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CATCH AND EFFORT TABLES ON TROPICAL TUNA CMMS

WCPFC-SC15-2019/ MI IP-06

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 $Table \ 1. \ Purse \ seine \ days \ fished \ in \ \underline{waters \ under \ national \ jurisdiction \ and \ in \ International \ waters \ (20^\circ N-20^\circ S)} \ in \ the \ WCPFC-CA$

																			Notified / Estimated	
																			EEZ Limits	
EEZ	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	for 2018	See NOTE(s)
AUSTRALIA	23	14	24	9	0	2	0	1	1	0	0	0	0	0	0	0	0	0	#	2,9,15
COOK ISLANDS	46	227	8	6	2	8	3	29	45	19	104	481	203	354	355	208	508	554	1,250	2,15
FIJI	12	5	10	26	36	6	6	23	11	29	27	27	32	0	50	43	31	3	300	2,15
FRENCH POLYNESIA	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	2,15
INDONESIA	466	432	483	644	750	598	451	285	319	224	497	1,127	2,425	1,372	987	1,810	2,398	628	*	2, 4, 16,18
JAPAN	2,339	2,253	2,166	2,203	1,591	1,410	1,650	706	394	378	186	290	453	184	561	560	501	308	1,500	2,9,10,13,15
NEW ZEALAND	233	256	172	459	371	218	245	234	135	218	288	268	304	285	280	197	152	110	#	2, 9, 15
NIUE	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	200	2,15
PHILIPPINES	726	776	1,077	1,119	1,054	1,054	1,196	1,370	975	661	431	358	837	1,137	884	876	1,158	798	*	2,4,6,8,17,1
REPUBLIC OF KOREA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	2, 18
SAMOA	7	11	3	4	3	1	3	7	9	7	39	29	35	15	32	82	11	4	150	2,15
TOKELAU	99	395	27	67	127	33	48	137	217	189	871	726	402	644	1,335	193	734	880	1,000	2,15,20
TONGA	2	0	0	1	1	0	0	0	0	0	0	0	2	0	2	18	11	0	250	2,15
CHINESE TAIPEI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	2, 18
USA	350	480	237	298	131	191	106	61	127	30	44	205	190	247	98	106	145	119	458	2, 15,19
VANUATU	2	2	0	23	1	0	0	14	1	0	4	5	1	0	4	0	1	0	200	2,15
WALLIS AND FUTUNA	5	3	4	0	4	0	0	6	6	1	3	1	0	1	2	2	1	0	*	2, 18
PNA EEZs (excl AWs)	24,937	27,247	29,339	30,500	32,344	32,081	31,724	34,403	32,680	44,150	47,322	41,993	43,544	42,634	30,924	35,287	37,160	34,943		5, 12,15,20
PNA AWs only	2,427	2,215	3,567	3,099	4,667	3,921	5,714	6,256	7,018	6,267	8,671	8,822	7,630	6,783	3,828	3,687	5,452	4,194		5
PNA EEZs + AWs = TOTAL PNA	27,364	29,462	32,906	33,599	37,011	36,002	37,438	40,659	39,698	50,417	55,993	50,815	51,174	49,417	34,752	38,974	42,612	39,137		5
TOTAL EEZs - excl. PNA AWs	29,219	32,086	33,523	35,350	36,411	35,600	35,432	37,269	34,913	45,905	49,814	45,509	48,428	46,872	35,512	39,384	42,810	38,347		
TOTAL EEZs - excl. PNA AWs																				
and ID/PH	28,027	30,878	31,963	33,587	34,607	33,948	33,785	35,614	33,619	45,020	48,886	44,024	45,166	44,363	33,641	36,698	39,254	36,921		
TOTAL EEZs + PNA AWs	31.674	34.318	37,118	38,458	41.082	39,523	41.146	43,532	41,938	52,173	58,488	54,332	56,058	53,656	39,342	43,073	48,263	42,541	47,849	
TOTAL INT. WATERS (20°N-20°S						10,514		13,213	15,787	2,306	2,137	2,943	11,040	9,286	11,911	10,258	10,604	11,403		6,8,11
TOTAL (EEZs + IW + PNA AWs)	43,439	47,088	50,251	54,348	54,473	50,037	54,151	56,745	57,725	54,479	60,625	57,275	67,098	62,942	51,253	53,331	58,867	53,944	59,252	
	10 100	45 54:	10.555	50.005	50.00	47.00:	50 10-	5.4.00÷	56.06=	50 55-	50.66	55 700			10 00-	50 460	55 102	50.00		
TOTAL minus ID/PH	42,180	45,714	48,505	52,006	52,291	47,984	52,125	54,924	56,367	53,557	59,666	55,783	63,828	60,430	49,382	50,482	55,106	52,394	57,702	
VIETNAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14

NOTES

- 1. Source: Raised logsheet data.
- 2. CMM 2014-01, CMM 2015-01 and CMM 2016-01 -- Para. 23. for years 2015 onwards
- 3. Catches and effort of vessels operating under charters and similar arrangements have been attributed to host island states or territories in accordance with paragraph 2 of CMM 2008-01 (paragraph 5 of CMM 2012-01, paragraph 5 of CMM 2013-01 or its replacement CMM) using the best information available to SPC-OFP. However, in some cases, catches have not yet been attributed to the CCM responsible for the "charter or similar arrangements" since the flag state CCM has yet to advise that it has excluded these catches from their data (and thereby avoid double-counting).
- 4. Purse-seine days for Indonesia and the Philippines in domestic waters have been estimated according to Appendix A in the SC4 Statistics SWG Working paper WP-4 (Data relating to purse-seine effort on the high seas and in the zones of non-PNA member CCMs). The estimates exclude archipelagic waters (AW) effort.
- 5. The definition of days effort in this table may differ from the definition of days used in the PNA Vessel Day Scheme (VDS)
- 6. The Total International waters effort prior to 2013 does not includes estimates of effort for the Philippines domestic fleet at this stage.
- 7. Since 2011, some components of the tropical purse seine fleet have changed criteria for reporting days with searching (included as a fishing day) and transiting (not included as a fishing day) and this is reflected in the decline in fishing days since 2011.
- 8. Philippines effort in the high seas pocket 1 during 2013 was 1,352 sets with an estimated 1 set per three days to produce an estimate of 4,056 days effort.
- 9. Coastal States within the Convention Area either north of 20°N or south of 20°S. CMM 2014-01/CMM 2015-01 references: Para. 22 and footnote 6 on Page 7 -- relevant for 2014 onwards.
- 10. Operational data for Japan EEZ are not available. Japan effort in their EEZ for years 2001-2007 was determined as the best estimate from their aggregate data. Japan effort for 2008-2017 in their EEZ was provided by Japan in their submission of Annual effort by EEZ/high seas areas.
- 11. International waters covers high seas in the WCFPC Conventional Area covering the area 20°N-20°S (valid for CMM 2014-01, CMM 2015-01 and CMM 2017-01).
- 12. CMM 2014-01 or its replacement CMM -- Para. 20. for 2014 -2017 "Coastal States within the Convention Area that are Parties to the Nauru Agreement (PNA) shall restrict the level of purse seine effort in their EEZs to 2010 levels through the PNA Vessel Days Scheme".
- 13. CMM 2014-or its replacement CMM -- Para. 22. for 2014 -2017 "Other coastal States within the Convention Area with effort in their EEZs exceeding 1,500 days annually over the period 2006-2010 shall limit effort in their EEZs to 2001-2004 average or 2010 levels".
- 14. The Vietnam purse seine fleet are understood to fish outside the WCFPC Convention Area (South China Sea).
- 15. CMM 2017-01 Table 1 provide the EEZ purse seine effort limits (CMM 2017-01 or its replacement measure paragraph 25)
- 16. ESTIMATED EEZ LIMIT --2015: Scientific estimates of catches and effort in Indonesia EEZ were recently revised to reflect distribution of catches between AW vs EEZ. Indonesia is yet to nominate a limit for purse seine effort in their EEZ in accordance with para 23 of CMM 2015-01. SPC advice as at 20 July 2014(Table 1) average of estimated EEZ fishing days effort in 2001-2004 is 507 days. CMM 2017-01 Table 1 says Indonesia's limit is yet to be notified to the Commission
- 17. ESTIMATED EEZ LIMIT --2015: Scientific estimates of catches and effort in Philippines EEZ were recently revised to reflect distribution of catches between AW vs EEZ. Indonesia is yet to nominate a limit for purse seine effort in their EEZ in accordance with para 23 of CMM 2015-01. SPC advice as at 20 July 2014 (Table 1) average of estimated EEZ fishing days effort in 2001-2004 is 925 days. CMM 2017-01 Table 1 says Philippines's limit is yet to be notified to the Commission
- 18. CMM 2017-01 Table 1 indicates that the limit is yet to be notified to the Commission.
- 19. CMM 2017-01 paragraph 29 allows for the United States to transfer 100 vessel days from the effort limits established for its EEZ, and notified to the Commission, to its high seas effort limit set out in Attachment 1, Table 2.
- 20. CMM 2017-01 Attachment 1 includes a comment that PNA + Tokelau effort limits are to be managed cooperatively through the PNA Vessel Day Scheme.

Table 2. Purse seine days fished in international waters in the WCPFC-CA between 20°N and 20°S, by flag, based on available operational data.

