameras may pick up some information.
Mainline material	Observer collects information	Retain suggested changes	ER Field to be collected by observer using drop down list of mainline materials.	Not able to be determined although cameras may pick up some information.
Mainline length	**Observer collects information from Captain or Deck Boss**	**Retain suggested changes**	**This could be better worked out by following VMS tracks along with observers' Lat and long for start and finish of the set. Using a known Lat and long for start and end of set on a VMS tracks will estimate closely the actual distances travelled along a VMS line between the two Lat and longs recorded. This could be worked out whether the set is straight or any other shape.**	Not able to be determined. But can use VMS tracking if required.

Mainline diameter	Observer collects information	Retain suggested changes	ER Field to be collected by observer using drop down list of diameters	Not able to be determined although cameras may pick up some information
Branch line material(s)	Observer collects information	Retain suggested changes	ER Field to be collected by observer using drop down list of materials used in Branch lines	Not able to be determined although cameras may pick up some information
LONG LINE SPECIAL GEAR ATTRIBUTES				
Wire trace	Observer collects information	Retain suggested changes	ER Field could indicate amount of wire traces used in a basket/set 100% Percentage ___ None	Can be seen by cameras during Set
Mainline hauler	**Observer collects Yes, No information**	**Field no longer required to be collected by observers**	**No collection required**	Can be seen by cameras during hauling
Branch line hauler	**Observer collects Yes, No information**	**Field no longer required to be collected by observers**	**No collection required**	Can be seen by cameras during hauling
Line shooter	Observer collects Yes, No information	Retain no suggested changes	Record speed when setting	Can be seen by cameras during Set
Automatic bait thrower	Observer collects Yes, No information	Retain no suggested changes	ER Field to be collected by observer	Can be seen by cameras during Set

Automatic branch line attached	Observer collects Yes, No information	Retain no suggested changes	ER Field to be collected by observer	Can be seen by cameras during Set
Hook type	Observer collects types of hooks used	Retain no suggested changes	ER Field to be collected by observer	Can be seen by cameras during Set
Hook size	Observer collects size of hooks used	Retain no suggested changes	ER Field to be collected by observer	Could be estimated during set by cameras
New Fields **Hook Shielding Devices Used** **Yes 100%** ☐ **Yes Mixed** ☐ **Percentage** ☐ **No** ☐	**Record at Set Level whether the vessel uses Hook Shielding Devices** **If Yes** • **Record if all lines have Hook shielding devices used** • **Record if a mixture of Hook shielding devices are used** • **If they are mixed estimate the percentage used.** **No Hook Shielding Devices are not used.**	**New Fields to be collected**	**ER can record this in a several ways either by the suggested fields in the 1st column or by creating a drop-down list for hook shielding devices with several connotations.**	
Tori Line Yes No	Observer collects information on whether the vessel is using a Tori Pole or not	Retain no suggested changes	ER Field to be collected by observer noting that if yes is answered additional information will be required as below	Can be seen by cameras during Set

Length of Tori Line/s	**Observer measure or if not possible, estimate length of line**	**New Fields to be collected**	**ER can record this in several ways by using a drop-down list with the below information**	Can be seen by cameras during Set
Streamers on Tori lines **Tori Line 1 2** **Short .5 -1 metres** ☐ ☐ **Long 1 plus metres** ☐ ☐ **Height of Tori Pole1** **Height of Tori Pole2** **End point from sea level**	**Observer collects following information at first set.** • **Number of Tori poles/lines used** • **length of Tori Pole** • **Tori Pole end point height from sea level** • **How many long Streamers longer than 1 metre used** • **How many short streamers, less than 1 metre used** • **First Streamer distant from tori line attachment to pole.** • **Distant apart from first streamer to rest of streamers down the line.**	**New Fields to be collected**	**ER can record this by using a drop-down list with information. Contained in column 2**	Some information Could be seen by cameras during Set
	• **Last Streamer distance from end of line** • **Total area of Extent during setting**			

