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CATCH AND EFFORT TABLES ON TROPICAL TUNA CMMS

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Paper prepared by the Secretariat and Oceanic Fisheries Programme (OFP) Pacific Community (SPC)

 $^{^1}$ This paper is an update of TCC15 meeting paper (TCC15-2019-IP08) and SC15 meeting paper (SC15-2019-IIP06)

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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	588	1,250	2,15
FIJI	12	5	10	26	36	6	6	23	11	29	27	27	32	0	50	43	31	3	300	
FRENCH POLYNESIA	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	636	*	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	1,147	745	*	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	878	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	116	458	2, 15,19
VANUATU	2	2	0	23	1	0	0	14	1	0	4	5	1	0	4	0	1	0	200	
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	35,290	37,160	34,947	44.033	5, 12,15,20
PNA AWs only	2,427		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	4,112	,	5
PNA EEZs + AWs = TOTAL PNA			32,906			36,002		40,659	39,698	50,417	55,993	50,815	51,174	49,417	34,752	38,977	42,612	39,059		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	39,383	42,799	38,335		
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 , 697	39,254	36,954		
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	43,072	48,252	42,447	47,755	
TOTAL INT. WATERS (20°N-20°S		8,208			8,763	6,607	8,199	8,544	10,062	1,500	1,525	2,215	6,154	5,681	8,396	6,919	7,136	7,699		6,8,11
TOTAL (EEZs + IW + PNA AWs)	39,025	42,526	45,353	48,698	49,845	46,130	49,345	52,076	52,000	53,673	60,013	56,547	62,212	59,337	47,738	49,991	55,388	50,146	55,454	
TOTAL minus ID/PH	37,333	40,818	43,293	46,435	47,541	43,978	47,198	49,921	50,206	52,788	59,085	55,062	58,950	56,828	45,867	47,305	51,843	48,765	54,073	
VIETNAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
A TINTIALIN	0	0	0	U	U	U	U	0	0	U	U	U	U	U	U	U	U	U	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	8	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	667				
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	813				11
MARSHALL ISLANDS	170	209	442	397	400	154	177	284	173	68	34	2	5	9	835	395	638	308				
NAURU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	143				
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	21				
PHILIPPINES	13	56	449	464	320	151	26	73	20	2	0	3	4,096	2,668	2,442	2,667	3,193	2,871	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	232	207	207	227	
SOLOMON ISLANDS	32	37	0	0	17	15	5	0	0	0	0	1	0	0	0	26	69	104				
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	58	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	1,458	830	1,572	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	6,809	6,944	7,326				

								PURSE S	SEINE DAYS	S 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	104	67	91	12	172	270		7
EL SALVADOR	21	33	3	0	0	0	25	129	24	19	22	4	127	154	43	67	45	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	48	40	111	102	331	111	86	78	97	266	239	205	117	232	354		

- 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	1,418	1,495	756	63	503	228	CHINA
0	0	0	0	0	0	74	367	138	220	440	442	275	342	143	50	239	411	ECUADOR
10	27	1	0	0	0	54	155	162	135	185	212	302	306	176	94	69	82	EL SALVADOR
77	33	59	81	46	125	242	412	328	363	488	460	515	431	331	93	149	188	EUROPEAN UNION
324	386	489	790	497	282	338	479	737	417	788	820	537	605	620	521	1,435	1,294	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	1,027	663	887	635	557	JAPAN
72	62	63	97	104	66	61	78	267	243	552	486	667	823	1,096	470	2,553	2,988	KIRIBATI
392	578	876	1,064	934	741	891	464	617	630	1,544	1,386	1,165	1,212	1,040	672	1,342	1,233	MARSHALL ISLANDS
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98	NAURU
136	399	439	574	196	488	418	439	387	189	189	159	104	117	46	30	75	83	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	1,727	1,230	1,841	1,702	1,811	PAPUA NEW GUINEA
901	1,034	1,240	1,197	1,131	848	246	536	552	375	401	623	511	415	366	307	205	96	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	1,561	1,565	1,887	2,385	REPUBLIC OF KOREA
150	118	100	88	109	252	130	86	173	80	147	191	134	99	107	228	353	439	SOLOMON ISLANDS
1,617	2,621	1,853	3,221	2,738	3,051	2,814	2,284	2,689	1,704	2,942	2,886	2,568	2,609	1,758	1,495	1,880	2,241	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	3,430	3,136	3,696	2,025	2,129	2,440	2,902	USA
36	143	182	655	528	467	626	172	242	169	391	261	260	229	126	37	123	95	VANUATU
9,423	11,852	11,081	18,737	13,794	15,783	14,062	15,371	17,958	10,550	18,248	17,435	15,146	16,273	12,080	10,541	15,649	17,237	

- 1. 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.