PURSE SEINE DAYS FISHED INTERNATIONAL WATERS 20°N-20°S

																			CMM limits	СММ	Max. Annual	
																			for 2014	limits	days for	See
Flag	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	- 2017	for 2018	2010-2012	Notes
CHINA	88	125	149	426	507	231	334	251	918	13	7	26	16	9	22	23	3	3	26	26	26	11
ECUADOR	0	0	0	0	0	0	25	10	12	3	3	13	0	1	0	0	0	0	**	**	13	7,9,
EL SALVADOR	2	27	0	0	0	0	197	200	78	46	33	31	24	48	53	24	29	28	**	**	46	7,9
EUROPEAN UNION	0	7	13	53	29	73	231	275	243	321	312	417	367	373	246	87	192	200	403	403	417	7
FSM	239	240	176	384	218	86	168	126	336	6	3	14	7	11	465	391	591	650				
INDONESIA	500	500	500	500	500	500	500	500	500	0	0	0	0	0	0	0	0	0	(0)	(0)		
JAPAN	1,366	1,269	1,755	1,867	1,837	1,580	1,346	1,057	1,562	6	3	1	13	8	102	25	0	5	121	121	6	
KIRIBATI	41	55	40	36	50	52	22	34	161	97	246	183	184	861	710	884	675	810				11
MARSHALL ISLANDS	170	209	442	397	400	154	177	284	173	68	34	2	5	9	835	395	638	310				
NAURU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	131				10
NEW ZEALAND	23	329	344	206	97	289	200	196	206	67	30	93	14	19	145	112	78	125	160	160		10
PAPUA NEW GUINEA	416	621	633	1,208	1,300	465	849	713	833	83	23	41	17	44	1,124	100	58	43	#	#		
PHILIPPINES	13	56	449	464	320	151	26	73	20	2	0	3	4,096	2,668	2,442	2,667	3,193	2,803	4,659	4,659		4,5
REPUBLIC OF KOREA	1,303	1,283	1,153	1,244	1,069	732	1,389	1,518	1,700	227	64	25	32	198	219	215	191	238	207	207	227	
SOLOMON ISLANDS	32	37	0	0	17	15	5	0	0	0	0	1	0	0	0	26	69	115				
TUVALU	0	0	0	0	0	0	0	0	40	4	5	1	0	1	85	146	102	55				
CHINESE TAIPEI	1,972	1,860	1,442	1,844	1,229	1,241	1,485	1,329	1,421	76	81	23	73	49	86	93	112	63	95	80	81	12
USA	972	1,318	860	986	772	528	792	1,553	1,733	398	572	1,238	1,047	1,147	1,658	1,457	830	1,584	1,270	1,370	1,238	13
VANUATU	67	166	186	579	378	401	379	166	64	37	31	7	8	3	0	163	204	121				
TOTAL	7,204	8,102	8,142	10,194	8,723	6,498	8,125	8,285	10,000	1,454	1,447	2,119	5,903	5,449	8,192	6,808	6,965	7,284				

								PURSE S	SEINE DAYS	FISHED :	in WCFPC-	IATTC O	VERLAP A	REA						
																				See
Flag	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		Notes
ECUADOR	0	0	0	0	0	0	43	174	74	51	39	82	89	67	91	12	178	269		7
EL SALVADOR	21	33	3	0	0	0	25	129	24	19	22	4	127	154	43	67	34	31		7
EUROPEAN UNION	126	74	90	48	40	111	34	28	13	16	17	11	35	18	71	38	15	53		7
TOTAL	147	107	93	4.8	4.0	111	102	331	111	86	7.8	9.7	251	239	205	117	227	353		

- 1. Source: Raised logsheet data.
- 2. Catches and effort of vessels operating under charters and similar arrangements have been attributed to host island states or territories in accordance with paragraph 2 of CMM 2008-01 (paragraph 5 of CMM 2012-01, paragraph 5 of CMM 2013-01 or its replacement CMM) using the best information available to SPC-OFP. However, in several cases, catches have not yet been attributed to the CCM responsible for the "charter or similar arrangements" since the flag state CCM has yet to advise that it has excluded these catches from their data (and thereby avoid double-counting). Under CMM 2017-01 paragraph 8 Charter provisions are not applicable to high seas purse seine effort attribution.
- 3. Purse-seine days for Indonesia have been arbitrarily assigned 500 days for high seas according to Appendix A in the SC4 Statistics SWG Working paper WP-4 (Data relating to purse-seine effort on the high seas and in the zones of non-PNA member CCMs)
- 4. The measures that the Philippines will take are in Attachment C of CMM 2014-01(or its replacement CMM) for years from 2014 onwards. Attachment C para 10 describes two limits: 1) total number of catcher vessels fishing in HSP-SMA is limited to 36, and 2) an effort limit in vessel days of 4,659 days (ref Table 2(b) WCPFC9-2012-IP09_rev3)
- 5. The Total International waters effort prior to 2013 does not includes estimates of effort for the Philippines domestic fleet at this stage. Philippines effort in the high seas pocket 1 during 2013 was 1,352 sets with an estimated 1 set per three days to produce an estimate of 4,056 days effort. Philippines effort in the high seas pocket 1 during 2014 was listed as 2,667 days according to the Philippines Annual Report Part 1 produced for SC11.
- 6. Since 2011, some components of the tropical purse seine fleet have changed criteria for reporting days with searching (included as a fishing day) and transiting (not included as a fishing day) and this is reflected in the decline in fishing days since 2011.
- 7. The days presented in Table 2 exclude effort in the overlap area because it takes into account the WCPFC9 decision on the application of measures in the part of the WCPF Convention Area that overlaps with the IATTC Convention Area (WCPFC9 Summary Report paragraph 80). European Union is a WCPFC member who is also an IATTC member, notified WCPFC in April 2013, of their choice of IATTC measures in the overlap area. Given that Ecuador and El Salvador are members of IATTC, the rules of the RFMO of which it is a member apply in the overlap area between WCPFC and IATTC, even if the CCM is a cooperating non-member of the other RFMO. Total days in Table 2 do not therefore reconcile with total high seas days in Table 1.
- 8. "CMM limits" are taken from CMM 2014-01 (or its replacement CMM) Attachments D and apply from 2015 -2017. "CMM limits in 2018" are taken from Attachment 1 Table 2 of CMM 2017-01
- 9. Subject to CNM on participatory rights, in accordance with paragraph 6 of CMM 2014-01 (or its replacement CMM) for years from 2015 onwards
- 10. The basis of the CMM 2014-01 (or its replacement CMM) high seas days limit for New Zealand was the average of 2006-2008 effort with an agreed reduction in line with CMM 2013-01 and it's predecessor CMMs.
- 11. For China and Kiribati, the 2015, 2016 and 2017 effort estimates reflect their WCPFC charter notifications for these years.
- 12. CMM 2017-01 Att 1 Table 2 specifies a limit of 95 days for Chinese Taipei. However Chinese Taipei has advised they will apply a limit of 80 days in 2018, to take into account the amount the limit was exceeded in 2017.
- 13. CMM 2017-01 paragraph 29 allows for the United States to transfer 100 vessel days from the effort limits established for its EEZ, and notified to the Commission, to its high seas effort limit set out in Attachment 1, Table 2.

Table 3. Estimated FAD sets undertaken in the tropical purse seine fishery of the WCPFC Convention Area (20°N-20°S), by flag, 2001-2018.

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	CCM
15	139	160	512	861	923	826	1,199	1,672	688	2,013	1,127	1,405	1,487	747	63	496	226	CHINA
0	0	0	0	0	0	74	367	138	220	440	442	275	343	143	50	249	411	ECUADOR
10	27	1	0	0	0	54	155	162	135	185	212	297	306	176	94	75	82	EL SALVADOR
77	33	59	81	46	125	242	412	328	363	488	460	515	431	327	93	149	188	EUROPEAN UNION
324	386	489	790	497	282	338	479	737	417	788	820	537	605	620	521	986	1,383	FSM
?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?			INDONESIA
2,320	2,021	2,266	3,162	2,379	2,617	2,437	2,607	2,403	833	1,320	1,619	1,038	1,026	664	887	635	557	JAPAN
72	62	63	97	104	66	61	78	267	243	552	486	667	823	1,078	470	1,884	2,979	KIRIBATI
392	578	876	1,064	934	741	891	464	617	630	1,544	1,386	1,165	1,212	1,050	670	1,317	1,217	MARSHALL ISLANDS
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89	NAURU
136	399	439	574	196	488	418	439	387	189	189	159	104	141	47	29	75	65	NEW ZEALAND
800	1,299	1,081	2,710	2,067	2,080	1,645	1,378	1,666	983	1,286	1,820	1,271	1,726	1,229	1,828	1,690	1,782	PAPUA NEW GUINEA
901	1,034	1,240	1,197	1,131	848	246	536	552	375	401	622	486	393	356	282	204	69 F	PHILIPPINES (distant-water)
?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?			PHILIPPINES (domestic)
551	1,220	711	2,518	889	2,300	1,867	1,958	2,126	1,097	2,116	1,421	1,167	1,091	1,533	1,579	1,904	2,368	REPUBLIC OF KOREA
150	118	100	88	109	252	130	86	173	80	147	191	134	99	107	244	352	431	SOLOMON ISLANDS
1,617	2,621	1,853	3,221	2,738	3,051	2,814	2,284	2,689	1,704	2,955	2,886	2,568	2,610	1,732	1,491	1,873	2,232	CHINESE TAIPEI
0	0	0	0	0	0	0	0	22	40	58	92	78	49	36	59	59	106	TUVALU
2,022	1,772	1,561	2,068	1,315	1,543	1,393	2,757	3,777	2,384	3,388	3,432	3,156	3,696	2,029	2,126	2,438	2,888	USA
36	143	182	655	528	467	626	172	242	169	391	261	260	229	124	37	123	95	VANUATU
9,423	11,852	11,081	18,737	13,794	15,783	14,062	15,371	17,958	10,550	18,261	17,436	15,123	16,267	11,998	10,523	14,509	17,168	

- Source: Raised logsheet data.
- 2. Covers Drifting FAD, Log and Anchored FAD sets
- 3. Excludes archipelagic waters. Fleets from Indonesia, Kiribati, Papua New Guinea, Philippines (distant-water), Philippines (domestic) and Solomon Islands in this list are normally the only fleets active in archipelagic waters.
- 4. Includes high seas
- 5. Excludes Vietnam domestic fleet
- 6. Complete information from Indonesia and Philippines domestic fisheries are not available.
- 7. CMM 2015-01- Paras. 14 and 17, and ATTACHMENT A, provides information on the 2016 FAD set limits that applies to FSM, Japan, Kiribati, Korea and United States of America.
- 8. CMM 2016-01 Paras. 14 and 17, and ATTACHMENT A, provides information on the 2017 FAD set limits that applies to Japan, Korea and United States of America.
- 9. CMM 2014-01 Paras. 14 and 17, and ATTACHMENT A, provides information on the 2015 FAD set limits that applies to FSM, Japan, Kiribati and Korea.
- 10. CMM 2013-01, Para 16 (ii) annual limit of FAD sets for 2015 (as set out in Column 'A' of Attachment A of CMM 2014-01) applies to FSM, Japan, Kiribati and Korea
- 11. Annual FAD sets takes into account CMM 2014-01 (or its replacement CMM) footnote 3 notifications (vessels that are managed outside of FAD set limit). This exemption applied to certain Kiribati vessels for 2016-2017.
- 12. In 2016, FSM applied CMM 2014-01 footnote 3 notifications, but formally chose the 4th month FAD closure for 2017.
- 13. The 2016 and 2017 estimates of FAD sets for Kiribati and China reflect their respective WCPFC charter notifications.
- 14. "CMM 2016-01 Adjusted Baseline", applies to Kiribati in 2017. The adjusted baseline includes average annual FAD sets for Kiribati vessels that were previously exempt prior to 2017 (due to being newly-introduced since 2012) that had operated for three years prior to 2017.

Table 4. Reported longline catches metric tonnes of bigeye tuna in the WCPFC-CA, by flag.

