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DATA IMPROVEMENTS STAFF RECOMMENDATIONS: UPDATED

This document provides updated recommendations for consideration in a revision of Resolution [C-03-05](#) on data provision. Two data improvement workshops in the series have been held to date (see [WSDAT-01](#): industrial longline and [WSDAT-02](#): small purse-seine fishery of vessels with a carrying capacity of ≤363 t, size Classes 1–5). The purpose of these two workshops was to respond to a SAC-endorsed recommendation ([SAC-12-RPT](#)) to hold a series of workshops, by gear type, on data provision and to ultimately update Resolution [C-03-05](#) to align data reporting requirements with objectives of the Antigua Convention, and to harmonize them with FAO and other tuna Regional Fisheries Management Organization’s (t-RFMOs) as needed ([SAC-12-16](#) see section B.3. “General Data Provisions”).

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SUMMARY

Due to several drivers that prompted the IATTC staff to propose a revision of Resolution [C-03-05](#) on data provision—adopted over two decades ago—including scientific, political, market and fisheries drivers, the staff reviewed existing datasets and gaps by fishery in [SAC-12-09](#) to provide considerations for improving data collection and provision. These drivers consisted of technical challenges with the stock assessments of tropical tunas (see [SAC-11-06](#); [SAC-11-07](#); [IATTC-95-05](#)), the growing awareness by the international community of the ecological impacts of fishing and tuna fisheries interactions with threatened or vulnerable species¹, the desire for eco-labeling and fisheries certification, and changes in the fisheries (e.g., increases in the number of FAD sets). The [Antigua Convention](#) shares, with other international instruments (e.g., the [United Nations Convention on the Law of the Sea](#) (UNCLOS), FAO’s [Code of Conduct for Responsible Fisheries](#) and the [Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem](#)), an implicit commitment to the Ecosystem Approach to Fisheries Management (EAFM) through its various articles (e.g., [Article IV 3](#); [Article VII 1a,f, g](#); [Article XV 3](#)). However, data on species caught incidentally as bycatch are limited in fisheries other than the large purse-seine fishery (i.e., vessels with a carrying capacity >363 t, size Class 6) for which 100% observer coverage is available as stipulated

¹ Unless specified otherwise, including but not limited to citations to vulnerability assessments and any qualitative/quantitative scores (e.g. [BYC-10 INF-B](#); [SAC-13-11](#); [SAC-14-12](#)), the staff’s definition of “vulnerable species” refers to the species that, in the sensu latu, and due to their low-productive life-history traits (i.e. K species in r/K selection theory), are more vulnerable to the impacts of fisheries and other anthropogenic activities on these species or their habitat and ecosystem. This includes the marine mammals, seabirds, sea turtles and the elasmobranchs.

in the [Agreement on the International Dolphin Conservation Program \(AIDCP\)](#). Consequently, the SAC endorsed a recommendation ([SAC-12-RPT](#)) to hold a series of workshops, by gear type, on data provision and to ultimately update Resolution [C-03-05](#) to align data reporting requirements with objectives of the Antigua Convention, and to harmonize them with FAO and other tuna Regional Fisheries Management Organization's (t-RFMOs) as needed ([SAC-12-16](#) see section B.3. "General Data Provisions"). This document summarizes the staff's recommendations that were revised based on feedback from workshop participants during the two workshops that have been completed to date (see [WSDAT-01](#): industrial longline fisheries, held in January 2023 and [WSDAT-02](#): small purse-seine fisheries i.e., vessels with a carrying capacity ≤363 t, size Class 1–5, held in February 2025).

1. RECOMMENDATIONS FROM THE DATA IMPROVEMENT WORKSHOP: INDUSTRIAL LONGLINE ([WSDAT-01](#))

The 1st workshop on data improvement—focused on the industrial longline fishery—was held virtually from January 9–11, 2023, and gathered 80 participants (see [List of participants](#)). The staff revised their preliminary recommendations in [WSDAT-01-01](#) as a result of discussions with workshop participants and consultations with individual members and cooperating non-members (CPCs)². These revised recommendations are provided in [SAC-14 INF-Q](#) and are compiled herein along with those from the data improvement workshop on small purse seiners described below. Additionally, in 2024 two recommendations from the SAC included data collection and provision related to the importance of having operational data from the longline fleet (both current and historical) for stock assessments of tuna and other associated species covered by the Antigua Convention (see [SAC-15 Recommendations](#), section 5 paragraphs c and d). These SAC recommendations state *"(c) That the Commission notes the importance and need of having operational data from the longline fleet in order for stock assessments of tuna and other associated species covered by the Antigua Convention to be completed and (d) That CPCs that maintain tuna longline fleets operating in the EPO provide the scientific staff with historical operational data to enable the implementation of the Scientific Plan with respect to the construction of indices of abundance and useful information for stock assessments of tropical and temperate tunas."*

