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# FISHERIES DATA REPORTING TO THE IOTC: STATUS AND ISSUES

Author: IOTC Secretariat

## Purpose

This paper provides an overview of the status of data reporting by CPCs to the IOTC Secretariat, focusing on datasets submitted during 2026. It assesses the extent to which reporting obligations have been met across the different data categories and evaluates the quality and completeness of the information provided. The paper also reviews the key challenges faced by CPCs in compiling and submitting these datasets and discusses constraints affecting reporting performance.

## Abstract

This report reviews the status and quality of fishery data submitted to the IOTC Secretariat for the 2025 statistical reference year, including retained catch, catch-and-effort, size-frequency, fishing craft and discard data. Overall reporting improved compared with previous years, with most CPCs submitting the core datasets required for longline, purse seine, and coastal fisheries. Several CPCs that had previously faced challenges in meeting the minimum reporting standards, such as Iran, Oman, and Somalia, submitted more complete datasets, although some gaps remained, particularly in geo-referenced information.

Reporting levels for the 2026 submission year reached record highs, with retained catch data covering 99% of reported catches and catch-and-effort data available for 90% of catches. However, CPCs continue to face challenges in collecting and reporting size-frequency data, with coverage remaining below 50%. Several recommendations were made to strengthen the collection of data for areas where reporting remains limited, particularly discarded catch and fishing activities associated with drifting objects. Nevertheless, reporting requirements for these data types remain incomplete and may require further clarification and development.

# Introduction

Assessing tuna stocks by tuna Regional Fisheries Management Organizations (tRFMOs) requires high-quality data from fleets harvesting these species, as well as information on associated and dependent species within the ecosystems in which they occur. The collection of these data relies on the cooperation of all fishing parties. The implementation of Conservation and Management Measures (CMMs) provides the framework for defining the data requirements necessary for stock assessments and ecosystem monitoring.

The Indian Ocean Tuna Commission (IOTC) relies primarily on three key types of fishery-dependent data: (i) retained catch data, comprising landings of tuna and tuna-like species by species and fishery; (ii) geo-referenced catch-and-effort data, providing detailed catch and fishing effort information by month, fishing area (grid square), and fishery stratum; and (iii) geo-referenced size-frequency data, based on biological sampling of individual fish to characterize population size structures. Statistics on the number of vessels operating in each fishery are also used to support stock assessments and monitoring activities.

In addition to the 16 species managed by the IOTC, increasing emphasis is being placed on the collection of information on bycatch species, particularly sharks Resolution 25/08 and rays26/03 that interact with tuna fisheries. Several of these species are subject to prohibitions or restrictions on retention and landing. Consequently, all interactions with such species should be recorded, including catches, releases (alive or dead), and prohibited activities such as shark fining.

Historically, many CPCs have faced significant challenges in managing and reporting fisheries data, particularly from coastal fisheries, where even basic estimates of annual tuna catches by species were often unavailable. Continuous capacity-development programmes, delivered through country-specific technical assistance and regional workshops, have helped reduce many of these data gaps. Activities undertaken by the IOTC Secretariat, including the development of reporting guidelines, training on data-reporting procedures, and species-identification workshops, have strengthened national capacities for fisheries data collection and management (Secretariat 2025, 2026).

Despite these improvements, several challenges continue to affect the collection and reporting of fisheries data. Country missions conducted by the Secretariat have provided valuable insights into national data collection systems and highlighted a number of recurring constraints affecting small-scale fisheries. Common deficiencies include:

- Limited capacity to accurately identify species;
- Inadequate monitoring of fishing activities;
- Data collection systems that aggregate information across species and fishery categories;
- Insufficient numbers of trained enumerators;
- Limited financial and logistical resources dedicated to fisheries data collection;
- Incomplete vessel registration systems and infrequent frame surveys; and
- Weak data management infrastructure, with information often stored and processed manually, increasing the risk of errors.

In recent years, several coastal CPCs have taken important steps to strengthen their fisheries data systems, although sustainable funding remains a major constraint. Improvements have included:

- The development and pilot implementation of electronic data-collection and monitoring systems, including mobile applications designed to facilitate data collection by enumerators during field surveys;
- The development of fisheries information management platforms incorporating catch estimation modules and centralized data repositories;

- Increased collaboration with national, regional, and international partners through projects supporting fisheries data collection and management; and
- Greater participation in IOTC meetings, training activities, and scientific processes.

These efforts have contributed to a gradual improvement in the quality and availability of fisheries data submitted by CPCs. Nevertheless, persistent challenges remain, including high staff turnover and limited institutional capacity, which continue to affect the consistency and long-term sustainability of fisheries data collection systems.

This report analyses the datasets submitted to the IOTC Secretariat during 2026, with particular emphasis on their timeliness, coverage, and quality across the major fisheries operating in the Indian Ocean. Persistent reporting issues are reviewed by dataset type, and proposed actions are presented for consideration by the Working Party on Data Collection and Statistics (WPDCS).

The reporting status by CPCs for year 2026 are shown in the **Table 1**. As shown, most of the CPCs managed to comply with providing the data, by the timeliness, despite quality of some datasets remain questionable.

**Table 1.** Status of reporting of all datasets in 2026 by CPC

| Fleet | 1RC | 1DI | 1DR | 1IN | 2FC | 3CE | 3DA | 3SU | 3AA | 4SF | 7PR |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Australia | | | | | | | | | | | |
| Bangladesh | | | | | | | | | | | |
| China | | | | | | | | | | | |
| Comoros | | | | | | | | | | | |
| EU (France) | | | | | | | | | | | |
| EU (France, Mayotte) | | | | | | | | | | | |
| EU (France, Réunion) | | | | | | | | | | | |
| EU (Italy) | | | | | | | | | | | |
| EU (Portugal) | | | | | | | | | | | |
| EU (Spain) | | | | | | | | | | | |
| India | | | | | | | | | | | |
| Indonesia | | | | | | | | | | | |
| Iran (Islamic Republic of) | | | | | | | | | | | |
| Japan | | | | | | | | | | | |
| Kenya | | | | | | | | | | | |
| Madagascar | | | | | | | | | | | |
| Malaysia | | | | | | | | | | | |
| Maldives | | | | | | | | | | | |
| Mauritius | | | | | | | | | | | |
| Mozambique | | | | | | | | | | | |
| Oman | | | | | | | | | | | |
| Pakistan | | | | | | | | | | | |
| Republic of Korea | | | | | | | | | | | |
| Seychelles | | | | | | | | | | | |
| Somalia | | | | | | | | | | | |
| South Africa | | | | | | | | | | | |
| Sri Lanka | | | | | | | | | | | |
| Sudan | | | | | | | | | | | |
| Taiwan Province of China | | | | | | | | | | | |
| Thailand | | | | | | | | | | | |
| United Kingdom of Great Britain | | | | | | | | | | | |
| United Republic of Tanzania | | | | | | | | | | | |
| Yemen | | | | | | | | | | | |

| Legend: | | <= 2026-06-30 | | > 2026-06-30 | | NIL |
|---|---|---|---|---|---|---|
| | | Not applicable (NA) | | Not reported (NC) | | Voluntary |

# Terminology, Definitions, and Data Requirements

## Species

### IOTC Species

Since its establishment, the IOTC has maintained a mandate covering 16 species, as specified in the IOTC Agreement.These species include southern bluefin tuna (*Thunnus maccoyii*; SBF), which is assessed and managed by the Conservation of Southern Bluefin Tuna (CCSBT) (**Table 2**). Discussions on the possible inclusion of shortbill spearfish (*Tetrapturus angustirostris*; SSP) within the IOTC mandate are ongoing.

**Table 2.** Category, code, common name, and scientific name of the 16 IOTC species

| Category | Code | Common name | Scientific name |
|---|---|---|---|
| BILLFISH | BLM | Black marlin | *Istiompax indica* |
| | BUM | Blue marlin | *Makaira nigricans* |
| | MLS | Striped marlin | *Kajikia audax* |
| | SFA | Indo-Pacific sailfish | *Istiophorus platypterus* |
| | SWO | Swordfish | *Xiphias gladius* |
| NERITIC | BLT | Bullet tuna | *Auxis rochei* |
| | FRI | Frigate tuna | *Auxis thazard* |
| | KAW | Kawakawa | *Euthynnus affinis* |
| | LOT | Longtail tuna | *Thunnus tonggol* |
| SEERFISH | COM | Narrow-barred Spanish mackerel | *Scomberomorus commerson* |
| | GUT | Indo-Pacific king mackerel | *Scomberomorus guttatus* |
| TEMPERATE | ALB | Albacore | *Thunnus alalunga* |
| | SBF | Southern bluefin tuna | *Thunnus maccoyii* |
| TROPICAL | BET | Bigeye tuna | *Thunnus obesus* |
| | SKJ | Skipjack tuna | *Katsuwonus pelamis* |
| | YFT | Yellowfin tuna | *Thunnus albacares* |

### Bycatch Species

In addition to the 16 species covered under the IOTC mandate, numerous other species are caught and retained in tuna fisheries. While some species, such as oilfish and blue shark, may be specifically targeted by certain longline fleets, others are retained due to their commercial value. As a result, distinguishing target species from bycatch can be difficult in some fisheries. However, species not included within the IOTC mandate are generally treated as bycatch species for reporting purposes.

Accordingly, the IOTC collects data on all bycatch species caught in association with tuna fisheries to support stock assessments, ecosystem monitoring, and fisheries management (**Table 3**).