CCM	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	CMM limits for 2017	CMM limits	See Notes
AMERICAN SAMOA	75	196	242	2004	134	181	218	132	249	487	1,263	1,502	389	318	557	658	1,394	845		101 2018	A NOTES
AUSTRALIA	1,307	1,002	1,024	892	791	499	1,008	1,027	726	458	379	553	489	490	785	870	418	325			7
BELIZE	1,322	812	782	297	425	254	158	89	43	89	102	132	217	0	703	0	410	0			8
CHINA	2,227	2,312	8,965	11,748	7,520			10,798		13,924	11,139	11,324	10,671	9,370	8,210	8,195	7,023	8,695		8,724	10,11,16
COOK ISLANDS	2,227	56	204	394	220	166	238	292	217	319	925	1,624	208	184	151	183	298	163		0,724	4
EU-PORTUGAL	0	0	0	0	0	0	0	0	0	0	3.23	17	106	71	17	10	0	0			-
EU-SPAIN	0	0	0	42	17	62	62	77	46	1.5	10	23	23	65	53	53	21	39			7
FSM	651	759	656	542	182	172	1,395	970	1,395	1,113	1,500	1,700	1,270	2,488	2,296	1,803	2,134	3,107			4
FIJI	662	853	889	1,254	721	771	556	671	768	539	1,718	1,588	1,018	1,698	1,184	1,396	1,108	891			4
FRENCH POLYNESIA	745	649	439	502	606	498	478	490	587	436	607	654	787	741	800	556	864				Δ
GUAM	0 /43	049	433	0	0.00	490	470	430	367	430	007	034	0	741	831	939	0	1,002			-1
INDONESIA	942	1,470	2.168	2,192	2,202	3.011	1.993	3,579	4.000	1,221	1.699	3.681	2,860	3,673	3,701	8	13		5,889	5,889	12
JAPAN	27,466	29,574	26,110	29,248	23,021	25,685	26,076	20,942	17,653	16,619	,	16,917	12,991	15,564	14,316	12,169		,	16,860	17,765	16
KIRIBATI	27,400	29,374	20,110	29,240	23,021	23,003	20,076	44	17,000	10,019	17,722 155	800	582	268	556	603	287	423		17,700	10
MARSHALL ISLANDS	0	0	0	1	0	0	3	375	381	257	259	335	80	200	220	700	1,229	1,146			4
NAURU	6	3	10	0	0	0	0	3/3	201	237	239	333	0	0	0	0	1,229	1,140			4
NEW CALEDONIA	128	189	142	90	76	-	53	63	51	44	41	49	51	58	63	74	48	46			4
NEW ZEALAND	481	201	204	177	175	177	213	133	253	132	174	154	109	122	122	177	97	135			7
NIUE	0	0	0	0	10	22	35	51	10	4	0	101	0	0	0	0	0	100			4
NORTHERN MARIANAS	0	0	0	0	0	0	0	0	0	0	0	0	492	1,000	1,000	884	997	993			4
PALAU	21	1	1	7	0	0	0	0	0	0	0	0	0	0	0	0	1,106				4
PAPUA NEW GUINEA	240	318	390	399	237	216	111	201	128	39	59	119	32	52	15	86	47	87			4
PHILIPPINES	59	59	59	59	59	59	59	59	59	59	777	248	167	63	0	0	0	0			6,7
REPUBLIC OF KOREA	22,172	28,533	17,151	17,941	15,622	12,489	10,054	17,001	15,231	13,914	15,282	18,823	12,818	12,779	10,689	11,018	10,220	13,828	12,689	13,942	11
SAMOA	185	137	110	104	64	128	101	106	117	108	71	54	36	48	48	61	150	59		,	4
SENEGAL	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0			
SOLOMON ISLANDS	187	401	385	294	3	0	0	0	0	806	213	0	0	3,054	4,390	0	0	1,235			4,11
TONGA	191	215	94	40	125	117	129	81	38	24	18	10	7	22	25	27	24	. 33			4
TUVALU	0	0	0	0	0	0	0	0	0	0	105	1,408	120	76	187	103	111	64			4
CHINESE TAIPEI	12,435	16,645	14,429	20,992	15,498	14,295	14,760	15,229	13,319	11,874	11,275	10,994	10,600	10,018	9,434	9,488	9,638	9,116	9,675	10,481	11
USA	2,418	4,396	3,618	4,181	4,462	4,381	5,381	4,649	3,741	3,577	3,565	3,660	3,612	3,823	3,427	3,747	2,968	3,392		3,554	13, 15
VANUATU	17	396	841	2,041	1,750	1,783	2,122	1,080	1,383	2,060	2,060	2,151	1,989	3,419	5,603	2,845	3,940				4
WALLIS AND FUTUNA	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0			4
Total	73,938	89,177	78,914	93,664	73,920	78,382	75,740	78,139	75,684	68,121	71,127	78,520	61,724	69,464	68,460	56,653	55,629	65,480	55,300	60,355	
	<u></u>																				
VIETNAM	1,450	614	2,129	2,781	3,527	3,538	3,648	3,358	2,992	2,441	3,424	3,761	2,260	2,350	3,100	1,115	1,004	902			9

- 1. Source: WCPFC Annual catch estimates as at 20th July 2019.
- 2. Catch estimates in **red** have been carried over from previous years.
- 3. Indonesia and Philippines have recently revised their estimates in recent years. (see the respective Annual Catch Estimate Workshop reports at (http://www.wcpfc.int/west-pacific-east-asia-oceanic-fisheries-management-project)
- 4. The limits in the columns labelled "CMM limits for 2017" and "CMM limits for 2018" do not apply to small island developing State members and participating Territories according to paragraph 7 of CMM 2014-01 and CMM 2015-01 (or its replacement CMM).
- 5. Catches and effort of vessels operating under charters and similar arrangements have been attributed to host island states or territories in accordance with paragraph 5 of CMM 2012-01 and paragraph 5 CMM 2013-01 using the best information available to SPC-OFP. However, in several cases, catches have not yet been attributed to the CCM responsible for the "charter or similar arrangements" since the flag state CCM has yet to advise that it has excluded these catches from their data (and thereby avoid double-counting).
- 6. Estimates include archipelagic water catches which for some countries cannot be separated at this stage (e.g. Philippines).
- 7. The catch limits established at 2,000t prior to 2010, remain at the level of 2,000t for relevant WCPFC members. (according to CMM 2008-01 Para. 32, CMM 2012-01 para 26 and CMM 2013-01 para 41 and its replacement CMM, including CMM 2017-01). Note although EU fleets are reported here separately by flag, it is understood that as per the relevant CMM the 2000 Mt limit applies to the combined EU-longline fleet.
- 8. Subject to CNM on participatory rights, in accordance with paragraph 6 of CMM 2014-01 and CMM 2015-01 (or its replacement CMM) for years from 2015 onwards
- 9. The Vietnam longline fleet are understood to fish outside the WCFPC Convention Area (South China Sea).
- 10. Catches by the Chinese longline fleet in the Kiribati EEZ are included in the estimates.
- 11. Catches by chartered Chinese, Fijian and Chinese-Taipei flagged longline vessels licensed to fish in Solomon Islands waters have been attributed to the Solomon Islands for 2010, 2011, 2014 and 2015
- 12. Indonesia bigeye tuna catch excludes catches in Archipelagic waters.
- 13. USA revised limit for 2015 was 3504 t., to take into account the overage in bigeye catch from 2014
- 14. "CMM limits for 2017" is according ATTACHMENT F in CMM 2016-01, and refer to catch limits for 2017 only, and "CMM limits for 2018" is according to Table 3 in CMM 2017-01 or its replacement measure.
- 15. USA advised by letter to the WCPFC Secretariat that they reduced their 2017 bigeye catch limit (of 3345 Mt in Att F of CMM 2016-01) to 3138Mt to offset the overage in 2016.
- 16. CMM 2017-01 Table 3, includes this note: Japan will make an annual one-off transfer of 500 metric tonnes of its bigeye tuna catch limit to China.

Table 5. Reported longline catches (metric tonnes) of yellowfin tuna in the WCPFC-CA, by flag.

																			Av.	
																			2001-	See
CCM	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2004	Notes
AMERICAN SAMOA	188	485	497	888	526	513	640	333	398	473	699	620	422	454	360	561	826	455	515	(4)
AUSTRALIA	2,819	3,531	3,681	2,356	1,499	1,830	1,390	1,650	1,387	1,359	1,858	1,259	1,341	1,685	2,177	1,763	1,666	1,312	3,097	
BELIZE	957	720	943	208	298	106	273	129	121	28	13	30	21	0	0	0	0	0	707	(6)
CHINA	1,919	1,844	3,358	4,048	2,446	4,055	2,768	5,007	7,958	2,576	4,598	6,004	4,638	5,949	6,226	6,559	8,526	9,031	2,792	(9),(10
COOK ISLANDS	1	42	178	506	413	262	290	247	197	192	394	693	346	504	339	314	610	319	182	(4)
EU-PORTUGAL	0	0	0	0	0	0	0	0	0	0	0	0	2	22	4	6	0	0	0	(13)
EU-SPAIN	0	0	0	23	1	127	127	10	7	3	0	2	2	11	10	28	7	13	6	(13)
FSM	338	164	276	185	99	270	548	328	583	515	750	750	850	1,639	1,691	1,589	1,416	2,395	241	(4)
FIJI	2,082	2,027	2,482	4,164	2,591	2,231	1,721	2,763	3,440	2,602	4,051	3,188	2,203	4,343	3,647	4,701	4,986	2,738	2,689	(4)
FRENCH POLYNESIA	967	507	621	1,066	793	690	527	447	716	418	491	758	615	783	1,074	941	1,390	1,309	790	(4)
GUAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(4)
INDONESIA	4,001	6,243	9,209	9,313	10,762	9,482	10,371	12,689	18,221	14,041	13,750	11,656	8,270	13,060	18,509	5,632	173	4,929	7,192	(12)
JAPAN	18,096	15,810	16,803	15,209	14.792	13,462	13,725	12,365	14,039	17,466	11,427	10,621	8,268	6,494	8,683	10,149	10,114	9,950	16,480	
KIRIBATI	2	0	2	0	0	0	0	7	0	4	140	300	175	108	405	610	359	220	1	(4)
MARSHALL ISLANDS	0	0	0	3	0	0	2	91	120	117	99	113	47	0	0	578	948	707	1	(4)
NAURU	5	2	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	(4)
NEW CALEDONIA	570	572	754	631	448	414	393	424	487	505	585	573	531	741	852	482	559	467	632	
NEW ZEALAND	131	27	39	36	36	3	25	11	3	6	3	1	1	2	2	55	10	20	58	, ,
NIUE	0	0	0	0	34	42	43	40	20	8	0	0	0	0	0	0	0	0	0	(4)
NORTHERN MARIANAS	0	0	0	0	0	0	0	0	0	0	0	0	93	0	0	0	0	0	0	(4)
PALAU	41	3	19	28	0	0	0	0	0	0	0	0	0	0	0	0	1,352	1,887	23	(4)
PAPUA NEW GUINEA	1,812	1,738	1,747	2,318	1,222	2,139	1,539	2,259	2,714	2,147	2,303	2,961	1,041	1,568	891	728	1,249	2,070	1,904	(4)
PHILIPPINES	484	484	484	484	484	484	484	484	484	484	146	61	27	153	0	0	0	0	484	(5)
REPUBLIC OF KOREA	13,768	15,497	12,134	10,058	13,329	9,529	8,817	7,846	10,032	7,644	7,881	7,832	5,716	8,371	9,352	8,054	7,008	6,519	12,864	(10)
SAMOA	470	369	293	444	199	264	305	317	412	386	395	234	330	231	252	239	644	375	394	(4)
SENEGAL	0	0	0	0	6	3	4	0	0	0	0	0	0	0	0	0	0	0	0	(7)
SOLOMON ISLANDS	159	401	258	440	6	0	0	0	0	5,159	643	0	0	12,536	15,923	0	0	4,451	315	(4), (
TONGA	259	263	263	163	219	227	341	291	109	47	171	140	126	195	297	322	373	179	237	(4)
TUVALU	0	0	0	0	0	0	0	0	0	0	286	453	114	41	166	124	164	106	0	(4)
CHINESE TAIPEI	22,326	21,993	22,149	22,975	19,571	18,654	16,668	16,411	19,693	22,225	21,320	16,948	14,999	12,257	14,118	17,816	21,622	16,050	22,361	(10)
USA	1,016	572	809	694	698	937	833	836	429	462	738	576	546	567	681	1,093	1,761	1,868	773	
VANUATU	49	778	1,315	1,755	1,147	1,346	967	860	801	788	1,269	2,230	1,626	1,695	2,097	1,454	1,437	1,269	974	(4)
WALLIS AND FUTUNA	0	0	0	0	, 0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	
Total	72,460	74,072	78,320	77,996	71,619	67,070	62,801	65,845	82,371	79,655	74,014	68,003	52,350	73,409	87,756	63,798	67,200	68,639	75,712	
									·				Í	,				,		
VIETNAM	8,292	9,756	8,179	11,122	10,895	10,930	11,270	10,375	9,244	9,513	10,576	12,456	13,917	11,603	15,097	16,423	15,677	16,500		(8)

