# Western and Central Pacific Fisheries Commission (WCPFC)

# **E-REPORTING STANDARD DATA FIELDS**

### **OPERATIONAL OBSERVER DATA**

10<sup>th</sup> June 2015

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2.00	ТВА		<ul> <li>Recommendations for update from WCPFC12</li> <li>Add fields for date-time and position for each catch event and each float retrieval which are automatically generated from EM systems</li> <li></li> <li></li> </ul>

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#### **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 Regional Observer Programme (ROP) 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 field¹ or not.

These E-Reporting data field standards are consistent with, and should be considered in conjunction with more detailed instructions<sup>2</sup> on how to collect observer data provided by SPC.

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.



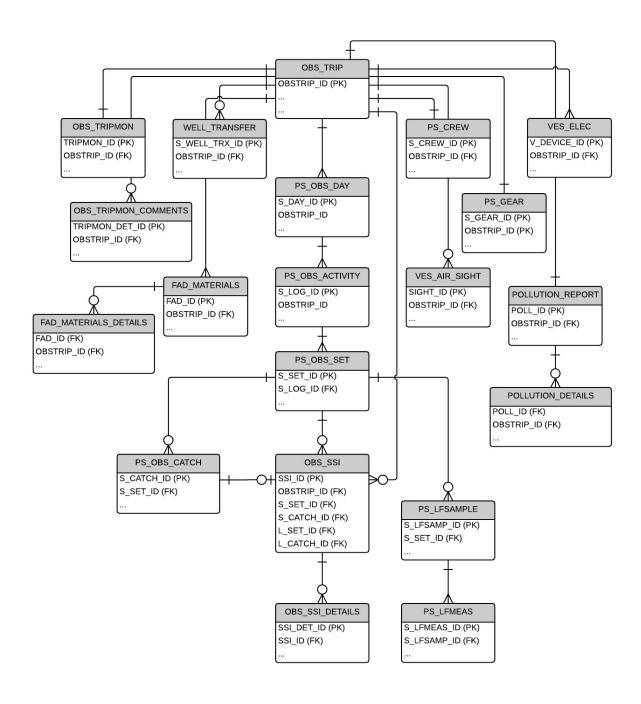
<sup>&</sup>lt;sup>1</sup> The minimum standard WCPFC Regional Observer programme (ROP) data fields for purse seine data are found in the "WCPFC ROP Minimum Standard Data Fields & Instructions" <a href="http://www.wcpfc.int/doc/table-rop-data-fields-including-instructions">http://www.wcpfc.int/doc/table-rop-data-fields-including-instructions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

<sup>&</sup>lt;sup>2</sup> 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 <a href="http://www.spc.int/oceanfish/en/data-collection-forms">http://www.spc.int/oceanfish/en/data-collection-forms</a>, general information/instruction for observers at <a href="http://www.spc.int/OceanFish/en/ofpsection/fisheries-monitoring/observers">http://www.spc.int/OceanFish/en/ofpsection/fisheries-monitoring/observers</a> and <a href="http://www.spc.int/OceanFish/en/certification-and-training-standards">http://www.spc.int/OceanFish/en/certification-and-training-standards</a>.

#### 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 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.



### 1.2 TRIP-LEVEL DATA

## OBS\_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)."

FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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	Char (4)	Observer programme code must be must valid country.  Refer to valid ISO two-letter Country Codes - ISO 3166 For example, refer to http://en.wikipedia.org/wiki/ISO_3166-1	<obsprg_code></obsprg_code>	Y
STAFF_CODE	Programme  Observer field staff NAME CODE. This will be unique and link to information kept at the regional level including Observer Name, Nationality of observer, Observer provider.	VarChar (5)	Staff code must exist in the regional Observer (FIELD_STAFF) Name Table.  The unique 5-letter staff codes are generated and maintained by SPC/FFA.	<staff_code></staff_code>	Y
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></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></tripno_int>	И

## OBS\_TRIP

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		Convention)."			
FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD
DATE and TIME OF DEPARTURE	Depart DATE/TIME for the observer trip (Observer's departure)				Y
	Vessel depart date/time will be obtained from other sources of data (e.g. VMS Data)	REFER TO APPENDIX A1	Use UTC DATE for the departure date.	<dep_date></dep_date>	
DATE AND TIME OF ARRIVAL IN PORT	Return DATE/TIME for the observer trip (from the observer's point of view)				Y
	Vessel return date/time will be obtained from other sources of data (e.g. VMS Data)	REFER TO APPENDIX A1	Use UTC DATE for the return date. DD/MM/YY	<ret_date></ret_date>	
GEAR_CODE	Link to ref_gears table	Char (1)	Must be a valid GEAR: 'L' - Longline; 'S' - Purse seine; 'P' - Pole-and-line	<gear_code></gear_code>	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></license_no>	N
VESSEL IDENIFIER		REFER TO	APPENDIX A4		
VERSN_ID	Data standards version	Int		<versn_id></versn_id>	N
COUNTRY_CODE	Two letter COUNTRY CODE for the country who organise the trip	Char (2)	Refer to valid ISO two-letter Country Codes - ISO 3166 For example, refer to http://en.wikipedia.org/wiki/ISO_3166-1	<country_code></country_code>	Y
PORT OF DEPARTURE	PROVIDE the Port of Departure	REFER TO APPENDIX A3	Must be valid United Nations - Code for Trade and Transport Locations (UN/LOCODE) - see <a href="http://www.unece.org/cefact/locode/service/location">http://www.unece.org/cefact/locode/service/location</a>	<dep_port></dep_port>	Y
PORT OF RETURN	PROVIDE the Port of Return for Unloading	REFER TO APPENDIX A3	Must be valid United Nations - Code for Trade and Transport Locations (UN/LOCODE)	<ret_port></ret_port>	Y
DEP_LAT	The actual depart LAT position for the trip (if departing AT SEA)	REFER TO APPENDIX A2		<dep_lat></dep_lat>	Y
DEP_LON	The actual depart LON position for the trip (if departing AT SEA)	REFER TO APPENDIX A2		<dep_lon></dep_lon>	Y
RET_LAT	The actual return LAT position for the trip (if departing AT SEA)	REFER TO APPENDIX A2		<ret_lat></ret_lat>	Y
RET_LON	The actual return LON position for the trip (if departing AT SEA)	REFER TO APPENDIX A2		<ret_lon></ret_lon>	Y
VESOWNER	NAME of the vessel owner	NVarChar (50)		<vesowner></vesowner>	Y
VESCAPTAIN	NAME of the captain of the vessel	NVarChar (50)		<vescaptain></vescaptain>	Y
VESCAPT_NATION	NATIONALITY of the captain of the vessel	Char (2)	Refer to valid ISO two-letter Country	<vescapt_co_code></vescapt_co_code>	Y

## OBS\_TRIP

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FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD
			Codes - ISO 3166		
	Two letter COUNTRY CODE for the country		For example, refer to		
	who organise the trip		http://en.wikipedia.org/wiki/ISO_3166-1		
VESCAPT_ID_DOC	Captain's Document ID	NVarChar (20)		<pre><vescapt_id_doc></vescapt_id_doc></pre>	Y
VESMASTER	NAME of the fishing master	NVarChar (50)		<vesmaster></vesmaster>	
VESMAST_NATION	NATIONALITY of the vessel MASTER		Refer to valid ISO two-letter Country	<vescapt_co_code></vescapt_co_code>	
		Char (2)	Codes - ISO 3166		Y
	Two letter COUNTRY CODE for the country	Cliar (2)	For example, refer to		1
	who organise the trip		http://en.wikipedia.org/wiki/ISO_3166-1		
VESMAST_ID_DOC	FISHING MASTERS's Document ID	NVarChar (20)		<vescapt_id_doc></vescapt_id_doc>	Y
CREW_NUMBER	Total number of CREW onboard during the	Int		<crew_number></crew_number>	Y
CREW_NUMBER	trip	THE		CREW_NUMBER>	1
SPILL	FLAG to indicated the trip was a SPILL	Bit		<spill></spill>	N
SFIBE	SAMPLE trip	BIC		(SPILL)	IN
CADET	FLAG to indicated whether the trip was	Bit		<cadet></cadet>	N
CADEI	observed by a CADET observer	БІС		\CADE1>	IN
SHARKTARGET	FLAG to indicated a trip has targeted	Bit		<sharktarget></sharktarget>	N
DIMICIANGET	SHARKS (LONGLINE trips only)	DIC		\DIMINITARGE1>	IN
COMMENTS	General comments about the trip	NText		<comments></comments>	N

