



# A Summary of the IOTC Regional Observer Programme During 2022

Indian Ocean Tuna  
Commission

## Annual Contractor's Report

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Submitted by:

**MRAG**





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## Acronyms

Acronym	Description
ATF	Authorisation to Fish
CCSBT	Commission for the Conservation of Southern Bluefin Tuna
CDS	Catch Documents Scheme
CMF	Catch Monitoring Form
CV	Carrier Vessel
EEZ	Exclusive Economic Zone
TD	Transshipment Declaration
ICCAT	International Commission for the Conservation of Atlantic Tunas
IOTC	Indian Ocean Tuna Commission
IRCS	International Radio Call Sign
LSTLV	Large Scale Tuna Longline Fishing Vessel
NRN	National Registration Number
RAV	Record of Authorised Vessels
ROP	Regional Observer Programme
VMS	Vessel Monitoring System

# 1 Introduction

During the calendar year 2022, the Regional Observer Programme (ROP) monitored a total of 1,487 transhipments from Large Scale Tuna Longline Fishing Vessels (LSTLVs) within the Indian Ocean Tuna Commission’s (IOTC) Area of Competence.

A further 190 transhipments took place which were not monitored due to the suspension of observer deployments under Covid. Data were recorded in the ROP database through transhipment declarations (TDs) submitted from the vessels. As with observed deployments, regular reports were submitted to the Secretariat summarising transhipments over that period.

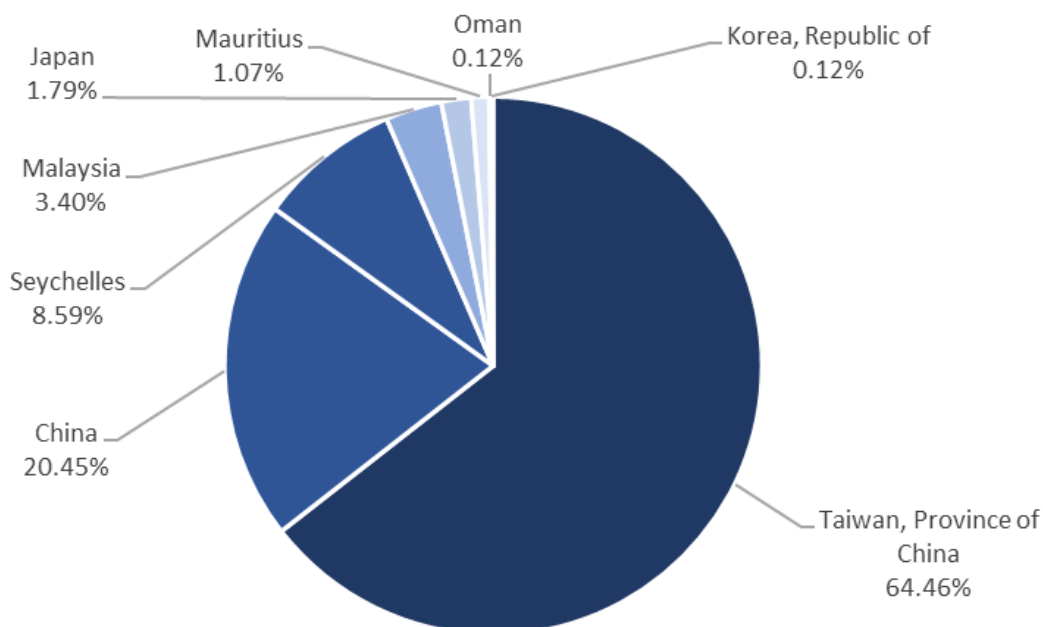
The total number of at-sea transhipments, 1,677, was higher than in previous years, see Table 1.

**Table 1 No. of transhipments and deployments pre- (2016 – 2019) and post-pandemic (2020, 2021, 2022).**

Year	No. of Transhipments	No. of Deployments	Average Deployment Length (days)
2016-2019*	1,288*	65*	41*
2020	1,615	66	64
2021	1,531	60	73
2022	1,677	50	60

\*Pre-pandemic averaged values.

