IOTC-2015-SC18-NR03

[China] National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2015

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INFORMATION ON FISHERIES, RESEARCH AND STATISTICS

In accordance with IOTC Resolution 10/02, final	Not applicable
scientific data for the previous year was provided	
to the Secretariat by 30 June of the current year,	
for all fleets other than longline [e.g. for a	
National report submitted to the Secretariat in	
2013 final data for the 2012 calendar year must be	
provided to the Secretariat by 30 June 2013)	
In accordance with IOTC Resolution 10/02,	YES
provisional longline data for the previous year	
was provided to the Secretariat by 30 June of the	29/06/2015
current year [e.g. for a National report submitted	
to the Secretariat in 2013, preliminary data for the	
2012 calendar year was provided to the Secretariat	
by 30 June 2013).	
DEMONDED Et 11 11 1 C 1	
REMINDER: Final longline data for the previous	
year is due to the Secretariat by 30 Dec of the	
current year [e.g. for a National report submitted	
to the Secretariat in 2013, final data for the 2012	
calendar year must be provided to the Secretariat	
by 30 December 2013). If no, please indicate the reason(s) and intended acti	oner
in no, please indicate the reason(s) and intended acti	UIIS.



Executive Summary [Mandatory]

Deep-frozen longline and ice fresh-longline are the only two fishing gears used by Chinese vessels to catch tuna and tuna-like species in the IOTC waters. The number of active deep-frozen longline vessels increased from 10 in 2011 to 38 in 2014, while the number of ice-fresh longline vessels increased to 16. Chinese longline fleet caught 4940 MT of tropical tunas (BET and YFT) in 2014, which is lower than the catch in 2013(5233 MT). The albacore tuna catch in 2014 was 1430 MT, which is higher than the catch in 2013 (1011 MT). Implementation of both the logbook and observer programs is going on for the Chinese longline fleet in the Indian Ocean. Catch and effort data collection of bycatch species have been improved. Two scientific observers were dispatched in 2014.

1. BACKGROUND/GENERAL FISHERY INFORMATION [MANDATORY]

Longline has been the only fishing gear for the China mainland fleets in the IOTC waters since 1995. One hundred-twenty longline fishing boats were recorded at the peak time in 1998, which mainly consisted of small non-professional boats reconstructed from trawlers or gill-netters originally operated along China coastal waters. After 1998 the number of fishing boats began to reduce due to poor management, low economic performance and fishing ground shift to other oceans. The total number of tuna fishing boats registered in IOTC Secretariat reduced to 93 in 2001 and further cut down to 63 in 2002. The number of fishing boats active reduced from 46 in 2008 to 32 in 2009 due to the piracy activity, of which 27 belongs to the large-size deep-frozen longliners. Before 2008 the deep-frozen tuna longliners usually operated in waters between 40 °E ~ 90°E and 20°N ~ 40°S. Since 2009, most of the deep-frozen fishing effort shifted to southern Indian Ocean owing to piracy effect. The number of deep-frozen longliners was 15 and 10 in 2010 and 2011, respectively. In 2012, however, more deep-frozen longliners came back to tropical western Indian Ocean and reached a total of 36 in the number of active longline vessels. The current number of active longline vessels was 38.

2. FLEET STRUCTURE [MANDATORY]

The Chinese tuna fleet consisted of deep frozen longliners (Deep LL) and ice fresh longliners (Ice LL) in the Indian Ocean. The fleet structure was shown in **Table 1**. The number of deep frozen longliners was 22 in 2014, while the number of Ice-fresh longliners was up to 16 in 2014.

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

Year	Gear	Vessel size range	Number of vessel
2006	Deep LL	GRT over 400	41
	Ice LL	GRT 200- 400	26
2007	Deep LL	GRT over 400	41
	Ice LL	GRT 200- 400	26
2008	Deep LL	GRT over 400	31
	Ice LL	GRT 200- 400	15
2009	Deep LL	GRT over 400	27
	Ice LL	GRT 200- 400	5
2010	Deep LL	GRT over 400	15
	Ice LL	GRT 200- 400	5
2011	Deep LL	GRT over 400	10
	Ice LL	GRT 200- 400	5
2012	Deep LL	GRT over 400	31
	Ice LL	GRT 200- 400	5
2013	Deep LL	GRT over 400	31



	Ice LL	GRT 200- 400	5
2014	Deep LL	GRT over 400	22
	Ice LL	GRT 200- 400	16

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

Annual catch and effort of Chinese fleet by gear and primary species in the IOTC area of competence were shown in **Table 2**. The Deep LL effort (hooks deployed) in 2014 was 23% lower than that in 2013. The Ice LL effort in 2014 was 14% higher than that in 2013.