### 1.3 DAILY SUMMARY DATA

mh o ab garren	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	Validation rules	XML TAG	WCPFC FIELD			
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></s_day_id>	Y			
DAY_START	Local Date and time at the start of the logged date.	REFER TO APPENDIX A1		<start_date></start_date>	Y			
UTC_DAY_START	UTC equivalent of DAY_START	REFER TO APPENDIX A1		<pre><utc_start_date></utc_start_date></pre>	Y			
LOG_NOFISH_N	For the entire logged day, provide the Number of logs sighted but no schools association.	SmallInt		<log_nofish_n></log_nofish_n>	Y			
LOG_FISH_N	For the entire logged day, provide the Number of log associated schools sighted.	SmallInt		<log_fish_n></log_fish_n>	Y			
SCH_FISH_N	For the entire logged day, provide the	SmallInt		<sch_fish_n></sch_fish_n>	Y			
FAD_FISH_N	For the entire logged day, provide the Number of anchored FADs sighted.	SmallInt		<fad_fish_n></fad_fish_n>	Y			
FAD_NOFISH_N	For the entire logged day, provide the Number of anchored FADS sighted but no schools association.	SmallInt		<fad_nofish_n></fad_nofish_n>	Y			
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></gen3today_ans>	N			
DIARYPAGE	Journal page # which has detail explanations of the incident	VarChar (50)		<diarypage></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

	effectively the OBSERVER's ACTIVITY LOG								
FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD				
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></s_log_id>	Y				
ACT_DATE	Local/Ship's date and time of Activity log recording.	REFER TO APPENDIX A1	Must be consistent with the start of DAY log DATE	<act_date></act_date>	Y				
UTC_ACT_DATE	UTC equivalent of ACT_DATE	REFER TO APPENDIX A1		<utc_act_date></utc_act_date>	Y				
LAT	Latitude at which this ACTIVITY LOG recorded	REFER TO APPENDIX A2		<lat></lat>	Y				
LON	Longitude at which this ACTIVITY LOG recorded.	REFER TO APPENDIX A2		<lon></lon>	Y				
S_ACTIV_ID	Purse seine activity code.	REFER TO APPENDIX A5		<s_activ_id></s_activ_id>	Y				
SCHAS_ID	School association code.	REFER TO APPENDIX A6		<schas_id></schas_id>	Y				
DETON_ID	Detection id. code. Must be 1-6 or 0 for no information.	REFER TO APPENDIX A7		<deton_id></deton_id>	Y				
BEACON	Beacon number where	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></beacon>	N				
COMMENTS	Observer comments related to this activity	NText		<comments></comments>	N				

#### 1.5 SET-LEVEL DATA

		PS OBS	SET		
T	he observer must PROVIDE the fo		 for EACH FISHING SET for the period of the	ne trip.	
FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></s_set_id>	Y
SET_NUMBER	Unique # for the SET ni this trip	Int		<set_number></set_number>	N
SKIFFOFF_TIME	DEFINED as the START of SET - Local DATE/Time when net skiff off with net	REFER TO APPENDIX A1		<skiffoff_time></skiffoff_time>	Y
SKIFFOFF_UTC	UTC DATE & TIME of START of SET	REFER TO APPENDIX A1	Must be aligned to SKIFFOFF_TIME	<skiffoff_utc></skiffoff_utc>	Y
WINCHON_TIME	LOCAL DATE/TIME when winches start to haul the net.	REFER TO APPENDIX A1		<winchon_time></winchon_time>	Y
WINCHON_UTC	UTC DATE & TIME when winches start to haul the net.	REFER TO APPENDIX A1	Must be aligned to WINCHON_TIME	<winchon_utc></winchon_utc>	Y
RINGUP_TIME	LOCAL DATE/TIME when purse ring is raised from the water.	REFER TO APPENDIX A1		<ringup_time></ringup_time>	Y
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></ringup_utc>	Y
SBRAIL_TIME	LOCAL DATE/TIME when brailing begins.	REFER TO APPENDIX A1		<sbrail_time></sbrail_time>	Y
SBRAIL_UTC	UTC DATE & TIME when brailing begins.	REFER TO APPENDIX A1	Must be aligned to SBRAIL_TIME	<sbrail_utc></sbrail_utc>	Y
EBRAIL_TIME	LOCAL DATE/TIME when brailing ends.	REFER TO APPENDIX A1		<ebrail_time></ebrail_time>	Y
EBRAIL_UTC	UTC DATE & TIME when brailing ends.	REFER TO APPENDIX A1	Must be aligned to EBRAIL_TIME	<ebrail_utc></ebrail_utc>	Y
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></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></stop_utc>	Y
LD_BRAILS	Sum of all brails	Decimal (8,3)		<ld_brails></ld_brails>	N
LD_BRAILS2	Sum of brails (#2)- only where a second type of brailer was used	Decimal (8,3)		<ld_brails2></ld_brails2>	N
MTTOTAL_OBS	Total observed catch (TUNA and BYCATCH) (mt)	Decimal (8,3)		<mt_total_obs></mt_total_obs>	Y
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></mttuna_obs>	Y
TOTSKJ_ANS	FLAG to indicate whether SKJ is presence in the set catch	Char (1)		<totskj_ans></totskj_ans>	Y
PERC_SKJ	% of SKJ in the set catch	Int		<perc_skj></perc_skj>	Y
MTSKJ_OBS	is presence in the set catch % of SKJ in the set catch Metric Tonnes of SKJ in the set catch	Decimal (8,3)	Determined from MTTUNA_OBS and PERC_SKJ fields	<mtskj_obs></mtskj_obs>	Y
TOTYFT_ANS	FLAG to indicate whether YFT is presence in the set catch	Char (1)		<totyft_ans></totyft_ans>	Y
PERC YFT	% of YFT in the set catch	Int		<perc_yft></perc_yft>	Y

			PS_OBS_	SET		
T	he obse	erver must PROVIDE the fol		- for EACH FISHING SET for the period of the control of the contro	ne trip.	
FIELD		llection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD
MTYFT_OBS		Metric Tonnes of YFT in the set catch	Decimal (8,3)	Determined from MTTUNA_OBS and PERC_YFT fields	<mtyft_obs></mtyft_obs>	Y
LARGE_YFT_ANS		FLAG to indicate YFT in the set catch	Char (1)		<large_yft_ans></large_yft_ans>	Y
PERC_LARGE_YFT		% of large YFT in the set catch	Int		<perc_large_yft></perc_large_yft>	Y
NB_LARGE_YFT		# of large YFT in the set catch	Int		<nb_large_yft></nb_large_yft>	Y
TOTBET_ANS		FLAG to indicate whether BET is presence in the set catch	Char (1)		<totbet_ans></totbet_ans>	Y
PERC_BET		% of BET in the set catch	Int		<perc_bet></perc_bet>	Y
MTBET_OBS	EYE	Metric Tonnes of BET in the set catch	Decimal (8,3)	Determined from MTTUNA_OBS and PERC_BET fields	<mtbet_obs></mtbet_obs>	Y
LARGE_BET_ANS	BIGEYE	FLAG to indicate BET in the set catch	Char (1)		<pre><large_bet_ans></large_bet_ans></pre>	Y
PERC_LARGE_BET		% of large BET in the set catch	Int		<perc_large_bet></perc_large_bet>	Y
NB_LARGE_BET		<pre># of large BET in the set catch</pre>	Int		<nb_large_bet></nb_large_bet>	Y
COMMENTS	comment	S	NText		<comments></comments>	N
B_NBTAGS	Number	of tags	SmallInt		<b_nbtags></b_nbtags>	Y

## 1.6 SET CATCH DATA

Th	ne observer must PROVIDE the foll	<del>-</del>	BS_CATCH ALLS for EACH FISHING SET for the period of t	he trip.	
FIELD	Data Collection Instructions	Field format	Validation rules	XML TAG	WCPFC FIELD
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></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 + SPECIES CODE + FATE CODE			<s_catch_id></s_catch_id>	Y
SP_CODE	Species code.	Char (3)	REFER TO APPENDIX 8.	<sp_code></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	<fate_code></fate_code>	Y
COND_CODE	CONDITION of this catch. Relevant for the Species of Special Interest.	Char (2)	REFER TO APPENDIX 10	<cond_code></cond_code>	Y
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)		<obs_mt></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></obs_n>	Y
COMMENTS	Are there any comments for this species catch ? (Y/N)	NText		<comments></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 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 Validation rules XML TAG							
FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD		
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></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></s_catch_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		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></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></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></ssi_id>	Y		
SGTYPE	Type of Interaction : 'L' - Landed; "S"- Sighted; "I" - Interacted with Gear	Char (1)	Must be 'L' - Landed; "S"- Sighted; "I" - Interacted with Gear	<sgtype></sgtype>	Y		
SGTIME	Time of Interaction: 'L' - Time of Landing; "I" - Time of Interaction / sighting	Char (1)		<sgtime></sgtime>	Y		
SSI_DATE	Local/Ship's date and time when	REFER TO	When SGTYPE = 'L' or 'I'	<ssi_date></ssi_date>	Y		