The distribution of transhipments by LSTLV fleets during 2022 was similar to previous years; as shown in Figure 1 for percentage contribution by fleet in 2022.

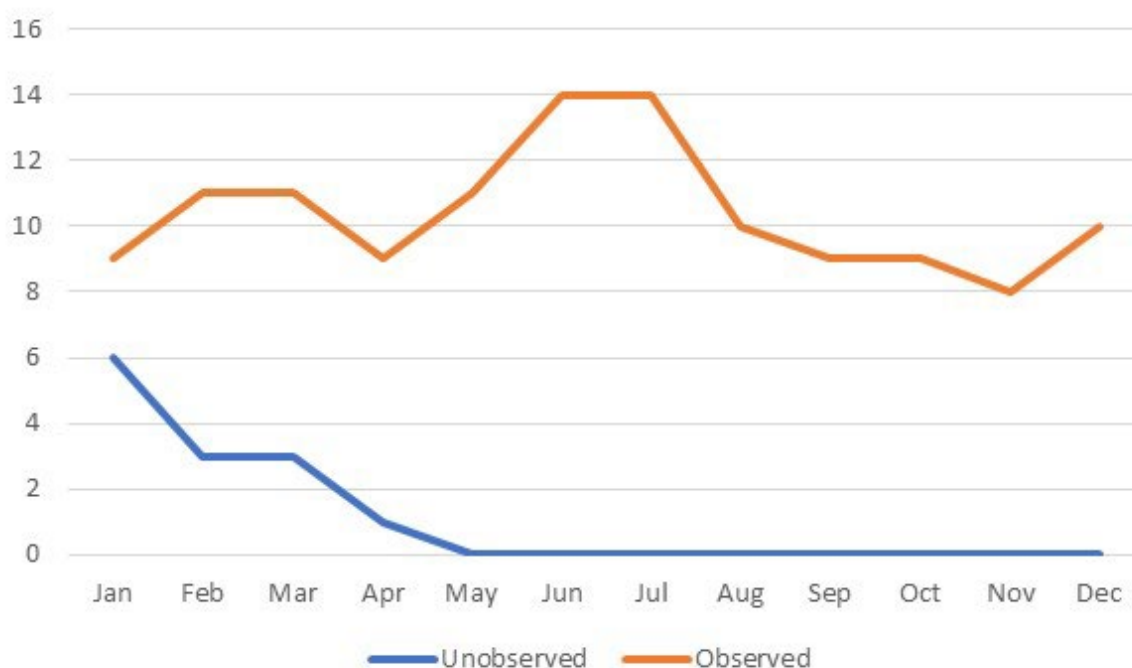


**Figure 1 Percentage contribution by fleet to the total number of IOTC transhipments during 2022.**

Deployments during 2022 (both observed and unobserved) were broadly similar to previous years by percentage contribution of vessel fleets. These occurred with Carrier Vessels (CVs) predominantly flagged to Panama (30%), followed by Taiwan, Province of China (26%), Malaysia (18%), Republic of Korea (10%), Liberia (6%), Japan (6%), and Singapore (4%).

A summary of the ROP deployment requests (i.e., the number of CV trips) during 2022 is shown in Figure 2. Of these, 51 deployments were approved during 2022 (request 723/22, 730/22 to request 782/22). Of these, 50 deployments were actively transshipping and monitored by an IOTC ROP observer during 2022; one deployment request was cancelled (761/22). At the beginning of 2022, several unobserved deployments from 2021 were still ongoing, these account for 190 unobserved transshipments.

Three observer deployments continued directly to, or from, the regulatory area of the International Commission for the Conservation of Atlantic Tunas (ICCAT) without making a port call at the point of crossing. Deployment requests were highest during June-July, peaking with 14 active CVs (both observed and unobserved). Figure 2 shows the annual cycle of deployments in 2022 for both observed and unobserved deployments.



**Figure 2 Active deployments showing Observer’s deployed and vessels unobserved in the IOTC ROP during 2022, figures represent the maximum number of observers deployed during the month.**

The location of transshipments during 2022 is shown in Figure 3 and follows a similar pattern to previous years, with the majority of transshipments occurring in the western Indian Ocean and a distinctive ‘band’ at around 30 degrees south. Observed transshipments are represented by green dots, unobserved by red dots, transshipments from the previous three years are shown to the right of the main map.



