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Thailand National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2021

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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 2021, final data for the 2020 calendar year must be provided to the Secretariat by 30 June 2021)	YES 24/06/2021
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 2021, preliminary data for the 2020 calendar year was provided to the IOTC Secretariat by 30 June 2021). 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 2021, final data for the 2020 calendar year must be provided to the Secretariat by 30 December 2021).	NO 24/06/2021
If no, please indicate the reason(s) and intended actions: No Thai longline vessels operated in IOTC area of competence since 2016 to present. (Refer to DoF letter No. 0511.3/4028 dated 23 June 2021).	



Executive Summary [Mandatory]

Thailand has advance for implementing a comprehensive system to combat IUU fishing. It has taken a reforms of legal framework and implementing regulations, the fisheries management limiting the fishing license issuance in compliance with the quantity of aquatic animals, the fleet management putting control over fishing vessels of all sizes and types, the monitoring, control and surveillance through port-in and port-out control since 2015 to present. Thailand has implemented PSM and assigned 26 PSM ports for port entry of foreign vessel. Moreover, for Thai oversea vessels installation of vessel monitoring system (VMS), and especially installation of electronic reporting system (ERS) electronic monitoring system (EM) for oversea fishing fleet, as well as the development of traceability system for catches from Thai-flagged vessel. Thailand has implemented NPOA-Sharks, Thailand: Plan 1, 2020-2024.

In 2020, Thailand had no fishing vessel operated in high sea of IOTC competent. Thailand had only domestic purse seiner fishery in the Andaman Sea, the number of fishing vessel was registered 228 in 2020. Their operated the fishing from shores is 10 to 30 nautical miles and depth of water range from 20-80 m. In 2020, Bullet tuna (50.40%) is the main composition, followed by Kawakawa 31.51%, Longtail tuna 11.32%, Frigate tuna 3.24% Skipjack tuna 2.00%, King mackerel 1.49% and Indo-Pacific sailfish 0.04%. The CPUE of 5 species in 2020 showed 381.14 kg/day, 238.31 kg/day, 85.59 kg/day, 24.49 kg/day, 15.16 kg/day, 11.30 kg/day and 0.28 kg/day, respectively.

At Present, DOF is launch authorizing Thai-flagged overseas fishing vessels. Currently, there has been applications from begin with Thai-flagged overseas fishing fleet. These vessels operate in SIOFA area and target demersal fish species. No application has been submitted for vessels operating in the IOTC area.



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1. BACKGROUND/GENERAL FISHERY INFORMATION [MANDATORY]

Current Thailand's marine fisheries scheme follows the National Marine Fisheries Management Plan (FMP), which implemented under the new Royal Ordinance on Fisheries B.E. 2558 (2015) and its revision in B.E. 2560 (2017). The plan recognizes the significance of sustainable management of the fisheries resources that aim to rebuilding and maintaining the fisheries resources at a level commensurate with the MSY. Together with fleet management and the monitoring, control and surveillance system such as port-in and port-out control, vessel monitoring system (VMS), electronic reporting system (ERS) and electronic monitoring system (EM) on oversea vessels, and the catch traceability system for Thai-flagged vessels.

There is only purse seine fishing fleets operated in the Andaman Sea, a part of IOTC area of competence in 2020. All of them are registered and licenced under Thai laws and entirely operated in Thai exclusive economic zone which normally in coastal area where the water depth is shallower than 80 meters. They target neritic tunas and other school pelagic fishes, e.g., mackerels, sardines, scads, etc.

Monitoring, control and surveillance (MCS) have been in placed to control both Thai and foreign vessels. Port State Measure (PSM) is also implemented for foreign vessels who request to enter Thai ports. Twenty-six PSM ports are designated for port entry of foreign vessels and ports in 8 provinces are assigned for entry and unloading fish of Thai overseas vessels.

2. FLEET STRUCTURE [MANDATORY]

2.1 DOMESTIC FISHING FLEET

All neritic tunas caught by Thai fishing fleets are from purse seine vessels. The fishing ground located 10 - 30 nautical miles from shore and fishing depth range between 20 - 80 m. Number of purse seine vessels has declined during the last 5 years. A total of 228 purse seine vessels operating in the Andaman Sea were reported in 2020 as presented in Table 1.

Table 1: Number of purse seine vessels operating in the IOTC area of competence by size in 2016 – 2020

Year	Size of vessel (GT)				
	10.00 -19.99	20.00 - 59.99	60.00 - 149.99	>150	Total
2016	18	71	172	21	282
2017	17	68	166	17	268
2018	6	67	146	19	238
2019	6	66	146	18	236
2020	1	60	147	20	228

2.2 OVERSEA FISHING FLEET

Thailand had only one purse seiner operated during December 2016 – February 2017. Today, no Thai flagged vessel operated in IOTC competence area. The number of fishing fleet was shown in Table 2.