#### OBS SSI

The observer must PROVIDE the following SPECIES OF SPECIAL INTEREST CATCH DETAILS for 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.

	the OBS_TRIP database table.							
FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD			
	this SSI was encountered.	APPENDIX A1						
			Must be consistent with PS_OBS_ACTIVITY record -					
			ACT_DATE					
UTC_SSI_DATE	UTC equivalent of SSI_DATE	REFER TO	When SGTYPE = 'L' or 'I'	<utc_ssi_date></utc_ssi_date>	Y			
		APPENDIX A1						
			Must be consistent with PS_OBS_ACTIVITY record -					
			UTC_ACT_DATE					
LAT	Latitude at which this SSI was	REFER TO	When SGTYPE = 'L' or 'I'	<lat></lat>	Y			
	encountered	APPENDIX A2						
			Must be consistent with PS_OBS_ACTIVITY record - LAT					
LON	Longitude at which this SSI was	REFER TO	When SGTYPE = 'L' or 'I'	<lon></lon>	Y			
l	encountered	APPENDIX A2						
		<b>51</b> (2)	Must be consistent with PS_OBS_ACTIVITY record - LON					
SP_CODE	SSI Species encountered. Link to	Char (3)	REFER TO APPENDIX 8.	<sp_code></sp_code>	Y			
	species table		Mark was and to the DC ODG CARGU was ad					
SP DESC	Extended Species Description	NText	Must correspond to the PS_OBS_CATCH record	<sp desc=""></sp>	N			
LANDED COND CODE	Condition code on LANDING	Char (2)	REFER TO APPENDIX 10	<pre><landed_cond_code></landed_cond_code></pre>	Y			
LANDED_COND_CODE  LANDED COND DESC	Description of Condition on	NText	REFER TO APPENDIX TO	<pre><landed_cond_desc></landed_cond_desc></pre>	Y			
LANDED_COND_DESC	Landing or at start of interaction	Niext		CLANDED_COND_DESC>	Y			
	with vessel's gear							
LANDED HANDLING	Description of handling on landing	NText		<pre><landed handling=""></landed></pre>	N			
LANDED_HANDEING	Length of landed species	Decimal (5,1)		<landed_len></landed_len>	Y			
LEN_CODE	Length code of the individual	Char (2)	REFER TO APPENDIX 11	<len_code></len_code>	Y			
LANDED SEX CODE	Sex code of the individual	Char (1)	REFER TO APPENDIX 12	<pre><landed_sex_code></landed_sex_code></pre>	Y			
DISCARD COND CODE	Condition code on RELEASE/DISCARD,	Char (2)	REFER TO APPENDIX 10	<pre><discard code="" cond=""></discard></pre>	Y			
DIBONED_COND_CODE	or at the END of interaction with	Char (2)	MIT IN TO THE INDIA TO		_			
	vessel's gear							
DISCARD COND DESC	Description of Condition on	NText		<pre><discard cond="" desc=""></discard></pre>	Y			
	RELEASE/DISCARD, or at the END of							
	interaction with vessel's gear							
SHK_FIN_WT_KGS	Estimated SHARK FIN WEIGHT (kgs)	Decimal (5,0)		<shk_fin_wt_kgs></shk_fin_wt_kgs>	Y			
SHK_FIN_BODY_KGS	Estimated SHARK CARCASS WEIGHT	Decimal (5,0)		<shk_fin_body_kgs></shk_fin_body_kgs>	Y			
	(kgs)							
TAG_RET_NO	Tag Number recovered from animal	NVarChar (7)		<tag_ret_no></tag_ret_no>	Y			
TAG_RET_TYPE	Type of Tag recovered from animal	NVarChar (5)		<tag_ret_type></tag_ret_type>	Y			
TAG_RET_ORG	Origin of Tag recovered from	NVarChar (10)		<tag_ret_org></tag_ret_org>	Y			
	animal (Organisation)							
TAG_PLACE_NO	Tag number placed on animal	NVarChar (14)		<tag_place_no></tag_place_no>	Y			
TAG_PLACE_TYPE	Type of Tag placed on animal	NVarChar (8)		<tag_place_type></tag_place_type>	Y			
TAG_PLACE_ORG	Origin of Tag placed on animal (Organisation)	NVarChar (10)		<tag_place_org></tag_place_org>	Y			
INTACT_ID	Vessel activity when INTERACTION	Int	REFER TO APPENDIX 13	<intact_id></intact_id>	Y			
	occurs							

### OBS\_SSI

The observer must PROVIDE the following SPECIES OF SPECIAL INTEREST CATCH DETAILS for 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.

	0110 020_11111 440404000 040201							
FIELD	Data Collection Instructions	Field format	Validation rules	XML TAG	WCPFC			
		notes			FIELD			
INTACT_OTHER	Other types of interaction	NVarChar (20)		<intact_other></intact_other>	Y			
INT_DESCRIBE	Description of the interaction	NText		<int_describe></int_describe>	Y			
SGACT_ID	Vessel activity when SIGHTING	Int	REFER TO APPENDIX 13	<sgact_id></sgact_id>	Y			
	occurs							
SGACT_OTHER	Indicates "other" Vessel Activity	NVarChar (20)		<sgact_other></sgact_other>	N			
SIGHT_N	Number of individuals sighted	SmallInt		<sight_n></sight_n>	Y			
SIGHT_ADULT_N	Number of adults sighted	SmallInt		<sight_adult_n></sight_adult_n>	N			
SIGHT_JUV_N	Number of juveniles sighted	SmallInt		<sight_juv_n></sight_juv_n>	N			
SIGHT_LEN	Estimated overall length (Average if more than one individual)	NText		<sight_len></sight_len>	N			
SIGHT_DIST	Distance of sighted animals from vessel	Decimal (7,3)		<sight_dist></sight_dist>	N			
SIGHT_DIST_UNIT	Units used for SIGHT_DIST	INT	1 = Metres; 2 = kilometres; 3 = Nautical miles	<sight_dist_unit></sight_dist_unit>	N			
SIGHT_DIST_NM	Distance in nautical miles	Decimal (10,4)		<sight_dist_nm></sight_dist_nm>	N			
SIGHT_BEHAV	Description of behaviour of Sighted animals	NText		<sight_behav></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.

			nteraction needs to be recorded/stored here.		
FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></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></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></start_end>	Y
SSI_NUMBER	Number of animals interacted	Int		<ssi_number></ssi_number>	Y
COND_CODE	CONDITION at the point of recording (either START or END)	Char (2)	REFER TO APPENDIX 10	<cond_code></cond_code>	Y
DESCRIPTION	Descriptions of the interaction	VarChar (100)		<description></description>	N

## 1.9 LENGTH SAMPLE DATA

	PS_LFSAMPLE								
PROV	PROVIDE the information related to the size (length) and species composition SAMPLE from each FISHING SET.								
FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD				
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></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=""></s_lfsamp>	Y				
SAMPLETYPE_ID	Sample Type	CHAR(1)	REFER TO APPENDIX 14	<sampletype_id></sampletype_id>	Y				
OTHER_DESC	Description other sampling type	NText		<other_desc></other_desc>	N				
FISH_PER_BRAIL	Target # of fish for sampling	SmallInt		<fish_per_brail></fish_per_brail>	N				
MEASURE_CODE	MEASURING INSTRUMENT	Char (1)	REFER TO APPENDIX 15	<measure_code></measure_code>	N				
COMMENTS	Comments about the sampling	NText		<comments></comments>	N				
BRAIL_FULL_N	# of Full brail count	SmallInt		<brail_full_n></brail_full_n>	N				
BRAIL_78_N	# of Seven eighths brail count	SmallInt		<brail_78_n></brail_78_n>	N				
BRAIL_34_N	# of Three quarter brail count	SmallInt		<brail_34_n></brail_34_n>	N				
BRAIL_23_N	# of Two third brail count	SmallInt		<brail_23_n></brail_23_n>	N				
BRAIL_12_N	# of Half brail count	SmallInt		<brail_12_n></brail_12_n>	N				
BRAIL_13_N	# of One third brail count	SmallInt		<brail_13_n></brail_13_n>	N				
BRAIL_14_N	# of One quarter brail count	SmallInt		<brail_14_n></brail_14_n>	N				
BRAIL_18_N	# of One eighth brail count	SmallInt		<brail_18_n></brail_18_n>	N				
BRAIL_N	Total number of brails	SmallInt		<brail_n></brail_n>	N				
SUM_BRAILS	Sum of All Brails	Decimal (7,2)		<sum_brails></sum_brails>	N				
SAMPLED_BRAIL_N UM	# of sampled brail	Int		<sampled_brail_num></sampled_brail_num>	N				
MEASURED_N	# of samples measured	Int		<measured_n></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	Validation rules	XML TAG	WCPFC FIELD				
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></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=""></s_lfsamp>	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></s_lfmeas_id>	Y				
SEQ_NUMBER	Measurement number.	Int		<seq_number></seq_number>	N				
SP_CODE	Link to species table	Char (3)	REFER TO APPENDIX 8.	<sp_code></sp_code>	Y				
LEN	Length (cm).  Expect that the following measurements have been taken by the observers, as instructed.  TUNA SPECIES - Upper jaw to fork length; SHARK SPECIES - total length; BILLFISH SPECIES - Lower jaw to fork length for billfish.	SmallInt		<len></len>	Y				

