



PROGRESS ON THE IMPLEMENTATION, DATA REPORTING, AND OUTCOMES OF THE IOTC REGIONAL OBSERVER SCHEME (ROS)

Author: IOTC Secretariat

Introduction

During its thirteenth session (S13), the Commission adopted Resolution 09/04, which established a Regional Observer Program with the primary objective of collecting verified catch data and other scientific information related to tuna and tuna-like species in the IOTC Area of Competence. Since then, the Resolution has been updated and along with the adoption of the Resolution 23/08 On electronic monitoring standards for IOTC fisheries, which can be used by CPCs to complement their observer data coverage, the tools employed for reporting data to the Secretariat required revision, and subsequent updating.

Although an increasing number of CPCs submitted data electronically, progress on implementing the ROS was not aligned with the provision of data using the ROS reporting tools. Consequently, not all formats used for submitting data were suitable for the automated and accurate extraction of information for storage in the ROS regional database.

Development of the database continued, in line with the current version of the reporting forms, which involved reviewing and updating the data catalogue to ensure harmonisation. However, due to technical limitations, it has not been possible to incorporate data provided by the CPCs since 2021.

This document aims to inform the WPDCS21 of the status of implementation and reporting to the IOTC Secretariat of the Regional Observer Scheme (ROS) data set out by Resolution 25/06 On a regional observer scheme, and the progress made on the updates of reporting tools, materials, and data compilation by the Secretariat.

The ROS Schema

Since its inception, the ROS has focused on collecting observations at sea through deploying observers on board vessels (Figure 1). As of 2022, electronic monitoring systems have been recognised as an additional source of observations at sea, as set out in Resolution 22/04 and supported later by the Resolution 23/08 (Figure 1). Although the monitoring of landings from artisanal vessels was considered part of the programme from the initial stages, no standards were developed, and the evaluation is based on country reports without a verification procedure. The following sections of the document are related to the observations at sea component, and the monitoring of artisanal landings is discussed in the ROS implementation section.



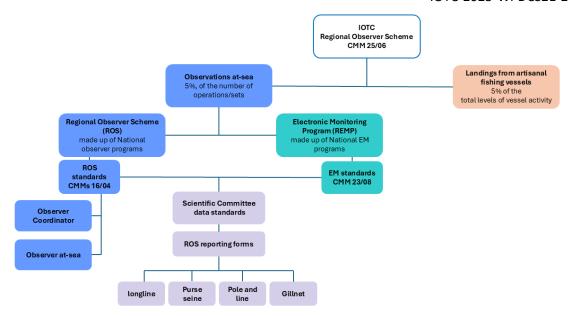


Fig. 1. Overview of the Regional Observer Schema (CMM 25/06) and related reporting requirements and methods.

Reporting tools

Last year the 27th meeting of the Scientific Committee (SC27) endorsed the revised lists of the ROS minimum data fields following a comprehensive review of the purse seine, longline and pole-and-line fisheries. The work was conducted by the WPDCS20, and includes the option to provide data collected through EMS, according to Resolution 23/08. The agreed fields and forms were also reviewed at the WGEMS05 and during intersessional meetings with key experts.

Following the approach of the mandatory statistical reporting forms, the consolidated ROS reporting forms were described according to the agreed data standard (Figure 2), including the description of each worksheet of the form (Figure 3), the data elements included and the specific reporting fields and formats (Figure 4). The four distinct gear group versions— longline, pole-and-line, and gillnets— corresponding to the main gears used in fisheries subject to the ROS data requirements are currently available on the reporting forms section of the IOTC webpage.

After persistent issues with the variety of reporting formats provided to the Secretariat, the Res. $\underline{25/06}$ specifies that the CPCs shall provide to the IOTC Secretariat, each report and observer data, following IOTC observer reporting templates and standards.

To reflect the complexity of the ROS forms, these data reporting templates are in the format of Microsoft Excel (XLSX) spreadsheets containing multiple sheets that correspond to different hierarchical levels of data to be reported. The Secretariat propose to conduct a dedicated ROS reporting workshop in 2026 to facilitate the implementation of the forms by the CPCs, as was previously done for the mandatory statistical forms, and develop, in parallel, a data quality control system procedure to be used as a verification tool by countries before submitting the data to the Secretariat (Annex I).





