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3 – 7 December 2017

DRAFT STANDARDS FOR THE E-REPORTING OF OBSERVER DATA

WCPFC14 -2017-20_ rev1[1]
6 December 2017

Paper by the Secretariat and SPC-OFP

Purpose

1. This paper presents for WCPFC14's consideration and adoption the latest version of the draft standards for the E-reporting of observer data.

Background

2. At WCPFC13 the Commission adopted *the standards, specifications and procedures for Electronic Reporting, which presently include E-reporting standards for operational catch and effort data (*WCPFC13 Summary Report paragraph 584 and Attachment T). The Commission also agreed that the draft E-reporting standards for observer data should continue to be revised based on comments provided by CCMs in 2017.

3. It is intended that as additional E-reporting standards are adopted by the Commission, they would be incorporated as new attachments within the E-reporting standard, specifications and procedures. Appropriate amendments would subsequently be made to the cover document for the E-Reporting SSPs in WCPFC13 Summary Report Attachment T.

4. In response to a query at TCC13 it was also clarified that after adoption, improvements could continue to be made to the SSPs under appropriate WCPFC processes, including consideration of standards and codes that are consistent with those used in other international fora, such as the FAO and UN/CEFACT. At WCPFC14, this matter was also discussed.

Draft E-reporting standards for observer data

5. These standards were reviewed on several occasions by CCMs during 2016. In the lead-up to WCPFC13, only two CCMs indicated the observer data standards required further modification and these modifications were discussed and clarified in the fringes of

[1] Replaces original version issued on 22 November 2017

WCPFC13. Unfortunately, there was insufficient time during WCPFC13 to complete and review the latest version of the observer data standards which were finalised after WCPFC13.

6. During 2017, these standards were further reviewed on several occasions. The comments from CCMs were generally supportive, and TCC13 provided an opportunity for CCMs to submit additional comments. Both SC13 and TCC13 recommended that the latest draft version of the WCPFC E-Reporting observer data standards be forwarded to WCPFC14 for consideration by the Commission. The agreed outcome from SC13 and TCC13 are reproduced here for ease of reference:

"SC13 recommended that the latest draft version of the WCPFC E-Reporting observer data standards be forwarded to WCPFC14 for adoption."

"TCC13 recommended to WCPFC14 that the Commission consider the E-reporting standards for observer data. CCMs with additional comments were encouraged to provide them to SPC-OFP by 21 October 2017. SPC-OFP would revise the version in advance of WCPFC14, as needed. (TCC13, para 177)"

7. The latest version of the Electronic Reporting Standards for Observer Data is attached as **Attachment 1**. This version incorporates some modifications in response to additional comments received from the European Union, Japan and Chinese Taipei.

Recommendation

8. WCPFC14 is invited to consider and adopt the Electronic Reporting Standards for Observer Data.

Western and Central Pacific Fisheries Commission (WCPFC)

E-REPORTING STANDARD DATA FIELDS

OPERATIONAL OBSERVER DATA

CURRENT VERSION:	*2.8~~7~~0*
DATE:	*5th December 2017~~16th November 2017~~*
STATUS:	*Draft – yet to be approved*

Version Number	*Date Approved*	*Approved by*	*Brief Description*
2.80	*5th December 2017*	*TBA*	Text added to indicate that, until such time as the requirements of UN/CEFACT standards are incorporated into this document, these standards do not apply to the WCPFC ROP data collected by European Union (EU) observer programmes operating in the WCPFC Area, and that data from these observer programmes can be provided to the WCPFC in UN/CEFACT format.
2.70	*16th November 2017*	*TBA*	Addresses the updates requested by Japan and Chinese Taipei prior to the TCC13-recommended deadline of 21st October 2017, and include: – Clarification on requirements for Vessel Identifier. – Requirement related to Observer Name – Requirement related to Vessel Fish Hold capacity and Freezer type – Clarification on requirement for DISCARD for PS catch reporting – Embark Lat/Lon and Disembark Lat/Lon are not mandatory ROP data fields.
2.60	*December 2016*	*TBA*	The changes suggested by Japan and Chinese Taipei immediately before and during WCFPC13 (Thirteenth Regular Session of the Commission, December 2016, Nadi, Fiji), include: – Further modifications of the description of data fields to be consistent with the descriptions in the WCPFC ROP minimum data fields, where relevant, including. ○ Inclusion of IMO number as a required vessel attribute field ○ Clarification that Freezer type is included and reported each trip ○ Added a new field to align with WCPFC ROP standards for purse seine retained and discarded catch (instead of more detailed FATE code) – Clarified the inclusion of WCPFC ROP standard fields for Observer Trip Monitoring – Clarification and modifications to align the WCPFC ROP standard fields for FAD data fields
2.50	*November 2016*	*Ongoing update only*	The substantive changes suggested by several CCMs who reviewed the documents include: – Reference to WCPFC two-letter COUNTRY codes (web page yet to be developed) – Reference to WCPFC five-letter LOCATION codes (web page yet to be developed) – Clarified the benefits of using the Vessel identifier ("VID") only instead of including all vessel attributes which would be inefficient (see APPENDIX 4) – Clarified that the fields that are not *WCPFC Regional Observer Programme (ROP) minimum data fields* are classified in the WCPFC Field column with 'N'. – In general, modify the description of data fields to be consistent with the descriptions in the *WCPFC ROP minimum data fields*, where relevant.

			– Includes a contingency if the WCPFC LOCATION code for a port is not available. – Aligned Date/Time requirements to WCPFC ROP standards where relevant.
2.00	*July 2016*	*Ongoing update only – this version was reviewed but no opportunity to approve.*	– *Recommendations for update of WCFPC ROP data fields approved by WCPFC12, including* o *New codes for species interaction in longline (Table A32)* o *Several bird mitigation fields collected at the SET LEVEL* o *Offal management field collected at SET level* o *Enhanced Shark line information collected at SET level* o *Wire trace moved to TRIP level* o *Longline hook type information moved to SET level* – *Add fields for date-time and position for each catch event and each float retrieval which are automatically generated from EM systems*
1.00 (Draft)	*July 2015*	*WCPFC ERandEM meeting (Nadi, Fiji)*	*First version draft accepted by the meeting*

Suggestions for future versions
1. *Number each of the data fields in the WCPFC ROP minimum data fields so the same fields in this document can be referenced with the corresponding data-field number. This suggestion will be incorporated into this document when there is agreement to update the WCPFC ROP minimum data fields. This implementation will facilitate the cross-referencing between the required WCPFC fields and this document. In the longer term, the metadata database will further improve the referencing of these data fields.*

Contents

INTRODUCTION

These tables set out the proposed standards for the provision of operational OBSERVER data fields collected in the WCPFC tropical purse seine and the longline fisheries through E-Reporting. These tables provide the minimum requirements for data entities, data formats and data validation to be established for data submitted to the national and regional fisheries authorities from E-Reporting systems. The data fields contained herein are based on information collected under the current regional standard data collection forms. This document acknowledges that national fisheries authorities require certain data fields that are not mandatory *WCPFC ROP minimum data fields* (for example, for anticipated Catch Documentation System – CDS – requirements), so a column in these tables identifies whether the data field is a mandatory WCFPC data field[1] or not.

It is acknowledged that, until such time as the requirements of UN/CEFACT standards are incorporated into this document, the proposed standards laid out in this document do not apply to European Union (EU) observer programmes operating in the WCPFC Area and that E-Reported WCPFC ROP minimum data fields collected by these observer programmes can be provided to the WCPFC in UN/CEFACT format.

These E-Reporting data field standards are consistent with, and should be considered in conjunction with more detailed instructions[2] on how to collect observer data provided by fleets active in the WCPFC area.

These tables are intended for, *inter alia*, E-Reporting service providers who have been contracted to provide electronic systems to record OBSERVER data collected on-board purse seine vessels.

These tables may also be used to provide data that were not collected through E-Reporting.

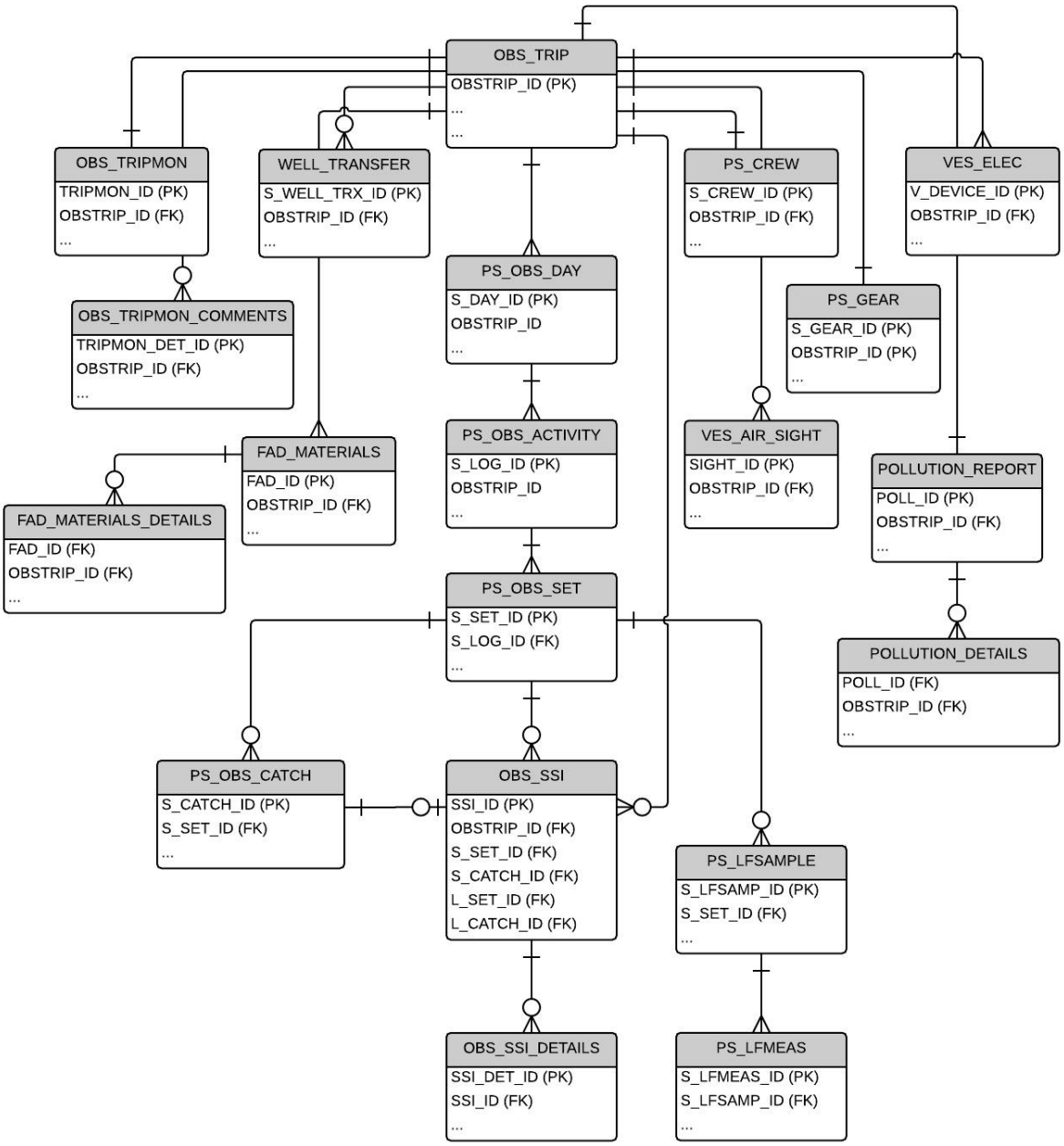
[1] The minimum standard WCPFC Regional Observer programme (ROP) data fields for purse seine data are found in the "WCPFC ROP Minimum Standard Data Fields & Instructions" http://www.wcpfc.int/doc/table-rop-data-fields-including-instructions

[2] In addition to the minimum WCPFC ROP data fields, instructions for observer data collection in the WCPFC Area are available with the regional standard observer data collection forms at http://www.spc.int/oceanfish/en/data-collection/241-data-collection-forms, general information/instruction for observers at http://www.spc.int/OceanFish/en/ofpsection/fisheries-monitoring/observers and http://www.spc.int/OceanFish/en/certification-and-training-standards.

1. PURSE SEINE OBSERVER E-REPORTING STANDARDS

1.1 DATA MODEL DIAGRAM

The following basic data model diagram outlines the structure of the entities and their relationships for purse seine operational OBSERVER data collected by E-Reporting systems. The tables that follow provide more information on the mechanisms of the links (relationships) between the entities.



1.2 TRIP-LEVEL DATA

OBS_TRIP[3]					
"The start of a trip is defined to occur when a vessel (a) leaves port after unloading part or all of the catch to transit to a fishing area or (b) recommences fishing operations or transits to a fishing area after transshipping part or all of the catch at sea (when this occurs in accordance with the terms and conditions of article 4 of Annex III of the Convention, subject to specific exemptions as per article 29 of the Convention)."					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD[4]**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
OBSPRG_CODE	OBSERVER SERVICE PROVIDERS identification– National or sub-regional observer programmes For national programmes, this is the COUNTRY_CODE + 'OB' for example, 'PGOB' – for the PNG national observer programme. For Sub-regional programmes, the following codes are used. 'TTOB' – US Multilateral Treaty Observer programme 'FAOB' – FSM Arrangement Observer Programme	Char (4)	Observer programme code must be must valid country. Refer to valid WCPFC alpha-2 two-letter Country Codes For example, refer to WCPFC codes web page[5]	<OBSPRG_CODE>	Y
OBS_NAME	Observer NAME.	VarChar (50)	For SPC/FFA member country observer providers, an observer code will also be used (see OBS_CODE) and must exist in the SPC/FFA regional Observer programme database. The unique 5-letter observer codes are generated and maintained by Regional agencies. For example, the unique 5-letter observer code for SPC/FFA country observers is maintained by SPC/FFA and used in the WCPFC observer database. It is recognised that some national observer programmes for domestic vessels	<OBS_NAME>	Y

[3] However, the definition of "start of an observer trip" requires some clarification within the WCPFC. For example, "start of (observer) trip" could be defined to occur when a vessel (a) leaves port with the observer or (b) receives the observer at the sea (after a transhipment, for example, which would designate the start of a new trip).

[4] Indicates whether it is a *WCPFC ROP minimum data field* or not.

[5] The WCPFC standard codes web page is yet to be implemented

OBS_TRIP[3]

"The start of a trip is defined to occur when a vessel (a) leaves port after unloading part or all of the catch to transit to a fishing area or (b) recommences fishing operations or transits to a fishing area after transshipping part or all of the catch at sea (when this occurs in accordance with the terms and conditions of article 4 of Annex III of the Convention, subject to specific exemptions as per article 29 of the Convention)."

FIELD	Data Collection Instructions	Field format notes	Notes	XML TAG	WCPFC FIELD[4]
			will provide their own observer codes which will then be translated into the regional agency observer code.		
OBS_CODE	An observer CODE will be provided in this field. In these cases, the code will be unique and link to a reference table which will include Observer Name, Nationality of observer, Observer provider, etc..	Char (5)	For SPC/FFA member country observer providers, an observer code will be used and must exist in the SPC/FFA regional Observer programme database. The unique 5-letter observer codes are generated and maintained by Regional agencies. For example, the unique 5-letter observer code for SPC/FFA country observers is maintained by SPC/FFA and used in the WCPFC observer database. It is recognised that some national observer programmes for domestic vessels will provide their own observer codes which will then be translated into the regional agency observer code.	<OBS_CODE>	N
TRIPNO	Unique TRIPNO for each observer in a given year (Regional Standard) Use the last two digits of the trip year followed by a dash and increment number for each trip in a year FOR THAT OBSERVER. YY-XX, for example, '14-01' would represent the first trip for an observer in the calendar year 2014	Char (5)	Must adhere to the regional standard	<TRIPNO>	N
TRIPNO_INTERNAL	TRIPNO as allocated and used by the respective Observer service provider. (If this system is different from the regional standard (e.g. the US PS MLT observer programme trip number uses the format '24LP/xxx')	VarChar (15)		<TRIPNO_INT>	N
DATE and TIME OF DEPARTURE from PORT	Depart DATE/TIME the vessel leaves a port to start its fishing campaign	REFER TO APPENDIX A1	Data should be reported in UTC DATE/TIME.	<DATE_DEP_PORT>	Y
DATE and TIME OF EMBARKATION	DATE/TIME the observer leaves the port (departs or embarks) to start their observer trip. If embarking at sea, this will be different from the DATE/TIME of Vessel departure from port.	REFER TO APPENDIX A1	Data should be reported in UTC DATE/TIME.	<DATE_EMBARK>	Y

OBS_TRIP[3]

"The start of a trip is defined to occur when a vessel (a) leaves port after unloading part or all of the catch to transit to a fishing area or (b) recommences fishing operations or transits to a fishing area after transshipping part or all of the catch at sea (when this occurs in accordance with the terms and conditions of article 4 of Annex III of the Convention, subject to specific exemptions as per article 29 of the Convention)."