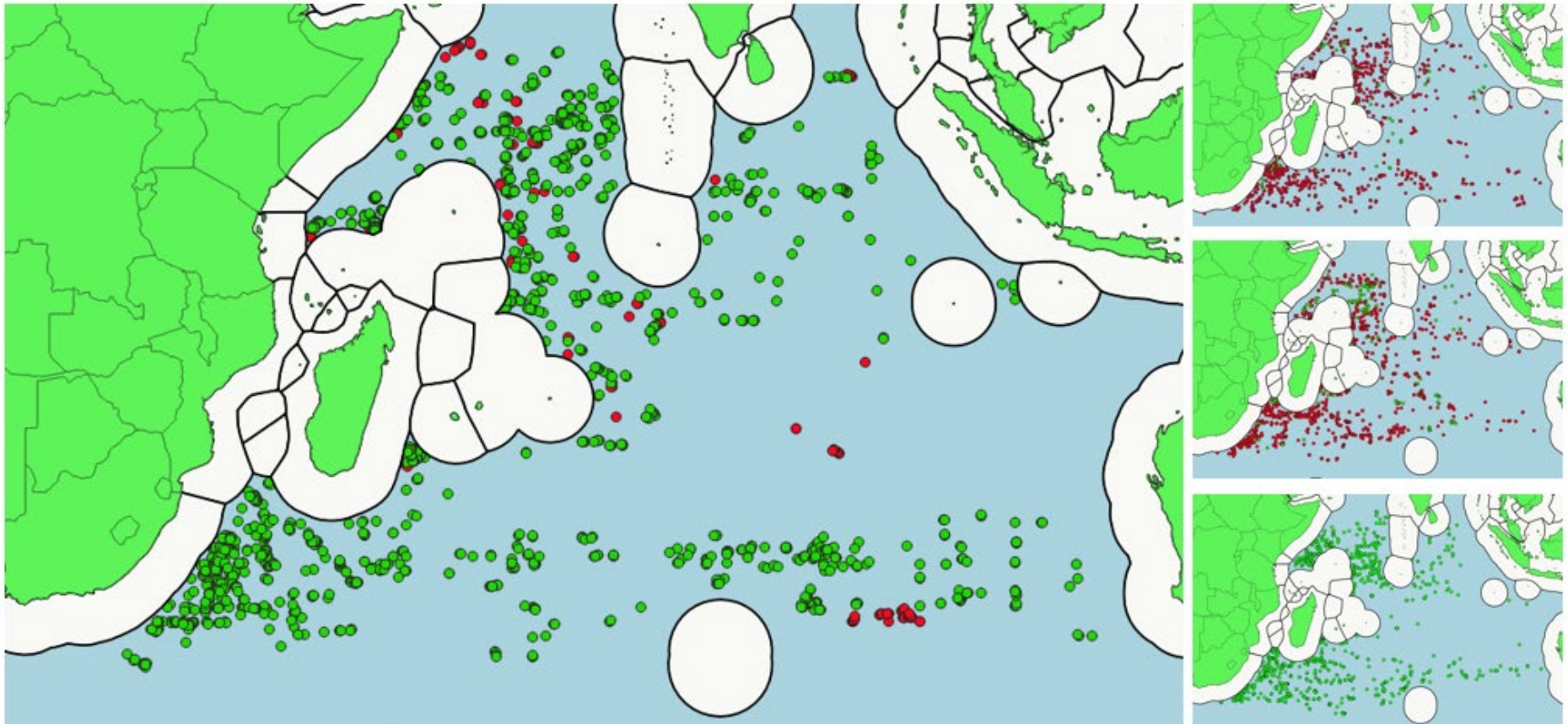
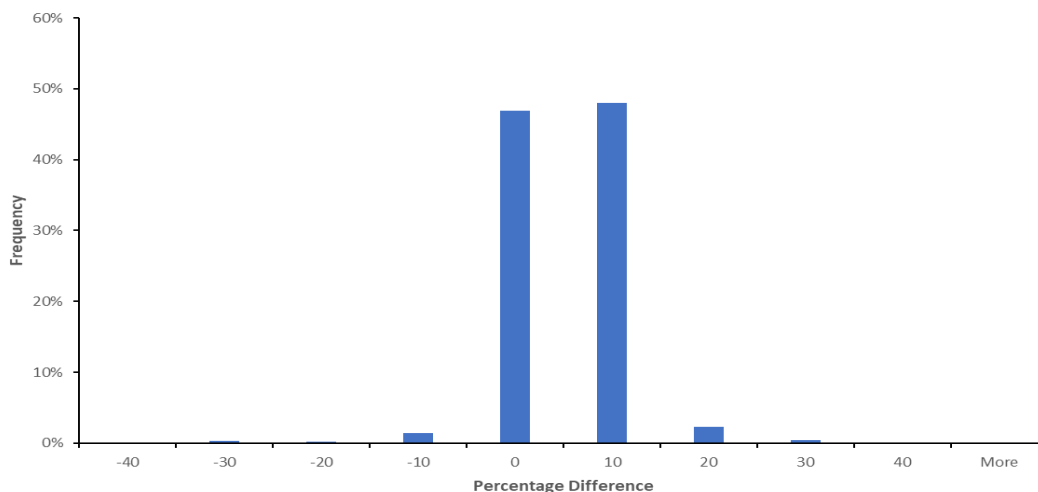