Night Setting Yes No **Time of Nautical Dawn/Dusk**	**Night setting may be totally at night; however, it usually includes periods after dawn or before dusk so nautical dawn, or dusk should be indicated and the lat and long recorded in the setting information** **Nautical Time to be in UTC**	**New Fields to be collected**	**ER can record timing in UTC and lat and long recorded however that means observer hav to observe totally all settings up to the point of record to ensure they get the info correct. However, by using an electronic nautical dawn dusk calculator for the pacific region time zones installed on the ER devices the timing could be recorded. And the lat and long recorded for that time along the VMS track.**	**Information if required can be sourced from nautical dawn dusk calculator and VMS**
Side setting with Bird Curtain *and weighted branch lines*	. Observer collects information	Retain no suggested changes	ER Field to be collected by observer	cameras may pick up some information

Weighted branch lines-	**At the trip level observer records whether the vessel uses weighted branch lines (Yes or No).** **If yes, the mass of the weights is recorded** **If more than one type of weighting is used during a trip, observers describe each type and indicate the proportion based on a sample of ten baskets from different sets.**	**Retain with suggested changes**	**Change the collection of weighted branch lines to set level from trip level** **Mass of Weight/s Used** ☐ **Distance between weight and hook (in metres),** ☐ **YES 100% of Lines** ☐ **YES, Mixed Lines** ☐ **Percentage** ☐ **NO weights used** ☐	cameras may pick up some information during set
Blue dyed bait	Observer collects information	Retain no suggested changes	ER Field to be collected by observer	cameras may pick up some info during Set
Deep setting line shooter yes no	Observer collects information	Retain but with suggested changes **Add Make and Model**	ER Field to be collected by observer	cameras may pick up some info during Set
Management off offal discharge Yes /No **Strategic offal disposal**	Observer collects information	Retain with suggested changes	ER Field to be collected by observer offal discharge /disposal could have a dropdown that includes different types of discharges and include Strategic discharging.	cameras may pick up some information during hauling
LONGLINE SET INFORMATION				

Date and time of start of set	Observer collects information	Retain no suggested changes	ER Field to be collected by observer	Recorded by analyst
Latitude and Longitude of start of set	Observer collects information	Retain no suggested changes	ER Field to be collected by observer	Recorded by analyst
Night Setting Yes No **Time of Nautical Dawn/Dusk**	**Night setting may be totally at night; however, it usually includes periods after dawn or before dusk so nautical dawn, or dusk should be indicated and the lat and long recorded in the setting information.** **Nautical Time to be recorded in UTC**	**New Fields to be collected**	**ER can record timing in UTC and lat and long recorded however that means observer must observe totally all settings up to the point of recording dawn or dusk to ensure they get the info correct.** **However, by using an electronic nautical dawn dusk calculator for the pacific region time zones installed on the ER devices the timing could be recorded for that date. And the lat and long recorded in UTC for that time along the VMS track.**	**Information if required can be sourced from nautical dawn dusk calculator and VMS**
Date and Time of end of set	Observer collects information	Retain no suggested changes	ER Field to be collected by observer	Recorded by analyst
Latitude and Longitude of end of set	Observer collects information	Retain no suggested changes	ER Field to be collected by observer	Recorded by analyst
Total number of baskets or floats	Observer collects information	Retain no suggested changes	ER Field to be collected by observer	Camera can be used to count at set
Number of hooks per basket/ number of hooks between floats	Observer collects information	Retain no suggested changes	ER Field to be collected by observer	Camera can be used to count at set

