MALAYSIA National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2019

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INFORMATION ON FISHERIES, RESEARCH AND STATISTICS

In accordance with IOTC Resolution 15/02, final scientific data for the previous year was provided to the IOTC Secretariat by 30 June of the current year, **for all fleets other than longline** [e.g. for a National Report submitted to the IOTC Secretariat in 2019, final data for the 2016 calendar year must be provided to the Secretariat by 30 June 2020)	YES 30/06/2020 Revised report sent on 30/07/2020
In accordance with IOTC Resolution 15/02, provisional **longline data** for the previous year was provided to the IOTC Secretariat by 30 June of the current year [e.g. for a National Report submitted to the IOTC Secretariat in 2019, preliminary data for the 2019 calendar year was provided to the IOTC Secretariat by 30 June 2020). **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 2020, final data for the 2019 calendar year must be provided to the Secretariat by 30 December 2020).	YES 30/06/2020 Revised report sent on 30/07/2020
If no, please indicate the reason(s) and intended actions:	

Executive Summary

Total catch of marine fish from Malaysian waters in 2019 were 1.456 million mt, a slight increased 1.0% compared to 1.453 million in 2018. The total landing in 2019 were attributed to the catch from 51,123 registered vessels with trawlers, purse seines, drift nets contributed large percentage of the catches. In 2019, marine fish production from the west coast of Peninsular Malaysia (Malacca Straits) contribute 815,816 mt (56%) out of the total catch. The remaining catches were from the South China Sea and Sulu Celebes Seas, east coast of Sabah. Coastal fisheries produced 82% (1,192,354 mt) and 18% (263,093 mt) from deep-sea fisheries.

Therefore, there is an emphasis by the government to develop tuna fisheries not only in coastal waters, but also in offshore waters within the Exclusive Economic Zone (EEZ). Tuna fisheries, which include both oceanic and neritic tuna, are targeted to be developed in the near future. The second Strategic Development Plan for tuna fisheries 2012-2020 was launched end of 2013.

During the early 1980s, small tuna (as neritic tuna were called then) were only caught as by-catch by gill nets and purse seines. When tuna purse seines were introduced in 1987, the neritic tuna fisheries started to develop. A tagging experiment on neritic tuna carried out in South China Sea showed that 50% of the recaptured tuna came from the purse seine operators. Initially purse seine operators visually searched for tuna schools. Gradually, some of these operators started to use lights to aggregate fish. Following complaints from other fishermen, the use of lights was regulated and limited to less than 30 kilowatts, although there have been incidences of non-compliance.

Neritic tuna contributes 6% of Malaysia's marine fish landings in 2019. Purse seiners are the most important fishing gear in neritic tuna fisheries, especially the 40-69.9 GRT and >70 GRT vessel size. It contributed more than 86% of the annual catches of neritic tuna in Malaysia. In Kuala Perlis, neritic tuna species are the second most abundant (13%) landed by purse seines after scad (16%), with longtail tuna dominated the landings followed by kawa kawa and frigate tuna. In the year 2019, neritic tuna landings in west coast Peninsular Malaysia amounted to 17,500 mt; increasing by 15.7% compared to 14,746 mt in 2018. Meanwhile landings of neritic tuna in Malaysia ranged from 50,000 mt to 80,000 mt. The highest catch was recorded in 2019 with 87,400 mt respectively. There was a decreasing trend in landings from 2002 to 2005 before an increasing trend until 2008. Landings of neritic tuna in Malaysia appear to have stabilized from 2010 to 2018.

The catch of oceanic tuna in 2019 showed a 2% decreased from 2,867 mt in 2018 to 2,828 mt in 2019. Albacore showed a decreasing from 1,792.46 mt in 2018 to 1,618.65 mt in 2019. The fleet which consisted of six (6) fishing vessels and one (1) carrier, unloaded and exported the catches at Port Louis, Mauritius. Albacore tuna formed nearly 60% of the total catches in the form of frozen tuna. Meanwhile, eleven (11) fishing vessels unloaded and exported catches at Penang Port, Malaysia mostly are yellowfin and bigeye tuna in frozen and gutted forms.

For domestic vessels operating beyond 30 nm offshore, there are plan by the DOF Malaysia to implement observer on board and logbook system. The revised NPOA- Sharks II is published in 2014 and sharks and endangered species listed in the CITES also listed in Malaysia CITES Act 2008. On sea turtle, four (4) turtle conservation and information centres have regularly

implementing awareness program for student and fishermen communities in the states of N.Sembilan, Perak, Penang and Melaka. Hatching program at these centers managed to release over 65,000 baby turtles back to the sea. There are several research programs on sea turtle been carried out at different areas in Malaysian waters and the ongoing projects are c-hook and satellite tracking.

Malaysia have updated the national logbook to include all the species as requested in Resolution 19/04 for longliners and purse seiners, and monitor tuna landing and inspection at port by Port Inspector. DOF Malaysia also monitoring and tracking the deep-sea and tuna vessels using National VMS.

Under resolution 19/06, Malaysia longliners transhipped at sea monitor by the IOTC observer under ROP. Malaysia participated in the Regional Observer Program in 2018 for carrier vessel and fishing vessel to monitor transhipment at sea. DOF Malaysia also have installed CCTV on every vessel as a tool for EMS as an alternative for observer on board.

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1. BACKGROUND/GENERAL FISHERY INFORMATION

Malaysia as a tropical country consist of multi-species and multi-gears fishery. There are over 100 commercial marine fish species in Malaysian waters and more than 10 type of fishing gears. Two most efficient fishing gears are trawlers and purse seines. The trawlers and purse seines contributed more than 75% of total marine catch and the rest of the catches are from traditional gears. In tuna fishery, the purse seines and trawlers catch 95% of neritic tuna and the rest by traditional gears such as trolling, hook and lines and gill nets. Tuna species represented nearly 5% of the total marine catch in Malaysian waters. The Malacca Straits and the South China Sea are the two main fishing areas which contribute most to catches and a small portion from the fishing areas in Sulu and Sulawesi Sea, east coast of Sabah (Borneo continent). There are oceanic tuna fishing activities by the traditional hook and lines gear in the Sulawesi Seas. There are oceanic tuna species found in Malaysian waters, the South China Sea and Sulawesi Sea. The main species are yellowfin tuna, bigeye, albacore and skipjack. The oceanic tuna is caught by handline with small traditional inboard boats, 4-5 days per trip. From 15 tuna longline vessels in 2003, the number gradually increased to 58 vessels in 2010. However, in 2011, the number of active tuna longline vessels dropped drastically to 7 vessels due to management problem faced by the vessel company. From 2012-2015, a fleet of 5 longline from a fishing company started to operate by targeting albacore tuna. Their fishing areas were in the southwest of Indian Ocean and they unload the catches at the Port Louis, Mauritius. Starting 2016 - 2018, after Malaysia open two designated tuna port in February 2016 (Penang Port & Langkawi Port), another tuna longline vessel from 2 fishing company were registered by phase as Malaysian Fleets and operate in the East of Indian Ocean area and their catches were landed in Penang port. By the end of 2019, 17 longline tuna vessel (AFV) and one (1) carrier vessel were authorized to operate in the IOTC area of competence. DOF Malaysia are committed on managing the fleet and complying with the conservation and management measures (CMM) and manage to get 79% on compliance level in 2019.

2. FLEET STRUCTURE

6 from 17 tuna longline vessels are operating in Southwest Indian Ocean (WIO) and another 11 tuna longline vessels operating in the East of Indian Ocean (EIO). For vessels operating in EIO, their target species are tropical tuna namely yellowfin and bigeye tuna and land their catches in Penang Port monthly. Meanwhile the vessels operating in WIO their target species is albacore. The vessels normally undertake a long fishing trips and all their catches were transported back to the designated port in Port Louis, Mauritius by carrier vessels.

One (1) carrier vessel was registered under Malaysia Flag and operated in area of West Indian Ocean served for the six (6) longline vessels fishing in the area. Under resolution 19/06, Malaysia longliners transhipment at sea monitor by the IOTC observer under ROP. Malaysia participated in the Regional Observer Program in 2019 for carrier vessel and fishing vessel to monitor transhipment at sea.

The size of fishing vessels operating in the IOTC area of competence varies in LOA and gross tonnage (GT) from 25m-36m and 70GT – 204GT respectively.

