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1er TALLER SOBRE LA MEJORA DE LA RECOLECCIÓN Y PROVISIÓN DE DATOS: PESQUERÍA PALANGRERA INDUSTRIAL

ÍNDICE

RESUMEN

Como resultado de una recomendación del personal respaldada por el Comité Científico Asesor y la Comisión (SAC-12-16, Provisión de datos generales) de celebrar una serie de talleres para revisar la resolución C-03-05 en consulta con los CPC y tomando en cuenta los elementos presentados en el documento SAC-12-09, el personal planificó y facilitó el primer taller de la serie que se centró en la pesquería palangrera industrial (WSDAT-01). El presente documento incluye las recomendaciones del taller que fueron revisadas con base en las discusiones con los participantes del taller y consultas con Miembros y no Miembros Cooperantes (CPC) individuales. Las discusiones se produjeron tras las presentaciones del personal y de colaboradores externos que proporcionaron información de referencia, ejemplos de casos sobre incentivos para mejorar la recolección de datos y las recomendaciones preliminares del personal (WSDAT-01-01).

1. INTRODUCCIÓN

La resolución C-03-05 de la CIAT sobre provisión de datos no solo es anterior a la Convención de Antigua, sino que ha no sufrido cambios desde su adopción hace 20 años. La Convención de Antigua entró en vigor hace más de una década y amplió el mandato de la Comisión para incluir especies no objetivo, dependientes y asociadas, y los efectos de la pesquería sobre el ecosistema. La provisión de datos se ha quedado atrás tanto en ritmo como en tipos de datos notificados a la CIAT. Esto, a su vez, ha afectado la capacidad del personal de cumplir adecuadamente sus obligaciones bajo la Convención y los objetivos bajo el Plan Científico Estratégico de la CIAT (2019-2023, IATTC-93-06a).

Varios impulsores han motivado al personal a proponer una revisión de la resolución sobre provisión de datos (C-03-05). Los impulsores científicos se centran en los recientes retos técnicos con las evaluaciones de poblaciones de atunes tropicales, pero también incluyen preocupaciones sobre cantidades biológicas desactualizadas o inexistentes (por ejemplo, relaciones talla-peso, ver SAC-14 INF-J). Los impulsores políticos incluyen el aumento de la percepción pública de los posibles efectos ecológicos de la pesca y las

interacciones de las pesquerías con especies amenazadas y vulnerables, y los impulsores de mercado y conservación incluyen el ecoetiquetado (por ejemplo, las certificaciones de Marine Stewardship), que varias pesquerías de atunes y especies afines han obtenido o están solicitando. El personal elaboró dos documentos de referencia en los que se explican los fundamentos para revisar esta resolución (ver SAC-12-09: centrado en todos los tipos de artes; WSDAT-01-01: centrado en el palangre industrial). Con estos impulsores en primer plano, el personal propuso una recomendación al CCA para celebrar una serie de talleres, por tipo de arte, sobre la provisión de datos para desarrollar formularios de notificación y proporcionar recomendaciones para actualizar la resolución C-03-05 (SAC-12-16, ver la sección B.3 "Provisión de datos generales"). Esta recomendación fue respaldada posteriormente por el CCA y la Comisión para mejorar la notificación de datos.

La primera pesquería que se abordó en la serie de talleres fue la pesquería palangrera industrial, ya que es la segunda pesquería más importante en volumen de captura, después de la pesquería de cerco, y la provisión de datos depende casi exclusivamente de las remisiones por los CPC, a diferencia de la pesquería de cerco que cuenta con un programa integral de recolección de datos gestionado por el personal de la CIAT. Además, los índices de abundancia de las principales poblaciones se derivan de los datos de captura y esfuerzo de esta pesquería, que captura peces de mayor talla y edad, lo que convierte a la pesquería palangrera industrial en un buen indicador de los adultos de la población. Se identificaron dificultades significativas asociadas a la provisión de datos como (1) el acceso restringido a datos operacionales de alta resolución, por lance individual, de las bitácoras necesarios para evaluar la condición de las poblaciones de atunes tropicales y especies afines (ver SAC-11-06; SAC-11-07; IATTC-95-05) y (2) la necesidad de metodologías de datos escasos usadas para evaluar los impactos ecológicos de la pesquería sobre el ecosistema debido a la escasa o nula notificación de especies capturadas incidentalmente (por ejemplo, ver SAC-14-11, SAC-13-11).

El 1er taller sobre la mejora de la recolección y provisión de datos se celebró por videoconferencia en enero de 2023. En preparación para esta reunión, el personal se puso en contacto con colegas de otras OROP atuneras para comparar los tipos de datos remitidos a cada OROP atunera y elaboró listas de especies y tablas de campos de datos para armonizar la recolección y notificación de datos entre las OROP atuneras, con un enfoque principal en alinearlas con la organización hermana de la CIAT, la WCPFC. En el documento WSDAT-01-01 y en el informe de la reunión correspondiente (WSDAT-01-RPT) se ofrecen más detalles.

2. RECOMENDACIONES REVISADAS

Las recomendaciones del personal para revisar la resolución C-03-05 que figuran a continuación han sido modificadas a partir de las recomendaciones preliminares recogidas en el documento WSDAT-01-01 y son la culminación de las aportaciones de los participantes del taller y de consultas con Miembros y no Miembros Cooperantes (CPC) individuales (WSDAT-01-RPT).

RECOMENDACIONES:

1. Establecimiento de una resolución para la notificación de datos operacionales:
El personal recomienda que la Comisión establezca una resolución para la remisión de datos operacionales de palangre (por buque, por lance individual), desde el año en que la flota comenzó a operar hasta el año más reciente posible, idealmente el año en curso o el anterior. Estos datos son necesarios para investigaciones científicas de conformidad con el objetivo, las reglas, y las disposiciones pertinentes de la Convención de Antigua y las medidas adoptadas por la CIAT. Según cada caso individual, y según lo determine el Director, los Miembros y no Miembros Cooperantes podrán remitir los datos en el marco de otros instrumentos[1]. La resolución debería incluir una disposición para que el personal elabore anualmente un documento que describa las deficiencias de datos y los esfuerzos para subsanarlas.

[1]Por ejemplo, se pueden establecer Memorándums de Entendimiento entre la CIAT y CPC individuales para fomentar la colaboración y el intercambio de datos con fines estadísticos para la evaluación de las poblaciones, la vulnerabilidad de las especies y la condición del ecosistema.