Table 2. Annual catch and effort by gear and primary species in the IOTC area of competence. [Mandatory]

Table 2a	Albacore		
Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	Deep LL	31643	54
2007	Deep LL	27644	77
2008	Deep LL	22215	145
2009	Deep LL	14417	210
2010	Deep LL	15305	3946
2011	Deep LL	2858	972
2012	Deep LL	7310	7
2013	Deep LL	19992	18
2014	Deep LL	15262	22

Table 2b	Albacore		
Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	ICE LL	3642	2
2007	ICE LL	2431	39
2008	ICE LL	3931	13
2009	ICE LL	621	179
2010	ICE LL	1689	803
2011	ICE LL	1278	442
2012	ICE LL	3985	1828
2013	ICE LL	3447	993
2014	ICE LL	3950	1409

Table 2c	Bigeye tuna		
Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	Deep LL	31643	8236
2007	Deep LL	27644	6974
2008	Deep LL	22215	4643
2009	Deep LL	14417	2657
2010	Deep LL	15305	1394
2011	Deep LL	2858	234
2012	Deep LL	7310	2404
2013	Deep LL	19992	4274
2014	Deep LL	15262	3723

Table 2d	Bigeye tuna		
Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	ICE LL	3642	466
2007	ICE LL	2431	193
2008	ICE LL	3931	320
2009	ICE LL	621	4
2010	ICE LL	1689	4
2011	ICE LL	1278	6
2012	ICE LL	3985	1



2013	ICE LL	3447	37
2014	ICE LL	3950	139

Table 2e	Yellowfin tuna		
Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	Deep LL	31643	3592
2007	Deep LL	27644	2652
2008	Deep LL	22215	747
2009	Deep LL	14417	449

Deep LL Deep LL Deep LL Deep LL Deep LL

Table 2f	Yellowfin tuna			
Year	Gear	Effort (1000 hooks)	Catch (MT)	
2006	ICE LL	3642	265	
2007	ICE LL	2431	173	
2008	ICE LL	3931	150	
2009	ICE LL	14417	4	
2010	ICE LL	1689	4.2	
2011	ICE LL	1278	2	
2012	ICE LL	3985	230	
2013	ICE LL	3447	253	
2014	ICE LL	3950	196	

Table 2g	Swordfish		
Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	Deep LL	31643	742
2007	Deep LL	27644	441
2008	Deep LL	22215	387
2009	Deep LL	14417	240
2010	Deep LL	15305	790
2011	Deep LL	2858	160
2012	Deep LL	7310	204
2013	Deep LL	19992	562
2014	Deep LL	15262	616

Table 2h	Swordfish		
Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	ICE LL	3642	33
2007	ICE LL	2431	9
2008	ICE LL	3931	32
2009	ICE LL	621	1
2010	ICE LL	1689	2
2011	ICE LL	1278	1
2012	ICE LL	3985	<1
2013	ICE LL	3447	6
2014	ICE LL	3950	8

Table 2i	Blue marlin		
Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	Deep LL	31643	Not available
2007	Deep LL	27644	Not available
2008	Deep LL	22215	Not available
2009	Deep LL	14417	75



2010	Deep LL	15305	105
2011	Deep LL	2858	38
2012	Deep LL	7310	89
2013	Deep LL	19992	226
2014	Deep LL	15262	88

Table 2j	Blue marlin		
Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	ICE LL	3642	Not available
2007	ICE LL	2431	Not available
2008	ICE LL	3931	Not available
2009	ICE LL	621	1
2010	ICE LL	1689	<1
2011	ICE LL	1278	1
2012	ICE LL	3985	<1
2013	ICE LL	3447	<1
2014	ICE LL	3950	23

Table 2k	Striped marlin		
Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	Deep LL	31643	Not available
2007	Deep LL	27644	Not available
2008	Deep LL	22215	Not available
2009	Deep LL	14417	87
2010	Deep LL	15305	89
2011	Deep LL	2858	31
2012	Deep LL	7310	58
2013	Deep LL	19992	170
2014	Deep LL	15262	70

Table 2l	Striped marlin		
Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	ICE LL	3642	Not available
2007	ICE LL	2431	Not available
2008	ICE LL	3931	Not available
2009	ICE LL	621	0
2010	ICE LL	1689	1
2011	ICE LL	1278	1
2012	ICE LL	3985	<1
2013	ICE LL	3447	<1
2014	ICE LL	3950	14

Table 2m	Black marlin		
Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	Deep LL	31643	Not available
2007	Deep LL	27644	Not available
2008	Deep LL	22215	Not available
2009	Deep LL	14417	33
2010	Deep LL	15305	16
2011	Deep LL	2858	11
2012	Deep LL	7310	9
2013	Deep LL	19992	10
2014	Deep LL	15262	8