2. RECOMMENDATIONS FROM THE DATA IMPROVEMENT WORKSHOP: SMALL PURSE SEINE ([WSDAT-02](#))

The 2nd workshop on data improvement—focused on the small purse-seine fishery (i.e., vessels with a carrying capacity of ≤363 t; size classes 1–5)—was held virtually from February 18–20, 2025 and gathered 72 participants (see [List of participants](#)). Preliminary staff recommendations in [WSDAT-02-01](#) were discussed with workshop participants (see [WSDAT-02-Rpt](#)). The preliminary recommendations were revised based on the staff's review and consideration of participant's feedback and are compiled herein in tandem with the revised recommendations from the 1st workshop on data improvement as described above.

3. COMPILATION OF REVISED RECOMMENDATIONS: INDUSTRIAL LONGLINE, SMALL PURSE SEINE

The revised recommendations from the first two data improvement workshops provide a compilation of recommendations by gear type for consideration in an update of the data provision Resolution C-03-05. Once the last workshop in the series—with a focus on the small-scale coastal fisheries—is completed after results from both Areas Beyond National Jurisdiction (ABNJ) [Common Oceans Tuna Projects](#) are obtained, all revised recommendations will be compiled for each gear type and presented to the SAC for consideration in updating the Resolution C-03-05 on data provision.

² In most or all such workshops, the IATTC staff submits to participants preliminary recommendations for their consideration. Based on the discussion, the staff may modify and update these recommendations before submitting them to the SAC and the Commission.

REVISED RECOMMENDATIONS – INDUSTRIAL LONGLINE ([WSDAT-01](#); [SAC-14 INF-Q](#)) (noting the tables referenced herein have been slightly modified either in number or content (i.e., species lists) based on discussions from WSDAT-02 (see [WSDAT-02-Rpt](#)), because species lists to be included in a revised resolution on data provision should be the same for each gear type):

1. Establishment of a resolution to report operational-level data:

The Commission establishes a resolution for the submission of operational level (vessel-specific, set-by-set) longline data—from the year the fleet began operating to most recent year possible, ideally the current or the previous year—needed for scientific research pursuant to the objective, rules, and relevant provisions of the Antigua Convention and measures adopted by the IATTC. On a case-by-case basis, and as determined by the Director, members and cooperating non-members may submit the data under other instruments¹. The resolution should include a provision for the staff to annually produce a paper describing data gaps and efforts to fill those gaps.

¹ For example, Memorandums of Understanding may be established between the IATTC and individual CPCs to foster collaboration and data sharing for statistical purposes of assessing stock, species' vulnerability, and ecosystem status.

2. TASK I (Annual data):

The resolution in recommendation 1 should include compulsory reporting of TASK I effort, catch² and disposition (retained or discarded) for tunas and tuna-like species [Table 1a] and [priority] sharks [Table 1b] and, where available, report catch for other relevant taxa [Table 1b and c]³ to the highest taxonomic resolution possible.

² Where catch is defined as gross annual removals in metric tons and effort is the number of active fishing vessels in the Antigua Convention area and total number of hooks

³ Due to potential difficulties with fishers accurately identifying shark species and observed inconsistencies between logbook and observer data, the staff continue to recommend an increase in observer coverage on longline vessels to at least 20%. This will allow the staff to explore analyses on expanding catches of non-target species to fleet totals to improve ecosystem assessments.

3.1. TASK II (Operational-level data):

The resolution in recommendation 1 should include compulsory reporting of TASK II, level 1, operational-level (vessel-specific, set-by-set) logbook data—from the year the fleet began operating, where available, to the most recent year possible, ideally the current or the previous year—using the data fields in Table 2, or at a minimum the fields in Tables 3a⁴ and 3b to harmonize with the WCPFC, to be used in scientific research pursuant to the objective, rules, and relevant provisions of the Antigua Convention and measures adopted by the IATTC. On a case-by-case basis, and as determined by the Director, members and cooperating non-members may submit the data under other instruments⁵.