Figure 3 Transshipment locations in 2022 (main image), in 2021 (top right), 2020 (middle right) and 2019 (bottom right).

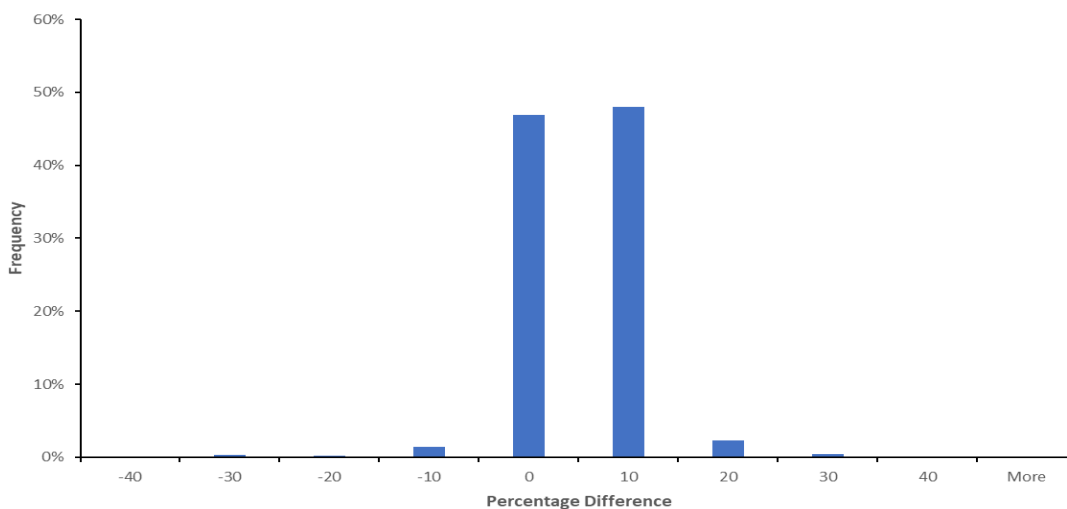
## 2 Sampling

### 2.1 Weight estimations

Weight estimation procedures have been previously discussed in the [Review of the IOTC ROP](#)<sup>1</sup>. The percentage difference between the overall observed weight and the vessel declared weight are shown in Figure 4 and for tuna species only in Figure 5.



**Figure 4 Percentage difference in observed weight compared to vessel declared weight (all species)**



**Figure 5 Percentage difference in observed weight compared to vessel declared weight (tuna species only)**

Positive differences in the percentage difference represent transshipments where the observer's estimate is higher than the vessel's declaration, negative differences are where the observer's estimate is lower. The main differences occurred where small amounts were being transferred (less than 20 tonnes).

