Western and Central Pacific Fisheries Commission (WCPFC)

E-REPORTING STANDARD DATA FIELDS

OPERATIONAL LOGSHEET DATA

5^{*th*} *December 2016*

CURRENT VERSION:	*2.70*
DATE:	*5*^{*th*} *December 2016*
STATUS:	*Draft – pending approval*

Version Number	Date Released	Date and process approved	Brief Description
2.00 (Draft)	*July 2015*	*July 2015 WCPFC ERandEM meeting (Nadi, Fiji)*	*First version draft accepted by the meeting*
2.50	21st November 2016	…	Released to Japan and Chinese Taipei on 21st November 2016 in response to their comments provided prior to the 21st October deadline. Changes based on reviews and suggestions from several CCMs (mainly Japan and Chinese Taipei) and minor corrections, including: − Purse seine reason discard code : exchanged '4' and '5' (APPENDIX A8) − APPENDIX A5 – changed titles to be consistent with covering activity codes across all gear types (and not just purse seine) − Provide the correct XML tag for Purse seine discard field − Remove redundant \<lath> and \<lonh> from both purse seine and longline positional data fields. The substantive changes suggested by several CCMs 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 <u>not</u> WCPFC minimum standard required 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 <u>WCPFC Scientific Data to be provided to the Commission</u>. − Includes a contingency if the WCPFC LOCATION code for a port is not available. − Aligned Date/Time requirements to WCPFC standards where relevant.
2.60	1st December 2016	…	Changes based on comments provided by Japan on 28th November 2016. Changed the column title "Validation Instructions" to "Notes" throughout, as suggested. Accepted all requested changes except the following: − Distinction made between the requirement for DATE only (WCPFC required field) and the DATE/TIME (not a WCPFC requirement), for departure date, unloading date and return-to-port dates. For both PS_TRIP and LL_TRIP − Removed the requirement for a "Carrier Vessel Id" under PS Unloading data − Suggested text in LL_TRIP for "PORT/PLACE OF DEPARTURE" and "PORT/PLACE OF UNLOADING" accepted. − Change to text in APPENDIX 2 accepted.

Version Number	Date Released	Date and process approved	Brief Description
			− In APPENDIX 8, new text clarifies that "<u>These codes are not WCPFC required fields.</u>" − Accept that catch in weight under LL_CATCH_DATA is not a WCPFC required field. − For both purse seine and longline standards, updated to reflect that SET START TIME (and SET END TIME for purse seine) are a required WCPFC fields but that SET START DATE/TIME is not a WCPFC required field but must be included for other standards. This creates some redundancy which may need to be explained in more detail.
2.70	5th December 2016	TBA	Minor changes to field descriptions and reordering of fields based on discussion with Japan on 5th December 2016.

Contents

INTRODUCTION

These tables set out the proposed standards for the provision of operational logsheet data fields collected in the WCPFC tropical purse seine fishery 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 data (e.g. licence/permit numbers and for anticipated Catch Documentation System – CDS – requirements) that are not mandatory WCPFC minimum standard scientific data fields, so a column in these tables identifies whether the data field is a mandatory WCFPC data field[1] or not.

These E-Reporting data field standards are consistent with, and should be considered in conjunction with more detailed instructions[2] on how to collect LOGBOOK data used 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 LOGBOOK information on-board purse seine vessels.

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

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[1] The mandatory WCPFC data fields for operational LOGBOOK data are found in the "Scientific Data to be provided to the Commission - Attachment K, Annex 1. Standards for the Provision of Operational Level Catch and Effort Data" http://www.wcpfc.int/system/files/Scientific%20Data%20to%20be%20Provided%20to%20the%20Commission%20-%20decision%20made%20by%20WCPFC10%20%28clean%29.pdf

[2] In addition to the WCPFC LOGBOOK data fields requirements, instructions for LOGBOOK 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.

1. PURSE SEINE LOGBOOK 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 logsheet data collected by E-Reporting systems and submitted to national and regional fisheries authorities. The tables that follow provide more information on the mechanisms of the links (relationships) between the entities. The red-shaded entities are not included in the WCPFC minimum required scientific data fields.
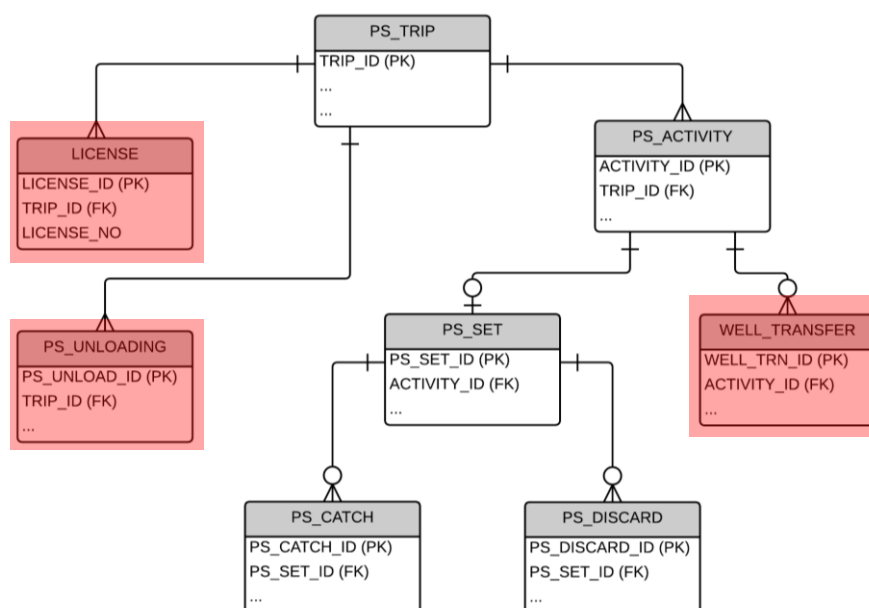
1.2 PURSE SEINE TRIP-LEVEL DATA