## 1.11 TRIP MONITORING QUESTIONS

PROV	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	Validation rules	XML TAG	WCPFC FIELD				
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></tripmon_id>	Y				
QUESTION_CODE	Unique CODE for each question in GEN3	Char (4)	REFER TO APPENDIX 16	<question_code></question_code>	Y				
ANSWER	FLAG to indicate whether has been answered or NOT	Char (1)	MUST BE 'Y', 'N' or 'X'- not answered	<answer></answer>	Y				
JOURNAL_PAGE	Detail description of the incident	NText		<journal_page></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	Validation rules	XML TAG	WCPFC FIELD			
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></tripmon_det_id>	Y			
GEN3_DATE	Date of the incident on GEN3	REFER TO APPENDIX A1		<gen3_date></gen3_date>	Y			
COMMENTS	Detail description of the incident	NText		<comments></comments>	Y			

# 1.13 VESSEL/AIRCRAFT SIGHTINGS DATA

,		TIEG ATD	GTGIIM						
	VES_AIR_SIGHT								
PROVIDE	the details on the GEN-1 form -	- VESSEL AND AIRCRA	AFT SIGHTINGS / FISH, BUNKERING and OTHER	TRANSFERS LOGS					
FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD				
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></sight_id>	Y				
SIGHT_DATE_TIME	Date/Time of sighting	REFER TO APPENDIX A1		<sighting_date></sighting_date>	Y				
LAT	Latitude of SIGHTING	REFER TO APPENDIX A2		<lat></lat>	Y				
LON	Longitude of SIGHTING	REFER TO APPENDIX A2		<lon></lon>	Y				
VESSEL IDENIFIER		REF	FER TO APPENDIX A4						
VATYP_ID	Vessel / Aircraft type	Int	REFER TO APPENDIX 17	<vatyp_id></vatyp_id>	Y				
BEARING_DIR	Bearing (0-360 degrees)	SmallInt		<pre><bearing_dir></bearing_dir></pre>	Y				
DISTANCE	Distance	Decimal (7,3)		<distance></distance>	Y				
DIST_UNIT	Units of Distance	INT	1 = Metres; 2 = kilometres; 3 = Nautical miles	<dist_unit></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></action_code>	Y				
COMMENTS	Comments	NText		<comments></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	Validation rules	XML TAG	WCPFC FIELD				
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></s_crew_id>	Y				
VSJOB_ID	CREW JOB TYPE	Int	REFER TO APPENDIX 19	<vsjob_id></vsjob_id>	N				
NAME	Name of the person in this position	NVarChar (50)		<name></name>	Y				
COUNTRY_CODE	Nationality of the person in this position	Char (2)	Refer to valid ISO two-letter Country Codes - ISO 3166 For example, refer to http://en.wikipedia.org/wiki/ISO_3166-1	<country_code></country_code>	Y				
EXP_YR	Experience in Years	SmallInt		<exp_yr></exp_yr>	N				
EXP_MO	Experience in months	SmallInt		<exp_mo></exp_mo>	N				
COMMENTS	Comments	NText		<comments></comments>	N				

### 1.15 MARINE DEVICES DATA

	VES_ELEC  PROVIDE information on the standard Marine Electronic devices.								
FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD				
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></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></device_id>	Y				
ONBOARD_CODE	Is this DEVICE SIGHTED ONBOARD ?	Char (1)	'Y' or 'N'	<onboard_code></onboard_code>	Y				
USAGE_CODE	Is this DEVICE USED ?	Char (3)	Refer to APPENDIX 21	<usage_code></usage_code>	N				
MAKE_DESC	Description of Make	NVarChar (30)		<make_desc></make_desc>	N				
MODEL_DESC	Description of Model	NVarChar (30)		<model_desc></model_desc>	N				
COMMENTS	Comments	NText		<comments></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.

	This may become mandatory WCPFC data collection related to CDS.								
FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD				
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></s_well_trx_id>	N				
TRX_DATE	DATE and TIME of fish transfer	REFER TO APPENDIX A1		<trx_date></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></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></destination>	N				
WELL_MT	Weight of the fish transfer	Decimal (8,3)		<well_mt></well_mt>	N				
CHANGE	Change of transfer - add or remove	Char (1)	Must be either '+', '-' or '0' (for no change)	<change></change>	N				
NEW_TOTAL	New cumulative to for the transfer	Decimal (8,3)		<new_total></new_total>	N				
ON_LOGSHEET	FLAG to indicate the transfer has been stated on the logsheet	Char (1)		<on_logsheet></on_logsheet>	N				
COMMENTS	Comments made on the fish transfer	NText		<comments></comments>	N				

### 1.17 PURSE SEINE GEAR DATA

		D.C	CEAD		
		PS	GEAR		
	PROVIDE info	ormation on the	PURSE SEINE GEAR on the vessel.		
FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></s_gear_id>	Y
PB_MAKE	Power block make	NVarChar (20)		<pb_make></pb_make>	N
PB_MODEL	Power block model	NVarChar (20)		<pb_model></pb_model>	N
PW_MAKE	Purse winch make	NVarChar (20)		<pw_make></pw_make>	N
PW_MODEL	Purse winch model	NVarChar (20)		<pw_model></pw_model>	N
NET_DEPTH	Max depth of the net	SmallInt		<net_depth></net_depth>	Y
NET_DEPTH_UNIT_ID	Net Depth unit of measurement M - metres; Y- Yards; F-Fathoms	Int	Must be M, Y, F or blank	<net_depth_unit_id></net_depth_unit_id>	Y
NET_LENGTH	Max length of the net	SmallInt		<net_length></net_length>	Y
NET_LENGTH_UNIT_ID	Net Length unit of measurement M - metres; Y- Yards; F-Fathoms	Int	Must be M, Y, F or blank	<net_length_unit_id></net_length_unit_id>	Y
NET_STRIPS	Number of net strips	SmallInt		<net_strips></net_strips>	N
NET_HANG_RATIO	Max net hang ratio	SmallInt		<net_hang_ratio></net_hang_ratio>	N
MESH_MAIN	Main Mesh size	SmallInt		<mesh_main></mesh_main>	Y
MESH_MAIN_UNIT_ID	Main mesh size unit of measurement C - centimetres; I - Inches	Int	Must be C, I or blank	<mesh_main_unit_id></mesh_main_unit_id>	Y
BRAIL_SIZE1	Brail #1 Capacity	Decimal (5,1)		<brail_size1></brail_size1>	Y
BRAIL_SIZE2	Brail #2 Capacity	Decimal (5,1)		<brail_size2></brail_size2>	Y
BRAIL_TYPE	Brailing Type Description	NText		<brail_type></brail_type>	Y

### 1.18 FAD MATERIAL DATA

		PS_FAD_MA	TERIAL		
	PROVIDE information		RIAL observed during the trip.		
FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></fad_id>	Y
FAD_EVENT_DATE	DATE/TIME of the FAD observation event	REFER TO APPENDIX A1		<fad_event_date></fad_event_date>	Y
OBJECT_NUMBER	Number allocated for the object	SmallInt		<object_number></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></origin_code>	Y
DEPLOYMENT_DATE	Date of FAD deployment	REFER TO APPENDIX A1		<pre><deployment_date></deployment_date></pre>	Y
LAT	LAT postion of deployment	REFER TO APPENDIX A2		<lat></lat>	Y
LON	LON postion of deployment	REFER TO APPENDIX A2		<lon></lon>	Y
SSI_TRAPPED	FLAG to indicate whether any SSI are trapped on the FAD	Char (1)		<ssi_trapped></ssi_trapped>	Y
AS_FOUND_CODE	CODE to indicate whether the FAD "as Found"	Int		<as_found_code></as_found_code>	Y
AS_LEFT_CODE	CODE to indicate whether the FAD "as Left"	Int		<as_left_code></as_left_code>	Y
MAX_DEPTH_M	Max DEPTH of the FAD in metres	Decimal (5,1)		<max_depth_m></max_depth_m>	Y
LENGTH_M	Max LENGTH of the FAD in metres	Decimal (5,1)		<length_m></length_m>	Y
WIDTH_M	Max WIDTH of the FAD in metres	Decimal (5,1)		<width_m></width_m>	Y
BUOY_NUMBER	Buoy number stated on the FAD	NVarChar (20)		<buoy_number></buoy_number>	Y
MARKINGS	Markings on the FAD	NVarChar (50)		<markings></markings>	Y
COMMENTS	Comments made by the observer about the FAD	NText		<comments></comments>	Y

