



South Africa National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2023

W. West, C. da Silva, Q. Mketsu, M. Meyer and S. Kerwath



Department of Forestry, Fisheries and the Environment (DFFE) Branch: Fisheries Management Private Bag X2 Roggebay Cape Town 8012





INFORMATION ON FISHERIES, RESEARCH AND STATISTICS

In accordance with IOTC Resolution 15/02, final	YES
scientific data for the previous year was provided	
to the IOTC Secretariat by 30 June of the current	28/06/2024
year, for all fleets other than longline [e.g. for a	
National Report submitted to the IOTC Secretariat	
in 2022, final data for the 2021 calendar year must	
be provided to the Secretariat by 30 June 2022)	
In accordance with IOTC Resolution 15/02,	YES
provisional longline data for the previous year was	
provided to the IOTC Secretariat by 30 June of the	28/06/2024
current year [e.g. for a National Report submitted	
to the IOTC Secretariat in 2022, preliminary data	
for the 2021 calendar year was provided to the	
IOTC Secretariat by 30 June 2022).	
REMINDER: Final longline data for the previous	
year is due to the IOTC Secretariat by 30 Dec of the	
current year [e.g. for a National Report submitted	
to the IOTC Secretariat in 2022, final data for the	
2021 calendar year must be provided to the	
Secretariat by 30 December 2022).	
in no, please indicate the reason(s) and intended action	OUS:





IOTC-2024-SC25-NR24

Executive Summary

South Africa has two commercial fishing sectors that target tuna – the Large Pelagic Longline and the Tuna Pole-line (baitboat) sectors. The latter sector mainly targets albacore (Thunnus alalunga) and to a lesser degree yellowfin tuna (Thunnus albacares) and rarely operates in the IOTC Area of Competence. The Large Pelagic Longline sector comprises two fleets with different histories: The South African-flagged Large Pelagic Longline vessels that traditionally used swordfish (*Xiphias gladius*) targeting methods, and the Japanese-flagged vessels that operate under joint-ventures and fish for South African right holders. In more recent years, the South African-flagged longline fleet catch a combination of tropical and temperate tunas, alongside swordfish. In 2022 and 2023, 19 longline vessels were active in the IOTC Area of Competence. Effort (hooks set) increased by 2% from 2022 (1 295 129) to 2023 (1 326 564) but was still less than that of 2019 (1 355 677). Only one Japaneseflagged vessel operated under joint-venture in South African waters in 2021, with an increase in fishing effort by South African flagged vessels over the last few years. Since a large portion of the fleet operates on the west coast, the effort in the IOTC Area of Competence is influenced by the vessels' desire to fish further south crossing the 20°E boundary that separates the IOTC and ICCAT. Catches for some species showed a significant increase .There was no Tuna Pole-line effort in the Indian Ocean area of competence in 2023. A total of 139 652 hooks were observed in the IOTC area of competence during 2022 which equates to 21.6% observer coverage.





IOTC-2024-SC25-NR24

Contents

1.	ŀ	BACKGROUND/GENERAL FISHERY INFORMATION
	1.1	. Large Pelagic Longline sector
	1.2	. Tuna Pole-line sector
2.	ŀ	FLEET STRUCTURE
3.	. (CATCH AND EFFORT (BY SPECIES AND GEAR)
4.	I	RECREATIONAL FISHERY14
5.	ŀ	ECOSYSTEM AND BYCATCH ISSUES
	5.1	. Sharks
	5.2	2. Seabirds
	5.3	Marine Turtles
	5.4	Other ecologically related species (e.g., marine mammals, whale sharks) 1'
6	. 1	NATIONAL DATA COLLECTION AND PROCESSING SYSTEMS18
	6.1	. Logsheet data collection and verification
	6.2	. Observer programme
	6.3	. Port sampling programme
	6.4	Actions taken to monitor catches & manage fisheries for Striped Marlin, Black Marlin, Blue Marlin and Indo-
	pac	cific Sailfish2
	6.5	. Gillnet observer coverage and monitoring
	6.6	5. Sampling plans for mobulid rays
7.	ľ	NATIONAL RESEARCH PROGRAMS
	7.1	. National research programs on blue shark
	7.2	Research programs on Striped Marlin, Black Marlin, Blue Marlin and Indo-pacific Sailfish
	7.3	National research programs on sharks 2
	7.4	National research programs on oceanic whitetip sharks
	7.5	National research programs on marine turtles 22
	7.6	National research programs on thresher shark
8. T(I ht c	IMPLEMENTATION OF SCIENTIFIC COMMITTEE RECOMMENDATIONS AND RESOLUTIONS OF THE IOTC RELEVANT IE SC
9.	, I	LITERATURE CITED





1. BACKGROUND/GENERAL FISHERY INFORMATION

1.1. Large Pelagic Longline sector

The South African Large Pelagic Longline sector was commercialized in 2005. The sector was initially split into swordfish and tuna-directed sub-sectors due to the drastic declines in swordfish catch and CPUE experienced during the period of the experimental fishery from 1997 to 2005. South Africa amended its Large Pelagic Longline sector policy in 2008 after only 9 swordfish-directed longline vessels operated in 2006, resulting in the lowest annual catch since 2001.

In 2015 the decision was taken to no longer refer to the fleet as two different fishing strategies, tuna-directed and swordfish-directed, since the fishing behaviour of the local fleet has been shifting from exclusive swordfish targeting to include tunas and sharks. The sector is now referred to as the Large Pelagic Longline sector and includes vessels that target tunas, swordfish, and sharks as bycatch. The 10-year long-term rights granted in 2005 expired in February 2015, and 15-year fishing rights have subsequently been allocated to 62 right holders. The sector is allowing an interim period for foreign vessels to be chartered in this sub-sector to expedite skills development and as a means of acquiring suitable vessels. Foreign vessel owners in the tuna-directed sub-sector are encouraged to reflag their vessels after one year of operation.

Foreign vessels, mainly from Japan and Chinese-Taipei, fished in South African waters through the issuing of bi-lateral agreements in the 1970s, and re-negotiated these agreements in the 1990s until 2002 (Sauer *et al.*, 2003). Joint-venture agreements with Japan have been underway since 2005, whereby these foreign-flagged fishing vessels are permitted to fish for a South African right holder. The vessel is required to adhere to South African legislation, including but not limited to, the Marine Living Resources Act (Act No. 18 of 1998) and Regulations promulgated thereunder, including Large Pelagic Longline sector specific policy. Importantly, each foreign fishing vessel is required to carry an observer onboard every trip. The catch, and observer coverage from these vessels accrues to South Africa.