<table>
<tr><td colspan="8" align="center">PS_TRIP</td></tr>
<tr><td colspan="8">"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)." See Section 1.2 of Attachment K, Annex 1. in the <u>Scientific Data to be provided to the Commission</u></td></tr>
<tr><th>FIELD</th><th>Data Collection Instructions</th><th>Field format notes</th><th>Notes</th><th>NAF CODE</th><th>XML TAG</th><th>WCPFC FIELD</th></tr>
<tr><td>TRIP IDENTIFIER</td><td>Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL IDENTIFIER + DEPARTURE DATE</td><td></td><td></td><td></td><td><TRIP_ID></td><td></td></tr>
<tr><td>VESSEL IDENTIFIER</td><td>PROVIDE the WCPFC VID for the VESSEL undertaking this trip.</td><td><u>REFER TO APPENDIX A4</u></td><td>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.</td><td></td><td><VID></td><td>Y</td></tr>
<tr><td>COUNTRY OF CHARTER</td><td>PROVIDE the Country responsible for chartering the vessel, where relevant.

This only applies if the vessel has been chartered according to the requirements under WCFPC CMM 2012-05 – chartering notifications.</td><td>CHAR(2)

WCPFC alpha-2 two-letter country code (refer to <mark>WCPFC codes web page</mark>)

UPPER CASE</td><td>WCPFC alpha-2 two-letter country code (refer to WCPFC codes web page)

This field must be completed if it has been listed as a chartered vessel on the WCPFC web site according to the requirements under WCFPC CMM 2012-05 – chartering notifications.</td><td>CS</td><td><CHARTER></td><td>N</td></tr>
<tr><td>AGENT FOR UNLOADING</td><td>PROVIDE the name of the Agent for the Unloading</td><td>CHAR(50)</td><td>Where possible, link this field to a reference table of authorised Agents for unloading. (referential integrity)</td><td>AN</td><td><AGENT></td><td>N</td></tr>
<tr><td>TRIP NUMBER</td><td>PROVIDE the trip number undertaken by this vessel for the year. Trip number is sequential, starting at 1 for first trip of the year for each vessel.</td><td>INTEGER(2)</td><td></td><td>TN</td><td><TRIPNO></td><td>N</td></tr>
<tr><td>PORT/PLACE OF DEPARTURE</td><td>PROVIDE the Port of Departure.</td><td><u>REFER TO APPENDIX A3</u></td><td>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.

If the start of a trip coincides with recommencing fishing</td><td>PE</td><td><PORTDEPART></td><td>Y</td></tr>
</table>

PS_TRIP						
"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)." See Section 1.2 of Attachment K, Annex 1. in the Scientific Data to be provided to the Commission						
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**NAF CODE**	**XML TAG**	**WCPFC FIELD**
			operations or transiting to a fishing area after transhipping part or all of the catch at sea then "ATSEA" code shall be reported in lieu of the port of departure.			
PORT/PLACE OF UNLOADING	PROVIDE the Port or Place of Return for Unloading.	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. If the end of a trip coincides with transhipping part or all of the catch at sea, then "ATSEA" code shall be reported in lieu of the port of unloading.	PO	\<PORTUNLOAD>	Y
DATE OF DEPARTURE	PROVIDE DATE of departure for this trip	REFER TO APPENDIX A1	ISO 8601 – Date only format The chronology of Departure date with respect to Date of arrival in port and the Days at sea must be valid.	SD	\<DATEDEPART>	Y
DATE and TIME OF DEPARTURE	PROVIDE Date and TIME of departure for this trip	REFER TO APPENDIX A1	ISO 8601 - Date and times format The chronology of Departure date with respect to Date of arrival in port and the Days at sea must be valid.	ST	\<DATETIMEDEPART>	N
DATE OF UNLOADING	PROVIDE DATE of unloading	REFER TO APPENDIX A1	ISO 8601 – Dates and times format The chronology of Arrival date with respect to Date of Departure and the Days at sea must be valid.	ED	\<DATEUNLOAD>	Y
DATE AND TIME OF UNLOADING	PROVIDE the Date and TIME of unloading	REFER TO APPENDIX A1	ISO 8601 - Date and times format The chronology of Departure date with respect to Date of arrival in port and the Days at sea must be valid.	ET	\<DATETIMEUNLOAD>	N
FISH ONBOARD – START	PROVIDE the total amount of fish on-board at the time of leaving port on this trip.	NUMBER(4)	WARNING: Should be a realistic amount. For example, having catch >200 t. would be unrealistic?	QS	\<AMOUNTSTART>	N
FISH ONBOARD – END	PROVIDE the total amount of fish on-board AFTER ALL UNLOADINGs have been undertaken before the next trip.	NUMBER(4)	WARNING: Should be a realistic amount. For example, having catch >200 t. would be unrealistic? Having catch greater than what was caught on the trip is not possible.	QE	\<AMOUNTAFTER>	N