Table 2: Number of authorized vessels operating in the IOTC area of competence, by gear type and size

Year	Number of Thailand commercial purse seiner vessels	Size of the vessels (GT)	Remark
2016	1	199.78	In 2018 - present, Thailand don't have commercial purse seiner operated in the IOTC area of competence.
2017	1	199.78	

Year	Number of Research Vessels of DOF Thailand	Size of the vessels (GT)	Remark
2016	3	1,178-1,424	
2017	3	1,178-1,424	
2018	3	1,178-1,424	
2019	3	1,178-1,424	
2020	3	1,178-1,424	

3. CATCH AND EFFORT (BY SPECIES AND GEAR) [Mandatory]

In 2020, Thailand had 228 purse seiners operating in the Andaman Sea, the tuna and tuna – like species catch was 30,176 tons. The trend of neritic catch was increased from 11,901 tons in 2016 to 30,176 tons in 2020 (Table 2 and Figure 1). Since 2018, Thailand has separated bullet tuna catch from frigate tuna catch and reported to IOTC.

In addition, in 2020, two additional species is reported consisting of skipjack tuna and Indo-Pacific sailfish. The main composition during 2016 to 2020 was kawakawa (42.30%), bullet tuna (28.99%), longtail tuna (22.83%), frigate tuna (2.87%), king mackerel (2.30%), skipjack tuna (0.70%) and Indo-Pacific sailfish (0.01%). In 2020, bullet tuna (50.40%) is the main composition, followed by kawakawa 31.51%, longtail tuna 11.32%, frigate tuna 3.24% skipjack tuna 2.00%, king mackerel 1.49% and Indo-Pacific sailfish 0.04%. The CPUE of 5 species in 2020 were 381.14 kg/day, 238.31 kg/day, 85.59 kg/day, 24.49 kg/day, 15.16 kg/day, 11.30 kg/day and 0.28 kg/day, respectively.

Table 3. Catch and effort by Purse seine vessels and primary species in the IOTC area of competence.

Year	Effort (Day)	King mackerel (tons)	Longtail tuna (tons)	Kawakawa (tons)	Frigate tuna (tons)	Bullet tuna (tons)	Skipjack tuna (tons)	Indo-Pacific sailfish (tons)
2016	56,989	495	4,183	7,223	-	-	-	-
2017	45,783	228	4,164	8,604	-	-	-	-
2018	35,411	367	4,798	5,104	635	2,960	-	-
2019	36,303	447	3,162	6,101	864	6,876	-	-
2020	39,901	451	3,415	9,509	977	15,208	605	11

Figure 1. Annual catch of neritic tuna from purse seiner during 2016-2020.

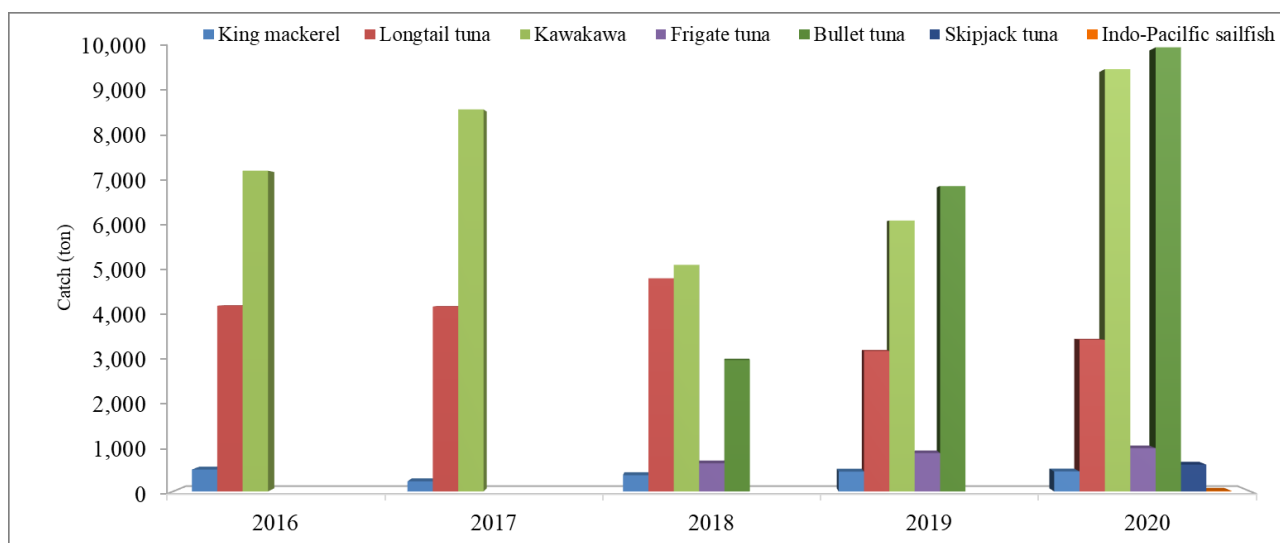


Figure 2. Map of the distribution of catch and fishing effort, by purse seiner in the IOTC area of competence in 2020.