Total number of hooks used in a set	Observer calculates information	Retain no suggested changes	ER Field to be collected by observer	Can be calculated by Analyst
Line shooter speed	Observer collects information	Retain no suggested changes	ER Field to be collected by observer	Camera may detect speed at set
Length of float-line	Observer collects information	Retain no suggested changes	ER Field to be collected by observer	Not able to be determined
Distance between branch-lines	Observer calculates information	Retain no suggested changes	ER Field to be collected by observer	Analyst can calculate if has line shooter speed
Length of branch-lines	Observer collects information	Retain no suggested changes	ER Field to be collected by observer	Not able to be determined
Time-depth recorders (TDRs)	Observer collects information	Retain no suggested changes	ER Field to be collected by observer	Camera may detect usage during set
Number of light-sticks	Observer collects information	Retain no suggested changes	ER Field to be collected by observer	Camera may detect usage during set
Target species	Observer collects information	Retain no suggested changes	ER Field to be collected by observer	Analyst will determine
Bait Species	Observer collects information	Retain no suggested changes	ER Fields to be collected by observer could use drop-down of FAO codes.	Camera may detect usage during set
Total weight of each species used for bait	**Observer collects information**	**Additional Field**	**ER Fields to be collected by observer could use drop-down**	Not able to be determined
Hook number indicated for attachment of bait species	**Observer collects information**	**Additional Field**	**ER Fields to be collected by observer could use drop-down**	Camera may detect usage during set
Date and time of start of haul	Observer collects information	Retain no suggested changes	ER Field to be collected by observer	Analyst will determine
Date and time of end of haul	Observer collects information	Retain no suggested changes	ER Field to be collected by observer	Analyst will determine

Total amount of baskets, floats monitored by observer in a single set	Observer collects information	Retain no suggested changes	ER Field to be collected by observer	Analyst can calculate
LONG LINE INFORMATION ON CATCH FOR EACH SET				
Hook number, between floats	Observer collects information	Retain no suggested changes	ER Field to be collected by observer	Analyst can calculate
Species code	Observer collects information using FAO codes	Retain no suggested changes	ER Field to be collected by observer	Analyst using FAO codes
Length of fish	Observer collects information measured in CM's	Retain no suggested changes	ER Field to be collected by observer	Estimations can be made by analysts
Length measurement code	Observer collects information using SPC Codes	Retain no suggested changes	ER Field to be collected by observer	Analyst using FAO code
Gender	Observer collects information using SPC Codes	Retain no suggested changes	ER Field to be collected by observer	Analyst using SPC codes
Condition when caught	Observer collects information using SPC Codes	Retain no suggested changes	ER Field to be collected by observer	Analyst using SPC codes
Fate	Observer collects information using SPC Codes	Retain no suggested changes	ER Field to be collected by observer	Analyst using SPC codes
Condition if released	Observer collects information using SPC Codes	Retain no suggested changes	ER Field to be collected by observer	Analyst using SPC codes
Tag recovery information	Observer collects information using SPC tag information	Retain no suggested changes	ER Field to be collected by observer	Analyst using SPC codes

PURSE SEINE INFORMATION AND DATA
VESSEL AND RELATED ATTRIBUTES

Number of onboard support vessels	Observer collects information	Retain no suggested changes	ER Fields to be collected by observer could use drop-down of vessel types	Cameras may detect
Aircraft type Make/Model,/Colour/Call-sign/Registration	Observer collects information if helicopter used or on board	Retain no suggested changes	ER Fields to be collected by observer could use drop-down with details	Cameras may detect
GEAR ATTRIBUTES				
Maximum depth of net	**Observer must ask for this information**	**Suggest removal and ask for this information to be included in vessel logs**	**No collection required**	No possible information
Maximum length of net	**Observer must ask for this information**	**Suggest removal and ask for this information to be included in vessel logs**	**No collection required**	No possible information
Net mesh size	**Observer can measure net mesh size**	**Suggest removal and ask for this information to be included in vessel logs**	**No collection required**	No possible information
• **Brailer capacity sizes** • **Brail counts for each set** • **Brail Amount each time brought on board in each set.**	Observers must get this for all brails on board to determine estimated catch. Observer can use volumetric calculations or just ask deck boss /bosun /captain for brail capacity	Retain suggested changes **Add data fields for number of brails bought on board during a set, plus amount in each brail when bought on board during a set**	ER Fields to be collected by observer	Analyst could determine with appropriate camera placement
INFORMATION ON DAILY ACTIVITIES				
Date and time of start of daily activities	Observers records ship time and UTC time when observation starts, then records all times in Ships time during that day.	Retain no suggested changes	ER Fields to be collected by observer	Analyst determines from known information