Regional Observer Scheme Datasets

The IOTC Regional Observer Scheme (ROS) was established to collect verified catch and scientific data on tuna and tuna-like species within the IOTC area. Its implementation, which began on 1 July 2010, is carried out entirely at the national level by IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs). Information on the ROS, including programme standards and observer training materials, is available on the ROS page of the IOTC website.

The ROS data reporting forms were revised during the 20th Session of the Working Party on Data Collection and Statistics (WPDCS20), held in November 2024, and were subsequently endorsed by the Scientific Committee at its 27th Session (SC27). The forms are provided as XLSX spreadsheets and contain multiple sheets corresponding to different hierarchical levels of data to be reported. They are available in four distinct gear group versions—gillnets, longlines, pole-and-line, and purse seines — corresponding to the main gears used in fisheries subject to the ROS data requirements, i.e., those involving vessels larger than 24 metres in length overall, or vessels smaller than 24 metres operating in Areas Beyond National Jurisdiction (ABNI).

Form ROS-GN | Gillnets

- Form template
- Form description

Form ROS-LL | Longlines

- Form template
- Form description

Form ROS-PL | Pole-and-Lines

- Form template
- Form template

Form ROS-PS | Purse Seines

- Form template
- Form description

Fig. 2. Overview of the Regional observer scheme reporting forms

IOTC ROS Data Reporting: Form ROS-LL

Author: IOTC Secretariat

Description

This form provides for the reporting of operational and catch data collected by scientific observers at sea, or from data reviewed through Electronic Monitoring Systems, for longline fisheries under the IOTC Regional Observer Scheme (ROS). It is designed to capture verified information on fishing activities, catch composition, bycatch associated with longline operations, and the implementation of mitigation measures. The reporting format follows standards adopted by the IOTC Scientific Committee (SC) and incorporates multiple hierarchical data levels, ranging from trip and set information to species-specific catch and bycatch records.

Click here to download a blank version of Form ROS-LL, or return to the list of all IOTC data reporting forms.

Data Content

Form ROS-LL is an XLSX workbook comprising 19 sheets, designed to report the mandatory (M; blue cells) and optional (O; green cells) data fields defined by the SC. The current version builds on the most recent revision of ROS fields endorsed at the 27th session of the SC (IOTC-2024-SC27-DATAO1). The sheets are interconnected through technical identifiers (e.g., observer trio ID, set ID), enabling the hierarchical organisation of the observations to be maintained.

Sheet	Data Components	Resolution	Description
META	Metadata	Trip	Information on the data submission by reporting fleet
O-INFO	Metadata	Trip	Observer identification and information of the observed fishing trip
V-INFO	Metadata	Trip	Identification of the fishing vessel and personnel information
V-TRIP	Metadata	Trip	Information on the fishing trip's course
V-ATTRIBUTES	Technology / Equipment	Trip	Information on the vessel's attributes and equipment
G-GENERAL	Gear configuration	Trip	Information on the fishing gear's equipment and machinery
G-CONFIG-BRANCHLINES	Gear configuration	Trip	Information on longline branchline configurations
G-CONFIG-MITIGATION-DEVICES	Gear configuration	Trip	Information on mitigation devices
E-SET	Gear Technology / Equipment	Operation	Information on setting by operations
E-SET-LIGHTS	Gear Technology / Equipment	Operation	Information on the lights used for fish attraction
E-SET_MITIGATION_MEASURES	Gear Technology / Equipment	Operation	Information on configuration of mitigation devices
E-SET-HOOKS	Gear Technology / Equipment	Operation	Information on fishing hooks by operation
E-SET-BAITS	Gear Technology / Equipment	Operation	Information on fishing bait use by operation
E-SET-HAULING	Gear Technology / Equipment	Operation	Hauling information by operation
E-SET-HAULING-BITEOFFS	Catch	Operation	Information on depredation events recorded during hauling
E-SET-CATCHES	Catch	Operation	Information on magnitude, composition, and fate of catch
E-SET-CATCH-SPECIMENS	Catch	Species	Information on fish biology (size, sex, maturity), samples, and depredation
E-SET-CATCH-SPECIMENS-SSI	Catch	Species	Information Species of Special Interest (SSI) caught in the observed trip
E-SET-TAG-DETAILS	Catch	Species	Information on tag release or recovery by specimen