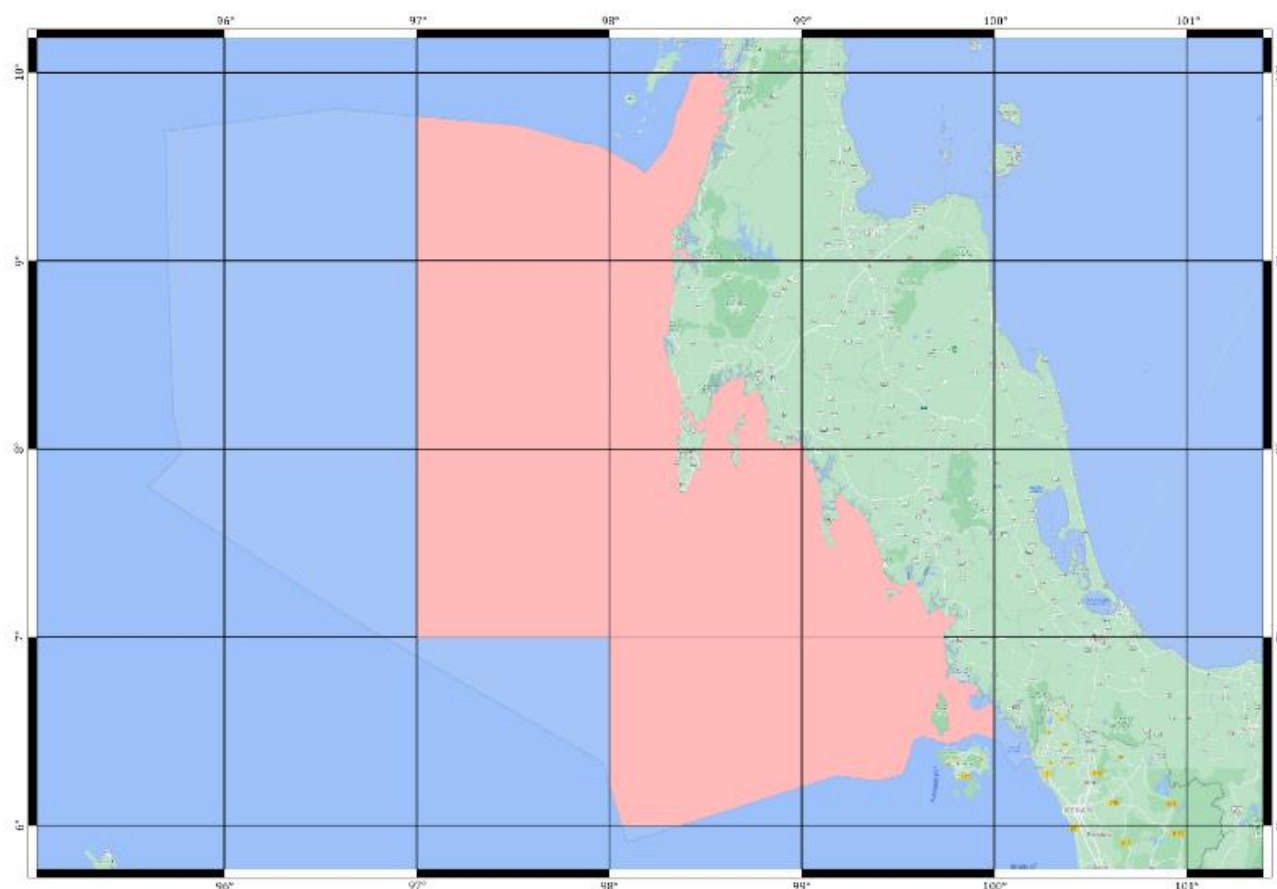
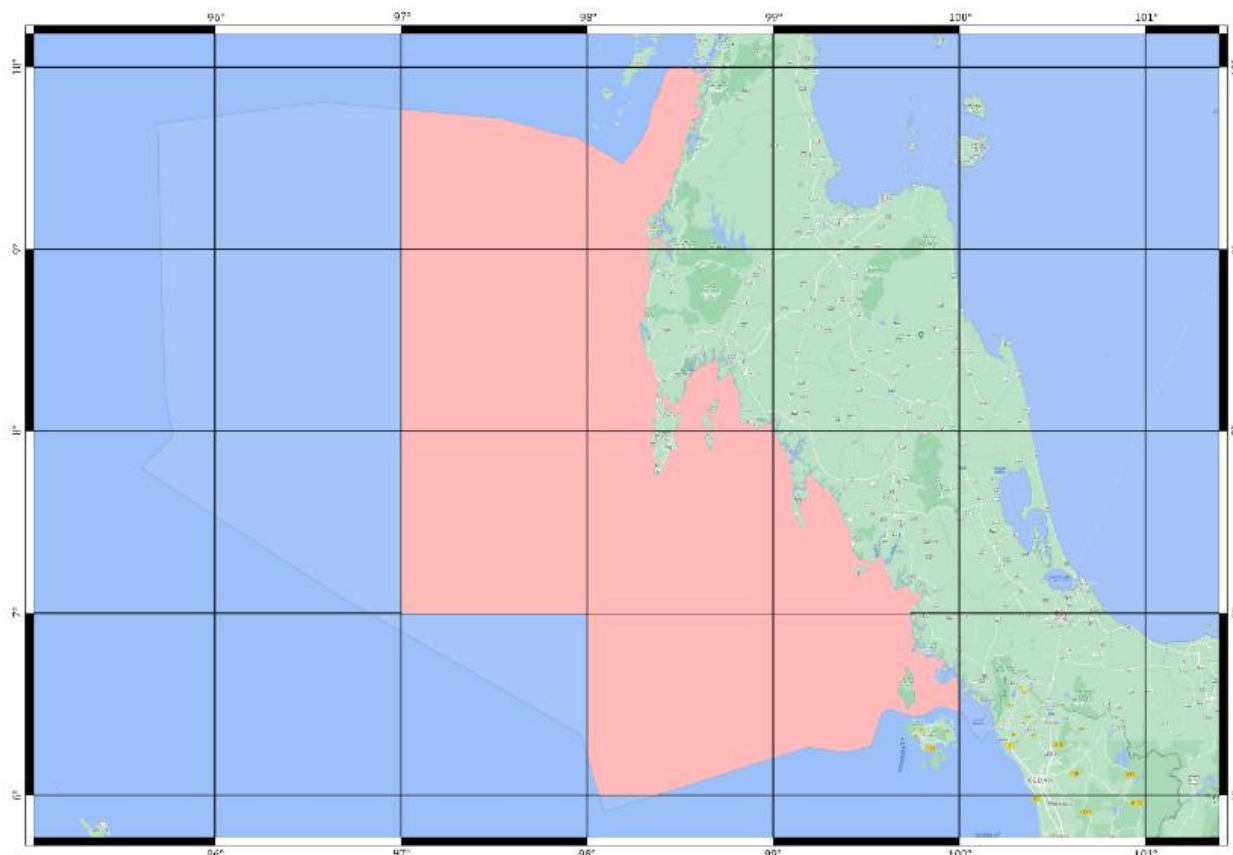