- 1. Source: WCFPC Annual catch estimates as at 20th July 2019.
- 2. Catch estimates in **red** have been carried over from previous years.
- 3. Indonesia and Philippines have recently revised their estimates (see the respective Annual Catch Estimate Workshop reports at (http://www.wcpfc.int/west-pacific-east-asia-oceanic-fisheries-management-project)
- 4. Catches and effort of vessels operating under charters and similar arrangements have been attributed to host island states or territories in accordance with paragraph 2 of CMM 2008-01 (paragraph 5 of CMM 2012-01, paragraph 5 of CMM 2013-01 or its replacement CMM) using the best information available to SPC-OFP. However, in several cases, catches have not yet been attributed to the CCM responsible for the "charter or similar arrangements" since the flag state CCM has yet to advise that it has excluded these catches from their data (and thereby avoid double-counting).
- 5. Estimates include archipelagic water catches which for some countries cannot be separated at this stage (e.g. Philippines).
- 6. Subject to CNM on participatory rights, in accordance with paragraph 6 of CMM 2014-01 (or its replacement CMM) for years from 2015 onwards. Belize is not presently a CNM.
- 7. Senegal committed to limiting its fishing activities in the WCPF Convention Area to one longline vessel WCFPC5 Report (Para. 44). Senegal is not presently a CNM
- 8. The Vietnam longline fleet are understood to fish outside the WCFPC Convention Area (South China Sea).
- 9. Catches by the Chinese longline fleet in the Kiribati EEZ are included in the estimates.
- 10. Catches by chartered Chinese and Chinese-Taipei flagged longline vessels licensed to fish in Solomon Islands waters have been attributed to the Solomon Islands for 2010, 2011, 2014, 2015 and 2018.
- 11. Does not yet cover development of new fisheries in the waters of small-island developing states (e.g. Tokelau)
- 12. Indonesia yellowfin tuna catch excludes catches in Archipelagic waters.
- 13. Note although EU fleets are reported here separately by flag, it is understood that as per the relevant CMM the 2000 Mt limit applies to the combined EU-longline fleet.

Table 6. Total Catch and Effort estimates for OTHER COMMERCIAL FISHERIES, other than Purse seine and Longline, in the WCPFC Statistical Area, relevent to CMM 2017-01.

		Total Effort	Estimate	Total C	Catch			
GEAR	FLAG	CMM 2014-01 limit	2018	CMM 2017-01 limit	2018	Area Note	Availability of EFFORT data	See NOTE
HANDLINE	INDONESIA					Within EEZ only, excluding AWs	NO	7, 8, 9
(LARGE-FISH)	PHILIPPINES	48,601	37,320	2,672		Within EEZ only, excluding AWs	NO	7, 9, 10
POLE-AND-LINE	JAPAN	21,021	13,170	114,573	71,782		YES	3, 6

- 1. Source: Raised logsheet data. 2018 data are provisional.
- 2. The column labeled "Average Annual tuna catch" is the average total skipjack, yellowfin and bigeye tuna catch for 2001-2004, or 2004. Average catches less than 2,000 t. have been excluded as per CMM 2013-01 Para. 47.
- 3. The CMM 2013 limit for total effort was determined from the average level for the period 2001-2004 or 2004 effort level.
- 4. The definition for "Commercial" fisheries, at this stage, includes all fisheries other than purse seine and longline fisheries, until otherwise advised.
- 5. Chinese Taipei advised on 29 July 2014 that its SEINE vessels have a historical catch over 2000 Mt of skipjack. The total number of Chinese Taipei seine vessels has been limited to 200 (source of baseline year not specified 2004 or ave 2001-2004 catches), and the number of vessels that actively fished in 2013 was 112. Annual catches of skipjack tuna and vessel numbers where provided for the period 2001-2013 on 30th October 2014. The average catch for 2004 was 2,473 t.
- 6. Advice from Japan -- "Paragraph 9 of CMM 2012-01 provides that this measure applies to all areas of high seas and EEZs in the Convention Area. Therefore this paragraph does not apply to troll fishery, which operate within territorial sea.
 - Regarding pole-and-line fishery and purse seine north of 20N fishery JFA ensure that the total effort and capacity of these tuna fisheries shall not exceed the average level for the period 2001-2004 or 2004 under its licensing system.
 - Therefore JFA consider fulfilling this requirement.
 - JFA submits following information of pole-and-line fishery and purse seine north of 20N fishery as attached. On the other hand JFA does not agree with the Secretariat view to consider non provision of these data as a potential compliance issue because it is not required under this paragraph.

Effort data (2001-2004 average, 2004 and 2013)

Catch data (2001-2004 average, 2004 and 2013)"

- 7. This table represents catch/effort that excludes activities in archipelagic waters.
- 8. Indonesia has advised that only few vessels in this fishery are "Commercial". Indonesia provides a catch estimate for the combined small-fish (artisanal) and large fish handline fishery and it is not yet possible to differentiate the large-fish handline catch estimate from this combined total.
- 9. Estimates of effort for Indonesia and Philippines has been based on data collected under the WCPFC-administered WPEA Projects.
- 10. The large-fish handline catch for the Philippines outside of archipelagic waters is estimated to be 20% of the total large-fish handline catch in the absence of catch by area information from this fishery.

Table 7. Purse seine tuna catch and effort by set type and species in the WCPFC Convention Area between 20°N and 20°S, excluding domestic purse seine catch/effort in Philippines, Indonesia and Vietnam.