Time of activity	Observer determines using SPC Activity Codes	Retain no suggested changes	ER Fields to be collected by observer using drop down of all SPC activity codes.	Analyst determines from known information
Latitude and longitude of activity	Observer collects information	Retain no suggested changes	ER Fields to be collected by observer	Analyst determines from known information
Numbers of school sighted per day	How many free or associated schools of fish were sighted during the day? The vessel may not set on these because of size or amount in school.	Difficulties in collecting this info as observer would need to be on watch all day to record accurately. As it is observers generally only indicate what the vessel investigates	ER Fields to be collected by observer with knowledge that when searching observer may not be observing due to other activities.	Analyst may be able to determine with appropriate camera placement
PS SCHOOL INFORMATION				
Method of detection of school	Observer determines using SPC Codes	Retain no suggested changes	ER Fields to be collected by observer	Analyst may be able to determine with appropriate camera placement
Type Of School Association	Observer determines using SPC Codes	Retain no suggested changes	ER Fields to be collected by observer	Analyst may be able to determine with appropriate camera placement
PS SET INFORMATION				
Observer's record of date and time of start of set	Observer collects information	Retain no suggested changes	ER Fields to be collected by observer	Analyst to determine
Observers record of date and time of end of set	Observer collects information	Retain no suggested changes	ER Fields to be collected by observer	Analyst to determine

Vessel's record of date and time of start of set	Observer collects information from vessel log for same set.	Retain no suggested changes	ER Fields to be collected by observer	Analyst to determine if log info given with EM video
Retained catch, by species	Observer collects information using FAO Codes along with SPC retention codes.	Retain no suggested changes	ER Fields to be collected by observer Dropdown of common species also drop down of SPC retention codes.	Analyst to determine using FAO codes and SPC Codes
Discards, by species	Observer collects information using FAO species codes and SPC discard Codes	Retain no suggested changes	ER Fields to be collected by observer Dropdown of common species also drop down of SPC retention codes.	Analyst to determine using FAO codes and SPC Codes
Tag recovery information	Observer collects information	Retain no suggested changes	ER Fields to be collected by observer as guided.	Not possible to record information.
PS INFORMATION ON CATCH FOR EACH SET				
Species code	Observer collects information using FAO species codes and SPC fate codes and life status codes and gender codes where possible	Retain no suggested changes	ER Fields to be collected by observer Dropdown of common species also drop down of SPC codes.	Analyst to determine using FAO codes and SPC Codes
Length measurement code	Observer collects information using SPC measurement codes	Retain no suggested changes	ER Fields to be collected by observer drop down of SPC codes	Analyst to determine using SPC Codes
Length	Observer measures fish using CM's	Retain no suggested changes	ER Fields to be collected by observer	Analyst to estimate
POLE-AND-LINE INFORMATION AND DATA				

VESSEL ATTRIBUTES				
Vessel fish hold capacity	**This is in the RFV and ER links can be used if needed. - Noting that the RFV records Cubic Metres whereas Observers have been collecting information in metric tonnes since 1994. As One Cubic Metre, equals One Metric Tonne. therefore, figures are the same.**	**Field no longer required to be collected by observers**	**RFV has this information in Cubic meters. And can be accessed if needed**	Information from RFV if required
Automatic poling devices	Observer collects information	Retain no suggested changes	ER Fields to be collected by observer	Cameras may detect
Date and time of start of daily activities	Observer collects information	Retain no suggested changes	ER Fields to be collected by observer	Analyst to determine
Time of activity	Observer collects information	Retain no suggested changes	ER Fields to be collected by observer	Analyst to determine
Latitude and longitude of activity	Observer collects information	Retain no suggested changes	ER Fields to be collected by observer	Analyst to determine
Type of activity	Observer collects information using SPC Codes	Retain no suggested changes	ER Fields to be collected by observer Dropdown of SPC codes	Analyst to determine using SPC Codes
Numbers of school sighted per day	How many schools of fish were sighted during the day? The vessel may not set on these because of size or amount in school.	Difficulties in collecting this info as observer would need to be on watch all day to record accurately. As it is observers generally only indicate what the vessel investigates	ER Fields to be collected by observer with knowledge that when searching observer may not be observing due to other activities.	Difficult to Determine
BAITFISHING INFORMATION				