**Table 3.** Category, code, common name, and scientific name of the main elasmobranch species interacting with IOTC fisheries

| Category | Code | Common name | Scientific name |
|---|---|---|---|
| RAYS | PLS | Pelagic stingray | *Pteroplatytrygon violacea* |
| | RMA | Alfred manta | *Mobula alfredi* |
| | RMB | Giant manta | *Mobula birostris* |
| | RME | Longhorned mobula | *Mobula eregoodoo* |
| | RMK | Shortfin devil ray | *Mobula kuhlii* |
| | RMM | Devil fish | *Mobula mobular* |
| | RMO | Smoothtail mobula | *Mobula thurstoni* |
| | RMT | Chilean devil ray | *Mobula tarapacana* |
| SHARKS | BSH | Blue shark | *Prionace glauca* |
| | BTH | Bigeye thresher | *Alopias superciliosus* |
| | FAL | Silky shark | *Carcharhinus falciformis* |
| | LMA | Longfin mako | *Isurus paucus* |
| | OCS | Oceanic whitetip shark | *Carcharhinus longimanus* |
| | POR | Porbeagle | *Lamna nasus* |
| | PTH | Pelagic thresher | *Alopias pelagicus* |
| | SMA | Shortfin mako | *Isurus oxyrinchus* |
| | SPK | Great hammerhead | *Sphyrna mokarran* |
| | SPL | Scalloped hammerhead | *Sphyrna lewini* |
| | SPZ | Smooth hammerhead | *Sphyrna zygaena* |

## Fisheries

### Fishery Categories

The type of datasets submitted to the Secretariat depends on a country's fishery categories. Fleets operating exclusively within National Jurisdiction Areas (NJA) with vessels under 24 m length overall have lighter reporting obligations and are classified as coastal (or artisanal) fisheries in IOTC terminology. In contrast, fisheries with larger vessels using longline or surface techniques in areas beyond national jurisdiction (ABNJ) have more stringent reporting requirements and must be listed on the IOTC Record of Authorized Vessels (RAV; Res. 26/04).

According to Res. 26/06, the IOTC fisheries are defined as follows:

- **Coastal Fisheries** means fisheries targeting IOTC species other than longline or surface, as defined below.

- **Longline Fisheries** means fisheries undertaken by vessels in the IOTC Record of Authorized Vessels that use longline gear.
- **Surface Fisheries** means all fisheries undertaken by vessels in the IOTC Record of Authorized Vessels other than longline fisheries; in particular those using purse seine, poleand-line, gillnets, handlines and trolling gear.

Fishing vessels authorised to fish for tuna and tuna-like species on the high seas are required to be reported to the Compliance Section of the IOTC Secretariat through the e-Regional Authorised Vessels Record e-RAV. This requirement applies to both authorised vessels and vessels that have actively operated during the reporting year.

With the increasing contribution of coastal fisheries to total catches in the Indian Ocean, there have been growing calls to improve the reporting of fishing craft statistics. These statistics comprise information on small-scale fishing vessels and craft, classified by vessel type and size category, and are considered essential for improving estimates of fishing capacity and catch production in coastal fisheries. During the 29th Session of the Commission, it was agreed that reporting of fishing craft statistics should eventually become a mandatory reporting requirement, with a target implementation date of 2030 (Resolution 26/06). Although reporting remains voluntary at present, several coastal CPCs submitted fishing craft statistics using Form 2FC.

**Fishery Types**

The classification of fishery types has been the subject of several discussions, particularly during workshops and consultations with CPCs. While the broad fishery categories of coastal, longline, and surface fisheries were retained, concerns were raised that the previously proposed fishery-type classification did not adequately reflect the diversity of operations undertaken by smaller vessels. In particular, some small-scale vessels, despite their relatively short length overall (LOA), are capable of operating over a wide geographical range and under different fishing strategies.

Historically, three fishery types, namely artisanal, semi-industrial, and industrial, were used to characterise the technical characteristics and spatial extent of vessels targeting tuna and tuna-like species in the Indian Ocean, based on criteria such as vessel motorisation, size, and area of operation (Moreno and Herrera 2013). However, this classification presented several limitations. For example, vessels smaller than 15 m LOA could be classified as either artisanal or semi-industrial, semi-industrial vessels were not always consistently reported in the RAV, and the artisanal category encompassed a broad range of fishing activities. To address these issues, a revised classification was proposed based on a combination of (i) the purpose of the fishery, (ii) the area of operation, and (iii) vessel length overall (IOTC-2022-WPDCS18-13_Rev3). Following discussions with CPCs, the terminology was revised to small-scale, medium-scale, and large-scale fisheries, better reflecting the operational characteristics and fishing range of vessels rather than their degree of industrialisation. The introduction of the medium-scale category was particularly important to distinguish vessels that, although relatively small in size, operate beyond the scope traditionally associated with small-scale fisheries and exhibit fishing patterns more comparable to larger commercial fleets (**Table 4**).

**Table 4.** Current IOTC classification scheme for fishery types depending on purpose, area of operation, and length overall (LOA; m). *Subsistence fishery may include some limited commercial activity

| Fishery Category | Fishery Type |
|---|---|
| **Coastal fisheries** | Commercial at medium-scale (NJA) |
| | Commercial at small-scale (NJA) |
| | Recreational (NJA) |

| Fishery Category | Fishery Type |
|---|---|
| | Subsistence (NJA) |
| **Longline fisheries** | Exploratory (NJAs and/or ABNJ) |
| | Large-scale (NJAs and/or ABNJ) |
| | Medium-scale (NJAs and/or ABNJ) |
| **Surface fisheries** | Exploratory (NJAs and/or ABNJ) |
| | Large-scale (NJAs and/or ABNJ) |
| | Medium-scale (NJAs and/or ABNJ) |

**Artisanal Fisheries**

The terminology surrounding *artisanal fisheries* remains ambiguous, as different authors define it according to their research scope and context (Smith and Basurto 2019). (Rousseau et al. 2019) highlighted that the term is inherently complex, case-specific, and lacks a universally applicable definition. Traditionally, artisanal fisheries have been characterised by low levels of technology, non-motorized or low-powered vessels, and the use of traditional fishing gear, all of which play vital roles in coastal community livelihoods (Smith and Basurto 2019). However, these characteristics are gradually changing. Consequently, the IOTC's definition of artisanal fisheries differs from those found in the broader fisheries science literature, which tend to encompass a wider range of activities.

To clarify the classification of coastal fisheries, the FAO introduced pilot testing of the Small-Scale Fisheries Matrix (Funge-Smith 2019), aimed at developing a standardised statistical definition for small-scale fisheries. This approach has revealed the complexity and importance of small-scale fisheries at global scale (Basurto et al. 2025; Aguión et al. 2025). Since 2021, the IOTC Secretariat has conducted a scoping study on coastal fisheries, with several CPCs contributing data on their respective coastal and artisanal sectors (IOTC Secretariat 2022, 2023).

## Data Requirements

It is imperative that CPCs comply with the reporting requirements established under various resolutions mandating data submission. These requirements encompass aspects such as timeliness, data coverage, and adherence to the relevant resolutions. The specific reporting obligations may vary depending on the characteristics and nature of each fishery (**Fig. 1** and **Table 5**).

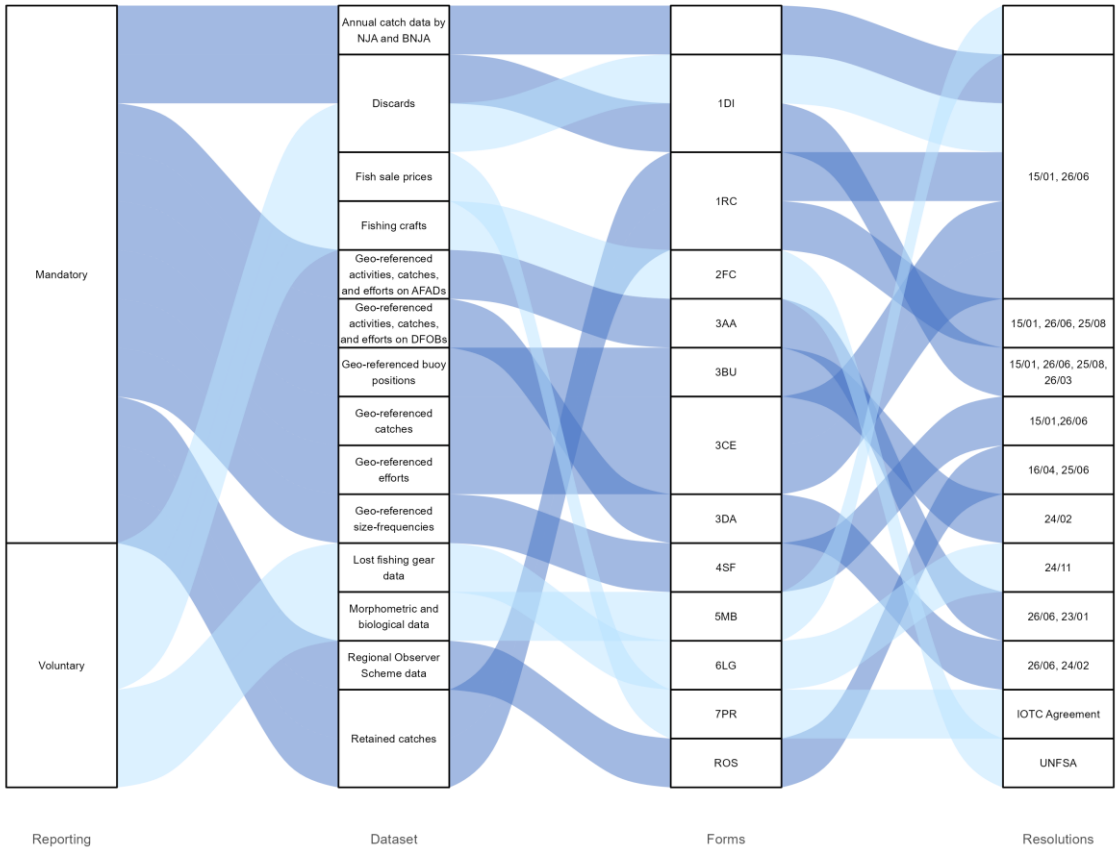


**Fig. 1.** Overview of the data reporting requirements, including IOTC reporting forms and tools, and Resolutions for the 16 IOTC species and bycatch species caught or interacted with by fisheries for tuna and tuna-like species in the IOTC Area of Competence. UNFSA = UN Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks

**Table 5.** Summary of IOTC data requirements applicable to IOTC and bycatch species. M = mandatory; V = voluntary; UNFSA = UN Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks

| Dataset | Resolutions | Reporting | Forms | Artisanal | Longline and surface |
|---|---|---|---|---|---|
| Retained catches | 15/01, 26/06, 25/08 | M | 1RC | Retained catch (weight) of the 16 IOTC species and the most commonly caught elasmobranch species by major area, gear, species and year | |
| | | M | 1RC | Retained catch (weight) of other bycatch species by major area, gear, species and year | |
| Annual catch data by NJA and BNJA | 15/01, 26/06 | M | | | Retained catch by (i) areas under national jurisdiction (ii) high seas, and (iii) areas under the national jurisdiction of other coastal State(s) if their vessels operate in those waters under any arrangement such as access agreements or chartering arrangements |
| Discards | | M | 1DI | Discard levels of the 16 IOTC species, the most common elasmobranch species, and turtles, cetaceans, and seabirds species by major area, gear, species, and year | |
| | 15/01, 26/06 | V | 1DI | Discard levels of all other bycatch species by major area, gear, species, and year | Discard levels of all other bycatch species by major area, gear, species, and year |
| Fishing crafts | UNFSA | V | 2FC | Number of fishing crafts by fishery, boat type, and year (Mandatory by 2030) | Individual vessel data for all vessels catching IOTC species (Mandatory by 2030) |
| Geo-referenced catches | 15/01, 26/06 | M | 3CE | Catch by species, fishery, area, and period | Catch by species, fishery, school type, grid area and month strata |
| Geo-referenced efforts | 15/01, 26/06 | M | 3CE | Effort by fishery, area, and month strata | Effort by fishery, school type, grid area and month strata, including supply vessels |

| Dataset | Resolutions | Reporting | Forms | Artisanal | Longline and surface |
|---|---|---|---|---|---|
| Geo-referenced activities, catches, and efforts on DFOBs | 26/06, 24/02 | M | 3DA | Not applicable | Interactions with drifting floating objects by purse seiners and supply vessels, by vessel, position, date, and time |
| Geo-referenced activities, catches, and efforts on AFADs | 26/06, 23/01 | M | 3AA | Fishing activities by position, date, and AFAD | Fishing activities by position, date, and AFAD |
| Geo-referenced buoy positions | 24/02 | M | 3BU | Not applicable | Daily positions of active buoys equipping FADs and natural floating objects, by purse seine vessel |
| Geo-referenced size-frequencies | 15/01,26/06 | M | 4SF | Individual lengths of IOTC species and the most commonly caught elasmobranch species | |
| Morphometric and biological data | | V | 5MB | Individual-level morphometric and biological data, including sex, maturity stage, and fish samples | |
| Lost fishing gear data | 24/11 | V | 6LG | Data and information on the recovery of abandoned, lost or discarded fishing gear | |
| Fish sale prices | IOTC Agreement | V | 7PR | Monthly time series of fish sale price | |
| Regional Observer Scheme data | 16/04, 25/06 | M | ROS | Samples of catches landed to cover at least 5% of vessel activities / EMS complemented data | Samples of catches at-sea to cover at least 5% of vessel operations / EMS complemented data |

# Availability and Timeliness of IOTC data (2014-2026)

It is imperative that the data required for stock assessment are available well in advance to allow sufficient time for processing before analyses are conducted. Late submissions have repeatedly hindered this process, as scientists face challenges in linking observed trends to changes in the fisheries when the underlying data contain uncertainties or are incomplete. The deadline for the submission of fisheries statistics is six months after the activity year, 30 June, and this applies to most data sets. Particular emphasis is placed on the three core datasets required for assessments: retained catch (RC), catch and effort (CE), and size-frequency (SF). These datasets are essential inputs for the review of fisheries management during meetings of the Working Parties and the Scientific Committee. Consequently, late reporting compromises the Secretariat's ability to validate and verify the data, especially when submissions are made close to, or during, Working Party sessions devoted to stock assessments.

As previously described, missing retained catch data are either estimated, obtained from alternative sources, or, in some cases, repeated from the previous year. The FAO FishStat database is the primary secondary source used to complement missing catch reports (see **Appendix V** of IOTC (2014)). However, in some cases, FAO data cannot be reliably incorporated due to inconsistencies between the data submitted to FAO and those reported to the IOTC Secretariat.

The three main datasets, retained catches, geo-referenced catch and effort data, and size-frequency data, are often submitted simultaneously, although in some cases individual components are received later. Upon data reception, standard controls and checks are performed to ensure that the metadata and data submitted to the Secretariat are consistent and include all mandatory fields. The controls depend on each type of data set and may require the submission of revised data from CPCs if the original one is found to be inconsistent (e.g., unknown gear code) or incomplete (e.g., missing CWP spatial grid).

The deadline for dataset submission is set at six months following the end of the year in which the fishing activities took place. Although this timeframe is intended to allow sufficient time for data preparation for stock assessment purposes, several CPCs have historically experienced difficulties in meeting the deadline for certain fisheries. The gradual improvement in the timeliness of data submissions can be attributed to increased awareness through capacity development activities, as well as greater emphasis on compliance with reporting obligations and the implications of late or non-submission.

Data reporting has remained a challenging area, particularly for coastal countries experiencing instability, where monitoring and reporting capacities may be constrained, despite fishing activities continuing to take place. More recently, the Secretariat has received datasets from most CPCs, with many successfully submitting their data within the established deadline. Other CPCs that continue to experience difficulties have proactively engaged with the Secretariat to discuss their datasets and fishing activities.

The increasing demand from scientists and other data users for datasets to be made available at least two to three months before scientific meetings highlights the importance of timely submissions. The Secretariat requires sufficient time to process, validate and verify the data before making them available to users. These processes can be lengthy, depending on data quality and whether further clarification or review by CPCs is required. Consequently, late reporting compromises the Secretariat's ability to adequately process, validate and verify the data, particularly when submissions are received close to or during Working Party sessions dedicated to stock assessments.

Complete retained catch data are required from all CPCs to ensure that estimates of actual catches are as comprehensive as possible and to support the calculation of stock biomass. Where retained catch data are missing or incomplete, the Secretariat estimates the missing information using historical catch records and secondary data sources, such as the FAO FishStat database , or information from proxy fleets. However, these alternative sources and estimation methods are generally limited to retained catch data.

Submissions of retained catch, catch and effort, and size frequency data are often made simultaneously. However, not all CPCs are able to provide these datasets concurrently for all their species and fisheries, resulting in gaps in the availability and completeness of information required for stock assessment.

## Retained Catch Data

### Availability and Timeliness

Following the improvement in the timeliness of retained catch reporting in 2025, when 99% of catches were reported by the deadline, 2026 saw a slight decline, with only 84% of catches reported on time overall. A further 15% of catches were reported after the deadline, partly due to delays in data submissions by some CPCs accounting for significant catches of IOTC species (**Fig. 2**).

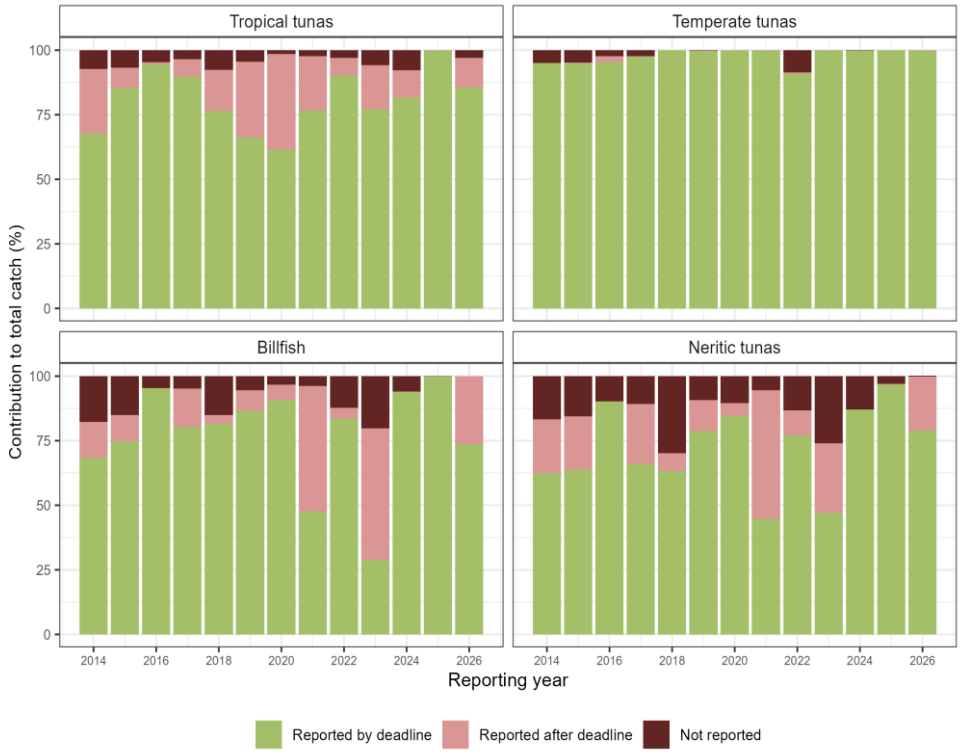


**Fig. 2.** Annual percentage of total retained catch of each of the IOTC species groups according to the date of submission of the retained catch data by each fleet to the IOTC Secretariat. The submission deadline is the 30th June of each year

Iranian fisheries account for a significant proportion of catches in the Indian Ocean, representing approximately 10% of tropical tuna catches, 22% of billfish catches and 17% of neritic tuna catches. Consequently, late submissions for these species groups predominantly reflect delays in reporting by Iran.

Somalia demonstrated remarkable progress in its data submissions, with improved-quality datasets submitted within the established deadline. However, due to unforeseen circumstances, Bangladesh,

Mozambique and Iran submitted their retained catch datasets a few days after the deadline, while Comoros submitted its data approximately three months late. In 2026, approximately 2026, 1% of catches remained unreported, corresponding to two CPCs, namely Sudan and Yemen. Catch estimates for these non-reporting CPCs, as well as for other non-IOTC coastal countries in the Indian Ocean, continue to be sourced from the FAO FishStat database.

There is growing interest among some non-IOTC coastal countries in joining the IOTC. Such participation could be mutually beneficial, strengthening regional cooperation and improving knowledge of fish stocks in the Indian Ocean, particularly those that are not currently assessed in the region.

## Catch and Effort Data

### Availability and Timeliness

Compared with retained catch data, geo-referenced catch-and-effort data require greater standardisation, particularly in terms of the stratification of the data. Although some CPCs made efforts to submit catch-and-effort datasets, important variables required to ensure data completeness were often missing. Consequently, these datasets could not be processed. Thus, while reporting statistics indicate that the majority of fleets submitted data, only datasets meeting all the required standards and completeness criteria could be processed and incorporated into the database. Overall, 68% of geo-referenced catch-and-effort data were reported by the deadline in 2026, while 15% were submitted late and 17% were unavailable due to non-reporting or incomplete submissions (**Fig. 3**).