1.3   LICENSE/PERMIT DATA

LICENSE						
PROVIDE each LICENSE/PERMIT that the vessel holds for the period of the trip.						
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**NAF CODE**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE				<TRIP_ID>	
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.	LC	<LICENSE_NO>	N

1.4   PS UNLOADING DATA

<table>
<tr>
<td colspan="7">PS_UNLOADING
PROVIDE information for TRIP UNLOADING INFORMATION which covers one or several unloading events during or at the end of the trip to (i) carriers, (ii) on-shore processing plants (Canneries) and/or (iii) a net-share event with another catcher vessel</td>
</tr>
<tr>
<th>FIELD</th>
<th>Data Collection Instructions</th>
<th>Field format notes</th>
<th>Notes</th>
<th>NAF CODE</th>
<th>XML TAG</th>
<th>WCPFC FIELD</th>
</tr>
<tr>
<td>TRIP IDENTIFIER</td>
<td>Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE</td>
<td></td>
<td>Link to TRIP information</td>
<td></td>
<td><TRIP_ID></td>
<td></td>
</tr>
<tr>
<td>UNLOADING START DATE</td>
<td>PROVIDE the start date for this specific Unloading event</td>
<td>REFER TO APPENDIX A1</td>
<td>ISO 8601 - Date format

GMT/UTC time
[YYYY]-[MM]-[DD]Z
The chronology of Unload Start date with respect to other dates for the trip and unloading must be valid.</td>
<td>SD</td>
<td><STARTDATE></td>
<td>N</td>
</tr>
<tr>
<td>UNLOADING END DATE</td>
<td>PROVIDE the end date for this specific Unloading event</td>
<td>REFER TO APPENDIX A1</td>
<td>ISO 8601 - Date format

GMT/UTC time
[YYYY]-[MM]-[DD]Z
The chronology of Unload End date with respect to other dates for the trip and unloading must be valid.</td>
<td>ED</td>
<td><ENDDATE></td>
<td>N</td>
</tr>
<tr>
<td>CARRIER VESSEL IDENTIFIER</td>
<td>If relevant, PROVIDE the WCPFC VID for the receiving CARRIER VESSEL for this specific Unloading event.

Note that for NET-SHARE events, this could be another purse seine catcher vessel.</td>
<td>REFER TO APPENDIX A4</td>
<td>Using a unique 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 (WCPFC) Vessel Registry database.</td>
<td></td>
<td><CARR_VID></td>
<td>N</td>
</tr>
<tr>
<td>CANNERY/ DESTINATION</td>
<td>If relevant, PROVIDE the receiving CANNERY/DESTINATION for this specific Unloading event.</td>
<td>CHAR(40)

UPPER CASE</td>
<td>Where possible, link this field to a reference table of authorised Canneries/Destinations (referential integrity)</td>
<td>FD FN</td>
<td><DESTINATION></td>
<td>N</td>
</tr>
<tr>
<td>SKJ UNLOADED</td>
<td>PROVIDE the total weight (metric tonnes) of SKIPJACK unloaded in this specific Unloading event</td>
<td>DECIMAL(7,3)</td>
<td rowspan="3">CONTROL TOTAL CHECK: Total amounts for this trip should reconcile checking total trip catch, catch on-board at start, catch on-board at end and all unloading events.</td>
<td>DQ</td>
<td><UNLOADSKJ></td>
<td>N</td>
</tr>
<tr>
<td>YFT UNLOADED</td>
<td>PROVIDE the total weight (metric tonnes) of YELLOWFIN unloaded in this specific Unloading event</td>
<td>DECIMAL(7,3)</td>
<td>DQ</td>
<td><UNLOADYFT></td>
<td>N</td>
</tr>
<tr>
<td>BET UNLOADED</td>
<td>PROVIDE the total weight (metric tonnes) of BIGEYE unloaded in this specific</td>
<td>DECIMAL(7,3)</td>
<td>DQ</td>
<td><UNLOADBET></td>
<td>N</td>
</tr>
</table>

			PS_UNLOADING			
PROVIDE information for TRIP UNLOADING INFORMATION which covers one or several unloading events during or at the end of the trip to (i) carriers, (ii) on-shore processing plants (Canneries) and/or (iii) a net-share event with another catcher vessel						
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**NAF CODE**	**XML TAG**	**WCPFC FIELD**
	Unloading event					
MIXED TUNA UNLOADED	PROVIDE the total weight (metric tonnes) of MIXED TUNA unloaded in this specific Unloading event	DECIMAL(7,3)		DQ	<UNLOADMIX>	N
OTHERS UNLOADED	PROVIDE the total weight (metric tonnes) of OTHERS unloaded in this specific Unloading event	DECIMAL(7,3)		DQ	<UNLOADOTH>	N
REJECTS UNLOADED	PROVIDE the total weight (metric tonnes) of REJECTED TUNA unloaded in this specific Unloading event	DECIMAL(7,3)		RT	<UNLOADREJ>	N