2. TAREA I (Datos anuales):
El personal recomienda que el establecimiento de la resolución de la recomendación 1 incluya la notificación obligatoria del esfuerzo, la captura[2] y la disposición (retenido o descartado) de la TAREA I para atunes, peces picudos y tiburones (como se indica en la Tabla 3a, que armoniza los requisitos de notificación de especies con la WCPFC) y, si está disponible, notificar la captura de otros taxones pertinentes (Tabla 3b)[3] con la mayor resolución taxonómica posible.

[2]La captura se define como las extracciones brutas anuales en toneladas métricas y el esfuerzo es el número de buques pesqueros activos en el Área de la Convención de Antigua y el número total de anzuelos.

[3]Debido a las posibles dificultades de los pescadores para identificar con precisión las especies de tiburones y a las inconsistencias observadas entre los datos de bitácora y los datos de observadores, el personal sigue recomendando un aumento de la cobertura por observadores en los buques palangreros hasta al menos 20%. Esto permitirá al personal explorar análisis sobre la expansión de las capturas de especies no objetivo a totales de la flota para mejorar las evaluaciones del ecosistema.

3.1. TAREA II (Datos operacionales):
El personal recomienda que el establecimiento de la resolución de la recomendación 1 incluya la notificación obligatoria de datos operacionales de bitácora de TAREA II, Nivel 1 (por buque, por lance individual), desde el año en que la flota comenzó a operar, si está disponible, hasta el año más reciente posible, idealmente el año en curso o el anterior, utilizando los campos de datos de la Tabla 4, o como mínimo los campos de las Tablas 1a[4] and 1b para armonizar con la WCPFC. Estos datos serán utilizados en investigaciones científicas de conformidad con el objetivo, las reglas, y las disposiciones pertinentes de la Convención de Antigua y las medidas adoptadas por la CIAT. Según cada caso individual, y según lo determine el Director, los Miembros y no Miembros Cooperantes podrán remitir los datos en el marco de otros instrumentos[5].

[4]Campos notificados a la WCPFC.

[5]Por ejemplo, se pueden establecer Memorándums de Entendimiento entre la CIAT y CPC individuales para fomentar la colaboración y el intercambio de datos con fines estadísticos para la evaluación de las poblaciones, la vulnerabilidad de las especies y la condición del ecosistema.

3.2. TAREA II (Datos agregados):

El personal recomienda que el establecimiento de la resolución de la recomendación 1 establezca: "Hasta que la cobertura de los datos operacionales de bitácora proporcionados a la Comisión sea del 100%, notificar los datos de captura y esfuerzo de la TAREA II en la mejor resolución espacial y temporal posible, como mínimo por mes y 5°x5°, expandidos para representar la captura y esfuerzo totales, e indicar los métodos estadísticos utilizados para estimar las capturas totales[6]. Para los datos remitidos anteriormente, indicar si se expandieron a totales de la flota y describir la metodología". Estos datos agregados también deberán incluir el número de buques en cada celda.

[6]Siguiendo a la WCPFC (ver Tabla 2, Métodos de estimación), proporcionar referencias a las tasas de cobertura para cada tipo de datos (por ejemplo, datos operacionales de captura y esfuerzo, registros de descargas, datos de muestreo de composición por especie) que se utilizan para estimar las capturas y a los factores de conversión que se utilizan para convertir el peso procesado a peso entero de los peces capturados con palangre, así como información sobre las relaciones y los métodos utilizados para expandir los datos.

4. Datos de composición por talla:

El personal recomienda que el establecimiento de la resolución de la recomendación 1 incluya la notificación obligatoria de datos de composición por talla que sean representativos de las capturas por las pesquerías, con la mejor resolución espacial y temporal posible, en el tipo y unidad de medición[7] original para los atunes, peces picudos y tiburones (Tabla 3a), indicando la hora, el lugar y el número de lances, viajes y buques muestreados por hora y lugar. Si están disponibles, notificar los datos de composición por talla de otras especies pertinentes (Tabla 3b). Cuando sea necesario, revisar los datos remitidos anteriormente para incluir toda la información. Se debería proporcionar un documento de metadatos que explique el programa de recolección de datos y muestreo.

[7] Indicar el tipo de medición (por ejemplo, peso entero o peso procesado; talla furcal para atunes, longitud de la mandíbula inferior a la cauda furcal para peces picudos, longitud total para tiburones) y unidad de medición (por ejemplo: kg, cm). Si se mide el peso procesado, indicar el tipo de peso procesado (por ejemplo, peso desagallado y eviscerado; peso descabezado, sin cola, desagallado y eviscerado).

5. Opciones de mecanismos de notificación:

El personal recomienda que el personal de la CIAT desarrolle las siguientes opciones para la notificación de datos:

a. Estándares, directrices y plantillas para los campos de datos obligatorios, para permitir a los CPC remitir los datos en el formato que prefieran (por ejemplo, CSV, XLS) siempre que sigan estas plantillas

b. Plantillas digitales predeterminadas en Excel para facilitar el trabajo de los CPC

c. Formularios en línea y aplicaciones de notificación electrónica, a largo plazo

d. Mecanismos de revisión de los programas nacionales de recolección de datos de bitácora

3. TABLAS

TABLE 1a. List of WCPFC longline logbook e-reporting data fields and field descriptions as provided in WCPFC14 Summary Report Attachment T: Standards, Specifications, and Procedures (Ssps) for Electronic Reporting in the Western and Central Pacific Fisheries Commission (see pages 20-28). Table remains unchanged from WSDAT-01-01.