<sup>1</sup> MRAG and CapFish (2010). Review of the IOTC Regional Observer Programme. CoC48\_Add1[E]

## 2.2 Species Transhipped

Table 2 shows the species transhipped by product type according to the TDs. Albacore were the commonly transhipped species by weight, followed by bigeye and yellowfin tuna. This is in comparison to 2021 where bigeye were most commonly transhipped followed by albacore and yellowfin. This shows an overall trend in the increase of albacore transhipped since the start of the ROP which between 2009 and 2013 was mainly bigeye tuna, the amounts transhipped of these three main species has become comparable over the last few years (Figure 6).

**Table 2 Declared quantity (tonnes) of transhipped species by product type during 2022.**

Species Group	English Name	Species Name	Total (t)	Gilled & gutted	Rounded Weight	Dressed weight	Headed various	Other various
<b>IOTC Managed Species</b>								
	Mixed Fish Species	<i>N/A</i>	118			1	1	116
Temperate and tropical tunas	Albacore	<i>Thunnus alalunga</i>	20,160		18,335	2		1,822
	Bigeye tuna	<i>Thunnus obesus</i>	15,557	14,858		320	379	
	Skipjack tuna	<i>Katsuwonus pelamis</i>	106		77		1	27
	Southern bluefin tuna	<i>Thunnus maccoyii</i>	1,239	1,239				
	Yellowfin tuna	<i>Thunnus albacares</i>	13,631	12,674	3	353	602	
Billfish	Black marlin	<i>Makaira indica</i>	225	1	14	166	44	
	Indo-Pacific blue marlin	<i>Makaira mazara</i>	761	2	2	545	212	
	Indo-Pacific sailfish	<i>Istiophorus platypterus</i>	150	1	1	91	56	
	Marlins, sailfishes, etc. nei	Istiophoridae	1				1	
	Striped marlin	<i>Tetrapturus audax</i>	136	74		41	22	
	Swordfish	<i>Xiphias gladius</i>	3,752	4		2,483	1,212	53
Neritic tunas and mackerels (seerfishes)	Japanese Spanish mackerel	<i>Scomberomorus niphonius</i>	2			2		
	Narrow-barred Spanish mackerel	<i>Scomberomorus commerson</i>	18			9	9	

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Species Group	English Name	Species Name	Total (t)	Gilled & gutted	Rounded Weight	Dressed weight	Headed various	Other various
<b>Non-IOTC Managed Species</b>								
Billfish	Atlantic blue marlin	<i>Makaira nigricans</i>	131	11		86	33	
	Shortbill spearfish	<i>Tetrapturus angustirostris</i>	11			4	7	
Neritic tunas and mackerels (seerfishes)	Wahoo	<i>Acanthocybium solandri</i>	13			3	10	
Other Target Species	Dorado/Mahi Mahi	<i>Coryphaena hippurus</i>	32		32			
	Escolar	<i>Lepidocybium flavobrunneum</i>	1,396			726	670	
	Oilfish	<i>Ruvettus pretiosus</i>	4,711		28	3,026	1,651	6
	Opah	<i>Lampris guttatus</i>	306			141	165	
	Other fish Unclassified	N/A	1,442		105	380	404	551
	Pomfret	<i>Brama spp.</i>	9			1	8	
	Pomfrets, ocean breams nei	Bramidae	1				1	
Sharks	Blacktip shark	<i>Carcharhinus limbatus</i>	12			12		
	Blue shark	<i>Prionace glauca</i>	958			464	138	356
	Mako sharks	<i>Isurus spp</i>	87			38	22	28
	Shortfin mako	<i>Isurus oxyrinchus</i>	141			33	21	86
	Silky shark	<i>Carcharhinus falciformis</i>	91			40	23	28
	Various sharks nei	Selachimorpha (Pleurotremata)	621			178	62	381