1.5   PS ACTIVITY DATA

<table>
<tr><th colspan="7">PS_ACTIVITY
PROVIDE information on the designated activities for each DAY AT SEA</th></tr>
<tr><th>FIELD</th><th>Data Collection Instructions</th><th>Field format notes</th><th>Notes</th><th>NAF CODE</th><th>XML TAG</th><th>WCPFC FIELD</th></tr>
<tr><td>TRIP IDENTIFIER</td><td>Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE</td><td></td><td>Link to TRIP information</td><td></td><td><TRIP_ID></td><td></td></tr>
<tr><td>ACTIVITY IDENTIFIER</td><td>Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be DATE + START TIME OF ACTIVITY</td><td></td><td></td><td></td><td><ACTIVITY_ID></td><td></td></tr>
<tr><td>DATE</td><td>PROVIDE the DATE for each day that the vessel is at sea.</td><td>REFER TO APPENDIX A1</td><td>Date may be automatically generated through VMS or other GPS-type devices.</td><td>DA</td><td><DATE_EVENT></td><td>Y</td></tr>
<tr><td>START DATE/TIME OF ACTIVITY</td><td>PROVIDE the DATE/TIME when the ACTIVITY started</td><td>REFER TO APPENDIX A1</td><td>Date / Time may be automatically generated through VMS or other GPS-type devices.

This is not a WCPFC required field.</td><td>ST</td><td><TIME_EVENT></td><td>N</td></tr>
<tr><td>POSITION LATITUDE</td><td>PROVIDE the LATITUDE position for the start of the set.
If no sets were made during the DAY, then the WCPFC requirement is to provide the position LATITUDE at noon.</td><td>REFER TO APPENDIX A2</td><td>Position coordinates may be automatically generated through VMS or other GPS-type devices.

The WCPFC requirement stipulates that the position of start of set should be reported in units of at least minutes of latitude and longitude.</td><td>LT</td><td><LAT></td><td>Y</td></tr>
<tr><td>POSITION LONGITUDE</td><td>PROVIDE the LONGITUDE position for the start of the set.
If no sets were made during the DAY, then the WCPFC requirement is to provide the position LONGITUDE at noon.</td><td>REFER TO APPENDIX A2</td><td>Some current data collection systems require the position for activities other than a fishing set, but this is not a WCPFC requirement.</td><td>LG</td><td><LON></td><td>Y</td></tr>
<tr><td>ACTIVITY</td><td>PROVIDE each ACTIVITY of the vessel within the DAY.</td><td>REFER TO APPENDIX A5</td><td>The current WCPFC requirement is for this item to be reported for each set and for days on which no sets were made (with the activity 'Searching').

Ensure relational integrity for certain values, for example,

"1 – Fishing Set" must link to a SET record and perhaps to other tables

"8 – Non-Set Well Transfer" must link to a WELL_TRANSFER record (this is not a WCPFC requirement)</td><td>AT</td><td><ACT_ID></td><td>Y</td></tr>
</table>

1.6   PS SET LEVEL DATA

PS_SET						
PROVIDE information for each FISHING SET						
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**NAF CODE**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE		Link to TRIP information		<TRIP_ID>	
ACTIVITY IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be DATE + START TIME OF ACTIVITY		Link to ACTIVITY (SET)		<ACTIVITY_ID >	
START TIME OF SET	PROVIDE the start time of the set which is defined at the time the SKIFF is launched.	REFER TO APPENDIX A1	WCPFC required fields. These TIMES should be GMT/UTC.	ST	<SETST_TIME>	Y
END TIME OF SET	PROVIDE the end time of the set which is defined as the time when the "RINGS UP" ON DECK.	REFER TO APPENDIX A1	These TIMES may be automatically generated through VMS or other GPS-type devices	ET	<SETEND_TIME >	Y
START DATE/TIME OF SET	PROVIDE the start date and time of the set which is defined at the time the SKIFF is launched.	REFER TO APPENDIX A1	These fields overlap with the previous two fields but the DATE of set start and end are no WCPFC fields so are covered with these two fields.	ST	<SETSTART>	N
END DATE/TIME OF SET	PROVIDE the end date and time of the set which is defined as the time when the "RINGS UP" ON DECK.	REFER TO APPENDIX A1	The Date and Time of the start and end of set should be GMT/UTC. Date and Time may be automatically generated through VMS or other GPS-type devices Date must also be provided with time since with the requirement to use UTC/GMT, it is possible for a set to go into the next (UTC/GMT) day.	ET	<SETEND>	N
SCHOOL ASSOCIATION	PROVIDE the School Associated Code	REFER TO APPENDIX A6	The code must be within the valid range as specified by the School Association code list in APPENDIX A6.	SA	<SCHOOL>	Y
SCHOOL ASSOCIATION NOTE	PROVIDE information of the SCHOOL ASSOCIATION in cases where the school association is not covered in the list of School association codes 1. To 7.	VARCHAR(30)	Used only when the SCHOOL ASSOCIATION = 8	SA	<SCH_NOTE>	Y

1.7 PS CATCH DATA

<table>
<tr><td colspan="7">PS_CATCH
PROVIDE information on each species catch RETAINED from a SET</td></tr>
<tr><th>FIELD</th><th>Data Collection Instructions</th><th>Field format notes</th><th>Notes</th><th>NAF CODE</th><th>XML TAG</th><th>WCPFC FIELD</th></tr>
<tr><td>TRIP IDENTIFIER</td><td>Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE</td><td></td><td>Link to TRIP information</td><td></td><td><TRIP_ID></td><td></td></tr>
<tr><td>ACTIVITY IDENTIFIER</td><td>Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be DATE + START TIME OF ACTIVITY</td><td></td><td>Link to ACTIVITY (SET)</td><td></td><td><ACTIVITY_ID></td><td></td></tr>
<tr><td>SET IDENTIFIER</td><td>Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be DATE + START TIME OF SET</td><td></td><td>Link to PS_SET</td><td></td><td><PS_SET_ID></td><td></td></tr>
<tr><td>SPECIES CODE</td><td>For each species taken in the set and RETAINED, PROVIDE the SPECIES CODE according to the FAO standard species code list</td><td>CHAR(3)</td><td><u>REFER TO APPENDIX 7.</u></td><td>DC</td><td><SP_CODE></td><td>Y</td></tr>
<tr><td>SIZE CATEGORY</td><td>For Yellowfin (YFT) and Bigeye tuna (BET) RETAINED catch, distinguish the catch by size category < 9kgs and > 9kgs) otherwise leave blank.</td><td>CHAR(2)</td><td>LG - Large Fish (>= 9 kgs)
SM - Small Fish (< 9 kgs)
<Blank> - Not applicable