CATEGORY		LL Trip Level Data	WCPFC field
LL TRIP	TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL IDENTIFIER + DEPARTURE DATE	
	VESSEL IDENTIFIER	PROVIDE the WCPFC VID, for the VESSEL undertaking this trip. REFER TO APPENDIX A4 Using a vessel identifier field ("VID") removes the redundancy of including all vessel attributes with each trip record and ensures standardization and consistency through referencing the main Vessel Registry database.	Mandatory
	COUNTRY OF CHARTER	PROVIDE the Country CHARTER responsible for chartering the vessel, where relevant. This only applies if the vessel has been chartered according to the requirements under WCFPC CMM 2012-05 – chartering notifications CHAR(2) WCPFC alpha-2 two-letter country code (refer to WCPFC codes web page)	Optional
	AGENT FOR UNLOADING	PROVIDE the name of the Agent for the Unloading. CHAR(50) Where possible, link this field to a reference table of authorized Agents for unloading. (referential integrity)	Optional
	TRIP NUMBER	PROVIDE the trip number undertaken by this vessel for the year. Trip number is sequential, starting at 1 for first trip of the year for each vessel.	Optional
	PRIMARY TARGET SPECIES	PROVIDE the Primary Target species for this trip. CHAR(3) REFER TO APPENDIX A7	Optional
	PORT/PLACE OF DEPARTURE	PROVIDE the Port of Departure CHAR(5). REFER TO APPENDIX A3 WCPFC LOCATION CODE. In the rare case that the port is not in the WCFPC LOCATION codes, then the actual port name can be included and a WCFPC LOCATION code will be generated. If the start of a trip coincides with recommencing fishing operations or transiting to a fishing area after transhipping part or all of the catch at sea then "ATSEA" code shall be reported in lieu of the port of departure.	Mandatory
	PORT/PLACE OF UNLOADING	PROVIDE the Port of Return for Unloading or indicate TRANSHIPMENT AT SEA. CHAR(5) UPPERCASE. REFER TO APPENDIX A3 WCPFC LOCATION CODE. In the rare case that the port is not in the WCFPC LOCATION codes, then the actual port name can be included and a WCFPC LOCATION code will be generated. If the end of a trip coincides with transhipping part or all of the catch at sea, then "ATSEA" code shall be reported in lieu of the port of unloading.	Mandatory
	DATE OF DEPARTURE	PROVIDE DATE and TIME of departure for this trip. REFER TO APPENDIX A1. ISO 8601 – Date only format If the start of a trip coincides with recommencing fishing operations or transiting to a fishing area after transhipping part or all of the catch at sea then date for the transhipment at sea shall be indicated.	Mandatory
	DATE and TIME OF DEPARTURE	PROVIDE TIME of departure for this trip. REFER TO APPENDIX A1. ISO 8601 - Date and times format The chronology of Departure date with respect to Date of arrival in port and the Days at sea must be valid.	Optional
	DATE OF UNLOADING	PROVIDE DATE of unloading or indicate DATE for the TRANSHIPMENT AT SEA. REFER TO APPENDIX A1. ISO 8601 – Date only format If the end of a trip coincides with transhipping part or all of the catch at sea, then date for the transhipment at sea shall be indicated.	Mandatory

CATEGORY	LL Trip Level Data		WCPFC field
	DATE and TIME OF UNLOADING	PROVIDE DATE and TIME of unloading or indicate TIME for the TRANSHIPMENT AT SEA. REFER TO APPENDIX A1. ISO 8601 - Date and times format If the end of a trip coincides with transhipping part or all of the catch at sea, then date for the transhipment at sea shall be indicated. The chronology of Departure date with respect to Date of arrival in port and the Days at sea must be valid.	Optional
LICENSE PERMIT DATA	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 subregional) complies to the required format.	Optional
LL ACTIVITY/SET DATA	ACTIVITY	PROVIDE each ACTIVITY of the vessel within the DAY. REFER TO APPENDIX A5. The current WCPFC requirement is for this item to be reported for each set and for days on which no sets were made.	Mandatory
	DATE/TIME ACTIVITY	PROVIDE the NOON DATE/TIME for each day that the vessel is at sea when a set was not made on that day, OR the START DATE/TIME of the SET. REFER TO APPENDIX A1. Date and Time may be automatically generated through VMS or other GPS-type devices.	Optional
	START TIME OF SET	PROVIDE the start of the set. REFER TO APPENDIX A1. Date and Time may be automatically generated through VMS or other GPS-type devices.	Mandatory
	POSITION LATITUDE	PROVIDE the LATITUDE position when the set started. REFER TO APPENDIX A2. The WCPFC requirement stipulates that the position of start of set should be reported in units of at least minutes of latitude and longitude. If no sets are made on that day, the noon position is to be reported. Position coordinates may be automatically generated through VMS or other GPS-type devices.	Mandatory
	POSITION LONGITUDE	PROVIDE the LONGITUDE position when the set started. REFER TO APPENDIX A2. The WCPFC requirement stipulates that the position of start of set should be reported in units of at least minutes of latitude and longitude. If no sets are made on that day, the noon position is to be reported. Position coordinates may be automatically generated through VMS or other GPS-type devices.	Mandatory
	NUMBER OF BRANCHLINES	PROVIDE the NUMBER OF BRANCHLINES (synonymous to HOOKS BETWEEN FLOATS and BRANCHLINES between FLOATS) for this set. Field format: NUMBER(2). The "Number of Branchlines" are also commonly referred to as "Hooks between floats" or "Branchlines between FLOATS" for some fleets. The code must be within the valid range. Only relevant with ACTIVITY = "1 – FISHING SET"	Mandatory
	NUMBER OF HOOKS	PROVIDE the total number of HOOKs per set. Field format: NUMBER(4). The code must be within the valid range (e.g., < 5,000 hooks). Only relevant with ACTIVITY = "1 – FISHING SET"	Mandatory
LL CATCH DATA	SPECIES CODE	For each species taken in the set, PROVIDE the SPECIES CODE according to the FAO standard species code list. CHAR(3) UPPER CASE. REFER TO APPENDIX 8.	Mandatory
	CATCH NUMBER	PROVIDE the retained CATCH NUMBER OF FISH covering this species. INTEGER(6). Validate that it is within the acceptable range for this species. (Refer to the SPECIES_RANGE table provided)	Mandatory
	CATCH WEIGHT	PROVIDE the retained CATCH ESTIMATED WEIGHT (metric tons to three decimal places) for this species. Field format: DECIMAL(6,3). Validate that it is within the acceptable range for this species. (Refer to the SPECIES_RANGE table provided)	Optional
	DISCARDED / RELEASED NUMBER	PROVIDE the NUMBER of this species DISCARDED or RELEASED. INTEGER(6). Validate that it is within the acceptable range for this species. (Refer to the SPECIES_RANGE table provided)	Mandatory

TABLE 1b. Fields to be reported to the IATTC in addition to the Table 1a fields. Table remains unchanged from WSDAT-01-01.

Data Type	IATTC (proposed logbook fields)
Vessel and gear characteristics	Mainline material (Record the material among multiple options: Nylon monofilament, Nylon multifilament, Natural material, Polyester, Polyethylene, Glass filament, Other (Specify))
Set-level information	DateTime beginning of daily fishing activities: UTC and vessel operational time (to be able to do time conversions)
	DateTime of set end (Record the date and time of the end of the set (MM-DD-YYYY-hh:mm) in vessel operational time
	Number of light sticks (Record the number of light sticks used).