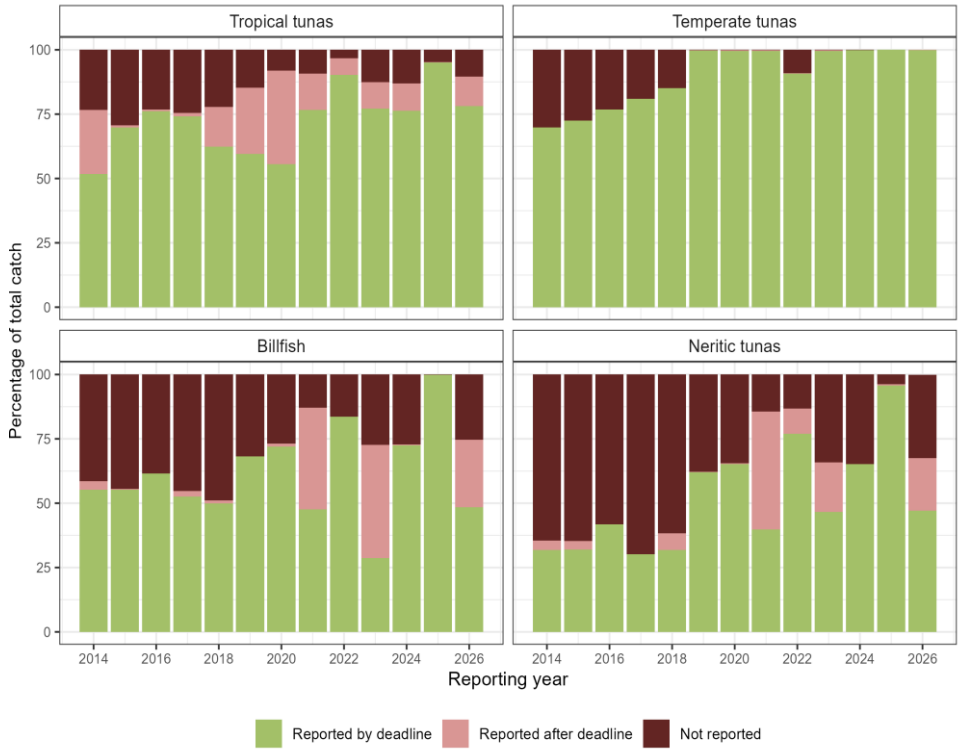


**Fig. 3.** Annual percentage of total retained catch of each of the IOTC species groups according to the date of submission of the geo-referenced catch and effort data by each fleet to the IOTC Secretariat. The submission deadline is the 30th June of each year

The availability of these data highlights the challenges faced by CPCs with significant catches of IOTC species in collecting and reporting detailed geo-referenced fisheries data. Recently, some CPCs have been making efforts to improve the methodologies used to estimate fisheries statistics, alongside

increased investment in the sector (Rajesh K.M., et al. 2026). As previously mentioned, the implementation of pilot electronic monitoring (EM) programmes to support fisheries data collection is also being introduced in several CPCs. Nevertheless, significant data gaps remain, particularly among fleets with substantial fishing operations. In 2026, geo-referenced catch data from India continued to lack essential information required for processing, while submissions from Indonesia remained limited in terms of coverage, and Iran reported late. Together, these fleets accounted for approximately 47% of the total retained catch of IOTC species, highlighting the importance of improving the availability and quality of geo-referenced data from these fisheries. Despite these challenges, the geo-referenced catch-and-effort data submitted by Iran showed significant improvement since 2025, with the data appropriately raised to account for total catches.

• *Tropical tunas*:

Although the reporting of geo-referenced catch-and-effort data for tropical tunas improved significantly in 2025, data availability and timeliness declined in 2026. Only 78% of the data were available by the submission deadline, compared with 95% in 2025. Iran's late submission, accounting for approximately 10% of retained tropical tuna catches, contributed to the 11% of geo-referenced catch-and-effort data reported after the deadline. A further 10% of data remained unavailable, primarily due to poor data quality in submissions from India and Indonesia, as well as non-reporting by Yemen.

• *Temperate tunas*:

Temperate tuna catches in the Indian Ocean are concentrated among a limited number of fleets. Although some coastal fleets also record small catches of temperate tuna, the absence of geo-referenced catch data from these fleets does not significantly affect overall data availability. In 2026, approximately 100% of geo-referenced catch data for temperate tunas were available by the submission deadline.

• *Billfish*:

In recent years, catches of billfish species by small and medium scale fisheries have increased in the Indian Ocean. The decline in the availability of geo-referenced billfish catch data in 2026 reflects delays in reporting by Iran and incomplete data submissions from India and Indonesia. Together, these three fleets accounted for approximately 52% of the total retained catches of billfish species. In 2026, only 48% of geo-referenced billfish catch data were available by the submission deadline, highlighting significant data gaps among fleets.

• *Neritic tunas and seerfish*:

Similar to the situation for geo-referenced billfish catch data, the low availability of geo-referenced catch data for neritic tunas is largely attributed to data gaps from major fishing fleets. In 2026, only 47% of geo-referenced neritic tuna catch data were available by the submission deadline. In addition to the major neritic tuna fishing fleets, several other CPCs, including both coastal and industrial fleets, did not report geo-referenced catch data for these species. A further 20% of the data were submitted after the deadline, while 32% remained unavailable in 2026.

## Size-Frequency data

### Availability and timeliness

Geo-referenced size-frequency data remain the least available dataset compared with retained catch and geo-referenced catch-and-effort data. In 2026, 59% of geo-referenced size-frequency data were available by the submission deadline. Interestingly, Iran submitted its size-frequency data on time,

despite delays in submitting the other two datasets. India also made progress by providing size-frequency data for some species in 2026. Nevertheless, significant gaps remain among both coastal and industrial fleets accounting for substantial catches of IOTC species. Overall, 41% of geo-referenced size-frequency data remained unavailable in 2026 (**Fig. 4**).

Data gaps among industrial fleets are mainly associated with newly established fisheries, particularly the large-scale industrial purse-seine fleets operating in Oman, Kenya and Tanzania. In coastal fisheries, the challenges are largely related to limited sampling coverage of IOTC species. In some cases, other stakeholders involved in fisheries sampling programmes focus exclusively on non-IOTC species, further limiting the availability of biological data for IOTC species.

The collection of biological samples from billfish species remains particularly challenging for coastal fleets. In many cases, facilities and observer coverage are insufficient to allow biological data to be recorded on board vessels before processing, as billfish are often landed in processed forms, such as headed and tail-off. Furthermore, in some fisheries, the relatively low commercial value of billfish has resulted in limited emphasis being placed on the collection of biological data for these species (Khorshidi 2023).

With the increasing adoption of artificial intelligence (AI) technologies in fisheries, new opportunities are emerging for the identification of fish species and the collection of biological information on board fishing vessels (Ou et al. 2023; Yang et al. 2025). These technologies could offer useful solutions to address existing challenges in biological data collection, particularly in fisheries where conventional sampling methods remain difficult to implement.

- *Tropical tunas*:

In recent years, an increasing number of fleets have been collecting geo-referenced size-frequency data for tropical tunas. However, compared with 2025, a decline in the level of size-frequency data reporting was observed in 2026. Only 66% of the expected size-frequency data were available by the reporting deadline, representing the lowest reporting level since 2021. This decline is partly attributed to poor-quality data submitted by some CPCs, which are currently under review. Furthermore, in 2025, sampling activities conducted by major fleets targeted only non-IOTC species.

- *Temperate tunas*:

The availability of geo-referenced size-frequency data for temperate tunas declined in 2026, with only 76.2% of the expected data available overall. This represents a notable decrease compared with 2025, when almost all CPCs catching temperate tunas collected biological samples for these species, resulting in a record reporting level of 96.6608272%. Similar to the situation for tropical tunas, major fleets did not report size-frequency data for temperate tunas in 2026.

- *Billfish*:

The availability of geo-referenced size-frequency data for billfish species remained low in 2026, with less than 50% of the expected data available in total. The reporting level was comparable to that recorded in 2025, at 42%. As previously highlighted, the processing of billfish prior to landing limits the ability of many fisheries to collect representative size-frequency samples. In particular, when catches are landed as body parts rather than whole fish, species identification at the point of landing becomes challenging. This issue is particularly prevalent in gillnet fisheries, which currently account for the majority of billfish catches.

- *Neritic tunas and seerfish*:

The collection of size-frequency samples for neritic tunas continued to decline in 2026. Following some improvement in 2025, when data availability reached 84%, reporting declined substantially to 52%. in

2026. Despite this overall decline, size-frequency data were reported for the first time by fleets such as India and Tanzania. However, the data submitted by India were constrained by limited fisheries information, with catches aggregated under a combined gillnet and longline category, making it difficult to distinguish the contribution of individual fishing gears. Furthermore, the number of samples collected from Tanzania's coastal fisheries remained low. Indonesia, on the other hand, did not report any size-frequency data for neritic tunas in 2026.

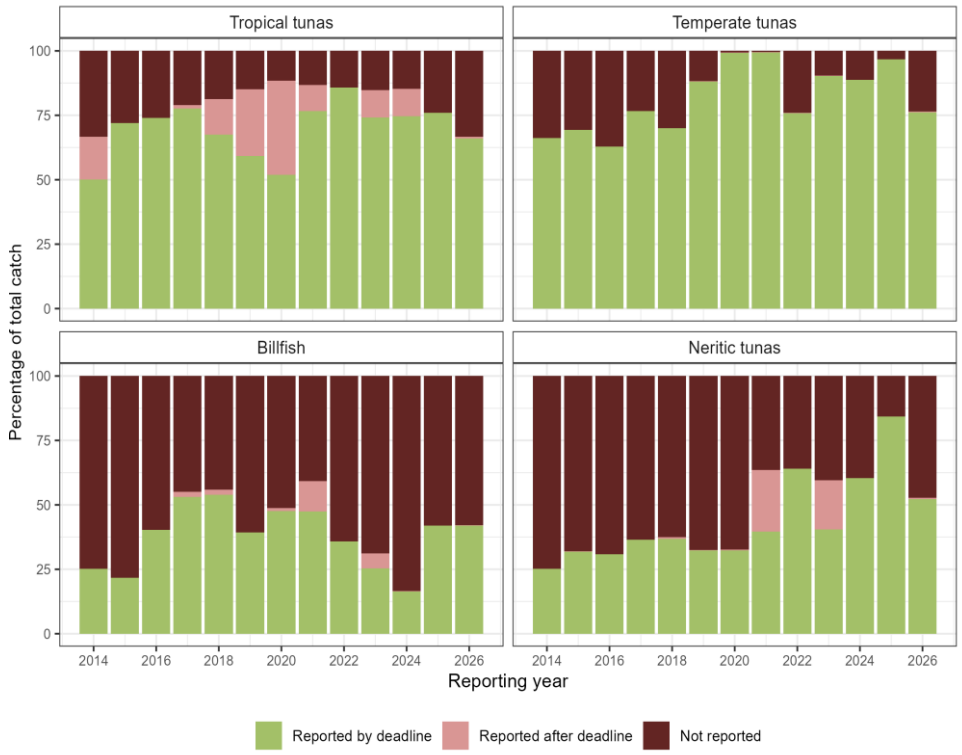


**Fig. 4.** Annual percentage of total retained catch of each of the IOTC species groups according to the date of submission of the size-frequency data by each fleet to the IOTC Secretariat. The submission deadline is the 30th June of each year

# Overview of the Status of the Data Reported for 2025

## Retained Catch, Catch and Effort, and Size-Frequency Data

Overall, data reporting in 2026 was satisfactory, with several CPCs making considerable efforts to improve data quality and ensure timely submission. In 2026, the Secretariat provided all CPCs with feedback on the major datasets, including comparisons between retained catch and catch-and-effort data, as well as size-frequency data. This feedback enabled CPCs to review and revise their submissions based on the Secretariat's data validation findings. The feedback process contributed to improvements in data quality and facilitated subsequent data processing and validation.