FIELD	Data Collection Instructions	Field format notes	Notes	XML TAG	WCPFC FIELD[4]
DATE AND TIME OF RETURN IN PORT	DATE/TIME for the vessel to return to port	REFER TO APPENDIX A1	Data should be reported in UTC DATE/TIME.	<RET_DATE>	Y
DATE AND TIME OF DISEMBARKATION	DATE/TIME the observer disembarks from the vessel to end the observer trip. If disembarking at sea, this will be different from the DATE/TIME of Vessel return to port.	REFER TO APPENDIX A1	Data should be reported in UTC DATE/TIME.	<DATE_DISEMBARK>	Y
GEAR_TYPE	Link to ref_gears table	Char (1)	Must be a valid GEAR: 'L' – Longline; 'S' – Purse seine; 'P' – Pole-and-line	<GEAR_TYPE>	Y
FISHING PERMIT/LICENSE NUMBERS	PROVIDE License/Permit number that the vessel holds for the period of the TRIP.	CHAR(40) UPPER CASE	Where possible, include validation to ensure the Permit format relevant to the agreement (national or sub-regional) complies to the required format.	<LICENSE_NO>	N
VESSEL IDENTIFIER	PROVIDE the appropriate identifier for the VESSEL undertaking this trip. The WCPFC ROP minimum data field requirement is to provide at least the Vessel Name, Registration number and call sign as "Vessel Identifiers". Provision of WCPFC VID is not mandatory at this stage, but is encouraged.	REFER TO APPENDIX A4	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. Refer to APPENDIX A4, which lists other vessel attributes, some of which are mandatory under WCPFC ROP minimum data field requirements. Future review of ROP minimum data standards should consider the inclusion of the WCPFC RFV VID as a mandatory field.	<VID>	Y
VERSN_ID	Data standards version	Int		<VERSN_ID>	N
COUNTRY_CODE	Two letter COUNTRY CODE for the country who organise the trip	Char (2)	Refer to valid WCPFC alpha-2 two-letter Country Codes For example, refer to WCPFC Codes web page	<COUNTRY_CODE>	N
PORT OF DEPARTURE	PROVIDE name of the Port where the vessel departs	REFER TO APPENDIX A3	Must be valid WCPFC 5-letter LOCATION Code. In the rare case that the port is not in the WCFPC LOCATION codes, then the actual port name can be included and a WCFPC LOCATION code will be generated.	<DEP_PORT>	Y
PORT OF RETURN	PROVIDE name of the Port where the vessel returns	REFER TO APPENDIX A3	Must be valid WCPFC 5-letter LOCATION Code. In the rare case that the port is not in the WCFPC LOCATION codes, then the	<RET_PORT>	Y

OBS_TRIP[3] "The start of a trip is defined to occur when a vessel (a) leaves port after unloading part or all of the catch to transit to a fishing area or (b) recommences fishing operations or transits to a fishing area after transshipping part or all of the catch at sea (when this occurs in accordance with the terms and conditions of article 4 of Annex III of the Convention, subject to specific exemptions as per article 29 of the Convention)."					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD[4]**
			actual port name can be included and a WCFPC LOCATION code will be generated.		
EMBARK_LAT	The actual depart LAT position for the observer trip (if embarking AT SEA)	REFER TO APPENDIX A2	Future review of ROP minimum data standards should consider the inclusion of this field.	<EMBARK_LAT>	N
EMBARK_LON	The actual depart LON position for the observer trip (if embarking AT SEA)	REFER TO APPENDIX A2	Future review of ROP minimum data standards should consider the inclusion of this field.	<DISEMBARK_LON>	N
DISEMBARK_LAT	The actual depart LAT position for the observer trip (if disembarking AT SEA)	REFER TO APPENDIX A2	Future review of ROP minimum data standards should consider the inclusion of this field.	<DISEMBARK_LAT>	N
DISEMBARK _LON	The actual depart LON position for the observer trip (if disembarking AT SEA)	REFER TO APPENDIX A2	Future review of ROP minimum data standards should consider the inclusion of this field.	<DISEMBARK_LON>	N
VESOWNER	NAME of the vessel owner	NVarChar (50)		<VESOWNER>	Y
HULL MARKINGS	Check compliance with CMM2004-03 and its successor measures	NVarChar (50)	The hull markings should be consistent with CMM2014-03 and its successor measures; these are virtually the same as the FAO standards on vessel markings except that a few letters disallowed in the FAO standards are permitted in CMM2004-03 and its successor measures.	<HULL_MARKINGS>	Y
WIN MARKINGS	Check compliance with CMM2004-03 and its successor measures	NVarChar (50)		<WIN_MARKINGS>	Y
FISH HOLD CAPACITY	The total maximum amounts in metric Tons (MT) that the vessel freezers, wells and other fish storage areas on a vessel can hold.	INTEGER(4)	Note that observer data providers may use a separate vessel attributes table, linked via a vessel identifier field ("VID") which removes the redundancy of including this vessel attribute at the observer trip level and ensures standardisation and consistency. See APPENDIX A4, which lists the vessel fields to be provided and may be represented by a separate VESSEL attributes table.	<F_HOLD_CAP>	Y
VESCAPT_NAME	NAME of the captain of the vessel	NVarChar (50)		<VESCAPTAIN>	Y
VESCAPT_NATION	NATIONALITY of the captain of the vessel	Char (2)	Refer to valid WCPFC alpha-2 two-letter Country Codes For example, refer to WCPFC Codes web page	<CAPT_CO_CODE>	Y
VESCAPT_ID_DOC	The Document that confirms nationality of the captain.	NVarChar (20)		<CAPT_ID_DOC>	Y
VESMAST_NAME	NAME of the fishing master	NVarChar (50)		<VESMASTER>	

OBS_TRIP[3]

"The start of a trip is defined to occur when a vessel (a) leaves port after unloading part or all of the catch to transit to a fishing area or (b) recommences fishing operations or transits to a fishing area after transshipping part or all of the catch at sea (when this occurs in accordance with the terms and conditions of article 4 of Annex III of the Convention, subject to specific exemptions as per article 29 of the Convention)."

FIELD	Data Collection Instructions	Field format notes	Notes	XML TAG	WCPFC FIELD[4]
VESMAST_NATION	NATIONALITY of the vessel MASTER	Char (2)	Refer to valid WCPFC alpha-2 two-letter Country Codes For example, refer to WCPFC Codes web page	<VESCAPT_CO_CODE>	Y
VESMAST_ID_DOC	The Document that confirms nationality of the Fishing Master.	NVarChar (20)		<VESCAPT_ID_DOC>	Y
CREW_TOTAL	Total number of CREW on-board, including captain and officers, during the trip (does not include observer).	Int		<CREW_NUMBER>	Y
CREW_OTHERS	Total number of the crews excluding captain and fishing master.	Int	If collecting these data by nationality, there is a separate table called CREW_DATA to provide this information.	<CREW_OTHERS>	Y
BOARD_NATION	Nationality of any boarding vessel. When at sea indicate if any patrol vessels made a boarding name and nationality of the vessel making the boarding	Char(2)	Refer to valid WCPFC alpha-2 two-letter Country Codes For example, refer to WCPFC Codes web page	<CAPT_CO_CODE>	Y
SPILL	FLAG to indicated the trip was a SPILL SAMPLE trip	Bit		<SPILL>	N
CADET	FLAG to indicated whether the trip was observed by a CADET observer	Bit		<CADET>	N
SHARKTARGET	FLAG to indicated a trip has targeted SHARKS (LONGLINE trips only)	Bit		<SHARKTARGET>	N
COMMENTS	General comments about the trip	NText		<COMMENTS>	N

1.3 DAILY SUMMARY DATA

PS_OBS_DAY The observer must provide the information in this table (daily logged DAY) for EACH DAY AT SEA for the period of the trip.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
DAY LOG IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + LOCAL DAY LOG DATE			<S_DAY_ID>	Y
DAY_START	Local/Ship's Date and time at the start of daily activities.	REFER TO APPENDIX A1		<START_DATE>	N
UTC_DAY_START	UTC equivalent of DAY_START	REFER TO APPENDIX A1		<UTC_START_DATE>	N
LOG_NOFISH_N	Provide the Number of logs sighted but no schools association.	SmallInt		<LOG_NOFISH_N>	N
LOG_FISH_N	Provide the Number of log associated schools sighted.	SmallInt		<LOG_FISH_N>	N
SCH_FISH_N	Provide the numbers of school sighted at that day.	SmallInt		<SCH_FISH_N>	Y
FAD_FISH_N	Provide the Number of anchored FADs sighted.	SmallInt		<FAD_FISH_N>	N
FAD_NOFISH_N	Provide the Number of anchored FADS sighted but no schools association.	SmallInt		<FAD_NOFISH_N>	N
GEN3TODAY_ANS	For the entire logged day, provide the FLAG to indicate that incident has occurred on GEN3.	Char (1)	Must be consistent with the GEN-3 data.	<GEN3TODAY_ANS>	N
DIARYPAGE	Journal page # which has detail explanations of the incident	VarChar (50)		<DIARYPAGE>	N

1.4 ACTIVITY LOG DATA

PS_OBS_ACTIVITY **The observer must PROVIDE a record of EACH change in ACTIVITY for EACH DAY AT SEA for the period of the trip. This is effectively the OBSERVER's ACTIVITY LOG**					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
ACTIVITY LOG IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + DAY LOG DATE + ACTIVITY LOG TIME			<S_LOG_ID>	Y
DAY_START	Local/Ship's Date and time at the start of daily activities.	REFER TO APPENDIX A1	(Identical to field in PS_OBS_DAY)	<START_DATE>	N
UTC_DAY_START	UTC equivalent of DAY_START	REFER TO APPENDIX A1	(Identical to field in PS_OBS_DAY)	<UTC_START_DATE>	N
ACT_TIME	Record ships time for each activity as indicated on the activity code table.	REFER TO APPENDIX A1	Must be consistent with the start of DAY log DATE. The combined DATE/TIME may be provided in this field.	<ACT_TIME>	Y
UTC_ACT_TIME	UTC equivalent of ACT_TIME	REFER TO APPENDIX A1	Must be consistent with the start of DAY log UTC DATE. The combined UTC DATE/TIME may be provided in this field.	<UTC_ACT_TIME>	N
LAT	Latitude at which this ACTIVITY LOG recorded	REFER TO APPENDIX A2		<LAT>	Y
LON	Longitude at which this ACTIVITY LOG recorded.	REFER TO APPENDIX A2		<LON>	Y
S_ACTIV_ID	Purse seine activity code.	REFER TO APPENDIX A5		<S_ACTIV_ID>	Y
SCHAS_ID	School association code.	REFER TO APPENDIX A6		<SCHAS_ID>	Y
DETON_ID	Provide method of detection of fish. Use Detection id. code. Must be 1-6 or 0 for no information.	REFER TO APPENDIX A7		<DETON_ID>	Y
BEACON	Beacon number where available. (there may be a regional standard numbering system in the future).	NVarChar (20)	Can only be recorded where an activity is related to an event for investigating, deploying, retrieving or setting on a floating object. REFER TO APPENDIX A5	<BEACON>	N
COMMENTS	Observer comments related to this activity	NText		<COMMENTS>	N

1.5 SET-LEVEL DATA

PS_OBS_SET The observer must PROVIDE the following information for EACH FISHING SET for the period of the trip.						
FIELD	**Data Collection Instructions**		**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE				<OBSTRIP_ID>	Y
SET IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + SET START DATE + SET START TIME			Must be consistent with PS_OBS_ACTIVITY record where S_ACTIV_ID = 1 (A fishing set).	<S_SET_ID>	Y
SET_NUMBER	Unique # for the SET ni this trip		Int		<SET_NUMBER>	N
SKIFFOFF_TIME	LOCAL DATE/TIME for the START OF SET. DEFINED as the START of SET – Local DATE/Time when net skiff off with net		REFER TO APPENDIX A1		<SKIFFOFF_TIME>	Y
SKIFFOFF_UTC	UTC DATE & TIME of START of SET		REFER TO APPENDIX A1	Must be aligned to SKIFFOFF TIME	<SKIFFOFF_UTC>	N
WINCHON_TIME	LOCAL DATE/TIME when winches start to haul the net.		REFER TO APPENDIX A1		<WINCHON_TIME>	N
WINCHON_UTC	UTC DATE & TIME when winches start to haul the net.		REFER TO APPENDIX A1	Must be aligned to WINCHON_TIME	<WINCHON_UTC>	N
RINGUP_TIME	LOCAL DATE/TIME when purse ring is raised from the water.		REFER TO APPENDIX A1		<RINGUP_TIME>	N
RINGUP_UTC	UTC DATE & TIME when purse ring is raised from the water.		REFER TO APPENDIX A1	Must be aligned to RINGUP_TIME	<RINGUP_UTC>	N
SBRAIL_TIME	LOCAL DATE/TIME when brailing begins.		REFER TO APPENDIX A1		<SBRAIL_TIME>	N
SBRAIL_UTC	UTC DATE & TIME when brailing begins.		REFER TO APPENDIX A1	Must be aligned to SBRAIL TIME	<SBRAIL_UTC>	N
EBRAIL_TIME	LOCAL DATE/TIME when brailing ends.		REFER TO APPENDIX A1		<EBRAIL_TIME>	N
EBRAIL_UTC	UTC DATE & TIME when brailing ends.		REFER TO APPENDIX A1	Must be aligned to EBRAIL TIME	<EBRAIL_UTC>	N
STOP_TIME	LOCAL DATE/TIME for the END of SET – Time when net skiff comes on-board i.e. end of set.		REFER TO APPENDIX A1		<STOP_TIME>	Y
STOP_UTC	UTC DATE & TIME – Date &Time when net skiff comes on-board i.e. end of set.		REFER TO APPENDIX A1	Must be aligned to STOP_TIME	<STOP_UTC>	N
LD_BRAILS	Sum of all brails		Decimal (8,3)		<LD_BRAILS>	N
LD_BRAILS2	Sum of brails (#2)- only where a second type of brailer was used		Decimal (8,3)		<LD_BRAILS2>	N
MTTOTAL_OBS	Total observed catch (TUNA and BYCATCH) (mt)		Decimal (8,3)		<MT_TOTAL_OBS>	N
MTTUNA_OBS	TOTAL amount of TUNA observed (mt)		Decimal (8,3)	Derived from and consistent with MTTOTAL_OBS minus all the bycatch (mt) listed under PS_OBS_CATCH for this SET	<MTTUNA_OBS>	N
TOTSKJ_ANS	SKIPJACK	FLAG to indicate whether SKJ is presence in the set catch	Char (1)		<TOTSKJ_ANS>	N
PERC_SKJ		% of SKJ in the set catch	Int		<PERC_SKJ>	N
MTSKJ_OBS		Metric Tonnes of SKJ in the set catch	Decimal (8,3)	Determined from MTTUNA_OBS and PERC_SKJ fields	<MTSKJ_OBS>	N

PS_OBS_SET

The observer must PROVIDE the following information for EACH FISHING SET for the period of the trip.