30111	cat			71 € 111 1	шірі	Jilles, i					111.														
		VES	SELS					SSOCIATE	D SCHOO						ASS	SOCIATE	SCHO	OOLS					TOTAL		
FLEET	YEAR	YB	LOG	DAYS		SKIPJA	ACK	YELLO	WFIN	BIG	SEYE	TOTAL		SKIPJA	CK	YELLOV	WFIN	BIGE	YE	TOTAL		SKJ	YFT	BET	TOTAL
		10	200		SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT	SETS	MT	MT	MT	MT
CN	2010	12	10	2,784	2,095	21,520	74%	7,257	25%	254	1%	29,031	692	17,247	70%	5,327	22%	1,955	8%	24,529	2,788	38,877	12,619	2,218	53,714
CN	2011	12	10	4,019	1,396	11,378	74%	3,828	25%	112	1%	15,318	2,023	46,312	74%	11,699	19%	4,212	7%	62,222	3,419	57,689	15,526	4,324	77,540
CN	2012	13	12	2,205	706	9,867	71%	3,886	28%	150	1%	13,902	1,143	26,302	75%	6,595	19%	2,348	7%	35,246	1,849	36,169	10,481	2,499	49,148
CN	2013	14	12	3,623	2,350	26,743	86%	3,959	13%	270	1%	30,971	1,409	37,068	73%	10,078	20%	3,385	7%	50,531	3,760	64,043	14,112	3,673	81,828
CN	2014	19	18	3,153	1,443	17,640	84%	3,277	16%	197	1%	21,114	1,474	45,590	78%	9,477	16%	3,432	6%	58,499	2,917	63,229	12,754	3,629	79,612
CN	2015	20	16	2,011	913	12,085	75%	3,832	24%	272	2%	16,189	749	21,135	78%	4,395	16%	1,518	6%	27,047	1,662	33,220	8,226	1,790	43,236
CN	2016	2	6	504	401	5,679	69%	2,452	30%	138	2%	8,269	140	2,689	68%	1,023	26%	233	6%	3,944	544	8,430	3,507	375	12,311
CN	2017	3	2	764	93	484	83%	93	16%	7	1%	585	496	11,145	75%	2,611	18%	1,133	8%	14,889	589	11,629	2,704	1,141	15,474
CN	2018	3	3	641	359	4,684	84%	875	16%	42	1%	5,602	234	7,212	78%	1,576	17%	435	5%	9,223	593	11,896	2,451	477	14,825
EC	2010	14	6	319	21	120	69%	49	28%	5	3%	175	233	6,456	58%	2,503	23%	2,186	20%	11,145	254	6,576	2,553	2,191	11,320
EC	2011	8	7	556	41	206	24%	641	75%	4	1%	851	447	19,087	67%	3,983	14%	5,261	19%	28,332	488	19,293	4,624	5,266	29,183
EC	2012	8	7	605	17	363	63%	210	37%	2	0%	575	444	15,456	69%	3,265	15%	3,849	17%	22,570	461	15,819	3,475	3,851	23,145
EC	2013	7	7	466	70	2,040	90%	184	8%	56	3%	2,280	284	13,397	70%	2,565	13%	3,201	17%	19,162	355	15,436	2,749	3,257	21,442
EC	2014	7	7	478	57	1,123	87%	147	11%	27	2%	1,297	360	15,767	77%	1,962	10%	2,813	14%	20,542	417	16,890	2,109	2,840	21,839
EC	2015	7	4	162	1	0		0		0		0	150	8,955	76%	981	8%	1,823	16%	11,759	151	8,955	981	1,823	11,759
EC	2016	2	3	42	0	0		0		0		0	50	2,613	67%	423	11%	889	23%	3,925	50	2,613	423	889	3,925
EC	2017	4	4	241	2	77	77%	23	23%	0	0%	100	248	9,997	66%	1,895	13%	3,269	22%	15,161	250	10,074	1,918	3,269	15,261
EC	2018	4	4	441	12	117	90%	6	5%	7	5%	130	412	16,639	75%	1,744	8%	3,933	18%	22,316	424	16,757	1,750	3,940	22,446
ES	2010	4	4	720	26	701	86%	113	14%	5	1%	820	364	19,766	69%	4,653	16%	4,229	15%	28,648	390	20,468	4,766	4,235	29,468
ES	2011	4	4	753	30	422	32%	905	68%	7	1%	1,334	488	27,104	71%	4,917	13%	6,096	16%	38,117	518	27,526	5,822	6,103	39,451
ES	2012	4	4	787	57	1,861	67%	878	32%	28	1%	2,767	461	19,362	66%	4,516	15%	5,525	19%	29,404	517	21,223	5,394	5,553	32,171
ES	2013	4	4	837	56	2,748	91%	272	9%	6	0%	3,026	515	28,625	66%	7,107	17%	7,409	17%	43,141	571	31,372	7,379	7,416	46,167
ES	2014	4	4	753	89	2,921	69%	1,277	30%	15	0%	4,213	431	27,591	76%	3,542	10%	5,114	14%	36,247	520	30,512	4,819	5,129	40,460
ES	2015	4	4	534	28	1,286	94%	82	6%	0	0%	1,368	326	26,871	84%	3,063	10%	1,906	6%	31,840	355	28,157	3,145	1,907	33,208
ES	2016	2	2	127	1	0		0		0		0	92	6,209	73%	781	9%	1,518	18%	8,508	93	6,209	781	1,518	8,508
ES	2017	2	2	207	0	0		0		0		0	149	8,009	70%	1,053	9%	2,470	21%	11,532	149	8,009	1,053	2,470	11,532
ES	2018	2	2	263	4	95	100%	0	0%	0	0%	95	188	8,119	79%	941	9%	1,168	11%	10,227	192	8,213	941	1,168	10,322
FM	2010	7	8	1,305	612	8,647	81%	1,905	18%	92	1%	10,645	419	10,379	74%	2,663	19%	1,036	7%	14,078	1,031	19,026	4,569	1,128	24,723
FM	2011	7	7	1,641	483	5,811	76%	1,800	24%	50	1%	7,661	790	13,397	71%	4,357	23%	1,078	6%	18,832	1,276	19,215	6,161	1,129	26,505
FM	2012	9	9	1,573	464	6,310	75%	2,052	24%	71	1%	8,432	826	21,726	79%	4,133	15%	1,676	6%	27,535	1,301	28,258	6,217	1,757	36,233
FM	2013	10	10	1,384	450	8,979	86%	1,342	13%	99	1%	10,420	539	13,121	75%	3,132	18%	1,211	7%	17,464	989	22,100	4,474	1,310	27,884
FM	2014	10	10	1,414	611	13,080	85%	2,114	14%	235	2%	15,429	614	17,148	76%	4,098	18%	1,401	6%	22,646	1,225	30,228	6,211	1,636	38,075
FM	2015	12	13	1,883	1,212	26,114	83%	4,989	16%	348	1%	31,452	627	19,515	80%	3,528	15%	1,247	5%	24,290	1,839	45,630	8,518	1,595	55,743
FM	2016	16	18	2,751	1,065	21,369	79%	5,229	19%	416	2%	27,014	1,137	34,220	77%	7,171	16%	3,285	7%	44,675	2,202	55,589	12,400	3,701	71,689
FM	2017	19	20	3,711	1,864	31,061	76%	9,190	23%	380	1%	40,631	1,434	31,316	74%	8,312	20%	2,991	7%	42,619	3,305	62,490	17,553	3,395	83,437
FM	2018	22	21	3,557	2,050	38,381	81%	8,466	18%	531	1%	47,378	1,491	51,758	81%	8,964	14%	2,953	5%	63,675	3,541	90,139	17,430	3,484	111,053

Table 7. (continued)

Tabi	e /.	(CO	HUIII	ueuj																					
		VES	SELS				UNA	SSOCIATE	D SCHOO	OLS					AS:	SOCIATED	SCHC	OLS					TOTAL		
FLEET	YEAR	YB	LOG	DAYS		SKIPJ	ACK	YELLO	WFIN	BIC	SEYE	TOTAL		SKIPJA	CK	YELLOV	VFIN	BIGE	ΥE	TOTAL		SKJ	YFT	BET	TOTAL
		10	LOG		SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT	SETS	MT	MT	MT	MT
JP	2010	37	37	5,695	5,633	131,801	79%	34,821	21%	1,223	1%	167,845	833	28,855	79%	5,147	14%	2,331	6%	36,333	6,566	162,488	41,179	3,699	207,366
JP	2011	40	38	6,524	5,956	92,330	78%	25,852	22%	875	1%	119,057	1,320	42,034	82%	6,302	12%	2,912	6%	51,247	7,306	134,883	32,257	3,795	170,935
JP	2012	41	37	5,448	4,867	101,257	82%	20,100	16%	1,623	1%	122,980	1,619	61,599	84%	8,154	11%	3,670	5%	73,423	6,514	163,061	28,379	5,321	196,761
JP	2013	41	34	5,501	4,759	101,389	84%	17,165	14%	1,674	1%	120,228	1,038	43,580	82%	6,927	13%	2,907	5%	53,413	5,834	145,512	24,417	4,666	174,595
JP	2014	40	33	4,898	4,276	86,453	74%	28,114	24%	2,401	2%	116,968	1,026	37,668	79%	7,401	15%	2,927	6%	47,996	5,342	125,231	35,937	5,584	166,752
JP	2015	40	33	4,195	3,380	89,141	76%	26,240	22%	1,647	1%	117,028	663	21,441	75%	5,384	19%	1,781	6%	28,606	4,169	114,190	32,946	3,614	150,750
JP	2016	37	31	5,002	4,170	85,269	78%	23,552	22%	764	1%	109,584	887	27,512	77%	6,823	19%	1,213	3%	35,548	5,136	114,950	31,033	2,014	147,997
JP	2017	38	32	4,693	3,892	81,902	75%	26,814	24%	1,058	1%	109,774	635	21,766	82%	3,677	14%	1,045	4%	26,488	4,650	106,610	31,669	2,231	140,510
JP	2018	34	29	4,058	3,701	98,254	77%	26,790	21%	2,021	2%	127,065	557	22,640	79%	4,959	17%	916	3%	28,515	4,413	124,541	33,577	3,289	161,407
KI	2010	5	4	693	465	7,486	80%	1,836	20%	73	1%	9,396	245	11,650	74%	2,248	14%	1,792	11%	15,691	741	19,599	4,232	1,915	25,746
KI	2011	7	7	1,429	785	9,419	71%	3,740	28%	73	1%	13,232	554	25,127	76%	4,461	13%	3,602	11%	33,190	1,347	34,606	8,219	3,689	46,514
KI	2012	9	9	1,845	1,592	29,795	78%	8,026	21%	309	1%	38,130	491	19,379	81%	2,960	12%	1,738	7%	24,076	2,091	49,359	11,019	2,054	62,432
KI	2013	12	12	2,007	1,443	26,828	81%	6,150	19%	281	1%	33,259	669	28,944	74%	6,593	17%	3,444	9%	38,982	2,113	55,772	12,743	3,726	72,241
KI	2014	14	15	2,820	2,188	45,349	77%	13,220	22%	324	1%	58,893	831	40,974	82%	5,378	11%	3,930	8%	50,281	3,019	86,322	18,598	4,254	109,174
KI	2015	21	21	2,942	2,563	62,312	87%	9,252	13%	417	1%	71,981	1,085	56,017	87%	6,111	9%	2,588	4%	64,716	3,649	118,329	15,363	3,005	136,697
KI	2016	27	23	4,552	2,360	50,937	82%	10,621	17%	609	1%	62,167	1,886	81,348	80%	12,580	12%	7,392	7%	101,320	4,246	132,286	23,201	8,002	163,489
KI	2017	19	21	4,656	1,807	29,221	72%	11,116	27%	312	1%	40,649	2,521	87,897	79%	16,279	15%	7,282	7%	111,458	4,330	117,143	27,399	7,596	152,138
KI	2018	21	21	4,436	1,538	34,355	81%	7,580	18%	265	1%	42,199	2,985	121,050	83%	15,773	11%	9,217	6%	146,041	4,526		23,365	9,484	188,391
KR	2010	29	28	7,178	6,308		72%	56,392	28%	2,128	1%	,-	1,117	56,739	79%	10,753	15%	4,714	7%	72,206	7,433	203,303	67,164		277,313
KR	2011	28	28	6,552	4,493	80,143	73%	28,617	26%	642		109,402	2,128	73,846	75%	16,996		7,265	7%	98,107	6,627	154,134	45,655	7,914	207,704
KR	2012	28	28	5,836	6,099	142,412	77%	41,930	23%	1,523		185,865	1,433	62,723	82%	9,817	13%	3,787	5%	76,326	7,533	205,134	51,746	5,311	262,191
KR	2013	27	28	5,983	6,068	131,442	81%	29,927	18%	1,824	1%	163,192	1,171	48,393	78%	10,362	17%	3,684	6%	62,439	7,239	179,835	40,288	5,508	225,631
KR	2014	28	29	5,437	5,820	162,650	81%	36,315	18%	1,256	1%	200,221	1,097	58,221	83%	7,845	11%	3,761	5%	69,827	6,917	220,870	44,160	5,017	270,048
KR	2015	25	26	4,763	4,615		83%	25,458	16%	1,339	1%		1,540	96,525	87%	10,398	9%	3,971	4%	110,894	6,155	229,113	35,856		270,278
KR	2016	25	25	4,702	4,211		78%	36,050	21%	1,793		168,612	1,588	88,931	81%	13,260	12%	7,652	7%	109,843	5,799		49,310	9,445	278,455
KR	2017	26	26	5,570	4,866	99,428	69%	42,828	30%	1,373		143,629	1,906	82,624	80%	14,556	14%	6,022	6%	103,202	6,775	182,052	57,384	7,395	246,831
KR	2018	27	25	5,720	4,489	111,164	82%	23,601	17%	1,428	1%	136,194	2,374	111,350	85%	12,825	10%	7,181	6%	131,356	6,864	222,514	36,426	8,610	267,549
MH	2010	10	10	1,670	1,228	19,406	78%	5,240	21%	258	1%	24,903	636	24,978	74%	5,434	16%	3,306	10%	33,718	1,881	44,777	10,805	3,580	59,162
MH	2011	10	10	2,521	547	7,839	82%	1,677	18%	44	1%	9,561	1,550	60,361	75%	12,713	16%	7,548	9%	80,622	2,097	68,200	14,390	7,592	90,183
MH	2012	10	10	1,989	748	11,149	68%	5,104	31%	122	1%	16,375	1,394	45,317	79%	7,735	14%	4,168	7%	57,220	2,142	56,466	12,839	4,290	73,595
MH	2013	10	10	2,132	1,075	17,787	89%	2,190	11%	99	1%	20,077	1,167	42,782	74%	10,385	18%	4,327	8%	57,494	2,243	60,611	12,592	4,431	77,634
MH	2014	12	11	2,131	1,127	19,020	88%	2,446	11%	130	1%	21,596	1,219	42,943	79%	8,010	15%	3,347	6%	54,300	2,346	61,963	10,457	3,477	75,896
MH	2015	12	12	2,203	1,839	35,333	94%	2,183	6%	81	0%	37,598	1,063	41,200	84%	5,637	11%	2,434	5%	49,271	2,903	76,533	7,820	2,515	86,869
MH	2016	10	10	1,975	1,305	23,686	85%	4,157	15%	183	1%	28,027	671	26,429	80%	4,369	13%	2,148	7%	32,946	1,976	50,116	8,526	2,331	60,973
MH	2017	10	10	2,193	537	7,244	76%	2,207	23%	102	1%	9,554	1,319	41,675	76%	9,097	17%	4,459	8%	55,232	1,858	48,919	11,305	4,562	64,785
MH	2018	13	13	1,952	782	12,257	86%	1,842	13%	79	1%	14,179	1,218	48,105	82%	7,608	13%	2,968	5%	58,681	2,001	60,388	9,457	3,048	72,894
NR	2018	2	2	183	122	2,156	69%	940	30%	21	1%	3,118	89	5,184	91%	384	7%	160	3%	5,728	212	7,340	1,325	181	8,846