ССМ	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	CMM limits for 2017	CMM limits for 2018	See Notes
AMERICAN SAMOA	75	196	242	227	134	181	218	132	249	487	1,263	1,502	389	318	557	658	1,394	845			4
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	0	0	0	0			8
CHINA	2,227	2,312	8,965	11,748	7,520	13,378	10,535	10,798	15,289	13,924	11,139	11,324	10,671	9,370	8,210	8,195	7,023	8,695	7,049	8,724	10,11,16
COOK ISLANDS	1	56	204	394	220	166	238	292	217	319	925	1,624	208	184	151	183	298	197			4
EU-PORTUGAL	0	0	0	0	0	0	0	0	0	0	3	17	106	71	17	10	0	0			
EU-SPAIN	0	0	0	42	17	62	62	77	46	15	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	1,062			4
GUAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	831	939	0	. 0			
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	1.255	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	17,722	16,917	12,991	15,564	14,316	12,169	11,494	11,921	16,860	17,765	16
KIRIBATI	2,,100	0	1	0	0	0	0	44	0	3	155	800	582	268	556	603	287	423	.,	11,7100	4
MARSHALL ISLANDS	0	0	0	1	0	0	3	375	381	257	259	335	80	0	0	700	1,229	1,146			4
NAURU	6	3	10	0	0	0	0	0	0	0	0	0	0	0	0	0	-,	-,			4
NEW CALEDONIA	128	189	142	90	76	35	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	0	0	0	0	0	0	0			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	1,011			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	62			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	34			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	9,672	9,069	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	3,138	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	2,831			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	55,663	62,693	55,300	60,355	
			0.165	0.76	2 565	0.500	2.662	2 252	0.000	0.445	2 46:	2 761	0.000	0.050	2 162		1 00:	0.00			
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-	
CCM	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2004	See Notes
AMERICAN SAMOA AUSTRALIA	188 2,819	485 3,531	497 3,681	888 2,356	526 1,499	513 1,830	640 1,390	333 1,650	398 1,387	473 1,359	699 1,858	620 1,259	422	454	360	561	826	455 1,312	515 3,097	(4)
BELIZE	2,619 957	720	943	2,336	298	1,030	273	1,630	1,307	28	1,000	30	1,341 21	1,685	2,177	1,763	1,666	1,312	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	
COOK ISLANDS	1,313	42	178	506	413	262	290	247	197	192	394	693	346	504	339	314	610	532	182	
EU-PORTUGAL	0	0	0	0	0	0	2.50	247	107	1 7 2	0	0.23	2	22	4	514	010	0	102	(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	
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	021	1,000	0	0.50	0	447	710	410	431	7.38	013	703	1,074	941	1,390	1,309	7 9 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	7.707	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	(12)
KIRIBATI	10,090	13,610	10,003	13,209	14,792	13,462	13,723	12,303	14,039	17,400	140	300	175	108	405	610	359	220	10,400	(4)
MARSHALL ISLANDS	0	0	0	3	0	0	2	91	120	117	99	113	47	100	403	578	948	707	1	(4)
NAURU	5	2	6	1	0	0	0	0	120	0	0	0	- 0	0	0	0	940	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	303	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	401	394	
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),(10)
TONGA	259	263	263	163	219	227	341	291	109	47	171	140	126	195	297	322	373	201	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	22,956	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	(4)
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	68,534	71,678	75,712	
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 <u>are</u> 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	atch			
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	6
(LARGE-FISH)	PHILIPPINES					Within EEZ only, excluding AWs	NO	7
POLE-AND-LINE	INDONESIA			41,025		Within EEZ only, excluding AWs	NO	
POLE-AND-LINE	JAPAN	21,021	13,170	114,573	71,782		YES	3,5

- 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. 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)"

- 6. 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.
- 7. The large-fish handline catch for the Philippines outside of archipelagic waters has been arbitrarily estimated to be 20% of the total large-fish handline catch due to the absence of logsheet data to provide indications of spatial distribution of the catch and effort. It is understood that there is considerable inter-annual variation in the activity of this fleet inside and outside archipelagic waters, so it is not possible at this stage to accurately estimate either the limit or the current year applicable catch (i.e. catch outside archipelagic waters).