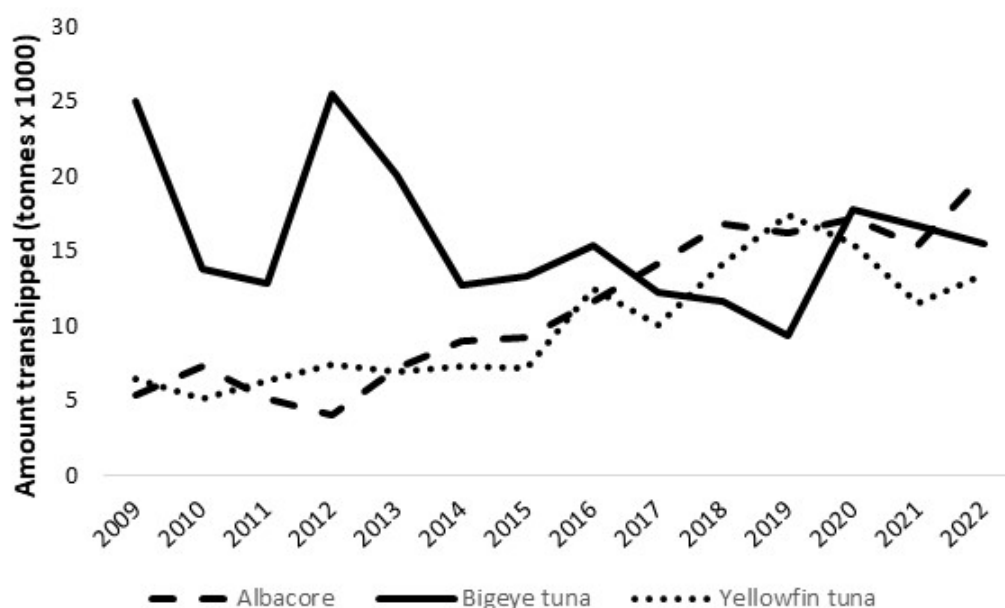


Figure 6 Trends in transshipments of albacore, bigeye tuna and yellowfin tuna since the start of the ROP.

### 3 Southern bluefin tuna

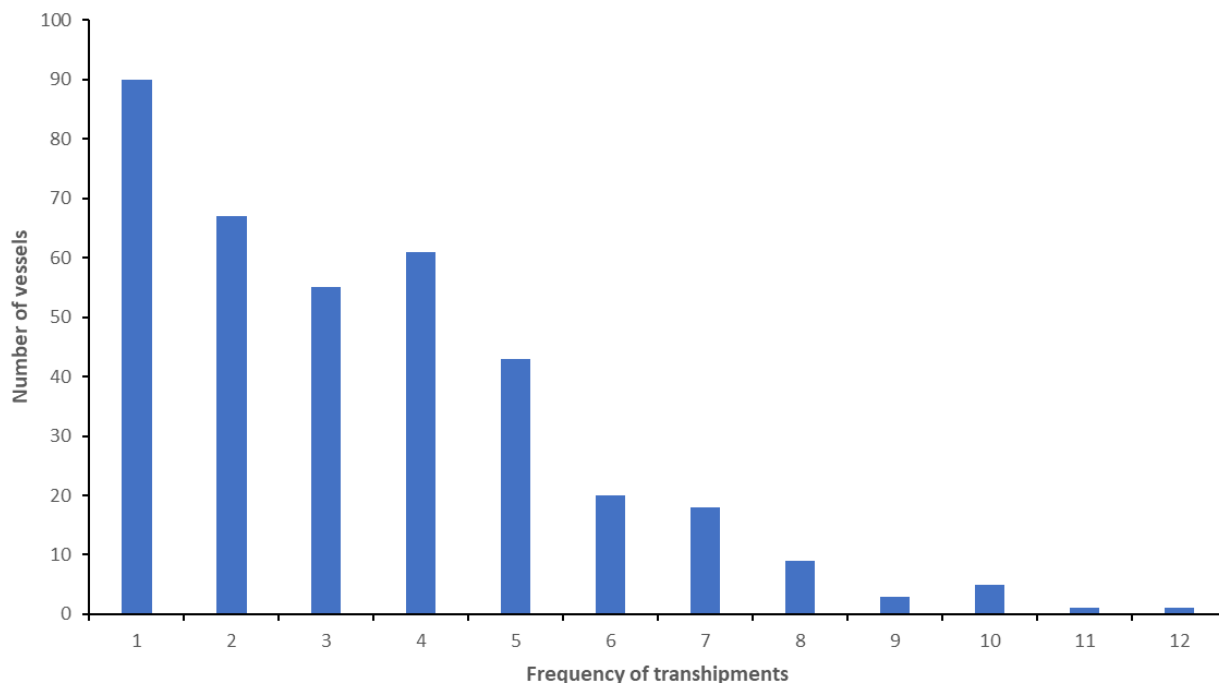
Since adoption of the Resolution on the Implementation of the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) Catch Documentation Scheme (CDS) on 1<sup>st</sup> January 2010, any southern bluefin tuna transhipped must be accompanied by a catch monitoring form (CMF). This form is countersigned by the observer to verify they have monitored the transhipment. During 2022 transshipments of southern bluefin tuna were declared on 49 occasions within 8 different deployments, with around 1,239 tonnes recorded by the vessels as being transhipped (Table 3).