Table 2n	Black marlin		
Year	Gear	Effort (1000 hooks)	Catch (MT)



2007 ICE LL 2431 Not available	
2008 ICE LL 3931 Not available	
2009 ICE LL 621 0	
2010 ICE LL 1689 <1	
2011 ICE LL 1278 <1	
2012 ICE LL 3985 3	
2013 ICE LL 3447 1	
2014 ICE LL 3950 2	

Figure 1. Historical annual catch for the national fleet, by gear and primary species, for the IOTC area of competence for the entire history of the fishery/fleet. **[Mandatory]**

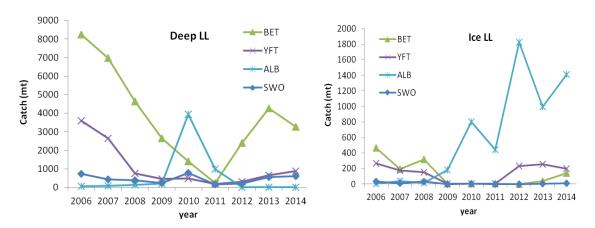
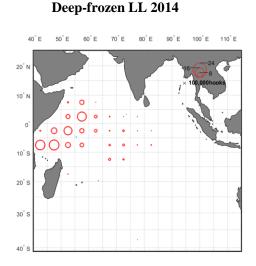


Figure 2a. Map of the distribution of fishing effort, by gear type for the national fleet in the IOTC area of competence (most recent year e.g. 2014). [Mandatory]



Ice-fresh LL 2014

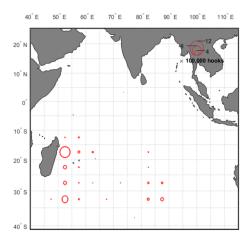
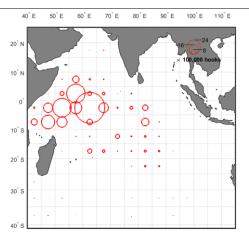


Figure 2b. Map of the distribution of <u>fishing effort</u>, by gear type for the national fleet in the IOTC area of competence (average of the 5 previous years e.g. 2010–2014). **[Mandatory]**

Deep-frozen LL 2010-2014

Ice-fresh LL 2010-2014





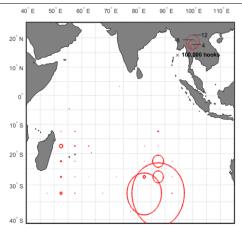
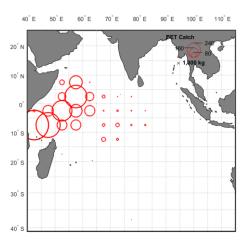


Figure 3a. Map of distribution of fishing <u>catch</u>, by species for the national fleet, in the IOTC area of competence (most recent year e.g. 2014). [Mandatory]

Deep-frozen ALB 2014

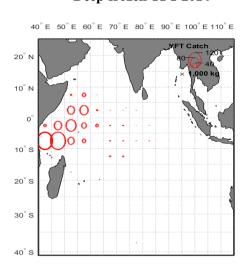
40°E 50°E 60°E 70°E 80°E 90°E 100°E 110°E 20°N 10°N 20°S 30°S

Deep-frozen BET 2014

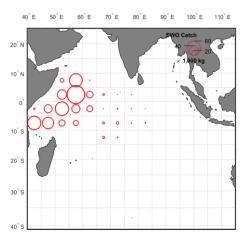


Deep-frozen YFT 2014

I



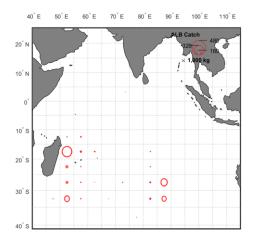
Deep-frozen SWO 2014

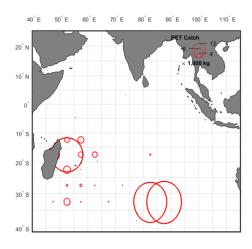


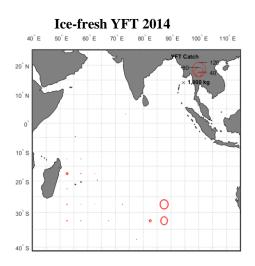
Ice-fresh ALB 2014

Ice-fresh BET 2014









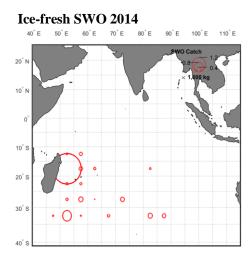
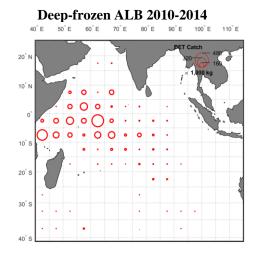
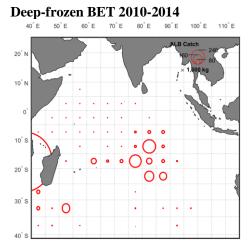