FIELD	Data Collection Instructions		Field format notes	Notes	XML TAG	WCPFC FIELD
TOTYFT_ANS	YELLOWFIN	FLAG to indicate whether YFT is presence in the set catch	Char (1)		<TOTYFT_ANS>	N
PERC_YFT		% of YFT in the set catch	Int		<PERC_YFT>	N
MTYFT_OBS		Metric Tonnes of YFT in the set catch	Decimal (8,3)	Determined from MTTUNA_OBS and PERC_YFT fields	<MTYFT_OBS>	N
LARGE_YFT_ANS		FLAG to indicate YFT in the set catch	Char (1)		<LARGE_YFT_ANS>	N
PERC_LARGE_YFT		% of large YFT in the set catch	Int		<PERC_LARGE_YFT>	N
NB_LARGE_YFT		# of large YFT in the set catch	Int		<NB_LARGE_YFT>	N
TOTBET_ANS	BIGEYE	FLAG to indicate whether BET is presence in the set catch	Char (1)		<TOTBET_ANS>	N
PERC_BET		% of BET in the set catch	Int		<PERC_BET>	N
MTBET_OBS		Metric Tonnes of BET in the set catch	Decimal (8,3)	Determined from MTTUNA_OBS and PERC_BET fields	<MTBET_OBS>	N
LARGE_BET_ANS		FLAG to indicate BET in the set catch	Char (1)		<LARGE_BET_ANS>	N
PERC_LARGE_BET		% of large BET in the set catch	Int		<PERC_LARGE_BET>	N
NB_LARGE_BET		# of large BET in the set catch	Int		<NB_LARGE_BET>	N
COMMENTS	comments		NText		<COMMENTS>	N
B_NBTAGS	Record as much information as possible on any Tags recovered		SmallInt		<B_NBTAGS>	Y

1.6 SET CATCH DATA

PS_OBS_CATCH The observer must PROVIDE the following CATCH DETAILS for each species retained or discarded in EACH FISHING SET for the period of the trip.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
SET IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + SET START DATE + SET START TIME		Must be consistent with PS OBS ACTIVITY record where S_ACTIV_ID = 1 (A fishing set).	<S_SET_ID>	Y
CATCH IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + SET START DATE + SET START TIME + SPECIES CODE + FATE CODE			<S_CATCH_ID>	Y
SP_CODE	Species code.	Char (3)	REFER TO APPENDIX 8.	<SP_CODE>	Y
RET_DISC	Use 'R' for Retained or 'D' for Discarded	Char (1)		<RET_DISC>	Y
FATE_CODE	FATE of this catch. This field provides more detail on FATE and indicates whether it was RETAINED, DISCARDED or ESCAPED, and any specific processing.	Char (3)	REFER TO APPENDIX 9	<FATE_CODE>	N
COND_CODE	CONDITION of this catch. Relevant for the Species of Special Interest.	Char (2)	REFER TO APPENDIX 10	<COND_CODE>	N
OBS_MT	Observer's visual estimate of TOTAL Species catch in metric tonnes. OBTAINED from the visual estimate of % of TUNA SPECIES in the respective fields for SKJ, YFT and BET in the table PS_OBS_SET. For BYCATCH species, this is the visual estimate, where relevant.	Decimal (8,3)	The field RET_DET indicates whether this represents retention or discard of this species.	<OBS_MT>	Y
OBS_N	Species catch (in numbers). OBTAINED from the visual estimate, which may be relevant for DISCARDs of TUNA, the discards/retained catch of BILLFISH and most other bycatch species. Entry into this field is mandatory for any Species of Special interest.	Int	For Species of Special interest (Mammals, Turtles, Birds and Sharks) there must be a corresponding set of records in the Species of Special interest table.	<OBS_N>	N
COMMENTS	Are there any comments for this species catch ? (Y/N)	NText		<COMMENTS>	N

1.7 SPECIES OF SPECIAL INTEREST DATA

OBS_SSI **The observer must PROVIDE the following SPECIES OF SPECIAL INTEREST CATCH DETAILS for each species retained, released or discarded in EACH FISHING SET for the period of the trip. There may be one or many records for each SSI record in PS_OBS_CATCH. When SIGHTED only, then this table is linked to the OBS_TRIP database table.**					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
SET IDENTIFIER – PS	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + SET START DATE + SET START TIME		To be used to link to PS OBS SET when relevant When SGTYPE = 'L' or 'I' Must be consistent with PS OBS ACTIVITY record where S_ACTIV_ID = 1 (A fishing set).	<S_SET_ID>	Y
CATCH IDENTIFIER – PS	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + SET START DATE + SET START TIME + SPECIES CODE + FATE CODE		To be used to link to PS OBS CATCH when relevant When SGTYPE = 'L' or 'I' Must be a link to the corresponding PS_OBS_CATCH record for this SSI	<S_CATCH_ID>	Y
SET IDENTIFIER – LL	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + SET START DATE + SET START TIME		To be used to link to LL OBS SET when relevant When SGTYPE = 'L' or 'I' Must be consistent with PS OBS ACTIVITY record where S_ACTIV_ID = 1 (A fishing set).	<L_SET_ID>	Y
CATCH IDENTIFIER – LL	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + SET START DATE + SET START TIME + SPECIES CODE + FATE CODE		To be used to link to LL OBS CATCH when relevant When SGTYPE = 'L' or 'I' Must be a link to the corresponding PS_OBS_CATCH record for this SSI	<L_CATCH_ID>	Y
SSI CATCH IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + DAY LOG + SIGHTING TIME + SPECIES CODE + FATE CODE			<SSI_ID>	Y
SGTYPE	Type of Interaction : 'L' - Landed; "S"- Sighted; "I" - Interacted with Gear	Char (1)	Must be 'L' - Landed on deck; "S"- Sighted; "I" - Interacted with Gear	<SGTYPE>	Y
SSI_DATE	Record ships date and time of interaction	REFER TO APPENDIX A1	When SGTYPE = 'L' or 'I'	<SSI_DATE>	Y

OBS_SSI **The observer must PROVIDE the following SPECIES OF SPECIAL INTEREST CATCH DETAILS for each species retained, released or discarded in EACH FISHING SET for the period of the trip. There may be one or many records for each SSI record in PS_OBS_CATCH. When SIGHTED only, then this table is linked to the OBS_TRIP database table.**					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
			Must be consistent with PS_OBS_ACTIVITY record – ACT_DATE		
UTC_SSI_DATE	[UTC equivalent of SSI_DATE]	REFER TO APPENDIX A1	When SGTYPE = 'L' or 'I' Must be consistent with PS_OBS_ACTIVITY record – UTC_ACT_DATE	<UTC_SSI_DATE>	N
LAT	Latitude at which this SSI was encountered	REFER TO APPENDIX A2	When SGTYPE = 'L' or 'I' Must be consistent with PS OBS ACTIVITY record – LAT	<LAT>	Y
LON	Longitude at which this SSI was encountered	REFER TO APPENDIX A2	When SGTYPE = 'L' or 'I' Must be consistent with PS OBS ACTIVITY record – LON	<LON>	Y
SP_CODE	SSI Species encountered. Link to species table	Char (3)	REFER TO APPENDIX 8. Must correspond to the PS OBS CATCH record	<SP_CODE>	Y
SP_DESC	Extended Species Description	NText		<SP_DESC>	N
LANDED_COND_CODE	Condition when landed on Deck or at start of interaction with vessel's gear Condition code on LANDING	Char (2)	REFER TO APPENDIX 10	<LANDED_COND_CODE>	Y
LANDED_COND_DESC	Description of Condition when landed on Deck or at start of interaction with vessel's gear	NText		<LANDED_COND_DESC>	N
LANDED_HANDLING	Description of handling on landing	NText		<LANDED_HANDLING>	N
LANDED_LEN	Length of landed species	Decimal (5,1)		<LANDED_LEN>	Y
LEN_CODE	Length measurement code of the individual	Char (2)	REFER TO APPENDIX 11	<LEN_CODE>	Y
GENDER	Sex code of the individual	Char (1)	REFER TO APPENDIX 12	<LANDED_SEX_CODE>	Y
RELEASE_COND_CODE	Condition on RELEASE/DISCARD, or at the END of interaction with vessel's gear. Condition code on RELEASE/DISCARD, or at the END of interaction with vessel's gear	Char (2)	REFER TO APPENDIX 10	<REL_COND_CODE>	Y
RELEASE_COND_DESC	Description of Condition on RELEASE/DISCARD, or at the END of interaction with vessel's gear	NText		<REL_COND_DESC>	N
SP_GR_CODE	Species/Gear interaction	Char (3)	APPENDIX A32 – SPECIES/GEAR INTERACTION CODES	<SP_GR_CODE>	N
SHK_FIN_WT_KGS	Estimated SHARK FIN WEIGHT (kgs)	Decimal (5,0)		<SHK_FIN_WT_KGS>	Y
SHK_FIN_BODY_KGS	Estimated SHARK CARCASS WEIGHT (kgs)	Decimal (5,0)		<SHK_FIN_BODY_KGS>	Y
TAG_RET_NO	Tag Number recovered from animal	NVarChar (7)		<TAG_RET_NO>	Y
TAG_RET_TYPE	Type of Tag recovered from animal	NVarChar (5)		<TAG_RET_TYPE>	N

OBS_SSI

The observer must PROVIDE the following SPECIES OF SPECIAL INTEREST CATCH DETAILS for each species retained, released or discarded in EACH FISHING SET for the period of the trip. There may be one or many records for each SSI record in PS_OBS_CATCH. When SIGHTED only, then this table is linked to the OBS_TRIP database table.

FIELD	Data Collection Instructions	Field format notes	Notes	XML TAG	WCPFC FIELD
TAG_RET_ORG	Origin of Tag recovered from animal (Organisation)	NVarChar (10)	Record as much as information as possible on any Tags recovered. At least these fields should be recorded.	<TAG_RET_ORG>	N
TAG_PLACE_NO	Tag number placed on animal	NVarChar (14)		<TAG_PLACE_NO>	N
TAG_PLACE_TYPE	Type of Tag placed on animal	NVarChar (8)		<TAG_PLACE_TYPE>	Y
TAG_PLACE_ORG	Origin of Tag placed on animal (Organisation)	NVarChar (10)		<TAG_PLACE_ORG>	Y
INTACT_ID	Vessel activity when INTERACTION occurs	Int	REFER TO APPENDIX 13	<INTACT_ID>	Y
INTACT_OTHER	Other types of interaction	NVarChar (20)		<INTACT_OTHER>	N
INT_DESCRIBE	Description of the interaction	NText		<INT_DESCRIBE>	Y
SGACT_ID	Vessel activity when SIGHTING occurs	Int	REFER TO APPENDIX 13	<SGACT_ID>	N
SGACT_OTHER	Indicates "other" Vessel Activity	NVarChar (20)		<SGACT_OTHER>	N
SIGHT_N	Number of individuals sighted	SmallInt		<SIGHT_N>	Y
SIGHT_ADULT_N	Number of adults sighted	SmallInt		<SIGHT_ADULT_N>	N
SIGHT_JUV_N	Number of juveniles sighted	SmallInt		<SIGHT_JUV_N>	N
SIGHT_LEN	Estimated overall length (Average if more than one individual)	NText		<SIGHT_LEN>	N
SIGHT_DIST	Distance of sighted animals from vessel	Decimal (7,3)		<SIGHT_DIST>	N
SIGHT_DIST_UNIT	Units used for SIGHT_DIST	INT	1 = Metres; 2 = kilometres; 3 = Nautical miles	<SIGHT_DIST_UNIT>	N
SIGHT_DIST_NM	Distance in nautical miles	Decimal (10,4)		<SIGHT_DIST_NM>	N
SIGHT_BEHAV	Description of behaviour of Sighted animals	NText		<SIGHT_BEHAV>	N

1.8 SPECIES OF SPECIAL INTEREST DETAILS DATA

OBS_SSI_DETAILS The observer must PROVIDE the following SPECIES OF SPECIAL INTEREST CATCH DETAILS for EACH FISHING SET for the period of the trip. The specific detail of each interaction needs to be recorded/stored here.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
SSI CATCH IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + DAY LOG + SIGHTING TIME + SPECIES CODE + FATE CODE		Link to OBS_SSI table	<SSI_ID>	Y
SSI DETAILS IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + DAY LOG + SIGHTING TIME + SPECIES CODE + FATE CODE			<SSI_DET_ID>	Y
START_END	Indication of "START" or "END" of interaction	Char (1)	Must be either 'S' for START or 'E' for END	<START_END>	N
SSI_NUMBER	Number of animals interacted	Int		<SSI_NUMBER>	N
COND_CODE	CONDITION at the point of recording (either START or END)	Char (2)	REFER TO APPENDIX 10	<COND_CODE>	N
DESCRIPTION	Descriptions of the interaction	VarChar (100)		<DESCRIPTION>	N

1.9 LENGTH SAMPLE DATA

PS_LFSAMPLE PROVIDE the information related to the size (length) and species composition SAMPLE from each FISHING SET.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
SET IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + SET START DATE + SET START TIME			<S_SET_ID>	Y
LF SAMPLE IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + DAY LOG + SET START DATE + SET START TIME + SAMPLE_TYPE			<S_LFSAMP _ID>	Y
SAMPLETYPE_ID	Sample Type	CHAR(1)	REFER TO APPENDIX 14	<SAMPLETYPE_ID>	N
OTHER_DESC	Description other sampling type	NText		<OTHER_DESC>	N
FISH_PER_BRAIL	Target # of fish for sampling	SmallInt		<FISH_PER_BRAIL>	N
MEASURE_CODE	MEASURING INSTRUMENT	Char (1)	REFER TO APPENDIX 15	<MEASURE_CODE>	N
COMMENTS	Comments about the sampling	NText		<COMMENTS>	N
BRAIL_FULL_N	# of Full brail count	SmallInt		<BRAIL_FULL_N>	N
BRAIL_78_N	# of Seven eighths brail count	SmallInt		<BRAIL_78_N>	N
BRAIL_34_N	# of Three quarter brail count	SmallInt		<BRAIL_34_N>	N
BRAIL_23_N	# of Two third brail count	SmallInt		<BRAIL_23_N>	N
BRAIL_12_N	# of Half brail count	SmallInt		<BRAIL_12_N>	N
BRAIL_13_N	# of One third brail count	SmallInt		<BRAIL_13_N>	N
BRAIL_14_N	# of One quarter brail count	SmallInt		<BRAIL_14_N>	N
BRAIL_18_N	# of One eighth brail count	SmallInt		<BRAIL_18_N>	N
BRAIL_N	Total number of brails	SmallInt		<BRAIL_N>	N
SUM_BRAILS	Sum of All Brails	Decimal (7,2)		<SUM_BRAILS>	N
SAMPLED_BRAIL_NUM	# of sampled brail	Int		<SAMPLED_BRAIL_NUM>	N
MEASURED_N	# of samples measured	Int		<MEASURED_N>	N

1.10 INDIVIDUAL LENGTH DATA

PS_LFMEAS PROVIDE the individual fish measurements from the SAMPLE from each FISHING SET.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
SET IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + SET START DATE + SET START TIME			<S_SET_ID>	Y
LF SAMPLE IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + DAY LOG + SET START DATE + SET START TIME + SAMPLE_TYPE			<S_LFSAMP _ID>	Y
LF MEASURE IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + DAY LOG + SET START DATE + SET START TIME + SAMPLE_TYPE + SEQ_NUMBER			<S_LFMEAS_ID>	Y
SEQ NUMBER	Measurement number.	Int		<SEQ_NUMBER>	N
SP CODE	Link to species table	Char (3)	REFER TO APPENDIX 8.	<SP_CODE>	Y
LEN	Length (cm).	SmallInt	Expectation that that the following measurements have been taken by the observers, as instructed. TUNA SPECIES - Upper jaw to fork length; LEN_CODE = 'UF' SHARK SPECIES - total length; LEN_CODE = 'TL' BILLFISH SPECIES - Lower jaw to fork length for billfish. LEN_CODE = 'LF'	<LEN>	Y
LEN_CODE	Record measurement methods given in codes				Y