The current domestic longline catch composition is a mixture of swordfish, temperate tunas (albacore, southern bluefin) and tropical tunas (bigeye, yellowfin). The general method and gear involve setting lines at night (to reduce seabird mortality) with primarily squid bait using buoy - and branch lines of 20 m length. Depending on the vessel size, 700 - 1500 hooks are set per line. Stainless steel hooks are prohibited and as of 2017 wire traces are also prohibited. In addition, there is a precautionary upper catch limit (PUCL) of 1000 t for pelagic sharks. Once the PUCL is reached, no pelagic sharks are landed, and fishing is only allowed with the presence of an onboard observer. The larger joint-venture vessels that target tropical tuna can fish further offshore and differ in their methodology. These vessels set up to 3000 hooks per set with a combination of fish and squid bait, using deeper branch lines and varying hook numbers per basket to influence the setting depth. The domestic longline vessels either carry ice or have refrigerated holds. Fish are dressed at sea and no further at-sea processing is conducted. There is no distinction in the catch areas of temperate species such as swordfish and albacore compared to tropical tunas. These species are caught interchangeably along the continental shelf edge in the areas operated by the fleet, along the west coast and the northeast of the South African EEZ .

South Africa submitted a bigeye tuna fishing plan (CoC 07/13) to the Commission meeting of the IOTC, thereby notifying the Commission of South Africa's intention to exceed 1000 t of bigeye tuna in future as the fishery develops. Prior to 2002 most of longline fishing effort was concentrated in the Atlantic Ocean. Fishing effort started increasing in the Indian Ocean from 2001 with the development of ice and processing facilities at Richards Bay, which is situated on the east coast of South Africa. The targeting and catching of tropical bigeye and yellowfin tunas has proven more successful in the Indian Ocean, resulting in a sizeable amount of the longline fishing effort being concentrated in the Indian Ocean. This sector is now the most important South African tuna sector operating in the Indian Ocean in terms of tonnage landed.

In 2005 the shark longline sector was split into a demersal shark longline component, which predominantly targets soupfin (*Galeorhinus galeus*) and hound sharks (*Mustelus mustelus*), and a pelagic shark longline component (seven vessels), which predominantly targets shortfin mako and blue sharks. The latter catches tunas and swordfish as bycatch. This sector was split as a precursor to phase out the targeting of pelagic sharks due





to the concern over the local stock status of some species. The pelagic shark fishery operated under exemptions from 2005 until March 2011, when South Africa incorporated the pelagic shark fishery into the tuna/swordfish longline fishery. Six of the seven shark exemption holders were issued with tuna/swordfish rights in March 2011, and underwent a phase-out period to reduce shark catch and improve tuna and/or swordfish catch performance. Pelagic sharks are now considered bycatch in the Large Pelagic Longline sector. Several management measures have also been introduced to reduce shark bycatch, such as the prohibition of wire traces and the prohibition of shark targeting. In addition to the aforementioned measures, the following actions have been taken domestically to monitor catches of all species, onboard observer coverage, catch statistics logbooks on board as well as discharge monitoring.

1.2. Tuna Pole-line sector

Fishing for tunas using rod and reel and/or pole and line dates to the 1970s in South Africa when they were caught in minimal quantities as bycatch in other fisheries. Interest sparked in 1979 when yellowfin tuna (*Thunnus albacares*) became available close inshore off Cape Point (Shannon, 1968). Operators from other sectors converted their vessels to ice vessels to fish for yellowfin tuna using Pole-line or purse-seine nets, resulting in catches of over 4 500 t (Penney and Punt, 1993). By 1980 the yellowfin tuna was no longer available close inshore, resulting in these vessels targeting albacore (*Thunnus alalunga*) instead in the Atlantic Ocean on the south-west and west coasts of South Africa. Albacore catches peaked at 6000 t in 1989, although these catches were under-reported and were probably closer to 10 000 t (Penney and Punt, 1993). The sector has continued to exploit juveniles and sub-adult albacore of between 2 and 3 years old (average of 86 cm FL) in the Atlantic Ocean and larger yellowfin tuna (average of 133 cm FL). Catches of albacore in the Atlantic Ocean have experienced periods of low catches of <2500t (2016-2018 and 2023) over the last decade, otherwise averaging approximately 4 000 t per year, and over 5000 t in 2022. Yellowfin tuna are periodically available inshore with a frequency of around 10 years, leaving the fleet to harvest this species opportunistically.

The sector operates along the south-west and west coasts of South Africa in the Atlantic Ocean where albacore is available close inshore from October to May, and vessels make few forays (<3 fishing days per year) into the Indian Ocean depending on target species distribution. Traditionally the South African fleet has been characterized into three different categories (1) Skiboats, (2) Pole-line and (3) Freezer vessels (Leslie *et al.*, 2004). Skiboats are less than 25 GRT and are mostly confined to day trips within a range of 50 nm. Pole-line boats, which represent the bulk of the fleet, are mainly older displacement-type vessels converted from other fisheries. These vessels can undertake multiday trips of limited duration and range, as the catch is kept on ice. Freezer vessels are mainly vessels up to 30 m and 230 GRT. Due to their large size and freezing facilities, these vessels can stay out at sea for long periods and reach the farthest fishing grounds (West *et al.*, 2013). In more recent years, improvements in navigational gear, the use of live bait and sonar equipment has improved the performance of these vessels (West *et al.*, 2013). Over the last decade, 22 of the larger vessels with the capability to fish further offshore and with freezer capacity have converted to longline gear.

This sector is effort controlled, limiting the number of vessels. Prior to 2006, the Tuna Pole-line sector was managed under the bracket of commercial linefishing. During the long-term rights allocation process in 2005, the commercial linefishery was divided into three separate sectors consisting of the traditional linefishery (452 vessels and 3 450 crew), the hake-handline sector (130 vessels and 785 crew) and the Tuna Pole-line sector (200 vessels and 3 600 crew) (Mann, 2013). Of the 200 vessels and 3 600 crew allocation available for 8 years, only 198 vessels and 2961 crew were allocated in 2005 (TAC/TAE, 2015). The reallocation of long-term rights in 2013 resulted in 164 fishing rights and a total of 165 vessels.3. The most recent Rights allocation process in 2021 resulted in 132 fishing rights being allocated for 140 vessels, valid for a period of 15 years and expiring in 2037.

Since vessels are small and the nature of the operation requires the vessel to maximise on crew (who work in pairs to catch and haul albacore), South Africa has not mandated vessels to accommodate human scientific observers and instead catches have been monitored in port during offloading. Two industry groups within this sector, which collectively cover the entire fleet, are seeking Marine Stewardship Council (MSC), one of which was recently certified in August 2024. The MSC certification process includes assessing and scoring external validation of evidence and information, and the adequacy of information through methods such as observer coverage. As such, this sector has voluntarily commenced with onboard human scientific observer coverage on suitable and willing vessels and their observer coverage currently is ~3% of fishing days.