Validate that it can only be used for YFT and BET.</td><td>DC</td><td><SP_SIZE></td><td>N</td></tr>
<tr><td>WELL TO</td><td>Well number where the catch is moved to.

Set catch for this species/size category may be moved to more than one well. (Used for Catch Documentation systems).</td><td>CHAR(3)</td><td>Valid code

DIS - Discard of fish to sea from a well (e.g. due to spoilage)
Snn - Starboard well with number = <nn>
Pnn - Port well with number = <nn>
Cnn - Central well with number = <nn></td><td>TC</td><td><WELL_TO></td><td>N</td></tr>
<tr><td>CATCH WEIGHT</td><td>PROVIDE the retained ESTIMATED CATCH WEIGHT (metric tonnes, to 3 decimal places if possible) covering this species/size category combination.</td><td>DECIMAL(7,3)</td><td>Validate that it is within the acceptable range for this species. (Refer to the SPECIES_RANGE table provided)</td><td>DC</td><td><SP_RET_MT></td><td>Y</td></tr>
<tr><td>CATCH NUMBER</td><td>PROVIDE the retained CATCH NUMBER covering this species/size category combination. This is only required for non-target species.</td><td>INTEGER(6)</td><td>Validate that it is within the acceptable range for this species. (Refer to the SPECIES_RANGE table provided)</td><td>DC</td><td><SP_RET_NO></td><td>N</td></tr>
</table>

1.8   PS DISCARD DATA

<table>
<tr><td colspan="7" align="center">PS_DISCARD</td></tr>
<tr><td colspan="7">PROVIDE information on each species catch DISCARDED from a SET.
As a WCFPC requirement, note that purse seine vessels fishing in EEZs and on the high seas within the area bounded by 20°N and 20°S are required to retain on board and then land or transship at port all bigeye, skipjack, yellowfin tuna generally (See paragraph 30 of CMM2015-01).</td></tr>
<tr><td>FIELD</td><td>Data Collection Instructions</td><td>Field format notes</td><td>Notes</td><td>NAF CODE</td><td>XML TAG</td><td>WCPFC FIELD</td></tr>
<tr><td>TRIP IDENTIFIER</td><td>Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE</td><td></td><td>Link to TRIP information</td><td></td><td><TRIP_ID></td><td></td></tr>
<tr><td>ACTIVITY IDENTIFIER</td><td>Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be DATE + START TIME OF ACTIVITY</td><td></td><td>Link to ACTIVITY (SET)</td><td></td><td><ACTIVITY_ID></td><td></td></tr>
<tr><td>SET IDENTIFIER</td><td>Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be DATE + START TIME OF SET</td><td></td><td>Link to PS_SET</td><td></td><td><PS_SET_ID></td><td></td></tr>
<tr><td>SPECIES CODE</td><td>For each species taken in the set and DISCARDED, PROVIDE the SPECIES CODE according to the FAO standard species code list</td><td>CHAR(3)</td><td>REFER TO APPENDIX 7.</td><td>DI</td><td><SP_CODE></td><td>Y</td></tr>
<tr><td>DISCARDED WEIGHT</td><td>PROVIDE the DISCARDED/RELEASED ESTIMATED WEIGHT (metric tonnes, to 3 decimal places if possible) covering this species.</td><td>DECIMAL(7,3)</td><td>Validate that it is within the acceptable range for this species. (Refer to the SPECIES_RANGE table provided)</td><td>DI</td><td><SP_DISC_MT></td><td>N</td></tr>
<tr><td>DISCARDED NUMBER</td><td>PROVIDE the DISCARDED/RELEASED NUMBER, where appropriate.</td><td>INTEGER(6)</td><td>Validate that it is within the acceptable range for this species. (Refer to the SPECIES_RANGE table provided)</td><td>DI</td><td><SP_DISC_NO></td><td>N</td></tr>
<tr><td>REASON FOR DISCARD</td><td>PROVIDE the reason for the DISCARD.</td><td>INTEGER(1)</td><td>REFER TO APPENDIX 8.</td><td>DI</td><td><DISC_REA_ID></td><td>N</td></tr>
<tr><td>REASON FOR DISCARD NOTE</td><td>PROVIDE information of the REASON FOR DISCARD in cases where the code is not covered in the list of Reason codes 1. To 4.</td><td>VARCHAR(30)</td><td>Used only when the REASON FOR DISCARD = 5</td><td>DI</td><td><DISC_NOTE></td><td>N</td></tr>
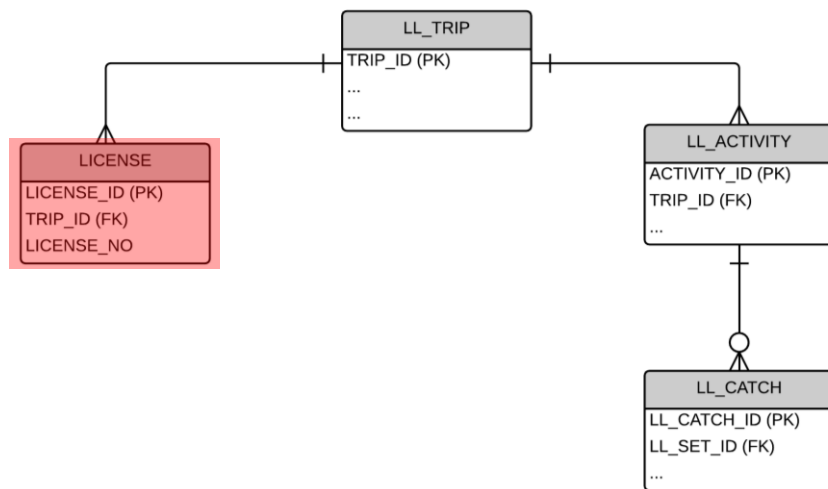</table>