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.

Seine	cau	.11/ e	:1101	t III P	ıııııppı	ines, in	uones	ia alic	vieu	iaiii.															
		VESS	SELS				UNA	SSOCIATI	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
		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	17,240	70%	5,327	22%	1,961	8%	24,529	2,788	38,870	12,619	2,225	53,714
CN	2011	12	10	4,019	1,396	11,375	74%	3,831	25%	112	1%	15,318	2,023	46,314	74%	11,728	19%	4,179	7%	62,222	3,419	57,689	15,559	4,291	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	13	3,617	2,329	26,535	86%	3,936	13%	269	1%	30,740	1,419	37,214	73%	10,149	20%	3,402	7%	50,765	3,750	63,978	14,161	3,689	81,828
CN	2014	19	18	3,012	1,351	15,999	84%	2,881	15%	185	1%	19,065	1,430	44,048	78%	9,280	16%	3,330	6%	56,659	2,781	60,047	12,161	3,515	75,724
CN	2015	20	16	2,007	897	11,901	75%	3,727	24%	263	2%	15,892	756	21,365	78%	4,444	16%	1,536	6%	27,344	1,653	33,266	8,171	1,799	43,236
CN	2016	2	6	504	401	5,694	69%	2,449	30%	138	2%	8,281	140	2,682	68%	1,019	26%	231	6%	3,932	544	8,437	3,500	374	12,311
CN	2017	3	2	761	84	438	83%	84	16%	7	1%	529	502	11,159	75%	2,640	18%	1,146	8%	14,945	586	11,597	2,725	1,152	15,474
CN	2018	3	3	637	359	4,662	83%	897	16%	43	1%	5,602	234	7,205	78%	1,575	17%	443	5%	9,223	593	11,866	2,472	487	14,825
EC	2010	14	6	319	21	120	69%	50	29%	5	3%	175	233	6,459	58%	2,502	22%	2,183	20%	11,145	254	6,579	2,552	2,189	11,320
EC	2011	8	7	556	41	205	24%	641	75%	4	1%	851	447	19,091	67%	3,983	14%	5,258	19%	28,332	488	19,296	4,625	5,262	29,183
EC	2012	8	7	605	17	363	63%	210	37%	2	0%	575	444	15,455	69%	3,268	15%	3,847	17%	22,570	461	15,818	3,478	3,849	23,145
EC	2013	7	7	480	70	1,976	88%	199	9%	61	3%	2,236	292	13,366	70%	2,556	13%	3,283	17%	19,206	362	15,343	2,755	3,345	21,442
EC	2014	7	7	477	57	1,123	87%	147	11%	28	2%	1,297	359	15,731	77%	1,961	10%	2,780	14%	20,472	416	16,853	2,108	2,808	21,769
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	237	2	78	77%	23	23%	0	0%	102	235	9,036	67%	1,666	12%	2,767	21%	13,469	237	9,115	1,689	2,767	13,571
EC	2018	4	4	441	12	117	90%	6	5%	7	5%	130	412	17,022	76%	1,582	7%	3,712	17%	22,316	424	17,139	1,587	3,719	22,446
ES	2010	4	4	720	26	701	86%	113	14%	5	1%	820	364	19,771	69%	4,655	16%	4,222	15%	28,648	390	20,473	4,768	4,228	29,468
ES	2011	4	4	753	30	422	32%	905	68%	7	1%	1,334	488	27,108	71%	4,918	13%	6,091	16%	38,117	518	27,530	5,823	6,098	39,451
ES	2012	4	4	787	57	1,863	67%	876	32%	28	1%	2,767	461	19,366	66%	4,518	15%	5,520	19%	29,404	517	21,229	5,394	5,548	32,171
ES	2013	4	4	837	56	2,749	91%	270	9%	6	0%	3,026	515	28,622	66%	7,111	17%	7,409	17%	43,141	571	31,371	7,381	7,415	46,167
ES	2014	4	4	753	89	2,919	69%	1,279	30%	15	0%	4,213	431	27,596	76%	3,540	10%	5,112	14%	36,247	520	30,515	4,819	5,127	40,460
ES	2015	4	4	529	28	1,286	94%	82	6%	0	0%	1,368	326	26,872	84%	3,061	10%	1,907	6%	31,840	355	28,158	3,143	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	7,988	69%	1,082	9%	2,462	21%	11,532	149	7,988	1,082	2,462	11,532
ES	2018	2	2	263	4	95	100%	0	0%	0	0%	95	188	8,119	79%	937	9%	1,171	12%	10,227	192	8,213	937	1,171	10,322
FM	2010	7	8	1,305	612	8,647	81%	1,905	18%	92	1%	10,645	419	10,375	74%	2,664	19%	1,039	7%	14,078	1,031	19,022	4,569	1,132	24,723
FM	2011	7	7	1,641	483	5,813	76%	1,798	24%	50	1%	7,661	790	13,399	71%	4,360	23%	1,074	6%	18,832	1,276	19,220	6,161	1,124	26,505
FM	2012	9	9	1,573	464	6,311	75%	2,051	24%	71	1%	8,432	826	21,728	79%	4,130	15%	1,676	6%	27,535	1,301	28,262	6,214	1,758	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	13,079	85%	2,115	14%	235	2%	15,429	614	17,148	76%	4,097	18%	1,401	6%	22,646	1,225	30,228	6,212	1,635	38,075
FM	2015	12	13	1,924	1,212	26,150	83%	4,975	16%	348	1%	31,473	641	19,308	80%	3,705	15%	1,257	5%	24,270	1,852	45,458	8,680	1,605	55,743
FM	2016	16	18	2,725	1,059	21,404	79%	5,161	19%	410	2%	26,975	1,141	34,289	77%	7,140	16%	3,285	7%	44,714	2,200	55,693	12,300	3,696	71,689
FM	2017	19	20	3,431	1,867	32,055	75%	10,130	24%	401	1%	42,586	1,337	30,010	74%	7,720	19%	2,968	7%	40,698	3,210	62,158	17,892	3,388	83,437
FM	2018	22	22	3,687	2,395	46,498	80%	10,773	19%	804	1%	58,074	1,422	48,912	81%	8,430	14%	2,939	5%	60,280	3,819	95,434	19,210	3,746	118,389