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In 2014, after 6 years of experimental fishing, live-bait purse-seining was incorporated in the sector, allowing a limited number of vessels to cast a net and all vessels to hold live-bait. The live-bait are mostly anchovy (*Engraulis encrasicolus*) with sardine (*Sardinops sagax*) considered as accidental catch and are stored alive in tanks for up to 3 months. The vessels are authorised to use purse-seine nets that do not exceed 210 m in length and 35 m in depth.

The Tuna Pole-line sector is largely based in Cape Town and the fleet operates in the Atlantic Ocean along the west coast as far north as Namibia and as far west as Valdivia and Vema seamounts, where they have access to albacore and yellowfin tuna in these areas.

2. FLEET STRUCTURE

South Africa has two commercial fishing sectors which target tuna and tuna-like species in the Indian Ocean – the Large Pelagic Longline and the Tuna Pole-line. The Tuna Pole-line sector, which operates mainly in the Atlantic Ocean from September – May each year, only occasionally crosses over into the Indian Ocean in search of yellowfin tuna. These vessels are relatively small (< 24m), have a limited range and the duration of trips is short (< 16 days). Since 2013, there have only been five (5) fishing days by four (4) Tuna Pole-line vessels in the Indian Ocean area of competence. In contrast, 19 longline vessels have been active in the IOTC area of competence in 2022 and 2023.

South Africa submitted a Fleet Development Plan (FDP) in 2007 and is yet to provide information on the implementation of the initial FDP and to consult with stakeholders to provide an updated FDP.

	Fleet S	Structure in 20	023	Fleet Structure 2015 – 2022		
Fishing Sector	No. Active Permits	Vessel size range (m)	Days at sea	No. Active Permits	Vessel size range (m)	Days at sea
Large Pelagic Longline	21 (19 vessels)	20 - 39	1 – 15	2022: 17 2021: 15 2020: 144 2019: 23 2018: 28 2017: 18 2016: 18 2015: 19	2022: 20 - 49 2021: 20 - 49 2020: 20 - 32 2019: 16 - 49 2018: 16 - 49 2017: 20 - 49 2016: 20 - 49 2015: 20 - 49	1 - 147
Pole-line	0	0	0	2022: - 2021: 1 2020: - 2019: - 2018: - 2017: 1 2016: - 2015: 2	2022: - 2021: 11 2020: 0 2019: - 2018: - 2017: 15 2016: - 2015: 17 - 19	1
Commercial Linefishery	~115	4 - 10	1 - 2	-		•
Recreational Linefishery	Unknown	4 - 10	1			

 Table 1. Number of vessels operating in the IOTC area of competence, by gear type and size, for the period 2015 - 2023.





3. CATCH AND EFFORT (BY SPECIES AND GEAR)

In 2023, 19 longline vessels were active in the IOTC Area of Competence, which is in the same as 2022. Effort increased by 2% from 2022 (1 295 129) to 2023 (1 326 564) (Table 2a). The effort was still less than that of 2019 (1 355 677). 2020 is considered a low effort year because of a combination of Joint-Venture vessels not operating in South African waters in that year and the impacts of the COVID19 pandemic. One Japanese-flagged vessel operated under joint-venture in South African waters in 2021, however more fishing effort was undertaken by South African flagged vessels over the last few years. Since a large portion of the fleet operates on the west coast, the effort in the IOTC Area of Competence is influenced by the vessels' desire to fish further south crossing the 20°E boundary that separates the IOTC and ICCAT. The minimal effort increase does not explain the changes seen in catches from 2022 to 2023, catches for some species showed a significant increase whilst not for others; albacore (+59%), southern bluefin tuna (-64%), bigeye tuna (-14%), yellowfin tuna (+59%) as shown in Figure 1a. Landings of sharks increased for shortfin mako (17%) despite the prohibition of wire traces and shark targeting, while blue shark catches decreased by 82%.Targeting, vessel effects, availability of species inshore, gear configurations, effort expended on the south coast compared to the northeast have impacted the changes in catches.

There was no Tuna Pole-line effort in the Indian Ocean Area of Competence in 2023.

Table 2a. Annual Large Pelagic Longline sector catch (tons round weight excluding sharks and NEI) and effort (number of hooks) of primary species in the IOTC Area of Competence for the period 2015 - 2023.

Year	Total number of hooks	Bigeye tuna	Yellowfin tuna	Albacore	Southern bluefin tuna	Swordfish	Skipjack	Shortfin mako	Blue shark	NEI
2015	1 614 724	256.0	422.1	18.5	10.7	122.7	0.3	290.6	128.9	47.4
2016	1 284 756	203.6	331.5	19.9	17.8	93.4	0.1	543.6	171.7	28.7
2017	1 284 160	261.7	247.5	26.5	46.8	57.3	0.5	421.1	105.4	22.9
2018	1 325 446	212.1	331.4	17.9	58.2	123.3	0.1	367.0	178.8	19.1
2019	1 355 677	238.4	389.0	57.2	63.9	225.5	0.2	116.1	68.0	14.8
2020	572 461	118.0	216.6	13.2	17.1	166.0	0	111.7	39.5	6.9
2021	901 104	266.0	307.6	42.7	52.6	276.6	0	36.6	6.2	11.5
2022	1 295 129	327.1	341.2	47.6	105.4	432	0.3	52.9	22.2	0
2023	1 325 654	280.6	544.8	75.7	37.2	548	0	62.4	3.9	0

Table 2b. Annual catch and effort (number of days) of primary species from the Tuna Pole-line in the IOTC Area of Competence	ce for
the period 2015 - 2023.	

Vear	Total number	Albacore	Yellowfin	Skiniack	Bigeye	Snoek	Vellowtail	NEI
i cai	of catch days	Albacole	tulla	экірјаск	tulla	SHOCK	Tenowtan	
2015	3	0.13	0.11	0	0	0	0	0
2016	25	5.78	0	0	0	6.52	0	0
2017	1	0	0	0	0	0	0.04	0
2018	0	0	0	0	0	0	0	0
2019	1	0.25	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	0	0







Figure 1a. Historical annual catch for the South African Large Pelagic Longline fleet for the IOTC Area of Competence of the period 2015 - 2023.



Figure 1b. Historical annual catch for the South African Tuna Pole-line fleet for the IOTC Area of Competence for the period 2015 – 2023. In 2023 there was zero Tuna Pole-line effort in the IOTC Area of Competence.





There are three areas of concentrated longline effort by the national fleet in the IOTC Area of Competence (Figure 2a): Agulhas Bank (~ 20-23 degrees longitude), Algoa Bay (~ 25-27 degrees longitude) and offshore of Richards Bay (~32 degrees longitude). The average spatial distribution of the fleet for the period 2018 to 2023 is shown in Figure 2b. The spatial distribution of species-specific catches is illustrated in Figure 3a, and the average species-specific catch distribution for the period 2018 to 2023 in shown in Figure 3b. The spatial distribution of fishing pressure and catch in 2023 illustrates an increasing importance of the fishing area offshore of Richards Bay.