⁴ Fields reported to WCPFC

⁵ For example, Memorandums of Understanding may be established between the IATTC and individual CPCs to foster collaboration and data sharing for statistical purposes of assessing stock, species' vulnerability, and ecosystem status.

3.2. TASK II (Aggregated data):

The resolution in recommendation 1 state, "Until the coverage of the operational-level logbook data provided to the Commission is 100%, report TASK II catch and effort data at the finest spatial and temporal resolution possible, as a minimum by month and 5°x5° [(level 3) or by month and 1x1 (level 2)], raised to represent the total catch and effort, and indicating the statistical methods used to estimate total catches⁶. For data previously submitted, indicate whether it was raised to fleet totals and describe the methodology." Such aggregated data shall also include the number of vessels in each grid cell.

⁶ Following WCPFC, provide 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 information about the relationships and methods used to raise the data.

REVISED RECOMMENDATIONS – INDUSTRIAL LONGLINE ([WSDAT-01](#); [SAC-14 INF-Q](#)), CONTINUED:

4. Size composition data:

The staff recommend that establishment of the resolution in recommendation 1 include compulsory reporting of size composition data that are representative of the catches by the fisheries at the finest possible spatial and temporal resolution in the originally measured type and unit⁷ for tunas and tuna-like species (Table 1a) and for [priority] shark species brought onboard vessels (Table 1b) indicating the time, location and number of set, trips and vessels sampled by time and location. Where available, report size composition data for other relevant species (Tables 1b and 1c). When necessary, revise previously submitted data to include all information. A meta-data document that explains the data collection and sampling program should be provided.

⁷ Indicating the measurement type (e.g., whole weight or processed weight; fork length for fishes, lower-jaw fork length for billfish, total length for sharks) and measurement unit (e.g., kg, cm). If processed weight is measured, indicate the type of processed weight (e.g., gilled and gutted weight; headed, tailed, gilled and gutted weight).

5. Options for data reporting mechanisms:

The staff recommend that the following options for data reporting be developed by IATTC staff:

- a. standards, guidelines and templates for mandatory data fields, to allow CPCs to submit data in their preferred format (e.g. CSV, XLS) as long as they follow these templates
- b. default digital templates in Excel to ease CPCs workflow
- c. online forms and e-reporting apps, in the longer term
- d. mechanisms for reviewing the national logbook data collection programs

REVISED RECOMMENDATIONS – PURSE-SEINE VESSELS ≤363 t, SIZE CLASSES 1–5 ([WSDAT-02](#), [WSDAT-02-Rpt](#))

1. Observer data:

Establish a non-voluntary observer program¹—comprised of onboard observers or electronic monitoring systems (EMS)—for small purse-seine vessels ≤363 t carrying capacity that mimics the Class-6 observer program (i.e., vessels with a carrying capacity >363 t), to the extent possible, including but not limited to catch, disposition (e.g., retained, discarded) and fate (e.g., released alive, released injured, dead) in numbers of individuals or weights, and length composition data on priority species² and other species that interact with this fishery³.

¹ Noting the observer program should be designed to collect representative data on the priority species (see ²). The objectives of the program, with regard to both priority species and the data to be collected on those species, will contribute to the definition of “representative” data. For example, the mix of vessel sizes and fishing strategies prioritized for the observer program may change depending on the list of priority species and the relative impact of different vessels and fishing strategies on those species. Also noting, due to space constraints on smaller Class 1–3 vessels, trials with EMS should be conducted to assess feasibility in lieu of an onboard observer.

² Priority species include tunas and tuna-like species (Table 1a), followed by species of special interest (Table 1b) defined as those for which the Commission has adopted specific Resolutions (e.g., sharks: Resolutions [C-24-05](#), [C-23-08](#), [C-19-06](#), [C-11-10](#); sea turtles: Resolutions [C-19-04](#), [C-04-07](#); mobulid rays: Resolution [C-15-04](#); dorado Resolution [C-23-09](#); bycatch: Resolution [C-04-05](#)).

³ Other non-target species caught incidentally as bycatch (e.g., Resolution [C-04-05](#)) – see Table 1c).

2. Data reporting mechanisms:

Any revisions to Resolution C-03-05 and/or the corresponding technical specifications or a new Resolution related to data provision should include a default template⁴ (e.g., in Excel) or at a minimum the mandatory data fields to be provided.