In 2026, approximately 84% of retained catch data were available by the reporting deadline, with overall availability subsequently at around 99%. This demonstrates the continued efforts made by CPCs to improve their data reporting. Reporting of catch-and-effort data also improved, with 83% of the expected data available by the WPDCS meeting. However, the reporting of size-frequency data remained a challenge in 2026.

Overall, when examined by fishery type, retained catch data were available from most CPCs across all fisheries, with only Sudan and Yemen not submitting the required data. Similarly, only a small number

of CPCs did not report catch-and-effort data. In contrast, the availability of size-frequency data remained comparatively low, particularly for small- and medium-scale fisheries (**Table 6**). Appendix I provides a detailed overview of the availability of the three datasets by species group.

As highlighted above, Somalia made significant improvements in its fisheries data reporting in 2026. Retained catch data for IOTC species were reported by individual species and fishery. Furthermore, the geo-referenced data were appropriately stratified by fishery, month and grid, providing the spatial and temporal detail required for fisheries monitoring and scientific assessments. Similarly, Oman reported catch-and-effort data for all its fisheries in 2026, with appropriate spatial and temporal stratification by fishery, month and grid, and aggregation according to the respective fisheries.

In 2026, substantial changes were identified in the catch data submitted by these two fleets, as well as by several other fleets. These changes and their implications are further analysed in Document 9#.

**Table 6.** Retained catches (metric tonnes; t) and data reporting quality of the main IOTC datasets by fishery group (industrial purse seine, industrial longline, and all other fisheries) and flag as reported in 2026 (for reference year 2025) for all IOTC species and sharks caught by tuna and tuna-like species in the Indian Ocean. RC = retained catch; CE = catch and effort; SF = size frequencies. Colour key is given in score key table

| Fishery group | CPC | Fleet | Catch (t) | RC | CE | SF |
|---|---|---|---|---|---|---|
| Purse seine | AUS | | 4,482 | | | |
| | EU | EUESP | 142,937 | | | |
| | | EUFRA | 66,233 | | | |
| | | EUITA | 8,333 | | | |
| | IDN | | 79,299 | | | |
| | KEN | | 12,913 | | | |
| | KOR | | 17,646 | | | |
| | MUS | | 33,627 | | | |
| | OMN | | 51,822 | | | |
| | SYC | | 134,050 | | | |
| | TZA | | 9,401 | | | |
| Longline | AUS | | 568 | | | |
| | CHN | CHN | 17,810 | | | |
| | | TWN | 63,124 | | | |
| | EU | EUESP | 8,794 | | | |
| | | EUFRA | 2,207 | | | |
| | | EUPRT | 1,517 | | | |
| | IDN | | 30,536 | | | |
| | JPN | | 8,297 | | | |
| | KEN | | 338 | | | |
| | KOR | | 1,935 | | | |
| | LKA | | 20,272 | | | |
| | MUS | | 338 | | | |
| | MYS | | 4,006 | | | |
| | OMN | | 981 | | | |
| | SYC | | 16,345 | | | |
| | TZA | | 88 | | | |
| | ZAF | | 952 | | | |
| Other | AUS | | 242 | | | |
| | BGD | | 23,191 | | | |
| | COM | | 17,064 | | | |
| | EU | EUFRA | 831 | | | |
| | GBR | | 17 | | | |
| | IDN | | 393,429 | | | |
| | IND | | 399,149 | | | |
| | IRN | | 316,268 | | | |
| | KEN | | 5,804 | | | |
| | LKA | | 133,925 | | | |
| | MDG | | 8,694 | | | |
| | MDV | | 149,304 | | | |
| | MOZ | | 15,406 | | | |
| | MYS | | 22,480 | | | |
| | OMN | | 108,143 | | | |
| | PAK | | 55,600 | | | |
| | SDN | | 175 | | | |
| | SOM | | 112,870 | | | |
| | SYC | | 525 | | | |
| | THA | | 18,925 | | | |
| | TZA | | 13,371 | | | |

| Fishery group | CPC | Fleet | Catch (t) | RC | CE | SF |
|---|---|---|---|---|---|---|
| | YEM | | 42,720 | | | |

## Discard

One of the datasets that CPCs are required to submit annually concerns catches that are not landed, including both target species and bycatch species discarded by fisheries. It is well recognised that industrial fisheries may discard catches that have no commercial value, as well as species for which landing is prohibited. Information on these discarded catches should therefore be reported by fishery. In contrast, coastal fisheries are generally considered to utilise most of the species caught, including for local consumption. Nevertheless, certain prohibited species may also be caught in coastal fisheries, but information on whether these species are discarded or landed is rarely documented.

**Table 1** summarises the CPCs that reported discard data, including those reporting zero discards. The reported information was provided either as the number of individuals discarded or as estimates of discarded catches in round weight, with the latter often being raised estimates. An analysis of discard data by fleet indicates that several species are discarded across different fisheries.

Discard data reported as numbers of individuals were available from several industrial fisheries, including longline and purse seine fleets, as well as one coastal fleet. The coastal fleet, comprising gillnet, hook, coastal purse seine and other fisheries in Sri Lanka, reported the numbers of individuals discarded. These data also included interactions with turtles, cetaceans and sharks. Several longline fleets reported interactions with cetaceans, sharks, seabirds, turtles and rays. In purse seine fisheries, commonly reported discarded species included tuna species, particularly those with limited or no commercial value. Discards of non-IOTC species, sharks and turtles were also reported. Additionally, one fleet reported seabird interactions in its purse seine fishery (**Fig. 5**).

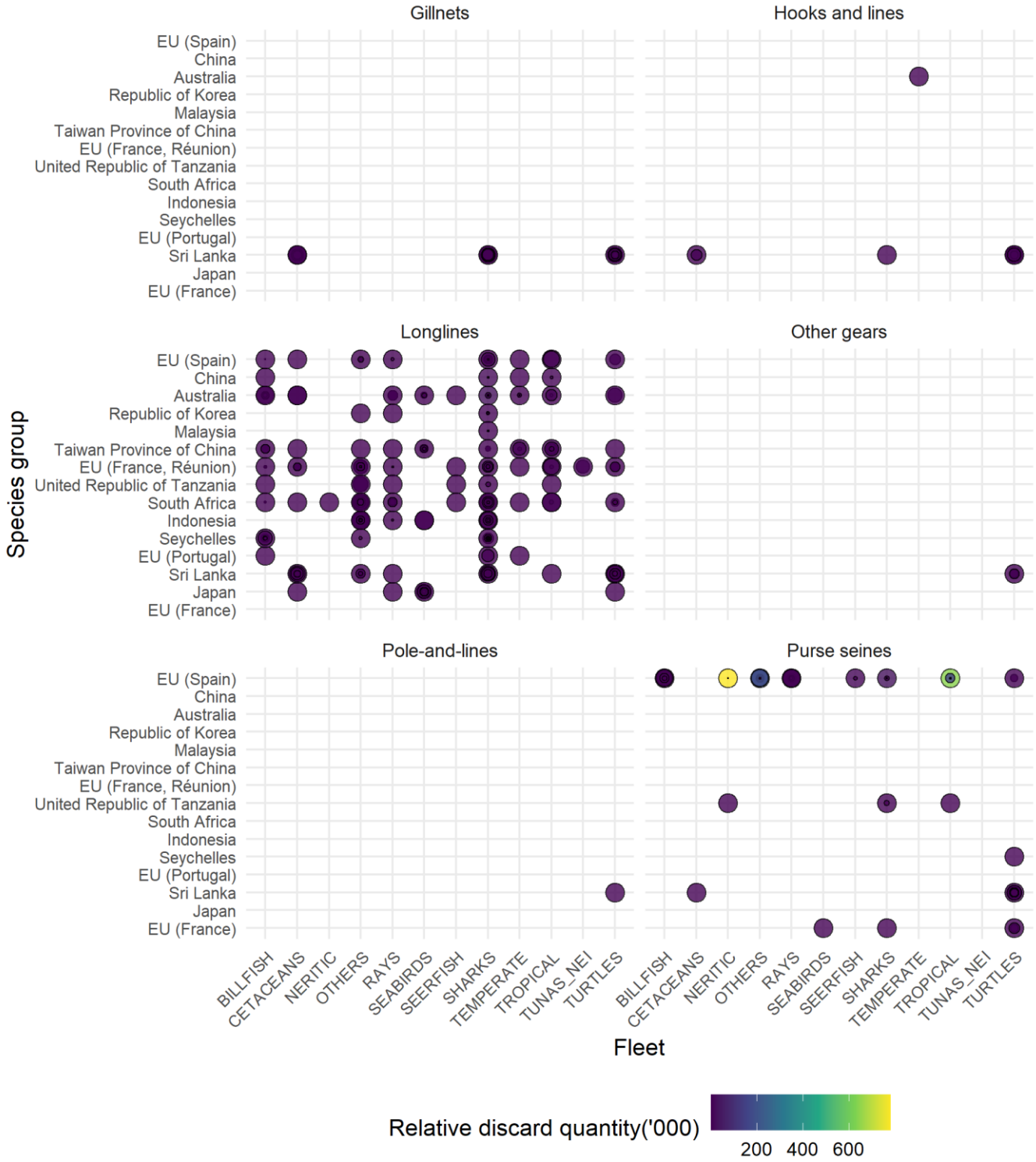


**Fig. 5.** Availability of discarded data reported in number

In contrast, reporting of discarded catches in round weight remains limited, with only five fleets providing data in this format. For longline fisheries, sharks and billfish were among the commonly reported discarded species. In purse seine fisheries, a wider range of discarded species was reported, including turtles, rays and sharks (**Fig. 6**).