Table 1: Number of vessels operating in the IOTC area of competence, by gear type and size

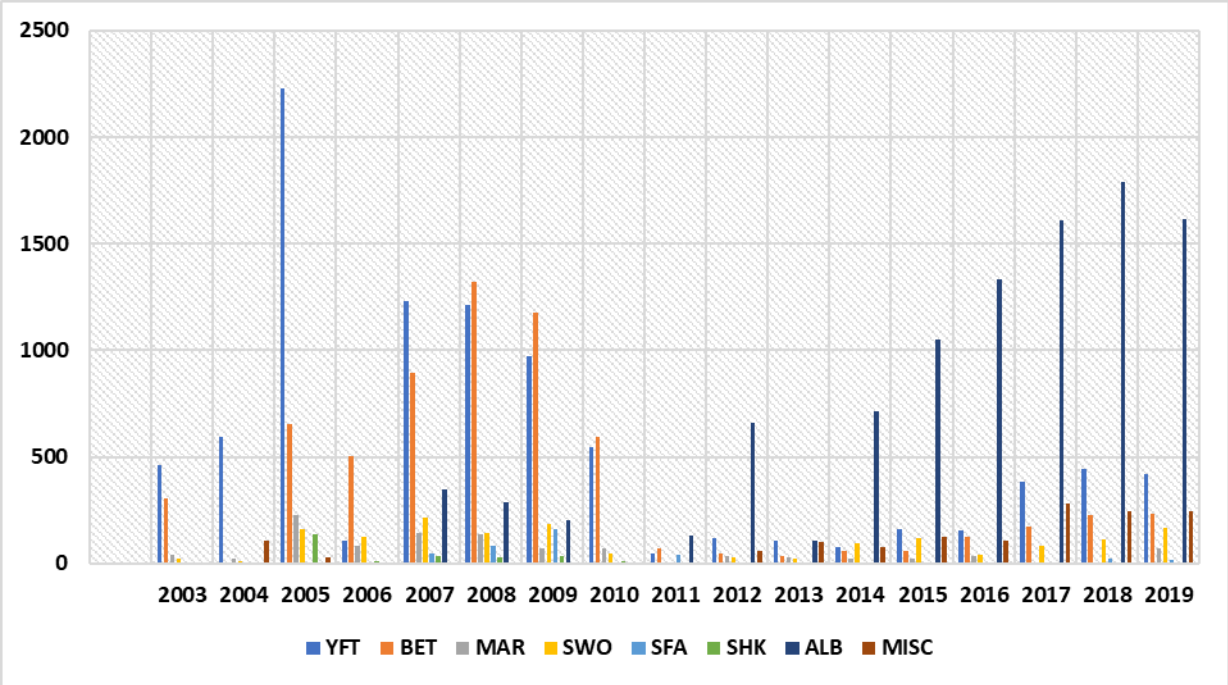
* Represent number of active vessels.

Year	<24 m	>24 m	Registered vessels	Gear Type
2003	1	14	15	Longline (LL)
2004		14	14	Longline (LL)
2005	1	18	19	Longline (LL)
2006	9	19	28	Longline (LL)
2007	9	24	33	Longline (LL)
2008	18	39	57	Longline (LL)
2009	18	44	62	Longline (LL)
2010	16	42	58	Longline (LL)
2011	1	6	23(7*)	Longline (LL)
2012		5	5	Longline (LL)
2013		5	5	Longline (LL)
2014		10	10	Longline (LL)
2015		5	5	Longline (LL)
2016		10	10	Longline (LL)
2017		19	19	Longline (LL)
2018		19	19	Longline (LL)
2019		17	17	Longline (LL)

3. CATCH AND EFFORT (BY SPECIES AND GEAR)

Catch of tuna and tuna-like species by Malaysian fishing vessels were based on the fishing operations in the East Indian Ocean (EIO) and West Indian Ocean (WIO). The efforts represented by the number of berthing of the vessels at the fishing port and fishing hooks. The target species in South WIO are Albacore with 1618 tonnes, while the target species in EIO are Yellowfin Tuna with 427 tonnes in 2019. In WIO, the vessels berthing at the port were carrier vessel where they pooled the catch from several fishing vessels (6 vessels) at the fishing grounds before they returned to the fishing port in Mauritius. For fishing operation in EIO, the fishing vessels berthing at Penang port every month for tuna landing with the average landing of 60-80mt monthly. For Fishing hooks, based on the logbook records, one vessel used 1800 – 2500 hooks for each fishing operations.

Table 2: Annual catch (by weight – tonnes) and effort by Malaysian longline vessels in the Indian Ocean until 2019



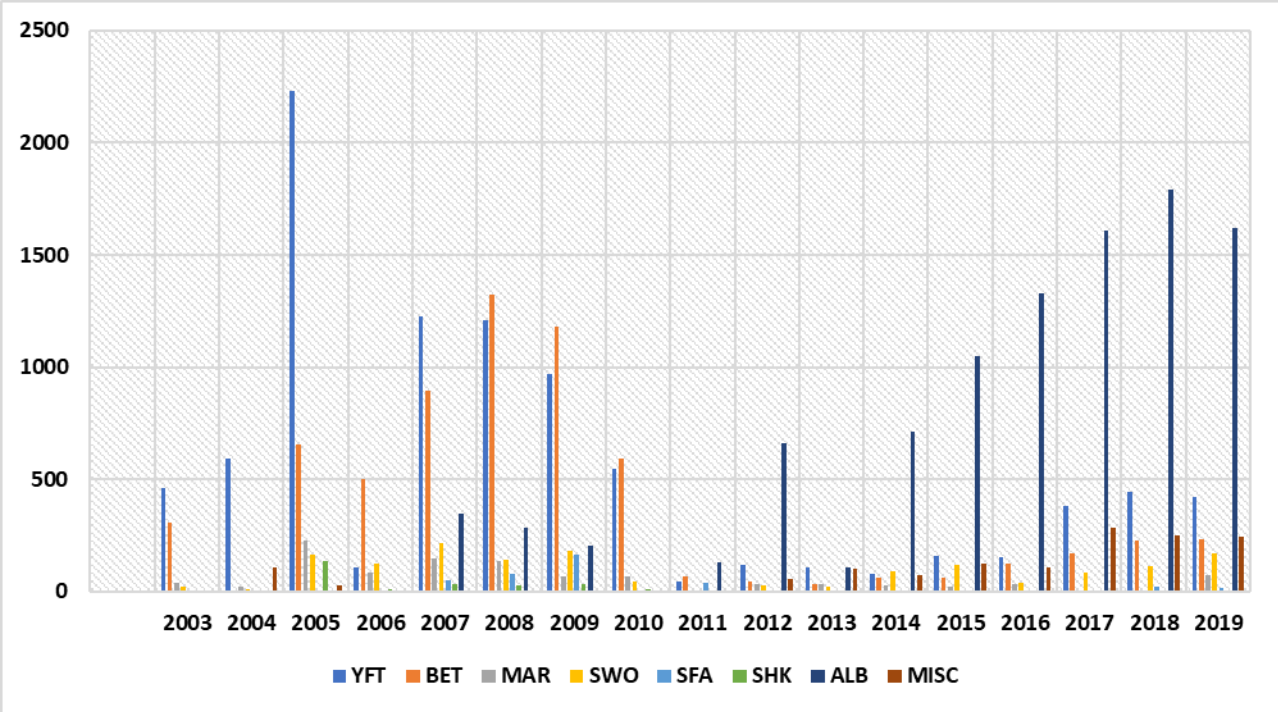
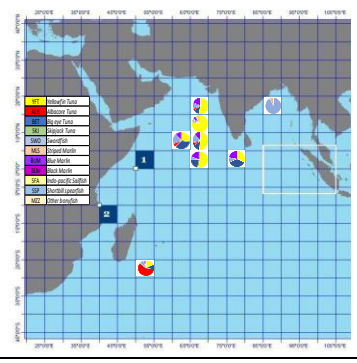
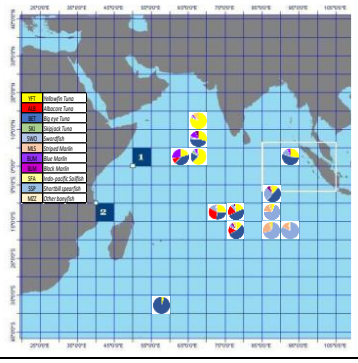
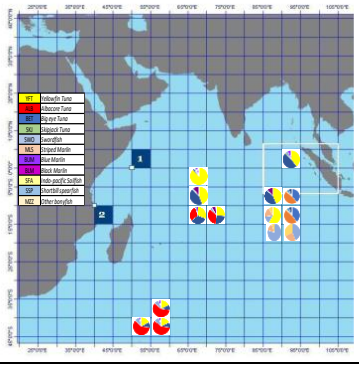