Bait species caught	Observer collects information using FAO Codes	Retain no suggested changes	ER Fields to be collected by observer Dropdown of common FAO codes	Analyst to determine using FAO Codes
Bait Species purchased	Observer collects information using FAO Codes	Retain no suggested changes	ER Fields to be collected by observer Dropdown of common FAO codes	Analyst to determine using FAO Codes
Estimated weight or quantity of bait caught or used	Observer collects information	Retain no suggested changes	ER Fields to be collected by observer	Analyst to determine
SCHOOL INFORMATION				
Method of detection of school	Observer collects information using SPC Detection Codes	Retain no suggested changes	ER Fields to be collected by observer can use dropdown of SPC Codes	Analyst may be able to determine with appropriate camera placement
Type of school association	Observer collects information using SPC Association Codes	Retain no suggested changes	ER Fields to be collected by observer can use dropdown of SPC Codes	Analyst may be able to determine with appropriate camera placement
INFORMATION ON CATCH PER SCHOOL FISHED				
Number of crew poling	Observer collects information	Retain no suggested changes	ER Fields to be collected by observer	Analyst may be able to determine with appropriate camera placement
Time of start of spraying,	Observer collects information	Retain no suggested changes	ER Fields to be collected by observer	Analyst may be able to determine with appropriate camera placement
Chumming and poling	Observer collects information	Retain no suggested changes	ER Fields to be collected by observer	Analyst may be able to determine with appropriate camera placement

Time of end of spraying, chumming and poling	Observer collects information	Retain no suggested changes	ER Fields to be collected by observer	Analyst may be able to determine with appropriate camera placement
Retained catch, by species	Observer collects information using FAO Codes	Retain no suggested changes	ER Fields to be collected by observer can use dropdown of common Species	Analyst may be able to determine with appropriate camera placement
Discards, by species	Observer collects information using FAO Codes	Retain no suggested changes	ER Fields to be collected by observer can use dropdown of common Species	Analyst may be able to determine with appropriate camera placement
Tag recovery information	Observer collects information	Retain no suggested changes	ER Fields to be collected by observer	Analyst may be able to determine with appropriate camera placement
Species code	Observer collects information using FAO Codes	Retain no suggested changes	ER Fields to be collected by observer can use dropdown of common Species	Analyst may be able to determine with appropriate camera placement
Length measurement code	Observer collects information using SPC Codes	Retain no suggested changes	ER Fields to be collected by observer can use dropdown of SPC Codes	Analyst can collect using SPC codes
Length	Observer collects information in CM's	Retain no suggested changes	ER Fields to be collected by observer	Analyst may be able to determine
SPECIES OF SPECIAL INTEREST **Marine Reptiles, Marine Mammals, Sea Birds, Designated Shark Species**				
GENERAL INFORMATION				