Figure 3b. Map of distribution of fishing <u>catch</u>, by species for the national fleet, in the IOTC area of competence (average of the 5 previous years e.g. 2010–2014). [Mandatory]

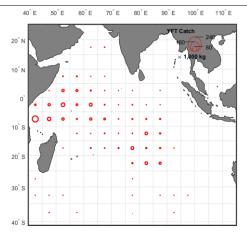


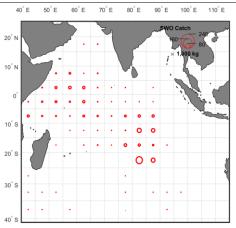


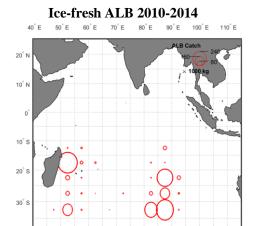
Deep-frozen YFT 2010-2014

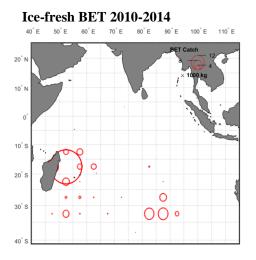
Deep-frozen SWO 2010-2014

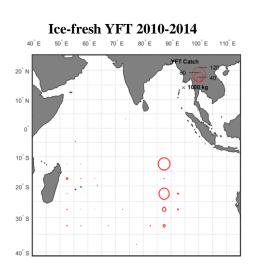


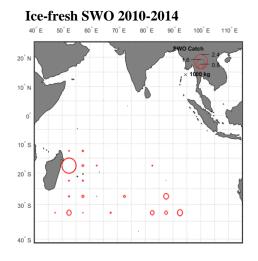












4. RECREATIONAL FISHERY [Mandatory]

No recreational fishing activities.

5. ECOSYSTEM AND BYCATCH ISSUES [Mandatory]



China is making its effort in contribution of data collection for ecosystem and bycatch issues in the Indian Ocean, based on our observer and logbook programs. Scientists and analysts from shanghai Ocean University (SHOU) take a majority of work in China's tropical tuna and bycatch research in the Indian Ocean. Although not conducted yet, national plans of action for sharks and seabirds are under developments. We are also planning an ecological risk analysis for sharks using data from our observer program and other data sources. We have provided scientific data from our observer programs and these data were used for biological study for sharks on WPEB10. In accordance with various management resolutions, China is now enhancing its management and conservations measures for important bycatch species (i.e. sharks, seabirds and marine mammals).

5.1 Sharks [Mandatory]

China is developing a national plan of action for sharks. China is also collecting biological and ecological information based on longline observer program. Now, species-specific catch and effort data are being recorded in the logbook data collection. However, in consideration of fishermen's poor knowledge in species identification and workload onboard, complete recording species on the recommended list is hardly finished for them at least for the current years. And in this year, Key sharks species Poster were sent to each vessel to facilitate fisherman to identify shark species. With the development of species identification cards and manuals, this issue will be solved in the near future.

Table 3: Total number and weight of sharks, by species, retained by the national fleet in the IOTC area of competence (for the most recent five years at a minimum, e.g. 2010–2014). [Mandatory]

Table 3a	Blue shark		
Year	Gear	Catch (number)	Catch (kg)
2010	Deep LL	2410	100282
2011	Deep LL	716	31547
2012	Deep LL	439	17560
2013	Deep LL	2120	72906
2014	Deep LL	2311	83401

Table 3b	Blue shark		
Year	Gear	Catch (number)	Catch (kg)
2010	ICE LL	56	1818
2011	ICE LL	58	2529
2012	ICE LL	1630	48484
2013	ICE LL	1210	48825
2014	ICE LL	1005	36748

Table 3c	Oceanic wh	itetip shark	
Year	Gear	Catch (number)	Catch (kg)
2010	Deep LL	5125	160026
2011	Deep LL	1044	33559
2012	Deep LL	No data(unclassified)	No data(unclassified)
2013	Deep LL	No data (discarded)	No data (discarded)
2013	Deep LL	No data (discarded)	No data (discarded)
2014	Deep LL	No data (discarded)	No data (discarded)

Table 3d	Oceanic whitetip shark			
Year	Gear	Catch (number)	Catch (kg)	
2010	ICE LL	7	282	
2011	ICE LL	13	501	