Figure 1: Historical catch of tuna and tuna-like species by Malaysian tuna longliners.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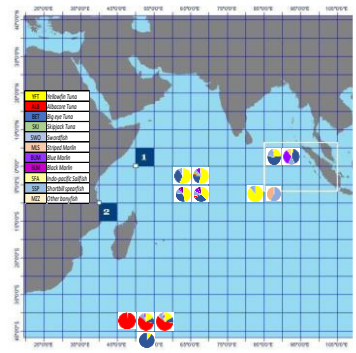	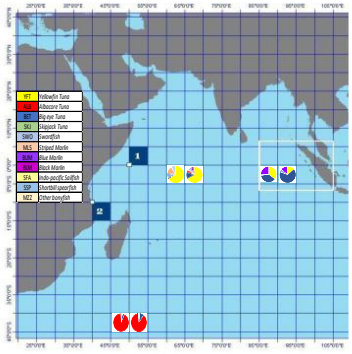	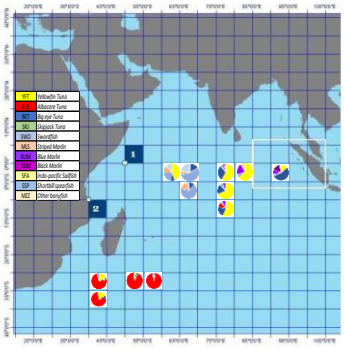
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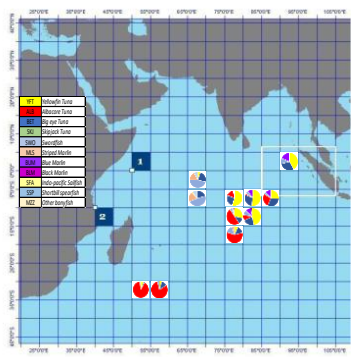	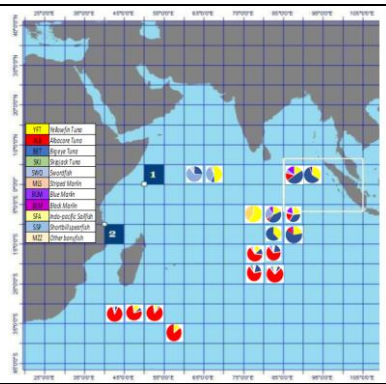	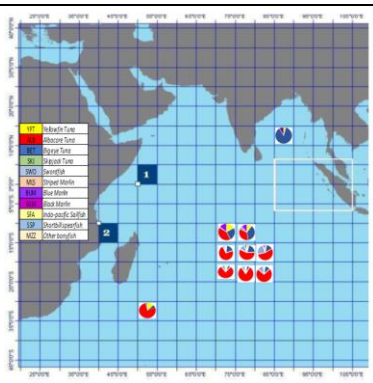
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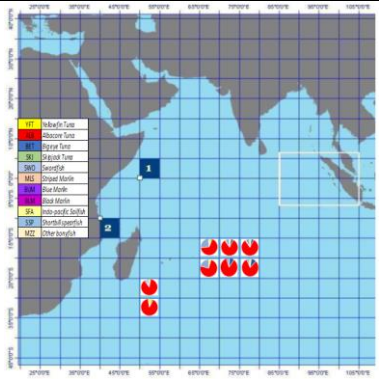	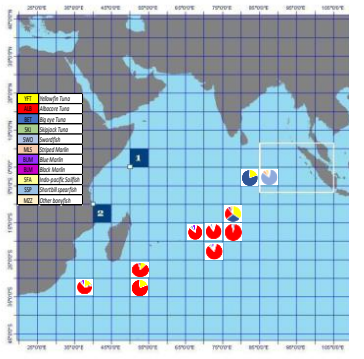	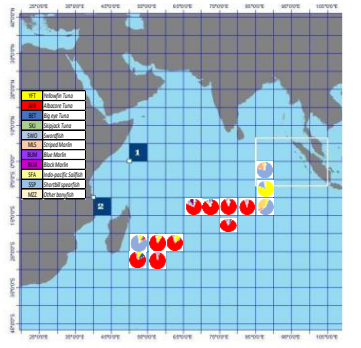
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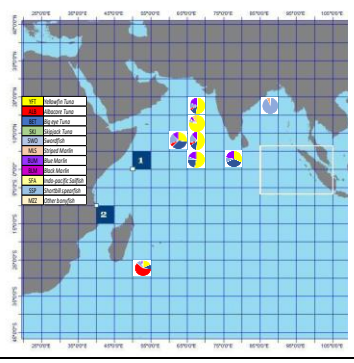
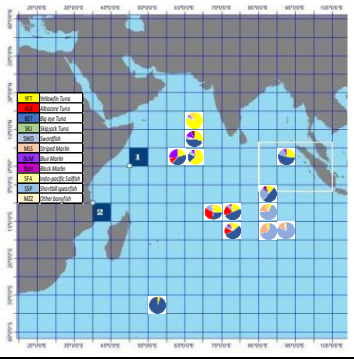
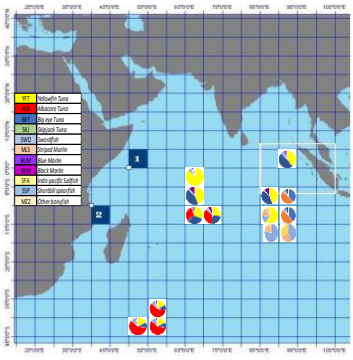
Figure 2. Map of CPUE monthly distribution by Malaysian tuna longline vessels in 2019 in IOTC area of competence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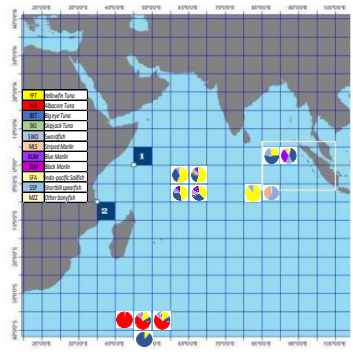	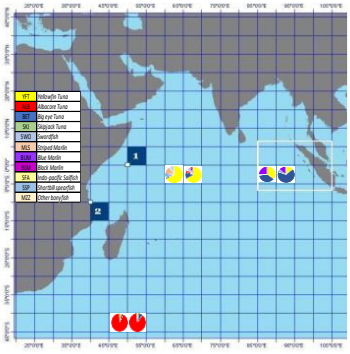	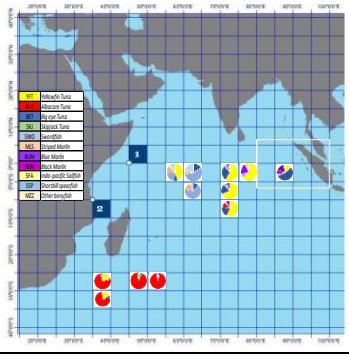
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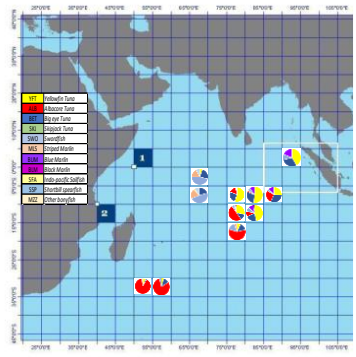	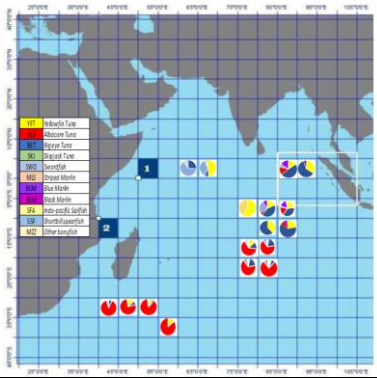	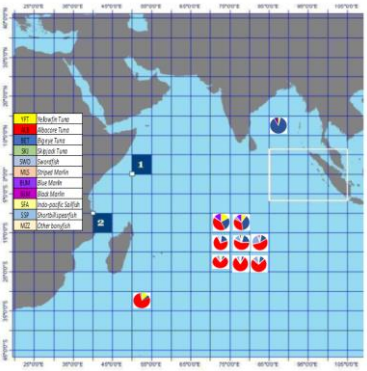
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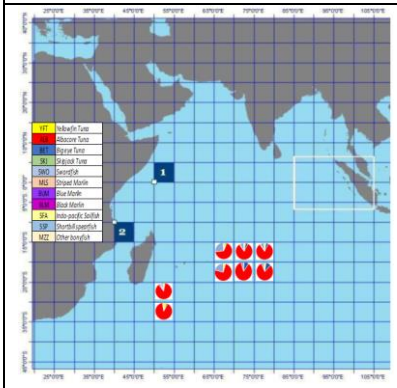	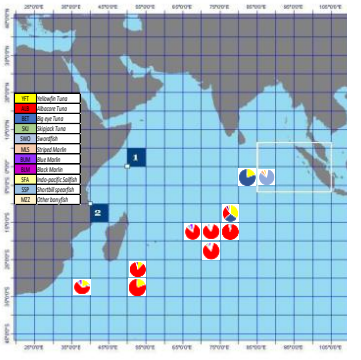	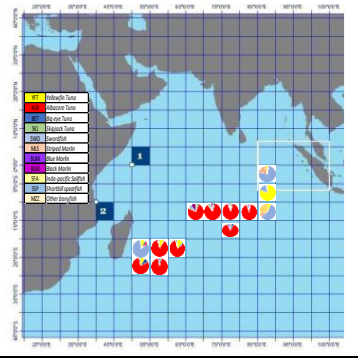
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Figure 2b. Map of monthly distribution of tuna species composition by Malaysian tuna longline vessels in 2019 in IOTC area of competence

Table 2b: Annual landings of neritic tuna (mt), Spanish mackerel and sharks in the Malacca Straits, under IOTC area of competence.

Year	Longtail	Kawa kawa	Frigate	Skipjack	Shark
	Thunnus tonggol	*Euthynnus affinis*	*Auxis thazard*	*Katsuwonus pelamis*	-
2001	-	8,978		1,253	3,857
2002	-	15,510		1,373	4,695
2003	12,599	819	11	1,088	4,625
2004	8,248	3,934		1,043	4,603
2005	8,834	2,862	3	805	3,469
2006	10,601	6,348	24	1,170	4,647
2007	15,749	3,487		1,162	4,292
2008	13,692	2,759		863	4,542
2009	13,764	5,160	83	1,463	4,178
2010	14,549	5,598	1	1,228	5,501
2011	13,122	8,405	148	4,743	1,059
2012	13,260	10,478	429	4,815	1,202
2013	10,376	7,259	339	5,937	1,334
2014	7,372	6,214	920	6,189	1,297
2015	5,323	8,188	272	5,446	2,362
2016	6,483	6,597	227	140	1,151
2017	1,544	10,541	385	18	856
2018	3,636	10,686	424	19	n/a
2019	5232	11,248	947	22.5	3.4

Table 2c: Catch of neritic tuna (mt) by major fishing gears in the Malacca Straits.