⁴ Noting that maintaining consistency is important to mitigate challenges for data collectors.

TABLE 1a. Principal tuna and tuna-like species prioritized for data collection (i.e., species for which data should be provided). Taxonomic tables should be the same for each gear type, and correspondingly each data improvement workshop dedicated to discussions focused on revising Resolution [C-03-05](#), will include the same tables or will be updated based on workshop participant's discussions and/or current resolutions. Noting this table is revised from Table 1 in the [technical specifications](#) for data provisions which corresponds to the data provision Resolution C-03-05. The purpose of this revision is to clarify the definition of tuna and tuna-like species. Tuna and tuna-like species are defined as those within the suborder Scombroidei, which includes families Scombridae, Xiphiidae, and Istiophoridae. Tunas are defined as those within the tribe Thunnini which is comprised of four genera: *Thunnus*, *Katsuwonus*, *Euthynnus* and *Auxis*. Tuna-like species therefore includes other fishes* within the families Scombridae (e.g., bonitos: *Sarda* spp.; wahoo: *Acanthocybium solandri*), Xiphiidae (swordfish; *Xiphias gladius*) and Istiophoridae (other billfish) which are known to interact with EPO tuna fisheries.

TABLA 1a. Principales atunes y especies afines priorizadas para la recolección de datos (es decir, especies para las que se deberían proporcionar datos). Las tablas taxonómicas deberían ser las mismas para cada tipo de arte, y en consecuencia cada taller sobre la mejora de los datos dedicado a discutir la revisión de la resolución [C-03-05](#) incluirá las mismas tablas o se actualizarán con base en las discusiones de los participantes del taller y/o las resoluciones actuales. Cabe señalar que esta tabla se revisó a partir de la Tabla 1 de las [especificaciones técnicas](#) para la provisión de datos, que corresponde a la resolución [C-03-05](#) sobre provisión de datos. El propósito de esta revisión es aclarar la definición de atunes y especies afines. Los atunes y especies afines se definen como aquéllos pertenecientes al suborden Scombroidei, que incluye las familias Scombridae, Xiphiidae e Istiophoridae. Los atunes se definen como aquéllos pertenecientes a la tribu Thunnini, que comprende cuatro géneros: *Thunnus*, *Katsuwonus*, *Euthynnus* y *Auxis*. Las especies afines incluyen, por lo tanto, otros peces* de las familias Scombridae (por ejemplo, bonitos: *Sarda* spp.; peto: *Acanthocybium solandri*), Xiphiidae (pez espada; *Xiphias gladius*) e Istiophoridae (otros peces picudos) que se sabe que interactúan con las pesquerías atuneras del OPO.

Taxonomic Group	Common name	Scientific or family name	ASFIS code
Tunas	Albacore tuna	<i>Thunnus alalunga</i>	ALB
	Bigeye tuna	<i>Thunnus obesus</i>	BET
	Pacific bluefin tuna	<i>Thunnus orientalis</i>	PBF
	Skipjack tuna	<i>Katsuwonus pelamis</i>	SKJ
	Yellowfin tuna	<i>Thunnus albacares</i>	YFT
	Black skipjack tuna	<i>Euthynnus lineatus</i>	BKJ
	Bullet tuna	<i>Auxis rochei</i>	BLT
	Frigate tuna	<i>Auxis thazard</i>	FRI
	Unidentified tunas nei	Scombridae nei	TUN
Tuna-like species	Eastern Pacific bonito	<i>Sarda chiliensis</i>	BEP
	Striped bonito	<i>Sarda orientalis</i>	BIP
	Unidentified bonitos	<i>Sarda</i> spp.	BZX
	Black marlin	<i>Istiompax indixa</i>	BLM
	Blue marlin	<i>Makaira nigricans</i>	BUM
	Striped marlin	<i>Kajikia audax</i>	MLS
	Sailfish	<i>Istiophorus platypterus</i>	SFA
	Shortbill spearfish	<i>Tetrapturus angustirostris</i>	SSP
	Unidentified billfishes, but not including swordfish**	Istiophoridae nei	BIL
	Swordfish	<i>Xiphias gladius</i>	SWO
	Wahoo	<i>Acanthocybium solandri</i>	WAH

*** References:**

Regan, C.T., 1909. XI. On the anatomy and classification of the Scombroid fishes. *Annals and Magazine of Natural History*, 3(13), pp.66-75.