TABLE 2. Comparison of the types of statistical data required by each tuna Regional Fishery Management Organization. * Pursuant to annual IATTC Memo Ref.: 0123-410, dated April 4, 2022, and Resolution C-03-05. Links to data requirements for each t-RFMO are provided in the column headers. Table remains unchanged from WSDAT-01-01.

Type of data		Description of statistical data	IATTC*	WCPFC	IOTC	ICCAT
TASK I ANNUAL CATCHES	I	Annual catches	Gross annual removals (round weight of all fish caught or killed during fishing operations) and disposition (retained or discarded) of tuna and tuna-like species, and other species taken in fisheries which capture tuna and tuna-like species in the Antigua Convention Area. If the data provided are nominal catches (round weight of retained catch when there is no information on discards), please note this when providing the data. These catch data should be reported as round weight, in metric tons or in kilograms, by species, by year, gear and disposition (retained or discarded). If the round weights are estimated by conversion from processed or sampled weights or measurements, or by some other means, the method and the sample data used to obtain the estimates should be provided.	The following estimates of catches during each calendar year shall be provided to the Commission for each gear type: Catches of BET, SKJ, YFT, BLU and BLM in: 1) the WCPFC Statistical Area, and 2) the portion of the WCPFC Statistical Area east of the 150° meridian of west longitude; Catches of ALB, MLS, SWO and PBF in: 1) the Pacific Ocean south of the Equator, 2) the Pacific Ocean north of the Equator, 3) the WCPFC Statistical Area north of the Equator, 4) the WCPFC Statistical Area south of the Equator, and 5) the portion of the WCPFC Statistical Area east of the 150° meridian of west longitude; Catches of BSH, FAL, OCS, MAK, THR, POR (south of 20°S, until biological data shows this or another geographic limit to be appropriate), HAM (winghead, scalloped, great, and smooth), and RHN	See Resolution 15/02 on Mandatory Statistical Reporting Requirements Estimates of total annual retained catches in live weight by IOTC Area, species and type of fishery (Form 1RC: obligatory for IOTC spp. and Sharks (R-05/05); voluntary for other spp.) Annual retained catches of yellowfin tuna in live weight by IOTC Area, type of fishery and vessel category (≥24m LOA or <24m LOA and fishing outside the EEZ) (Form 1RC-YFT: obligatory (R-19/01 (para. 26)) Estimates of discard levels (dead individuals) in live weight (or number) by IOTC Area, species and type of fishery (Form 1DI: obligatory for IOTC spp., Sharks (R-05/05), Seabirds (R-10/06), Marine Turtles (R-12/04); Cetaceans (R-13/04); Whale sharks (R-13/05); voluntary for other spp.) Binary matrix of annual records of retained catches or discards by species and fishery group (Form 1DR: obligatory for IOTC spp. and elasmobranchs R-18/07)	Nominal annual catch of tuna, tuna-like spp. and sharks by region, gear, flag and species, and where possible by EEZ and High Seas catches should be reported in kilograms, round (live) weight Art. IX (ICCAT Convention); Rec. 05-09; Res. 66-01; Various conservation and management measures relating to individual species. Form ST02-T1NC. Information required for all CPCs. If no catches of any tuna or tuna like species have been made, this should be reported to the Secretariat
TASK EFFORT	I	Annual effort statistics	Fishing power (fleet) statistics. The number of fishing vessels, by gear, operating in the Antigua Convention Area in each calendar year should be reported.	The number of vessels active in the WCPFC Statistical Area during each calendar year shall be provided to the Commission for each gear type. For longliners, pole-and-line vessels, and purse seiners, the number of vessels active shall be provided by gross registered tonnage (GRT) class. The GRT classes are defined as follows: Longline: 0–50, 51–200, 201–500, 500+; Pole-and-line: 0–50, 51–150, 150+ Purse seine: 0–500, 501–1000, 1001–1500, 1500+	Total annual number of fishing crafts operated by type of fishery, type of craft and craft size. Form 2FC for Fisheries targeting IOTC species. See FSA-Annex I, Article 4. Note this is voluntary.	Fleet characteristics: Number of fishing vessels by size classes, gear and flag Art. IX (ICCAT Convention); Rec. 05-09; Res. 66-01; Various conservation and management measures relating to individual species. Form: ST01-T1FC. Information required for all CPCs. If no fleet exists, this fact should be reported to the Secretariat

Type of data	Description of statistical data	IATTC*	WCPFC	IOTC	ICCAT
TASK II CATCH & EFFORT	Aggregated catches	TASK II level 2: 1°x1°-month aggregated data TASK II level 3: 5°x5°-month aggregated data	If the coverage rate of the operational catch and effort data that are provided to the Commission is less than 100%, then catch and effort data aggregated by time period and geographic area that have been raised to represent the total catch and effort shall be provided. Longline catch and effort data shall be aggregated by periods of month and areas of 5° longitude and 5° latitude. Purse-seine and ringnet catch and effort data shall be aggregated by periods of month, areas of 1° longitude and 1° latitude, and type of school association. Catch and effort data for other surface fisheries targeting tuna shall be aggregated by periods of month and areas of 1° longitude and 1° latitude. If the coverage rate of the operational catch and effort data that are provided to the Commission is less than 100%, then catch and effort data that have been raised to represent the total catch and effort shall also be aggregated by periods of year and areas of national jurisdiction and high seas within the WCPFC Statistical Area. Catch and effort data aggregated by periods of month and areas of 5° longitude and 5° latitude that have been raised to represent the total catch and effort, and unraised longline catch and effort data stratified by the number of hooks between floats and the finest possible resolution of time period and geographic area, covering distant-water longliners may also be provided for the Pacific Ocean east of the eastern boundary of the WCPFC Statistical Area	LONGLINE: Catch by species in number or live weight and effort in number of hooks set by 5° grid area and month strata (extrapolated to annual catch). (Form 3CE obligatory for IOTC spp. (R-15/02), Sharks (R-12/09; R-15/01; R-15/02; R-17/05; R-18/02), and voluntary for other bycatch (R-15/01; R-15/02)) LONGLINE: Catch by species in number (or live weight) and effort in number of hooks set by 1° grid area and month strata (extrapolated to annual catch). (Form 3CE voluntary for IOTC spp. (R-15/01; R-15/02) and Sharks (R-12/09; R-15/01; R-15/02; R-17/05; R-18/02)) See Resolution 15/02: Estimates of the total catch by species and gear, if possible quarterly, that shall be submitted annually (separated, whenever possible, by retained catches in live weight and by discards in live weight or numbers) for all species under the IOTC mandate as well as the most commonly caught elasmobranch species according to records of catches and incidents as established in Resolution 15/01 on the recording of catch and effort data by fishing vessels in the IOTC area of competence (or any subsequent superseding Resolution). Concerning cetaceans, seabirds and marine turtles, data should be provided as stated in Resolutions 13/04 on Conservation of Cetaceans, Resolution 12/06 on reduction the incidental bycatch of seabirds in longline fisheries and Resolution 12/04 on the conservation of marine turtles (or any subsequent superseding resolutions).	Catch and effort statistics by area, gear, flag, species and by month Art. IX (ICCAT Convention); Rec. 05-09; Res. 66-01; Various conservation and management measures relating to individual species. Form ST03-T2CE. Information required for all CPCs. See Requests for statistics on ATL tunas and sharks Monthly catch (all species catch composition) and effort statistics, disaggregated by fleet, gear, month, and geographical squares (longline: 5x5 or higher resolution, other gears: 1x1 or higher resolution). Preferably, observed data obtained from various sources (logbooks, auction sales, port sampling, landing ports, transhipments, etc.). Could also be equivalent estimations, raised to Task 1 nominal catches Form: ST03-T2CE