Year/Gear	Trawl net	Purse seine	Drift/Gill net	Hook & Line
2001	-	-	-	-
2002	-	-	-	-
2003	140	18,783	290	-
2004	156	11,742	277	5
2005	216	11,754	317	1
2006	469	16,354	149	1
2007	3	66	3	-
2008	1,425	14,706	132	8
2009	665	18,183	156	4
2010	1,669	18,275	204	-
2011	1,271	20,390	102	1
2012	385	23,536	273	2
2013	354	16,856	902	1
2014	13	12,894	2,029	1
2015	19	13,127	639	-
2016	17	12,472	957	0
2017	31	12,005	436	16
2018	35	14,561	155	13
2019	226	17,119	90	31

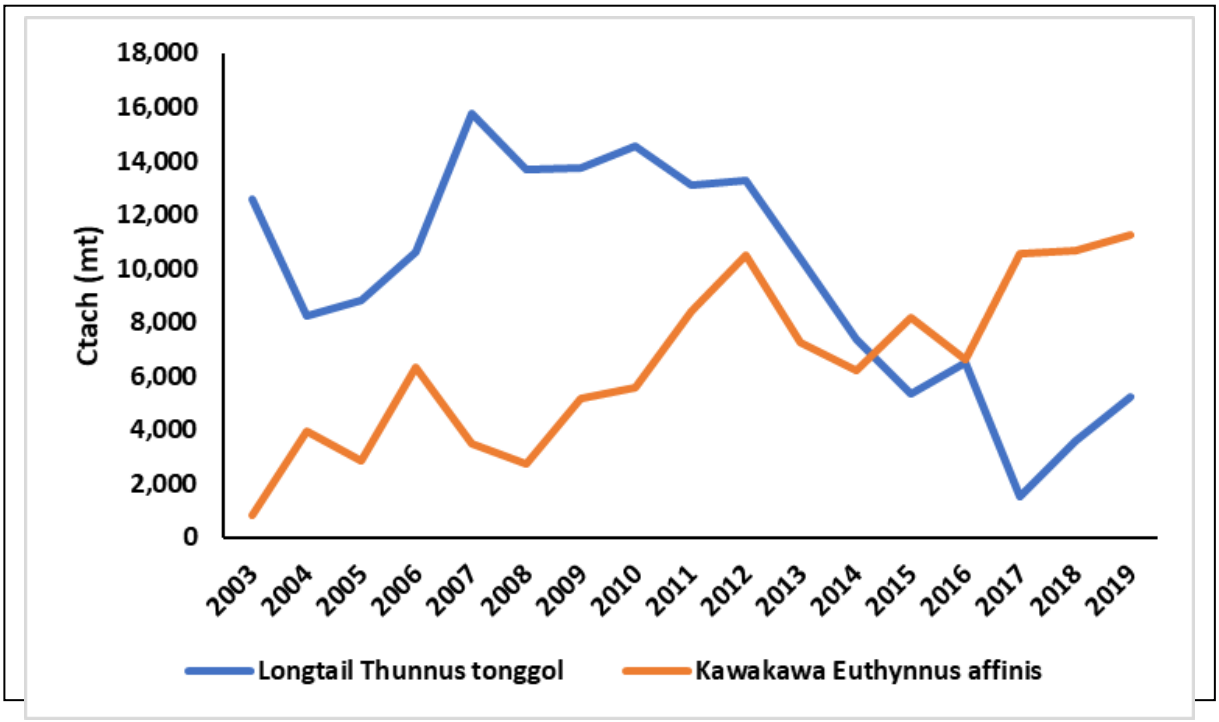

Figure 4: Annual catches of neritic tuna (longtail and kawa kawa) in the Malacca Straits 2003 - 2019

4. RECREATIONAL FISHERY

Recreational fishery for tuna and tuna-like species is not a widely fishing games in the Malacca Straits, and they are only occasional and seasonal events. Currently there is no specific Act to regulate the recreational fishery. However, there is the Marine Recreational Fishing Regulations, promulgated under the Fisheries Act 1985 that have been gazetted and implemented. Under this regulation, recreational fishing shall only be allowed prior to written permission issued by the Director General of Fisheries. Several species listed under the regulation in the First Schedule are prohibited from being landed. The species include 2 shark species; *Atelomycterus marmoratus* (coral catshark) and *Rhincodon typus* (Whale shark). In recent event, DOF had taken a step to regulate the recreational fishery by imposing regulation such as permit for the event, and information on catches should be submitted to the Department of Fisheries which include individual weight and length by species.

5. ECOSYSTEM AND BY-CATCH ISSUES

Malaysia has taken measures to reduce the impact of fishing activities on marine ecology by promoting and encouraging the use of eco-friendly fishing gears as well as introducing various fishing regulations such as;

- Prohibit commercial fishing gears from fishing below 1nm (Conservation zone) from coast line as the areas for aquaculture activities, cockle culture and fisheries communities' activities only. Zoning of fishing areas: regulation, at which fishing areas are categorized into 4 zones, and for each zone only for vessels of certain range GRT and gears are permitted to fish.
- Fisheries Regulations on prohibition of method of fishing, Fisheries Regulations on endangered species, Fisheries Regulations on prohibited areas.
- Implementation of vessel operation reports LOV for deep sea fisheries and landing survey for coastal fisheries in which data of fishing activities help in the management of fisheries resources.
- To reduce by-catch, especially undersize fish, Juvenile and turtle excluding device (JTED) are promoted to the fishermen.
- Research on cod end size mess size for trawl nets have been carried out.
- Promoting the use of circle hook to the longline fishermen.

5.1 Sharks

Sharks are not a target species for longliners operating in high seas. In 2019 based on logbook and landing data there are no shark interaction recorded or landed. However, during inspection and interview at landing sites the crew had inform that sharks had been trapped during fishing operations but they were released alive and no data was recorded because they felt impractical to obtain the species and size of sharks before released to reduce the risk of death. The sharks data recorded in 2019 were from bycatch of local fishing vessels operating in the Malaysia EEZ.

Trawlers caught high numbers of sharks as by-catch and all the catch are sold in wholesome in the wet market. The coastal shark's species found in Malaysia waters are of small size and they are not suitable for finning.

Under 'The Regional Technical Working Group on Data Collection for Sharks in Southeast Asia' held in Phuket, Thailand on 22 – 24 April 2014. The European Union and The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) through the Southeast Asian Fisheries Development Center (SEAFDEC) had agreed to fund a one-year project for conducting activities in Malaysia with a grant of US$6,000. Apart from that, the Malaysian Government allocated RM70,000 (about US$19,000) more to ensure the smooth implementation of the project. With the funding in place, eight districts were identified with four fully sponsored by SEAFDEC and four more by the Malaysian Government.

The project aimed to enhance human resource development in elasmobranch taxonomy, to increase awareness on conservation, to improve landings data recording from generic ‘sharks’ and ‘rays’ to species level and as a preparation for Malaysia to conduct Non-detriment Findings (NDFs) study for sharks and rays in the near future. During the period of 12 months from August 2015 to July 2016, recording of landings data were conducted in eight districts, with four each in the states of Perak and Sabah. Four districts, of which two facing the Straits of Malacca, namely Larut Matang and Selama, and Manjung Utara in Perak, and the districts of Kota Kinabalu and Sandakan in Sabah were selected as the study sites under the sponsorship of SEAFDEC. The other four districts that were funded by the Malaysian Government are Manjung Selatan and Hilir Perak in Perak and two on the east coast of Sabah, namely Semporna and Tawau.

The project aimed to enhance human resource development in elasmobranch taxonomy, to increase awareness on conservation, to improve landings data recording from generic ‘sharks’ and ‘rays’ to species level and as a preparation for Malaysia to conduct Non-detriment Findings (NDFs) study for sharks and rays in the near future. During the period of 12 months from August 2015 to July 2016, recording of landings data were conducted in eight districts, with four each in the states of Perak and Sabah. Thirteen staff from the Department of Fisheries Malaysia and the Department of Fisheries Sabah trained in shark taxonomy were involved in the endeavor, collecting data at least 12 days per month, compared to only five days per month in most of the other ASEAN member countries. Four districts, of which two facing the Straits of Malacca, namely Larut Matang and Selama, and Manjung Utara in Perak, and the districts of Kota Kinabalu and Sandakan in Sabah were selected as the study sites under the sponsorship of SEAFDEC. The other four districts that were funded by the Malaysian Government are Manjung Selatan and Hilir Perak in Perak and two on the east coast of Sabah, namely Semporna and Tawau.