Klawe, W.L., 1977. What is a tuna. *Marine Fisheries Review*, 39(11), pp.1-5.

Collette, B.B. and Nauen, C.E., 1983. FAO species catalogue. Vol. 2. Scombrids of the world. An annotated and illustrated catalogue of tunas, mackerels, bonitos and related species known to date.

Orrell, T.M., Collette, B.B. and Johnson, G.D., 2006. Molecular data support separate scombroid and xiphioid clades. *Bulletin of Marine Science*, 79(3), pp.505-519.

** not elsewhere identified

TABLE 1b. Species of special interest by the Commission, defined as those species or species groups with a dedicated Resolution, for which data should be provided. These include Resolution [C-24-05](#), Annex 4: priority shark species and other Resolutions on sharks ([C-23-08](#), [C-19-06](#), [C-11-10](#)); Resolution [C-15-04](#): mobulid rays, Resolutions [C-19-04](#), [C-04-07](#) on sea turtles; Resolution [C-11-02](#) on seabirds; Resolution [C-23-09](#) on dorado, and the [Agreement for the International Dolphin Conservation Program](#) (AIDCP), Resolution [A-03-02](#) on dolphin mortality. Noting this table has been revised from tables 5a-b in [WSDAT-02-01](#) to reflect comments made by workshop participants during [WSDAT-02](#) to define priority species (see [WSDAT-02-Rpt](#)). This table is also different from Table 1b in the technical specifications corresponding to the data provision Resolution C-03-05. Any revisions to C-03-05 and the technical specifications should include the same species lists which will be applicable to all gear types. These species lists may change depending on any new species-specific Resolutions and priorities that may be adopted or defined by the Commission.

TABLA 1b. Especies de interés especial para la Comisión, definidas como aquellas especies o grupos de especies con una resolución específica, para las que se deberían proporcionar datos. Estas incluyen la resolución [C-24-05](#), Anexo 4: especies prioritarias de tiburones y otras resoluciones sobre tiburones ([C-23-08](#), [C-19-06](#), [C-11-10](#)); resolución [C-15-04](#): rayas Mobulidae, resoluciones [C-19-04](#), [C-04-07](#) sobre tortugas marinas; resolución [C-11-02](#) sobre aves marinas; resolución [C-23-09](#) sobre el dorado, y el [Acuerdo sobre el Programa Internacional para la Conservación de los Delfines](#) (APICD), resolución [A-03-02](#) sobre la mortalidad de delfines. Cabe señalar que esta tabla se revisó a partir de las Tablas 5a-b del documento [WSDAT-02-01](#) para reflejar los comentarios hechos por los participantes del taller [WSDAT-02](#) para definir las especies prioritarias (ver [WSDAT-02-Rpt](#)). Esta tabla también es diferente de la Tabla 1b en las especificaciones técnicas correspondientes a la resolución C-03-05 sobre provisión de datos. Cualquier revisión de la resolución C-03-05 y de las especificaciones técnicas debería incluir las mismas listas de especies, que serán aplicables a todos los tipos de artes. Estas listas de especies pueden cambiar en función de cualquier nueva resolución sobre especies específicas y prioridades que la Comisión pueda adoptar o definir.