1.11 TRIP MONITORING SUMMARY

OBS_TRIPMON PROVIDE the details of the OBSERVER GEN-3 "OBSERVER VESSEL TRIP MONITORING FORM". One record per question.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
TRIP MONITORING IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + UNIQUE SEQ NUMBER			<TRIPMON_ID>	Y
QUESTION_CODE	Unique CODE for each question in GEN3	Char (4)	REFER TO APPENDIX 16	<QUESTION_CODE>	Y
ANSWER	Record the Answer to each question. There is also an indicator whether this has been answered or NOT	Char (1)	MUST BE 'Y', 'N' or 'X'- not answered	<ANSWER>	Y
JOURNAL_PAGE	Additional explanation and information for any YES response (including reference to the journal page)	NText		<JOURNAL_PAGE>	Y

1.12 TRIP MONITORING COMMENTS

OBS_TRIPMON_COMMENTS PROVIDE the details of the OBSERVER GEN-3 "OBSERVER VESSEL TRIP MONITORING FORM". One record per day of trip monitoring reported event/incident.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
TRIP MONITORING COMMENTS IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + UNIQUE SEQ NUMBER			<TRIPMON_DET_ID>	Y
GEN3_DATE	Date of the incident on GEN3	REFER TO APPENDIX A1		<GEN3_DATE>	N
COMMENTS	Detail description of the incident	NText		<COMMENTS>	N

1.13 VESSEL/AIRCRAFT SIGHTINGS DATA

VES_AIR_SIGHT PROVIDE the details on the GEN-1 form -- VESSEL AND AIRCRAFT SIGHTINGS / FISH, BUNKERING and OTHER TRANSFERS LOGS					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
SIGHTING IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + SIGHT DATE TIME			<SIGHT_ID>	Y
SIGHT_DATE_TIME	Date/Time of sighting	REFER TO APPENDIX A1		<SIGHTING_DATE>	Y
LAT	Latitude of SIGHTING	REFER TO APPENDIX A2		<LAT>	Y
LON	Longitude of SIGHTING	REFER TO APPENDIX A2		<LON>	Y
VESSEL IDENTIFIER	PROVIDE the WCPFC VID for the VESSEL sighted (if this is possible)	REFER TO APPENDIX A4	Record VID if the vessel can be identified on the WCPFC RFV	<VID>	N
S_NAME	Record sighted vessel or aircraft name, where possible		Record this information if the vessel cannot be identified on the WCPFC RFV	<S_NAME>	Y
S_IRCS	Record sighted vessel or aircraft call-sign, where possible			<S_IRCS>	Y
S_FLAG	Record flag of sight vessel, if possible			<S_FLAG>	Y
S_OTHER-MARKING	Record other vessel markings, if possible			<S_MARK>	Y
VATYP_ID	Vessel / Aircraft type	Int	REFER TO APPENDIX 17	<VATYP_ID>	Y
BEARING_DIR	Bearing (0-360 degrees)	SmallInt		<BEARING_DIR>	Y
DISTANCE	Record estimated distance from observers vessels to sighted vessel	Decimal (7,3)	Check the sighting on the radar and use the distance indicated, f not available use your estimate.	<DISTANCE>	Y
DIST_UNIT	Units of Distance	INT	1 = Metres; 2 = kilometres; 3 = Nautical miles	<DIST_UNIT>	Y
ACTION_CODE	Action of Vessel/Aircraft sighted	Char (2)	REFER TO APPENDIX 18 for Vessel/Aircraft sightings only – only allow actions where FORM USED = 'GEN-1'	<ACTION_CODE>	Y
COMMENTS	Comments	NText		<COMMENTS>	Y

1.14 CREW DATA

PS_CREW PROVIDE the details of each PURSE SEINE CREW member on this TRIP.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
CREW IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + CREW NAME			<S_CREW_ID>	Y
VSJOB_ID	CREW JOB TYPE	Int	REFER TO APPENDIX 19	<VSJOB_ID>	N
NAME	Name of the person in this position	NVarChar (50)		<NAME>	N
COUNTRY_CODE	Nationality of the person in this position	Char (2)	Refer to valid WCPFC alpha-2 two-letter Country Codes For example, refer to WCPFC Codes web page WCPFC requirements are to list crew by nationality (non-binding).	<COUNTRY_CODE>	N
EXP_YR	Experience in Years	SmallInt		<EXP_YR>	N
EXP_MO	Experience in months	SmallInt		<EXP_MO>	N
COMMENTS	Comments	NText		<COMMENTS>	N

1.15 MARINE DEVICES DATA

VES_ELEC PROVIDE information on the standard Marine Electronic devices.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
TRIP/VESSEL DEVICE IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + DEVICE ID			<V_DEVICE_ID>	Y
DEVICE_ID	Marine Device CODE.	Int	Refer to APPENDIX 20 - the DEVICES should only be available according to the respective gear code (e.g. "S" for purse seine or "L" for longline is in the GEAR LIST CODES column)	<DEVICE_ID>	Y
ONBOARD_CODE	Is this DEVICE SIGHTED ONBOARD ?	Char (1)	'Y' or 'N'	<ONBOARD_CODE>	Y
USAGE_CODE	Is this DEVICE USED ?	Char (3)	Refer to APPENDIX 21	<USAGE_CODE>	N
MAKE_DESC	Description of Make	NVarChar (30)		<MAKE_DESC>	N
MODEL_DESC	Description of Model	NVarChar (30)		<MODEL_DESC>	N
COMMENTS	Comments	NText		<COMMENTS>	N

1.16 WELL TRANSFER DATA

WELL_TRANSFER PROVIDE information for each transfer to/from storage WELLs during the trip. This may become mandatory WCPFC data collection related to CDS.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	N
WELL TRANSFER IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + TRX_DATE			<S_WELL_TRX_ID>	N
TRX DATE	DATE and TIME of fish transfer	REFER TO APPENDIX A1		<TRX_DATE>	N
ACTION_CODE	WELL TRANSFER ACTION CODE	Char (2)	REFER TO APPENDIX 18 for Well transfers only – only allow actions where FORM USED = 'PS-5	<ACTION_CODE>	N
SOURCE	Fish transfer source Can be the 'NET' and valid well number or a VESSEL	VarChar (80)	Can be the 'NET' and valid well number or a VESSEL	<SOURCE>	N
DESTINATION	Description of the transfer destination Can be Well No., vessel, SHORE or DISCARD	VarChar (80)	Can be Well No., vessel, SHORE or DISCARD	<DESTINATION>	N
WELL MT	Weight of the fish transfer	Decimal (8,3)		<WELL_MT>	N
CHANGE	Change of transfer – add or remove	Char (1)	Must be either '+', '-' or '0' (for no change)	<CHANGE>	N
NEW TOTAL	New cumulative to for the transfer	Decimal (8,3)		<NEW_TOTAL>	N
ON_LOGSHEET	FLAG to indicate the transfer has been stated on the logsheet	Char (1)		<ON_LOGSHEET>	N
COMMENTS	Comments made on the fish transfer	NText		<COMMENTS>	N

1.17 PURSE SEINE GEAR DATA

PS_GEAR PROVIDE information on the PURSE SEINE GEAR on the vessel.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
PS GEAR IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<S_GEAR_ID>	Y
PB_MAKE	Power block make	NVarChar (20)		<PB_MAKE>	N
PB_MODEL	Power block model	NVarChar (20)		<PB_MODEL>	N
PW_MAKE	Purse winch make	NVarChar (20)		<PW_MAKE>	N
PW_MODEL	Purse winch model	NVarChar (20)		<PW_MODEL>	N
NET_DEPTH	Max depth of the net	SmallInt		<NET_DEPTH>	Y
NET_DEPTH_UNIT_ID	Net Depth unit of measurement M – metres; Y- Yards; F-Fathoms	Char(1)	Must be M, Y, F or blank	<NET_DEPTH_UNIT_ID>	Y
NET_LENGTH	Max length of the net	SmallInt		<NET_LENGTH>	Y
NET_LENGTH_UNIT_ID	Net Length unit of measurement M – metres; Y- Yards; F-Fathoms	Char(1)	Must be M, Y, F or blank	<NET_LENGTH_UNIT_ID>	Y
NET_STRIPS	Number of net strips	SmallInt		<NET_STRIPS>	N
NET_HANG_RATIO	Max net hang ratio	SmallInt		<NET_HANG_RATIO>	N
MESH_MAIN	Main Mesh size	SmallInt		<MESH_MAIN>	Y
MESH_MAIN_UNIT_ID	Main mesh size unit of measurement C – centimetres; I - Inches	Char(1)	Must be C, I or blank	<MESH_MAIN_UNIT_ID>	Y
BRAIL_SIZE1	Brail #1 Capacity	Decimal (5,1)		<BRAIL_SIZE1>	Y
BRAIL_SIZE2	Brail #2 Capacity	Decimal (5,1)		<BRAIL_SIZE2>	Y
BRAIL_TYPE	Brailing Type Description	NText		<BRAIL_TYPE>	N

1.18 PURSE SEINE VESSEL SUPPORT DATA

PS_VESS_SUPPORT PROVIDE information on the PURSE SEINE VESSEL SUPPORT information.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
PS VESS SUPPORT IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<S_VESSUP_ID>	Y
SPEEDBOATS_N	Number of Speedboats	SmallInt		<SPEEDBOATS_N>	Y
TOW_N	Number of Tow boats	SmallInt		<TOW_N>	Y
AUXBOATS_N	Number of Auxiliary boats	SmallInt		<AUXBOATS_N>	Y
LIGHT_N	Number of light boats	SmallInt		<LIGHT_N>	Y
TENDERBOATS_YN	Do other tender boats work with Catcher ?	Char(1)		<TENDERBOATS_YN>	N
SKIFF_MAKE	Make of SKIFF	Varchar(20)	Must be M, Y, F or blank	<SKIFF_MAKE>	N
SKIFF_HP	Horsepower of SKIFF	Int		<SKIFF_HP>	N
HELI_MAKE	Make of Helicopter	Varchar(20)		<HELI_MAKE>	Y
HELI_MODEL	Model of helicopter	Varchar(20)		<HELI_MODEL>	Y
HELI_REG_NO	Helicopter registration number	Varchar(20)		<HELI_REG_NO>	Y
HELI_RANGE	Range of Helicopter (see HELI_RANGE_UNIT)	Int	Must be C, I or blank	<HELI_RANGE>	Y
HELI_RANGE_UNIT	Unit of distance for range of Helicopter	Char(1)	'K' in kms ; 'N' in nautical miles	<HELI_RANGE_UNIT>	Y
HELI_COLOUR	Colour of Helicopter	Varchar(20))		<HELI_COLOUR>	Y
HELI_SERVICES_N	No. of vessels that this helicopter services	SmallInt		<HELI_SERVICES_N>	N

1.19 FAD MATERIAL DATA

PS_FAD_MATERIAL PROVIDE information on the FAD MATERIAL observed during the trip.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
FAD EVENT IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + FAD EVENT DATE/TIME			<FAD_ID>	Y
FAD_EVENT_DATE	DATE/TIME of the FAD sighting (observation event).	REFER TO APPENDIX A1		<FAD_EVENT_DATE>	Y
OBJECT_NUMBER	Number allocated for the object. (related to "FAD Markings or numbers")	SmallInt		<OBJECT_NUMBER>	Y
ORIGIN_CODE	Original CODE of the FAD	REFER TO APPENDIX A24	Code 5 or 6 used for FADs with radio buoy attached	<ORIGIN_CODE>	Y
FAD_DET_CODE	FAD Detection CODE	REFER TO APPENDIX A25		<FAD_DET_CODE>	Y
DEPLOYMENT_DATE	Date of FAD deployment	REFER TO APPENDIX A1		<DEPLOYMENT_DATE>	N
LAT	LAT position of deployment	REFER TO APPENDIX A2		<LAT>	Y
LON	LON position of deployment	REFER TO APPENDIX A2		<LON>	Y
SSI_TRAPPED	FLAG to indicate whether any SSI are trapped on the FAD	Char (1)		<SSI_TRAPPED>	N
AS_FOUND_CODE	CODE to indicate whether the FAD "as Found"	Int		<AS_FOUND_CODE>	N
AS_LEFT_CODE	CODE to indicate whether the FAD "as Left"	Int		<AS_LEFT_CODE>	N
MAX_DEPTH_M	Max DEPTH of the FAD in metres	Decimal (5,1)		<MAX_DEPTH_M>	Y
LENGTH_M	Max LENGTH of the FAD in metres	Decimal (5,1)		<LENGTH_M>	Y
WIDTH_M	Max WIDTH of the FAD in metres	Decimal (5,1)		<WIDTH_M>	Y
BUOY_NUMBER	Buoy number stated on the FAD	NVarChar (20)		<BUOY_NUMBER>	Y
MARKINGS	Markings on the FAD	NVarChar (50)		<MARKINGS>	Y
COMMENTS	Comments made by the observer about the FAD	NText		<COMMENTS>	Y

1.20 FAD MATERIAL DETAIL

PS_FAD_MATERIAL_DETAIL PROVIDE information on the FAD MATERIAL DETAIL observed during the trip.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
FAD EVENT IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + FAD EVENT DATE/TIME			<FAD_ID>	Y
MATERIAL_CODE	FAD Material CODE	REFER TO APPENDIX A26	Material Code must exist in the ref_ids table	<MATERIAL_CODE>	Y
IS_ATTACHMENT	FLAG to indicate if there is an attachment to the FAD	Char (1)	'Y' or 'N'	<IS_ATTACHMENT>	Y

1.21 OBSERVER POLLUTION REPORT

OBS_POLLUTION PROVIDE information any Pollution observed during the trip.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
POLLUTION EVENT IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + INCIDENT DATE/TIME			<POLL_ID>	Y
INC DATE	DATE & TIME of the incident	REFER TO APPENDIX A1		<INC_DTIME>	N
LAT	Latitude where incident occurred	REFER TO APPENDIX A2		<LAT>	N
LON	Longitude where incident occurred	REFER TO APPENDIX A2		<LON>	N
PORT ID	PORT where incident occurred	REFER TO APPENDIX A3		<PORT_ID>	N
ACTIV_ID	Activity when event occurred	REFER TO APPENDIX A5		<ACTIV_ID>	N
VESSEL IDENIFIER	REFER TO APPENDIX A4				
VATYP_ID	Vessel / Aircraft type	Int	REFER TO APPENDIX 17	<VATYP_ID>	N
BEARING_DIR	Compass Bearing to offending vessel	SmallInt		<BEARING_DIR>	N
DISTANCE	Distance to offending vessel	Decimal (7,3)		<DISTANCE>	N
COMMENTS	Additional comments	NText		<COMMENTS>	N
STICKERS_ANS	Response to "Stickers" question	Char (1)	'Y' or 'N'	<STICKERS_ANS>	N
AWARE_ANS	Response to "MARPOL" question	Char (1)	'Y' or 'N'	<AWARE_ANS>	N
ADVISED_ANS	Response to "INFRINGEMENTS" question	Char (1)	'Y' or 'N'	<ADVISED_ANS>	N
PHOTOS_ANS	Response to "PHOTOS" question	Char (1)	'Y' or 'N'	<PHOTOS_ANS>	N
PHOTO_NUMBERS	Number of photos taken on the incident	NVarChar (50)		<PHOTO_NUMBERS>	N

1.22 OBSERVER POLLUTION DETAILS

OBS_POLLUTION_DETAILS PROVIDE information any Pollution details observed during the trip.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
POLLUTION EVENT IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + INCIDENT DATE/TIME			<POLL_ID>	Y
POLLUTIONTYPE_ID	Pollution type code	REFER TO APPENDIX A31	Some, but not all codes in listed in the relevant APPENDICES are WCPFC required fields. For example, Disposal of OFFAL MANAGEMENT is a WCFPC required field.	<POLLUTIONTYPE_ID>	N
MATERIAL_ID	Pollution Materials code	REFER TO APPENDIX A29		<MATERIAL_ID>	N
POLL_GEAR_ID	Pollution Gear code	REFER TO APPENDIX A28		<POLL_GEAR_ID>	N
POLL_SRC_ID	Pollution Source code	REFER TO APPENDIX A30		<POLL_SRC_ID>	N
POLL_DESC	Description of pollution type	NText		<POLL_DESC>	N
POLL_QTY	Description of pollution quantity	NText		<POLL_QTY>	N