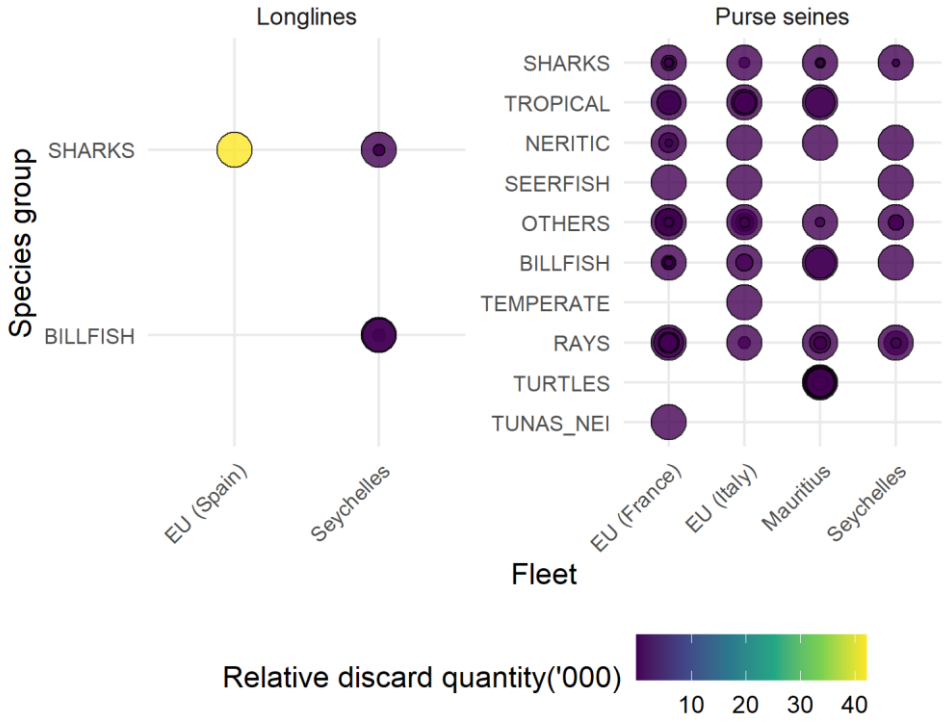


**Fig. 6.** Availability of discarded data reported in weight

## Overview of IOTC Fishing Craft Statistics

Over time, fleet structures may change as fisheries expand into new activities, or as the number of vessels operating in existing fisheries increases or declines. While some CPCs maintain comprehensive information on their fishing fleets, others, particularly those with predominantly coastal and small-scale fisheries, have limited knowledge of the number of active vessels operating each year.

Information on industrial fishing vessels, including vessels greater than and less than 24 m in length that operate on the high seas or participate in the export of tuna and tuna-like species products, is generally well documented through the IOTC Record of Authorised Vessels (RAV). CPCs with vessels in RAV, are also required to submit annual Active Vessel Lists (AVL), reporting the vessels that operated during the previous year. These reporting mechanisms are generally well maintained, with most CPCs providing the required information in a timely manner. However, vessels operating exclusively within national jurisdictions and not involved in international trade are not required to be included in either the RAV or AVL. Consequently, information on these vessels is primarily obtained through fishing craft statistics (form 2FC), which are submitted on a voluntary basis.

For small-scale fisheries, the principal method used to estimate the number of vessels is the boat frame survey. In recent years, some CPCs have also sought to establish small-vessel registries by providing incentives for vessel owners to register their boats. Boat frame surveys are typically conducted at intervals of two to five years because of the substantial financial and human resources required, particularly in countries with large coastlines and numerous landing sites. As a result, statistics on fishing craft operating in coastal fisheries may be unreliable where vessel registries are incomplete, frame surveys are conducted infrequently, or there is limited information on the actual number of vessels operating annually.

An analysis of the available fishing craft statistics indicates considerable interannual variability in the reported number of vessels operating in artisanal fisheries, whereas the number of large-scale vessels has remained relatively stable over time (**Fig. 7**).

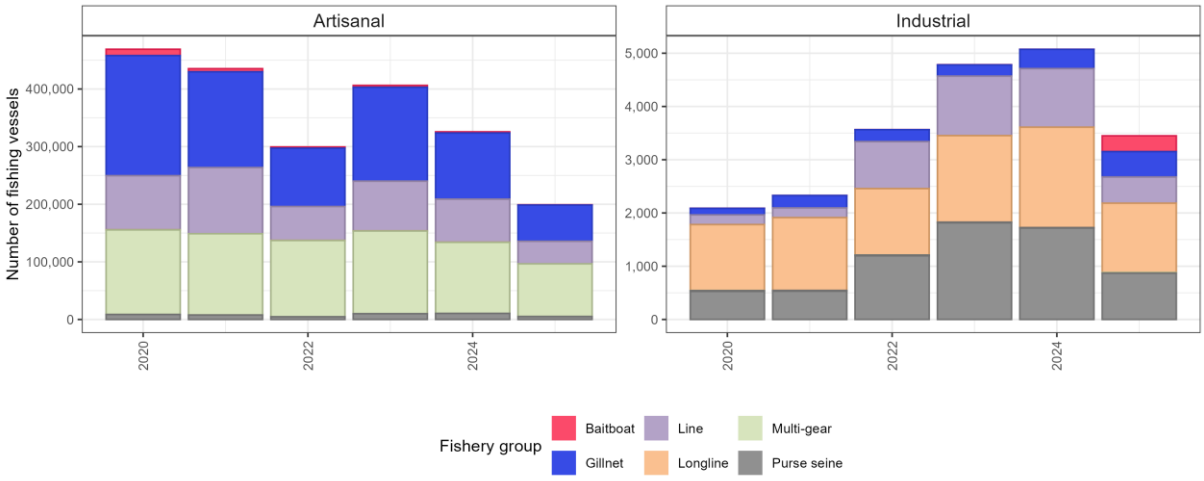


**Fig. 7.** Fishing craft statistics by fishery category: industrial and artisanal available for years 2020-2025

The number of fishing craft reported as operating in small-scale fisheries showed substantial variation during the period 2020-2025. In 2025, the reported number of vessels declined to approximately half the level reported in 2024. This decrease was primarily driven by a reduction in the number of vessels reported by Indonesia, which declined by approximately 75%, together with the absence of fishing craft statistics from several CPCs. In contrast, Somalia provided fishing craft statistics for the first time in 2025.

The number of large-scale vessels showed an increasing trend in recent years. In particular, the number of purse seine vessels reported as active doubled in 2025. This increase was largely attributable to Indonesia reporting a greater number of purse seine vessels operating as industrial fisheries. Although these vessels operate exclusively within national jurisdictional waters, they supply export markets and are therefore classified within the industrial fishing sector.

**Fishing craft statistics reported in 2026**

**Table 1** summarises the availability of fishing craft statistics submitted by CPCs in 2026. For CPCs that did not provide information, the status is indicated as Voluntary (V) rather than Not Reported, as reporting fishing craft statistics is not mandatory until 2030 under Resolution 26/06. In addition to information submitted through Form 2FC, the Secretariat extracted data on active industrial fishing vessels from the AVL system for 2025 to assess trends in fleet size for industrial fisheries, for which fishing craft statistics are generally not available through Form 2FC. Considerable variation was observed among fleets and fishery groups, with the number of active vessels generally reflecting the relative level of fishing activity.

The multi-gear and multi-species nature of artisanal fisheries makes it difficult to allocate fishing craft to specific gear categories without risking double counting. Consequently, fishing craft statistics for artisanal fleets were generally aggregated into broad fishery groups, such as multi-gear (vessels operating a variety of gear types), line (vessels using line-based gears), and gillnet (vessels using vertically suspended nets). For some CPCs reporting vessels as multi-gear, all fishing craft were classified under the category Other, whereas for others the reported number of vessels was apportioned across the relevant fishery groups. Fishing craft statistics were available for several CPCs with artisanal fisheries in 2025; however, some countries, particularly those with large artisanal fleets

such as India, continue to face challenges in compiling and reporting these data. As a result, the coverage and level of detail in fishing craft statistics remain variable among CPCs (**Table 7**).

**Table 7.** Availability of number of the active vessels by fishery and fleet for artisanal fisheries in 2025

| CPC code | Fleet code | Baitboat | Gillnet | Line | Other | Purse seine |
|---|---|---|---|---|---|---|
| ARE* | | | | | | |
| AUS | | | | 31 | | |
| BGD | | | 23,101 | 94 | 2,662 | |
| BHR* | | | | | | |
| COM | | | | 5,164 | | |
| DJI* | | | | | | |
| EGY* | | | | | | |
| ERI | | | | | | |
| EU | EUMYT | | | 169 | | |
| | EUREU | | | 156 | | |
| GBR | | | | | | |
| IDN | | 455 | 14,840 | 22,102 | 2,328 | 286 |
| IND | | | | | | |
| IRN | | | 5,403 | 1,771 | | |
| JOR* | | | | | | |
| KEN | | | 385 | 9 | | |
| KWT* | | | | | | |
| LKA | | 66 | 1,719 | 3,569 | 43,474 | 2,160 |
| MDG | | | | | 2,938 | |
| MDV | | | | | | |
| MMR* | | | | | | |
| MOZ | | | | | | |
| MYS | | | 8,040 | 140 | 2,342 | 268 |
| OMN | | | 8,422 | 5,894 | 4,509 | |
| PAK | | | 850 | | | |
| QAT* | | | | | | |
| SAU* | | | | | | |
| SDN | | | | | | |
| SOM | | | 7,983 | 7,983 | | |
| SYC | | | | 87 | | |
| THA | | | | | | 218 |
| TMP* | | | | | | |
| TZA | | | 5,716 | 5,716 | | 5,716 |
| YEM | | | | | | |

The number of active vessels operating in industrial fisheries was available for most fleets and fishery groups (**Table 8**). For fleets that operate both industrial and artisanal components within the same fishery, vessel numbers could, in some cases, be disaggregated between the two sectors. However, for other fleets, all vessels were classified either as industrial or artisanal, reflecting differences in the level of detail available in the source data.