Fig. 3. Overview of the Longline ROS reporting form main description and data content





META				
Submission Info	rmation			
Field	Requirement	Description	Format	Input value
Liaison officer full name	М	Name of the liaison officer in charge of the compilation of the data	String	e.g., John Doe
Liaison officer email	М	Email address of the liaison officer in charge of the compilation of the data	Valid email address	e.g., John.Doe@fao.org
Organisation name	M	Name of the organisation in charge of the compilation of the data	String	e.g., Institute of Fisheries
Organisation email	0	Email address of the organisation in charge of the compilation of the data	Valid email address	e.g., nif@gov.sc
Finalisation date	М	Date of finalisation of the dataset	ISO 8601	e.g., 1996-03-27
Submission date	M	Date of submission of the dataset	ISO 8601	e.g., 1997-03-21
General Informa	ation			
Field	Requirement	Description	Format	Input value
Reporting year	М	Gregorian calendar year of the fishing activities reported through the dataset	4-digit integer	e.g., 1996
Reporting entity	М	Three-letter (alpha-3) code of the entity reporting the dataset to the IOTC Secretariat	Code from Entities	e.g., ABW
Flag / Chartering state	М	The country registration of the fishing vessels or chartering flag in case of chartering agreement	Code from Countries	e.g., FRA
Data source	М	The source of the data, i.e., collected by observers at sea or derived from Electronic Monitoring Systems	Code from Data Sources	e.g., OB

Fig. 4. Specific section of the Longline ROS reporting form and data content

Material supporting data collection and reporting

The development of reporting tools required a review of materials related to the implementation of the ROS to ensure that they reflect current resolutions and minimum standards. The implementation of an observer programme is defined by the resolution in terms of:

- 1- Who does this obligation apply to? It covers all fishing vessels measuring 24 metres in length or more, and those measuring under 24 metres if they operate outside the exclusive economic zone (EEZ).
- 2- What systems (reporting tools or programmes) can be used to comply with this obligation? Qualified observers who collect information on board fishing vessels as part of observer programmes, the Electronic Monitoring System (EMS) or alternative on-board data collection methods (e.g. crew sampling) other than ROS observers or EMS.
- 3- <u>How do CPCs comply?</u> By using the IOTC ROS Minimum Standard Data Fields, IOTC data collection forms, IOTC species identification cards, IOTC Regional Observers Scheme (ROS) observer manual and IOTC observer forms published on the IOTC website.

The original documents included a mix of reporting obligations, standards and guidelines, therefore their structure and their relationship to each other were reviewed in order to organise and present them according to the needs of the end users and to identify those that should be updated, replaced or archived.





Table 1. List of revised documents to support the implementation of the ROS related with the observations at the sea

SECTION	PROGRAM	DOCUMENTS		
		IOTC-Regional_Observer_Scheme_Standards		
		ROS Field observer competency standards		
		ROS Briefing-debriefing procedures		
		ROS Health and safety equipment checklist		
	On board observer programs	ROS Emergency action plan		
Standards		ROS Code of conduct		
		ROS Observer coordinator trainer minimum standards		
		ROS Vessel pre-safety check		
		ROS Data standard		
	EMS	Electronic monitoring program standards		
	EMS	Electronic monitoring system and data standards		
		ROS Observer coordinator training minimum standards		
Training	Onboard observer programs	ROS Basic field observer training curriculum		
		ROS Observer manual		
Reporting	Onboard observer programs/ EMS	ROS reporting forms		
neporting	EMS	<u>Vessel monitoring plans</u>		

There are <u>Identification Guides</u> for marine turtles, seabirds, and sharks and rays available versions in Arabic, Bahasa Indonesian, Bahasa Malaysia, Bengali, Hindi, Persian, Portuguese, Sinhalese, Spanish, Swahili, Tamil, Thai and Urdu. Guides translation to Dhivehi are in progress (Table 2).