1.23 OBSERVER JOURNAL

OBS_JOURNAL PROVIDE a description of the day's activities in a daily journal record for the trip.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	N
DAILY JOURNAL IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBS_JRNL_ID>	N
JRNL_DATE	DATE of Journal entry	REFER TO APPENDIX A1		<JRNL_DATE>	N
JRNL_TEXT	Daily journal entry	NText		<JRNL_TEXT>	N

1.24 PURSE SEINE TRIP REPORT

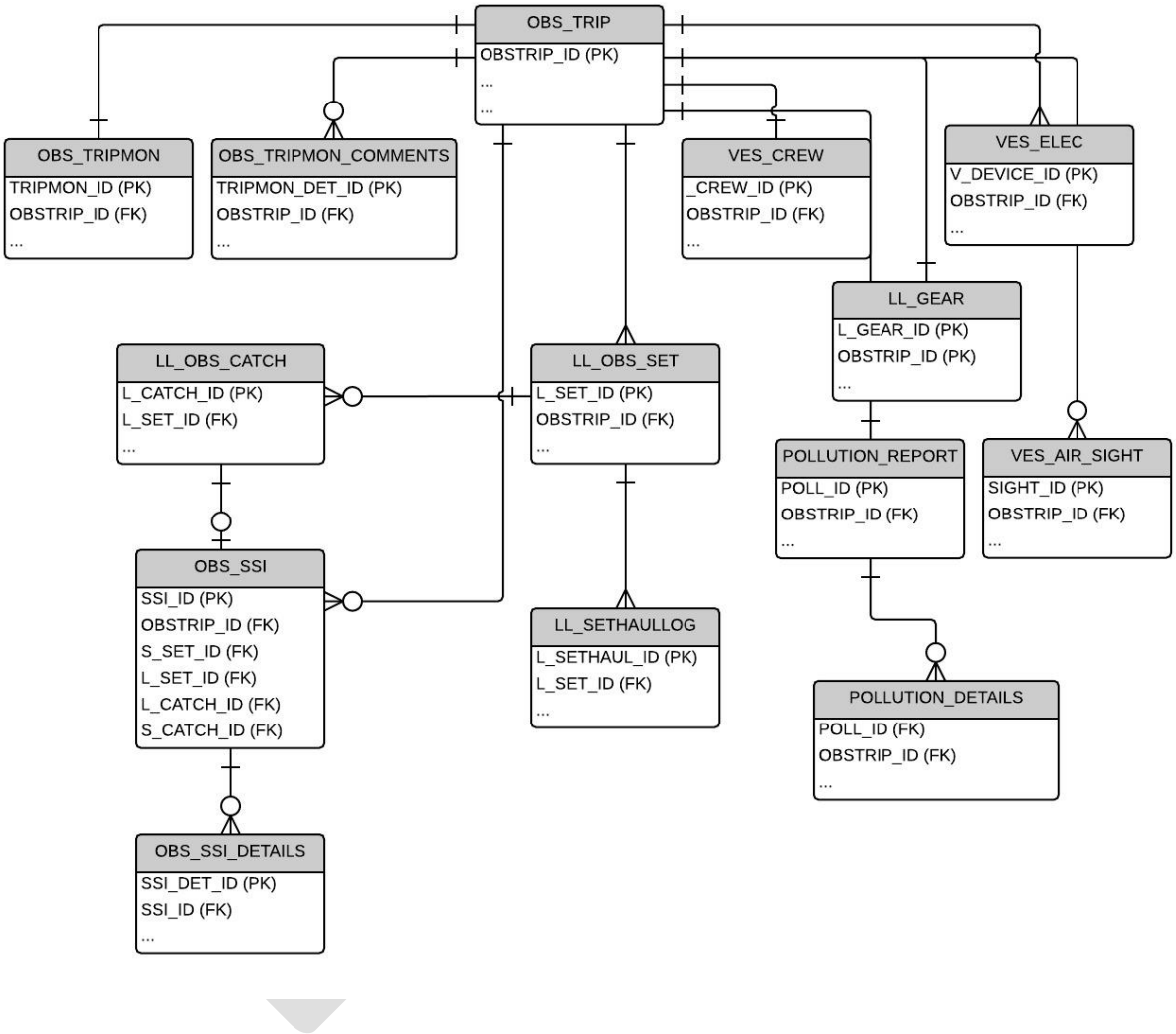
PS_TRIP_REPORT PROVIDE descriptive information on the trip. Refer to the relevant sections in http://www.spc.int/OceanFish/en/publications/doc_download/1334-2014-ps-trip-report-					
FIELD	**Data Collection Instructions**	**Field format notes**	**Note**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	N
1_BACKGROUND	(Refer to relevant section in link above)	NText		<1_BACKGROUND>	N
2_0_CRUISE_SUMMARY	(Refer to relevant section in link above)	NText		<2_0_CRUISE_SUMMARY>	N
2_1_AREA_FISHED	(Refer to relevant section in link above)	NText		<2_1_AREA_FISHED>	N
2_2_END_OF_TRIP	(Refer to relevant section in link above)	NText		<2_2_END_OF_TRIP>	N
3_0_DATA_COLLECTED	(Refer to relevant section in link above)	NText		<3_0_DATA_COLLECTED>	N
4_0_VESSEL_CREW	Refer to relevant section in link above)	NText		<4_0_VESSEL_CREW>	N
4_1_VESS_INFO	Refer to relevant section in link above)	NText		<4_1_VESS_INFO>	N
4_2_CREW_NATION	Refer to relevant section in link above)	NText		<4_2_CREW_NATION>	N
4_2_1_PIC	Refer to relevant section in link above)	NText		<4_2_1_PIC>	N
4_3_FISHING_GEAR	Refer to relevant section in link above)	NText		<4_3_FISHING_GEAR>	N
4_3_1_BRAIL	Refer to relevant section in link above)	NText		<4_3_1_BRAIL>	N
4_3_2_NET	Refer to relevant section in link above)	NText		<4_3_2_NET>	N
4_4_ELEC	Refer to relevant section in link above)	NText		<4_4_ELEC>	N
4_5_SAFETY_EQ	Refer to relevant section in link above)	NText		<4_5_SAFETY_EQ>	N
4_6_OTHER_GEAR	Refer to relevant section in link above)	NText		<4_6_OTHER_GEAR>	N
5_0_FISH_STRATEGY	Refer to relevant section in link above)	NText		<5_0_FISH_STRATEGY>	N
5_1_FLOAT_SCHS	Refer to relevant section in link above)	NText		<5_1_FLOAT_SCHS>	N
5_2_FREE_SCHS	Refer to relevant section in link above)	NText		<5_2_FREE_SCHS>	N
5_3_SET_TECH	Refer to relevant section in link above)	NText		<5_3_SET_TECH>	N
5_4_VESS_ADV	Refer to relevant section in link above)	NText		<5_4_VESS_ADV>	N
5_5_HELICOPTER	Refer to relevant section in link above)	NText		<5_5_HELICOPTER>	N
5_6_FISH_SUCC	Refer to relevant section in link above)	NText		<5_6_FISH_SUCC>	N
5_7_FISH_INFO	Refer to relevant section in link above)	NText		<5_7_FISH_INFO>	N
6_0_COC	Refer to relevant section in link above)	NText		<6_0_COC>	N
7_0_ENVIRON	Refer to relevant section in link above)	NText		<7_0_ENVIRON>	N
8_1_TARGET_RET	Refer to relevant section in link above)	NText		<8_1_TARGET_RET>	N
8_2_TARGET_DISC	Refer to relevant section in link above)	NText		<8_2_TARGET_DISC>	N
8_3_TARGET_LOG	Refer to relevant section in link above)	NText		<8_3_TARGET_LOG>	N
8_4_BYCATCH	Refer to relevant section in link above)	NText		<8_4_BYCATCH>	N
8_4_1_BYC_LOG_COMP	Refer to relevant section in link above)	NText		<8_4_1_BYC_LOG_COMP>	N
8_4_2_BILL	Refer to relevant section in link above)	NText		<8_4_2_BILL>	N
8_4_3_SHARKS_RAYS	Refer to relevant section in link above)	NText		<8_4_3_SHARKS_RAYS>	N
8_4_4_OTHER_BY-CATCH	Refer to relevant section in link above)	NText		<8_4_4_OTHER_BY-CATCH>	N
8_4_5_UNSPEC_SP_CODES	Refer to relevant section in link above)	NText		<8_4_5_UNSPEC_SP_CODES>	N
8_4_6_SSI_LAND	Refer to relevant section in link above)	NText		<8_4_6_SSI_LAND>	N
8_4_7_SSI_INTERACT	Refer to relevant section in link above)	NText		<8_4_7_SSI_INTERACT>	N
8_4_8_SSI_SIGHT	Refer to relevant section in link above)	NText		<8_4_8_SSI_SIGHT>	N
9_0_SAMPLING	Refer to relevant section in link above)	NText		<9_0_SAMPLING>	N
9_1_GRAB	Refer to relevant section in link above)	NText		<9_1_GRAB>	N

PS_TRIP_REPORT PROVIDE descriptive information on the trip. Refer to the relevant sections in http://www.spc.int/OceanFish/en/publications/doc_download/1334-2014-ps-trip-report-					
FIELD	**Data Collection Instructions**	**Field format notes**	**Note**	**XML TAG**	**WCPFC FIELD**
9_2_SPILL	Refer to relevant section in link above)	NText		<9_2_SPILL>	N
9_3_OTHER	Refer to relevant section in link above)	NText		<9_3_OTHER>	N
10_0_OTHER_PROJ	Refer to relevant section in link above)	NText		<10_0_OTHER_PROJ>	N
11_0_WELL_LOAD	Refer to relevant section in link above)	NText		<11_0_WELL_LOAD>	N
12_0_VESS _DATA	Refer to relevant section in link above)	NText		<12_0_VESS _DATA>	N
13_0_GENERAL	Refer to relevant section in link above)	NText		<13_0_GENERAL>	N
14_0 _TRIP_MON	Refer to relevant section in link above)	NText		<14_0 _TRIP_MON>	N
14_1_CLARIFY	Refer to relevant section in link above)	NText		<14_1_CLARIFY>	N
14_2_RECOMMEND	Refer to relevant section in link above)	NText		<14_2_RECOMMEND>	N
14_3_CREW_INFO	Refer to relevant section in link above)	NText		<14_3_CREW_INFO>	N
14_4_MEDICAL	Refer to relevant section in link above)	NText		<14_4_MEDICAL>	N
14_5_PHOTOS	Refer to relevant section in link above)	NText		<14_5_PHOTOS>	N
14_6_OTHER_INFO	Refer to relevant section in link above)	NText		<14_6_OTHER_INFO>	N
15_0_PROBS	Refer to relevant section in link above)	NText		<15_0_PROBS>	N
15_1_FORM_CH_RECS	Refer to relevant section in link above)	NText		<15_1_FORM_CH_RECS>	N
16_0_CONCL	Refer to relevant section in link above)	NText		<16_0_CONCL>	N
17_0_ACKS	Refer to relevant section in link above)	NText		<17_0_ACKS>	N

2. LONGLINE OBSERVER E-REPORTING STANDARDS

2.1 DATA MODEL DIAGRAM

The following basic data model diagram outlines the structure of the entities and their relationships for purse seine operational OBSERVER data collected by E-Reporting systems. The tables that follow provide more information on the mechanisms of the links (relationships) between the entities.



2.2 TRIP-LEVEL DATA

(see the common OBS_TRIP table under 1.2 TRIP-LEVEL DATA)

2.3 SET-LEVEL DATA

LL_OBS_SET The observer must PROVIDE the following information for EACH FISHING SET/HAUL during the trip.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Note**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
SET IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + SET START DATE + SET START TIME			<L_SET_ID>	Y
SET_NUMBER	Unique # for the SET in this trip	Int		<SET_NUMBER>	N
OBSERVED_YN	Flag to indicate whether set was observer or not.	Bit		<OBSERVED_YN>	N
SET_START_DATE	Date and time the first buoy is thrown into the water to start the setting of the line.	REFER TO APPENDIX A1		<SET_START_DATE>	Y
SET_START_LAT	Take the GPS reading at the time the first buoy is thrown into the water.	REFER TO APPENDIX A2		<SET_START_LAT>	Y
SET_START_LON				<SET_START_LON>	Y
SET_END_DATE	Date and time the last buoy (usually has radio beacon attached) at the end of the mainline thrown into the water.	REFER TO APPENDIX A1		<SET_END_DATE>	Y
SET_END_LAT	Take the GPS reading at the time the last buoy is thrown into the water.	REFER TO APPENDIX A2		<SET_START_LAT>	Y
SET_END_LON				<SET_START_LON>	Y
HK_BT_FLT	Number of hooks between floats	SmallInt	Must be 1-60, or -1 for no information.	< HK_BT_FLT >	Y
BASK_SET	Number of baskets set.	SmallInt		<BASK_SET>	Y
BASK_OBSERVED	Number of basket observed (bottom of form, Nov 07 version)	SmallInt		<BASK_OBSERVED>	Y
HOOK_SET	Total number of hooks used in a set.	SmallInt		<HOOK_SET>	Y
HOOK_OBSERVED	Number of hooks observed and data recorded.	SmallInt		<HOOK_OBSERVED>	N
FLOAT_LENGTH	Length of floatline (m)	SmallInt		<FLOAT_LENGTH>	Y
LSPEED	Line-shooter setting speed.	Decimal (5,1)		<LSPEED>	Y
LSPEED_UNIT_ID	Link to ref_ids table	CHAR(1)	Must be 'M' for metres/second or 'K' for knots	<LSPEED_UNIT_ID>	Y
BRANCH_INTVL	Time interval (secs.) between branchline sets.	SmallInt		<BRANCH_INTVL>	Y
BRANCH_DIST	Mainline distance between branchlines (m).	Decimal (4,1)		<BRANCH_DIST>	Y
VESSEL_SET_SPEED	Vessel setting Speed (Knots).	Decimal (5,1)		<VESSEL_SET_SPEED>	N
LIGHTSTICKS	Number of lightsticks used	SmallInt		<LIGHTSTICKS>	Y
TDRS	Number of Time Depth recorders used	SmallInt		<TDRS>	Y
BRANCH_LENGTH	Length of branchline (m) (If all are of a consistent length, otherwise use next set of fields).	Decimal (4,1)		<BRANCH_LENGTH>	Y
BRANCH_0_20	Number of branchlines between successive floats that are < 20 m.	SmallInt		<BRANCH_0_20>	N

LL_OBS_SET

The observer must PROVIDE the following information for EACH FISHING SET/HAUL during the trip.