Taxonomic Group	Common name	Scientific or family name	ASFIS code
Sharks*	Pelagic thresher shark ³	<i>Alopias pelagicus</i>	PTH
	Bigeye thresher shark ³	<i>Alopias superciliosus</i>	BTH
	Common thresher shark ³	<i>Alopias vulpinus</i>	ALV
	Copper Shark	<i>Carcharhinus brachyurus</i>	BRO
	Silky shark	<i>Carcharhinus falciformis</i>	FAL
	Galapagos shark	<i>Carcharhinus galapagensis</i>	CCG
	Oceanic whitetip shark	<i>Carcharhinus longimanus</i>	OCS
	Tiger shark	<i>Galeocerdo cuvier</i>	TIG
	Shortfin mako ²	<i>Isurus oxyrinchus</i>	SMA
	Longfin mako ²	<i>Isurus paucus</i>	LMA
	Salmon shark	<i>Lamna ditropis</i>	LMD
	Porbeagle shark	<i>Lamna nasus</i>	POR
	Blue shark	<i>Prionace glauca</i>	BSH
	Crocodile shark	<i>Pseudocarcharias kamoharai</i>	PSK
	Whale shark	<i>Rhincodon typus</i>	RHN
	Scalloped hammerhead shark ⁴	<i>Sphyrna lewini</i>	SPL
Mobulid rays	Great hammerhead shark ⁴	<i>Sphyrna mokarran</i>	SPK
	Smooth hammerhead ⁴	<i>Sphyrna zygaena</i>	SPZ
	Alfred manta	<i>Mobula alfredi</i>	RMA
	Giant manta	<i>Mobula birostris</i>	RMB
	Devil fish	<i>Mobula mobular</i>	RMM
	Munk's devil ray	<i>Mobula munkiana</i>	RMU
	Chilean devil ray	<i>Mobula tarapacana</i>	RMT
Turtles	Smoothtail manta	<i>Mobula thurstoni</i>	RMO
	Manta rays nei	<i>Mobula spp.</i>	RMV
	Olive Ridley turtle	<i>Lepidochelys olivacea</i>	LKV
	Green turtle	<i>Chelonia mydas</i>	TUG
	Loggerhead turtles	<i>Caretta caretta</i>	TTL
Seabirds	Hawksbill turtle	<i>Eretmochelys imbricata</i>	TTH
	Leatherback turtle	<i>Dermochelys coriacea</i>	DKK
	Albatrosses nei	Diomedidae	ALZ
Marine Mammals	Petrels nei	<i>Procellaria spp.</i>	PTZ
	Shearwaters nei	<i>Puffinus spp.</i>	PQW
	Seagulls nei	<i>Larus spp.</i>	LHX
	Pantropical spotted dolphin	<i>Stenella attenuata</i>	DPN

	Spinner dolphin	<i>Stenella longirostris</i>	DSI
	Striped dolphin	<i>Stenella coeruleoalba</i>	DST
	Rough-toothed dolphin	<i>Steno bredanensis</i>	RTD
	Common dolphin	<i>Delphinus delphis</i>	DCO
	Long-beaked common dolphin	<i>Delphinus sp.</i>	
	Bottlenose dolphin	<i>Tursiops truncatus</i>	DBO
	Risso's dolphin	<i>Grampus griseus</i>	DRR
	Pacific white-sided dolphin	<i>Lagenorhynchus obliquidens</i>	DWP
	False killer whale	<i>Pseudorca crassidens</i>	FAW
	Melon-headed whale	<i>Peponocephala electra</i>	MEW
	Dolphins nei	<i>Delphinidae</i>	DLP
	Pilot whales nei	<i>Globicephala spp.</i>	GLO
Other fishes	Common dolphinfish	<i>Coryphaena hippurus</i>	DOL
	Pompano dolphinfish	<i>Coryphaena equiselis</i>	CFW
	Dolphinfishes nei	<i>Coryphaenidae</i>	DOX

links to species fact sheets are provided where available

* where available, include other sharks (see Table 1c)

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 1c. 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 the technical guidelines for data provision corresponding to [C-03-05](#). This table may be modified as needed. This table is different from Table 1b in the technical specifications corresponding to the data provision Resolution C-03-05. Any revisions to C-03-05 and the technical specifications should include the same species lists which will be applicable to all gear types. These species lists may change depending on workshop participant's discussions from the next workshop in the series or if any new species-specific Resolutions and priorities that are adopted or defined by the Commission.

TABLA 1c. Principales grupos taxonómicos de interés que se sabe que son capturados por buques y artes de pesca que pescan especies bajo competencia de la Comisión en el Área de la Convención de Antigua. Las capturas de especies no mostradas en esta lista deberían notificarse utilizando el nombre común y el nombre científico si se conoce, así como el código ASFIS si está disponible. Cabe señalar que no se les han asignado códigos a todas las especies. Las resoluciones relativas a ciertos grupos taxonómicos y la provisión de datos generales se proporcionan en las directrices técnicas para la provisión de datos correspondientes a la res. [C-03-05](#). Esta tabla puede modificarse según sea necesario. Esta tabla es diferente de la Tabla 1b en las especificaciones técnicas correspondientes a la resolución C-03-05 sobre provisión de datos. Cualquier revisión de la resolución C-03-05 y de las especificaciones técnicas debería incluir las mismas listas de especies, que serán aplicables a todos los tipos de artes. Estas listas de especies pueden cambiar en función de cualquier nueva resolución sobre especies específicas y prioridades que la Comisión pueda adoptar o definir.