Table 7. (continued)

Tabi	e /.	(COI	IUII	ueuj																					
		VESS	ELS				UNA	SSOCIATE	D SCHOO	DLS					AS	SOCIATED	SCHO	OOLS					TOTAL		
FLEET	YEAR	YB	LOG	DAYS		SKIPJ	ACK	YELLO	WFIN	BIG	SEYE	TOTAL		SKIPJA	CK	YELLOV	VFIN	BIGE	YE	TOTAL		SKJ	YFT	BET	TOTAL
		ID	LOG		SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT	SETS	MT	MT	MT	MT
NZ	2010	4	4	564	371	8,038	97%	242	3%	8	0%	8,288	192	7,861	82%	1,312	14%	421	4%	9,594	564	15,899	1,554	430	17,882
NZ	2011	4	4	461	140	2,726	86%	454	14%	5	0%	3,185	193	5,836	77%	1,174	16%	547	7%	7,557	333	8,562	1,627	552	10,742
NZ	2012	4	4	471	288	5,373	86%	818	13%	26	0%	6,217	162	3,809	81%	638	14%	231	5%	4,678	450	9,182	1,455	257	10,895
NZ	2013	4	4	306	173	4,936	94%	320	6%	9	0%	5,265	120	4,343	80%	737	14%	373	7%	5,453	293	9,279	1,057	382	10,719
NZ	2014	5	5	301	173	3,675	87%	537	13%	20	1%	4,233	157	4,685	86%	526	10%	241	4%	5,453	330	8,360	1,064	261	9,685
NZ	2015	2	2	263	276	4,819	88%	606	11%	84	2%	5,510	51	2,378	88%	247	9%	88	3%	2,713	327	7,197	854	172	8,223
NZ	2016	2	2	176	240	4,814	97%	125	3%	42	1%	4,981	28	2,099	85%	219	9%	152	6%	2,470	268	6,913	344	194	7,451
NZ	2017	1	1	85	16	614	87%	90	13%	1	0%	704	75	2,527	77%	498	15%	276	8%	3,301	91	3,140	588	277	4,005
NZ	2018	2	2	139	76	1,189	62%	715	37%	12	1%	1,915	67	2,418	87%	185	7%	165	6%	2,768	143	3,606	900	177	4,683
PG	2010	45	50	8,914	5,461	90,436	74%	31,369	26%	1,288	1%	123,093	2,659	56,704	69%	20,183	25%	5,053	6%	81,940	8,125	147,258	51,579	6,348	205,184
PG	2011	49	52	9,202	4,733	65,379	77%	18,687	22%	429	1%	84,496	3,289	62,227	73%	19,458	23%	4,117	5%	85,801	8,035	127,885	38,231	4,566	170,682
PG	2012	51	52	9,817	6,335	95,603	69%	40,626	30%	1,539			3,210	69,245	71%	22,993	24%	5,430	6%	97,668	9,589	165,351	63,797	7,015	236,163
PG	2013	51	52	8,961	6,040	88,890	72%	32,294	26%	1,667	1%	122,851	2,454	48,723	67%		27%	4,372	6%	72,389	8,509	137,799	51,688	6,060	195,547
PG	2014	55	53	9,640	6,326	105,406	74%	35,218	25%	1,859	1%	142,483	2,395	68,239	74%	17,725	19%	5,813	6%	91,777	8,744	174,026	53,136	7,718	234,881
PG	2015	53	54	6,689	5,660	107,703	74%	35,076	24%	2,092	1%	,	1,586	51,719	74%	13,417	19%	4,477	6%	69,613	7,251	159,440	48,500	6,571	214,511
PG	2016	67	39	8,542	7,224	124,083	66%	61,590	33%	3,162		,	2,092	73,497	75%	18,522	19%	5,740	6%	97,759	9,346	198,509	80,573	9,003	288,085
PG	2017	67		10,833			61%	85,025	38%	3,566		,	2,110	52,655	72%	17,538	24%	3,494	5%	73,686		191,225	104,045	7,221	302,492
PG	2018	55		10,203	10,820	168,458	68%	74,609	30%	3,130	1%		2,050	58,809	74%	17,141	22%	3,370	4%	79,320		227,836	91,978	6,543	326,356
PH	2010	25	24	4,480	2,339	30,756	64%	16,952	35%	725	2%	48,432	777	16,333	64%	7,253	29%	1,898	7%	25,485	3,222	48,115	24,779	2,702	75,596
PH	2011	25	23	5,694	3,201	41,592	72%	16,069	28%	294	1%	57,955	1,275	21,563	68%	9,311	29%	982	3%	31,855	4,574	63,991	25,712	1,313	91,016
PH	2012	21	28	6,276	4,330	51,598	63%	29,350	36%	1,350	2%	82,298	1,650	29,747	67%	12,872	29%	2,096	5%	44,716	6,031	81,968	42,374	3,476	127,818
PH	2013	27	27	4,808	3,175	35,390	55%	27,427	43%	1,210	2%	64,027	1,363	22,273	58%	13,849	36%	2,221	6%	38,343	4,584	58,306	41,696	3,486	103,488
PH	2014	27	29	4,940	3,771	57,944	63%	31,873	35%	1,546	2%	91,363	1,112	19,330	63%	9,611	31%	1,937	6%	30,877	4,904	77,484	41,613	3,511	122,607
PH	2015	23	21	2,888	1,981	24,842	56%	18,673	42%	1,076	2%	44,591	834	15,774	53%	11,464	38%	2,719	9%	29,957	2,824	41,024	30,353	3,883	75,260
PH	2016	17	21	2,019	1,600	27,175	59%	17,991	39%	924	2%	46,090	560	15,454	65%	6,634	28%	1,592	7%	23,680	2,207	43,567	25,140	2,687	71,393
PH	2017	12	21	1,957	838	10,659	52%	9,335	46%	439	2%	20,433	748	6,483	73%	2,263	25%	149	2%	8,895	1,610	17,499	11,906	607	30,011
PH	2018	12	5	400	349	5,379	62%	3,204	37%	104	1%	8,686	111	1,806	67%	781	29%	113	4%	2,699	460	7,186	3,986	216	11,389
SB	2010	5	5	485	95	2,102	60%	1,351	39%	27	1%	3,480	353	6,610	68%	2,798	29%	330	3%	9,737	448	8,712	4,149	357	13,217
SB	2011	5	5	1,006	119	2,272	80%	554	20%	11	0%	2,836	742	13,350	59%	8,748	39%	627	3%	22,726	861	15,622	9,301	638	25,562
SB	2012	5	5	1,094	98	1,571	75%	524	25%	0	0%	2,096	833	15,523	64%	8,286	34%	594	2%	24,404	931	17,095	8,811	595	26,500
SB	2013	5	5	1,093	213	2,960	66%	1,506	33%	44	1%	4,510	664	12,876	64%	6,758	33%	625	3%	20,259	876	15,835	8,264	669	24,769
SB	2014	5	5	1,212	269	3,660	47%	4,197	53%	12	0%	7,869	787	12,078	54%	10,003	44%	474	2%	22,554	1,056	15,739	14,201	485	30,425
SB	2015	8	6	1,343	389	5,675	61%	3,657	39%	51	1%	9,383	787	10,851	56%	8,215	42%	343	2%	19,410	1,176	16,526	11,872	395	28,792
SB	2016	8	8	2,172	1,020	15,157	64%	8,495	36%	202	1%	23,854	1,061	17,929	57%	12,906	41%	715	2%	31,550	2,094	33,285	21,550	935	55,770
SB	2017	10	10	2,060	1,132	13,137	62%	7,797	37%	190	1%	21,124	864	14,970	61%	8,954	36%	660	3%	24,584	1,995	28,110	16,754	1 000	45,713
SB	2018	10	10	2,105	807	10,980	75%	3,489	24%	90	1%	14,560	1,142	24,411	65%	12,021	32%	999	3%	37,432	1,951	35,391	15,511	1,090	51,991

Table 7. (continued)