1.9   PS WELL TRANSFER DATA

WELL_TRANSFER						
PROVIDE information on each WELL TRANSFER or NET-to-WELL TRANSFER when the relevant ACTIVITIES are recorded						
FIELD	Data Collection Instructions	Field format notes	Notes	NAF CODE	XML TAG	WCPFC FIELD
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE		Link to TRIP information		<TRIP_ID>	
ACTIVITY IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be DATE + START TIME OF ACTIVITY		Link to ACTIVITY (SET or WELL TRANSFER)		<ACTIVITY_ID>	
WELL FROM	Well number or the NET (in the case of a set) where the catch is coming from.	CHAR(3)	Valid code Snn – Starboard well with number = <nn> Pnn – Port well with number = <nn> Cnn – Central well with number = <nn>	TC	<WELL_FROM>	N
WELL TO	Well number where the catch is moved to. Note that this includes DISCARDs of fish from the well.	CHAR(3)	Valid code DIS – Discard of fish to sea from a well (e.g. due to spoilage) Snn – Starboard well with number = <nn> Pnn – Port well with number = <nn> Cnn – Central well with number = <nn>	TC	<WELL_TO>	N
SPECIES CODE	For each species catch transferred, PROVIDE the SPECIES CODE according to the FAO standard species code list	CHAR(3) UPPER CASE	REFER TO APPENDIX 7.	TC	<SP_CODE_WELL>	N
SIZE CATEGORY	For Yellowfin (YFT) and Bigeye tuna (BET) transferred catch, distinguish the catch by size category < 9kgs and > 9kgs) otherwise leave blank.	CHAR(2)	LG - Large Fish (>= 9 kgs) SM - Small Fish (< 9 kgs) <Blank> - Not applicable Validate that it can only be used for YFT and BET.	DC	<SP_WELL_SIZE>	N
WEIGHT TRANSERRED	PROVIDE the WEIGHT (metric tonnes, to 3 decimal places if possible) of the species transferred.	DECIMAL(6,3)		TC	<SP_WELL_MT>	N

2. LONGLINE LOGBOOK E-REPORTING STANDARDS

2.1   DATA MODEL DIAGRAM

The following basic data model diagram outlines the structure of the entities and their relationships for longline operational logsheet data collected by E-Reporting systems and submitted to national and regional fisheries authorities. The tables that follow provide more information on the mechanisms of the links (relationships) between the entities. The red-shaded entities are not included in the WCPFC minimum required scientific data fields.

2.2 LONGLINE TRIP-LEVEL DATA

LL_TRIP

"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)." See Section 1.2 of Attachment K, Annex 1. in the Scientific Data to be provided to the Commission

FIELD	Data Collection Instructions	Field format notes	Notes	NAF CODE	XML TAG	WCPFC FIELD
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL IDENTIFIER + DEPARTURE DATE				<TRIP_ID>	
VESSEL IDENTIFIER	PROVIDE the WCPFC VID for the VESSEL undertaking this trip.	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.		<VID>	Y
COUNTRY OF CHARTER	PROVIDE the Country responsible for chartering the vessel, where relevant. This only applies if the vessel has been chartered according to the requirements under WCFPC CMM 2012-05 – chartering notifications.	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) This field must be completed if it has been listed as a chartered vessel on the WCPFC web site according to the requirements under WCFPC CMM 2012-05 – chartering notifications.	CS	<CHARTER>	N
AGENT FOR UNLOADING	PROVIDE the name of the Agent for the Unloading	CHAR(50)	Where possible, link this field to a reference table of authorised Agents for unloading. (referential integrity)	AN	<AGENT>	N
TRIP NUMBER	PROVIDE the trip number undertaken by this vessel for the year. Trip number is sequential, starting at 1 for first trip of the year for each vessel.	INTEGER(4)		TN	<TRIPNO>	N
PRIMARY TARGET SPECIES	PROVIDE the Primary Target species for this trip	CHAR(3)	REFER TO APPENDIX A7	DC	<SP_CODE_TARGET>	N
PORT/PLACE OF DEPARTURE	PROVIDE the Port of Departure	CHAR(5) UPPERCASE	REFER TO APPENDIX A3 WCPFC 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. If the start of a trip coincides with recommencing fishing operations or transiting to a fishing area after transhipping part or all of the catch at sea then "ATSEA" code shall be	PE	<PORTDEPART>	Y