Table 7. (continued)

Table	٠,٠	COII		icuj																					
		VESS	ELS				UNA	SSOCIATI	D SCHO	OLS					AS	SOCIATED	SCHO	OLS					TOTAL		
FLEET	YEAR	YB	LOG	DAYS		SKIPJ	ACK	YELLO	WFIN	BIG	SEYE	TOTAL		SKIPJA	CK	YELLOV	VFIN	BIGE	YE	TOTAL		SKJ	YFT	BET	TOTAL
					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	4,275	86,456	74%	28,118	24%	2,401	2%	116,975	1,027	37,665	79%	7,397	15%	2,927	6%	47,989	5,342	125,231	35,937	5,584	166,752
JP	2015	40	32	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	30	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	30	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	27	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	7,485	80%	1,838	20%	73	1%	9,396	245	11,645	74%	2,254	14%	1,792	11%	15,691	741	19,592	4,239	1,915	25,746
KI	2011	7	7	1,429	785	9,419	71%	3,740	28%	73	1%	13,232	554	25,118	76%	4,470	14%	3,602	11%	33,190	1,347	34,596	8,229	3,689	46,514
KI	2012	9	9	1,851	1,593	29,830	78%	8,025	21%	309	1%	38,164	492	19,344	81%	2,962	12%	1,735	7%	24,041	2,093	49,360	11,020	2,051	62,432
KI	2013	12	12	2,007	1,443	26,832	81%	6,145	19%	281	1%	33,259	669	28,940	74%	6,597	17%	3,445	9%	38,982	2,113	55,772	12,743	3,726	72,241
KI	2014	14	15	2,818	2,188	45,360	77%	13,227	23%	325	1%	58,912	830	40,953	82%	5,380	11%	3,929	8%	50,263	3,018	86,313	18,608	4,253	109,174
KI	2015	21	20	2,884	2,482	61,607	86%	9,275	13%	422	1%	71,304	1,082	56,671	87%	6,120	9%	2,603	4%	65,393	3,564	118,278	15,395	3,025	136,698
KI	2016	27	23	4,473	2,407	51,842	82%	10,485	17%	589	1%	62,915	1,854	80,643	80%	12,504	12%	7,423	7%	100,570	4,261	132,487	22,991	8,012	163,490
KI	2017	19	21	4,619	1,801	29,102	72%	11,085	27%	299	1%	40,486	2,535	88,157	79%	16,486	15%	7,368	7%	112,011	4,337	117,284	27,576	7,668	152,527
KI	2018	21	21	4,423	1,538	34,527	82%	7,399	18%	276	1%	42,202	2,985	120,459	83%	16,223	11%	9,356	6%	146,038	4,526	155,121	23,635	9,635	188,392
KR	2010	29	28	7,178	6,308	146,507	72%	56,393	28%	2,128	1%	205,027	1,117	56,729	79%	10,754	15%	4,723	7%	72,206	7,433	203,292	67,165	6,856	277,313
KR	2011	28	28	6,552	4,493	80,141	73%	28,619	26%	642	1%	109,402	2,128	73,842	75%	17,002	17%	7,262	7%	98,107	6,627	154,128	45,663	7,913	207,704