### 1.19 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	Validation rules	XML TAG	WCPFC FIELD		
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></fad_id>	Y		
MATERIAL_CODE	FAD Material CODE	REFER TO APPENDIX A26	Material Code must exist in the ref_ids table	<material_code></material_code>	Y		
IS_ATTACHMENT	FLAG to indicate if there is an attachment to the FAD	Char (1)	'Y' or 'N'	<is_attachment></is_attachment>	Y		



### 1.20 OBSERVER POLLUTION REPORT

		OBS POLI	UTION		
	PROVIDE info	<del>-</del>	on observed during the trip.		
FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></poll_id>	Y
INC_DATE	DATE & TIME of the incident	REFER TO APPENDIX A1		<inc_dtime></inc_dtime>	Y
LAT	Latitude where incident occured	REFER TO APPENDIX A2		<lat></lat>	Y
LON	Longitude where incident occured	REFER TO APPENDIX A2		<lon></lon>	Y
PORT_ID	PORT where incident occurred	REFER TO APPENDIX A3		<port_id></port_id>	N
ACTIV_ID	Activity when event occurred	REFER TO APPENDIX A5		<activ_id></activ_id>	N
VESSEL IDENIFIER		RE	FER TO APPENDIX A4		
VATYP_ID	Vessel / Aircraft type	Int	REFER TO APPENDIX 17	<vatyp_id></vatyp_id>	N
BEARING_DIR	Compass Bearing to offending vessel	SmallInt		<bearing_dir></bearing_dir>	N
DISTANCE	Distance to offending vessel	Decimal (7,3)		<distance></distance>	N
COMMENTS	Additional comments	NText		<comments></comments>	N
STICKERS_ANS	Response to "Stickers" question	Char (1)	'Y' or 'N'	<stickers_ans></stickers_ans>	N
AWARE_ANS	Response to "MARPOL" question	Char (1)	'Y' or 'N'	<aware_ans></aware_ans>	N
ADVISED_ANS	Response to "INFRINGEMENTS" question	Char (1)	'Y' or 'N'	<advised_ans></advised_ans>	N
PHOTOS_ANS	Response to "PHOTOS" question	Char (1)	'Y' or 'N'	<photos_ans></photos_ans>	N
PHOTO_NUMBERS	Number of photos taken on the incident	NVarChar (50)		<photo_numbers></photo_numbers>	N

## 1.21 OBSERVER POLLUTION DETAILS

	OBS_POLLUTION_DETAILS  PROVIDE information any Pollution details observed during the trip.						
FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD		
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></poll_id>	Y		
POLLUTIONTYPE_ID	Pollution type code	REFER TO APPENDIX A31	For example, Disposal of OFFAL MANAGEMENT is a WCFPC required field.	<pollutiontype_id></pollutiontype_id>	Y		
MATERIAL_ID	Pollution Materials code	REFER TO APPENDIX A29		<material_id></material_id>			
POLL_GEAR_ID	Pollution Gear code	REFER TO APPENDIX A28		<poll_gear_id></poll_gear_id>			
POLL_SRC_ID	Pollution Source code	REFER TO APPENDIX A30	For example, Disposal of OFFAL MANAGEMENT is a WCFPC required field.	<poll_src_id></poll_src_id>	Y		
POLL_DESC	Description of pollution type	NText	For example, Disposal of OFFAL MANAGEMENT is a WCFPC required field.	<poll_desc></poll_desc>	Y		
POLL_QTY	Description of pollution quantity	NText	For example, Disposal of OFFAL MANAGEMENT is a WCFPC required field.	<poll_qty></poll_qty>	Y		

## 1.22 OBSERVER JOURNAL

	OBS_JOURNAL						
FIELD	PROVIDE a description of the day's activities in a daily journal record for the trip.  FIELD Data Collection Instructions Field format notes Validation rules XML TAG WCPF FIELD Validation rules						
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></obs_jrnl_id>	N		
JRNL_DATE	DATE of Journal entry	REFER TO APPENDIX A1		<jrnl_date></jrnl_date>	N		
JRNL_TEXT	Daily journal entry	NText		<jrnl_text></jrnl_text>	N		

## 1.23 PURSE SEINE TRIP REPORT

## PS\_TRIP\_REPORT

PROVIDE descriptive information on the trip.

Ref	er to the relevant sections in <a href="http://">http://</a>	/www.spc.int/Oce	pc.int/OceanFish/en/publications/doc_download/1334-2014-ps-trip-report-				
FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD		
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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.

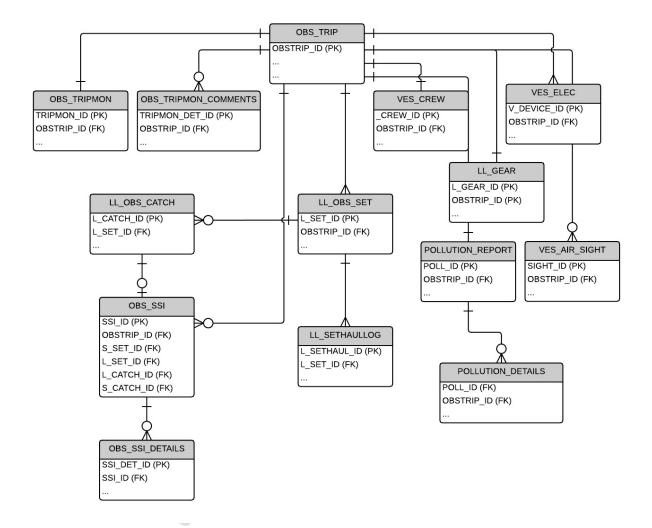
Refer to the relevant sections in http://www.spc.int/OceanFish/en/publications/doc\_download/1334-2014-ps-trip-report-

FIELD	Data Collection Instructions	Field format	Validation rules	XML TAG	WCPFC
		notes			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 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.



# 2.2 TRIP-LEVEL DATA

(see the common OBS\_TRIP table under  $\frac{1.2 \text{ TRIP-LEVEL DATA}}{}$ 

### 2.3 SET-LEVEL DATA

${ m LL\_OBS\_SET}$ The observer must PROVIDE the following information for EACH FISHING SET/HAUL during the trip.						
FIELD	Data Collection Instructions	Field format	Validation rules	XML TAG	WCPFC FIELD	
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></l_set_id>	Y	
SET_NUMBER	Unique # for the SET in this trip	Int		<set_number></set_number>	N	
OBSERVED_YN	Flag to indicate whether set was observer or not.	Bit		<observed_yn></observed_yn>	N	
SET_DATE	Start Date/time for set.	REFER TO APPENDIX A1		<set_date></set_date>	Y	
HK_BT_FLT	Number of hooks between floats	SmallInt	Must be 1-60, or -1 for no information.	<hk_bt_flt></hk_bt_flt>	Y	
BASK_SET	Number of baskets set.	SmallInt		<bask_set></bask_set>	Y	
BASK_OBSERVED	Number of basket observed (bottom of form, Nov 07 version)	SmallInt		<bask_observed></bask_observed>	Y	
HOOK_SET	Total number of hooks set.	SmallInt		<hook_set></hook_set>	Y	
HOOK_OBSERVED	Number of hooks observed and data recorded.	SmallInt		<hook_observed></hook_observed>	Y	
FLOAT_LENGTH	Length of floatline (m)	SmallInt		<float_length></float_length>	Y	
LSPEED	Line setting speed.	Decimal (5,1)		<lspeed></lspeed>	Y	
LSPEED_UNIT_ID	Link to ref_ids table	CHAR(1)	Must be 'M' for metres/second or 'K' for knots	<pre><lspeed_unit_id></lspeed_unit_id></pre>	Y	
BRANCH_INTVL	Time interval (secs.) between branchline sets.	SmallInt		<branch_intvl></branch_intvl>	Y	
BRANCH_DIST	Mainline distance between branchlines (m).	Decimal (4,1)		<branch_dist></branch_dist>	Y	
VESSEL_SET_SPEED	Vessel setting Speed (Knots).	Decimal (5,1)		<pre><vessel_set_speed></vessel_set_speed></pre>	N	
LIGHTSTICKS	Number of lightsticks used	SmallInt		<lightsticks></lightsticks>	Y	
TDRS	Number of Time Depth recorders used	SmallInt		<tdrs></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></branch_length>	Y	
BRANCH_0_20	Number of branchlines between successive floats that are < 20 m.	SmallInt		<pre><branch_0_20></branch_0_20></pre>	Y	
BRANCH_20_34	Number of branchlines between successive floats that are 20-35 m.	SmallInt		<pre><branch_20_34></branch_20_34></pre>	Y	
BRANCH_35_50	Number of branchlines between successive floats that are 35-50 m.	SmallInt		<branch_35_50></branch_35_50>	Y	
BRANCH_50_99	Number of branchlines between successive floats that are > 50 m.	SmallInt		<pre><branch_50_99></branch_50_99></pre>	Y	
FLOAT_HOOK_N	The total number of hooks that have been hung directly from the floatline for this set.	SmallInt		<float_hook_n></float_hook_n>	Y	
TAR_SP_CODE	Target Species id recorded on the form	Char (3)	REFER TO APPENDIX 8.	<tar_sp_code></tar_sp_code>	Y	

