

SPECIFICATIONS FOR DATA PROVISION

- The technical aspects for data that are compiled and maintained by the IATTC on species under its purview have been established by the Director in accordance with Resolutions [C-03-05](#)¹ on data provision and [C-04-05](#) on bycatch.
- The requirements for reporting on, restrictions on, and provisions for the operations of vessels in the Antigua Convention Area² are established in Resolutions [C-18-06](#) on a Regional Vessel Register, [C-02-03](#) on the capacity of the tuna fleet in the eastern Pacific Ocean, and [C-11-05](#) on the establishment of a list of longline vessels over 24 m (LSTLFVs) authorized to operate in the eastern Pacific Ocean.
- Confidentiality of all information provided is maintained in strict accordance with Resolution [C-04-10](#) on catch reporting (“...categories containing two or less vessels or companies shall be pooled.”) and paragraph 50 of the IATTC Rule of Procedure (“50. Reports and statistics of individual fisheries production and details of the operations that companies individually provide to the Commission or its staff shall be considered as confidential and treated in accordance with rules on confidentiality established by the Commission”).

1. REGIONS OF COVERAGE, AND DATA TYPES REQUESTED BY REGION

- 1.1. ANTIGUA CONVENTION AREA** (the Pacific Ocean east of 150°W between latitudes 50°N and 50°S): All data requested are required for the Convention Area.
- 1.2. 150° W - 180°, 50°N - 50°S:** Size-frequency data from this region are requested, on a voluntary basis, to provide sample sizes sufficient for estimating fish sizes for nearby strata within the Convention Area with few samples.
- 1.3. PACIFIC OCEAN:** For albacore tuna, Pacific bluefin tuna, and all billfishes, data for the entire Pacific Ocean are requested, so that any assessments conducted by the IATTC staff can cover the entire range of the species. Data west of 150°W are requested on a voluntary basis.

2. REQUIRED DATA

The specifications are presented below in expanded form, using a format and terminology generally consistent with those used by ICCAT, IOTC, FAO, and other fisheries bodies handling tuna fisheries statistics.

- 2.1. TASK I CATCH STATISTICS:** Gross annual removals³ (round weight of all fish caught or killed during fishing operations) and disposition (retained or discarded) of tuna and tuna-like species (Table 1), and other species (Table 2) taken in fisheries which capture tuna and tuna-like species in the Antigua Convention Area. If the data provided are nominal catches¹ (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.

- 2.2. TASK I 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

¹ For the full texts of the resolutions cited, see <http://www.iattc.org/ResolutionsActiveENG.htm>

² <https://www.iattc.org/images/WebPics/EPOMap.jpg>

³ <https://www.fao.org/3/bt981t/bt981t.pdf>

reported.

2.3. TASK II CATCH AND EFFORT STATISTICS: Catch and effort statistics by area, gear, and species. Gross removals and disposition (retained or discarded) for each species, and the associated fishing effort, should be reported at the finest possible level of resolution as noted below, in metric tons or in kilograms. If the data provided are nominal catches, please note this when providing the data. 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.

2.3.1. Level 1. Operational (logbook) data: 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, use 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.

A list of gears other than PS and LP commonly encountered in the Convention Area, and associated codes and measures of effort, is given in Table 3.

2.3.2. Level 2. 1°x1°-month aggregated data

2.3.3. Level 3. 5°x5°-month aggregated data

2.3.4. For Level 2 and Level 3 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.

2.3.4.1. Raised option:

The total number of vessels operating in a time-area stratum should be reported. The total number of operations of gear made in an 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.

2.3.4.2. Unraised option:

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 2.3.4.1 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.

2.4. CATCH-AT-SIZE 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.

TABLE 1. Principal tuna and tuna-like species for which data should be provided.

Common name	Scientific or family name	ASFIS code
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
Unidentified tunas nei ⁴	Scombridae nei	TUN
Eastern Pacific bonito	<i>Sarda chiliensis</i>	BEP
Striped bonito	<i>Sarda orientalis</i>	BIP
Unidentified bonitos	<i>Sarda</i> spp.	BZX
Black skipjack tuna	<i>Euthynnus lineatus</i>	BKJ
Black marlin	<i>Istiompax indixa</i>	BLM
Blue marlin	<i>Makaira nigricans</i> ⁵	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 (SWO)	Istiophoridae nei	BIL
Swordfish	<i>Xiphias gladius</i>	SWO

⁴ nei: Not elsewhere included. These catches are known only to the indicated taxonomic level.

⁵ Classified previously in some data systems as *Makaira mazara* (BLZ, Indo-Pacific blue marlin)

TABLE 2. Some of the principal species 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 code⁶ if available. Note that codes have not been assigned for all species.