Type of data	Description of statistical data	IATTC*	WCPFC	IOTC	ICCAT
TASK II CATCH & EFFORT	Operational-level (logbook) catch and effort data	TASK II level 1: The IATTC staff collects operational data directly from the majority of purse-seine (PS) and pole-and-line (LP) vessels that fish for tunas in the Convention Area. The information that should be reported includes details of starting and ending position of sets, time gear set and retrieved, and other data which are specific to each gear and affect its efficiency, such as gear configuration (including, for longlines, total number of hooks fished, number of branch lines between floats, number of lightsticks, etc.), use of FADs or aircraft, and hook type. The catch for each operation should be reported by species, in both numbers and weight if available. Estimates of coverage rates by gear should be provided.	(e.g. individual sets by longliners and purse seiners, and individual days fished by pole-and-line vessels and trollers) shall be provided to the Commission. It is recognized that certain members and cooperating non-members of the Commission may be subject to domestic legal constraints, such that they may not be able to provide operational data to the Commission until such constraints are overcome. Until such constraints are overcome, aggregated catch and effort data and size composition data shall be provided. It is also recognized that certain members and cooperating non-members of the Commission may have practical difficulties in compiling operational data for fleets comprised of small vessels, such as certain sectors of the fisheries of Indonesia, the Philippines and small island developing states. Information on operational changes in the fishery that are not an attribute in the data provided is to be listed and reported with the data provision. CCMs are to provide, to the extent possible, the number of individual vessels per stratum and area covered by their operational data with the aggregated catch and effort data they submit to the Commission. Information on operational changes in the fishery that are not an attribute in the data provided is to be listed and reported with the data provision. Information on operational changes in the fishery that are not an attribute in the data provided is to be listed and reported with the data provision.See Attachment K, Annex I. Standards for the provision of Operational Level Catch & Effort Data set-by-set data is a requirement for operational longline catch and effort data … See tables at the end of https://meetings.wcpfc.int/node/16231	No specific mention of operational-level logbook data but see reference to data resolution in 15/02: For the work of relevant working parties under the IOTC Scientific Committee, longline data should be of a resolution of 1° grid area and month or finer. These data would be for the exclusive use of IOTC Scientific Committee and its Working Parties, subject to the approval of the data owners and IOTC Resolution 12/02 Data confidentiality policy and procedures and should be provided for scientific use only in a timely fashion. Access to set-by-set data has been granted to staff of the Secretariat through some specific projects, mostly in the context of CPUE analysis for deriving time series of abundance indices, *e.g.,* work on SWO with Seychelles and neritic tunas with I.R. Iran. As part of the collaborative work on joint longline CPUE which includes scientists from the main longline fleets operating in the Indian Ocean (Japan, China, Republic of Korea, and Seychelles), scientists attending the workshops had access to operational data of all fleets on the condition of signing a Non-Disclosure Agreement and removing all data at the end of the meeting. The IOTC Resolution 12/02 as well as the recent FAO administrative circular 2022/07 define the nature of the data sets and the rules of confidentiality that prevail for their use and dissemination.	No logbook data are routinely received. access to set-by-set data was granted to specific scientists for particular projects, or for this species group in a specific condition.

Type of data	Description of statistical data	IATTC*	WCPFC	IOTC	ICCAT
TASK II SIZE DATA	Length/weight size frequency data	Lengths and weights of individual tunas and tuna-like fishes in the catch should be provided at the highest spatial-temporal resolution possible (*i.e.* Level 1 if known). Type of measurement and condition of the fish should be noted for each measurement. When catch and effort data are reported at Level 2 or 3, catch-at-size data should be reported by gear, area, and month as well, if possible. In all cases, catch-at-size data should be reported at the finest resolution possible. Details of the design of the sampling program should be provided.	Length and/or weight composition data that are representative of catches by the fisheries shall be provided to the Commission at the finest possible resolution of time period and geographic area and at least as fine as periods of quarter and areas of 20° longitude and 10° latitude. Length-class intervals defined as: SKJ&ALB 1cm; YFT&BET ideally 1cm, but not more than 2cm; Billfish ideally 1cm, but not more than 5cm. The weight size class intervals are defined as Tunas and Billfish spp. 1kg. CCMs shall indicate whether lengths and/or weights are rounded up or rounded down to the unit specified.	Length/weight data by species, type of fishery and 5° grid area and month strata. Form 4SF. Obligatory for IOTC spp. (R-15/02) and Sharks (R-17/05) 15/02: Size data shall be provided for all gears and for all species according to paragraph 4 and following the guidelines set out by the procedures described in the Guidelines for the reporting of fisheries statistics to the IOTC. Size sampling shall be run under strict and well described random sampling schemes which are necessary to provide unbiased figures of the sizes taken. Sampling coverage shall be set to at least one fish measured by ton caught, by species and type of fishery, with samples being representative of all the periods and areas fished. Alternatively, size data for longline fleets may be provided as part of the Regional Observer Scheme where such fleets have at least 5% observer coverage of all fishing operations. Length data by species, including the total number of fish measured, shall be submitted by a 5° grid area by month, by gear and fishing mode (e.g. free-swimming schools or schools in association with floating objects for the purse seiners). Documents covering sampling and raising procedures shall also be provided, by species and type of fishery.	TASK II Size data: Actual size frequencies of fish sampled by area, gear, flag, species and by month and by sex if possible. Art. IX (ICCAT Convention); Rec. 05-09; Res. 66-01; Various conservation and management measures relating to individual species (Form ST04-T2SZ; information required for all CPCs) TASK II: Catch-at-size data: for BFT, ALB, YFT,BET and SKJ tunas and SWO, by gear, sampling area and by month or quarters, and by sex and by 5x5 degree squares if possible. The ICCAT form 3-6 to show sampling coverage and data substitutions is also required. Art. IX (ICCAT Convention); Rec. 05-09; Res. 66-01; Various conservation and management measures relating to individual species. (Form: ST05-T2CS; information required for all CPCs) There are two different forms for submission of this data one is for catch at size (raised to the catch) and another for sampling data. See https://www.iccat.int/en/submitSTAT.html