KR	2012	28	28	5,836	6,099	142,411	77%	41,929	23%	1,525	1%	185,865	1,433	62,723	82%	9,817	13%	3,787	5%	76,326	7,533	205,134	51,746	5,312	262,191
KR	2013	27	28	5,983	6,068	131,440	81%	29,928	18%	1,824	1%	163,192	1,171	48,370	78%	10,371	17%	3,698	6%	62,439	7,239	179,811	40,299	5,522	225,631
KR	2014	28	29	5,437	5,820	162,652	81%	36,312	18%	1,257	1%	200,221	1,097	58,221	83%	7,845	11%	3,761	5%	69,827	6,917	220,873	44,157	5,018	270,048
KR	2015	25	26	4,664	4,561	131,211	83%	24,763	16%	1,320	1%	157,294	1,534	96,587	87%	10,410	9%	3,956	4%	110,953	6,094	227,799	35,173	5,276	268,248
KR	2016	25	25	4,755	4,260	131,458	78%	36,068	21%	1,789	1%	169,315	1,590	88,469	81%	13,156	12%	7,515	7%	109,140	5,851	219,927	49,224	9,304	278,455
KR	2017	26	26	5,545	4,898	100,191	69%	43,569	30%	1,332	1%	145,091	1,881	81,645	80%	14,364	14%	5,731	6%	101,740	6,782	181,836	57,933	7,063	246,832
KR	2018	27	25	5,677	4,467	110,451	82%	23,591	17%	1,444	1%	135,487	2,372	112,297	85%	12,628	10%	7,139	5%	132,064	6,839	222,749	36,219	8,583	267,551
MH	2010	10	10	1,670	1,228	19,405	78%	5,241	21%	258	1%	24,903	636	24,975	74%	5,435	16%	3,308	10%	33,718	1,881	44,772	10,806	3,583	59,162
MH	2011	10	10	2,521	547	7,852	82%	1,664	17%	45	1%	9,561	1,550	60,363	75%	12,712	16%	7,548	9%	80,622	2,097	68,214	14,376	7,593	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	12,838	4,290	73,595
MH	2013	10	10	2,132	1,075	17,786	89%	2,192	11%	99	1%	20,077	1,167	42,782	74%	10,385	18%	4,327	8%	57,494	2,243	60,610	12,593	4,431	77,634
MH	2014	12	11	2,131	1,127	19,020	88%	2,446	11%	130	1%	21,596	1,219	42,946	79%	8,007	15%	3,348	6%	54,300	2,346	61,966	10,453	3,477	75,896
MH	2015	12	12	2,221	1,857	35,685	94%	2,198	6%	82	0%	37,965	1,061	40,853	84%	5,632	12%	2,419	5%	48,904	2,919	76,538	7,830	2,501	86,869
MH	2016	10	10	1,970	1,305	23,700	85%	4,145	15%	183	1%	28,027	671	26,433	80%	4,368		2,145	7%	32,946	1,976	50,132	8,513	2,328	60,973
MH	2017	10	10	2,152	537	7,203	75%	2,253	24%	98	1%	9,553	1,319	41,620	75%	9,124	17%	4,487	8%	55,231	1,858	48,822	11,377	4,585	64,784
MH	2018	13	13	1,927	782	12,292	87%	1,809	13%	77	1%	14,178	1,218	48,065	82%	7,584	13%	3,032	5%	58,680	2,001	60,383	9,400	3,110	72,894
NR	2018	2	2	165	122	2,195	70%	901	29%	22	1%	3,118	89	5,155	90%	391	7%	182	3%	5,728	212	7,350	1,292	204	8,846