<table>
<tr><td colspan="8" align="center">

LL_TRIP

"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)." See Section 1.2 of Attachment K, Annex 1. in the [Scientific Data to be provided to the Commission](#)

</td></tr>
</table>

FIELD	Data Collection Instructions	Field format notes	Notes	NAF CODE	XML TAG	WCPFC FIELD
			reported in lieu of the port of departure.			
PORT/PLACE OF UNLOADING	PROVIDE the Port of Return for Unloading or indicate TRANSHIPMENT AT SEA	CHAR(5) UPPERCASE	REFER TO APPENDIX A3 WCPFC 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. If the end of a trip coincides with transhipping part or all of the catch at sea, then "ATSEA" code shall be reported in lieu of the port of unloading.	PO	\<PORTUNLOAD\>	Y
DATE OF DEPARTURE	PROVIDE DATE and TIME of departure for this trip	REFER TO APPENDIX A1	ISO 8601 – Date only format If the start of a trip coincides with recommencing fishing operations or transiting to a fishing area after transhipping part or all of the catch at sea then date for the transhipment at sea shall be indicated.	SD	\<DATEDEPART\>	Y
DATE and TIME OF DEPARTURE	PROVIDE TIME of departure for this trip	REFER TO APPENDIX A1	ISO 8601 - Date and times format The chronology of Departure date with respect to Date of arrival in port and the Days at sea must be valid.	ST	\<DATETIMEDEPART\>	N
DATE OF UNLOADING	PROVIDE DATE of unloading or indicate DATE for the TRANSHIPMENT AT SEA	REFER TO APPENDIX A1	ISO 8601 – Date only format If the end of a trip coincides with transhipping part or all of the catch at sea, then date for the transhipment at sea shall be indicated.	ED	\<DATEUNLOAD\>	Y
DATE and TIME OF UNLOADING	PROVIDE DATE and TIME of unloading or indicate TIME for the TRANSIPMENT AT SEA	REFER TO APPENDIX A1	ISO 8601 - Date and times format If the end of a trip coincides with transhipping part or all of the catch at sea, then date for the transhipment at sea shall be indicated. The chronology of Departure date with respect to Date of arrival in port and the Days at sea must be valid.	ET	\<DATETIMEUNLOAD\>	N

2.3 LICENSE/PERMIT DATA

<table>
<tr><th colspan="7">LICENSE
PROVIDE each LICENSE/PERMIT that the vessel holds for the period of the trip.</th></tr>
<tr><th>FIELD</th><th>Data Collection Instructions</th><th>Field format notes</th><th>Notes</th><th>NAF CODE</th><th>XML TAG</th><th>WCPFC FIELD</th></tr>
<tr><td>TRIP IDENTIFIER</td><td>Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE</td><td></td><td></td><td></td><td><TRIP_ID></td><td></td></tr>
<tr><td>FISHING PERMIT/LICENSE NUMBERS</td><td>PROVIDE License/Permit number that the vessel holds for the period of the TRIP.</td><td>CHAR(40) UPPER CASE</td><td>Where possible, include validation to ensure the Permit format relevant to the agreement (national or sub-regional) complies to the required format.</td><td>LC</td><td><LICENSE_NO></td><td>N</td></tr>
</table>

2.4 LL ACTIVITY/SET DATA

LL_ACTIVITY						
PROVIDE the following information on EACH FISHING SET; if there was no fishing set on that day, provide information on the MAIN ACTIVITY FOR THAT DAY AT SEA						
FIELD	**Data Collection Instructions**	**Field format notes**	**Notes**	**NAF CODE**	**XML TAG**	**WCPFC FIELD**
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE		Link to TRIP information		<TRIP_ID>	
ACTIVITY IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be DATE + START TIME OF ACTIVITY				<ACTIVITY_ID>	
ACTIVITY	PROVIDE each ACTIVITY of the vessel within the DAY.	REFER TO APPENDIX A5	The current WCPFC requirement is for this item to be reported for each set and for days on which no sets were made.	AT	<ACT_ID>	Y
DATE/TIME ACTIVITY	Not a WCPFC Requirement.

PROVIDE the NOON DATE/TIME for each day that the vessel is at sea when a set was not made on that day, OR the START DATE/TIME of the SET | REFER TO APPENDIX A1 | Date and Time may be automatically generated through VMS or other GPS-type devices. | DA | <ACT_DATETIME> | N |
| START TIME OF SET | PROVIDE the start of the set. | REFER TO APPENDIX A1 | Date and Time may be automatically generated through VMS or other GPS-type devices. | ST | <SETSTART> | Y |
| POSITION LATITUDE | PROVIDE the LATITUDE position when the set started | REFER TO APPENDIX A2 | The WCPFC requirement stipulates that the position of start of set should be reported in units of at least minutes of latitude and longitude. | LT | <LAT> | Y |
| POSITION LONGITUDE | PROVIDE the LONGITUDE position when the set started | REFER TO APPENDIX A2 | If no sets are made on that day, the noon position is to be reported.

Position coordinates may be automatically generated through VMS or other GPS-type devices. | LG | <LON> | Y |
| NUMBER OF BRANCHLINES | PROVIDE the NUMBER OF BRANCHLINES (synonymous to HOOKS BETWEEN FLOATS and BRANCHLINES between FLOATS) for this set | NUMBER(2) | The "Number of Branchlines" are also commonly referred to as "Hooks between floats" or "Branchlines between FLOATS" for some fleets.