Table 3 Transshipments of southern bluefin tuna (*Thunnus maccoyii*) declared by vessels during 2022.

Deployment No.	CV Name	CV IOTC #	Number of transshipments	Total Declared Weight (t)
747	YACHIYO	17140	22	249.109
752	SEIBU	16637	2	29.922
753	MEITA MARU	8461	1	13.436
755	CHITOSE	15114	11	289.039
756	SHENG HONG	900080040	2	20.014
760	CHIKUMA	14788	5	297.533
763	TAISEI MARU NO.15	8465	1	67.157
769	YACHIYO	17140	5	272.854

## 4 Vessel checks

The roles and responsibilities of the observers with regards to at-sea vessel checks are outlined in Annex IV of Resolution 21/02 (superseded by Resolution 22/02). A total of 1,266 inspections were undertaken on 373 different LSTLVs during 2022, Figure 7 shows the number of times individual vessels were checked.



**Figure 7 Number of times vessels (LSTLVs) checked in 2022.**

A summary of the results of the LSTLV checks are given in [IOTC-2023-WPICMM06-04](#).

## 5 Other Possible Infractions

None recorded.

## 6 Observer Training

There are currently 164 observers who have received IOTC training since 2009, some of whom were trained directly through the IOTC whilst others crossed over from ICCAT with prior approval from the IOTC Secretariat. All observers are also trained to monitor CCSBT transshipments. Not all observers who have been trained are currently active and many have left the programme. There are currently around 70 observers trained and actively participating on rotation in the IOTC ROP, although many are involved in other programmes and not always available. It is therefore necessary to continue to hold observer courses on a regular basis to replace those who drop out, and to ensure the increasing demand is met as well as provide refresher training for current observers. Courses have been run in conjunction with ICCAT and CCSBT for a number of years, allowing observers to be eligible to work in ICCAT and IOTC as well as monitoring CCSBT transshipments.

## 7 Other Issues

### 7.1 Health and Safety

During 2022 there were no deployments refused by an observer on the grounds of safety.

- **The Coronavirus pandemic.** The programme started up again in March 2022 with observers being present on CVs, although boarding of LSTLVs has been limited. The consortium will commence full boarding protocols under the following conditions:
  - Observers shall be fully vaccinated;
  - Observers shall wear the appropriate PPE (masks);
  - Observers shall use hand sanitiser prior to and after any boarding; and,
  - The final decision on boarding shall be with the CV and LSTLV Captains.

### 7.2 Waste disposal

Waste disposal methods vary among CVs and most have operational waste disposal plans in place which includes having an incinerator on board, instructions and containers to separate and store different waste products. The methods for doing this continue to be recorded by observers.

### 7.3 Vessel cooperation

Cooperation from both LSTLVs and CVs continues to be good and no negative reports have been received from observers. As in previous years the Consortium would like to extend their gratitude to the vessel operators for their assistance and cooperation in maintain the reporting objectives of the ROP during the pandemic and suspension of observed transshipments earlier in the year.