Tabi	e /.	(COI	IUII	ueuj																					
		VESS	ELS				UNA	SSOCIATE	D SCHOO	DLS					AS	SOCIATED	SCHO	OOLS					TOTAL		
FLEET	YEAR	YB	LOG	DAYS		SKIPJ	ACK	YELLO	WFIN	BIG	SEYE	TOTAL		SKIPJA	CK	YELLOV	VFIN	BIGE	YE	TOTAL		SKJ	YFT	BET	TOTAL
		ID	LOG		SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT	SETS	MT	MT	MT	MT
SV	2010	2	2	210	3	20	71%	8	29%	0	0%	28	136	4,840	66%	1,334	18%	1,170	16%	7,344	139	4,860	1,342	1,170	7,372
SV	2011	2	2	268	3	18	21%	67	79%	0	0%	85	185	8,729	72%	1,540	13%	1,873	15%	12,141	188	8,747	1,607	1,873	12,226
SV	2012	2	2	300	4	15	100%	0	0%	0	0%	15	213	9,097	67%	2,170	16%	2,365	17%	13,632	217	9,112	2,170	2,365	13,647
SV	2013	4	4	404	13	340	83%	70	17%	2	1%	412	296	11,309	67%	2,828	17%	2,668	16%	16,805	309	11,648	2,899	2,670	17,217
SV	2014	4	4	485	92	1,974	98%	44	2%	1	0%	2,019	303	11,534	75%	1,959	13%	1,968	13%	15,461	394	13,508	2,004	1,968	17,480
SV	2015	2	2	180	7	0		0		0		0	177	12,304	80%	1,967	13%	1,029	7%	15,300	184	12,304	1,967	1,029	15,300
SV	2016	3	2	112	6	676	100%	1	0%	0	0%	677	95	5,350	81%	603	9%	673	10%	6,626	101	6,026	604	673	7,303
SV	2017	1	2	72	2	34	52%	32	49%	0	0%	66	75	2,774	65%	561	13%	917	22%	4,253	78	2,808	593	918	4,319
SV	2018	1	1	82	6	275	100%	0	0%	0	0%	275	82	3,269	74%	487	11%	659	15%	4,415	88	3,544	487	659	4,690
TV	2010	1	1	271	319	6,898	77%	2,046	23%	53	1%	8,997	40	1,126	72%	319	21%	113	7%	1,557	359	8,024	2,365	166	10,554
TV	2011	1	1	311	283	4,362	82%	964	18%	24	0%	5,351	58	1,614	78%	281	14%	171	8%	2,066	341	5,976	1,245	195	7,417
TV	2012	1	1	271	301	3,258	59%	2,195	40%	46	1%	5,500	92	4,514	81%	720	13%	320	6%	5,554	393	7,772	2,916	366	11,054
TV	2013	1	1	273	353	6,808	88%	855	11%	58	1%	7,721	79	2,841	77%	655	18%	199	5%	3,695	432	9,648	1,510	257	11,416
TV	2014	1	1	159	146	3,205	87%	442	12%	28	1%	3,675	49	1,839	81%	284	13%	145	6%	2,268	195	5,044	726	173	5,943
TV	2015	1	1	186	174	3,590	97%	97	3%	4	0%	3,690	36	1,525	86%	186	10%	69	4%	1,780	210	5,115	283	72	5,470
TV	2016	1	1	234	93	2,458	98%	59	2%	4	0%	2,520	59	3,020	84%	434	12%	136	4%	3,590	152	5,478	492	139	6,110
TV	2017	2	2	161	84	2,081	68%	957	31%	20	1%	3,057	59	1,985	77%	318	12%	283	11%	2,586	143	4,066	1,275	302	5,643
TV	2018	1	1	206	159	3,373	79%	868	20%	27	1%	4,269	107	5,585	82%	577	9%	612	9%	6,774	265	8,958	1,446	639	11,043
TW	2010	34	30	7,865	6,413	94,771	77%	26,753	22%	1,085	1%	122,609	1,709	56,124	74%	14,649	19%	5,468	7%	76,241	8,122	150,895	41,402	6,552	198,849
TW	2011	34	31	8,801	4,763	54,662	79%	13,973	20%	403	1%	69,037	2,955	80,029	75%	18,928	18%	7,940	7%	106,897	7,718	134,691	32,901	8,343	175,935
TW	2012	34	33	7,051	4,617	61,292	71%	24,156	28%	881	1%	86,328	2,903	89,539	78%	17,560	15%	7,225	6%	114,324	7,520	150,831	41,717	8,105	200,653
TW	2013	34	34	7,530	6,146	86,899	85%	14,402	14%	1,051	1%	102,352	2,580	81,469	74%	21,098	19%	7,562	7%	110,128	8,725	168,368	35,500	8,613	212,480
TW	2014	34	35	6,735	5,784	103,432	87%	14,271	12%	1,205	1%	118,908	2,611	93,259	79%	17,766	15%	7,224	6%	118,249	8,396	196,692	32,037	8,428	237,157
TW	2015	34	34	5,080	4,661	80,172	76%	24,098	23%	1,435	1%	105,704	1,739	70,696	80%	12,909	15%	4,888	6%	88,494	6,403	150,908	37,017	6,325	194,250
TW	2016	34	31	5,259	4,769	83,775	74%	28,730	25%	1,428	1%	113,932	1,502	56,748	78%	11,831	16%	4,530	6%	73,108	6,273	140,523	40,561	5,957	187,040
TW	2017	31	31	5,417	5,112	64,939	68%	29,468	31%	1,046	1%	95,452	1,882	54,740	75%	13,546	19%	4,319	6%	72,605	6,995	119,709	43,023	5,366	168,098
TW	2018	27	30	5,161	4,647	79,326	81%	17,184	18%	900	1%	97,409	2,247	76,974	79%	16,023	16%	4,653	5%	97,651	6,896	156,300	33,207	5,553	195,060
US	2010	37	37	8,220	6,331	110,719	83%	21,322	16%	767	1%	132,809	2,397	87,213	78%	17,874	16%	7,250	7%	112,336	8,738	198,152	39,335	8,037	245,524
US	2011	37	36	8,048	3,008	47,084	79%	12,587	21%	273	1%	59,943	3,401	110,967	77%	21,307	15%	11,023	8%	143,297	6,409	158,050	33,894	11,295	203,240
US	2012	39	39	8,784	5,620	99,331	80%	23,562	19%	826	1%	123,720	3,464	109,217	80%	18,961	14%	7,803	6%	135,981	9,086	208,596	42,530	8,633	259,759
US	2013	40	41	8,388	5,022	95,203	91%	9,381	9%	440	0%	105,024	3,175	111,833	75%	25,041	17%	12,258	8%	149,131	8,201	207,127	34,430	12,714	254,271
US	2014	40	40	9,069	6,268	118,682	85%	20,575	15%	640	1%	139,897	3,717	143,421	83%	20,078	12%	9,609	6%	173,108	9,987	262,103	40,653	10,249	313,005
US	2015	39	39	6,984	5,901	110,326	88%	14,704	12%	751	1%	125,781	2,056	97,064	86%	10,537	9%	4,695	4%	112,296	7,957	207,391	25,241	5,445	238,077
US	2016	37	34	5,580	3,333	76,420	88%	9,528	11%	567	1%	86,515	2,177	92,545	81%	15,001	13%	7,075	6%	114,621	5,511	168,976	24,533	7,643	201,152
US	2017	34	34	5,627	2,652	45,863	77%	13,022	22%	444	1%	59,328	2,442	83,968	78%	15,754	15%	7,399	7%	107,121	5,095	129,831	28,776	7,842	166,449
US	2018	34	34	5,742	2,825	54,473	79%	14,368	21%	453	1%	69,295	2,890	100,786	80%	16,101	13%	9,901	8%	126,789	5,715	155,260	30,470	10,355	196,084

Table 7. (continued)

		,											_		_										
		VESSELS			UNASSOCIATED SCHOOLS									ASSOCIATED SCHOOLS							TOTAL				
FLEET	YEAR	YB	LOG	DAYS		SKIPJ	ACK	YELLO	WFIN	BIG	SEYE .	TOTAL		SKIPJA	CK	YELLOV	VFIN	BIGE	YE	TOTAL		SKJ	YFT	BET	TOTAL
		ID	LOG		SETS	MT	%	MT	%	MT	%	MT	SETS	MT	%	MT	%	MT	%	MT	SETS	MT	MT	MT	MT
VU	2010	5	5	872	469	10,794	81%	2,397	18%	86	1%	13,277	198	8,360	80%	1,448	14%	632	6%	10,440	668	19,156	3,846	718	23,720
VU	2011	6	4	1,142	287	5,387	81%	1,282	19%	26	0%	6,695	391	12,829	77%	2,779	17%	1,080	7%	16,688	678	18,216	4,061	1,106	23,382
VU	2012	6	3	775	472	9,565	65%	5,129	35%	133	1%	14,827	268	9,944	82%	1,463	12%	768	6%	12,175	740	19,509	6,592	901	27,002
VU	2013	6	4	974	607	11,679	87%	1,728	13%	83	1%	13,490	263	9,934	78%	2,020	16%	758	6%	12,712	870	21,614	3,747	841	26,202
VU	2014	3	3	685	362	8,805	89%	1,028	10%	73	1%	9,906	230	8,660	80%	1,557	14%	638	6%	10,855	592	17,465	2,585	711	20,761
VU	2015	3	3	293	104	1,617	96%	72	4%	3	0%	1,692	126	5,608	84%	738	11%	306	5%	6,652	229	7,225	810	309	8,344
VU	2016	3	3	165	40	1,320	96%	54	4%	8	1%	1,382	37	2,484	83%	203	7%	325	11%	3,012	78	3,804	258	333	4,394
VU	2017	3	3	250	119	1,662	74%	564	25%	17	1%	2,242	122	3,399	74%	564	12%	640	14%	4,603	241	5,061	1,128	657	6,845
VU	2018	2	2	313	337	6,041	77%	1,794	23%	63	1%	7,898	96	4,075	89%	360	8%	169	4%	4,604	433	10,116	2,154	233	12,502

Table 7. (continued)

	VESSELS UNASSOCIATED SCHOOLS							ASSOCIATED SCHOOLS								TOTAL								
YEAR		LOG	DAYS		SKIPJA	ACK	YELLO	WFIN	BIG	EYE	TOTAL		SKIPJA	СК	YELLOV	VFIN	BIGE'	ΥE	TOTAL		SKJ	YFT	BET	TOTAL
	16	LOG		SETS	МТ	%	МТ	%	МТ	%	МТ	SETS	МТ	%	МТ	%	МТ	%	МТ	SETS	MT	МТ	МТ	мт
2010	276	265	52,245	38,189	690,723	76%	210,053	23%	8,077	1%	908,855	13,000	421,241	74%	105,898	19%	43,884	8%	571,022	51,469	1,116,183	318,235	52,291	1,486,710
2011	279	269	58,928	30,268	431,030	76%	131,697	23%	3,272	1%	565,999	21,789	624,412	74%	148,954	18%	66,334	8%	839,697	52,216	1,057,286	281,235	69,694	1,408,216
2012	285	283	55,128	36,615	630,620	74%	208,546	25%	8,629	1%	847,795	20,606	612,499	77%	132,838	17%	53,593	7%	798,932	57,365	1,244,907	341,912	62,348	1,649,167
2013	297	289	54,669	38,013	651,061	80%	149,172	18%	8,873	1%	809,105	17,786	561,511	73%	149,430	19%	60,604	8%	771,541	55,904	1,214,306	299,546	69,679	1,583,531
2014	308	302	54,310	38,802	755,019	79%	195,095	20%	9,969	1%	960,084	18,413	648,947	78%	127,222	15%	54,774	7%	830,940	57,300	1,405,666	323,064	65,070	1,793,800
2015	306	291	42,598	33,704	697,603	80%	169,019	19%	9,600	1%	876,221	13,595	559,578	81%	99,177	14%	35,882	5%	694,638	47,443	1,261,255	269,751	45,761	1,576,767
2016	293	259	43,914	31,838	653,587	75%	208,634	24%	10,240	1%	872,459	14,062	539,077	77%	112,783	16%	45,268	6%	697,125	46,076	1,196,972	323,237	55,839	1,576,048
2017	282	278	48,497	33,175	524,462	68%	238,561	31%	8,955	1%	771,976	17,085	517,930	76%	117,476	17%	46,808	7%	682,215	50,545	1,048,374	359,072	56,097	1,463,543
2018	272	257	45,600	33,083	630,957	76%	186,331	23%	9,173	1%	826,465	18,340	670,190	80%	118,450	14%	49,572	6%	838,214	51,616	1,305,528	306,860	59,146	1,671,533