Type of data	Description of statistical data	IATTC*	WCPFC	IOTC	ICCAT
TASK II Aggregated catch estimations (i.e. raised or unraised options for reporting data)	Estimation methods	If the round weights in the TASK II catch and effort statistics are estimated by conversion from processed or sampled weights or measurements, or by some other means, the method and the sample data used to obtain the estimates should be provided.For Level 2 and Level 3 aggregated data, there are two options for provision of data to the Commission. In either case, the data should be developed, whenever possible, from logbook and unloading data, and the method should be fully documented. RAISED: The total number of vessels operating in a time-area stratum should be reported. The total number of operations of gear made in a time-area stratum should be provided by gear-configuration stratum, with associated gross removals (or nominal catch, if information on discards is not available) by species, in both numbers and round weight, if available. In this option, summarized logbook and landing data (the sample data) are used to develop estimates that are then raised to totals. The coverage rates, and detailed descriptions and calculations for the method used to obtain the estimates of total catch and effort by strata are to be provided. UNRAISED: The data from logbook and unloading records are summarized to provide sample statistics of fishing effort and catch by species in numbers of fish and round weight, within area-time-gear configuration strata, as discussed in Raised Option. The number of individual vessels from which the observations were obtained in an area-time stratum are also reported. Estimates of the total number of vessels operating by area, and of total catch by area-time, should be provided in as much detail as possible, if available.*note: limited if any info on estimation is received	The statistical methods used to estimate the annual and seasonal catches shall be reported to the Commission, with reference to the coverage rates for each type of data (e.g. operational catch and effort data, records of unloadings, species composition sampling data) that is used to estimate the catches and to the conversion factors that are used to convert the processed weight of longline-caught fish to whole weight.The statistical and sampling methods that are used to derive the size composition data shall be reported to the Commission, including reference to whether sampling was at the level of fishing operation or during unloading, details of the protocol used, and the methods and reasons for any adjustments to the size data. Where feasible, this shall also be applied to all historical data.	Resolution 15/02 Mandatory Statistical Reporting Requirements for IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs): Longline fisheries: catch by species, in numbers or weight, and effort as the number of hooks deployed shall be provided by 5° grid area and month strata. Documents describing the extrapolation procedures (including raising factors corresponding to the logbook coverage) shall also be submitted routinely. For the work of relevant working parties under the IOTC Scientific Committee, longline data should be of a resolution of 1° grid area and month or finer. These data would be for the exclusive use of IOTC Scientific Committee and its Working Parties, subject to the approval of the data owners and IOTC Resolution 12/02 Data confidentiality policy and procedures, and should be provided for scientific use only in a timely fashion. Effort units reported should be consistent with those effort requirements of Resolution 15/01 or any subsequent revision of such resolution. Information on estimation is available in the metadata fields “ESTIMATION (EST)” and “DATA PROCESSING METHOD (DPR)” of IOTC form 3CEFor size data in 15/02: Documents covering sampling and raising procedures shall also be provided, by species and type of fishery.	See TASK II Catch & Effort above: Requests for statistics on ATL tunas and sharks Monthly catch (all species catch composition) and effort statistics, disaggregated by fleet, gear, month, and geographical squares (longline: 5x5 or higher resolution, other gears: 1x1 or higher resolution). Preferably, observed data obtained from various sources (logbooks, auction sales, port sampling, landing ports, transshipments, etc.). Could also be equivalent estimations,raised to Task 1 nominal catches Form: ST03-T2CE The 5 by 5 data needs to be raised to the fleet total, and the raising process is done internally by each CPC. There has been request to submit meta-data information explaining the procedure for raising the catches, but not much has been submitted. Most CPCs would obtain their catch data from landing information plus sampling.

TABLE 3a. Principal tunas, billfishes, and sharks for which data should be provided. Table was revised from WSDAT-01-01 based on input from workshop participants.

Taxonomic Group	Common name	Scientific or family name	ASFIS code
Tunas	Albacore tuna	*Thunnus alalunga*	ALB
	Bigeye tuna	*Thunnus obesus*	BET
	Pacific bluefin tuna	*Thunnus orientalis*	PBF
	Skipjack tuna	*Katsuwonus pelamis*	SKJ
	Yellowfin tuna	*Thunnus albacares*	YFT
	Unidentified tunas nei	Scombridae nei	TUN
	Eastern Pacific bonito	*Sarda chiliensis*	BEP
	Striped bonito	*Sarda orientalis*	BIP
	Unidentified bonitos	*Sarda* spp.	BZX
	Black skipjack tuna	*Euthynnus lineatus*	BKJ
	Black marlin	*Istiompax indixa*	BLM
Billfishes	Blue marlin	*Makaira nigricans*	BUM
	Striped marlin	*Kajikia audax*	MLS
	Sailfish	*Istiophorus platypterus*	SFA
	Shortbill spearfish	*Tetrapturus angustirostris*	SSP
	Unidentified billfishes, but not including swordfish[1]	Istiophoridae nei	BIL
	Swordfish	*Xiphias gladius*	SWO
Sharks*	Blue shark	*Prionace glauca*	BSH
	Silky shark	*Carcharhinus falciformis*	FAL
	Oceanic whitetip shark	*Carcharhinus longimanus*	OCS
	Shortfin mako[2]	*Isurus oxyrinchus*	SMA
	Longfin mako[2]	*Isurus paucus*	LMA
	Mako sharks nei[1]	*Isurus* spp. nei	MAK
	Bigeye thresher shark[3]	*Alopias superciliosus*	BTH
	Pelagic thresher shark[3]	*Alopias pelagicus*	PTH
	Common thresher shark[3]	*Alopias vulpinus*	ALV
	Thresher sharks nei[1]	*Alopias* spp. nei	THR
	Great hammerhead shark[4]	*Sphyrna mokarran*	SPK
	Scalloped hammerhead shark[4]	*Sphyrna lewini*	SPL
	Smooth hammerhead shark[4]	*Sphyrna zygaena*	SPZ
	Hammerhead sharks nei[1]	Sphyrnidae nei	SPY
	Porbeagle shark	*Lamna nasus*	POR
	Whale shark	*Rhincodon typus*	RHN

links to species fact sheets are provided where available

* where available, include other sharks (see WSDAT-01-01, Table 3b)