In Perak, Larut Matang recorded 19 species of rays from five families, and 14 spesies of sharks from three Families. Whereas Manjung Utara recorded 14 species of rays from four families, and six species of sharks three Families. In term of percentage of total marin landings, rays and sharks contributed 2.03% and 0.56% at Larut Matang, while for Manjung Utara at 1.38% and 0.38% respectively. For Sabah, Kota Kinabalu recorded the highest number of species with 20 rays from six families and 17 sharks from 11 families compare to Sandakan with 19 species of rays from six families and 14 sharks species from six families. The landings of rays and sharks were minimal in the state, with the contribution of 0.39% and 0.24% at Kota Kinabalu, and 1.81% and 0.53% at Sandakan respectively. These figures confirmed earlier data as published in Malaysian National Statistics that rays and sharks were only by-catch and not targeted and contributed less than 2% of the total annual marine landings.

The abundance of sharks and rays species varied between the study sites. The most abundant sharks species at Larut Matang were *Chiloscyllium hasseltii, Chiloscyllium punctatum, Atelomycterus marmoratus* and *Carcharhinus sorrah* while for rays were *Neotrygon kuhlii, Himantura gerrardi, Himantura walga* and *Dasyatis zugei.* The most abundant shark species at Manjung Utara were *Chiloscyllium hasseltii, Chiloscyllium punctatum* and *Atelomycterus marmoratus* while for rays were *Himantura walga, Himantura gerrardi, Neotrygon kuhlii*, and *Dasyatis zugei.* For Sabah, the most abundant sharks species at Kota Kinabalu were *Chiloscyllium punctatum* followed by *Chiloscyllium plagiosum* and *Atelomycterus marmoratus* and for rays *Neotrygon kuhlii* followed by *Himantura gerrardi* and *Dasyatis zugei*.

As for Sandakan, the most abundant sharks species were *Chiloscyllium punctatum* followed by *Carcharhinus sorrah* and *Chiloscyllium plagiosum*, and for rays *Neotrygon kuhlii* followed by *Himantura gerrardi* and *Taeniura lymma*.

The top 10 catch per unit effort (CPUE) (kg/days and kg/hauls) for rays species captured by trawl net Zone C in Perak were *Neotrygon kuhlii, Himantura gerrardi* and *Himantura walga*, while for sharks were dominated by *Chiloscyllium hasseltii, Chiloscyllium punctatum* and *Carcharhinus sorrah.* The top 10 catch per unit effort (CPUE) sharks and rays species captured by trawl net, combined for Kota Kinabalu and Sandakan in Sabah, were determined in Zone 3 and Zone 4. For rays, *Himantura gerrardi* topped the list, followed by *Neotrygon kuhlii* and *Himantura fai* in Zone 3. In Zone 4, *Neotrygon kuhlii* was the main species, followed by *Himantura fai* and *Himantura uarnacoides.* For sharks, the top three species for both Zone 3 and Zone 4 were in the same order, with *Chiloscyllium punctatum* came first, followed by *Chiloscyllium plagiosum* and *Carcharhinus sorrah.*

Table 3b: Total weight (mt) of sharks caught by various fishing gears in the Malacca Straits.

YEAR	TRAWL NET	PURE SEINE	DRIFT/GILL NET	HOOKS & LINE
2001	866	0	308	55
2002	1023	0	273	50
2003	819	0	201	54
2004	754	2	216	52
2005	660	0	83	41
2006	750	81	287	38
2007	733	1	351	57
2008	608	0	130	110
2009	1217	39	120	114
2010	1053	1	129	45
2011	960	93	144	33
2012	1170	1	152	68
2013	993	4	330	70
2014	1054	21	194	62
2015	188.23	7.34	172.75	12.62
2016	102.43	8.54	102.25	13.06

Common shark caught in the Malacca Strait is *Carchrhinus sorah, Chiloscyllium puntatum, Chiloscyllium hasseltii, Atelomycterus marmoratus* and *Carcharhinus selai.*

5.1.1. NPOA sharks

Malaysian NPOA-Shark had been adopted and published in 2006. It was based on the guideline set by the FAO international Plan of Action for the Conservation and Management of Sharks (IPOA-Sharks). In 2014, the revised NPOA-Sharks II was officially gazetted and published. The main objective of Malaysian NPOA- Sharks is to ensure the conservation and management of sharks and their long- term sustainable use. On legislation, Malaysia as a signatory to Convention on International Trade in Endangered Species of Wild Fauna and Flora in Washington D.C. and on 3rd March 1973, Malaysia introduced a CITES Act 2008 and gazetted it in 2010. Under this Act, all sharks under Appendix I and Appendix II lists the following sharks; Sawfishes (*Pristidae spp*., 7 species) Family Cetorhinidae (Basking shark) - *Cetorhinus maximus*, Family Lamnidae (Great white shark) - *Carcharodon carcharias*, Oceanic whitetip shark (*Carcharhinus longimanus*), Porbeagle shark (*Lamna nasus*), Scalloped hammerhead shark (*Sphyrna lewini*), Great hammerhead shark (*Sphyrna mokarran*), Smooth hammerhead shark (*Sphyrna zygaena*), Silky shark (*Carcharhinus falciformis)*, Thresher sharks (*Alopias spp.)* and Family Rhincodontidae (Whale shark) - *Rhincodon typus.*

5.1.2. Sharks finning regulation

National Regulation (Licensing Condition) 2015 stated no shark finning is allowed and No Shark Fin Campaign were conducted regularly for public awareness.

In the Terms and Condition of the ATF, no. 19: The Master of this vessel shall fully utilise their entire catches of blue sharks if accidentally caught any and the sharks has died. The master shall ensure the removal of shark fins on board is prohibited for the shark landed fresh. The total weight of onboard shark fins landed frozen shall not be more than 5% of the total weight of shark on board.

5.1.3. Blue shark

Blue Shark catches is monitored using logbook. The Species is included in the discard/release table for shark catches. Malaysian Fleet vessel did not targeted blue sharks and no landing of blue sharks were recorded which are monitored by port inspector at landing port.

Table 3: Total weight of sharks retained by the national fleet in the IOTC area of competence from 2015–2019

YEAR	SHARKS
2015	0
2016	4.73
2017	0
2018	0
2019	0

Table 4: Total weight of sharks released/discarded by the national fleet in the IOTC area of competence from 2015–2019.

YEAR	SHARKS
2015	0
2016	0
2017	0
2018	0
2019	0

5.2 Seabirds

Malaysian longline vessels only started to fish in areas below 25^{o} S in mid of 2012. In 2019, only 6 Malaysian AFV operated south of 25˚S. all 6 vessels vessels have applied 2 types of mitigation measures recommended by the IOTC which are tori lines and fast sinking lines. No report of seabird interaction by the Malaysian fishing vessels in the logbook during their fishing operation in the southeast Indian Ocean. However, the fleets owner has been reminded about their responsibility on seabird conservation practice stated in the IOTC resolution. One National Workshop on Seabirds has been conducted in Malaysia on 20th September 2018. Malaysian. To date, Malaysia still does not develop NPOA-Seabird.

Table 5: Malaysia seabird mitigation measures datasheet.

Seabirds mitigation measures	No of Vessels
vessels operated south of 25˚S	6
bird scaring lines	6
line weighting	6
night setting	0

5.3 Marine Turtles

Malaysia is one of the countries that actively involved in the conservation program on turtles. In 2008 the NPOA-Marine Turtle was published and becomes a guideline for the conservation and management of sea turtles. As one of the conservation measures to prevent possible interaction the turtles by the fishing gears especially trawlers, a device known as “Juvenile and Turtle Excluding Device“ (JTED) is developed and promoted to the fishermen to use in their trawl nets. The use of circle hook for longline is also been encouraged and promoted to the artisanal fishermen. Several join trails and training were conducted between the government and fishermen for the use of C-hook.

There are a total of 26 Turtle Hatcheries Centres throughout Malaysia and seven (7) turtle conservation and information centres in Malaysia have regularly implementing awareness program for student and fishermen communities. Four (4) centres are located in the west coast of Malaysia; Padang Kemunting (Melaka), Pantai Kerachut (Penang) Port Dickson (N.Sembilan) and Segari (Perak). Main activities of these centres are to protect natural nesting areas of turtles and hatching and release baby turtles back to the sea. Education and awareness programs were conducted for the students and public. In 2018 alone a total of nesting in Melaka, Penang, N.Sembilan and Perak was 600, 34, 27 and 37 respectively.

Fisheries Act 1985 section 27 provides legal instrument to protect marine turtle and marine mammals from any type of fishing. However, there is separate legal instrument on state level that cover marine turtles as stated in the Federal Constitution. So far very few interactions were recorded between fishermen and turtles reported by the traditional and commercial fishermen.

From the logbook report and observer transhipment report for vessels operating in the IOTC area of competence, there is no interaction of marine turtles recorded in 2019. No data on captures/released recorded by the fishing vessels.

Table 7: Malaysia marine turtles interaction from logbook datasheet

	Fishery			Observed **				
Year	Lat*	Lon	Total effort	Total effort observed	Species	Captures (number)	Mortalities (number)	Live releases (number)
2015						0	0	0
2016						0	0	0
2017						0	0	0
2018						0	0	0
2019						0	0	0

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

No record of interaction reported by the Malaysian fishing vessels operating in Indian Ocean. Reported cases in Malaysian Fisheries Waters mostly on marine mammals sighted at sea or stranded by the beach and all reports are handled by Department of Fisheries Malaysia.