Figure 3. Map of the distribution of catch and fishing effort, by purse seiner in the IOTC area of competence in 2019.



The fisheries coordinate of the catch and effort are the same data and cannot be classified into individual species, while the 2016 - 2018 statistical group has no fisheries coordinate data, so it is not possible to plot points

4. RECREATIONAL FISHERY [Mandatory]

Recreational fishery for tuna and tuna - like species is not a popular fishing game in Thailand, and they are only occasional and seasonal events in the Andaman Sea.

5. ECOSYSTEM AND BYCATCH ISSUES [Mandatory]

Ecosystem impacts and bycatch issues are recognized as a major concern in Thailand's marine fisheries. Individual laws and regulations are implemented for preservation and management of marine ecosystem. The current enacted legislation are Royal Ordinance of Fisheries B.E. 2558 (A.D. 2015) and its amendment B.E. 2560 (A.D. 2017), Wild Animal Reservation and Protection Acts B.E. 2535, and Act on the Promotion of Marine and Coastal Resources Management B.E. 2558.

The fisheries conservation regulations and management measures are implemented under the current fisheries law through the National Fisheries Management Plan (FMP). The FMP goals comprise of effective management measures along with sustainable exploitation of fisheries resources. In particular, the environmental management measures were issued in sense of restoring and rehabilitating the marine ecosystem i.e. probation of trawl in three nautical miles from shoreline, reduce bycatch of small fishes by mesh size regulation in trawl and purse seine, established seasonal closed areas and marine protected areas. The onboard bycatch monitoring is implemented as required in Thailand fisheries legislation, that the overseas fishing vessels required to have at least one onboard observer boarding the ship during a trip. However, there is no active overseas fishing vessels operated in the IOTC area in 2020.

In response bycatch issues, Thailand established a pilot national plan of action on sharks which preliminary review current shark bycatch in Thailand and outline the necessary actions to improve the management and conservation of shark resources in Thai waters.