## LL\_OBS\_SET

			on for EACH FISHING SET/HAUL during	_	LIGDEG
FIELD	Data Collection Instructions	Field format	Validation rules	XML TAG	WCPFC FIELD
	for this set (refer to the SPECIES				
	table)				
TARGET TUN YN	ADDITIONAL FLAG indication for MULTIPLE	Bit		<target_tun_yn></target_tun_yn>	Y
	targeting				
TARGET_SWO_YN	ADDITIONAL FLAG indication for MULTIPLE	Bit		<target_swo_yn></target_swo_yn>	Y
	targeting				
TARGET_SKH_YN	ADDITIONAL FLAG indication for MULTIPLE	Bit		<target_skh_yn></target_skh_yn>	Y
	targeting				
SETDETAILS	General notes on the setting procedures.	NText		<setdetails></setdetails>	N
	Any comments relating to the setting				
	strategy. For example has there been any				
	specific targetting of shark in this				
	set.				
BAIT1_SP_CODE	Bait species id. # 1	Char (3)	REFER TO APPENDIX 8.	<bait1_sp_code></bait1_sp_code>	Y
BAIT2_SP_CODE	Bait species id. # 2	Char (3)	REFER TO APPENDIX 8.	<bait2_sp_code></bait2_sp_code>	Y
BAIT3_SP_CODE	Bait species id. # 3	Char (3)	REFER TO APPENDIX 8.	<bait3_sp_code></bait3_sp_code>	Y
BAIT4_SP_CODE	Bait species id. # 4	Char (3)	REFER TO APPENDIX 8.	<bait4_sp_code></bait4_sp_code>	Y
BAIT5_SP_CODE	Bait species id. # 5	Char (3)	REFER TO APPENDIX 8.	<bait5_sp_code></bait5_sp_code>	Y
BAIT1_W	Weight of bait species #1 used, (kg)	SmallInt		<bait1_w></bait1_w>	N
BAIT2_W	Weight of bait species #2 used, (kg)	SmallInt		<bait2_w></bait2_w>	N
BAIT3_W	Weight of bait species #3 used, (kg)	SmallInt		<bait3_w></bait3_w>	N
BAIT4_W	Weight of bait species #4 used, (kg)	SmallInt		<bait4_w></bait4_w>	N
BAIT5_W	Weight of bait species #5 used, (kg)	SmallInt		<bait5_w></bait5_w>	N
BAIT1_H	Hook number(s) in basket that Bait 1 was	NVarChar (25)	(Hook numbers separated by commas)	<bait1_h></bait1_h>	N
	placed				
BAIT2_H	Hook number(s) in basket that Bait 2 was	NVarChar (25)	(Hook numbers separated by commas)	<bait2_h></bait2_h>	N
	placed				
BAIT3_H	Hook number(s) in basket that Bait 3 was	NVarChar (25)	(Hook numbers separated by commas)	<bait3_h></bait3_h>	N
	placed				
BAIT4_H	Hook number(s) in basket that Bait 4 was	NVarChar (25)	(Hook numbers separated by commas)	<bait4_h></bait4_h>	N
	placed				
BAIT5_H	Hook number(s) in basket that Bait 5 was	NVarChar (25)	(Hook numbers separated by commas)	<bait5_h></bait5_h>	N
	placed				
BAIT1_DYED_YN	FLAG indication on dyed on bait #1	SmallInt		<bait1_dyed_yn></bait1_dyed_yn>	Y
BAIT2_DYED_YN	FLAG indication on dyed on bait #2	SmallInt		<bait2_dyed_yn></bait2_dyed_yn>	Y
BAIT3_DYED_YN	FLAG indication on dyed on bait #3	SmallInt		<bait3_dyed_yn></bait3_dyed_yn>	Y
BAIT4_DYED_YN	FLAG indication on dyed on bait #4	SmallInt		<bait4_dyed_yn></bait4_dyed_yn>	Y
BAIT5_DYED_YN	FLAG indication on dyed on bait #5	SmallInt		<bait5_dyed_yn></bait5_dyed_yn>	Y
TORI_POLES_YN	FLAG indication on tori poles used	SmallInt		<tori_poles_yn></tori_poles_yn>	Y
BIRD_CURTAIN_YN	FLAG indication on bird curtain used	SmallInt		<bird_curtain_yn></bird_curtain_yn>	Y
WT_LINES_YN	FLAG indication on weighted lines used	SmallInt		<wt_lines_yn></wt_lines_yn>	Y
UW_CHUTE_YN	FLAG indication on underwater chute used	SmallInt		<uw_chute_yn></uw_chute_yn>	Y

### 2.4 SET-HAUL LOG DATA

## LL\_SETHAULLOG

The E-Reporting system must PROVIDE the following log information for EACH SET/HAUL during the period of the trip, typically on a 30-minute basis.

		On a 30-minut			
FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD
TRIP IDENTIFIER	Internally generated. Can be NATURAL			<obstrip_id></obstrip_id>	Y
	KEY or unique integer. NATURAL KEY				
	would be VESSEL + DEPARTURE DATE				
SET IDENTIFIER	Internally generated. Can be NATURAL			<l_set_id></l_set_id>	Y
	KEY or unique integer. NATURAL KEY				
	would be VESSEL + DEPARTURE DATE +				
	SET START DATE + SET START TIME				
SETHAUL LOG	Internally generated. Can be NATURAL			<l_sethaulog_id></l_sethaulog_id>	Y
IDENTIFIER	KEY or unique integer. NATURAL KEY				
	would be VESSEL + DEPARTURE DATE +				
	SET START DATE + SET START TIME + LOG				
	DATE + LOG TIME				
LOG_DATE	Date/TIME of log reading	REFER TO APPENDIX A1		<log_date></log_date>	Y
	Status of gear at this logged				Y
SETHAUL	date/time : Set (S) Haul (H), Soak	Char (4)	Must be either 'S', 'H', 'K' or 'F'	<sethaul></sethaul>	
	(K) or Float retrieved (F)				
	Indicator for status of the SET-HAUL				Y
	83 - First log record for the SET				
	(start of SET information)				
	84 - Last log record for the SET (end				
STEND ID	of SET information)	Int	Must be 83, 84, 85, 86, 91 or NULL	<stend_id></stend_id>	
SIEND_ID	85 - First log record for the HAUL	1110	Mase be 03, 01, 03, 00, 91 01 Nobb	(SIEND_ID)	
	(start of HAUL information)				
	86 - Last log record for the HAUL				
	(end of HAUL information)				
	91 - Float retrieval				
LAT	Latitude (long format)	REFER TO APPENDIX A2		<lat></lat>	Y
LON	Longitude (long format)	REFER TO APPENDIX A2		<lon></lon>	Y
COMMENTS	Comments	NText		<comments></comments>	N
FLOAT ID	Unique identifier for the Float	NVARCHAR (15)	Only used when Float retrieved (STEND_ID = 91)	<float_id></float_id>	N
LHOMI_ID	retrieved	WVARCHAR(15)	E-Monitoring ONLY	/LHOWI_ID>	
	Hooks between this float retrieved	SmallInt	Must be 1-60, or -1 for no information.	<hk_bt_flt></hk_bt_flt>	N
HK_BT_FLT	and the next float		Only used when Float retrieved (STEND_ID = 91)		
	and the next 110at		E-Monitoring ONLY		