[1] not elsewhere identified

[2] if species-specific catch reporting is not possible, aggregate into "mako sharks, nei"

[3] if reporting species-specific catch is not possible, aggregate into "thresher sharks, nei"

[4] if reporting species-specific catch is not possible, aggregate into "hammerhead sharks, nei"

TABLE 3b. Selected principal taxa of interest known to be caught by vessels and gears fishing for species under the purview of the Commission in the Antigua Convention Area. Catches of species not shown on this list should be reported using the common name, and the scientific name if known, as well as the ASFIS 3-alpha code if available. Note that codes have not been assigned for all species. Resolutions pertaining to certain taxa and general data provision are provided in Annex B of the IATTC Annual Memo (IATTC Memo Ref: 0123-410, dated April 4, 2022), which includes guidelines for data provision and corresponds to C-03-05. This table may be modified as needed. Table was revised from WSDAT-01-01 based on input from workshop participants.

Taxonomic Group	Common name	Scientific or family name	ASFIS code
Sharks	Scalloped bonnethead shark	*Sphyrna corona*	SSN
	Scoophead shark	*Sphyrna media*	SPE
	Bonnethead shark	*Sphyrna tiburo*	SPJ
	Salmon shark	*Lamna ditropis*	LMD
	Tiger shark	*Galeocerdo cuvier*	TIG
	Great white shark	*Carcharodon carcharias*	WSH
	Sand tiger shark	*Carcharias taurus*	CCT
	Blacktip shark	*Carcharhinus limbatus*	CCL
	Spottail shark	*Carcharhinus sorrah*	CCQ
	Silvertip shark	*Carcharhinus albimarginatus*	ALS
	Bull shark	*Carcharhinus leucas*	CCE
	Copper shark	*Carcharhinus brachyurus*	BRO
	Dusky shark	*Carcharhinus obscurus*	DUS
	Galapagos shark	*Carcharhinus galapagensis*	CCG
	Sandbar shark	*Carcharhinus plumbeus*	CCP
	Carcharhinus sharks nei	*Carcharhinus* spp.	CWZ
	Requiem sharks nei	Carcharhinidae	RSK
	Crocodile shark	*Pseudocarcharias kamoharai*	PSK
	Longnose velvet dogfish	*Centroscymnus crepidater*	CYP
	Velvet dogfish	*Scymnodon squamulosus*	SSQ
	Cookie cutter shark	*Isistius brasiliensis*	ISB
	Bigeye sand tiger shark	*Odontaspis noronhai*	ODH
	Nurse shark	*Ginglymostoma cirratum*	GNC
	Sicklefin smooth-hound	*Mustelus lunulatus*	MUU
	Speckled guitarfish	*Rhinobatos glaucostigma*	RBL
	Tope shark	*Galeorhinus galeus*	GAG
	Whitenose shark	*Nasolamia velox*	CNX
	Kitefin shark	*Dalatias licha*	SCK
	Sharks nei	Elasmobranchii	SKX
Rays	Pelagic stingray	*Pteroplatytrygon violacea*	PLS
	Stingrays nei	*Dasyatis* spp.	STI
	Alfred manta	*Mobula alfredi*	RMA
	Giant manta	*Mobula birostris*	RMB
	Devil fish	*Mobula mobular*	RMM
	Munk's devil ray	*Mobula munkiana*	RMU
	Chilean devil ray	*Mobula tarapacana*	RMT
	Smoothtail manta	*Mobula thurstoni*	RMO
	Manta rays nei	*Mobula* spp.	RMV
Turtles	Olive Ridley turtle	*Lepidochelys olivacea*	LKV
	Green turtle	*Chelonia mydas*	TUG
	Loggerhead turtles	*Caretta caretta*	TTL

	Hawksbill turtle	*Eretmochelys imbricata*	TTH
	Leatherback turtle	*Dermochelys coriacea*	DKK
Seabirds	Albatrosses nei	Diomedeidae	ALZ
	Petrels nei	*Procellaria* spp.	PTZ
	Shearwaters nei	*Puffinus* spp.	PQW
	Seagulls nei	*Larus* spp.	LHX
	Boobies and gannets nei	Sulidae spp.	SZV
Marine Mammals	Pantropical spotted dolphin	*Stenella attenuata*	DPN
	Spinner dolphin	*Stenella longirostris*	DSI
	Striped dolphin	*Stenella coeruleoalba*	DST
	Rough-toothed dolphin	*Steno bredanensis*	RTD
	Common dolphin	*Delphinus delphis*	DCO
	Long-beaked common dolphin	*Delphinus* sp.	
	Bottlenose dolphin	*Tursiops truncatus*	DBO
	Risso's dolphin	*Grampus griseus*	DRR
	Pacific white-sided dolphin	*Lagenorhynchus obliquidens*	DWP
	False killer whale	*Pseudorca crassidens*	FAW
	Melon-headed whale	*Peponocephala electra*	MEW
	Dolphins nei	Delphinidae	DLP
	Pilot whales nei	*Globicephala* spp.	GLO
Fishes	Common dolphinfish	*Coryphaena hippurus*	DOL
	Pompano dolphinfish	*Coryphaena equiselis*	CFW
	Dolphinfishes nei	Coryphaenidae	DOX
	Wahoo	*Acanthocybium solandri*	WAH
	Jacks, crevalles nei	*Caranx* spp.	TRE
	Rainbow runner	*Elagatis bipinnulata*	RRU
	Yellowtail amberjack	*Seriola lalandi*	YTC
	Longfin yellowtail	*Seriola rivoliana*	YTL
	Greater amberjack	*Seriola dumerili*	AMB
	Samson fish	*Seriola hippos*	RLH
	Amberjacks nei	*Seriola* spp.	AMX
	Sunfish	*Mola* spp.	MOP
	Barracudas nei	Sphyraenidae	BAZ
	Opah	*Lampris guttatus*	LAG
	Opahs nei	*Lampris* spp.	LAP
	Escolar	*Lepidocybium flavobrunneum*	LEC
	Oilfish	*Ruvettus pretiosus*	OIL
	Luvar	*Luvaris imperialis*	LVM
	Snake mackerel	*Gempylus serpens*	GES
	Snake mackerels, escolars nei	Gempylidae	GEP
	Long snouted lancetfish	*Alepisaurus ferox*	ALX
	Short snouted lancetfish	*Alepisaurus brevirostris*	ALO
	Lancetfishes nei	*Alepisaurus* spp.	ALI
	Sickle pomfret	*Taractichthys steindachneri*	TST
	Dagger pomfret	*Taractes rubescens*	TCR
	Big-scale pomfret	*Taractichthys longipinnis*	TAL
	Rough pomfret	*Taractes asper*	TAS
	Pomfrets, ocean breams nei	Bramidae	BRZ
	Finescale triggerfish	*Balistes polylepis*	BIY
	Spotted oceanic triggerfish	*Canthidermis maculata*	CNT