5.1 Sharks [Mandatory]

Thai fisheries do not target shark species. Mostly shark catches in Thailand are bycatch from bottom trawls with very low percentage of catch. The common species found small shark such as Brown bamboo shark (*Chiloscyllium punctatum*), Grey bamboo shark (*Chiloscyllium griseum*) and Ray species in Family Dasyatidae and Myliobatidae. Despite sharks and rays are bycatch in Thai fisheries. The concerning of continuously declining of sharks is reflected in country's legislation.

5.1.1. NPOA sharks [Desirable]

National Plan of Action for Conservation and Management of Sharks of Thailand (Plan 1: 2020 – 2024) was launched under the International Plan of Action for Conservation and Management of Sharks (IPOA-Sharks) framework. The NPOA reviews the species of shark found in Thai waters and the adjacent waters, statistical catch, utilization and trade of sharks, relevant legislations, current management and the 5-years work plan under this NPOA. The action plan aims to ensure the sustainability use of shark resources along with long-term socioeconomic development in the country with the key objectives; 1) development a shark database in Thai waters including biological data, ecology, fisheries and utilization of sharks, 2) assess shark status and risks from fisheries and environment impacts, 3) increase knowledge capacity of responsible officers, 4) define management measures on sharks which consistent with international rules, regulations and obligations, and 5) established a stakeholder network for management and conservation of shark resources.

5.1.2. Sharks finning regulation [Mandatory]

No specific laws or regulations on shark fishery in current national legislation. All of catches sharks are utilized at land, mainly for fresh consumption and the rests are processed as salted or dried products. The majority of local shark finned products sell in Thailand are from rays and skates. Despite the national legislation, Thailand has followed international obligation on shark conservations and always complied with management measures of the RFMOs as its member i.e., the Code of Conduct for Responsible Fisheries (CCRF), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on Biological Diversity (CBD), and the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and NPOA of Sharks.

5.1.3. Blue shark [Mandatory]

There is no record of blue shark catch from Thai fishing vessels up until now. However, the monitoring of the shark catch is in place as stated in NPOA-shark.

5.2 Seabirds [Mandatory]

There is no record of accidental caught seabirds. All of Thai fishing vessels are operated in tropical area, Andaman Sea, and there is no interaction with seabirds. However, Thailand aware of seabirds that are opportunistic feeders and may attracted interaction with purse seine. Thailand is considering to establish NPOA-seabirds in near future.

5.3 Marine Turtles [Mandatory]

In Thailand, marine turtles are treated as conservational species and be protected by laws. Thailand implemented the post-capture practice of sea turtle on Thai fishing longliners, follows the FAO Guideline to Reduce Sea Turtle Mortality in Fishing Operation. Several regulations relating to marine turtles are as follows;

1. Royal Ordinance of Fisheries B.E. 2558 (A.D. 2015) and its amendment B.E. 2560 (A.D. 2017) in section 66; Turtle and marine mammals are not allowed to be fished, disturbed or taken onboard, except for rescue purpose. The turtles and marine mammals that are accidentally caught alive have to be release immediately, or if injured they must have emergency treatments before release to the sea.
2. Notification of the Department of Fisheries: Rules and regulations of the overseas fishing vessels operating in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E. 2561 (2018) in clause 14; Purse seiners are prohibited to catch marine turtles. Marine turtles have to be discarded if it was caught and record the detail of getting such animals, and in case the turtles was caught from fishing and looks weak or injured, it should be brought up to the vessel and take care until healthy and release to the sea. And clause 16; longliners must equipped with line cutters and de-hookers for releasing caught marine turtles.
3. Notification of Ministry of Agriculture and Cooperatives, prescribes to install the Turtle Excluder Devices (TED) for shrimp trawler in the fishing area dated 16 September 1996.
4. Wild Animal Preservation and Protection Act B.E. 2562 (2019). Marine turtles are also protected under this regulation.
5. Ministerial Regulation Prescribing Species of Protected Wildlife that May Be Bred in Captivity B.E. 2546 (2003).

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

No record available on the number of accidentals caught marine animals and whale sharks by Thai fishing vessels in 2020. Under Thai legislation, marine mammals and Whale shark are not allowed to be fished, disturbed or taken for whatever means without the permission of Fisheries authority.

In October 2019 - September 2020, a total of 255 dugongs were surveyed, of which 32 dugongs were found in the Gulf of Thailand and 223 dugongs were found in the Andaman Sea.

6. NATIONAL DATA COLLECTION AND PROCESSING SYSTEMS [Mandatory]

6.1. Logsheet data collection and verification (including date commenced and status of implementation)

Data collection of Thai overseas fisheries has been categorized into two themes. The first theme is collecting information from daily report while vessels were fishing or having transshipment activity outside Thai water. This data was transmitted via satellite system. Another theme is collecting data from landing sites.