The code must be within the valid range. Only relevant with ACTIVITY = "1 – FISHING SET" | SA | <HK_BTWN_FLT> | Y |
| NUMBER OF HOOKS | PROVIDE the total number of HOOKs per set | NUMBER(4) | The code must be within the valid range (e.g. < 5,000 hooks).

Only relevant with ACTIVITY = "1 – FISHING SET" | SA | <HOOKS> | Y |

2.5 LL CATCH DATA

<table>
<tr><td colspan="8" align="center">LL_CATCH
PROVIDE information on each species catch from a SET</td></tr>
<tr><th>FIELD</th><th>Data Collection Instructions</th><th>Field format notes</th><th>Notes</th><th>NAF CODE</th><th>XML TAG</th><th>WCPFC FIELD</th></tr>
<tr><td>TRIP IDENTIFIER</td><td>Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE</td><td></td><td>Link to TRIP information</td><td></td><td><TRIP_ID></td><td></td></tr>
<tr><td>ACTIVITY IDENTIFIER</td><td>Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be DATE + START TIME OF ACTIVITY</td><td></td><td>Link to ACTIVITY (SET)</td><td></td><td><ACTIVITY_ID></td><td></td></tr>
<tr><td>SPECIES CODE</td><td>For each species taken in the set, PROVIDE the SPECIES CODE according to the FAO standard species code list</td><td>CHAR(3)
UPPER CASE</td><td>REFER TO APPENDIX 8.</td><td>DC</td><td><SP_CODE_RET></td><td>Y</td></tr>
<tr><td>CATCH NUMBER</td><td>PROVIDE the retained CATCH NUMBER OF FISH covering this species.</td><td>INTEGER(6)</td><td>Validate that it is within the acceptable range for this species. (Refer to the SPECIES_RANGE table provided)</td><td>DC</td><td><SP_RET_NO></td><td>Y</td></tr>
<tr><td>CATCH WEIGHT</td><td>PROVIDE the retained CATCH ESTIMATED WEIGHT (metric tonnes to three decimal places) for this species.</td><td>DECIMAL(6,3)</td><td>Validate that it is within the acceptable range for this species. (Refer to the SPECIES_RANGE table provided)</td><td>DC</td><td><SP_RET_MT></td><td>N</td></tr>
<tr><td>DISCARDED / RELEASED NUMBER</td><td>PROVIDE the NUMBER of this species DISCARDED or RELEASED.</td><td>INTEGER(6)</td><td>Validate that it is within the acceptable range for this species. (Refer to the SPECIES_RANGE table provided)</td><td>DC</td><td><SP_DISC_NO></td><td>Y</td></tr>
</table>

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

Annex 1 of WCPFC Scientific Data to be provided to the Commission stipulates that the position of start of set should be reported in units of at least minutes of latitude and longitude. The Latitude and Longitude coordinates must adhere to the ISO 6709 – Positions in 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 the LL_TRIP and PS_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 logsheet 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 rules	XML TAG	WCPFC FIELD
VESSEL NAME		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	PROVIDE the VESSEL attributes which should be consistent with the attributes stored in the WCPFC and FFA Regional Vessel Registers	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>	Y
UNIVERSAL VESSEL IDENTIFIER (UVI)		INTEGER(10)	Must be consistent with the WCPFC and FFA Vessel Registers	<IMO_UVI>	N
VESSEL INTERNATIONAL CALLSIGN		CHAR(10) UPPER CASE	Must be consistent with the WCPFC and FFA Vessel Registers	<IRCS>	Y

APPENDIX A5 – ACTIVITY CODES

ACT_ID	Description	PURSE SEINE LOGSHEET	LONGLINE LOGSHEET	PURSE SEINE OBSERVER
1	Set	Y	Y	Y
2	Searching	Y	N	Y
3	Transit	Y	Y	Y
4	No fishing - Breakdown	Y	Y	Y
5	No fishing - Bad weather	Y	Y	Y
6	In port	Y	Y	Y
7	Net cleaning set	Y	N	Y
8	Investigate free school	Y	N	Y
9	Investigate floating object	Y	N	Y
10	Deploy - raft, FAD or payao	Y	N	Y
11	Retrieve - raft, FAD or payao	Y	N	Y
12	No fishing - Drifting at day's end	N	N	Y
13	No fishing - Drifting with floating object	N	N	Y
14	No fishing - Other reason (specify)	N	N	Y
15	Drifting -With fish aggregating lights	N	N	Y
16	Retrieve radio buoy	N	N	Y
17	Deploy radio buoy	N	N	Y
18	Transhipping or bunkering	N	Y	Y
19	Servicing FAD or floating object	Y	N	Y
20	*Helicoptor takes off to search*	*N*	*N*	*Y*
21	*Helicepter returned from search*	*N*	*N*	*Y*

APPENDIX A6 – PURSE SEINE TUNA SCHOOL ASSOCIATION CODES

SCHOOL	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 – SPECIES CODES

Refer to the FAO three-letter species codes:

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

APPENDIX A8 – PURSE SEINE REASON FOR DISCARD

These codes are not WCPFC required fields.

REASON CODE	Description
1	FISH DAMAGED / UNFIT FOR CONSUMPTION
2	VESSEL FULLY LOADED
3	GEAR FAILURE
4	OTHER REASON (SPECIFY)
5	NON-TARGET SPECIES