FIELD	Data Collection Instructions	Field format notes	Note	XML TAG	WCPFC FIELD
BRANCH_20_34	Number of branchlines between successive floats that are 20-35 m.	SmallInt		<BRANCH_20_34>	N
BRANCH_35_50	Number of branchlines between successive floats that are 35-50 m.	SmallInt		<BRANCH_35_50>	N
BRANCH_50_99	Number of branchlines between successive floats that are > 50 m.	SmallInt		<BRANCH_50_99>	N
SHARKLINE	The total number of hooks that have been hung directly from the floatline for this set. Also referred to as Shark lines.	SmallInt		<SHARKLINE>	Y
TAR_SP_CODE	Target Species id recorded on the form for this set (refer to the SPECIES table)	Char (3)	REFER TO APPENDIX 8.	<TAR_SP_CODE>	Y
TARGET_TUN_YN	ADDITIONAL FLAG indication for MULTIPLE targeting	Bit		<TARGET_TUN_YN>	Y
TARGET_SWO_YN	ADDITIONAL FLAG indication for MULTIPLE targeting	Bit		<TARGET_SWO_YN>	Y
TARGET_SKH_YN	ADDITIONAL FLAG indication for MULTIPLE targeting	Bit		<TARGET_SKH_YN>	Y
SETDETAILS	General notes on the setting procedures. Any comments relating to the setting strategy. For example has there been any specific targetting of shark in this set.	NText		<SETDETAILS>	N
BAIT1_SP_CODE	Bait species id. # 1	Char (3)	REFER TO APPENDIX 8.	<BAIT1_SP_CODE>	Y
BAIT2_SP_CODE	Bait species id. # 2	Char (3)	REFER TO APPENDIX 8.	<BAIT2_SP_CODE>	Y
BAIT3_SP_CODE	Bait species id. # 3	Char (3)	REFER TO APPENDIX 8.	<BAIT3_SP_CODE>	Y
BAIT4_SP_CODE	Bait species id. # 4	Char (3)	REFER TO APPENDIX 8.	<BAIT4_SP_CODE>	Y
BAIT5_SP_CODE	Bait species id. # 5	Char (3)	REFER TO APPENDIX 8.	<BAIT5_SP_CODE>	Y
BAIT1_W	Weight of bait species #1 used, (kg)	SmallInt		<BAIT1_W>	N
BAIT2_W	Weight of bait species #2 used, (kg)	SmallInt		<BAIT2_W>	N
BAIT3_W	Weight of bait species #3 used, (kg)	SmallInt		<BAIT3_W>	N
BAIT4_W	Weight of bait species #4 used, (kg)	SmallInt		<BAIT4_W>	N
BAIT5_W	Weight of bait species #5 used, (kg)	SmallInt		<BAIT5_W>	N
BAIT1_H	Hook number(s) in basket that Bait 1 was placed	NVarChar (25)	(Hook numbers separated by commas)	<BAIT1_H>	N
BAIT2_H	Hook number(s) in basket that Bait 2 was placed	NVarChar (25)	(Hook numbers separated by commas)	<BAIT2_H>	N
BAIT3_H	Hook number(s) in basket that Bait 3 was placed	NVarChar (25)	(Hook numbers separated by commas)	<BAIT3_H>	N
BAIT4_H	Hook number(s) in basket that Bait 4 was placed	NVarChar (25)	(Hook numbers separated by commas)	<BAIT4_H>	N
BAIT5_H	Hook number(s) in basket that Bait 5 was placed	NVarChar (25)	(Hook numbers separated by commas)	<BAIT5_H>	N
BAIT1_DYED_YN	FLAG indication on dyed on bait used #1	SmallInt		<BAIT1_DYED_YN>	Y
BAIT2_DYED_YN	FLAG indication on dyed on bait used #2	SmallInt		<BAIT2_DYED_YN>	Y

LL_OBS_SET The observer must PROVIDE the following information for EACH FISHING SET/HAUL during the trip.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Note**	**XML TAG**	**WCPFC FIELD**
BAIT3_DYED_YN	FLAG indication on dyed on bait used #3	SmallInt		<BAIT3_DYED_YN>	Y
BAIT4_DYED_YN	FLAG indication on dyed on bait used #4	SmallInt		<BAIT4_DYED_YN>	Y
BAIT5_DYED_YN	FLAG indication on dyed on bait used #5	SmallInt		<BAIT5_DYED_YN>	Y
TORI_LINES_YN	FLAG indication on tori lines used	SmallInt		<TORI_LINES_YN>	Y
BIRD_CURTAIN_YN	FLAG indication on side setting with bird curtain and weighted branch lines	SmallInt		<BIRD_CURTAIN_YN>	Y
WT_LINES_YN	FLAG indication on weighted lines used	SmallInt		<WT_LINES_YN>	Y
DIST_WT_HK	Record the distance in metres from where the bottom of the weight is attached on the branch line to the eye of the look.	SmallInt		<DIST_WT_HK>	Y
UW_CHUTE_YN	FLAG indication on underwater chute used	SmallInt		<UW_CHUTE_YN>	N
DEEP LINE SHOOTER	FLAG indication on whether deep lineshooter was used for this set used	SmallInt		<DEEP_LINE>	Y
HKSJAPAN_SIZE	Japanese hook size	NVarChar (50)		<HKSJAPAN_SIZE>	Y
HKSJAPAN_PERC	% of Japanese-style hook	TinyInt		<HKSJAPAN_PERC>	N
HKSJAPAN_ORS	Japanese-style hook offset, rings and/or swivels	NVarChar (5)		<HKSJAPAN_ORS>	N
HKSCIRCLE_SIZE	Circle hook size	NVarChar (50)		<HKSCIRCLE_SIZE>	Y
HKSCIRCLE_PERC	% of Circle hook	TinyInt		<HKSCIRCLE_PERC>	N
HKSCIRCLE_ORS	Circle hook offset, rings and/or swivels	NVarChar (5)		<HKSCIRCLE_ORS>	N
HKSJ_SIZE	J hook size	NVarChar (50)		<HKSJ_SIZE>	Y
HKSJ_PERC	% of J hook size	TinyInt		<HKSJ_PERC>	N
HKSJ_ORS	J hook offset, rings and/or swivels	NVarChar (5)		<HKSJ_ORS>	N
HKSOTH_TYPE	Other hook types description	NVarChar (50)		<HKSOTH_TYPE>	Y
HKSOTH_SIZE	Other hook type size	NVarChar (50)		<HKSOTH_SIZE>	Y
HKSOTH_PERC	% of Other hook types	TinyInt		<HKSOTH_PERC>	N
HKSOTH_ORS	Others types of hook offset, rings and/or swivels	NVarChar (5)		<HKSOTH_ORS>	N
OFFAL MANAGEMENT	FLAG indication whether the vessel used management of offal discharge	SmallInt		<OFFAL_MGMT>	Y

2.4 SET-HAUL LOG DATA

LL_SETHAULLOG **Integrated GPS/VMS into the E-Reporting system would typically PROVIDE the following log information for EACH SET/HAUL during the period of the trip; E-Reporting provides the opportunity for high frequency position logging and therefore more precision of the position of the individual catch.**					
FIELD	**Data Collection Instructions**	**Field format notes**	**Note**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
SET IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + SET START DATE + SET START TIME			<L_SET_ID>	Y
SETHAUL LOG IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + SET START DATE + SET START TIME + LOG DATE + LOG TIME			<L_SETHAULOG_ID>	Y
LOG_DATE	Date/TIME of log reading	REFER TO APPENDIX A1	Date and time required.	<LOG_DATE>	N
SETHAUL	Status of gear at this logged date/time : Set (S) Haul (H), Soak (K) or Float retrieved (F)	Char (4)	Must be either 'S', 'H', 'K' or 'F'	<SETHAUL>	N
STEND_ID	Indicator for status of the SET-HAUL 83 – First log record for the SET (start of SET information) 84 – Last log record for the SET (end of SET information) 85 – First log record for the HAUL (start of HAUL information) Corresponds to when the first buoy of the mainline is hauled from the water to start the haul 86 – Last log record for the HAUL (end of HAUL information. Corresponds to when the last buoy of the mainline is hauled from water to end the haul. 91 – Float retrieval	Int	Must be 83, 84, 85, 86, 91 or NULL The WCPFC requirements are for the date/time and position (lat/lon) are required for Start and End of set, and Start and End of Haul only. NULL is used in this field for any other logged position.	<STEND_ID>	N
LAT	Latitude (long format)	REFER TO APPENDIX A2		<LAT>	N
LON	Longitude (long format)	REFER TO APPENDIX A2		<LON>	N
COMMENTS	Comments	NText		<COMMENTS>	N
FLOAT_ID	Unique identifier for the Float retrieved	NVARCHAR(15)	Only used when Float retrieved (STEND_ID = 91) **E-Monitoring ONLY**	<FLOAT_ID>	N
HK_BT_FLT	Hooks between this float retrieved and the next float	SmallInt	Must be 1-60, or -1 for no information. Only used when Float retrieved (STEND_ID = 91) **E-Monitoring ONLY**	<HK_BT_FLT>	N

2.5 SET CATCH DATA

LL_OBS_CATCH The observer must PROVIDE the following CATCH DETAILS for each species catch in EACH FISHING HAUL for the trip.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Note**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
SET IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + SET START DATE + SET START TIME			<L_SET_ID>	Y
CATCH IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + SET START DATE + SET START TIME + CATCH EVENT DATE + CATCH EVENT TIME			<L_CATCH_ID>	Y
CATCH_DATE	Date of individual catch event. This should relate to the DATE of the SET END or HAUL – see "SET_END_DATE" FIELD IN LL_SET.	REFER TO APPENDIX A1		<CATCH_DATE>	Y
CATCH_DTIME	Date/TIME of individual catch event	REFER TO APPENDIX A1		<CATCH_DTIME>	N
HOOK_NO	Hook number that the fish is caught on count hooks from the last float hauled on board to next float hauled on board. Hook number=99 represents catch on a hook hanging directly from the floatline (the "Sharkline").	SmallInt		<HOOK_NO>	Y
SP_CODE	Species code.	Char (3)	REFER TO APPENDIX 8. Only shark species can have a FATE as 'RFR' and 'DFR'.	<SP_CODE>	Y
FATE_CODE	FATE of this catch. This indicates whether it was RETAINED, DISCARDED or ESCAPED, and any specific processing.	Char (3)	REFER TO APPENDIX 9 Only shark species can have a FATE as 'RFR' and 'DFR'.	<FATE_CODE>	Y
COND_CODE	CONDITION of this catch on caught. (or maybe also be referred as on "Landing"). Relevant for the Species of Special Interest.	Char (2)	REFER TO APPENDIX 10	<COND_CODE>	Y
COND_REL_CODE	CONDITION of this catch on RELEASE/DISCARD. Relevant for the Species of Special Interest.	Char (2)	REFER TO APPENDIX 10	<COND_REL_CODE>	Y
LEN	Length (cm).	SmallInt	Refer to SPECIES RANGE table for these species	<LEN>	Y
LEN_CODE	Length measurement code	Char (2)	REFER TO APPENDIX 11	<LEN_CODE>	Y
WT	Weight (kgs) – must be measured weight and not a visual estimate	Decimal (5,1)		<WT>	N
WT_CODE	Weight code.	Char (2)	REFER TO APPENDIX 22	<WT_CODE>	N
SEX_CODE	SEX of fish	Char (1)	REFER TO APPENDEX 12	<SEX_CODE>	Y

LL_OBS_CATCH The observer must PROVIDE the following CATCH DETAILS for each species catch in EACH FISHING HAUL for the trip.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Note**	**XML TAG**	**WCPFC FIELD**
SP_GR_CODE	Species/Gear interaction. Required for Species of Special Interest (SSIs)	Char (3)	APPENDIX A32 – SPECIES/GEAR INTERACTION CODES	<SP_GR_CODE>	N
GSTAGE_CODE	GONAD STAGE CODE	Char (1)	REFER TO APPENDIX 23	<GSTAGE_CODE>	N
COMMENTS	Comments. For **TAG recoveries**, record as much as information as possible on any Tags recovered	NVarChar (40)		<COMMENTS>	Y
LAT	Latitude (long format)	REFER TO APPENDIX A2	Position of each catch event **E-Monitoring ONLY**	<LAT>	N
LON	Longitude (long format)	REFER TO APPENDIX A2	Position of each catch event **E-Monitoring ONLY**	<LON>	N

2.6 SPECIES OF SPECIAL INTEREST DATA

(see 1.7 SPECIES OF SPECIAL INTEREST DATA)

2.7 SPECIES OF SPECIAL INTEREST DETAILS DATA

(see 1.8 SPECIES OF SPECIAL INTEREST DETAIL DATA)

2.8 TRIP MONITORING QUESTIONS

(see 1.11 TRIP MONITORING DATA)

2.9 TRIP MONITORING COMMENTS

(see 1.12 TRIP MONITORING COMMENTS)

2.10 VESSEL/AIRCRAFT SIGHTINGS DATA

(see 1.13 VESSEL/AIRCRAFT SIGHTINGS)

2.11 MARINE DEVICES DATA

(see 1.15 MARINE DEVICES DATA)

2.12 CREW DATA

VES_CREW PROVIDE the summary details of VESSEL CREW by NATIONALITY on this TRIP.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Note**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
CREW IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE + COUNTRY CODE			<V_CREW_ID>	Y
COUNTRY_CODE	Nationality of the CREW	Char (2)	Refer to valid WCPFC alpha-2 two-letter Country Codes For example, refer to WCPFC Codes web page	<COUNTRY_CODE>	N
CREWCOUNT	Total number of crew on board during the trip	SmallInt		<CREWCOUNT>	Y

2.13 LONGLINE GEAR DATA

LL_GEAR PROVIDE information on the LONGLINE GEAR on the vessel.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Note**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	Y
LL GEAR IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<L_GEAR_ID>	Y
WIRETRACE_ANS	Presence of wire trace (Y/N)	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond to this question)	<WIRETRACE_ANS>	Y
WIRETRACE_TXT	If wire traces used on all lines during the trip then record "ALL LINES" If the vessel used wire traces on certain branch lines during the trip record, where possible, information on the location of the branch line where used	NVarChar(20)		<WIRETR_TXT>	Y
MLINEHAUL_ANS	Usage of Mainline hauler (Y/N)	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond to this question)	<MLINEHAUL_ANS>	Y
MLINEHAUL_USAGE_CODE	Link to ref_usage table	Char (3)	REFER TO APPENDIX 21	<MLINEHAUL_USAGE_CODE>	N
MLINEHAUL_COMMENTS	Comments on Mainline Hauler	NVarChar (50)		<MLINEHAUL_COMMENTS>	N
BLINEHAUL_ANS	Usage of Branchline hauler (Y/N)	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond to this question)	<BLINEHAUL_ANS>	Y
BLINEHAUL_USAGE_CODE	Link to ref_usage table	Char (3)	REFER TO APPENDIX 21	<BLINEHAUL_USAGE_CODE>	
BLINEHAUL_COMMENTS	Comments on Branchline Hauler	NVarChar (50)		<BLINEHAUL_COMMENTS>	N
BLINE_MAT1_DIAM	Branchlines (Material #1) diameter	Decimal (4,1)		<BLINE_MAT1_DIAM>	N
BLINE_MAT2_DIAM	Branchlines (Material #2) diameter	Decimal (4,1)		<BLINE_MAT2_DIAM>	N
LSHOOT_ANS	Usage of Line shooter (Y/N)	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond to this question)	<LSHOOT_ANS>	Y
LSHOOT_USAGE_CODE	Link to ref_usage table	Char (3)	REFER TO APPENDIX 21	<LSHOOT_USAGE_CODE>	N
LSHOOT_COMMENTS	Comments on Line shooter	NVarChar (50)		<LSHOOT_COMMENTS>	N
BAITTHR_ANS	Usage of Automatic bait thrower (Y/N)	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond to this question)	<BAITTHR_ANS>	Y
BAITTHR_USAGE_CODE	Link to ref_usage table	Char (3)	REFER TO APPENDIX 21	<BAITTHR_USAGE_CODE>	N
BAITTHR_COMMENTS	Comments on Automatic Bait thrower	NVarChar (50)		<BAITTHR_COMMENTS>	N
BRANCHATT_ANS	Usage of Automatic branchline attacher (Y/N)	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond to this question)	<BRANCHATT_ANS>	Y
BRANCHATT_USAGE_CODE	Link to ref_usage table	Char (3)	REFER TO APPENDIX 21	<BRANCHATT_USAGE_CODE>	N
BRANCHATT_COMMENTS	Comments on Automatic Branchline attacher	NVarChar (50)		<BRANCHATT_COMMENTS>	N