Common name	Scientific name	ASFIS code
Blue shark	<i>Prionace glauca</i>	BSH
Salmon shark	<i>Lamna ditropis</i>	LMD
Bigeye thresher shark	<i>Alopias superciliosus</i>	BTH
Pelagic thresher shark	<i>Alopias pelagicus</i>	PTH
Thresher sharks nei ⁷	<i>Alopias</i> spp. nei	THR
Blacktip shark	<i>Carcharhinus limbatus</i>	CCL
Oceanic whitetip shark	<i>Carcharhinus longimanus</i>	OCS
Silky shark	<i>Carcharhinus falciformis</i>	FAL
Shortfin mako shark	<i>Isurus oxyrinchus</i>	SMA
Longfin mako shark	<i>Isurus paucus</i>	LMA
Mako sharks nei	<i>Isurus</i> spp. nei	MAK
Scalloped bonnethead shark	<i>Sphyrna corona</i>	SSN
Scalloped hammerhead shark	<i>Sphyrna lewini</i>	SPL
Scoophead shark	<i>Sphyrna media</i>	SPE
Great hammerhead shark	<i>Sphyrna mokarran</i>	SPK
Bonnethead shark	<i>Sphyrna tiburo</i>	SPJ
Smooth hammerhead shark	<i>Sphyrna zygaena</i>	SPZ
Hammerhead sharks nei	Sphyrnidae	SPY
Sharks nei	Elasmobranchii nei	SKX
Unidentified fishes	Osteichthyes nei	MZZ
Pelagic stingray	<i>Pteroplatytrygon violacea</i>	PLS
Stingrays nei	<i>Dasyatis</i> spp.	STI
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

⁶ See <https://www.fao.org/fishery/en/collection/asfis/en>

⁷ nei: Not elsewhere included. These catches are known only to the indicated taxonomic level.

Smoothtail manta	<i>Mobula thurstoni</i>	RMO
Manta rays nei	<i>Mobula</i> spp.	RMV
Common dolphinfish	<i>Coryphaena hippurus</i>	DOL
Dolphinfishes nei	Coryphaenidae	DOX
Wahoo	<i>Acanthocybium solandri</i>	WAH
Jacks, crevalles nei	<i>Caranx</i> spp.	TRE
Rainbow runner	<i>Elagatis bipinnulata</i>	RRU
Amberjacks nei	<i>Seriola</i> spp.	AMX
Opahs nei	<i>Lampris</i> spp.	LAP
Snake mackerels, escolars nei	Gempylidae	GEP
Pomfrets, ocean breams nei	Bramidae	BRZ
Olive Ridley turtle	<i>Lepidochelys olivacea</i>	LKV
Green turtle	<i>Chelonia mydas</i>	TUG
Loggerhead turtles	<i>Caretta caretta</i>	TTL
Hawksbill turtle	<i>Eretmochelys imbricata</i>	TTH
Leatherback turtle	<i>Dermochelys coriacea</i>	DKK
Pantropical spotted dolphin	<i>Stenella attenuata</i>	DPN
Spinner dolphin	<i>Stenella longirostris</i>	DSI
Striped dolphin	<i>Stenella coeruleoalba</i>	DST
Common dolphin	<i>Delphinus delphis</i>	DCO

TABLE 3. Gear types, codes, units of fishing effort measurement, and examples of gear and operational details which should be reported in TASK II Data provided to the IATTC. If unsure about effort measures for other gear types⁸, or for information on how to report other gears not shown, please contact the IATTC at datarequests@iattc.org.

Gear type	Code	Effort measure	Gear characteristics and operation details (not exhaustive)
Gillnet	GN	Length of nets, expressed in 100-meter units, multiplied by the numbers of sets made per day, and Number of sets per day.	Length and depth of net, mesh size, mesh material; use of aircraft/radar/sonar in set; use of satellite images or oceanographic data in search/set
Hand-line	LH	Total number of lines fished per day, and Total number of days fished	Number of lines
Longline	LL	Total number of hooks fished per day, and Total number of days fished.	Number of hooks per basket; mainline material; float line length ; branch line length; use of light sticks; use of thermal sensors in set; use of satellite images or oceanographic data in search/set
Troll line	LTL	Total number of lines fished per day, and Total number of days fished	Number of lines trolled; use of skiff
Other	OTR	Total number of days at sea, and Total number of days fished, by gear-type	Configuration information for each gear, if known
Recreational	RG	Total number of vessels multiplied by number of days fished, and Total number of days fished.	

⁸ Other gear types: <http://www.fao.org/3/bt987e/bt987e.pdf>