**Table 8.** Availability of the number of active vessels by fishery and fleet for industrial fisheries in 2025

| CPC code | Fleet code | Baitboat | Gillnet | Line | Longline | Other | Purse seine |
|---|---|---|---|---|---|---|---|
| AUS | | 1 | | | 14 | | 5 |
| CHN | CHN | | | | 65 | | |
| | TWN | | | | 177 | | |
| EU | EUESP | | | | 16 | | 12 |
| | EUFRA | | | | | | 10 |
| | EUITA | | | | | | |
| | EUPRT | | | | 2 | | |
| | EUREU | | | | 21 | | |
| IDN | | | | 61 | 231 | | 2,544 |
| IND | | | | | | | |
| IRN | | | 246 | | | | |
| JPN | | | | | 39 | | |
| KEN | | | | | 4 | | 2 |
| KOR | | | | | 4 | | 2 |
| LKA | | | 230 | | 555 | | 431 |
| MDG | | | | | 5 | | |
| MDV | | 296 | | | | | |
| MUS | | | | | 12 | | 3 |
| MYS | | | | | 32 | | |
| OMN | | | | | 17 | | 8 |
| SYC | | | | | 87 | | 15 |

| CPC code | Fleet code | Baitboat | Gillnet | Line | Longline | Other | Purse seine |
|---|---|---|---|---|---|---|---|
| **TZA** | | | | | 1 | | 1 |
| **ZAF** | | | | | 19 | | |

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# Appendices

## Appendix I: Availability and reporting quality of IOTC datasets for 2025

### Tropical Tuna Species

**Tab. A1:** Retained catches (metric tonnes; t) and availability of the main IOTC datasets by fishery group (purse seine, longline, and all other fisheries) and fleet as reported in 2026 (for reference year 2025) for tropical tunas of the Indian Ocean. B = bigeye tuna; S = skipjack tuna; Y = yellowfin tuna. RC = retained catch; CE = catch and effort; SF = size frequencies. Colour key is given in Table 6

| Fishery group | CPC | Fleet | Catch (t) | Species | RC | CE | SF |
|---|---|---|---|---|---|---|---|
| Purse seine | EU | EUESP | 140,936 | B,S,Y | | | |
| | | EUFRA | 64,309 | B,S,Y | | | |
| | | EUITA | 8,153 | B,S,Y | | | |
| | IDN | | 70,988 | B,S,Y | | | |
| | KEN | | 12,732 | B,S,Y | | | |
| | KOR | | 17,646 | B,S,Y | | | |
| | MUS | | 33,067 | B,S,Y | | | |
| | OMN | | 51,270 | B,S,Y | | | |
| | SYC | | 130,693 | B,S,Y | | | |
| | TZA | | 9,170 | B,S,Y | | | |
| Longline | AUS | | 79 | B,S,Y | | | |
| | CHN | CHN | 7,849 | B,S,Y | | | |
| | | TWN | 17,767 | B,S,Y | | | |
| | EU | EUESP | 68 | B,S,Y | | | |
| | | EUFRA | 751 | B,Y | | | |
| | | EUPRT | 9 | B | | | |
| | IDN | | 13,057 | B,S,Y | | | |
| | JPN | | 3,797 | B,S,Y | | | |
| | KEN | | 16 | B,S,Y | | | |
| | KOR | | 1,459 | B,S,Y | | | |
| | LKA | | 15,267 | B,S,Y | | | |
| | MUS | | 248 | B,S,Y | | | |
| | MYS | | 965 | B,S,Y | | | |
| | OMN | | 905 | B,Y | | | |
| | SYC | | 12,034 | B,Y | | | |
| | TZA | | 61 | B,Y | | | |
| | ZAF | | 560 | B,Y | | | |
| Other | AUS | | 2 | S,Y | | | |
| | BGD | | 152 | S | | | |
| | COM | | 15,621 | B,S,Y | | | |
| | EU | EUFRA | 344 | B,S,Y | | | |
| | GBR | | 1 | Y | | | |
| | IDN | | 117,694 | B,S,Y | | | |
| | IND | | 88,676 | B,S,Y | | | |
| | IRN | | 129,159 | B,S,Y | | | |
| | LKA | | 57,234 | B,S,Y | | | |
| | MDG | | 767 | B,S,Y | | | |
| | MDV | | 149,207 | B,S,Y | | | |
| | MOZ | | 297 | B | | | |
| | MYS | | 20 | S | | | |
| | OMN | | 61,232 | S,Y | | | |
| | PAK | | 10,014 | S,Y | | | |
| | SOM | | 51,719 | B,S,Y | | | |
| | SYC | | 355 | B,Y | | | |
| | THA | | 3,814 | S,Y | | | |
| | TZA | | 2,868 | B,S,Y | | | |
| | YEM | | 36,180 | Y | | | |

## Temperate Tuna Species

**Tab. A2:** Retained catches (metric tonnes; t) and data reporting quality of the main IOTC datasets by fishery group and fleet as reported in 2026 (for reference year 2025) for temperate tunas of the Indian Ocean. A = albacore; S = southern bluefin tuna. RC = retained catch; CE = catch and effort; SF = size frequencies. Colour key is given in Table 6

| Fishery group | CPC | Fleet | Catch (t) | Species | RC | CE | SF |
|---|---|---|---|---|---|---|---|
| Purse seine | AUS | | 4,482 | S | | | |
| | EU | EUESP | 30 | A | | | |
| | | EUFRA | 34 | A | | | |
| | | EUITA | 54 | A | | | |
| | IDN | | 6 | A | | | |
| | KEN | | 6 | A | | | |
| | MUS | | 13 | A | | | |
| | SYC | | 47 | A | | | |
| Longline | AUS | | 381 | A,S | | | |
| | CHN | CHN | 5,540 | A | | | |
| | | TWN | 26,214 | A,S | | | |
| | EU | EUESP | 4 | A | | | |
| | | EUFRA | 332 | A | | | |
| | | EUPRT | 1 | A | | | |
| | IDN | | 6,974 | A,S | | | |
| | JPN | | 3,841 | A,S | | | |
| | KOR | | 230 | A,S | | | |
| | LKA | | 66 | A | | | |
| | MUS | | 15 | A | | | |
| | MYS | | 2,576 | A | | | |
| | OMN | | 19 | A | | | |
| | SYC | | 1,240 | A | | | |
| | TZA | | 4 | A | | | |
| | ZAF | | 67 | A,S | | | |
| Other | AUS | | 19 | A,S | | | |
| | COM | | 52 | A | | | |
| | EU | EUFRA | 101 | A | | | |
| | IDN | | 6,383 | A,S | | | |
| | IND | | 1 | A | | | |
| | LKA | | 746 | A | | | |
| | MDG | | 19 | A | | | |
| | SOM | | 744 | A | | | |

## Billfish Species

**Tab. A3:** Retained catches (metric tonnes; t) and data reporting quality of the main IOTC datasets by fishery group and fleet as reported in 2026 (for reference year 2025) for billfish species of the Indian Ocean. F = Indo-Pacific sailfish; M = marlins; P = shortbill spearfish; S = swordfish. RC = retained catch; CE = catch and effort; SF = size frequencies. Colour key is given in Table 6

| Fishery group | CPC | Fleet | Catch (t) | Species | RC | CE | SF |
|---|---|---|---|---|---|---|---|
| Purse seine | EU | EUESP | 24 | F,M | | | |
| | | EUFRA | 29 | F,M,P | | | |
| | | EUITA | 1 | F,M | | | |
| | IDN | | 465 | F,M,S | | | |
| | KEN | | 3 | M | | | |
| | SYC | | 28 | M | | | |
| Longline | AUS | | 104 | M,P,S | | | |
| | CHN | CHN | 2,568 | F,M,P,S | | | |
| | | TWN | 4,117 | F,M,P,S | | | |
| | EU | EUESP | 4,496 | F,M,P,S | | | |
| | | EUFRA | 1,083 | F,M,P,S | | | |
| | | EUPRT | 802 | F,M,S | | | |
| | IDN | | 3,454 | F,M,P,S | | | |
| | JPN | | 471 | F,M,S | | | |
| | KEN | | 264 | F,M,S | | | |
| | KOR | | 192 | F,M,P,S | | | |
| | LKA | | 4,231 | F,M,S | | | |
| | MUS | | 46 | F,M,S | | | |
| | MYS | | 197 | F,M,P,S | | | |
| | OMN | | 55 | F,M,S | | | |
| | SYC | | 1,766 | F,M,P,S | | | |
| | TZA | | 16 | F,M,S | | | |
| | ZAF | | 272 | F,M,S | | | |
| Other | BGD | | 4,624 | F,M,S | | | |
| | COM | | 570 | F,M,P,S | | | |
| | EU | EUFRA | 215 | F,M,P,S | | | |
| | IDN | | 8,794 | F,M,P,S | | | |
| | IND | | 27,950 | F,M,S | | | |
| | IRN | | 28,674 | F,M,P,S | | | |
| | KEN | | 571 | F | | | |
| | LKA | | 7,298 | F,M,P,S | | | |
| | MDG | | 150 | F,M,S | | | |
| | MDV | | 2 | F,M | | | |
| | MYS | | 209 | F,M,S | | | |
| | OMN | | 1,655 | F,M,S | | | |
| | PAK | | 4,487 | F,M | | | |
| | SOM | | 20,765 | F,M,S | | | |
| | SYC | | 43 | F,M,P,S | | | |
| | THA | | 70 | F | | | |
| | TZA | | 423 | F,S | | | |