Table 2. ID guides progress for supporting the identification of species. Numbers indicate priority languages and species groups for translation and printing as identified by the SC16 and SC17

	1. Tuna & like	2. Billfish	3. Turtles	4. Sharks and rays	5. Seabirds			
Persian	2	1	1	1	1			
Arabic	2	2	2	2	2			
Urdu	4							
Bahasa Indonesian	1	3	5	5	5			
Swahili		4						
Spanish		5	3	3	3			
Portuguese		6	4	4	4			
Thai		7						
Sinhala	3	8						
Tamil		8						
Bahasa Malaysia	1							
Hindi	3							
Bengali								
Dhivehi								
	in progress translation and finalisation complete							





Regional database and data collation

As previously described, the main obstacle to incorporating the data sent by the CPCs into the database was the variety of report formats (IOTC, 2025). Nevertheless, the current ROS database and its associated applications are technically outdated and fragmented, relying on manual workflows and legacy technologies that limit efficiency, data validation and interoperability with other IOTC systems, and consequently delaying the data incorporation since 2021. The database architecture is under reconstruction in order to accommodate the requested revision of the minimum data fields and data standard including (i) changes made in reporting fields (additions, changes of field reporting status, (ii) the revision and harmonisation of all ROS code lists, (iii) specific ROS code list incorporation and publication on the IOTC Reference Data Catalogue, (iv) the migration of the ROS database from SQL Server to Postgres.

Therefore, the ongoing work is focused on consolidate the existing tools and databases into a unified digital platform, ensuring interoperability with IOTC statistical, as well the development of enhanced modules for validation, visualisation and reporting. The upgraded system will offer CPCs a harmonised interface for reviewing, correcting and approving observer data prior to submission, similarly with the system in place for the verification of data that support the submission of mandatory statistics (Annex I).

Understanding the limitations and individual progress of all components of the ROS system in parallel, the main challenge for ROS remains the contribution of verified catch data and other scientific data related to tuna and tuna-like species fisheries in the IOTC area.

Historical data reconstruction

Recognizing the efforts made by CPCs in implementing their observer programs, deploying observers on board, collecting data, and preparing the data reports, the Secretariat reconstructed the historical data submitted as trips reports to consolidate the main ROS data sets to support the working groups and the Scientific Committee.

In addition to the information already available in the database, data from 506 longline observer trip reports, totalling 26,290 operations, was compiled. The aggregation and harmonisation of the available ROS data at the same level required defining three levels of data aggregation, as follows:

- 1) **OBSERVED TRIP CATCHES (0)**: Refers to data that can be aggregated at annual level mirroring the mandatory statistical datasets RC and DI, including the main IOTC area, total catches retained (t) and total discards by species (t), and SSI interactions.
- 2) **OBSERVED GEO-REFERENCED CATCH (1)**: Refers to retained and discarded data by species that can be aggregated by month and 5x5 grids. Observations related with the implementations of specific gear settings and/or mitigation measures ca be also derived from this level.
- 3) **OBSERVED BIOLOGICAL DATA (2)**: Refers to the geo-refenced lengths, weights or other biological data that can be aggregated by species month and grid.

There was comprehensive reporting for most observer-based trips, with data provided for most reporting sections; however, the extracted data required several cleaning steps. Species names were inconsistent—appearing as different codes, common names, or scientific names—and geo-referenced catch data were presented in varying formats, sometimes even within individual trips by the same CPC. Encouragingly, data provided to the Secretariat covered a substantial proportion of the IOTC area of competence (Figure 5). Figure 5 provides an example of an observer dataset (sharks) from the database and an updated version incorporating the data from the reporting trips. The data compilation workflow is still being refined, with improvements expected to provide next year's working parties with more complete and harmonised observer data (Annex I).