Table 7. (continued)

		VES:	SELS				UNA	SSOCIATE	ED SCHOO	OLS					AS	SOCIATED	SCHO	OOLS					TOTAL		
FLEET	YEAR	VD	1.00	DAYS		SKIPJ	ACK	YELLO	WFIN	BIC	SEYE	TOTAL		SKIPJA	CK	YELLOV	VFIN	BIGE	ΥE	TOTAL		SKJ	YFT	BET	TOTAL
		YB	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%	241	3%	8	0%	8,288	192	7,861	82%	1,312	14%	421	4%	9,594	564	15,899	1,553	430	17,882
NZ	2011	4	4	461	140	2,726	86%	454	14%	5	0%	3,185	193	5,834	77%	1,177	16%	546	7%	7,557	333	8,559	1,631	552	10,742
NZ	2012	4	4	471	288	5,371	86%	820	13%	26	0%	6,217	162	3,808	81%	639	14%	231	5%	4,678	450	9,179	1,459	257	10,895
NZ	2013	4	4	306	173	4,936	94%	320	6%	9	0%	5,265	120	4,342	80%	737	14%	374	7%	5,453	293	9,278	1,057	384	10,719
NZ	2014	5	5	381	220	4,168	86%	626	13%	29	1%	4,823	163	4,905	86%	550	10%	255	5%	5,710	383	9,073	1,177	284	10,533
NZ	2015	2	2	223	238	4,396	87%	585	12%	83	2%	5,064	42	1,874	87%	210	10%	72	3%	2,157	280	6,270	796	156	7,221
NZ	2016	2	2	141	191	3,883	96%	115	3%	41	1%	4,039	24	1,406	89%	107	7%	68	4%	1,581	215	5,289	222	109	5,620
NZ	2017	1	1	85	16	611	87%	92	13%	1	0%	704	75	2,522	76%	507	15%	272	8%	3,301	91	3,133	599	273	4,005
NZ	2018	1	1	68	43	868	71%	341	28%	7	1%	1,216	42	1,551	88%	119	7%	102	6%	1,772	85	2,419	459	109	2,987
PG	2010	45	50	8,846	5,471	90,861	74%	31,341	25%	1,294	1%	123,496	2,620	56,479	69%	20,026	25%	5,000	6%	81,505	8,099	147,478	51,401	6,304	205,184
PG	2011	49	52	9,270	5,018	71,909	77%	20,688	22%	458	1%	93,055	3,145	60,014	72%	18,966	23%	3,899	5%	82,879	8,176	132,202	39,742	4,376	176,319
PG	2012	51	52	9,636	6,530	99,646	70%	41,619	29%	1,645	1%	142,910	2,978	65,940	71%	21,432	23%	5,148	6%	92,520	9,559	166,101	63,224	6,838	236,163
PG	2013	51	52	9,533	6,862	102,397	72%	37,727	27%	1,910	1%	142,034	2,453	52,171	68%	20,362	26%	4,669	6%	77,202	9,371	155,340	58,568	6,647	220,555
PG	2014	55	53	9,314	6,440	106,399	74%	35,520	25%	1,849	1%	143,768	2,307	67,285	74%	17,485	19%	5,775	6%	90,545	8,773	174,035	53,176	7,668	234,879
PG	2015	53	54	6,684	5,686	107,242	74%	35,623	25%	2,140	2%	145,005	1,602	51,742	75%	13,275	19%	4,461	6%	69,478	7,292	159,002	48,906	6,604	214,512
PG	2016	67	41	8,609	7,279	124,086	66%	60,742	32%	3,162	2%	187,991	2,121	74,401	76%	18,262	19%	5,747	6%	98,410	9,436	199,541	79,531	9,015	288,087
PG	2017	67	58	10,812	10,186	136,187	61%	85,563	38%	3,528	2%	225,278	2,116	53,012	72%	17,433	24%	3,489	5%	73,934	12,406	191,128	104,229	7,136	302,493