2012	ICE LL	Not available	7768	
2013	ICE LL	No data (discarded)	No data (discarded)	
2014	ICE LL	No data (discarded)	No data (discarded)	

Table	30	Shortfin	mako	chark

Year	Gear	Catch (number)	Catch (kg)
2010	Deep LL	3100	120826
2011	Deep LL	910	34297
2012	Deep LL	132	6004
2013	Deep LL	928	36781
2014	Deep LL	239	10771

Table 3f Shortfin mako shark

Tubic 31	Shor tim ma	NO SHULK		_
Year	Gear	Catch (number)	Catch (kg)	
2010	ICE LL	47	1996	
2011	ICE LL	37	1108	
2012	ICE LL	9932	66886	
2013	ICE LL	1742	63574	
2014	ICE LL	5268	144	

Table 4: Total number of sharks, by species, released/discarded by the national fleet in the IOTC area of competence (for the most recent five years at a minimum, e.g. 2010–2014). Where available, include life status upon released/discard. [**Desirable**]

We are unable to provide estimates of total discard and release status since this information was not routinely recorded in our current logbook.

5.2 Seabirds [Mandatory]

Most of China tuna longline vessels are operating in the tropical areas of IOTC waters and there are no interactions with seabirds. No seabird mortality was observed by China tuna longline fleet, which was confirmed by national observer programme. For a few number of vessels operated in the south of 25° S, mitigation measures were implemented according to the management measures.

5.3 Marine Turtles [Mandatory]

Observers are responsible for recording species specific interactions of marine turtles in longline fisheries, including number of caught, fate, and release status. No national plan of action for marine turtles is under development. One olive ridley sea turtle was reported by the observer to be incidentally caught by Chinese longline vessels in 2014.

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

Observers are responsible for recording species specific interaction of marine mammals in longline fisheries, including number of caught, fate, and release status. No national plan of action for marine turtles is under development.



Table 5. Observed annual catches of species of special interest by species (seabirds, marine turtles and marine mammals) by gear for the national fleet, in the IOTC area of competence (for the most recent five years at a minimum, e.g. 2010–2014 or to the extent available). [Mandatory]

Table 5a Marine turtles

Year	Gear	Species	Catch (number)	Species	Catch (number)
2010	Deep LL		No mortality		
2011	Deep LL		No mortality		
2012	Deep LL		No mortality		
2013	Deep LL		No mortality		
2014	Deep LL		No mortality		

Table 5b Marine turtles

Year	Gear	Species	Catch (number)	Species	Catch (number)
2010	ICE LL		No mortality		
2011	ICE LL		No mortality		
2012	ICE LL		No mortality		
2013	ICE LL		No mortality		
		olive ridley			
2014	ICE LL	sea turtle	1		

Table 5c Marine mammals

	1,1441 1116 1114111111				
Year	Gear	Species	Catch (number)	Species	Catch (number)
2010	Deep LL		No mortality		
2011	Deep LL		No mortality		
2012	Deep LL		No mortality		
2013	Deep LL		No mortality		
2014	Deep LL		No mortality		

Table 5d Marine mammals

1401004	1120011110 111011111101				
Year	Gear	Species	Catch (number)	Species	Catch (number)
2010	ICE LL		No mortality		
2011	ICE LL		No mortality		
2012	ICE LL		No mortality		
2013	ICE LL		No mortality		
2014	ICE LL		No mortality		

6. NATIONAL DATA COLLECTION AND PROCESSING SYSTEMS [Mandatory]

6.1. Logsheet data collection and verification (including date commenced and status of implementation) China started the pilot logbook data submission system in 2005 in order to obtain more detailed information about catch and fishing effort as required by the IOTC. In 2006 the Bureau of Fisheries, Ministry of Agriculture, required that all tuna fishing boats need to fill logbook and return to the Bureau of Fisheries. The Bureau also announced that implementation of logbook work will be considered as one of the main factors for renewing fishing permission and licenses. Under the support of China Overseas Fisheries Association (COFA) and cooperation of the tuna fishing companies, China's logbook system has been carried out smoothly as a normal data collection work. Since 2009, 100% logbook coverage for the longline fishery has been realized. So far about 85% of the logbooks have been returned to SHOU through the Bureau of Fisheries. All the information of those logbooks has entered the national tuna fishery database in SHOU and is being processed by the tuna technical working group at SHOU. Preliminary analysis showed that the data quality of some logbook needs to be further improved.

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

All the Chinese longline vessels operating in the Indian Ocean have been equipped with VMS system.