## Neritic Species

**Tab. A4:** Retained catches (metric tonnes; t) and data reporting quality of the main IOTC datasets by fishery group and fleet as reported in 2026 (for reference year 2025) for neritic tunas and seerfish of the Indian Ocean. B = bullet tuna; C = narrow-barred Spanish mackerel; F = frigate tuna; G = Indo-Pacific king mackerel; K = kawakawa; L = longtail tuna; X = seerfish. RC = retained catch; CE = catch and effort; SF = size frequency. Colour key is given in Table 6

| Fishery group | CPC | Fleet | Catch (t) | Species | RC | CE | SF |
|---|---|---|---|---|---|---|---|
| Purse seine | EU | EUESP | 1,491 | F,K,X | | | |
| | | EUFRA | 1,551 | F,K,X | | | |
| | | EUITA | 101 | F,K,X | | | |
| | IDN | | 5,764 | B,C,F,G,K,L,X | | | |
| | KEN | | 108 | F,X | | | |
| | MUS | | 463 | F,X | | | |
| | OMN | | 552 | F | | | |
| | SYC | | 2,769 | F,X | | | |
| | TZA | | 217 | F | | | |
| Longline | CHN | CHN | 28 | X | | | |
| | | TWN | 75 | B,C,F,G,K,L | | | |
| | EU | EUESP | 2 | X | | | |
| | | EUFRA | 4 | X | | | |
| | IDN | | 503 | B,C,G,K,X | | | |
| | LKA | | 188 | B,C,F,G,K,L,X | | | |
| | ZAF | | 1 | X | | | |
| Other | AUS | | 206 | C,K,L,X | | | |
| | BGD | | 11,003 | B,C,F,G,K | | | |
| | COM | | 564 | B,C,F,G,K,L,X | | | |
| | EU | EUFRA | 58 | C,F,K,X | | | |
| | GBR | | 9 | K,X | | | |
| | IDN | | 249,615 | B,C,F,G,K,L,X | | | |
| | IND | | 236,978 | B,C,F,G,K,L,X | | | |
| | IRN | | 150,011 | B,C,F,G,K,L,X | | | |
| | KEN | | 1,069 | X | | | |
| | LKA | | 12,830 | B,C,F,G,K,L,X | | | |
| | MDG | | 4,456 | B,C,F,G,K,X | | | |
| | MDV | | 93 | F,K,X | | | |
| | MOZ | | 15,076 | C,F,K,X | | | |
| | MYS | | 17,899 | B,C,F,G,K,L,X | | | |
| | OMN | | 44,843 | C,F,K,L | | | |
| | PAK | | 27,832 | B,C,F,K,L | | | |
| | SDN | | 175 | C | | | |
| | SOM | | 34,978 | B,C,F,G,K,L | | | |
| | SYC | | 39 | K,X | | | |
| | THA | | 15,041 | B,C,F,G,K,L | | | |
| | TZA | | 3,745 | B,C,F,G,K,L,X | | | |

## Main Shark Species

**Tab. A5:** Retained catches (metric tonnes; t) and data reporting quality of the main IOTC datasets by fishery group and fleet as reported in 2026 (for reference year 2025) for the most commonly caught sharks of the Indian Ocean. H = hammerhead sharks; L = blue shark; M = mako sharks; O = other sharks; P = pelagic thresher; S = silky shark; W = oceanic whitetip shark. RC = retained catch; CE = catch and effort; SF = size frequencies. Colour key is given in Table 6

| Fishery group | CPC | Fleet | Catch (t) | Species | RC | CE | SF |
|---|---|---|---|---|---|---|---|
| Purse seine | IDN | | 77 | L,M,O | | | |
| Longline | AUS | | 1 | M | | | |
| | CHN | TWN | 2,697 | L,S | | | |
| | EU | EUESP | 4,165 | L,M | | | |
| | | EUFRA | 8 | L,M | | | |
| | | EUPRT | 701 | L,M | | | |
| | IDN | | 2,041 | L,M,O,S | | | |
| | JPN | | 188 | L,M | | | |
| | KEN | | 55 | L,M,O,S | | | |
| | LKA | | 352 | H,L,M,O,S | | | |
| | OMN | | 2 | L | | | |
| | SYC | | 228 | L,O,S | | | |
| | ZAF | | 43 | L,M | | | |
| Other | AUS | | 2 | H,O | | | |
| | COM | | 40 | L,S,W | | | |
| | EU | EUFRA | 3 | M | | | |
| | IDN | | 1,460 | L,M,O,S | | | |
| | IND | | 20,714 | B,L,M,O,P,S,W | | | |
| | IRN | | 1,652 | H,L,M,O,S,W | | | |
| | KEN | | 1,108 | O,W | | | |
| | LKA | | 1,454 | H,L,M,O,S | | | |
| | MDG | | 805 | H,L,M,O,S | | | |
| | MYS | | 580 | O | | | |
| | PAK | | 831 | M,O,P,S | | | |
| | SOM | | 1,335 | L,S,W | | | |
| | SYC | | 7 | H,L,O | | | |
| | TZA | | 4,959 | B,H,L,O,S,W | | | |

# Appendix II: Data issues and proposed actions

**Tab. A6:** Main data issues identified by the WPDCS and actions proposed to address them. RC = retained catch; CE = catch and effort; SF = size frequencies; ROS = Regional Observer Scheme

| Dataset | CPCs | Fisheries | Main issues | Proposed actions |
|---|---|---|---|---|
| RC | Comoros | Coastal fisheries | Lack of information on data collection and processing systems in place. Some high interannual variability in catch | Following the country mission in 2026, follow-up on the system to assist in reviewing the system to meet current fishery structure |
| | India | | Catches reported for various regions by fisheries, rather than aggregated by main IOTC areas. Catches for shark not available at species level | Follow-up of in-country visit to India in October 2025 |
| | Indonesia | Coastal, longline, and surface fisheries | Potential issues in sampling representativeness and species identification; lack of data and information reported for elasmobranch species | The WPDCS will review the methodology of estimation of Indonesia pelagic sharks in 2026 |
| | Kenya | Coastal fisheries, purse seine, and longline fisheries | Lack of consistency in historical catches | Liaise with Kenya to assist with data mining and potential re-estimation of historical catch time series |
| | Madagascar | Coastal and longline fisheries | Some issues to fully estimate catches of the small-scale fisheries, and the sampling program started at the end of 2024. Important gaps in data collection coverage and processing systems | Follow-up of mission conducted in 2025 and 2026, Madagascar will present their current estimation methodology to WPDCS for reivew. |
| | Pakistan | Drifting gillnet fishery | Additional validation of latest revised catch series | Liaise with Pakistan in terms of support for data appraisal |
| | Somalia | Coastal fisheries | Retained catch data reported for the first time for 2024. No historical time series | Support to national initiatives (e.g., Fisheries Data Collection Working Group) for the validation of databases and data collection programmes |
| | Yemen | Handline fishery | No retained catch data estimated | Continue liaising with Yemen to improve data reporting and potentially revise historical catches |
| CE | All | Most fisheries | Data either not submitted, or fall short of IOTC reporting requirements | Improvement of guidelines and workshop and bilateral meetings on reporting obligations |

| Dataset | CPCs | Fisheries | Main issues | Proposed actions |
|---|---|---|---|---|
| | | Coastal fisheries | Failure to report catches and effort per month for their coastal fisheries for some CPCs | As a minimum, request CPCs to report catches and fishing by species, gear, and month, in addition to the total numbers of fishing craft operated by gear, and month (or year) |
| | Oman | Longline fisheries | Data either not submitted, or fall short of the IOTC data reporting requirements | Oman improved the reporting of longline data for 2025. The Secretariat will see the possibility of retrieving historical data |
| | Indonesia | Coastal, longline and surface fisheries | Low logbook coverage in longline and surface fisheries; potential issues of species identification for neritic tunas; lack of information on anchored FADs | Strengthen management and validation of logbook data – particularly issues of low reporting rates of submitted logbooks (<10% in recent years) |
| | Oman | Handline and gillnet fisheries | Data not complete or not submitted by IOTC standards | In 2026, Oman reivew the data processing system, and improved data for the coastal fisheries submitted. Will follow-up for historical data |
| | Pakistan | Drifting gillnet fishery | Data not submitted | Liaise with Pakistan for in-country mission to assess data collection and reporting systems in place, assess the current status and data collected through the self-reporting programme, and support data reporting in accordance with IOTC standards |
| | Madagascar | Coastal fisheries | Issues with data collection, inconsistency and not fully covering all areas | Follow-up of mission conducted in 2025 and 2026, Madagascar will present their current estimation methodology to WPDCS for reivew. |
| DA | Kenya, Tanzania, Oman, Mauritius | Purse seine fisheries | DFAD-related data generally incomplete and not by standards | Following the data review by Secretariat, including updating the form for flexibility, the DFAD data are improving |
| SF | India, Indonesia, Malaysia, Oman, Yemen | Coastal fisheries | No or very few size frequency data reported | Data supporting missions, reporting workshop, and pilot regional sampling programme |
| | I.R. Iran | Drifting gillnet fishery | Historical data not by IOTC standards | The IOTC Secretariat to continue providing assistance to I.R. Iran to submit size data by fishing ground and fisheries (rather than landing site) based on port sampling as logbooks are currently being fully implemented on a limited number of vessels |
| | China, Japan, Seychelles, Taiwan,China | Longline fisheries | Historical issues in sampling and inconsistencies between average weights derived from logbooks and size data | Follow-up of consultancy conducted in 2025 in collaboration with Seychelles to assess the quality of size data and implement quality control procedures at the source to enhance data quality |
| | Pakistan | Drifting gillnet fishery | No or very few size-frequency data reported | IOTC Secretariat liaising with Pakistan in terms of possible technical mission |

| Dataset | CPCs | Fisheries | Main issues | Proposed actions |
|---|---|---|---|---|
| ROS | All | Longline and surface fisheries | Low levels of implementation and reporting for some fleets | ROS training workshops were organised to enhance CPCs on the guidelines, and tools available to collect and process ROS data. |
| | | Coastal fisheries | Low levels of implementation and reporting | Extend of EMS pilot project to other countries besides Sri Lanka; Strengthen data collection mechanisms at landing sites (in-port observers, alternative data collection mechanisms). Virtual workshop conducted to CPCs with gillnet fisheries |
| | Sri Lanka | Coastal and offshore fisheries | Partial implementation of ROS requirements | IOTC Secretariat to continue supporting the adoption of the ROS standards and tools; possible follow-up on EMS trial projects dependent on funding. Follow-up on the pilot study of EMS in Sri Lanka for coastal fisheries |
| Socio-Economics | All | All | Limited data available, and collated within the IOTC database | The Secretariat to work closely with CPCs, in formulating the format for collecting socio-economic data. Furthermore, liaise with FAO and other institutes to access open repositories of fish sale price, import and export data, and national indicators. Encourage CPCs to report information of fish prices with Form 7PR |