Figure 2a. Map of the distribution of effort of the South African Large Pelagic Longline fishing fleet in the IOTC Area of Competence for 2023.







Figure 2b. Map of the distribution of average effort of the South African Large Pelagic Longline fishing fleet in the IOTC Area of Competence for the period 2018 – 2023.





IOTC-2024-SC25-NR24



Figure 3a. Map of distribution of fishing catch (metric tons), for a) bigeye tuna, b) yellowfin tuna, c) albacore, d) swordfish, e) shortfin mako shark and f) blue shark for Large Pelagic Longline in South Africa, in the IOTC Area of Competence in 2023.







Figure 3b. Map of distribution of average fishing catch (metric tons), for a) bigeye tuna, b) yellowfin tuna, c) albacore, d) swordfish, e) shortfin mako shark and f) blue shark for Large Pelagic Longline in South Africa, in the IOTC Area of Competence for the period 2018 -2023.





4. RECREATIONAL FISHERY

The boat-based recreational sector, including informal charter and sport fisheries using rod and reel and spear guns, also catches albacore, yellowfin, skipjack, bigeye, eastern little and southern bluefin tunas and billfish (swordfish, blue marlin *Makaira nigricans*, black marlin *Makaira indica*, longbill spearfish *Tetrapturus pfluegeri*, shortbill spearfish *Tetrapturus angustirostris* and striped marlin *Kajikia audax*), from small fishing vessels (on average 4 - 10 m in length). All recreational fishers are required to purchase a permit and are restricted to a bag-limit of 10 tunas, 5 swordfish and 5 billfish per day, with the sale of catch strictly prohibited. There are further minimum weight restrictions of 3.2 kg for yellowfin and bigeye, 6.4 kg for southern bluefin and 25 kg for swordfish caught. As there are no reporting requirements for this sector, catch and effort data are not consistently available. The angling associations have regular tuna and billfish competitions every year where they promote research (e.g., tagging), catch-and-release and responsible fishing. Most recreational fishing takes place in nearshore waters during holidays and relatively few anglers are equipped to target tuna.

The impact of the recreational fishing sector on South African large pelagic resources has resulted in several data collection initiatives being implemented. These are largely driven by NGOs, Government Research Institutes and Universities. One such initiative FishforLife (<u>http://fishforlife.co.za/</u>) is a citizen science initiative aimed at gathering relevant fisheries data in the recreational fishing sector via their online portal CatchReport (<u>http://www.catchreport.co.za/</u>). These projects also aim to collate all angling club and angling tournament catch and effort data which will be accessible for scientific research purposes.

5. ECOSYSTEM AND BYCATCH ISSUES

The World Wildlife Fund-South Africa (WWF-SA) Responsible Fisheries Programme, now the WWF Sustainable Fisheries, has worked since 2007 to facilitate the implementation of an Ecosystem Approach to Fisheries management (EAF) in Southern Africa. An Ecological Risk Assessment (ERA) was conducted in 2007 to identify the issues (e.g., ecological wellbeing, human wellbeing, and ability to achieve) in the pelagic longline, shark longline and Tuna Pole-line fisheries (Petersen, 2007). The Performance Report identified the gaps amongst research, management, compliance, and industry and has been used – and has continued relevance – as a tool to guide work plans and the implementation of EAF considerations in permit conditions.

5.1. Sharks

South Africa has one of the most diverse shark faunas in the world and many species are caught in appreciable quantities in directed and non-directed shark fisheries. South Africa has well developed fisheries management systems for most of its fisheries and many challenges regarding the sustainable management and conservation of sharks have already been identified and addressed in individual fisheries policies and management measures.

The permit conditions are amended regularly to include shark mitigation measures. As of 2017, the use of wire traces has been banned in the South African Large Pelagic Longline sector, as is the use of stainless-steel hooks. Furthermore, shark fins must be naturally attached or tethered to the body when landed. As of 2018, the targeting of sharks (defined as 50% or more sharks per fishing season by mass) is prohibited and if quarterly landings exceeded 60% shark, the vessel would require 100% observer coverage for the remainder of the fishing season.

In addition, an initial precautionary upper catch limit (PUCL) of 2000 t dressed weight of Chondrichthyans was enforced in 2012, which has since been revised to 1 000 t dressed weight. When the PUCL has been reached, no shark shall be landed, and fishing will only be allowed with the presence of an observer onboard.

Thresher sharks belonging to the genus *Alopias*, hammerhead sharks (belonging to genus *Sphyrna*), oceanic whitetip sharks, porbeagle sharks, dusky sharks and silky sharks shall not be retained on board any vessel and all releases of these species are noted on the logbooks. Furthermore, manta- and mobulid rays shall not be retained on board any vessel and all releases of these species are noted on the logbooks.





The trade of shark and ray products, including fins, fillets, gill rakers and other products should be carefully monitored to ensure CITES Appendix II listed species are not traded without the necessary permits.

5.1.1. NPOA sharks

South Africa is a signatory of the FAO Code of Conduct for Responsible Fisheries. Under its framework an International Plan of Action for the Conservation and Management of Sharks (IPOA-Sharks) was developed in 1998, which encourages maritime states to conduct a Shark Assessment Report (SAR) and adopt a National Plan of Action for Sharks (NPOA-Sharks). The first South African National Plan of Action for sharks (NPOA-Sharks I) was finalized in 2013 and provided baseline information on the status of chondrichthyans in South Africa and assessed research, management, monitoring, and enforcement frameworks associated with shark fishing and trade of shark product in the South African context.

In 2018, DFFE reviewed the NPOA-Sharks I which was presented at the IOTC WPEB14 (da Silva et al., 2018). The review indicated that progress was made in six of the seven "Issue Clusters". Most notable progress was made within the optimum use (100% of listed actions completed) and classification and assessment of species (84% of listed actions completed) issue clusters. The least progress was made in the data and reporting and regulatory tools issue clusters. In May 2020, following public concern about shark populations along the South African coast, The Minister of Environment, Forestry and Fisheries, Ms Barbara Creecy, appointed an External Panel to formally review the NPOA-Sharks I. The Expert panel was tasked to provide an independent critical appraisal of the NPOA-Sharks I, to review the progress made with implementation of the plan and to provide input towards an updated and improved NPOA. The Expert panel scrutinised 60 background documents and reviewed the 62 actions of NPOA-Sharks I and provided scores for each section. The external experts commended the external review process as a unique example of accountability and transparency that highlighted the Departments' commitment to conserve shark species and properly manage their long-term sustainable use. Overall the review of the Panel was positive and acknowledged good progress with the foundational sections of the plan relating to research. They noted that in this context, South Africa's plans and achievements compare well with the standard of developed countries such as the USA and Australia. To improve on sections where limited progress was made, specific recommendations were made for immediate implementation. These included but were not limited to effective communication and coordination from science to policy, the need for measurable indicators to track progress of the updated plan and a stronger focus on illegal, unregulated, and unreported fishing (DEFF, 2020).