Type of interaction	Observer collects information using SPC Codes	Retain no suggested changes	ER Fields to be collected by observer can use dropdown of SPC Codes	Analyst can collect using SPC codes
Date and time of interaction	Observer collects information	Retain no suggested changes	ER Fields to be collected by observer	Analyst may be able to determine
Time of SSI first sighting with time recorded before or after Set time	**The observer collects timing information and whether there was an intentional set on an SSI or unintentional set on SSI. Additional information required if sighting was observed before the vessel starts their set.**	**Additional Field**	**ER Fields to be collected by observer**	**Analyst may be able to determine with camera placement**
Latitude and longitude of interaction	Observer collects information	Retain no suggested changes	ER Fields to be collected by observer	Analyst may be able to determine
Species code of marine reptile, marine mammal, or seabird.	Observer collects information using FAO Codes to species level if possible	Retain no suggested changes	ER Fields to be collected by observer can use dropdown of FAO Codes to species level	Analyst can collect using FAO codes
LANDED ON DECK				
Length	Observer collects information using CM's	Retain no suggested change	ER Fields to be collected by observer	Analyst may be able to determine
Length measurement code	Observer collects information using SPC Codes	Retain no suggested change	ER Fields to be collected by observer can use dropdown of SPC Codes	Analyst may be able to determine using SPC Codes

Gender	Observer collects information using SPC Codes	Retain no suggested change	ER Fields to be collected by observer can use dropdown of SPC Codes	Analyst may be able to determine using SPC Codes
Estimated shark fin weight by species	**Observer collects information**	**Observer only collects if fins removed from carcass**	**ER Fields to be collected by observer**	**Unable to determine weight but can report if Finned**
Estimated shark carcass weight by species	Observer collects information	Carcass weight include fins if attached	ER Fields to be collected by observer	Unable to determine weight but can report if retained
Condition when landed on Deck	Observer collects information using SPC Codes	Retain no suggested change	ER Fields to be collected by observer can use dropdown of SPC Codes	Analyst may be able to determine using SPC Codes
Condition when released	Observer collects information using SPC Codes	Retain no suggested change	ER Fields to be collected by observer can use dropdown of SPC Codes	Analyst may be able to determine using SPC Codes
Length of line on released live animal. (long line caught)	**New Field Observer collects if able measurement in Metres/Centimetres**	**Additional Field**	**ER Fields to be collected by observer**	**Analyst may be able to determine with camera placement**
Tag recovery information	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Unable to determine info but may report tag capture
Tag release information	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Unable to determine info but may report tag release
INTERACTION WITH VESSEL OR GEAR ONLY				

Vessel's activity during interaction	Observer collects information using SPC Codes	Retain no suggested change	ER Fields to be collected by observer	Analyst may be able to determine with camera placement
Condition observed at start of interaction	Observer collects information using SPC Codes	Retain no suggested change	ER Fields to be collected by observer	Analyst may be able to determine with camera placement
Condition observed at end of interaction	Observer collects information using SPC Codes	Retain no suggested change	ER Fields to be collected by observer	Analyst may be able to determine with camera placement
Description of interaction	Observer collects information using SPC Codes	Retain no suggested change	ER Fields to be collected by observer	Analyst may be able to determine with camera placement
OBSERVER TRIP MONITORING SUMMARY				
VESSEL TRIP SUMMARY				
UTC. Date & Time of sighting	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Unable to determine
Observers Vessel Latitude and Longitude position	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Unable to determine
Where possible sighted vessel or aircraft name	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Unable to determine
Where possible sighted vessel or aircraft call-sign	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Unable to determine
Flag of sighted vessel if possible	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Unable to determine

Other vessel markings	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Unable to determine
Type of Vessel (i.e. Purse-seine - Long line, etc.)	Observer collects information using SPC Vessel Codes	Retain no suggested change	ER Fields to be collected by observer	Unable to determine
Compass bearing from observers' vessels to sighted vessel	Observer collects information in compass degrees	Retain no suggested change	ER Fields to be collected by observer	Unable to determine
Estimated distance from observers' vessels to sighted vessel	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Unable to determine
Activity of sighted vessel i.e., Fishing, Drifting, Steaming etc.	Observer collects information using SPC Codes	Retain no suggested change	ER Fields to be collected by observer	Unable to determine
Comments-.	Observer collects information and indicate if photos taken.	Retain no suggested change	ER Fields to be collected by observer	Unable to determine

The trip monitoring Summary needs to be totally revamped so that the elements that may require further CCFS analysis are separated from the general management and reporting matters, the following is the current format with comments that may assist in future determinations for these monitoring fields noting that this area needs to be discussed separately.