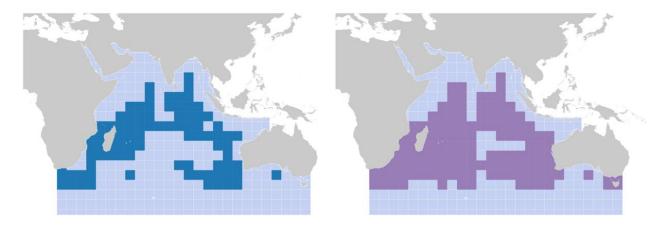


Fig. 5. Spatial distribution of data available up to 2021 for shark interactions (blue) and the updated dataset with the collation of data from observer trips report (purple).

Coverage of at-sea observations

The resolution <u>25/06</u> sets minimum observer coverage of 5% of operations/sets. In 2022 the <u>SC25</u> recommended that the Commission endorsed the mandatory reporting of geo-referenced effort data as number of sets/operations for longline and surface fisheries to complement the current requirements of Res. <u>15/02</u>, in order for the Secretariat to accurately and independently calculate the ROS coverage. Since then, the reporting of georeferenced effort as operations/sets has mainly been adopted for reporting on purse seine fisheries. Despite the mandatory nature of the reporting requirements, only Australia provided geo-referenced effort by sets for its longline fisheries in 2024.

To estimate the coverage, the submitted observer data were compiled by quantifying the number of observed and conducted operations (where available), along with alternative effort units according to each fishery (e.g. the number of hooks deployed or fishing days). The effort reported as part of the mandatory statistical submissions (CE) was then raised to the total reported catch (RC), providing an estimate of total fishing effort for each flagmain gear combination.

Coverage levels were then derived by comparing the number of observed operations, or alternative effort, with the corresponding total effort estimates (Table 3). In the absence of CE reports as operations/sets for most longline fleets, coverage estimates continue to be based on the number of hooks observed. Coverage estimates for purse seine fleets are based on observed operations/sets.

For longline fleets, Australia, EU, France, Korea and South Africa have consistently reported data, achieving coverage above the required 5% (Table 3). China and Taiwan, China are showing and increasing rate on observed coverage with closer values to the requirement (Table 3), although the final coverage estimation can be affected by the computation of fishing trips reports to the starting date. Since 2022, Taiwan, China has provided trip reports and the data through the ROS forms which allow for data to be appropriately allocated to the correct year, even when the operation takes place across the end of one year, and the start of the next one.

For the remaining longline fleets evaluated during this period, data reporting is inconsistent, and coverage is below the minimum required. It is also important to recognise the efforts of Tanzania, who have started to report data from at-sea observations for the first time since 2022 (Table 3 and Table 4).





Table 3. Annual total effort and estimated observer coverage for longline fleets (2022-2024). OP_OBS = Number of operations observed, EFF_OBS = amount of effort observed, EFF_UNITS = effort units, SOURCE = indicates if data provided are from observers at sea or EMS, EFF_REP = effort reported (or estimated) from mandatory statistical submissions (CE), OBS_COV = estimated observer coverage.