The review panel recognized South Africa's achievements, in particular the discipline of scientific assessments, but also identified areas where improvements are still needed. Emanating from this review, after an extensive stakeholder consultation phase, the revised NPOA-Sharks II (2022) builds on the achievements and lessons learned from NPOA-Sharks I and closely follows the recommendations of the Shark expert panel. In 2022, the NPOA-Sharks II was finalised and adopted. The NPOA-Sharks II was presented at the 2022 IOTC WPEB (*South Africa NPOA Sharks II. C. da Silva, S.E. Kerwath. IOTC-2022-WPEB18-10*).

5.1.2. Sharks finning regulation

South African Large Pelagic longline permit condition 6.1 (h) includes the following:

Fins may not be removed from the shark trunks (i.e. headed, gutted). Fins are to be kept attached to the specific trunk either through a partial cut and folded over or tethered to the trunk via a cord (any loop in the cord shall not exceed approximately 8 cm in diameter and shall follow similar specifications to permit condition 22.1 (b)).

5.1.3. Blue shark





South African Large Pelagic longline permit condition 11.2(a) includes the following:

The Permit Holder shall render statistics as required in the prescribed numbered catch statistics logbook.

South African Large Pelagic longline permit condition 11.2(f) includes the following:

The Department will not issue the 2025/26 catch permit to the Right Holder if the required monthly catch statistics data, up to and including December 2024, are not provided or are incomplete.

South African Large Pelagic longline permit condition 10.3 includes the following:

A Landing Declaration (Annexure 7 and electronic version available upon request from Large Pelagics Marine Research Technician, Table 2) is to be completed after every discharge and certified by a FCO or a DFFE appointed Monitor. The Landing Declaration is to be submitted by the right holder along with the monthly catch statistics forms (Clause 11.2).

And permit condition 16.1:

The Department shall require each Permit Holder to carry one or more Scientific observers on board its vessel on request (72 hours), a minimum of one per quarter to ensure that 20% of all fishing days per quarter are monitored. Failure to comply with this request shall result in the vessel being ordered to remain in port and may result in the initiation of proceedings under section 28 of the MLRA. Annual observer coverage per vessel is required to be spatially representative of annual fishing effort and needs to fulfil RFMO specific requirements. If coverage of observed trips is not temporally and spatially representative of effort, the Department shall require vessels to carry scientific observers on board additional trips.





5.2.Seabirds

South Africa has been collecting data on seabird interaction with its longline sector since 1998. South Africa published its NPOA for seabirds in 2008 (NPOA-Seabirds, 2008). The NPOA-Seabirds specifies a maximum mortality rate of 0.05 birds/1000 hooks and lays out bycatch mitigation measures for use in longline fishing.

South Africa has introduced several bird mitigation measures through permit conditions since the start of the tuna longline sector, including no daylight setting in conjunction with the compulsory flying of tori-lines or line weighting, and the use of thawed bait to improve sink rates. South Africa does not consider the use of line shooters or offal discard management to be useful in reducing seabird incidental mortality. Furthermore, South Africa (with the Albatross Task Force of BirdLife South Africa) developed a management plan in 2008 to reduce seabird bycatch in its longline sector. This plan, integrated in the permit conditions, includes two seabird bycatch limits per vessel per year. The first limit stipulates that once a vessel reaches 25 birds killed in a year, it must adopt additional mitigation measures; it must fly a second tori line and it must place additional weights on to each branchline. If the vessel reaches the second limit of 50 seabird mortalities, the Department will review compliance with mitigation measures before deciding whether to permit further fishing by that vessel.

Vessels are encouraged to use 'hook shielding devices' (as approved by the Agreement on the Conservation of Albatross and Petrels), which in 2019 are limited to Smart Tuna Hooks® and Hookpods®. If either method is chosen, each hook set shall have the chosen device attached.

South Africa is in the process of updating the NPOA seabirds a final draft has been produced and gazetting and implementation is planned for 2025.

- How many vessels operated south of 25°S in the period covered by this report?
 100% of vessels operations reported in 2023 were south of 25°S.
- 2. How many of those vessels used bird scaring lines (as a proportion of total effort)?- 10 of the vessels flew tori lines, and 18% of total effort used had at least one tori line.
- 3. How many of those vessels used line weighting (as a proportion of total effort)?17 of the vessels used line weighting, and 90% of effort used line weighting.
- 4. How many of those vessels used night setting (as a proportion of total effort)?- 100% of vessels employed night setting. This is a mandatory regulation in South African waters.

5.3. Marine Turtles

The South African government has worked closely with WWF to educate skippers on release procedures for turtles. Skippers are provided with guidelines/instructions in their permit conditions on how to safely handle and release caught turtles. The use of circle hooks is encouraged as stated in the permit conditions, as well as the release of turtles using a de-hooker. As of 2014, skippers were required to record interactions with turtles, including the fate of the turtle, in the catch statistic logbooks on board the vessel. There is high awareness among skippers on turtle handling protocols and release mortalities are thought to be low. In 2023, 115 turtle interactions were recorded by skippers and observers, 114 of which were released alive and 62% of the interactions were loggerhead turtles.

5.4. Other ecologically related species (e.g., marine mammals, whale sharks)

South Africa encourages vessels to take cognizance of sustainable fishing practices and impacts of tuna longline operations on the ecosystem. Given that South Africa does not allow purse-seine fishing tuna fishing and large pelagics are solely targeted by longliners and baitboats, interactions with marine mammals are negligible. However, a specific concern is the impact of lost "strops" (cords used to hang fish during freezing) during





discharge procedures. Marine animals subsequently become entangled in these strops, resulting in mutilation and potential mortality of entangled animals. To solve this problem, the Permit Holder is to ensure that "strops" used during freezing, and discharge do not exceed the stipulated 80 mm stretched length.

The Department of Forestry, Fisheries and the Environment (DFFE) of South Africa is collaborating with researchers from SeaSearch and Stellenbosch University on a new study focused on killer whale populations around southern Africa. While the study covers a broad range of topics, of particular interest to the Indian Ocean Tuna Commission (IOTC) is the investigation into killer whale depredation on tuna vessels in the broader Southwest Indian Ocean and Atlantic regions. Since the early 2010s, killer whales have been increasingly depredating fish from tuna vessels off South Africa, with interactions between the tuna fleet and killer whales becoming more frequent over the past decade. Depredation, the act of marine mammals feeding on fish catches or fishing gear, has been documented across all ocean basins, particularly in longline fisheries—where it can result in significant losses. For example, depredation can reduce overall catch rates by up to 30% and even cause complete loss of catch on individual longline sets (i.e., 100% loss). Beyond the financial impacts on fisheries, depredation also raises concerns about the accuracy of fish stock abundance indices.