Suggestions have been made and should be considered to add a checkbox beside the 'Y' if ticked by the observer so that it can be verified by the debriefer, to determine whether there is further action required for CCFS purposes. If it isn't ticked it would be treated as a false positive and not require further action but could still be noted but not entered in the CCFS.

OBSERVER TRIP MONITORING SUMMARY				
VESSEL TRIP SUMMARY				
Observer name & nationality:	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	
Observer Trip number:	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	
Observer Provider/Programme:	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	

Name of Vessel:	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	
Vessel Call sign:	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	
Vessel Gear Type:	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	
Coastal state license, when applicable:	Observer collects information from vessel documentation	Retain no suggested change	ER Fields to be collected by observer	Unable to determine
Vessel certificate of registration:	**Observer asks to check vessel documentation.**	**Create link to RFV to get this field**	**Create link to RFV to get this field**	
WCPFC Authorisation:	**Observer asks to check vessel documentation**	**Create link to RFV to get this field**	**Create link to RFV to get this field**	
Nationality of any boarding vessel *** note this field is only to be used when a boarding is made by an Inspection vessel**	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst may be able to determine with camera placement
Observer Start date of Trip	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	
Observer End date of Trip	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	
Status of Observer Debriefing	Observer collects information	Retain no suggested change	ER Fields to be collected by observer using Debriefed Not Debriefed Pre Debriefed	Unable to determine
Summary Text Box for debriefer to make comment on a 'Y' ticked by the observer	**Debriefer verifies if Y is false positive or requires further CCFS input**	**Additional field for debriefer to fill**	**ER Fields to be entered by debriefer.**	Unable to determine

Did the vessel do any of the following: indicate YES or NO; for any YES response, please provide additional explanation and information)				
inaccurately record vessel positions on vessel log sheet for sets, hauling and catch; (Yes No)	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst can check against vessel logs if available
inaccurately record retained 'Target Species' in the vessel logs; (Yes No)	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst can check against vessel logs if available
inaccurately record 'Target Species' discards; (Yes No)	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst can check against vessel logs if available
inaccurately record retained By catch species (Yes No)	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst can check against vessel logs if available
inaccurately record By catch species discards; (Yes No)	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst can check against vessel logs if available
record species inaccurately (Yes No)	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst can check against vessel logs if available
interact with ~~non-target~~ SSI species: (Yes No)	**Observer collects information**	**Retain with suggested change**	**ER Fields to be collected by observer**	Analyst may be able to determine with camera placement
high grade the catch; (Yes No)	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst may be able to determine with camera placement
fail to comply with any Commission Conservation and Management measure; (Yes No)	**Observer collects information on what they think**	**Remove as observers cannot determine this accurately as observer need to know fully all**	**If observer thinks there is a CMM problem they could still report this in their written reports**	**Unable to determine**

		CMMS and their requirments.		
fish in areas where it is not permitted to fish; (Yes No)	**Observer would need to know all areas where vessel is not permitted to fish**	**Remove as observers cannot determine this accurately as observer need to know fully all area closures of each country**	**If observer thinks there is a problem with fishing in closed area, they could report this in their reports**	Unable to determine
fail to report vessel position to countries, where required, when entering and leaving an EEZ (crossing to or from an EEZ into or out of the High Seas (Yes No)	**Observer has no way of determining if this has happened correctly unless message is shown to observer.**	**Remove as observers cannot determine when a vessel crosses boundaries.**	**VMS should be used to determine when crossing occurs and countries can check if ZENT or ZEXIT have been sent**	Unable to determine
transfer or tranship fish from, or to, another vessel (Yes No)	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst may be able to determine with camera placement
request that an event not be reported by the observer; (Yes No)	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	N/A
Did the operator or any crew assault, obstruct, resist, delay, refuse boarding to, intimidate or interfere with observers in the performance of their duties (Yes No)	Observer collects information	Retain with suggested change	**ER Fields to be collected by observer However dropdown of different scenarios is recommended so observer can indicate exact problem.**	N/A
Did the operator fail to provide the observer, while on board the vessel, at no expense to the observer or the observer's government,	Observer collects information	Retain with suggested change	**ER Fields to be collected by observer However dropdown of different scenarios is recommended**	N/A