TABLE 4. Recommended template of data fields (vessel and gear characteristics and operational-level logbook) for industrial longline vessels proposed to be collected and submitted by individual CPCs to IATTC to facilitate stock assessments of target species and vulnerability assessments of species caught as bycatch. 4a: provides metadata fields for vessel, gear characteristics; and trip-level gear information; 4b: set-level information, set-level catch information, and set-level size composition data. Table remains unchanged from WSDAT-01-01.

4a. Trip-level information

Data Type	IATTC proposed logbook fields
Vessel and gear characteristics	Flag (Vessel flag abbreviation)
	Unique Vessel Identifiers: Vessel name Vessel call sign) IMO (International Identification IMO number) (if available) IATTC Vessel number (IATTC Vessel register number assigned to all vessels) (for vessels having operated after 2002) Assigned code that allows the vessel to be identified over time (for vessels operated before 2002 and not afterwards)
	Length over all (Length of the vessel (meters))
	Gross tonnage (Vessel Gross Registered Tonnage) per C-18-06
	Vessel electronics: Radar equipped (Y/N) Echo sounder (Y/N) Global Positioning System (GPS) (Y/N) Sea Surface Temperature (SST) gauge (Y/N) Search light Sonar (Y/N) Omnidirectional Sonar (Y/N) Radio/ Satellite Buoys (Y/N) Acoustic Doppler Current Meter Y/N) Expendable Bathythermograph (XBT) (Y/N) Satellite imagery, remote sensing and modelling information service (e.g., fisheries oceanography analysis) Y/N Other (specify)
	Refrigeration type: ( ) blast frozen, ( ) refrigerated sea water, ( ) ice, ( ) other ___
	Mainline material (Record the material among multiple options: Nylon monofilament, Nylon multifilament, Natural material, Polyester, Polyethylene, Glass filament, Other (Specify))
	Branch line material(s) (Record the material of the branchline. A branch line can consist of one type of material like monofilament or it can be made up of many different materials like braided nylon wire trace and mono filament, etc.)
Trip-characteristics	Departure Date (Date and time the vessel departs from port (MM- DD -YYYY))
	Departure Port (Name of the port of departure or transshipment (if ports are close to the IATTC regional offices, the logbook information could complement port sampling in the future)
	Arrival Date (Date and time of vessel's return to port at the completion of its trip (DD-MM-YYYY-hh:mm))
	Arrival Port (Name of the port of arrival or transshipment (If the ports are close to the IATTC regional offices, the logbook information could complement port sampling in the future))
	Was an observer onboard (Y/N)

4b. Set-by-set information

Data Type	For each set
Set-level information	Target species of target type or target species groups
	DateTime beginning of daily fishing activities: UTC and vessel operational time (to be able to do time conversions)
	DateTime of set start (Record the date and time of the start of the set)[1]
	DateTime of set end (Record the date and time of the end of the set) [10]
	DateTime of haul start (Record the date and time the first buoy of the mainline is hauled from the water to start the haul [10]
	DateTime of haul end (Record the date and time the last buoy of the mainline is hauled from the water to end the haul)[10]
	Haul direction (Record whether the haul was from 1=Start to finish or 2=Finish to start)
	Latitude at start of set [2]
	Longitude at start of set [3]
	Latitude at end of set [11]
	Longitude at end of set [12]
	Latitude at haul start [11]
	Longitude at haul start [12]
	Latitude at haul end [11]
	Longitude at haul end [12]
	Wire trace (For each set indicate whether wire trace was used: 0 (no wire trace used); 1 ("SOME LINES", e.g., the vessel used wire traces on certain branch line positions during the set); 2 ("ALL LINES", e.g., wire traces were used on all lines during the set))
	Use of shark line (a hook attached to the float or at the float line)
	Number of hooks in the set (Total number of hooks in each set.)
	Number of floats
	Number of hooks between floats
	Float line length (meters) (Length of the line that is attached to the floats)
	Branch line length(meters) (Length of the branch line)
	Was a shooter used? (Y/N) If yes, Line shooter speed (Line shooter speed (meters/second))
	Vessel speed (Vessel speed when setting (knots)) (OPTIONAL ONLY IF NO POSITIONS)
	Hook type (For each set, record the type of hook or hooks used)
	Line shooter speed (Line shooter speed (meters/second))
	Hook size (For each set, record the size of the hooks used)
	Bait type: Record bait (e.g. fish, squid, artificial)
	Blue dyed bait used (Was the bait dyed blue? (Y/N))
	Number of light sticks (Record the number of light sticks used)
	Maximum depth of the fishing gear: Unknown ( ), estimated ( ), measured ( ) , how was max depth determined (estimated, TDR, other measuring gauge)Number of light sticks (Record the number of light sticks used.)
	How was max depth determined (estimated, TDR, other measuring gauge) (OPTIONAL)
Catch data	Species code: Provide the ASFIS species code for each species taken in the set (aligns with WCPFC) Catch number: Provide the total number of fish (by species) (Total number of fish caught of each listed species) (aligns with WCPFC) Catch weight: Provide the total weight (by species[4] (Total weight[5] nearest kg) of fish caught for the reporting day Discarded/Released number (PROVIDE the NUMBER of this species DISCARDED or RELEASED)
Size information for individual fish	If length or weight data is collected for a set, provide it associated with the set information

[1] Record in vessel operational time in the format MM-DD-YYYY-hh:mm

[2] Record the latitude in degrees and minutes and indicate 'N' or 'S' for north and south respectively

[3] Record the longitude in degrees and minutes and indicate 'W' or 'E' for west and east respectively

[4] Species in Tables 3a and 3b

[5] Indicate whether round weight, gilled and gulled, or other processing