LL_GEAR PROVIDE information on the LONGLINE GEAR on the vessel.					
FIELD	**Data Collection Instructions**	**Field format notes**	**Note**	**XML TAG**	**WCPFC FIELD**
WEIGHTED BRANCH LINE ANS	Usage of weight branch line (Y/N)	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond to this question)	<WBRANCH_ANS>	Y (60)
STRATEGIC OFFAL DISPOSAL_ANS	Usage of strategic offal disposal (Y/N)	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond to this question)	<SODIS_ANS>	Y (66)
WT_SCA_ANS	Weighing scales (Y/N)	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond to this question)	<WT_SCA_ANS>	N
WT_SCA_USAGE_CODE	Weighing scales USAGE	Char (3)	REFER TO APPENDIX 21	<WT_SCA_USAGE_CODE>	N
WT_SCA_COMMENTS	Comments on Automatic B Weighing scales	NVarChar (50)		<WT_SCA_COMMENTS>	N
MLINE_COMP	Composition of mainline	NText		<MLINE_COMP>	N
BLINE_COMP	Composition of branchlines	NText		<BLINE_COMP>	N
MLINE_MAT	Mainline material	NVarChar (15)		<MLINE_MAT>	Y
MLINE_MAT_DESC	Mainline material description	NVarChar (50)		<MLINE_MAT_DESC>	N
MLINE_LEN	Mainline length (nm)	Decimal (5,1)		<MLINE_LEN>	Y
MLINE_DIAM	Mainline diameter (mm)	Decimal (4,1)		<MLINE_DIAM>	Y
BLINE_MAT1	Branchline material (Material #1)	NVarChar (40)		<BLINE_MAT1>	Y
BLINE_MAT1_DESC	Branchlines (Material #1) description	NVarChar (50)		<BLINE_MAT1_DESC>	Y
BLINE_MAT2	Branchline material (Material #2)	NVarChar (40)		<BLINE_MAT2>	Y
BLINE_MAT2_DESC	Branchlines (Material #2) description	NVarChar (50)		<BLINE_MAT2_DESC>	Y
BLINE_MAT3	Branchline material (Material #3)	NVarChar (40)		<BLINE_MAT3>	Y
BLINE_MAT3_DESC	Branchlines (Material #3) description	NVarChar (50)		<BLINE_MAT3_DESC>	Y
SEAWATER_ANS	Refrigeration method - Sea water ?	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond to this question)	<SEAWATER_ANS>	Y
BLASTFREEZER_ANS	Refrigeration method - blast freezer ?	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond to this question)	<BLASTFREEZER_ANS>	Y
ICE_ANS	Refrigeration method - Ice ?	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond to this question)	<ICE_ANS>	Y
CHILLEDSEAWATER_ANS	Refrigeration method - Chilled Sea water ?	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond to this question)	<CHILLEDSEAWATER_ANS>	Y
OTHERSTORAGE_ANS	Refrigeration method - other ?	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond to this question)	<OTHERSTORAGE_ANS>	Y
OTHERSTORAGE_DESC	Refrigeration method – other description	NVarChar (50)		<OTHERSTORAGE_DESC>	Y

2.14 POLLUTION REPORT

(see 1.20 POLLUTION REPORT and 1.21 POLLUTION DETAILS)

2.15 OBSERVER JOURNAL

(see 1.22 OBSERVER JOURNAL)

2.16 LONGLINE TRIP REPORT

LL_TRIP_REPORT PROVIDE descriptive information on the trip. Refer to the relevant sections in http://www.spc.int/OceanFish/en/publications/doc download/1318-2014-ll-trip-report					
FIELD	**Data Collection Instructions**	**Field format notes**	**Note**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<OBSTRIP_ID>	N
1_BACKGROUND	(Refer to relevant section in link above)	NText		<1_BACKGROUND>	N
2_0_CRUISE_SUMMARY	(Refer to relevant section in link above)	NText		<2_0_CRUISE_SUMMARY>	N
2_1_AREA_FISHED	(Refer to relevant section in link above)	NText		<2_1_AREA_FISHED>	N
2_2_END_OF_TRIP	(Refer to relevant section in link above)	NText		<2_2_END_OF_TRIP>	N
3_0_DATA_COLLECTED	(Refer to relevant section in link above)	NText		<3_0_DATA_COLLECTED>	N
3_1_OTHER_DATA_COLL	(Refer to relevant section in link above)	NText		<3_1_OTHER_DATA_COLL>	N
4_0_COC	Refer to relevant section in link above)	NText		<4_0_COC>	N
5_1_VESS_INFO	Refer to relevant section in link above)	NText		<5_1_VESS_INFO>	N
5_2_CREW_NATION	Refer to relevant section in link above)	NText		<5_2_CREW_NATION>	N
5_2_1_PIC	Refer to relevant section in link above)	NText		<5_2_1_PIC>	N
5_3_ELEC	Refer to relevant section in link above)	NText		<5_3_ELEC>	N
5_3_1_RADIO_BUOYS	Refer to relevant section in link above)	NText		<5_3_1_RADIO_BUOYS>	N
5_4_FISHING_GEAR	Refer to relevant section in link above)	NText		<5_4_FISHING_GEAR>	N
5_4_1_MAINLINE	Refer to relevant section in link above)	NText		<5_4_1_MAINLINE>	N
5_4_2_BRANCHLINES	Refer to relevant section in link above)	NText		<5_4_2_BRANCHLINES>	N
5_4_3_FLOATLINES	Refer to relevant section in link above)	NText		<5_4_3_FLOATLINES>	N
5_4_4_BLINE_WTS	Refer to relevant section in link above)	NText		<5_4_4_BLINE_WTS>	N
5_4_5_FISH_HOOKS	Refer to relevant section in link above)	NText		<5_4_5_FISH_HOOKS>	N
5_5_SAFETY_EQ	Refer to relevant section in link above)	NText		<5_5_SAFETY_EQ>	N
5_6_REGRIG	Refer to relevant section in link above)	NText		<5_6_REGRIG>	N
5_7_OTHER_GEAR	Refer to relevant section in link above)	NText		<5_7_OTHER_GEAR>	N
6_0_FISH_STRATEGY	Refer to relevant section in link above)	NText		<6_0_FISH_STRATEGY>	N
6_1_FISHERY_INFO	Refer to relevant section in link above)	NText		<6_1_FISHERY_INFO>	N
6_2_OCEAN_FEATURES	Refer to relevant section in link above)	NText		<6_2_OCEAN_FEATURES>	N
6_3_SET_HAUL	Refer to relevant section in link above)	NText		<6_3_SET_HAUL>	N
6_4_TARGET_DEPTH	Refer to relevant section in link above)	NText		<6_4_TARGET_DEPTH>	N
6_5_BAITING	Refer to relevant section in link above)	NText		<6_5_BAITING>	N
6_6_MITIGATION	Refer to relevant section in link above)	NText		<6_6_MITIGATION>	N
6_6_1_FISH_OFFAL	Refer to relevant section in link above)	NText		<6_6_1_FISH_OFFAL>	N
6_7_HAUL_PROCESS	Refer to relevant section in link above)	NText		<6_7_HAUL_PROCESS>	N
6_8_UNUSUAL_SET	Refer to relevant section in link above)	NText		<6_8_UNUSUAL_SET>	N
6_9_CHANGES_SETS	Refer to relevant section in link above)	NText		<6_9_CHANGES_SETS>	N
7_1_WEATHER	Refer to relevant section in link above)	NText		<7_1_WEATHER>	N
7_2_SEA_COND	Refer to relevant section in link above)	NText		<7_2_SEA_COND>	N
7_3_MOON_PHASE	Refer to relevant section in link above)	NText		<7_3_MOON_PHASE>	N
8_1_TARGET_CATCH	Refer to relevant section in link above)	NText		<8_1_TARGET_CATCH>	N
8_1_1_TARGET_PROC	Refer to relevant section in link above)	NText		<8_1_1_TARGET_PROC>	N
8_1_2_TARGET_DISC	Refer to relevant section in link above)	NText		<8_1_2_TARGET_DISC>	N

LL_TRIP_REPORT

PROVIDE descriptive information on the trip.

Refer to the relevant sections in http://www.spc.int/OceanFish/en/publications/doc_download/1318-2014-ll-trip-report

FIELD	Data Collection Instructions	Field format notes	Note	XML TAG	WCPFC FIELD
8_1_3_TARGET_DAMAGE	Refer to relevant section in link above)	NText		<8_1_3_TARGET_DAMAGE>	N
8_2_1_OTHER_TUN_BILL	Refer to relevant section in link above)	NText		<8_2_1_OTHER_TUN_BILL>	N
8_2_2_SHARKS_RAYS	Refer to relevant section in link above)	NText		<8_2_2_SHARKS_RAYS>	N
8_2_3_OTHER_BY-CATCH	Refer to relevant section in link above)	NText		<8_2_3_OTHER_BY-CATCH>	N
8_3_UNSPEC_SP_CODES	Refer to relevant section in link above)	NText		<8_3_UNSPEC_SP_CODES>	N
8_4_1_SSI_LAND	Refer to relevant section in link above)	NText		<8_4_1_SSI_LAND>	N
8_4_2_SSI_INTERACT	Refer to relevant section in link above)	NText		<8_4_2_SSI_INTERACT>	N
8_4_3_SSI_MAM	Refer to relevant section in link above)	NText		<8_4_3_SSI_MAM>	N
8_4_4_SSI_SIGHT	Refer to relevant section in link above)	NText		<8_4_4_SSI_SIGHT>	N
9_0_TRANS	Refer to relevant section in link above)	NText		<9_0_TRANS>	N
10_1_TAGS	Refer to relevant section in link above)	NText		<10_1_TAGS>	N
10_2_STOMACH	Refer to relevant section in link above)	NText		<10_2_STOMACH>	N
10_3_OTHER	Refer to relevant section in link above)	NText		<10_3_OTHER>	N
11_0_ TRIP_MON	Refer to relevant section in link above)	NText		<11_0_ TRIP_MON>	N
11_1_CLARIFY	Refer to relevant section in link above)	NText		<11_1_CLARIFY>	N
11_2_RECOMMEND	Refer to relevant section in link above)	NText		<11_2_RECOMMEND>	N
11_3_CREW_INFO	Refer to relevant section in link above)	NText		<11_3_CREW_INFO>	N
11_4_MEDICAL	Refer to relevant section in link above)	NText		<11_4_MEDICAL>	N
11_5_PHOTOS	Refer to relevant section in link above)	NText		<11_5_PHOTOS>	N
11_6_OTHER_INFO	Refer to relevant section in link above)	NText		<11_6_OTHER_INFO>	N
12_0_VESS _DATA	Refer to relevant section in link above)	NText		<12_0_VESS _DATA>	N
13_0_GENERAL	Refer to relevant section in link above)	NText		<13_0_GENERAL>	N
14_0_PROBS	Refer to relevant section in link above)	NText		<14_0_PROBS>	N
14_1_FORM_CH_RECS	Refer to relevant section in link above)	NText		<14_1_FORM_CH_RECS>	N
15_0_CONCL	Refer to relevant section in link above)	NText		<15_0_CONCL>	N
16_0_ACKS	Refer to relevant section in link above)	NText		<16_0_ACKS>	N

APPENDICES

APPENDIX A1 – DATE/TIME FORMAT

The DATE and DATE/TIME formats must adhere to the following standard:
ISO 8601 - Dates and times format – both local and UTC dates

[YYYY]-[MM]-[DD] Z	for fields designated as UTC date
[YYYY]-[MM]-[DD]	for fields designated as LOCAL date
[YYYY]-[MM]-[DD]T[HH]:[MM]Z	for fields designated as UTC date/time
[YYYY]-[MM]-[DD]T[HH]:[MM]	for fields designated as LOCAL date/time

APPENDIX A2 – POSITION/COORDINATE FORMAT

The Latitude and Longitude coordinates must adhere to the ISO 6709 – Positions
Degrees and minutes (to 3 decimal places where relevant).

LATITUDE	+/- DDMM.MMM
LONGITUDE	+/- DDDMM.MMM

APPENDIX A3 – LOCATION CODES

The PORT LOCATION Codes must adhere to the list of valid WCPFC 5-letter LOCATION codes [UPPERCASE CHAR(5)]

In the rare case that the port is not in the WCFPC LOCATION codes, then the actual port name can be included and a WCFPC LOCATION code will be generated.

(Refer to the relevant WCPFC Codes web page link)

APPENDIX A4 – VESSEL IDENTIFICATION

Using a single vessel identifier field ("VID") in OBS_TRIP removes the redundancy of including all vessel attributes with each trip record and ensures standardisation and consistency through the direct referencing to the WCPFC Register of Fishing Vessels (RFV) and other Vessel Registry databases (e.g. the IMO/UVI standards, the FFA Vessel Register and the PNA Vessel Register).

The WCPFC RFV vessel identifier ("VID") will be used as the vessel identifier except in cases where, for example, it is more convenient to use the unique national vessel identifier (e.g. IRSC) and in these cases, the must be a link between the national vessel identifier and the WCPFC RFV VID established and available.

The attributes for the VESSEL should already be maintained in the WCFPC RFV (and other Vessel Registry databases, where relevant) and so can be obtained through reference in using the "VID"; as such, there is no requirement to include the vessel attributes with the E-Reported observer data.

The following table lists the type of information that can be accessed in the WCFPC RFV (and other registers) by using the "VID" as the reference.

FIELD	Data Collection Instructions	Field format notes	Validation instructions	XML TAG	WCPFC FIELD
VESSEL NAME	PROVIDE the VESSEL attributes which should be consistent with the attributes stored in the WCPFC and FFA Regional Vessel Registers	CHAR(30) UPPER CASE	Must be consistent with the WCPFC and FFA Vessel Registers	<VESSELNAME>	Y
COUNTRY OF VESSEL REGISTRATION		CHAR(2) WCPFC alpha-2 two-letter country code (refer to WCPFC codes web page) UPPER CASE	WCPFC alpha-2 two-letter country code (refer to WCPFC codes web page) Must be consistent with the WCPFC and FFA Vessel Registers Country of registration is distinct from the chartering nation, where relevant	<COUNTRYREG>	Y
VESSEL REGISTRATION NUMBER		CHAR(20) UPPER CASE	Must be consistent with the WCPFC and FFA Vessel Registers	<REGNO>	Y
FFA VESSEL REGISTER NUMBER		INTEGER(5)	Must be consistent with the FFA Vessel Register	<FFAVID>	N
WCPFC RFV VID		INTEGER(10)	Must be consistent with the WCPFC RFV	<WIN>	N
UNIVERSAL VESSEL IDENTIFIER (UVI)		INTEGER(10)	Must be consistent with the WCPFC and FFA Vessel Registers	<IMO_UVI>	N
IMO_OR_LR		INTEGER(7)	Record of IMO number or Lloyd's Register number (fishing vessel at least 100GT or 100GRT)		
VESSEL IRCS - CALLSIGN		CHAR(10) UPPER CASE	Must be consistent with the WCPFC and FFA Vessel Registers	<IRCS>	Y
CRUISING SPEED		INTEGER(3)	Cruising speed (not top speed)	<C_SPEED>	Y
FISH HOLD CAPACITY		INTEGER(4)	The total maximum amounts in metric Tons (MT) that the vessel freezers, wells and other fish storage areas on a vessel can hold.	<F_HOLD_CAP>	Y
LOA		INTEGER(3)	Specify length overall and the unit	<LOA>	Y
TONNAGE		INTEGER(4)	Specify the Gross registered tonnage (GRT) or Gross Tonnage (GT) and the unit	<V_TONNAGE>	Y
ENGINE POWER		INTEGER(5)	Specify the engine power and the power units	<ENG_POWER>	Y

APPENDIX A5 – PURSE SEINE OBSERVER ACTIVITY CODES

S_ACTIV_ID	Description	FAD reference (to record BEACON field)	FORM Code version (old)
1	Set	YES	1
2	Searching		2
3	Transit		3
4	No fishing - Breakdown		4
5	No fishing - Bad weather		5
6	In port - please specify		6
7	Net cleaning set		7
8	Investigate free school		8
9	Investigate floating object	YES	9
10	Deploy - raft, FAD or payao	YES	10D
11	Retrieve - raft, FAD or payao	YES	10R
12	No fishing - Drifting at day's end		11
13	No fishing - Drifting with floating object	YES	12
14	No fishing - Other reason (specify)		13
15	Drifting -With fish aggregating lights	YES	14
16	Retrieve radio buoy	YES	15R
17	Deploy radio buoy	YES	15D
18	Transhipping or bunkering		16
19	Servicing FAD or floating object	YES	17
20	*Helicoptor takes off to search*		*H1*
21	*Helicopter returned from search*		*H2*