Taxonomic Group	Common name	Scientific or family name	ASFIS code
Sharks	Scalloped bonnethead shark	<i>Sphyrna corona</i>	SSN
	Scoophead shark	<i>Sphyrna media</i>	SPE
	Bonnethead shark	<i>Sphyrna tiburo</i>	SPJ
	Great white shark	<i>Carcharodon carcharias</i>	WSH
	Sand tiger shark	<i>Carcharias taurus</i>	CCT
	Blacktip shark	<i>Carcharhinus limbatus</i>	CCL
	Spottail shark	<i>Carcharhinus sorrah</i>	CCQ
	Silvertip shark	<i>Carcharhinus albimarginatus</i>	ALS
	Bull shark	<i>Carcharhinus leucas</i>	CCE
	Dusky shark	<i>Carcharhinus obscurus</i>	DUS
	Sandbar shark	<i>Carcharhinus plumbeus</i>	CCP
	Carcharhinus sharks nei	<i>Carcharhinus</i> spp.	CWZ
	Requiem sharks nei	Carcharhinidae	RSK
	Longnose velvet dogfish	<i>Centroscymnus crepidater</i>	CYP
	Velvet dogfish	<i>Scymnodon squamulosus</i>	SSQ
	Cookie cutter shark	<i>Isistius brasiliensis</i>	ISB
	Bigeye sand tiger shark	<i>Odontaspis noronhai</i>	ODH
	Nurse shark	<i>Ginglymostoma cirratum</i>	GNC
	Sicklefin smooth-hound	<i>Mustelus lunulatus</i>	MUU
	Speckled guitarfish	<i>Rhinobatos glaucostigma</i>	RBL
	Tope shark	<i>Galeorhinus galeus</i>	GAG
	Whitenose shark	<i>Nasolamia velox</i>	CNX
	Kitefin shark	<i>Dalatias licha</i>	SCK
	Sharks nei	Elasmobranchii	SKX
Rays	Pelagic stingray	<i>Pteroplatytrygon violacea</i>	PLS
	Stingrays nei	<i>Dasyatis</i> spp.	STI
Fishes	Jacks, crevalles nei	<i>Caranx</i> spp.	TRE
	Rainbow runner	<i>Elagatis bipinnulata</i>	RRU
	Yellowtail amberjack	<i>Seriola lalandi</i>	YTC
	Longfin yellowtail	<i>Seriola rivoliana</i>	YTL

Taxonomic Group	Common name	Scientific or family name	ASFIS code
Fishes	Greater amberjack	<i>Seriola dumerili</i>	AMB
	Samson fish	<i>Seriola hippos</i>	RLH
	Amberjacks nei	<i>Seriola</i> spp.	AMX
	Sunfish	<i>Mola</i> spp.	MOP
	Barracudas nei	Sphyraenidae	BAZ
	Opah	<i>Lampris guttatus</i>	LAG
	Opahs nei	<i>Lampris</i> spp.	LAP
	Escolar	<i>Lepidocybium flavobrunneum</i>	LEC
	Oilfish	<i>Ruvettus pretiosus</i>	OIL
	Luvar	<i>Luvaris imperialis</i>	LVM
	Snake mackerel	<i>Gempylus serpens</i>	GES
	Snake mackerels, escolars nei	Gempylidae	GEP
	Long snouted lancetfish	<i>Alepisaurus ferox</i>	ALX
	Short snouted lancetfish	<i>Alepisaurus brevirostris</i>	ALO
	Lancetfishes nei	<i>Alepisaurus</i> spp.	ALI
	Sickle pomfret	<i>Taractichthys steindachneri</i>	TST
	Dagger pomfret	<i>Taractes rubescens</i>	TCR
	Big-scale pomfret	<i>Taractichthys longipinnis</i>	TAL
	Rough pomfret	<i>Taractes asper</i>	TAS
	Pomfrets, ocean breams nei	Bramidae	BRZ
	Finescale triggerfish	<i>Balistes polylepis</i>	BIY
	Spotted oceanic triggerfish	<i>Canthidermis maculata</i>	CNT

TABLE 2. 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 (following recommendation 3.1 for longline data). 2a: provides metadata fields by trip level for vessel and gear characteristics; 2b: set-level information, including set-level catch information and set-level size composition data. Table remains unchanged from [WSDAT-01-01](#) and [SAC-14 INF-Q](#).