with food, accommodation and medical facilities of a reasonable standard equivalent to those normally available and medical facilities of a reasonable standard equivalent to those normally available to an officer on board the vessel .(Yes No)			**so observer can indicate exact problem**	
Mistreat Crew	**New Field for the MSDF although already collected on the SPC Gen-3 forms**	**Additional Field**	**ER Fields to be collected by observer**	Analyst may be able to determine with camera placement
use a fishing method other than the method the vessel was designed or licensed; (Yes No)	Observer collects information	Retain no suggested change	**ER Fields to be collected by observer However dropdown of different methods is recommended so observer can indicate methods used**	Analyst may be able to determine with camera placement
lose any fishing gear; (Yes No)	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst may be able to determine with camera placement
abandon any gear; (Yes No)	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst may be able to determine with camera placement
fail to report any abandoned gear; (Yes No)	Observer must ask for a copy of the report to know if it was reported.	**Retain but definition of abandoned gear is required and**	**ER Fields to be collected by observer However dropdown of different gear for each vessel type is**	Unable to determine

		knowledge of who it must be reported to.	**recommended so observer can indicate what was abandoned**	
dispose of any metals, plastics, old fishing gear or chemicals;(Yes No)	Observer collects information	Retain no suggested change	**ER Fields to be collected by observer However dropdown of different items is recommended so observer can indicate what was discarded or discharged**	Analyst may be able to determine with camera placement
discharge any oil; (Yes No)	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst may be able to determine with camera placement
fail to monitor international safety frequencies; (Yes No)	Observer collects information but needs access to radios	Retain no suggested change	ER Fields to be collected by observer	Unable to determine
fail to stow fishing gear when entering areas where they were not authorized to fish; (Yes No)	Observer collects information	Retain no suggested change	ER Fields to be collected by observer could include dropdown of closed areas i.e Territorial Seas, etc	Unable to determine
MSDF FAD DATA FIELDS ARE INDICATED BELOW, BUT WORK WITH THE FAD IWG NEEDS TO BE INCORPORATED WHEN OUTCOMES ARE DETERMINED.				
FAD DATA Fields				
Name of Observer	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst name
Vessel Name	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst
Vessel IRCS	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst
Observer Trip Number	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst

Page Number	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst
Date FAD Sighted	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst
Time FAD Sighted	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst
Latitude of FAD	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst
Longitude of FAD	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst
FAD ANCHORED OR DRIFTING (circle "Y" for Anchored or "N" for Drifting	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst may be able to determine with camera placement
Materials FAD Is Made From	Observer collects information	Retain no suggested change	ER Fields to be collected by observer with dropdown list of Materials	Analyst may be able to determine with camera placement
FAD Attachments	Observer collects information	Retain no suggested change	ER Fields to be collected by observer with dropdown list of Materials	Analyst may be able to determine with camera placement
Electronics Associated with FAD	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst may be able to determine with camera placement
Origin of FAD	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Unable to determine
FAD Activity	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Unable to determine
Estimated Size of FAD	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst may be able to determine

				with camera placement
COMMENTS	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst
Depth of Netting and or other materials hanging from Floating Object (FAD	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Unable to determine
FAD Markings or numbers	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst may be able to determine with camera placement
Describe the "Floating Object" when first found by the vessel.	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst may be able to determine with camera placement
Describe any changes or additions to the 'Floating Object' when vessel departs.	Observer collects information	Retain no suggested change	ER Fields to be collected by observer	Analyst may be able to determine with camera placement