For commercial fishing vessels operated fishing inside Thai waters, logbook data was collected at landing site. Catch data in logbook was verified with the actual landing weight at port. In 2020, there was 7.53% of purse seine vessel trips were monitored the offloading at port and cross - checked data with logbook. Both data (logbook and landing data) has been consistent analysis and record in “Thai-flagged” databases

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

Thailand started and implemented the VMS system on all fishing vessels (> 30 gross ton) in 2015. All overseas vessels have already implemented the VMS system on board in compliance with the fisheries management authorities. When competent Officers lock and mark the VMS, signal transmitting cable and electric cable connecting to the VMS of any vessel, the removal, making damage, destruction or making to the useless of the lock and marking carrying out by the competent Officers shall be prohibited

and also the owner of fishing vessel shall maintain the vessel monitoring system of fishing vessel to be active at all time whether during the fishing operation or landing at port.

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

Thailand has no any fishing vessels operated in IOTC area of competence since 2018.

Human Observer programme

Thailand required the fishing vessel that operates outside Thai waters must have an onboard observer. For the fishing vessel which operates fishing at high-seas in the IOTC competent area, observer onboard the vessel shall be placed not less than 5% of total fishing effort and Regional Observer shall be placed for observation entire the period of transshipment.

The 1st batch of observers (20 of them) completed their training in December 2015 and the 2nd batch of candidate observers (30 of them) were trained to act as onboard fisheries observers in April 2016 and the 3rd batch of candidate observers (30 of them) were trained to act as onboard fisheries observers in September 2017 and the 4th batch of candidate observers (18 of them) were trained to act as onboard fisheries observers in July 2019. The Department of Fisheries have been preparing operating manuals, report forms, observer report application and formulating necessary rules and regulations to ensure the effectiveness of the observer program. The process is being expedited so that the observers can begin working on board selected vessels operating in the High Seas or the Indian Ocean in 2016. The DOF have an annual refresh training course for observers and also have a training course for the debriefers or training for the trainer course. Debriefers is the one who in charge the briefing activity for observers before their deployment and in charge the debriefing activity when they return. The briefing and debriefing activity will ensure the quality of the collecting information by observers as well as to improve their capacity and performance.

Electronic Observer programme

Thailand has Electronic Monitoring System on fishing vessel and carrier vessel. The Electronic Monitoring System (EM) is a system using information technology and satellite communications for getting information on the use of fishing and transshipments gears at sea from electronic sensor equipment on fishing vessels which has direct connections with the equipment gears used in fishing and transshipments. Information on the use of these gears will be confirmed by information regarding vessels' direction from the vessel monitoring system (VMS) as well as information from the closed-circuit television system (CCTV) captured in snapshots and transmitted through a satellite communication in real time. This can be monitored and examined after such video recordings. The RFID technology and electronic signals from capstans and cranes on fishing vessels will be the sensor equipment identifying the start and end of fishing and transshipment activities.

6.4. Port sampling programme [Mandatory]

Scientific sampling survey is carried by Marine Fisheries Research and Development Division, Department of Fisheries. The survey is carried out monthly. Landed fishing vessels are random sampling at port. The fishery data are collected by two methods; 1) interviewing fishing information from Captains, assisted captains, or vessel owners for fishing day, number of hauls, fishing grounds, catch, and other relevant issues, and 2) sampling for catch composition and length of fish.

The length of interested IOTC species are collected in scientific sampling. All measured fishes were sampling from domestic purse seiners, vessel size less than 24m LOA operated in Thailand's EEZ. The number of fish 8,270 were measured and presented in Table 5.

Table 4. Number of vessel trips or vessels active monitored, by species and gear] [Mandatory]

Gears	Area					
	Gulf of Thailand		Andaman Sea		Total	
	Number of vessel trips notified to port in	Number of vessel trips monitored	Number of vessel trips notified to port in	Number of vessel trips monitored	Number of vessel trips notified to port in	Number of vessel trips monitored
Purse seine	26,575	2,175	29,050	2,031	55,625	4,188

Table 5. Number of individuals measured, by species and gear in 2020

Species	Code	No. of measured fish
<i>Scomberomorus commerson</i>	COM	369
<i>Thunnus tonggol</i>	LOT	525
<i>Euthynnus affinis</i>	KAW	2,989
<i>Auxis thazard</i>	FRI	983
<i>Auxis rochei</i>	BLT	3,141
<i>Katsuwonus pelamis</i>	SKJ	198
<i>Istiophorus platyterus</i>	SFA	65
Total		8,270

6.5. Unloading/Transshipment of flag vessels [including date commenced and status of implementation] [Mandatory]

Thailand designed 26 ports for foreign fishing and carrier vessels entry into ports. There are 20 ports located in Gulf of Thailand and 6 ports are located in Andaman Sea area. In 2020, ports located in the IOTC area was conducted for unloading activity of 11 fishing vessels as follows in the Table 6. Ten fishing vessels are longliner with the flag of Taiwan, Province of China and another one fishing vessel is purse seiner with the flag of Japan. There is no transshipment activity at ports located in the IOTC area.