APPENDIX A6 – PURSE SEINE TUNA SCHOOL ASSOCIATION CODES

S_ACTIV_ID	Description	SCHOOL TYPE CATEGORY
1	Unassociated (free school)	UNASSOCIATED
2	Feeding on Baitfish (free school)	UNASSOCIATED
3	Drifting log, debris or dead animal	ASSOCIATED
4	Drifting raft, FAD or payao	ASSOCIATED
5	Anchored raft, FAD or payao	ASSOCIATED
6	Live whale	ASSOCIATED
7	Live whale shark	ASSOCIATED
8	Other (please specify)	
9	No tuna associated	

APPENDIX A7 – PURSE SEINE TUNA SCHOOL/ FAD DETECTION CODES

DETON _ID	Description
1	Seen from vessel
2	Seen from helicopter; Use when vessel gets to the school of tuna that helicopter either: 1. reported on; or 2. dropped buoy on.
3	Marked with beacon
4	Bird radar
5	Sonar / depth sounder
6	Info. from other vessel
7	Anchored FAD / payao (recorded)
8	Marked with Satellite/GPS Beacon
9	Navigation Radar
10	Lights
11	Flock of birds sighted from vessel
12	Other – please specify
13	FAD being deployed (so not detected)
20	Unknown

APPENDIX A8 – SPECIES CODES

Refer to the FAO three-letter species codes:

http://www.fao.org/fishery/collection/asfis/en

APPENDIX A9 – OBSERVER FATE CODES

FATE CODE	DESCRIPTION
DCF	Discarded - Line cut or Other
DDL	Discarded - Difficult to land
DFR	Discarded - fins removed and trunk discarded
DFW	Discarded - Discarded from well
DGD	Discarded - Gear damage
DNS	Discarded - No space in freezer
DOR	Discarded - other reason (specify)
DPA	Discarded - Protected species - Alive
DPD	Discarded - Protected species - Dead
DPQ	Discarded - poor quality
DPS	Discarded - protected species (e.g. turtles)
DPU	Discarded - Protected Species - Condition unknown
DSD	Discarded - Shark damage
DSO	Discarded - rejected (struck off before landing)
DTS	Discarded - too small
DUS	Discarded - Undesirable species
DVF	Discarded - Vessel fully loaded
DWD	Discarded - Whale damage
ESC	Escaped
RCC	Retained - Crew Consumption
RFL	Retained - Filleted
RFR	Retained - fins removed and trunk retained
RGG	Retained - gilled and gutted (retained for sale)
RGO	Retained - gutted only
RGT	Retained - gilled gutted and tailed (for sale)
RHG	Retained - headed and gutted (Marlin)
RHT	Retained - Headed, gutted and tailed
RMD	Retained - fins removed/trunk retained (MANDATORY)
ROR	Retained - other reason (specify)
RPT	Retained - partial (e.g. fillet, loin)
RSD	Retained - Shark damage
RTL	Retained - Tailed
RWD	Retained - Whale Damage
RWG	Retained - Winged
RWW	Retained - whole
UUU	Unknown - not observed

APPENDIX A10 – OBSERVER CONDITION CODES

CONDITION CODE	Description
A0	Alive but unable to describe condition
A1	Alive and healthy
A2	Alive, but injured or distressed
A3	Alive, but unlikely to live
D	Dead
U	Condition, unknown

APPENDIX A11 – LENGTH CODES

Length Code	Description
AN	Anal fin length
BL	Bill to fork in tail
CC	Curved Carapace Length
CK	Cleithrum to anterior base caudal keel
CL	carapace length (turtles)
CW	Carapace width
CX	Cleithrum to caudal fork
EO	Posterior eye orbital to caudal fork
EV	Posterior eye orbital to vent
FF	1st dorsal to fork in tail
FN	Weight of all fins (sharks)
FS	1st dorsal to 2nd dorsal
FW	Fillets weight
GF	Gilled, gutted, headed, flaps removed
GG	Gilled and gutted weight
GH	Gutted and headed weight
GI	Girth
GO	Gutted only (gills left in)
GT	Gilled, gutted and tailed
GX	Gutted, headed and tailed
LF	lower jaw to fork in tail
NM	not measured
OW	Observer's Estimate
PF	pectoral fin to fork in tail
PS	Pectoral fin to 2nd dorsal
SC	Straight Carapace Length
SL	Tip of snout to end of caudal peduncle
TH	Body Thickness (Width)
TL	tip of snout to end of tail
TW	total width (tip of wings - rays)
UF	upper jaw to fork in tail
US	Upper jaw to 2nd dorsal fin
WW	Whole weight

APPENDIX A12 – SEX CODES

Sex Code	Description
F	Female
I	Indeterminate (checked but unsure)
M	Male
U	Unknown (not checked)

APPENDIX A13 – Vessel activity (SSI interaction) codes

Activity Code for interaction	Description
1	SETTING
2	HAULING
3	SEARCHING
4	TRANSITING
5	OTHER

APPENDIX A14 – SIZE and SPECIES COMPOSIION SAMPLE PROTOCOL

Sample Type	Description
R	Random (GRAB) sample
S	SPILL sample
B	Bycatch only sampling
F	Small-fish only sampling
O	Other type of sampling protocol (please specify)

APPENDIX A15 – MEASURING INSTRUMENTS Codes

Measure Code	Description
B	BOARD
C	CALLIPER - ALUMINIUM
E	EYE
R	RULER
T	TAPE
U	UNKNOWN
W	CALLIPER - WOOD

APPENDIX A16 – TRIP MONITORING QUESTION Codes

QUESTION CODE	Description	WCPFC Question	WCPFC ROP Q#
RS-A	Did the operator or any crew member assault, obstruct, resist, delay, refuse boarding to, intimidate or interefere with observers in the performance of their duties	Y	14
RS-B	Request that an event not be reported by the observer	Y	13
RS-C	Mistreat other crew	N	
RS-D	Did operator fail to provide observer with food, accommodation, etc.	Y	15
NR-A	Fish in areas where the vessel is not permitted to fish	Y	10
NR-B	Target species other than those they are licenced to target	N	
NR-C	Use a fishing method other than the method the vessel was designed or licensed	Y	16
NR-D	Not display or present a valid (and current) licence document onboard	N	
NR-E	Transfer or transship fish from or to another vessel	Y	12
NR-F	Was involved in bunkering activities	N	
NR-G	Fail to stow fishing gear when entering areas where vessel is not authorised to fish	Y	23
WC-A	Fail to comply with any Commission Conservation and Management Measures (CMMs)	Y	9
WC-B	High-grade the catch	Y	8
WC-C	Fish on FAD during FAD Closure	N	
LP-A	Inaccurately record vessel position on vessel log sheets for sets, hauling and catch	Y	1
LP-B	Fail to report vessel positions to countries where required	Y	11
LC-A	Inaccurately record retained 'Target Species' in the Vessel logs [or weekly reports]	Y	2
LC-B	Inaccurately record 'Target Species' Discards	Y	3
LC-C	Record target species inaccurately [eg. combine bigeye/yellowfin/skipjack catch]	Y	6
LC-D	Not record bycatch discards	N	
LC-E	Inaccurately record retained bycatch Species	Y	4
LC-F	Inaccurately record discarded bycatch species	Y	5
SI-A	Land on deck Species of Special Interest (SSIs)	N	
SI-B	Interact (not land) with SSIs	Y	7
PN-A	Dispose of any metals, plastics, chemicals or old fishing gear	Y	20
PN-B	Discharge any oil	Y	21
PN-C	Lose any fishing gear	Y	17
PN-D	Abandon any fishing gear	Y	18
PN-E	Fail to report any abandoned gear	Y	19
SS-A	Fail to monitor international safety frequencies	Y	22
SS-B	Carry out-of-date safety equipment	N	

APPENDIX A17 – VESSEL / AIRCRAFT SIGHTINGS Codes

CODE	Description
1	SINGLE PURSE SEINE
2	LONGLINE
3	POLE AND LINE
4	MOTHERSHIP
5	TROLL
6	NET BOAT
7	BUNKER
8	SEARCH, ANCHOR OR LIGHT BOAT
9	FISH CARRIER
10	TRAWLER
11	LIGHT AIRCRAFT
12	HELICOPTER
13	OTHER

APPENDIX A18 – ACTION Codes

Action Codes	Description	SPC/FFA FORM Used (for reference)
AG	Aground	GEN6
BG	Bunkering (transfer of fuel), vessel observer is on is GIVING	GEN1, GEN6
BR	Bunkering (transfer of fuel), vessel observer is on is RECEIVING	GEN1, GEN6
CR	Retained from a set solely because of catch-retention rules	PS5
DF	Dumping of fish	GEN1
DS	Discarded into the sea	PS5
FI	Fishing	GEN1, GEN6
FO	Fish On-board	PS5
FS	From set	PS5
NF	Not fishing	GEN1
OG	Other, vessel observer is on is GIVING	GEN1
OR	Other, vessel observer is on is RECEIVING	GEN1
PF	Possibly fishing	GEN1
SG	Set sharing, vessel observer is on is GIVING	GEN1
SR	Set sharing, vessel observer is on is RECEIVING	GEN1,PS5
TG	Transferring fish between vessels, vessel observer is on is GIVING	GEN1,PS5, GEN6
TR	Transferring fish between vessels, vessel observer is on is RECEIVING	GEN1,PS5, GEN6
UL	Unloaded at cannery or cool store	PS5
WT	Transferred between wells	PS5

GEN1 – Vessel / Aircraft sightings
GEN6 – Pollution Report
PS-5 – Purse seine Well transfer

APPENDIX A19 – Purse seine CREW JOB Codes

CODE	Description
1	CAPTAIN
2	NAVIGATOR/MASTER
3	MATE
4	CHIEF ENGINEER
5	ASSISTANT ENGINEER
6	DECK BOSS
7	COOK
8	HELICOPTER PILOT
9	SKIFF MAN
10	WINCH MAN
11	HELICOPTER MECHANIC
12	CREW
13	NAVIGATOR
14	FISHING MASTER
15	RADIO OPERATOR
16	TRANSLATOR

APPENDIX A20 – MARINE DEVICES Codes

Code	Description	WCPFC FIELD	GEAR LIST CODES
1	BATHYTHERMOGRAPH MBT	YES	
2	BIRD RADAR	YES	SP
3	CHART PLOTTER	YES	LSP
4	DEPTH SOUNDER	YES	LSP
5	DOPPLER CURRENT MONITOR	YES	
6	SATELLITE BUOY	YES	S
7	FISHERY INFORMATION SERVICES	YES	LSP
8	GPS	YES	LSP
9	NAVIGATIONAL RADAR #1	YES	LP
10	RADIO BUOYS - CALL-UP	YES	LSP
11	RADIO BUOYS - NON CALL-UP	YES	LSP
12	RADIO BEACON DIRECTION FINDER	YES	LSP
13	SATELLITE - HF TELEX	YES	
14	SEA SURFACE TEMP. GAUGE	YES	LP
15	SONAR	YES	LSP
16	HF RADIO TELEPHONE	YES	
17	SMART-LINK PHONE	YES	
18	TRACK PLOTTER	YES	LSP
19	VESSEL MONITORING SYSTEM (VMS)	YES	LSP
20	WEATHER FACSIMILE	YES	LP
21	WEATHER SATELLITE MONITOR	YES	
22	NET SOUNDER	-	LSP
23	BINOCULARS	-	P
24	ECHO SOUNDING BUOY	-	S
25	EPIRB	-	

APPENDIX A21 – DEVICE USAGE codes

Code	Description
XXX	Not mentioned
ALL	used all the time for fishing
BRO	broken now but used normally
NA	Not applicable / Not filled
NOL	no longer ever used
OIF	used only in transit
RAR	used rarely
SIF	used often but only in fishing
TRA	used all the time

APPENDIX A22 – WEIGHT MEASUREMENT codes

Weight measurement code	Description
CW	Captain's Estimate
FN	Weight of all fins (sharks)
FW	Fillets weight
GF	Gilled, gutted, headed, flaps removed
GG	Gilled and gutted
GH	Gutted and headed
GO	Gutted only (gills left in)
GT	Gilled, gutted and tailed
GX	Gutted, headed and tailed
NM	Not measured
OW	Observer's Estimate
TW	Trunk weight
WW	Whole weight

APPENDIX A23 – GONAD STAGE codes

Gonad stage code	Short description	Description
N	No information	No information
I	Immature	Ovary small and slender. Cross-section round
E	Early Maturing	Enlarged, pale yellow ovaries. Ova not visible.
L	Late Maturing	Enlarged, turgid, orange-yellow ovaries. Ova opaque
M	Mature	Enlarged, richly vascular, orange ovaries, losing turgidity. Ova translucent.
R	Ripe	Greatly enlarged ovaries, not turgid. Ova easily dislodged and extruded by pressure.
S	Spent	Flaccid, vascular ovaries. Most ova gone. Often dark orange-red coloration.
R	Recovering	Vascular ovaries. Next batch of ova developing.

APPENDIX A24 – FAD ORIGIN codes

FAD ORIGIN CODE	Description
1	Your vessel deployed this trip
2	Your vessel deployed previous trip
3	Other vessel (owner consent)
4	Other vessel (no owner consent)
5	Other vessel (consent unknown)
6	Drifting and found by your vessel
7	Deployed by FAD auxiliary vessel
8	Origin unknown
9	Other origin

APPENDIX A25 – FAD DETECTION codes

FAD DETECTION CODE	Description
1	Seen from Vessel (no other method)
2	Seen from Helicopter
3	Marked with Radio beacon
4	Bird Radar
6	Info. from other vessel
7	Anchored (GPS)
8	Marked with Satellite Beacon
9	Navigation Radar
10	Lights
11	Flock of Birds sighted from vessel
12	Other (please specify)
13	Vessel deploying FAD (not detected)

APPENDIX A26 – FAD MATERIAL codes

FAD MATERIAL CODE	Description
1	Logs, Trees or debris tied together
2	Timber/planks/pallets/spools
3	PVC or Plastic tubing
4	Plastic drums
5	Plastic Sheeting
6	Metal Drums (i.e. 44 gallon)
7	Philippines design drum FAD
8	Bamboo/Cane
9	Floats/Corks
10	Unknown (describe)
11	Chain, cable rings, weights
12	Cord/rope
13	Netting hanging underneath FAD
14	Bait containers
15	Sacking/bagging
16	Coconut fronds/tree branches
17	Other (describe)

APPENDIX A27 – FAD TYPE codes

FAD TYPE CODE	Description
1	Man-made object (Drifting FAD)
2	Man-made object (Non FAD)
3	Tree or log (natural, free floating)
4	Tree or logs (converted into FAD)
5	Debris (flotsam bunched together)
6	Dead Animal (specify; i.e. whale, horse, etc.)
7	Anchored Raft, FAD, or Payao
8	Anchored Tree or Logs
9	Other (please specify)
10	Man-made object (Drifting FAD)-changed

APPENDIX A28 – POLLUTION GEAR codes

POLLUTION GEAR CODE	DESCRIPTION
1	Lost during fishing
2	Abandoned
3	Dumped

APPENDIX A29 – POLLUTION MATERIALS codes

POLUTION MATERIALS CODES	DESCRIPTION
1	Plastics
2	Metals
3	Waste Oils
4	Chemicals
5	Old fishing gear
6	General garbage

APPENDIX A30 – POLLUTION SOURCE codes

POLLUTION SOURCE CODES	DESCRIPTION
1	Vessel Aground/Collision
2	Vessel at Anchor/Berth
3	Vessel Underway
4	Land Based Source
5	Other

APPENDIX A31 – POLLUTION TYPE codes

POLLUTION TYPE CODES	DESCRIPTION
1	Waste dumped overboard
2	Oil splillages and leakages
3	Abandoned or Lost Fishing Gear

APPENDIX A32 – SPECIES/GEAR INTERACTION CODES

CONDITION CODE	Description
G01	Entangled
G02	Hooked externally
G03	Hooked internally
G04	Hooked in mouth (SSI & Sharks)
G05	Hooked deeply – throat stomach (SSI & Sharks)
G06	Hooked unknown