#### 2.5 SET CATCH DATA

The	LL_OBS_CATCH  The observer must PROVIDE the following CATCH DETAILS for EACH FISHING HAUL for the period of the trip.				
FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></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></l_catch_id>	Y
CATCH_DATE	Date/TIME of individual catch event	REFER TO APPENDIX A1		<catch_date></catch_date>	Y
HOOK_NO	Hook number (since the last float). Hook number=99 represents catch on a hook hanging directly from the floatline.	SmallInt		<hook_no></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></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></fate_code>	Y
COND_CODE	CONDITION of this catch on LANDING. Relevant for the Species of Special Interest.	Char (2)	REFER TO APPENDIX 10	<cond_code></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		Y
LEN	Length (cm).	SmallInt	Refer to SPECIES RANGE table for these species	<len></len>	Y
LEN_CODE	Length measurement code	Char (2)	REFER TO APPENDIX 11	<len_code></len_code>	Y
WT	Weight (kgs) - must be measured weight and not a visual estimate	Decimal (5,1)		<wt></wt>	N
WT_CODE	Weight code.	Char (2)	REFER TO APPENDIX 22	<wt_code></wt_code>	N
SEX_CODE	SEX of fish	Char (1)	REFER TO APPENDEX 12	<sex_code></sex_code>	Y
GSTAGE_CODE	GONAD STAGE CODE	Char (1)	REFER TO APPENDIX 23	<gstage_code></gstage_code>	N
COMMENTS	Comments	NVarChar (40)		<comments></comments>	N
LAT	Latitude (long format)	REFER TO APPENDIX A2	Position of each catch event <b>E-Monitoring ONLY</b>	<lat></lat>	N
LON	Longitude (long format)	REFER TO APPENDIX A2	Position of each catch event <b>E-Monitoring ONLY</b>	<lon></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	Validation rules	XML TAG	WCPFC FIELD	
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></v_crew_id>	Y	
COUNTRY_CODE	Nationality of the CREW	Char (2)	Refer to valid ISO two-letter Country Codes - ISO 3166 For example, refer to http://en.wikipedia.org/wiki/ISO_3166-1	<country_code></country_code>	Y	
CREWCOUNT	Total number of crew on board during the trip for this COUNTRY OF NATIONALITY	SmallInt		<crewcount></crewcount>	Y	

#### 2.13 LONGLINE GEAR DATA

	LL_GEAR  PROVIDE information on the LONGLINE GEAR on the vessel.				
FIELD	Data Collection Instructions	Field format	Validation rules	XML TAG	WCPFC FIELD
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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></l_gear_id>	Y
MLINEHAUL_ANS	Mainline hauler (Y/N)	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond to this question)	<mlinehaul_ans></mlinehaul_ans>	Y
MLINEHAUL_USAGE_CODE	Link to ref_usage table	Char (3)	REFER TO APPENDIX 21	<pre><mlinehaul_usage_code></mlinehaul_usage_code></pre>	Y
MLINEHAUL_COMMENTS	Comments on Mainline Hauler	NVarChar (50)		<pre><mlinehaul_comments></mlinehaul_comments></pre>	N
BLINEHAUL_ANS	Branchline hauler (Y/N)	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond to this question)	<blinehaul_ans></blinehaul_ans>	Y
BLINEHAUL_USAGE_CODE	Link to ref_usage table	Char (3)	REFER TO APPENDIX 21	<pre><blinehaul_usage_code></blinehaul_usage_code></pre>	Y
BLINEHAUL_COMMENTS	Comments on Branchline Hauler	NVarChar (50)		<pre><blinehaul_comments></blinehaul_comments></pre>	N
LSHOOT_ANS	Line shooter (Y/N)	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond to this question)	<lshoot_ans></lshoot_ans>	Y
LSHOOT_USAGE_CODE	Link to ref_usage table	Char (3)	REFER TO APPENDIX 21	<lshoot_usage_code></lshoot_usage_code>	Y
LSHOOT_COMMENTS	Comments on Line shooter	NVarChar (50)		<lshoot_comments></lshoot_comments>	N
BAITTHR_ANS	Automatic bait thrower (Y/N)	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond to this question)	<baitthr_ans></baitthr_ans>	Y
BAITTHR_USAGE_CODE	Link to ref_usage table	Char (3)	REFER TO APPENDIX 21	<pre><baitthr_usage_code></baitthr_usage_code></pre>	Y
BAITTHR_COMMENTS	Comments on Automatic Bait thrower	NVarChar (50)		<baitthr_comments></baitthr_comments>	N
BRANCHATT_ANS	Automatic branchline attacher (Y/N)	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond to this question)	<branchatt_ans></branchatt_ans>	Y
BRANCHATT_USAGE_CODE	Link to ref_usage table	Char (3)	REFER TO APPENDIX 21	<pre><branchatt_usage_code></branchatt_usage_code></pre>	Y
BRANCHATT_COMMENTS	Comments on Automatic Branchline attacher	NVarChar (50)		<pre><branchatt_comments></branchatt_comments></pre>	N
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></wt_sca_ans>	N
WT_SCA_USAGE_CODE	Weighing scales USAGE	Char (3)	REFER TO APPENDIX 21	<wt_sca_usage_code></wt_sca_usage_code>	N
WT_SCA_COMMENTS	Comments on Automatic B Weighing scales	NVarChar (50)		<wt_sca_comments></wt_sca_comments>	N
MLINE_COMP	Composition of mainline	NText		<mline_comp></mline_comp>	Y
BLINE_COMP	Composition of branchlines	NText		<bline_comp></bline_comp>	Y
MLINE_MAT	Mainline material	NVarChar (15)		<mline_mat></mline_mat>	Y
MLINE_MAT_DESC	Mainline material description	NVarChar (50)		<mline_mat_desc></mline_mat_desc>	Y
MLINE_LEN	Mainline length (nm)	Decimal (5,1)		<mline_len></mline_len>	Y
MLINE_DIAM	Mainline diameter (mm)	Decimal (4,1)		<mline_diam></mline_diam>	Y
BLINE_MAT1	Composition of branchlines (Material #1)	NVarChar (40)		<bline_mat1></bline_mat1>	Y
BLINE_MAT1_DESC	Branchlines (Material #1)	NVarChar (50)		<pre><bline_mat1_desc></bline_mat1_desc></pre>	Y

# LL\_GEAR PROVIDE information on the LONGLINE GEAR on the vessel.

FIELD	Data Collection Instructions	Field format	Validation rules	XML TAG	WCPFC
1122	Data Collection imperactions	notes	Vallacion Lateb		FIELD
	description				
BLINE_MAT2	Composition of branchlines	NVarChar (40)		<bline_mat2></bline_mat2>	Y
	(Material #2)				
BLINE_MAT2_DESC	Branchlines (Material #2)	NVarChar (50)		<pre><bline_mat2_desc></bline_mat2_desc></pre>	Y
	description				
BLINE_MAT3	Composition of branchlines	NVarChar (40)		<bline_mat3></bline_mat3>	Y
	(Material #3)				
BLINE_MAT3_DESC	Branchlines (Material #3)	NVarChar (50)		<bline_mat3_desc></bline_mat3_desc>	Y
	description				
WIRETRACE_ANS	Presence orf wire trace (Y/N)	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond	<pre><wiretrace_ans></wiretrace_ans></pre>	Y
			to this question)		
SEAWATER_ANS	Refrigeration method - Sea	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond	<seawater_ans></seawater_ans>	Y
	water ?		to this question)		
BLASTFREEZER_ANS	Refrigeration method - blast	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond	<pre><blastfreezer_ans></blastfreezer_ans></pre>	Y
TOP AND	freezer ?  Refrigeration method - Ice ?	Clara (1)	to this question)  Must be 'Y', 'N' or 'X' (observer did not respond	<ice ans=""></ice>	Y
ICE_ANS	Reirigeration method - Ice ?	Char (1)	to this question)	<ice_ans></ice_ans>	Y
CHILLEDSEAWATER ANS	Refrigeration method - Chilled	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond	<pre><chilledseawater ans=""></chilledseawater></pre>	Y
CHILLEDSEAWATER_ANS	Sea water ?	Cliai (1)	to this question)	CHIEBEDGEAWATEK_ANS>	_
OTHERSTORAGE ANS	Refrigeration method - other ?	Char (1)	Must be 'Y', 'N' or 'X' (observer did not respond	<pre><otherstorage ans=""></otherstorage></pre>	Y
OTHERD TORAGE_AND	Refrigeration method other.	Char (1)	to this question)	TOTAL DIGITAL DESCRIPTION OF THE PROPERTY OF T	_
OTHERSTORAGE DESC	Refrigeration method - other	NVarChar (50)	to and interest,	<otherstorage_desc></otherstorage_desc>	Y
	description	(00)		_	
HKSJAPAN_SIZE	Japanese hook size	NVarChar (50)		<hksjapan_size></hksjapan_size>	Y
HKSJAPAN_PERC	% of Japanese hook	TinyInt		<hksjapan_perc></hksjapan_perc>	N
HKSJAPAN_ORS	Japanese hook original size	NVarChar (5)		<hksjapan_ors></hksjapan_ors>	Y
HKSCIRCLE_SIZE	Circle hook size	NVarChar (50)		<hkscircle_size></hkscircle_size>	Y
HKSCIRCLE_PERC	% of Circle hook	TinyInt		<hkscircle_perc></hkscircle_perc>	N
HKSCIRCLE_ORS	Circle hook original size	NVarChar (5)		<hkscircle_ors></hkscircle_ors>	Y
HKSJ_SIZE	J hook size	NVarChar (50)		<hksj_size></hksj_size>	Y
HKSJ_PERC	% of J hook size	TinyInt		<hksj_perc></hksj_perc>	N
HKSJ_ORS	J hook original size	NVarChar (5)		<hksj_ors></hksj_ors>	Y
HKSOTH_TYPE	Other hook types description	NVarChar (50)		<hksoth_type></hksoth_type>	Y
HKSOTH_SIZE	Other hook type size	NVarChar (50)		<hksoth_size></hksoth_size>	Y
HKSOTH_PERC	% of Other hook types	TinyInt		<hksoth_perc></hksoth_perc>	N
HKSOTH_ORS	Others types of hook original size	NVarChar (5)		<hksoth_ors></hksoth_ors>	Y
BLINE_MAT1_DIAM	Branchlines (Material #1) diameter	Decimal (4,1)		<bline_mat1_diam></bline_mat1_diam>	Y
BLINE_MAT2_DIAM	Branchlines (Material #2) diameter	Decimal (4,1)		<bline_mat2_diam></bline_mat2_diam>	Y