Table 6. Quantities by species and gear landed in ports located in the IOTC area of competence [Mandatory]

Entry	Port of landing	Vessel Name	Flag	Fishing gear		Unloaded weight species (kg)														
					Albacore	Barracudas	Bigeye tuna	Black marlin	Blue marlin	Dolphin Fish	Black escolar	Striped marlin	Oilfish	Fish other than IOTC species or sharks	I-P Sailfish	Skipjack tuna	Swordfish	Wahoo	Yellow fin tuna	Total weight (Kg)
1	Phuket Fishing Port	SRI FU FA NO.999	Taiwan	Longline	-	-	98	285	666	-	-	248	44	-	5,428		31,023	33	1,807	39,632
2	Phuket Deep Sea port	TAIKEI MARU NO.1	Japan	Purse seine	-	-	60,000			-			-			359,000			56,000	475,000
3	Phuket Fishing Port	YU PAI TSAIR NO.9	Taiwan	Longline	-	-		352	192	110	397	665	-		1,946	339	10,889	95	8,476	23,461
4	Phuket Fishing Port	SHUN YING	Taiwan	Longline	-	2		344	803	89	31	2,879		-	4,909	177	28,205	97	13,904	51,440
5	Phuket Fishing Port	SHUN YING NO.168	Taiwan	Longline	148		2,107	513	1,444	190	937	1,772	-	-	5,527	-	30,821	339	17,500	61,298
6	Phuket Fishing Port	SHUN YING NO.368	Taiwan	Longline	-	-			60	23		254	-	-	796	-	2,928	10	7,256	11,327
7	Phuket Fishing Port	SHENG JIN FONG	Taiwan	Longline	-	-	121	788	1,872	116		2,983	121		7,733		12,410	102	4,698	30,944
8	Phuket Fishing Port	SHUN YING NO.668	Taiwan	Longline	-	125	364	657	689	66	146	3,155			4,600		26,526	266	11,810	48,404
9	Phuket Fishing Port	SRI FU FA NO.999	Taiwan	Longline	-	-		395	719			2,174			2,215		28,577		6,286	40,366
10	Phuket Fishing Port	SHENG JIN FONG	Taiwan	Longline	4,297		5,991	792	3,532	65	2,854	287			549		1,243	2,475	5,087	27,172
11	Phuket Fishing Port	SRI FU FA NO.999	Taiwan	Longline	4,870		7,849	999	4,947		1,887	282			965		1,780	2,086	9,066	34,731

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

Thailand has been monitoring billfish through logbook and port-in/port-out control. As Billfish are not target species for Thai fishing fleet, the catch was very low. However, Department of fisheries has been monitoring these species via the scientific sampling survey as shown in 6.4. The IOTC species identification cards are used as classification guideline in field sampling, to keep identification standardize among several survey teams.

6.7. Gillnet observer coverage and monitoring [Desirable]

Not applicable. Thailand do not have gill net vessels operated in IOTC area, only purse seiners are operated in the Andaman Sea.

6.8 Sampling plans for mobulid rays [Mandatory]

Thailand do not have a specific sampling plan for mobulid rays as these species are rarely caught by Thai fishing fleet. All mobulid rays catches are bycatch. The scientific sampling program presented in 6.4 is applied for all cartilaginous fish which includes mobulid rays. In addition, mobulid rays are treated as conservational species and be protected under the Act of Conserve and protect wildlife animals.

7. NATIONAL RESEARCH PROGRAMS [Desirable]

In 2020, Thailand has no national research relating to IOTC interested species in the Andaman Sea.

7.1. National research programs on blue shark

None.

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

None.

7.3. National research programs on sharks

None.

7.4. National research programs on oceanic whitetip sharks

None.

7.5. National research programs on marine turtles

Thailand has a system to collect sea turtle egg laying in place. In 2020, the report presented sea turtle egg laying totally 491 nets consist of *Chelonia mydas* with 240 nets, *Eretmochelys imbricata* with 234 nets, *Lepidichelys olivacea* with 1 net and *Dermochelys coriacea* with 16 nets. In 2021, sea turtle was reported 502 nets, consist of *Chelonia mydas* with 199 nets, *Eretmochelys imbricata* with 283 nets, *Lepidichelys olivacea* with 2 nets and *Dermochelys coriacea* with 18 nets.

7.6. National research programs on thresher sharks

None.