TABLA 2. Plantilla recomendada de campos de datos (características del buque y arte y datos operacionales de bitácora) para buques palangreros industriales que se propone que los CPC individuales recolecten y remitan a la CIAT para facilitar las evaluaciones de poblaciones de especies objetivo y las evaluaciones de vulnerabilidad de especies capturadas incidentalmente (siguiendo la recomendación 3.1 para datos de palangre). 2a: proporciona campos de metadatos para las características de los buques y las artes de pesca a nivel de viaje; 2b: información a nivel de lance, incluyendo información sobre las capturas a nivel de lance y datos sobre la composición por talla a nivel de lance. La tabla de [WSDAT-01-01](#) y [SAC-14 INF Q](#) no fue modificada.

2a. 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 that 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)
Trip-characteristics	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.)
	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)

2b. 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)³ DateTime of set end (Record the date and time of the end of the set)¹ DateTime of haul start (Record the date and time the first buoy of the mainline is hauled from the water to start the haul)¹ DateTime of haul end (Record the date and time the last buoy of the mainline is hauled from the water to end the haul)¹ Haul direction (Record whether the haul was from 1=Start to finish or 2=Finish to start) Latitude at start of set⁴ Longitude at start of set⁵ Latitude at end of set² Longitude at end of set³ Latitude at haul start² Longitude at haul start³ Latitude at haul end² Longitude at haul end³ 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) 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 species⁶ (Total weight⁷ 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

³ Record in vessel operational time in the format MM-DD-YYYY-hh:mm

⁴ Record the latitude in degrees and minutes and indicate 'N' or 'S' for north and south respectively

⁵ Record the longitude in degrees and minutes and indicate 'W' or 'E' for west and east respectively

⁶ Species in Table1

⁷ Indicate whether round weight, gilled and gulled, or other processing

Table 3a. List of WCPFC longline logbook e-reporting data fields and field descriptions as provided in [WCPFC14 Summary Report Attachment T: Standards, Specifications, and Procedures \(Sps\) for Electronic Reporting in the Western and Central Pacific Fisheries Commission](#) (see pages 20-28). Table remains unchanged from [WSDAT-01-01](#) and [SAC-14 INF-Q](#). Table corresponds to recommendation 3.1 for longline data.

TABLA 3a. Lista de campos de datos de bitácora de palangre de la WCPFC para informes electrónicos y descripciones de los campos, tal como figuran en el Anexo T del [Informe Resumido de la WCPFC14: Estándares, Especificaciones y Procedimientos \(Sps\) para Informes Electrónicos en la Comisión de Pesca del Pacífico Occidental y Central](#) (ver páginas 20-28). La tabla de [WSDAT-01-01](#) y [SAC-14 INF Q](#) no fue modificada. La tabla corresponde a la recomendación 3.1 para datos de palangre.

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	Mandatory
	VESSEL IDENTIFIER	PROVIDE the WCPFC VID, for the VESSEL undertaking this trip. REFER TO APPENDIX A4 Using a vessel identifier field ("VID") removes the redundancy of including all vessel attributes with each trip record and ensures standardisation and consistency through referencing the main Vessel Registry database.	
	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 WCPFC 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 authorised 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 WCPFC LOCATION codes, then the actual port name can be included and a WCPFC LOCATION code will be generated. If the start of a trip coincides with recommencing fishing operations or transiting to a fishing area after transshipping 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 WCPFC LOCATION codes, then the actual port name can be included and a WCPFC LOCATION code will be generated. If the end of a trip coincides with transshipping 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 transshipping part or all of the catch at sea then date for the transshipment 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 transshipping part or all of the catch at sea, then date for the transshipment at sea shall be indicated.	Mandatory
	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 transshipping part or all of the catch at sea, then date for the transshipment 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

CATEGORY			LL Trip Level Data	WCPFC field
LICENSE PERMIT DATA	FISHING NUMBERS	PERMIT'/LICENSE	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 3b. Recommended data fields to be reported to the IATTC in addition to the Table 3a fields. Table remains unchanged from [WSDAT-01-01](#) and [SAC-14 INF-Q](#). Table corresponds to recommendation 3.1 for longline data.

TABLA 3b. Campos recomendados a notificar a la CIAT además de los de la Tabla 3a. La tabla de [WSDAT-01-01](#) y [SAC-14 INF Q](#) no fue modificada. La tabla corresponde a la recomendación 3.1 para datos de palangre

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.