In South Africa, the true extent of killer whale depredation, its changes over time, and the factors driving variations between different fisheries are not well understood. This study, using data from fisheries reports and observers, aims to investigate and quantify marine mammal depredation trends on the large pelagic longline fishery over the past two decades. Researchers are also examining broader questions related to killer whale populations around southern Africa, including their numbers, migratory patterns, diet, and impacts on the ecosystem and fisheries. Additionally, the study seeks to understand how South African killer whales relate to other populations in the Southwest Indian Ocean and Atlantic regions.

Skippers are encouraged to report any interactions with killer whales in their logbooks, including details such as the location, pod size, type of interaction, and photos or videos when possible. This data will help researchers track and understand the nature of these interactions. A key component of the research is to identify potential mitigation measures to reduce the negative financial impacts of killer whale depredation on tuna fisheries and right holders.

6. NATIONAL DATA COLLECTION AND PROCESSING SYSTEMS

6.1. Logsheet data collection and verification

Vessels in the Large Pelagic Longline sector and Tuna Pole-line sector have been required to complete daily logs of catches since 1997 and 1985, respectively. The data are verified by comparing logs of catches with landing declarations that are overseen by South African Fisheries Compliance Officers and Fisheries Monitors. Right holders are required to submit these logsheets monthly.

6.2. Observer programme

Observer coverage of local Large Pelagic Longline vessels has been included in the permit conditions and has been steadily increasing. To improve the spatiotemporal observer coverage further, South Africa is aiming to increase its overall observer coverage to 20% per quarter. To achieve this, the current Large Pelagic Longline permit conditions require permit holders to carry one or more scientific observers on board their vessels on a minimum of one fishing trip per quarter to ensure monitoring of 20% of all fishing days in each quarter.

Observer coverage for joint-venture (foreign-flagged) vessels will continue with 100% of fishing trips observed should these vessels return. In 2023, the South African large pelagic longline fleet set 139 652 hooks in the IOTC Area of Competence with an observer onboard, which equates to 10.5% of all hooks set in the IOTC Area of Competence.





IOTC-2024-SC25-NR24

Although the Tuna Pole-line sector has achieved ~3% observer coverage voluntarily, this has taken place in the Atlantic Ocean and the fleet has not operated in the IOTC Area of Competence. There have been increased inspections and sampling of Tuna Pole-line vessels conducted during offloading in port by South Africa Fisheries Compliance Officers and Fisheries Monitors.

The observers collect all operational, catch (retained and discard), effort and length frequency data, and will collect biological material when required. The observers record data on IOTC forms (IOTC Form I-GEN, IOTC Form 2-LL, IOTC Form 4-LL etc.), and a transition to the Official IOTC ROS data reporting forms (MS Excel) is underway.

 Table 3. The number of hooks observed (local and foreign-flagged joint-venture vessels) per year from 2019 to 2023 in the IOTC Area of Competence.

Year	Total number of hooks observed	Percentage hooks observed of total hooks set in IOTC region
2019	804 121	59%
2020	100 179	18%
2021	312 368	35%
2022	279 862	21.6%
2023	139 652	10.5%



Figure 4. Map showing the spatial distribution of observer effort coverage for the IOTC Area of Competence in 2023.

^{6.3.} Port sampling programme





IOTC-2024-SC25-NR24

Port sampling for tuna, swordfish and related species began in 1973 in South Africa. The collection of tuna length-frequency data through port sampling of Tuna Pole-line vessels has been undertaken by employees of the Department of Forestry, Fisheries and the Environment since 2011, and by scientific observers since 2022. The skippers are encouraged to collect yellowfin tuna length frequency measurements onboard Pole-line vessels prior to dressing the catch. All length frequency data on the pelagic longline vessels are collected at sea by observers prior to the fish being dressed.

Table 5. Number of individuals measured by observers on Large Pelagic Longline vessels in the IOTC Area of Competence for the period2019 - 2023. These fish are not necessarily retained.

English name	Scientific name	2019	2020	2021	2022	2023
Albacore	Thunnus alalunga	1694	58	1098	264	261
Atlantic pomfret	Brama	221		66	34	
Bigeye thresher	Alopias superciliosus				2	1
Bigeye tuna	Thunnus obesus	1494	126	1211	747	404
Black marlin	Makaira indica	10		14	16	11
Blue marlin	Makaira nigricans	4	5	11	28	13
Blue shark	Prionace glauca	442	372	515	474	19
Butterfly kingfish	Gasterochisma melampus	13		5		
Common dolphinfish	Coryphaena hippurus	46	8	60	143	62
Copper shark	Carcharhinus brachyurus		1			
Crocodile shark	Pseudocarcharias kamoharai	3			2	
Escolar	L. flavobrunneum	191		79	375	4
Great barracuda	Sphyraena barracuda				1	
Indo-Pacific sailfish	Istiophorus platypterus	6		5	9	2
L. snouted lancetfish	Alepisaurus ferox	6				
Mako sharks	Isurus spp	10	2139	78	19	
Moonfish	Mene maculate	1	8		1	2
Oceanic whitetip shark	Carcharhinus longimanus			2		4
Oilfish	Ruvettus pretiosus	178	1	58	53	16
Opah	Lampris guttatus	70		1	2	
Pelagic stingray	Dasyatis violacea	5				
Shortbill spearfish	Tetrapturus angustirostris	8		9	6	7
Shortfin mako	Isurus oxyrinchus	121	1268	49	24	55
Silky shark	Carcharhinus falciformis	1		30	1	7
Skipjack tuna	Katsuwonus pelamis	14	1	13	124	1
Southern bluefin tuna	Thunnus maccoyii	703	65	223		20
Striped marlin	Tetrapturus audax	3		1		8
Swordfish	Xiphias gladius	612	132	585	939	807
Tiger shark	Galeocerdo cuvier					1
Wahoo	Acanthocybium solandri	15		1	2	1
Yellowfin tuna	Thunnus albacares	3682	707	972	1671	849





6.4. Actions taken to monitor catches & manage fisheries for Striped Marlin, Black Marlin, Blue Marlin and Indo-pacific Sailfish

Catches of marlin species (Striped Marlin, Black Marlin, Blue Marlin and Indo-pacific Sailfish) in the South African large pelagic longline sector remains low (< 10 tons per annum for all species combined). The following permit conditions aim to further reduce catches for these species:

6.1 (a) - Billfishes of the genera Makaira (blue marlin), Tetrapturus (spearfish), Istiophorus (sailfish), Istiompax (black marlin) and Kajikia (striped and white marlin) are designated as secondary species.
i6.. (k) – The catching of and marlins less than 120cm LJFL or less than 90 cm PFL is prohibited.

6.5. Gillnet observer coverage and monitoring

South African does not have a gillnet sector.

6.6. Sampling plans for mobulid rays

South African does not have a gillnet or purse seine sector. No interactions with mobulid rays were reported in 2023.