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

Under authorization by the Bureau of fisheries, Ministry of Agriculture, the SHOU has been in charge of the national tuna observer program in the Pacific Ocean, Atlantic Ocean and Indian Ocean. China began to implement tuna Scientific Observer programme in IOTC in 2002. So far, the program has been carried out normally under the support of COFA. Observers have been dispatched each year since then. No observer was dispatched for the year 2011 due to the piracy activity (the observer has been selected and trained). Two observers were sent in 2014. Graduate/Senior students majoring in marine fisheries science & technology or marine fisheries resources from SHOU are chosen to take the task as scientific observers.

Table 6. Annual observer coverage by operation, e.g. longline hooks, purse seine sets (for the most recent five years at a minimum, e.g. 2010–2014 or to the extent available). [Mandatory]

Year	Gear	Hooks deployed	Number of observers	Hooks observed	Coverage (%)
2010	Deep LL	15,304,660	1	153,000	1
2011	Deep & ICE LL	0	0	0	0
2012	Deep LL	11,295,050	1	218,520	2
2013	Deep & ICE LL	23,439,470	1	216,640	1
2014	Deep & ICE LL	19,212,540	2	178,413	1

Figure 4. Map showing the spatial distribution of observer coverage. [Mandatory]

There were two observer trips conducted in 2014, here the observed longline sets were shown (Figure 4). Observers worked on onboard two deep-frozen longliners from August to September 2014.

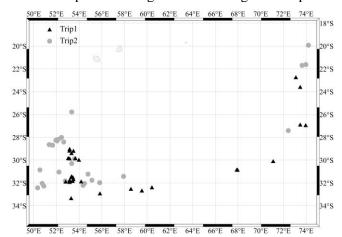


Figure 4 Map showing the observed longline operating sets during the 2014 observer trip

6.4. Port sampling programme [including date commenced and status of implementation]

China has set up a port sampling program in early 2012. The program was designed for vessels which return and unload catch in domestic ports.

Table 7. Number of individuals measured, by species and gear] [Mandatory] In 2014 there was no unloading at China's domestic ports for catch from the Indian Ocean tuna fisheries.

6.5. Unloading/Transhipment [including date commenced and status of implementation] [Mandatory]

Table 8 Transhipment of China fleet in 2014(at sea and in port)



Date of	Species Transhipped at sea (Unit:metic ton)							
Transshipment	BET	YFT	swo	MLS	ALB	SHARK	Oth	
2014/3/8	41	14	9	1.1		6.415	2.105	
2014/3/4	54	39	9	2		2.6	6.716	
2014/3/5	49.069	24.226	11.707	1.189		4.725	5.618	
2014/3/6	22	15	7	2		14.2	14.75	
2014/3/6	39	27	7	1.5		4	5.8	
2014/3/9	33.481	7.518	8.969	2.338		5.108	11.316	
2014/3/7	38	14	7	2		9	5.89	
2014/3/9	32	11	5	3		9.684	7.454	
2014/3/10	26	8	4	2		6.098	7.259	
2014/6/23	65	25	25	1.2		5	6	
2014/6/23	44	23	16	1		5	6	
2014/6/22	83	17	19	2		3.305	7.6	
2014/6/22	61	14	14	2		3.305	6	
2014/6/21	51	15	11	1		2.956	4.216	

Date of	Port Name		Specie	es Tranship	ped in por	rt (Unit:m	etic ton)	
Transhipment	Port Name	BET	YFT	SWO	ALB	Marlin	Sharks	Others
2014/1/23	MOMBASE, KENYA	116.902	21.91			2.398		
2014/1/25	MOMBASE, KENYA			10.994				0.604
2014/2/25	VICTORIS,MAHE	34.025	16.76 6					
2014/2/26	VICTORIS,MAHE	31.36	18.64 0					
2014/3/2	VICTORIS,MAHE	55	6.8					
2014/7/23	PORT LOUIS	86.233	54.64 8			5.032		
2014/7/11	COLOMBO,SRILA NKA	47	24.08	1.5				
2014/8/5	COLOMBO,SRILA NKA			13.227	0.389	11.152	22.748	4.124
2014/8/6	COLOMBO,SRILA NKA			13.139	0.466	10.39	32.098	1.327
2014/9/9	PORT LOUIS	5.383	8.748	10.105	3.01			
2014/9/17	PORT LOUIS	20.14	13.45 4	4.414	41.502			

7. NATIONAL RESEARCH PROGRAMS [Desirable]

China has launched a couple of domestic research projects regarding tuna fisheries and stock status of key species in the Indian Ocean, which are funded by Shanghai Municipal Education Commission and undertaken by SHOU. **Table 9** shows a representative project. Besides of these specific projects, scientists from Shanghai Ocean University are collecting and analyzing biological and size composition data based on national longline observer program.

Table 9. Summary table of national research programs, including dates.