Under the Fisheries Regulation on (Control of Endangered Species of Fish) Regulation 1999, 5 group of endangered species listed (30 which are dugong group, whale group, dolphin group, whale shark group and clams group. Whale shark (*Rhincodon typus*) is one out of 30 species listed under Fisheries (Control of Endangered Species of Fish) Regulation 1999.

6. NATIONAL DATA COLLECTION AND PROCESSING SYSTEMS

6.1. Log sheet data collection and verification

As the need for conservation of the national marine resources increases, the need for more and better-quality data on how these resources are utilized also increases. One of the most useful types of data is catch per unit effort. To meet these needs, Department of Fisheries Malaysia has started in September 2017 to implemented vessel logbook programs and these programs were initiated for the longline fisheries and in 2019, national logbook is extended to high seas purse seine fisheries. Malaysia have updated the national logbook to include all the species as requested in Resolution 19/04, and monitor tuna landing and inspection at port by Port Inspector. Fishermen are required to report the numbers of each species caught, the numbers of animals retained. release alive or discarded dead (longline gear is non-selective and unwanted or prohibited species such as, billfishes, sea turtles, etc., must be returned to the water), the location of the set, the types and size of gear, and the duration of the set. Because some of the needed catch/effort information for pelagic longline fisheries remains the same for the entire trip (i.e., it would be redundant to report it for every set), a supplemental form is used to report this type of data. Information on the port and date of departure and return, date of landing, number of sets, number of crew, are reported on the Trip Summary form. In addition, information on costs associated with the trip can be reported on this form. Information on the quantity caught for each species, area of catch, type and quantity of gear, the dealer and location (country and state where the trip is unloaded), the duration of the trip (time away from dock), an estimate of the fishing time, and the number of crew are also included on this form.

At the same time, all vessels operating beyond 30 nm from the shore (deep-sea vessels) in the Malaysian waters are compulsory to record their landings in the "Vessels Operation Report" or LOV. Data recording in the LOV is part of the vessel licensing regulation, to renew their annual license. The operators are required to provide information based on the Vessel Operation Report (LOV) forms and submit the forms to the nearby Department of Fisheries office. This form contains detailed information on fishing areas, times/dates, catches by species, details of by-catches if any and names of ports. Failure to do so, will cause the license of the vessel to be revoked or suspended as provided under the Fisheries Act 1985. Subsequently the fisheries officers will provide the data to the IOTC.

To date, Malaysia have not implemented the e-logbooks as there are still improvement to be made. Therefore in 2019, road tours and training has been done by the Department of Fisheries Malaysia on the introduction of e-logbooks.

6.2. Vessel Monitoring System (including date commenced and status of implementation)

Department of Fisheries Malaysia has successfully implemented a Vessel Monitoring System (VMS) for all deep-sea and tuna fishing vessels. It is based on Inmarsat, utilizing Inmarsat C, Mini C and D+/B equipment. For tuna longline vessels operating beyond Malaysian EEZ, they use Argos and Iridium system for their VMS and monitor on CLS Themis Web. Monitoring and tracking of deep-sea and tuna vessels using National VMS are conducted daily to make sure compliance with the geographical limits contained in their license and to check position data contained in their catch and effort/transhipment reports.

The installation of Mobile Transceiver Units (MTU) is mandatory under vessel licensing regulation. Failure to do so, will cause the license of the vessel to be revoked or suspended as provided under the Fisheries Act 1985. To date, all Malaysian longline have the devices installed and active.

6.3. Observer programme (including date commenced and status; number of observer, include percentage coverage by gear type)

To further improve quality of tuna catch data, DOF Malaysia plans to implement observer onboard for purse seine vessels fishing in the domestic waters. Due to the lacking of financial resources (insufficient fund), the lacking of man power (staff) or human capacity and communication problem within captain and crew, the observer onboard program planning still under consideration.

Malaysia had requested assistance from countries who have developed and implemented regional observer scheme. However, due to the limited numbers of port inspectors, the request could not be granted to Malaysia. Subsequently, Malaysia wrote to IOTC to request for the assistance. DOF Malaysia also have installed CCTV on every vessel as a tool for EMS as an alternative for observer on board.

Although Malaysia has yet to conduct Observer scheme as required by Resolution 11/04, there are 6 fishing vessels involved in a programme for Transhipment by large- scale fishing vessels which indirectly being monitored by observer. Under resolution 19/06, Malaysia longliners transhipped at sea monitor by the IOTC observer under ROP. Malaysia participated in the Regional Observer Program in 2019 for carrier vessel and fishing vessel to monitor transhipment at sea.

6.4. Port sampling programme

From 2010, permanent staff from the DOF has conducted regular sampling activities at the MITP, Penang. They are responsible to collected, process and assist tuna scientists to analyse catch data. However, since 2012 until middle 2016, all Malaysian flag vessels unload their catches outside Malaysian port, then, no port samplings program were carried out. The port sampling program were resumed conducted after Malaysia register two designated tuna port in 2016 (Penang Port and Langkawi Port). until present, 11 tuna fishing vessels unload their catches at Penang Port. Monitoring of tuna landing and inspection at port by Port Inspector also carried out for Malaysian tuna fishing vessels and foreign tuna fishing vessels unloading in Malaysia designated tuna port.

Table 8. Number of vessels monitored by species, individuals measured, and gear

No.	Vessel landing in Malaysia Port	Date of Inspection	Landing declared (kg)	Gears	No of Samples recorded (unit)			
					YFT	BET	ALB	SKJ
1	FAJAR 7	11/01/2019	46,836	LL	6	2	40	3
2	FAJAR 6	28/03/2019	44,585	LL	41	21	17	3
3	FAJAR 2	12/04/2019	33,195	LL	31	2	0	4
4	FAJAR 17	12/04/2019	29,327	LL	13	19	2	3
5	FAJAR 7	03/05/2019	27,625	LL	4	17	0	3
6	FAJAR 1	13/05/2019	61,585	LL	43	9	5	5
7	FAJAR 9	23/05/2019	69,304	LL	41	11	5	7
8	FAJAR 13	23/05/2019	42,728	LL	30	7	7	7
9	FAJAR 3	11/06/2019	78,954	LL	44	18	6	6
10	FAJAR 1	18/11/2019	87,624	LL	0	11	57	3
11	FAJAR 17	18/11/2019	45,606	LL	6	5	36	3
12	FAJAR 2	19/11/2019	57,115	LL	8	6	40	9

Sampling for neritic tuna for research purpose have been done monthly (12 month) since 2015. Their sampling program covers all landing sites and fishing ports along the west coast of Peninsular Malaysia, only on vessels operating in the Malaysian Fisheries waters. The sampling was taken by researchers and enumerators. The port sampling data at landing site covers 70% of landing and taken by Fisheries officer of DOF Malaysia

6.5. Unloading/Transhipment

Under resolution 19/06, 6 Malaysian longliners were allowed to do transhipment at sea on the Malaysian Carrier Vessel (Kha Yang 333) and monitored by the IOTC observer under ROP. Malaysia participated in the Regional Observer Program in 2019 for carrier vessel and fishing vessel to monitor transhipment at sea. The data stated in the observer's report provides breakdown of species composition by weight and % of fishes transhipped. All transhipment was done in the South WIO and the carrier vessels enter Port Louis, Mauritius for unloading. All transhipments declarations were sent to DoF and Secretariat as required in the Resolution 19/06, At Sea Transhipment and Condition Relating to in-port transhipment. Malaysia has provided details on the feedback on the possible infractions in 2019 highlighted on the IOTC observer reports: 567/19, 571/19, 578/19, 590/19, and 586/19. 517/18, 525/18 to the IOTC Secretariat on 15/01/2020.

11 Malaysian longliners are not involved in the transhipment activities and unloading their catches at Penang Port, Malaysia every month and monitored by the Port Inspectors.

Table 9. Quantities declared (kg) landed in Malaysia ports in 2019.