7. NATIONAL RESEARCH PROGRAMS

7.1. National research programs on blue shark

7.1.1 South Africa does not currently have any new research programs on blue sharks in the IOTC region of competence apart from the analysis of historical satelite data previously reported to IOTC. This project aims to investigate the horizontal movement shortfin mako blue sharks around the Agulhas Bank shelf. Furthermore, this project aims to investigate the hypothesis that the Agulhas shelf acts as a nursery ground for shortfin mako sharks. To date 19 shortfin mako and 8 blue sharks have been tagged with PSAT and SPOT tags in collaboration with DFFE, DEA (Department of Environmental affairs) and SWIOFP (South West Indian Fishery Project). One of the key research priorities involves investigating the movement of large pelagic sharks and fish between the Indian and Atlantic Ocean.

7.2. Research programs on Striped Marlin, Black Marlin, Blue Marlin and Indo-pacific Sailfish

South Africa does not currently have any research programs on marlin or sailfish species as catches are negligible. In 2023, the combined catches for all these species was only 16.9 tons.

7.3. National research programs on sharks

7.3.1. South Africa adopted a revised shark NPOA in 2022 The NPOA was presented at the 2022 IOTC WPEB18 meeting (*South Africa NPOA Sharks II. C. da Silva, S.E. Kerwath. IOTC-2022-WPEB18-10*).





7.4. National research programs on oceanic whitetip sharks

South Africa does not currently have any research programs on oceanic whitetip. In 2023, there were 254 catches of oceanic whitetip sharks (249 released alive, 5 dead) reported from logsheets and observers.

7.5. National research programs on marine turtles

South Africa does not currently have any research programs on marine turtles. In 2023, 115 turtle interactions (leatherback, loggerhead, green) were reported from logsheets and observers, 114 of which were released alive.

7.6. National research programs on thresher shark

South Africa is currently involved in the IOTC research program that investigates post-release mortality of bigeye thresher sharks through the deployment of PSAT tags using observers on longline vessels.

8. IMPLEMENTATION OF SCIENTIFIC COMMITTEE RECOMMENDATIONS AND RESOLUTIONS OF THE IOTC RELEVANT TO THE SC.

Res. No.	Resolution	Scientific requirement	CPC progress
12/04	On the conservation of marine turtles	Paragraphs 3, 4, 6–10	 The use of circle hooks is encouraged as stated in the permit conditions. The South African Government has worked closely with WWF to educate skippers on release procedures for turtles. According to the handling and release instructions provided to vessels in their permit conditions, vessels are required, amongst others, to: Remove the hook using a long-handled de-hooker on turtles too large to bring onboard and a de-hooker on turtles brought onboard. Use a line-cutter when a de-hooker is not possible and to cut the line as close to the hook as possible. Use net to bring the turtle onboard and to avoid pulling on the line. Handle the turtle with gentle care. Release the turtle headfirst and away from fishing gear once it has recovered onboard. Trained observers are present on 100% foreign-flagged longline and up to 20% of domestic vessels and they record all interactions with marine turtles during the fishing operation. Since 2013, all vessels have been required to record interactions with marine turtles in their logbooks, and each vessel has been given a species guide to aid identification of turtles to species level.
12/09	On the conservation of thresher sharks (family alopiidae) caught in association with fisheries in the IOTC area of competence	Paragraphs 4–8	Thresher sharks are not permitted to be retained; this is stated in the permit conditions.

Table 9. Scientific requirements contained in Resolutions of the Commission, adopted between 2012 and 2023.





Res. No.	Resolution	Scientific requirement	CPC progress
13/04	On the conservation of cetaceans	Paragraphs 7– 9	According to observer records and incidental reporting by skippers there have been minimal encounters (i.e., incidental captures) of cetaceans by longline vessels. Logging these incidents is a requirement for the fishery. South Africa endeavours to have all skippers and onboard observers collect data on all encounters with cetaceans.
13/05	On the conservation of whale sharks (<i>Rhincodon</i> <i>typus</i>)	Paragraphs 7– 9	There have been no recorded encounters (i.e., incidental captures) with whale sharks by the longline vessels. South Africa will endeavour to have all skippers and onboard observers collect data on all encounters with whale sharks.
13/06	On a scientific and management framework on the conservation of shark species caught in association with IOTC managed fisheries	Paragraph 5–6	South Africa's NPOA-Sharks II (2022) has grouped issues facing each fishery into clusters with proposed actions, responsibilities, priorities, and timeframes (Pg 11-17 of the NPOA-Sharks II, 2022)
15/01	On the recording of catch and effort by fishing vessels in the IOTC area of competence	Paragraphs 1–10	All Large Pelagic Longline and Tuna Pole-line vessels are required to complete a logbook of catch and effort and submit this monthly to the Department.
15/02	Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs)	Paragraphs 1–7	South Africa submits nominal catch data and catch and effort data for surface and longline fisheries. Size data are collected through the observer program and port sampling. Fleet characteristics are submitted annually.
17/05	On the conservation of sharks caught in association with fisheries managed by IOTC	Paragraphs 6, 9, 11	 The following permit conditions (6.1) regulate shark catches in the South African Large Pelagic longline fishery: (b) Targeting of sharks is prohibited. Targeting is defined as landing 50% or more sharks per fishing season in terms of landed total mass. (c) The Permit Holder is restricted to landings of less than 60% sharks in terms of landed total mass in any quarter. If quarterly landings exceed 60%, the Permit Holder will be required to have 100% observer coverage for the remainder of the fishing season. (d) A Precautionary Upper Catch Limit (PUCL) of 1 000t applies to the total landed shark mass. (e) Once 80% of the PUCL has been caught, the remaining 20% of the PUCL shall be subdivided equally among active right holders. This PUCL will, in line with the prohibition on targeting of sharks, be reduced seasonally over a five-year period. (f) Once the PUCL has been reached, no pelagic sharks shall be landed, and fishing will only be allowed with the presence of an onboard Observer. (g) Thresher sharks belonging to the genus Alopias, hammerhead sharks (belonging to genus Sphyrna), oceanic whitetip sharks, porbeagle sharks, dusky sharks and silky sharks shall not be retained on board the vessel. The Permit Holder shall encourage the crew to release live sharks. It is prohibited to gaff, lift by the gill slits/ spiracles or punch holes through the bodies of prohibited species.