Project title	Period	Countries	Budget	Funding source	Objectives	Short
		involved	total			description
Stock assessment	2012-	China		Innovation Program of	Test alternative	
and risk analysis of	2014			Shanghai Municipal	management strategies	
bigeye tuna in the				Education Commission,	and quantify stock risk to	
IO				China	these strategies	
					C	



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

Table 10. Respond with progress made to recommendations of the SC and specific Resolutions relevant to the work of the Scientific Committee [to be updated annually to include most recent Conservation and Management Measures adopted by the Commission].

Res. No.	Resolution	Scientific requirement	CPC progress
05/05	Concerning the conservation of sharks caught in association with fisheries managed by IOTC	Paragraphs 1–12	Paragraph 1- China is improving its species specific data collection in logbook task, also is trying to make reliable bycatch estimates for commonly captured sharks.
			Paragraph 2- Research plan was developed. Stock assessments not conducted yet.
			Paragraph 3- China is encouraging full utilisation of sharks captured by all longline vessels operation in the IOTC areas.
			Paragraph 4- The 5 % ratio strategy was being implemented on Chinese longline vessels.
			Paragraph 5- The 5 % ratio strategy was not fully reviewed by China.
			Paragraph 6- China is making effort to reduce finning activity on board tuna vessel.
			Paragraph 7- non-valuable sharks captured (e.g. crocodile shark) are discarded (most alive).
			Paragraph 8- circle hook experiments were conducted by researchers in Shanghai Ocean University
			Paragraph 9- China is making effort to collect biological (in particular reproductive info.) data through its observer program, to study reproduction of commonly captured sharks. However, sample size from IO was small, compared with the Pacific Ocean.
			Paragraph 10- The commission has provided assistances such as species identification and observer training guideline for China.
			Paragraph 11- no response
			Paragraph 12- no response
10/02	Mandatory statistical requirements for IOTC members and cooperating non contracting parties	Paragraphs 1–7	Paragraph 1- China has submitted required data to the secretariat.
			Paragraph 2- China has provided total catch by species and gear for tunas, billfishes, three shark species (BSH, SMA, OCS), and others.
			Paragraph 3- China has provided catch and effort by species and gear (Deep LL and Ice LL) for tunas, billfishes, three shark species (BSH, SMA, OCS), and others, by 5° grid area and month strata.
			Paragraph 4- China has provided size data for BET and ALB captured by LL. These size data are based on individual weight data in logbooks. China has no size data from observer trip for 2011 since no observer was sent out to work due to piracy activity.
			Paragraph 5- No response.
			Paragraph 6- Data has been submitted before deadline.
			Paragraph 7- No response.



Res. No.	Resolution	Scientific requirement	CPC progress
10/06	On reducing the incidental bycatch of seabirds in longline fisheries. Reminder: Resolution 12/06 will supersede Resolution 10/06 on 1 July 2014	Paragraphs 3–7	Paragraph 3- All Chinese longliners operating in the Indian Ocean are equipped with bird scaring lines (Measure in Column A), and longliners fishing in the south of 25° S are required to make their bird scaring lines work during the whole operating period. Offal discharge control (Measure in Column B) is the second measure that has been implemented for fishing south of 25° S.
			Paragraph 4- The measure has been implemented (Birdscaring lines). Paragraph 5- Two measures used by Chinese longliner, the Bird-scaring lines and Offal discharge control, conformed
			to minimum technical standards in Annex 1. Paragraph 6- The design and deployment for bird scaring
			lines meet the specifications provided in Annex 2. Paragraph 7- Information on interactions with seabirds has been reported.
11/04	On a regional observer scheme	Paragraph 9	Paragraph 9- This information has been included in this report.
13/03	On the recording of catch and effort by fishing vessels in the IOTC area of competence	Paragraphs 1–11	Paragraph 1-All Chinese fishing vessels are subject to data recording system of IOTC.
			Paragraph 2-This measure applies to all Chinese fishing vessels.
			Paragraph 3-Logbooks being used onboard now record bycatch species, but not consistent with the species list in the Annex. So, we are revising the logbook forms accordingly.
			Paragraph 4-China will submit to the IOTC Executive Secretary by 15 February 2014 a template of its official logbooks.
			Paragraph 5-China's logbook is published with Chinese and English.
			Paragraph 6-8. No response.
			Paragraph 9-China's logbooks are submitted to Shanghai Ocean University which is authorized by the Bureau of fisheries, Ministry of Agriculture.
			Paragraph 10-China will submit the logbook data, but our current form and data field are not consistent with this measure.
			Paragraph 11-No response.
12/04	On the conservation of marine turtles	Paragraphs 3, 4, 6–10	Paragraph 3- Interactions with marine turtles have been recorded and reported.
			Paragraph 4- Interactions with marine turtles have been recorded and reported.
			Paragraph 6- Fishermen are required to help recover marine turtle captured and release. De-hooking techniques and guideline have been equipped onboard fishing vessels.
			Paragraph 7- No gillnet fishery.
			Paragraph 8- Line cutters and de-hookers are in place onboard longliner. The fishing operators are required to hand and promptly release marine turtles caught or entangled, in accordance with IOTC Guidelines. Marine Turtle Identification Cards will be distributed among fleet.
			Paragraphs 9- Most of baits used are finfish bait. Paragraph 10- Incidents involving marine turtles during fishing operations are required to be recorded in logbooks and reported to SHOU.
12/09	On the conservation of thresher sharks (family alopiidae) caught in association with fisheries in the IOTC area of competence	Paragraphs 4–8	Paragraph 4- Fishermen are encouraged to record and report incidental catches of thresher sharks in logbooks.





