#### **APPENDICES**

#### APPENDIX A1 – DATE/TIME FORMAT

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

[YYYY]-[MM]-[DD] Z for fields designated as UTC date

[YYYY]-[MM]-[DD] for fields designated as LOCAL date

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

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

#### APPENDIX A2 - POSITION/COORDINATE FORMAT

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

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

#### APPENDIX A3 - LOCATION CODES

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

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

(Refer to the relevant WCPFC Codes web page link)

#### APPENDIX A4 – VESSEL IDENTIFICATION

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

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

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

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

FIELD	Data Collection Instructions	Field format notes	Validation instructions	XML TAG	WCPFC
VESSEL NAME		CHAR(30) UPPER CASE	Must be consistent with the WCPFC and FFA Vessel Registers	<vesselname></vesselname>	Y
COUNTRY OF VESSEL REGISTRATION	PROVIDE the VESSEL attributes which should be consistent with the attributes	CHAR(2)  WCPFC alpha- 2 two-letter country code (refer to WCPFC codes web page)  UPPER CASE	WCPFC alpha-2 two-letter country code (refer to WCPFC codes web page)  Must be consistent with the WCPFC and FFA Vessel Registers  Country of registration is distinct from the chartering	<countryreg></countryreg>	Y
VESSEL REGISTRATION NUMBER	stored in the WCPFC and FFA Regional Vessel Registers	CHAR (20)  UPPER CASE	nation, where relevant  Must be consistent with the WCPFC and FFA Vessel Registers	<regno></regno>	Y
FFA VESSEL REGISTER NUMBER		INTEGER (5)	Must be consistent with the FFA Vessel Register	<ffavid></ffavid>	N
WCPFC RFV VID		INTEGER (10)	Must be consistent with the WCPFC RFV	<win></win>	Y

UNIVERSAL VESSEL IDENTIFIER (UVI)	INTEGER (10)	Must be consistent with the WCPFC and FFA Vessel Registers	<imo_uvi></imo_uvi>	N
IMO_OR_LR	INTEGER(7)	Record of IMO number or Lloyd's Register number (fishing vessel at least 100GT or 100GRT)		
VESSEL IRCS - CALLSIGN	CHAR (10)	Must be consistent with the WCPFC and FFA Vessel Registers	<ircs></ircs>	Y
CRUISING SPEED	UPPER CASE  INTEGER(3)	Cruising speed (not top speed)	<c_speed></c_speed>	Y
FISH HOLD CAPACITY	INTEGER (4)	The total maximum amounts in metric Tons (MT) that the vessel freezers, wells and other fish storage areas on a vessel can hold.	<f_hold_cap></f_hold_cap>	Y
LOA	INTEGER(3)	Specify length overall and the unit	<loa></loa>	Y
TONNAGE	INTEGER (4)	Specify the Gross registered tonnage (GRT) or Gross Tonnage (GT) and the unit	<v_tonnage></v_tonnage>	Y
ENGINE POWER	INTEGER (5)	Specify the engine power and the power units	<eng_power></eng_power>	Y

### APPENDIX A5 – PURSE SEINE OBSERVER ACTIVITY CODES

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

# APPENDIX A6 – PURSE SEINE TUNA SCHOOL ASSOCIATION CODES

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

# APPENDIX A7 – PURSE SEINE TUNA SCHOOL/ FAD DETECTION CODES

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

### APPENDIX A8 – SPECIES CODES

# Refer to the FAO three-letter species codes:

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

### APPENDIX A9 – OBSERVER FATE CODES

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

### APPENDIX A10 – OBSERVER CONDITION CODES

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

### APPENDIX A11 – LENGTH CODES

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

### APPENDIX A12 – SEX CODES

Sex Code	Description
F	Female
1	Indeterminate (checked but unsure)
М	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 COMPOSITION 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
Т	TAPE
U	UNKNOWN
W	CALLIPER - WOOD