Res. No.	Resolution	Scientific requirement	CPC progress
			 (h) Fins may not be removed from the shark trunks (i.e., headed, gutted). Fins are to be kept attached to the specific trunk either through a partial cut and folded over or tethered to the trunk via a cord (any loop in the cord shall not exceed approximately 8 cm in diameter and shall follow similar specifications to permit condition 22.1 (b)).
18/02	On management measures for the conservation of blue shark caught in association with IOTC fisheries	Paragraphs 2-5	 The following permit conditions (6.1) regulate shark catches in the South African Large Pelagic Longline sector: (b) Targeting of sharks is prohibited. Targeting is defined as landing 50% or more sharks per fishing season in terms of landed total mass. (c) The Permit Holder is restricted to landings of less than 60% sharks in terms of landed total mass in any quarter. If quarterly landings exceed 60%, the Permit Holder will be required to have 100% observer coverage for the remainder of the fishing season. (d) A Precautionary Upper Catch Limit (PUCL) of 1 000t applies to the total landed shark mass. (e) Once 80% of the PUCL has been caught, the remaining 20% of the PUCL shall be subdivided equally among active right holders. This PUCL will, in line with the prohibition on targeting of sharks, be reduced seasonally over a five-year period. (f) Once the PUCL has been reached, no pelagic sharks shall be landed, and fishing will only be allowed with the presence of an onboard Observer. (h) Fins may not be removed from the shark trunks (i.e., headed, gutted). Fins are to be kept attached to the specific trunk either through a partial cut and folded over or tethered to the trunk via a cord (any loop in the cord shall not exceed approximately 8 cm in diameter and shall follow similar specifications to permit condition 22 1 (b))
18/05	On management measures for the conservation of the Billfishes: Striped marlin, black marlin, blue marlin and Indo-Pacific sailfish	Paragraphs 7 – 11	 Catches of marlin species (Striped Marlin, Black Marlin, Blue Marlin and Indo-pacific Sailfish) in the South African large pelagic longline remains low (< 20 tons per annum for all species combined). The following permit conditions aim to further reduce catches for these species: 6.1 (a) - Billfishes of the genera Makaira (blue marlin), Tetrapturus (spearfish), Istiophorus (sailfish), Istiompax (black marlin) and Kajikia (striped and white marlin) are designated as secondary species. 6.1 (h) - Marlins (Black, Blue, Stripped and White) shall not be retained on board the vessel, West of 20 degrees. The Permit Holder shall encourage the crew to release live marlins. 6.3 – The catching of and marlins less than 120cm LJFL or less than 90 cm PFL is prohibited. No discarding of dead marlins is permitted.





On measures applicable in case of non-fulfilment of reporting obligations	Paragraphs 1, 4	Right holders must submit monthly logsheets of direct and incidental catches.
in the IOTC		and if they do not comply, they will not be permitted to harvest in the next fishing season. Through regular stakeholder engagements, right holders are encouraged and reminded to report on incidental catches of sharks, seabirds, turtles and mammals. 100% observer coverage is achieved on joint-venture foreign flagged vessels. Local vessels are required to take observers throughout the year, with a target of 20% observer coverage. All Large Pelagic Longline and Tuna Pole-line vessels shall be fitted with a functional vessel monitoring system (VMS). The permit holder shall ensure the VMS is fully functional and continues to transmit to the Department's Operations room. Whilst at sea, the VMS shall report without interruption.
On an Interim Plan for Rebuilding the Indian Ocean Yellowfin Tuna Stock in the IOTC Area of Competence	Paragraph 22	South Africa has never exceeded 5,000 MT of yellowfin tuna landings since the inception of its tuna fisheries. South Africa only operates Longline and Pole-line vessels within the IOTC Area of Competence.
On the Conservation of Mobulid Rays Caught in Association with Fisheries in the IOTC Area of Competence	Paragraph 11	South African does not have a floating gillnet or purse seine fishery.
On an Interim Plan for Rebuilding the Indian Ocean Yellowfin Tuna Stock in the IOTC Area of Competence (<i>If not</i> <i>provided under Res 19/01</i> <i>above</i>)	Paragraph 23	South Africa has never exceeded 5,000 MT of yellowfin tuna landings since the inception of its tuna fisheries. South Africa only operates Longline and Pole-line vessels within the IOTC Area of Competence.
On a regional observer scheme	Paragraph 12	100% observer coverage is achieved on foreign flagged longline fishing vessels. The observer programme for domestic longline vessels expired in 2011. South Africa requires that each Large Pelagic longline right holder carries one or more Scientific observers on board its vessel on request for a minimum of one trip per quarter to ensure that 20% of all fishing days per quarter are monitored.
On Reducing the Incidental Bycatch of Seabirds in Longline Fisheries	Paragraphs 3–7	Foreign flagged longline fishing vessels have mandatory 100% observer coverage. South Africa requires that each Large Pelagic longline right holder carries one or more Scientific observers on board its vessel on request for a minimum of one trip per quarter to ensure that 20% of all fishing days per quarter are monitored. Observers are trained on bird ID and the observer companies work closely with bird experts to ensure proper ID of captured birds. Dead birds are handed over to scientific experts for investigation and research. All bird interactions during observed trips are captured and bird interaction reporting is mandatory in the fisheries'log books.
-	in the IOTC in the IOTC On an Interim Plan for Rebuilding the Indian Ocean Yellowfin Tuna Stock in the IOTC Area of Competence On the Conservation of Mobulid Rays Caught in Association with Fisheries in the IOTC Area of Competence On an Interim Plan for Rebuilding the Indian Ocean Yellowfin Tuna Stock in the IOTC Area of Competence (<i>If not</i> provided under Res 19/01 above) On a regional observer scheme On Reducing the Incidental Bycatch of Seabirds in Longline Fisheries	in the IOTC Image: Constraint of the image: Constr





Res. No.	Resolution	Scientific requirement	CPC progress
			Vessels must fly a bird-scaring line (tori line) during the setting of each
			longline.
			• Instruction on the method of tori line construction and deployment
			is provided to each vessel to ensure that correct specifications and procedures are followed.
			Dack lighting is to be kent to a minimum. The beams of dack lights must be
			directed towards the deck.
			All bait must be appropriately thawed, and where necessary, the swim bladder
			punctured to ensure rapid sinking of the bait.
			All birds caught must be brought onboard and, with the use of the release
			instructions provided, live birds are to be released.
			• The release instructions clearly outline the procedures to follow to
			ensure that a seabird has a good chance of survival after release.
			The NPOA-SEABIRDS (2008) specifies a maximum bycatch rate of 0.05
			birds/1000 hooks. Within this plan an initial seabird bycatch limit of 25 birds
			killed per year is set per vessel. Once the vessel reaches this limit then:
			• a second tori line must be flown and,
			• branch lines (snoods) must be weighted by placing 60 g weights
			within 2 m of the hook to ensure optimal sinking rates. Where
			multiple weights are used then the first weight should be within 2 m
			of the hook and the last weight within 3 m of the hook.
			If a vessel reaches 50 birds killed in a year then the vessel must stop fishing
			immediately. If the vessel has complied with all mitigation measures 100% of
			the time then it will be allowed to fish on condition that a trained onboard
			observer must be present to investigate the nature of the high seabird
			mortality and that instructions given by the observer will be followed.
			The NPOA seabirds II is in its final draft, planned to be gazetted in 2025.





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