Res.	Resolution	Scientific	CPC progress
No.	Kesoiution	requirement	
			Paragraph 5- No recreational and sport fishing. Paragraph 6- This kind of information are required in observer program and will be provided for study.
			Paragraph 7- Specific project or biological sampling for tissues (vertebrae, tissues, reproductive tracts, stomachs, etc.) was not set up for thresher sharks by now. But we will include this task in future's observer work.
			Paragraph 8- Shark catch data will be recorded and reported as required by IOTC data reporting procedures.
14/04	Concerning the IOTC record of vessels authorised to operate in the IOTC area of competence	Paragraphs 2,3,5,7-10,12-16	Paragraph2-China has submitted required registration information to the secretariat for AFVs that are authorised to operate in the IOTC area of competence.
			Paragraph3-China has submitted an updated template of the official authorisation to fish outside National Jurisdictions with information concerning these ATF.
			Paragraph5-China has notified the IOTC Executive Secretary of any addition to, any deletion from and/or any modification of the IOTC Record at any time such changes occur.
			Paragraph7- China takes necessary measures to ensure our AFVs comply with all the relevant IOTC CMMs.
			Paragraph8- China reviews our AFVs performance yearly and takes necessary punitive actions and sanctions to vessels and owners violating the relevant IOTC CMMs according to our domestic law.
			Paragraph9-China takes measures to prohibit the fishing for, the retaining on board, the transshipment and landing of tuna and tuna-like species by the vessels which are not entered into the IOTC Record.
			Paragraph10-China has notified the IOTC Executive Secretary of any factual information showing that there are reasonable grounds for suspecting vessels not on the IOTC Record to be engaged in fishing for and/or transshipment of tuna and tuna-like species in the IOTC area of competence.
			Paragraph12-China has communicated with the Commission and the other CPCs to develop and implement appropriate measures.
			Paragraph13-All Chinese fishing vessel carry on board documents issued and certified by the competent authority including license, vessel name, registered port, registered number, international call sign, names and addresses of owners, overall length and engine power.
			Paragraph14- All Chinese fishing vessels authorised to fish in the IOTC area of competence are marked in accordance with FAO Standard Specification for the Marking Identification of Fishing vessels.
			Paragraph15- China takes necessary measures to ensure that each gear used by its fishing vessels authorised to fish in the IOTC area of competence is marked appropriately
			Paragraph16- A bound fishing national logbook has been kept on board the Chinese vessel for a period of at least 12months.
14/06	On establishing a programme for transhipment by large-scale fishing vessels	Paragraphs 2,4,6,7,9,10,17,19,20	Paragraph2-Chinese LSTVs comply with the required notification obligations when transhipping in port.
			Paragraph4-China authorised their LSTLV to tranship at sea in accordance with the required procedure.
			Paragraph6- China has submitted required information to the secretariat for the carrier vessels that are authorised to receive at-sea transhipments from its LSTLVs in the IOTC area of competence.





Res. No.	Resolution	Scientific requirement	CPC progress
			Paragraph7- China has notified the IOTC Executive Secretary of any addition to, any deletion from and/or any modification of the IOTC Record at any time such changes occur.
			Paragraph9-VMS has been installed and operated onboard Chinese carrier vessels.
			Paragraph10- China takes the necessary measures to ensure that LSTLVs have obtained prior authorization, notify the required information to China at least 24 hours in advance of an intended transshipment.
			Paragraph17-All Chinese carrier vessels transhipped at sea have an IOTC observer on board.
			Paragraph19-China takes the Statistical Document programs to ensure the effectiveness of the IOTC CMM.
			Paragraph20-China has submitted the report to the IOTC Executive Secretary before 15 September 2014.

9. LITERATURE CITED [Mandatory]

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