### APPENDIX A16 – TRIP MONITORING QUESTION Codes

QUESTION	Description	WCPFC	WCPFC
CODE		Question	ROP Q#
RS-A	Did the operator or any crew member assault, obstruct, resist, delay, refuse boarding to,	Υ	14
N3-A	intimidate or interefere with observers in the performance of their duties		
RS-B	Request that an event not be reported by the observer	Υ	13
RS-C	Mistreat other crew	N	
RS-D	Did operator fail to provide observer with food, accommodation, etc.	Υ	15
NR-A	Fish in areas where the vessel is not permitted to fish	Υ	10
NR-B	Target species other than those they are licenced to target	N	
NR-C	Use a fishing method other than the method the vessel was designed or licensed	Υ	16
NR-D	Not display or present a valid (and current) licence document onboard	N	
NR-E	Transfer or transship fish from or to another vessel	Υ	12
NR-F	Was involved in bunkering activities	N	
NR-G	Fail to stow fishing gear when entering areas where vessel is not authorised to fish	Υ	23
WC-A	Fail to comply with any Commission Conservation and Management Measures (CMMs)	Υ	9
WC-B	High-grade the catch		8
WC-C	Fish on FAD during FAD Closure		
LP-A	Inaccurately record vessel position on vessel log sheets for sets, hauling and catch	Υ	1
LP-B	Fail to report vessel positions to countries where required	Υ	11
LC-A	Inaccurately record retained 'Target Species' in the Vessel logs [or weekly reports]	Υ	2
LC-B	Inaccurately record 'Target Species' Discards	Υ	3
LC-C	Record target species inaccurately [eg. combine bigeye/yellowfin/skipjack catch]	Υ	6
LC-D	Not record bycatch discards	N	
LC-E	Inaccurately record retained bycatch Species	Υ	4
LC-F	Inaccurately record discarded bycatch species	Υ	5
SI-A	Land on deck Species of Special Interest (SSIs)	N	
SI-B	Interact (not land) with SSIs	Υ	7
PN-A	Dispose of any metals, plastics, chemicals or old fishing gear  Y		20
PN-B	Discharge any oil Y		21
PN-C	Lose any fishing gear	Υ	17
PN-D	Abandon any fishing gear	Υ	18
PN-E	Fail to report any abandoned gear	Υ	19
SS-A	Fail to monitor international safety frequencies	Υ	22
SS-B	Carry out-of-date safety equipment	N	

# APPENDIX A17 – VESSEL / AIRCRAFT SIGHTINGS Codes

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

# APPENDIX A18 – ACTION Codes

Action		
Codes	Description	SPC/FFA FORM Used (for reference)

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

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

### APPENDIX A19 – Purse seine CREW JOB Codes

CODE	Description
1	CAPTAIN
2	NAVIGATOR/MASTER
3	MATE
4	CHIEF ENGINEER
5	ASSISTANT ENGINEER
6	DECK BOSS
7	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

		14/0050	CEARLICE
Code	Description	WCPFC	GEAR LIST
_		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
XXX	Not mentioned
ALL	used all the time for fishing
BRO	broken now but used normally
NA	Not applicable / Not filled
NOL	no longer ever used
OIF	used only in transit
RAR	used rarely
SIF	used often but only in fishing
TRA	used all the time

### APPENDIX A22 – WEIGHT MEASUREMENT codes

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

### APPENDIX A23 – GONAD STAGE codes

Gonad		
stage		
code	Short description	Description
N	No information	No information
I	Immature	Ovary small and slender. Cross-section round
E	Early Maturing	Enlarged, pale yellow ovaries. Ova not visible.
L	Late Maturing	Enlarged, turgid, orange-yellow ovaries. Ova opaque
		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 found by your vessel
7	Deployed by FAD auxiliary vessel
8	Origin unknown
9	Other origin

### APPENDIX A25 – FAD DETECTION codes

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

# APPENDIX A26 – FAD MATERIAL codes

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

### APPENDIX A27 – FAD TYPE codes

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

#### APPENDIX A28 – POLLUTION GEAR codes

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

### APPENDIX A29 – POLLUTION MATERIALS codes

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

### APPENDIX A30 – POLLUTION SOURCE codes

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

### APPENDIX A31 – POLLUTION TYPE codes

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