## 2.14 POLLUTION REPORT

(see <u>1.20 POLLUTION REPORT</u> and <u>1.21 POLLUTION DETAILS</u>)

# 2.15 OBSERVER JOURNAL

(see 1.22 OBSERVER JOURNAL)



## 2.16 LONGLINE TRIP REPORT

## LL\_TRIP\_REPORT

PROVIDE descriptive information on the trip.

	fer to the relevant sections in <a href="http://doi.org/10.100/journal.org/">http://doi.org/10.100/journal.org/</a>				LIGDEG
FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE			<obstrip_id></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_1_WEATHER 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
					N
8_1_2_TARGET _DISC	Refer to relevant section in link above)	NText		<8_1_2_TARGET _DISC>	IN

## LL\_TRIP\_REPORT

#### PROVIDE descriptive information on the trip.

Refer to the relevant sections in http://www.spc.int/OceanFish/en/publications/doc\_download/1318-2014-11-trip-report

FIELD	Data Collection Instructions	Field	Validation rules XML TAG	WCPFC
		format		FIELD
		notes		
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_BILI	> 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/TIME formats must adhere to the following standard:
ISO 8601 - Dates and times format – both local and UTC dates

[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

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

#### **APPENDIX A3 - PORT LOCATION CODES**

The PORT LOCATION Codes must adhere to the UN/LOCODE standard UPPERCASE CHAR(5) United Nations - Code for Trade and Transport Locations (UN/LOCODE) – see <a href="http://www.unece.org/cefact/locode/service/location">http://www.unece.org/cefact/locode/service/location</a>

#### **APPENDIX A4 - VESSEL IDENTIFICATION**

The attributes to be provided for the VESSEL needs to be consistent with several VESSEL registers at the global and regional level. The most important are the proposed IMO/UVI standard vessel identifier (UVI), the WCPFC vessel register and the FFA Vessel register.

FIELD	Data Collection Instructions	Field format notes	Validation rules	XML TAG	WCPFC FIELD
VESSEL NAME		CHAR(30)	Must be consistent with the WCPFC and FFA Vessel	<vesselname></vesselname>	Y
		UPPER CASE	Registers		
COUNTRY OF		CHAR(2)	ISO 3166-1 alpha-2 two-letter country code	<countryreg></countryreg>	Y
VESSEL		ISO 3166-1 alpha-2			
REGISTRATION		two-letter country	Must be consistent with the WCPFC and FFA Vessel		
		code	Registers		
		UPPER CASE			
			Country of registration is distinct from the		
			chartering nation, where relevant		
VESSEL	PROVIDE the VESSEL attributes which	CHAR (20)	Must be consistent with the WCPFC and FFA Vessel	<regno></regno>	Y
REGISTRATION	should be consistent with the		Registers		
NUMBER	attributes stored in the WCPFC and	UPPER CASE			
FFA VESSEL	FFA Regional Vessel Registers	INTEGER(5)	Must be consistent with the FFA Vessel Register	<ffavid></ffavid>	N
REGISTER NUMBER	TTA REGIONAL VESSEL REGISCEIS				
WCPFC RFV VID		INTEGER(10)	Must be consistent with the WCPFC RFV	<win></win>	Y
UNIVERSAL		INTEGER(10)	Must be consistent with the WCPFC and FFA Vessel	<imo_uvi></imo_uvi>	N
VESSEL			Registers		
IDENTIFIER					
(UVI)					
VESSEL		CHAR(10)	Must be consistent with the WCPFC and FFA Vessel	<ircs></ircs>	Y
INTERNATIONAL			Registers		
CALLSIGN		UPPER CASE			

#### **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 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)

#### **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
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
A4	Entangled, okay
A5	Entangled, injured
A6	Hooked, externally, injured
A7	Hooked, internally, injured
A8	Hooked, unknown, injured
D	Dead
D1	Entangled, dead
D2	Hooked, externally, dead
D3	Hooked, internally, dead
D4	Hooked, unknown, dead
U	Condition, unknown
U1	Entangled, unknown condition
U2	Hooked, externally, condition unknown
U3	Hooked, internally, condition unknown
U4	Hooked, unknown, 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
1	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
В	Bycatch only sampling
F	Small-fish only sampling
0	Other type of sampling protocol (please specify)

# **APPENDIX A15 - MEASURING INSTRUMENTS Codes**

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

# **APPENDIX A16 - TRIP MONITORING QUESTION Codes**

QUESTION	Description	WCPFC Question
CODE	Did the operator or any crew member assault, obstruct, resist, delay, refuse boarding	Υ
RS-A	to, intimidate or interefere with observers in the performance of their duties	Ť
RS-B		
RS-C	Mistreat other crew	Y N
RS-D	Did operator fail to provide observer with food, accommodation, etc.	Y
NR-A	Fish in areas where the vessel is not permitted to fish	Y
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	Υ
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	Υ
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	Υ Υ
WC-A	Fail to comply with any Commission Conservation and Management Measures (CMMs)	Y
WC-A	High-grade the catch	<u>т</u> Ү
WC-B	Fish on FAD during FAD Closure	N
LP-A	Inaccurately record vessel position on vessel log sheets for sets, hauling and catch	Y
LP-A LP-B	Fail to report vessel positions to countries where required	<u>т</u> Ү
LC-A	Inaccurately record retained 'Target Species' in the Vessel logs [or weekly reports]	<u>т</u> Ү
LC-A	Inaccurately record 'Target Species' Discards	Y
LC-B	Record target species inaccurately [eg. combine bigeye/yellowfin/skipjack catch]	Y
LC-D	Not record bycatch discards	N
LC-E	Inaccurately record disparded by catch Species	Y Y
LC-F	Inaccurately record discarded bycatch species	
SI-A	Land on deck Species of Special Interest (SSIs)	N V
SI-B	Interact (not land) with SSIs	Y
PN-A	Dispose of any metals, plastics, chemicals or old fishing gear	Y
PN-B	Discharge any oil	Y
PN-C	Lose any fishing gear	Y
PN-D	Abandon any fishing gear	Y
PN-E	Fail to report any abandoned gear	Y
SS-A	Fail to monitor international safety frequencies	Y
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	FORM Used
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

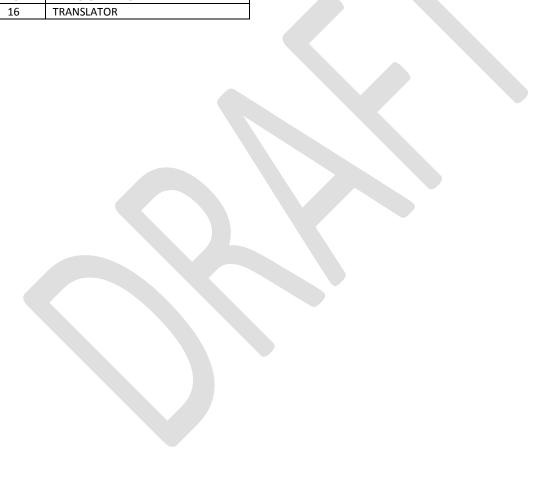
 ${\sf GEN1-Vessel\,/\,Aircraft\,sightings}$ 

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	СООК
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**

		WCPFC	GEAR LIST
Code	Description	FIELD	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		Р
24	ECHO SOUNDING BUOY		S
25	EPIRB		

# **APPENDIX A21 - DEVICE USAGE codes**

Code	Description
	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
		Enlarged, richly vascular, orange ovaries, losing turgidity.
M	Mature	Ova translucent.
		Greatly enlarged ovaries, not turgid. Ova easily dislodged
R	Ripe	and extruded by pressure.
		Flaccid, vascular ovaries. Most ova gone. Often dark
S	Spent	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 foudn by your vessel
7	Deployed by FAD auxillary vessel
8	Origin unknown
9	Other origin

## **APPENDIX A25 - FAD DETECTION codes**

FAD DETECTION	Description
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**

Al I ENDIA AZO - PAD MATERIAL COUCS	
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/Bearth
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