No.	Vessel landing in Malaysia Port	Date of Inspection	Landing declared (kg)	Gears	Port Inspector
1	FAJAR 7	11/01/2019	46,836	LL	PN NABILAH, EN KHAIRULL
2	FAJAR 6	28/03/2019	44,585	LL	PN AZLIN, EN RAUF
3	FAJAR 2	12/04/2019	33,195	LL	EN KHAIRULL
4	FAJAR 17	12/04/2019	29,327	LL	EN KHAIRULL
5	IBU WIRA 3	16/04/2019	50,300	LL	PN NABILAH, EN KHAIRULL
6	FAJAR 7	03/05/2019	27,625	LL	EN HAZLIE, PN AISYAH, EN YUSOF
7	FAJAR 1	13/05/2019	61,585	LL	PN NABILAH, EN KHAIRULL
8	FAJAR 8	17/05/2019	46,738	LL	HJ ISMAIL
9	FAJAR 13	23/05/2019	42,728	LL	PN NABILAH, ZAINI
10	FAJAR 9	23/05/2019	69,304	LL	EN KHAIRULL, RIDZAHAM
11	FAJAR 3	11/06/2019	78,954	LL	PN NABILAH
12	FAJAR 11	01/07/2019	87,305	LL	EN AZHAR, ZAINI, AMZAR, HIDAYAT
13	FAJAR 17	01/07/2019	18,526	LL	PN NABILAH, RIDZAHAM, NAJIB
14	FAJAR 2	02/08/2019	50,017	LL	PN NABILAH
15	FAJAR 6	02/08/2019	44,110	LL	EN KHAIRULL, EN AZIZUL
16	FAJAR 7	23/08/2019	41,935	LL	PN NABILAH, EN ZUWAIRI, PN ROZIMAH
17	IBU WIRA 3	11/09/2019	68,550	LL	EN KHAIRULL, EN AZIZUL
18	FAJAR 13	16/10/2019	54,745	LL	EN KHAIRULL, EN HALIM
19	FAJAR 6	07/11/2019	49,505	LL	PN ROZIMAH, EN HALIM, EN AMZAR
20	FAJAR 1	18/11/2019	87,624	LL	EN KHAIRULL, EN HALIM
21	FAJAR 17	18/11/2019	45,606	LL	EN KHAIRULL, EN HALIM
22	FAJAR 2	19/11/2019	57,115	LL	EN KHAIRULL, EN HALIM
23	FAJAR 9	03/12/2019	89,648	LL	EN AMZAR, EN HALIM
24	FAJAR 3	17/12/2019	111,896	LL	EN RAUF
25	FAJAR 8	18/12/2019	82,246	LL	EN RAUF
26	FAJAR 7	20/12/2019	47,920	LL	EN ZUWAIRI

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

In the Terms and Condition of the ATF, No 18: The Master of this vessel shall not retain on board, trans-ship, land, any specimen smaller than 60 cm Lower Jaw Fork Length (LJFL) of any of the following species; Striped Marlin, Black Marlin, Blue Marlin and Indo Pacific Sailfish and shall ensure that all necessary steps have been taken to guarantee the safe release of unintentionally or accidentally caught.

DOF Malaysia includes report of Size Frequency (SF) in the logbook for all tuna and tuna like Species. From the logbook SF record, the average length (LJFL) are between 100 cm – 200 cm

Table 10: Size Frequency of Striped Marlin, Black Marlin, Blue Marlin, Indo Pacific Sailfish and swordfish.

Species	Lower LJFL (cm)	Higher LJFL (cm)
Striped Marlin	107	180
Black Marlin	142	290
Blue Marlin	110	230
Indo Pacific Sailfish	130	190
Sword Fish	80	220

6.7. Gillnet observer coverage and monitoring

In the Terms and Condition of the ATF, No.5: All Malaysia tuna fishing vessels are not allowed to use fishing gears other than the licensed gears. Large-scale driftnets shall be prohibited. No large-scale driftnet is licensed in the Malaysian Waters.

6.8 Sampling plans for mobulid rays [Mandatory]

Mobulid Rays are protected under section 27 Fisheries Act 1985 and Fisheries (Control of Endangered Species of Fish) (Amendment) Regulations 2019. In the Terms and Condition of the ATF, No 15: The Master of this vessel: (i) is prohibited from using the vessel to target mobulid rays, sharks, or turtle; and (ii) shall ensure that all necessary steps have been taken to promote the live release. To date, no national research has been conducted on mobulid rays.

7. NATIONAL RESEARCH PROGRAMS

For the last 5 years only one research was carried out on tuna and tuna-like species in the IOTC fishing areas namely on neritic tuna by the Fisheries Research Institute, Kampong Acheh, Perak.

The other study on oceanic tuna only involve in area of Sulawesi Sea, east coast of Sabah.

For additional, the size frequency of oceanic tuna was provided by the fishing vessels in the logbook and some of the oceanic tuna were measured at the landing site by the Port Inspector.

7.1. National research programs on blue shark

No specific national research programs on blue sharks.

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

No national research programs on Striped Marlin, Black Marlin, Blue Marlin and Indo-pacific Sailfish.

7.3. National research programs on sharks

Research collaboration with SEAFDEC to undertake the management issues on sharks in Malaysia.

7.4. National research programs on oceanic whitetip sharks

No specific national research programs on oceanic whitetip sharks.

7.5. National research programs on marine turtles

As one of the conservation measures to prevent possible interaction the turtles by the fishing gears especially trawlers, a device known as "Juvenile and Turtle Excluding Device" (JTED) is developed and promoted to the fishermen to use in their trawl nets. The use of circle hook for longline is also been encouraged and promoted to the artisanal fishermen. Several join trails and training were conducted between the government and fishermen for the use of C-hook.

There are a total of 26 Turtle Hatcheries Centres throughout Malaysia and seven (7) turtle conservation and information centres in Malaysia have regularly implementing awareness program for student and fishermen communities.

7.6. National research programs on thresher sharks

No specific national research programs on thresher sharks.

Table 11. Summary table of national research programs

Project title	Period	Countries involved	Budget total	Funding source	Objectives	Short description
Landing and biology of longtail and kawakawa tuna in the northeast of peninsular Malaysia	2014-2020	Malaysia	RM 700,000	National R&D Fund.	Landing trend by Species and spawning season of kawakawa	On going
Landing of Oceanic Tuna in West Malaysia	2014 - 2020	Malaysia	RM 1,000,000	National R&D Fund.	Landing trend by Species of oceanic tuna	On going
Qualitative determination of small tuna catches from Malaysian eez.	2014 -2015	Malaysia	RM 80,000	National R&D Fund.	To determine the leaking trend of neritic tuna resources by local purse seine vessels	Completed

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

Malaysia is committed to abide to all the adopted resolutions. Below are the feedbacks regarding compliance issues

Table 9. Scientific requirements contained in Resolutions of the Commission, adopted between 2015 and 2019.

Res No.	Resolution	Scientific requirement	CPC progress
13/ 04	On the conservation of cetaceans	Paragraphs 7– 9	Under Malaysian Fisheries Act 1985, Fisheries Regulation on (Control of Endangered Species of Fish) Regulation 1999, cetacean under dolphin group were protected. Release and discard table also included in the updated logbook for recording any interaction with the species.
13/ 05	On the conservation of whale sharks (*Rhincodon typus*)	Paragraphs 7– 9	Under Malaysian Fisheries Act 1985, Fisheries Regulation on (Control of Endangered Species of Fish) Regulation 1999, whale shark (*Rhincodon typus*) were protected and listed in Malaysia CITES Act 2008. Release and discard table also included in the updated logbook for recording any interaction with the species.
13/ 06	On a scientific and management framework on the conservation of shark species caught in association with IOTC managed fisheries	Paragraph 5– 6	Each Malaysian tuna longline vessels fishing in the Indian Ocean have been provided with booklet on shark species identification for them to records any interaction and to report to the fisheries authority. Sharks and rays listed in CITES also listed in the Malaysia CITES Act 2008. Release and discard table also included in the updated logbook for recording any interaction with the species.
12/ 09	On the conservation of thresher sharks (family alopiidae) caught in association with fisheries in the IOTC area of competence	Paragraphs 4–8	Any interaction of shark species includes Families Alophiidae to be recorded by the tuna longline operators. Fishing, storing or retaining on board, transhipping or landing in whole or in part, any of the following sharks shall be prohibited: species of the family Alopiidae; and Oceanic whitetip shark. Release and discard table also included in the updated logbook for recording any interaction with the species.

12/06	On reducing the incidental bycatch of seabirds in longline fisheries.	Paragraphs 3–7	Malaysia requires all vessels operating in the area south of 25°S to take mitigation measures as required under license condition and ATF. All Malaysian flag fishing vessels are using weighted branch lines and tori lines as the mitigation measures on seabirds when operating in areas south of 25 °S.
12/04	On the conservation of marine turtles	Paragraphs 3, 4, 6–10	Sea turtle is protected under section 27, Fisheries Act 1985 and Malaysia has published the National Plan of Action for Conservation and Management of Sea Turtles. The NPOA is currently being reviewed for further improvement. Malaysia has sets requirement in the license and ATF terms and condition for all fishing vessels to carry line cutters and de hookers on board. Release and discard table also included in the updated logbook for recording any interaction with the species.
11/04	On a regional observer scheme	Paragraph 9	Malaysia has communicated with IOTC Secretariat on the Support for the implementation of the IOTC Regional Observer Scheme Malaysia for the proposal to be involved in the Pilot Project for the IOTC Regional Observer Scheme. (no LoU signed yet)
15/01	On the recording of catch and effort by fishing vessels in the IOTC area of competence	Paragraphs 1–10	Malaysia have updated the national logbook to include all the species as requested in Resolution 15/01 and submitted to the Secretariat in 2017 and in 2019 for purse seine. The updated logbook includes mandatory to provide size frequency and interaction with protected species. For vessels <24m, operating within EEZ, data collection using Vessel Operating Activity (LOV) and researcher enumerator.
15/02	Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs)	Paragraphs 1–7	Malaysia has started compiling data on size frequency for coastal fisheries from year 2017 – 2019. Malaysia had submitted the catch and effort data to the Secretariat as required under data to the secretariat as required under resolution 15/02. The size frequency of oceanic tuna was provided by the fishing vessels in the logbook and some of the oceanic tuna was measured at the landing site by the Port Inspector.