PG	2018	56	52	9,632	10,323	160,552	69%	70,407	30%	3,495	2%	234,454	1,956	56,556	74%	16,380	22%	3,333	4%	76,269	12,308	217,638	87,009	6,868	311,515
PH	2010	25	24	4,469	2,289	29,736	63%	16,711	35%	709	2%	47,155	795	16,155	64%	7,235	29%	1,931	8%	25,320	3,186	46,890	24,509	2,715	74,113
PH	2011	25	23	5,302	2,720	32,560	71%	13,170	29%	220	1%	45,949	1,381	23,116	69%	9,525	28%	1,105	3%	33,746	4,192	56,449	23,006	1,358	80,813
PH	2012	21	30	5,575	3,552	39,994	61%	24,710	38%	1,092	2%	65,796	1,652	29,097	66%	12,657	29%	2,086	5%	43,839	5,243	69,622	37,502	3,203	110,327
PH	2013	27	40	5,096	2,667	28,180	54%	22,636	44%	1,002	2%	51,818	1,920	26,346	62%	13,874	33%	2,269	5%	42,489	4,592	54,589	36,554	3,280	94,423
PH	2014	27	40	4,698	3,161	49,266	63%	27,346	35%	1,340	2%	77,952	1,388	18,541	65%	8,494	30%	1,667	6%	28,702	4,563	67,991	35,959	3,030	106,980
PH	2015	23	25	2,876	1,928	25,164	57%	17,939	41%	1,010	2%	44,113	843	16,351	54%	11,473	38%	2,668	9%	30,493	2,778	41,891	29,610	3,759	75,260
PH	2016	17	29	2,337	1,541	26,801	58%	18,889	41%	905	2%	46,595	774	15,203	65%	6,662	29%	1,461	6%	23,326	2,358	42,855	26,017	2,521	71,394
PH	2017	12	22	1,959	849	10,596	52%	9,480	46%	451	2%	20,528	748	6,389	73%	2,272	26%	138	2%	8,799	1,622	17,343	12,060	608	30,011
PH	2018	12	2	457	340	5,177	61%	3,142	37%	140	2%	8,459	152	1,922	66%	872	30%	132	5%	2,926	492	7,102	4,016	272	11,390
SB	2010	5	5	485	95	2,097	60%	1,356	39%	27	1%	3,480	353	6,613	68%	2,795	29%	329	3%	9,737	448	8,710	4,151	356	13,217
SB	2011	5	5	1,006	120	2,273	80%	554	20%	11	0%	2,837	741	13,359	59%	8,743	39%	622	3%	22,724	861	15,632	9,297	633	25,561
SB	2012	5	5	1,094	98	1,573	75%	523	25%	0	0%	2,096	833	15,525	64%	8,285	34%	594	2%	24,404	931	17,098	8,808	595	26,500
SB	2013	5	5	1,093	213	2,960	66%	1,506	33%	44	1%	4,510	664	12,890	64%	6,752	33%	617	3%	20,258	876	15,850	8,258	661	24,769
SB	2014	5	5	1,212	269	3,660	47%	4,197	53%	12	0%	7,869	787	12,097	54%	9,992	44%	465	2%	22,554	1,056	15,758	14,190	477	30,425
SB	2015	8	6	1,343	389	5,665	60%	3,666	39%	52	1%	9,382	787	10,851	56%	8,217	42%	342	2%	19,410	1,176	16,516	11,883	394	28,792
SB	2016	8	8	2,205	1,042	15,500	64%	8,665	36%	206	1%	24,371	1,066	17,582	57%	12,728	41%	715	2%	31,025	2,122	33,285	21,546	940	55,770
SB	2017	10	9	2,068	1,127	13,300	63%	7,560	36%	174	1%	21,034	873	15,031	61%	8,995	37%	648	3%	24,674	2,001	28,333	16,557	823	45,713
SB	2018	10	10	2,066	794	10,661	75%	3,407	24%	116	1%	14,184	1,149	24,715	65%	12,087	32%	1,006	3%	37,808	1,944	35,376	15,494	1,122	51,992