FLAG	YEAR	GEAR	OP_OBS	EFF_OBS	EFF_UNITS	SOURCE	EFF_REP	EFF_UNITS	OBS_COV
AUS	2022	LL	19	27802	HK	EM	249082	HK	11.16
AUS	2023	LL	10	15290	HK	EM	233220	HK	6.56
AUS	2024	LL	34	45134	HK	EM	556744	HK	8.11
CHN	2022	LL	459	1268709	НК	ОВ	38273218	HK	3.31
CHN	2023	LL	506	1488168	HK	ОВ	30536496	HK	4.87
CHN	2024	LL	NA	NA			54552392	HK	
TWN	2022	LL	3240	6634164	HK	ОВ	178619657	HK	3.71
TWN	2023	LL	3182	6819976	HK	ОВ	157860339	HK	4.32
TWN	2024	LL	2778	5891423	HK	ОВ	138277667	HK	4.26
EUESP	2022	LL	18	19559	HK	ОВ	1982653	HK	0.99
EUESP	2023	LL	1088	NA	HK	ОВ	3212085	HK	
EUESP	2024	LL	187	252008	HK	OB + EM	7692214	HK	3.28
EUFRA	2022	LL	415	575934	HK	ОВ	3610932	HK	15.95
EUFRA	2023	LL	463	656600	HK	ОВ	3671370	HK	17.88
EUFRA	2024	LL	439	587967	HK	ОВ	4001843	HK	14.69
EUPRT	2022	LL	NA	NA			488200	HK	
EUPRT	2023	LL	101	121113	HK	ОВ	501400	HK	24.15
EUPRT	2024	LL	NA	NA			571400	HK	
IDN	2022	LL	216	401210	HK	ОВ	89238307	HK	0.45
IDN	2023	LL	NA	NA			53768141	HK	
IDN	2024	LL	NA	NA			43300444	HK	
KOR	2022	LL	88	163929	HK	ОВ	1667422	HK	9.83
KOR	2023	LL	66	115847	HK	ОВ	1421920	HK	8.15
KOR	2024	LL	78	175993	HK	ОВ	2059212	HK	8.55
LKA	2022	LL	NA	NA			37264565	HK	
LKA	2023	LL	2	1640	HK	ОВ	56650448	HK	0.00
LKA	2024	LL	81	68440	HK	ОВ	60290475	HK	0.11
TZA	2022	LL	NA	NA			352506	HK	
TZA	2023	LL	18	19923	HK	ОВ	666591	HK	2.99
TZA	2024	LL	13	19900	HK	ОВ	590751	HK	3.37
ZAF	2022	LL	142	144634	HK	ОВ	1295129	HK	11.17
ZAF	2023	LL	104	116876	HK	ОВ	871732	HK	13.41
ZAF	2024	LL	NA	NA			NA		



For all the purse seine fleets providing observer data from 2022 to 2024 the coverage is above the minimum required (Table 4). Seychelles reported only fishing days as effort on the mandatory reported CE data in 2022, and therefore the coverage was assessed against this effort unit. Although Tanzania provided observer data, the mandatory reported CE data was not provided in 2022 and 2024 (Table 4).

Table 4. Annual total effort and estimated observer coverage for purse seine fleets (2022-2024). OP_OBS = Number of operations observed, EFF_OBS = amount of effort observed, EFF_UNITS = effort units, SOURCE = indicates if data provides are from observers at sea or EMS, EFF_REP = effort reported (or estimated) from mandatory statistical submissions (CE), OBS_COV = estimated observer coverage

FLAG	YEAR	GEAR	OP_OBS	EFF_OBS	EFF_UNITS	SOURCE	EFF_REP	EFF_UNITS	OBS_COV
EUESP	2022	PS	1560	1068	FD	ОВ	3891	NS	40.09
EUESP	2023	PS	1228	768	FD	ОВ	5647	NS	21.75
EUESP	2024	PS	1109	669	FD	ОВ	6181	NS	17.94
EUFRA	2022	PS	664	630	FD	OB	2316	NS	28.67
EUFRA	2023	PS	1240	1154	FD	OB	2453	NS	50.55
EUFRA	2024	PS	1230	1092	FD	OB	4375	NS	28.11
EUITA	2022	PS	83	96	FD	OB	236	NS	35.17
EUITA	2023	PS	91	118	FD	OB	261	NS	34.87
EUITA	2024	PS	124	88	FD	OB	371	NS	33.42
SYC	2022	PS	1879	1205	FD	OB	2934.842	FD	41.06
SYC	2023	PS	365	235	FD	ОВ	3738	NS	9.76
SYC	2024	PS	425	260	FD	OB	4281	NS	9.93
TZA	2022	PS	27	19	FD	OB	NA	NS	
TZA	2023	PS	77	69	FD	ОВ	460	NS	16.74
TZA	2024	PS	133	89	FD	ОВ	NA	NS	

Monitoring of artisanal landings

The Resolution 25/06 requires that landings from artisanal fishing vessels are monitored at the landing place by field samplers, defined as _"a person who collects information on land during the unloading of fishing vessels and field sampling programs can be used inter alia for quantifying catch, retained bycatch and collecting tag returns"_ and setting the level of coverage of the artisanal fishing vessels at 5% of the total levels of vessel activity (i.e. total number of vessel trips or total number of active vessels). Paragraph 10 also specifies that field samplers shall monitor catches at the landing place with a view to estimating catch-at-size by type of boat, gear and species, or carry out such scientific work as may be requested by the IOTC Scientific Committee.