17/05	Concerning the conservation of sharks caught in association with fisheries managed by IOTC	Paragraphs 6, 9, 11	Very low interaction on shark species by Malaysian tuna longliners and they were required to record on any interaction. For shark species caught by within EEZ waters, the majority are from demersal species which are not listed under endangered species. The Master vessel shall ensure that all necessary steps have been taken to guarantee the safe release of shark that is unintentionally caught and report all incidents of the shark releases, including the status at time of release.
18/02	On management measures for the conservation of blue shark caught in association with IOTC fisheries	Paragraphs 2-5	National logbook includes reporting on blue shark, released/discarded and size frequency. No specific national research programs on blue sharks.
18/05	On management measures for the conservation of the Billfishes: Striped marlin, black marlin, blue marlin and Indo-Pacific sailfish	Paragraphs 7 – 11	National logbook includes reporting on catch and effort and Size Frequency (SF) in the logbook for Billfishes: Striped marlin, black marlin, blue marlin and Indo-Pacific sailfish. No national research programs on Striped Marlin, Black Marlin, Blue Marlin and Indo-pacific Sailfish.
18/07	On measures applicable in case of non-fulfilment of reporting obligations in the IOTC	Paragraph 1, 4	National logbook includes reporting on shark species, released/discarded and size frequency. Malaysia sent full set of data reporting in 2019 including data on zero catches.
19/01	On an interim plan for rebuilding the Indian Ocean Yellowfin tuna stock in the IOTC area of competence	Paragraph 22	Malaysia longliners catches of yellowfin tuna for 2019 were below 5000 mt. No commercial gillnet license and operating in the IOTC area for yellowfin tuna catches.
19/03	On the conservation of mobulid rays caught in the association with fisheries in the IOTC area of competence	Paragraph 11	Mobulid Rays are protected under section 27 Fisheries Act 1985 and Fisheries (Control of Endangered Species of Fish) (Amendment) Regulations 2019. To date, no national research has been conducted on mobulid rays.

Describe the actions taken, under national legislation, to implement conservation and management measures adopted by the Commission in previous Sessions, and which have not been reported previously.

1) In September 2019, Government of Malaysia had approved Amendment of Fisheries Act 1985 (Amendment 2019) to includes jurisdiction in High Seas. Malaysia also working with a consultant under the Technical and Scientific Services for the Indian Ocean Tuna Commission (IOTC) to assist Malaysia in increasing the level of compliance under the IOTC Resolution (Technical Assistance to transpose the IOTC Resolutions into domestic law.)

2) Updated Terms and Conditions of Malaysia ATF (2020)

Authorisation to Fish (ATF) Terms and Conditions

The owner or operator and Master of the Malaysian Tuna Fishing Vessel shall comply with the following terms and conditions at all times:

1. This vessel is authorised only to fish (ATF) for tuna and tuna-like species in the Indian Ocean Area of Competence using longline / purse seine gear.
2. This ATF is only valid with a valid local Fishing License.
3. Fishing activities are allowed in designated areas as stated in the ATF only.
4. All Malaysia tuna fishing vessels are not allowed to use fishing gears other than the licensed gears. Large-scale driftnets shall be prohibited.
5. The Master of this vessel must at all times comply with the Malaysia Fisheries Act 1985 and all regulations made thereunder, and the laws, rules, regulations and national policies from time to time in force in Malaysia as well as the Indian Ocean Tuna Commission (IOTC) Resolutions.
6. The Master of this vessel shall keep this ATF, National Fishing License, Vessel Registration Certificate and a bound fishing national logbook on board at all times, and shall produce these documents for inspection upon the request of an authorised officer.
7. Markings and identification of the vessel shall be clearly displayed in accordance with the Standard Specifications for the Marking and Identification of Fishing Vessels. The vessel shall clearly display, on both sides and on its deck, its International Radio Call Sign (IRCS) and the country (flag state) registration number.
8. The fishing gear and fish aggregating devices (FAD) shall be marked by using a tag and shall be displayed prominently and such marking shall be permanent.
9. The Master of this vessel shall maintain a record of the catch in the logbook for each fishing trip and submit to the Department every Friday. The logbook (with consecutively numbered pages) shall be produced for inspection to any authorized officer, if requested.
10. The Operator of this vessel shall install, maintain and operate a registered National VMS or such other approved MTU at all time. The Master of this vessel and owner shall ensure that the MTU on board their vessels within the IOTC area of competence are at all times fully operational and shall immediately notify any technical failure or non-functioning MTU to DOFM.
11. The Master shall ensure that one hundred percent (100%) of its catch is landed at a designated port in Malaysia. Any landings at foreign ports must obtain prior written permission from the Director General of Fisheries Malaysia.
12. The Master of this vessel (longliner) shall ensure line cutters and de-hookers are always on board.
13. The Master of this vessel shall ensure the implementation of at least two of three mitigation measures, namely, night setting with minimum deck lighting, bird-scaring lines and line weighting when operating at south of 25°S or in other area, as appropriate, consistent with the scientific advice.
14. The Master of this vessel shall ensure to prohibit the intentional fishing within 1 nautical mile of a data buoy or intentional interaction with a data buoy. Interaction with a data buoy includes, but is not limited to: encircling the buoy with fishing gear; tying up to or attracting the boat or any fishing gear, part or portion of the boat to a data buoy or its moorings; or cutting a data buoy anchor line. Operator is also required to report any data buoy observed to be damaged to DOFM.

15. The Master of this vessel: (i) is prohibited from using the vessel to target mobulid rays, sharks, or turtle; and (ii) shall ensure that all necessary steps have been taken to promote the live release;
16. Fishing, storing, retaining on board, transhipping or landing any part or whole carcass, any of the species of the family Alopiidae; Oceanic whitetip shark and mobulid rays shall be prohibited;
17. The Master of this vessel shall ensure that all necessary steps have been taken to guarantee the safe release of unintentionally or accidentally caught of mobulid rays and shark (listed in paragraph (vi) of the IOTC Resolutions) and record and report all incidents of the mobulid rays and shark releases, including the status at the time of release as required in the Logbook.
18. The Master of this vessel shall not retain on board, trans-ship, land, any specimen smaller than 60 cm Lower Jaw Fork Length (LJFL) of any of the following species; Striped Marlin, Black Marlin, Blue Marlin and Indo Pacific Sailfish and shall ensure that all necessary steps have been taken to guarantee the safe release of unintentionally or accidentally caught.
19. The Master of this vessel shall fully utilise their entire catches of blue sharks if accidentally caught any and the sharks has died. The master shall ensure the removal of shark fins on board is prohibited for the shark landed fresh. The total weight of onboard shark fins landed frozen shall not be more than 5% of the total weight of shark on board.
20. The LSTLV concerned shall complete and transmit to its flag State, not later than 15 days after the transhipment, the IOTC transhipment declaration, along with its number in the IOTC Record of Fishing Vessels, in accordance with the format set out in Annex III, Resolution 19/06 Section 4 At Sea Transhipment.
21. The Master of the LSTV concerned shall complete and transmit to its flag State the IOTC transhipment declaration, along with its number in the IOTC Record of Fishing Vessels, not later than 15 days after the transhipment, in accordance with the format set out in Annex II, Resolution 19/06 Condition Relating to in-port transhipment.
22. The Master of this vessel (purse seiner) shall prohibit their vessels from intentionally setting a fishing gear around a cetacean and whale shark in the IOTC area of competence, if a cetacean or whale shark is unintentionally encircled, the Master of the vessels shall take all reasonable steps to ensure the safe release of the cetacean or whale shark while taking into consideration the safety of the crew;
23. The master of this vessel (purse seiner) shall avoid encirclement of marine turtles, and if a marine turtle encircled or entangled, take practicable measures to safely release the turtle following the handling guidelines in the IOTC Marine Turtle Identification Cards; release all marine turtles observed entangled in fish aggregating devices (FADs) or other fishing gear. If a marine turtle entangled in the net, stop net roll as soon as the turtle comes out of the water; disentangle the turtle without injuring it before resuming the net roll; and to the extent practicable, assist the recovery of the turtle before returning it to the water; Carry and employ dip nets, when appropriate, to handle marine turtles;
24. Any interactions or sighting with cetaceans, whale shark and marine turtle shall be recorded and reported by the Master of this vessel as required in the National Logbook.
25. The Master of this vessel (purse seiner) shall ensure action is taken to retain on board and then land all bigeye tuna, skipjack tuna, and yellowfin tuna caught, and other non-targeted species, except fish, considered unfit for human consumption or prohibited from retention, consumption, or trade through domestic legislation and international obligations, as stated in IOTC Resolution 19/05.
26. This fishing vessel is prohibited from using aircrafts and unmanned aerial vehicles as fishing aids including support and supply vessels (if any).
27. This Fishing vessel and other vessels including support, supply and auxiliary vessels are prohibited from using, installing or operating surface or submerged artificial lights for the purpose of aggregating tuna and tuna-like species beyond territorial waters. The use of lights on DFADs is also prohibited.

FAILURE TO COMPLY WITH THESE AND OTHER TERMS AND CONDITIONS OF THE LICENCE, NATIONAL LAWS AND REGULATIONS MAY, IN ADDITION TO ANY JUDICIAL PENALTIES THAT MAY BE INCURRED, RESULT IN THE SUSPENSION OR CANCELLATION OF THE LICENCE, EITHER TEMPORARILY OR PERMANENTLY

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