Notes:

- 1. Estimates are based on aggregate data and raised logsheet data with species composition adjusted using observer sampling with grab sample bias correction. Note that these estimates may differ from the annual catch estimates provided by CCMs.
- 2. Estimates exclude domestic purse seine catch/effort in Philippines, Indonesia and Vietnam.
- 3. Two sources of estimates of vessel numbers are provided (i) those provided by CCMs with their annual catch estimates (and therefore appear in the WCPFC Yearbook) and (ii) estimates of vessel numbers from unraised operational data available to SPC.
- 4. The estimate of Japanese purse seine vessels fishing in the tropical fishery (20°N-20°S) has been determined by only considering vessel numbers in the categories >200 GRT.
- 5. There are several instances where vessel numbers from unraised logbook data are higher than the vessel numbers provided by the CCM. The reasons for these occurrences include: (i) situations where one vessel became inactive during the calendar year and was replaced by a new vessel the vessel number from the operational data is based on a count of the total distinct vessels fishing throughout the year; (ii) instances where there are inconsistencies in the charter/flag assignment between the vessel numbers provided by CCMs and the operational logsheet data (e.g. Philippine-flagged vessels chartered to PNG this will require follow-up and clarification with relevant CCMs).
- 6. ASSOCIATED covers sets on Drifting FAD, Log and Anchored FAD. Catch/effort for sets on ANIMALS is not shown separately but are included in the TOTAL.
- 7. Includes Catch and Effort in Archipelagic Waters.
- 8. Total Associated sets may differ from values provided in Table 3. The reasons for the differences include, (i) sets in archipelagic waters are included in this table but not in Table 3, (ii) the raising process in Table 3 is undertaken at the EEZ/AW level while the raising in this Table is undertaken at the WCPFC Area level; this will be an issue in cases where logbook coverage is not 100%. Future versions of Tables 3 and 7 will be reconciled.

Fleet Codes

CN	- China	ES	- EU-Spain	FM	- FSM		
JP	- Japan	KI	- Kiribati	KR	- Republic of Korea		
MH	- Marshall Islands	NZ	- New Zealand	PG	- PNG		
PH	- Philippines (DW)	SB	- Solomon Is.	SV	- El Salvador	NR	- Nauru
TV	- Tuvalu	TW	- Chinese Taipei	US	- USA	VU	- Vanuatu

Table 8. Longline effort (100s of hooks) in the tropical WCPFC LONGLINE fishery (20°N-10°S), by fleet, 2010-2018.

FLEET		LONGLINE EFFORT (100s of Hooks)												
I LLL I	2010	2011	2012	2013	2014	2015	2016	2017	2018					
CK	13,422	16,809	32,818	16,880	10,880	11,761	38,405	23,186	11,403					
CN	558,006	741,473	838,710	653,046	554,203	856,023	643,894	490,233	808,126					
FJ	27,971	94,017	172,330	136,376	128,960	83,827	88,998	45,946	28,555					
FM	76,704	94,564	110,591	85,598	74,842	149,576	183,800	174,479	274,522					
JP	591,056	544,105	513,557	453,786	393,605	346,620	283,968	286,824	160,542					
KI	0	19,626	45,193	27,577	23,868	36,636	66,957	28,225	37,174					
KR	728,899	803,678	771,103	626,874	603,157	506,797	586,401	473,107	569,554					
МН	16,828	16,763	20,679	6,286	0	585	63,218	139,967	104,411					
PF	0	242	147	246	437	18	1,123	13,024	5,189					
PG	24,589	51,692	40,188	14,849	19,232	7,897	8,997	2,774	34,053					
PW	0	0	0	0	0	0	626	7,371	89,002					
SB	66,324	12,757	5,497	2,793	457,456	582,324	5,228	9,821	183,953					
TV	3,436	26,925	69,189	16,219	16,809	18,844	12,927	16,220	12,376					
TW	1,309,957	1,586,000	1,710,738	1,238,811	1,031,881	1,207,708	1,291,770	1,354,219	1,058,135					
US	127,121	135,232	152,740	128,813	147,964	181,589	240,527	216,609	157,612					
VU	76,507	89,530	127,777	186,070	130,340	286,797	202,711	121,645	110,571					
	3,620,819	4,233,413	4,611,259	3,594,223	3,593,634	4,277,002	3,719,549	3,403,651	3,645,178					

- 1. Estimates are based on available aggregate data for the WCPFC Area, 20°N-10°S.
- 2. Estimates exclude domestic longline effort for Philippines, Indonesia and Vietnam fleets.
- 3. Excluding vessels targeting South Pacific Albacore is not possible at this stage for a number of reasons the main reason being the lack of operational data. In the absence of complete operational data (which would include targeting information), the area $20^{\circ}\text{N-}10^{\circ}\text{S}$ has been selected as the area which best minimises both South and North Pacific albacore targeting.

Fleet Codes

- CK Cook Islands
- CN China
- FJ Fiji
- FM FSM
- JP Japan
- KI Kiribati
- KR Korea
- MH Marshall Is.
- PF French Polynesia
- PG PNG
- PW Palau
- SB Solomon Is.
- TV Tuvalu
- TW Chinese Taipei
- US USA
- VU Vanuatu

Table 9. Annual purse seine bigeye tuna catches, by fleet, 2010-2017.

ссм	2010	2011	2012	2013	2014	2015	2016	2017	55% of average 2010- 2012 BET catch
AUSTRALIA	0	0	0	0	0	0	0	0	0
CHINA	2,224	4,318	2,512	3,645	2,705	1,745	317	1,135	1,660
ECUADOR	1,597	3,219	3,826	3,242	2,225	1,764	600	2,738	1,584
EL SALVADOR	1,142	1,856	1,956	2,063	1,952	482	269	856	908
EU-SPAIN	4,136	6,057	5,487	7,313	5,101	1,877	1,527	2,023	2,875
FSM	1,035	1,142	1,771	1,131	1,622	1,592	3,695	3,444	724
INDONESIA	2,038	1,746	1,940	4,507	2,054	2,049	3,178	1,071	1,049
JAPAN	4,152	4,432	3,494	2,821	4,001	3,970	2,118	2,646	2,214
KIRIBATI	1,940	3,664	2,018	3,751	4,237	2,937	8,045	7,152	1,397
MARSHALL ISLANDS	3,425	7,715	4,192	4,429	3,453	2,506	2,313	4,555	2,811
NEW ZEALAND	407	545	238	383	258	64	77	177	218
PAPUA NEW GUINEA	6,282	4,332	7,008	5,962	7,594	6,669	8,995	6,818	3,231
PHILIPPINES	4,720	2,166	4,388	3,632	4,219	5,089	3,605	2,354	2,067
REPUBLIC OF KOREA	6,863	7,883	5,303	5,502	5,034	5,190	9,486	7,113	3,676
SOLOMON ISLANDS	349	982	602	697	459	395	933	831	354
CHINESE TAIPEI	6,570	8,330	8,110	8,595	8,367	6,368	5,975	5,519	4,219
TUVALU	171	200	363	260	171	60	141	245	135
USA	7,948	11,437	8,582	12,822	10,177	5,422	7,448	7,005	5,127
VANUATU	712	1,115	830	641	698	304	326	632	487
	55,711	71,139	62,620	71,396	64,327	48,483	59,048	56,314	
VIETNAM	325	688	965	805	1,192	1,394	2,081	1,959	363

- 1. Excludes archipelagic waters. Fleets from Indonesia, Kiribati, Papua New Guinea, Philippines (domestic) and Solomon Islands in this list are normally the only fleets active in archipelagic waters.
- 2. The Vietnam purse seine fleet are understood to fish outside the WCFPC Convention Area (South China Sea).
- 3. Purse seine tuna species catch estimates (including bigeye tuna catch) have been adjusted using observer data (except for Japan purse seine catch, which is undertaken by Japan using unloadings and port sampling data).

Table 10. High seas FAD sets, by fleet, during 2017.

ССМ	2017	Notes
CHINA	1	
ECUADOR	0	
EL SALVADOR	33	
EU-SPAIN	128	
FSM	34	
JAPAN	0	
KIRIBATI	391	5
MARSHALL ISLANDS	421	
NEW ZEALAND	66	
PAPUA NEW GUINEA	3	
PHILIPPINES	0	4
REPUBLIC OF KOREA	0	
SOLOMON ISLANDS	22	
CHINESE TAIPEI	0	
TUVALU	40	
USA	0	
VANUATU	99	3

- 1. This table has been prepared considering the language of CMM 2016-01 paragraph 18 footnote 5 that states "The high seas FAD closure in paragraph 18 does not apply in 2017 to a CCM that has achieved a verifiable reduction in bigeye catches by its purse seine vessels to 55% from current levels (2010-2012), to be reviewed on the basis of the advice of the Scientific Committee. A CCM that has qualified for the above mentioned exemption shall maintain a verifiable reduction in bigeye catches by its purse seine vessels to 55% from the reference levels (2010-2012) also in the course of 2017."
- 2. High seas FAD sets for 2017 are sourced from operational logbook data noting that some data are provisional at this stage.
- 3. The sets presented in Table 10 exclude effort in the overlap area because it takes into account the WCPFC9 decision on the application of measures in the part of the WCPF Convention Area that overlaps with the IATTC Convention Area (WCPFC9 Summary Report paragraph 80). European Union is a WCPFC member who is also an IATTC member, notified WCPFC in April 2013, of their choice of IATTC measures in the overlap area. Given that Ecuador and El Salvador are members of IATTC, the rules of the RFMO of which it is a member apply in the overlap area between WCPFC and IATTC, even if the CCM is a cooperating non-member of the other RFMO.
- 4. The measures that the Philippines will take are in Attachment C of CMM 2016-01. In 2017, the Philippines expended 2,749 days in the HSP1 and no reported purse seine effort in any other high seas areas.
- 5. In addition to the FAD measures 2015 and 2016, except for those Kiribati flagged vessels fishing in the adjacent high seas, it shall be prohibited to set on FADs in the high seas, unless the Commission decides on other alternative measures at its 2014 or 2015 or 2016 annual meeting.