The Secretariat reviewed the data presented in the mandatory statistical submissions to explore a potential procedure for estimating the required coverage. Data sources must be reported for the three mandatory datasets (RC, CE and SF), as described on the reporting forms webpage and with the provided codes options included in the data catalogue. The code RS is the one related to the landing survey for the three datasets.

Within the data submission for 2023, 50% of the total retained catches reported by the 65 coastal fisheries had corresponding landing sampling in relation to vessel coverage, fishing trips or fish weight (Table 5). Of the catch and effort dataset, 63% of the data came from sampling operations at landing sites, obtained from 47 coastal fisheries (Table 5). Almost 100% of the size dataset corresponded to landings sampling operations, although substantially fewer coastal fisheries provided this dataset (Table 5).





Table 5. Reporting data source and coverage type of RC, CE and Sf data for coastal fisheries in 2023. Data source codes: LG = Logbook, OB = Observers (port), PA = Port authority, PR = Fishing industry, RS = Landing survey. Coverage type codes: BO = Boats, FW = Fish in weight, TR = Trips, SE = Sets, FN = Fish in numbers.

DATA	DATA DATA SOURCE		COVERAGE TYPE (%)						
SET	DATA SOUNCE	ВО	FW	TR	SE	FN			
	LG		13.8	6.2					
	ОВ	4.6							
RC (65)	PA	15.4	4.6	1.5					
	PR		3.1						
	RS	21.5	13.8	15.4					
	LG		19.1	10.6					
CE (47)	ОВ	2.1		4.3					
	RS	27.7	10.6	17.0	8.5				
SF (30)	LG		3.3						
31 (30)	RS	50.0	26.7	3.3		16.7			

While the resolution calls for the assessment of coverage of the artisanal fishing vessels in relation to the total levels of vessel activity, the active coastal fishing vessel reporting remains voluntary. The form 2FC provides for the reporting of the total annual numbers of fishing vessels involved in operation by type of fishing vessel, configuration, mechanisation, onboard fish preservation, size class and the data coverage, as the percentage (%) of vessels or fishing activities sampled for coastal fisheries, including the coastal fisheries. SC26 requested that the submission of fishing craft statistics be made mandatory in 2022.

The available data limits the estimation of monitoring coverage at landing sites for coastal fisheries and raises the need to define a standard and strengthen monitoring protocols and sampling programs in coastal countries.





Summary and key remarks

Reporting tools

- The ROS reporting forms were updated and consolidated into the mandatory format to report observer data.
- The Secretariat will continue to develop data checks for data validation before data are submitted.
- The Secretariat is planning a ROS Reporting Workshop in 2026 (date TBC) to assist the CPCs in the implementation of the ROS IOTC forms.

Supporting material for collection and reporting

- The supporting material for the ROS implementation was revised and updated and will be made available.
- The ROS section on the IOTC website will be updated in 2026 and will include the revised documents by purpose (standards, training, reporting) to facilitate access and use by CPCs.
- The development of the ROS Reporting Guidelines is ongoing, and the observer manual will be updated in 2026.

Database

Ongoing revision of database model to include changes made in reporting fields (additions, changes of field status, improvements)

ROS Datasets

The compilation of historical data is ongoing and the main ROS datasets will be consolidated to support the working parties and Scientific Committee

ROS implementation

Some fleets show stable reporting and coverage trends, nevertheless, is necessary address the data provision of other fleets and support the implementation of new observer programs in countries with emerging fisheries subject to the Resolution <u>25/06</u>, including the monitoring of coastal fisheries.



Annex I - ROS Workplan

ROS component	Specific task	2025	2026	2027
Standards	Develop standard for the monitoring of artisanal landings			
Training	Update ROS observer manual			
Reporting tools and materials	Updated reporting forms			
	Description of the reporting forms			
	Develop data check for reporting forms			
	Develop ROS reporting guidelines			
	Conduct ROS data reporting workshop			
ROS database	Database architecture review and migration			
ROS data	Data compilation			
	Preparation of datasets			