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

Table 7. Scientific requirements contained in Resolutions of the Commission, adopted between 2012 and 2020.

Res. No.	Resolution	Scientific requirement	CPC progress
11/04	On a regional observer scheme	Paragraph 9	Thailand reports of number of vessels monitored and submits report to IOTC in accordance with Resolution 11/04.
12/04	On the conservation of marine turtles	Paragraphs 3, 4, 6–10	Thailand has been to enforce the law which has designed incidental logbook. And Thailand has notification of the Department of Fisheries: Rules and regulations of overseas fishing vessels operating in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E. 2561 (2018)
12/06	On reducing the incidental bycatch of seabirds in longline fisheries.	Paragraphs 3–7	Thailand has been to enforce the law which has designed incidental logbook. And Thailand has notification of the Department of Fisheries: Rules and regulations of overseas fishing vessels operating in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E. 2561 (2018)
12/09	On the conservation of thresher sharks (family <i>alopidae</i>) caught in association with fisheries in the IOTC area of competence	Paragraphs 4–8	Thailand has been to enforce the law which has designed incidental logbook. And Thailand has notification of the Department of Fisheries: Rules and regulations of overseas fishing vessels operating in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E. 2561 (2018)
13/04	On the conservation of cetaceans	Paragraphs 7–9	Thailand has been to enforce the law which has designed incidental logbook. And Thailand has notification of the Department of Fisheries: Rules and regulations of overseas fishing vessels operating in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E. 2561 (2018)
13/05	On the conservation of whale sharks (<i>Rhincodon typus</i>)	Paragraphs 7–9	Thailand has been to enforce the law which has designed incidental logbook. And Thailand has notification of the Department of Fisheries: Rules and regulations of overseas fishing vessels operating in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E. 2561 (2018)
13/06	On a scientific and management framework on the conservation of shark species caught in association with IOTC managed fisheries	Paragraph 5–6	Thailand has been to enforce the law which has designed incidental logbook. And Thailand has notification of the Department of Fisheries: Rules and regulations of overseas fishing vessels operating in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E. 2561 (2018)
15/01	On the recording of catch and effort by fishing vessels in the IOTC area of competence	Paragraphs 1–10	Thailand collects fisheries information by using fishing logbook, which will be report through Electronic Report System (ERS).
15/02	Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs)	Paragraphs 1–7	Thailand collects fisheries information in the area and submits report to IOTC in accordance with Resolution 15/02.
17/05	On the conservation of sharks caught in association with fisheries managed by IOTC	Paragraphs 6, 9, 11	Thailand has been to enforce the law which has designed incidental logbook. And Thailand has notification of the Department of Fisheries: Rules and regulations of overseas fishing vessels operating in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E. 2561 (2018). Thailand report and submits report to IOTC in accordance with Resolution 17/05.
18/02	On management measures for the conservation of blue shark caught in association with IOTC fisheries	Paragraphs 2–5	Thailand has been to enforce the law which has designed incidental logbook. And Thailand has notification of the Department of Fisheries: Rules and regulations of overseas fishing vessels operating in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E. 2561 (2018). Thailand follows and submits Annual Report as required in the Resolution.
18/05	On management measures for the conservation of the Billfishes: Striped marlin, black marlin, blue marlin and Indo-Pacific sailfish	Paragraphs 7 – 11	Thailand has been to enforce the law which has designed fishing logbook and incidental logbook for collect the data related billfish. And Thailand has notification of the Department of Fisheries: Rules and regulations of overseas fishing vessels operating in the responsible area of Indian

Res. No.	Resolution	Scientific requirement	CPC progress
			Ocean Tuna Commission (IOTC) B.E. 2561 (2018). Thailand report and submits report to IOTC in accordance with Resolution 18/05.
18/07	On measures applicable in case of non-fulfilment of reporting obligations in the IOTC	Paragraphs 1, 4	Thailand follows and submits Annual Report as required in the Resolution. And Thailand has been enforce the law which has designed incidental logbook.
19/01	On an Interim Plan for Rebuilding the Indian Ocean Yellowfin Tuna Stock in the IOTC Area of Competence	Paragraph 22	Thailand has been to enforce the law which are encouraged to increase their observer coverage or field sampling in gillnet fishing vessels by 10% using data collection methodologies.
19/03	On the Conservation of Mobulid Rays Caught in Association with Fisheries in the IOTC Area of Competence	Paragraph 11	Thailand has been to enforce the law which has designed fishing logbook and incidental logbook for collect the data related Mobulid Rays. And Thailand has notification of the Department of Fisheries: Rules and regulations of overseas fishing vessels operating in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E. 2561 (2018). Thailand is implementing in accordance with Resolution 19/03 Paragraph 11.

9. LITERATURE CITED [Mandatory]

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