Table 7. (continued)

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		VESS	SELS				UNA	SSOCIATE	ED SCHOO	DLS					AS	SOCIATED	SCHO	OOLS					TOTAL		
FLEET	YEAR	VD	LOG	DAYS		SKIPJ	ACK	YELLO	WFIN	BIG	SEYE	TOTAL		SKIPJA	CK	YELLOV	VFIN	BIGE	YE	TOTAL		SKJ	YFT	BET	TOTAL
		YB	LUG		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	4,842	66%	1,333	18%	1,169	16%	7,344	139	4,862	1,341	1,169	7,372
SV	2011	2	2	268	3	18	21%	67	79%	0	0%	85	185	8,730	72%	1,539	13%	1,872	15%	12,141	188	8,748	1,606	1,872	12,226
SV	2012	2	2	300	4	15	100%	0	0%	0	0%	15	213	9,096	67%	2,173	16%	2,363	17%	13,632	217	9,111	2,173	2,363	13,647
SV	2013	4	4	398	13	316	77%	94	23%	2	1%	412	296	11,308	67%	2,829	17%	2,669	16%	16,805	309	11,624	2,922	2,671	17,217
SV	2014	4	4	485	92	1,974	98%	44	2%	1	0%	2,019	303	11,542	75%	1,953	13%	1,967	13%	15,461	394	13,516	1,997	1,967	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	76	2	0	0%	31	100%	0	0%	31	73	2,924	68%	532	12%	831	19%	4,288	75	2,924	563	831	4,319
SV	2018	1	1	82	6	275	100%	0	0%	0	0%	275	82	3,313	75%	469	11%	634	14%	4,415	88	3,587	469	634	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	8,023	2,365	166	10,554
TV	2011	1	1	311	283	4,362	82%	965	18%	24	0%	5,351	58	1,614	78%	281	14%	171	8%	2,066	341	5,976	1,246	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	2,092	68%	947	31%	18	1%	3,057	59	1,968	76%	347	13%	271	11%	2,586	143	4,060	1,294	289	5,643
TV	2018	1	1	206	159	3,343	78%	893	21%	33	1%	4,269	107	5,590	83%	573	9%	612	9%	6,774	265	8,933	1,466	645	11,043
TW	2010	34	30	7,865	6,413	94,772	77%	26,752	22%	1,085	1%	122,609	1,709	56,102	74%	14,651	19%	5,488	7%	76,241	8,122	150,874	41,403	6,573	198,849
TW	2011	34	31	8,801	4,763	54,626	79%	14,016	20%	395	1%	69,037	2,955	80,034	75%	18,948	18%	7,914	7%	106,897	7,718	134,661	32,965	8,310	175,935
TW	2012	34	33	7,146	4,660	61,155	71%	24,042	28%	876	1%	86,073	2,940	89,696	78%	17,646	15%	7,237	6%	114,579	7,600	150,851	41,689	8,113	200,652
TW	2013	34	34	7,706	6,171	85,080	85%	14,411	14%	1,070	1%	100,562	2,638	82,846	74%	21,414	19%	7,659	7%	111,919	8,809	167,926	35,825	8,730	212,481
TW	2014	34	36	6,845	5,749	102,565	87%	14,423	12%	1,217	1%	118,205	2,654	93,913	79%	17,824	15%	7,215	6%	118,952	8,404	196,478	32,247	8,432	237,157
TW	2015	34	34	5,141	4,639	79,784	76%	23,576	23%	1,391	1%	104,751	1,785	71,320	80%	13,195	15%	4,983	6%	89,498	6,424	151,104	36,770	6,374	194,249
TW	2016	34	31	5,235	4,751	83,565	74%	28,551	25%	1,411	1%	113,526	1,500	57,082	78%	11,909	16%	4,521	6%	73,513	6,252	140,648	40,460	5,932	187,039
TW	2017	31	31	5,435	5,142	64,930	68%	29,506	31%	1,025	1%	95,461	1,897	54,852	76%	13,460	19%	4,285	6%	72,596	7,040	119,812	42,974	5,311	168,098
TW	2018	27	30	5,169	4,632	79,378	82%	16,645	17%	900	1%	96,924	2,262	77,146	79%	16,104	16%	4,885	5%	98,135	6,895	156,525	32,750	5,785	195,059
US	2010	37	37	8,220	6,331	110,720	83%	21,321	16%	767	1%	132,809	2,397	87,200	78%	17,874	16%	7,262	7%	112,336	8,738	198,140	39,335	8,049	245,524
US	2011	37	36	8,048	3,008	47,080	79%	12,589	21%	273	1%	59,943	3,401	110,965	77%	21,309	15%	11,023	8%	143,297	6,409	158,045	33,898	11,296	203,240
US	2012	39	40	8,789	5,622	99,374	80%	23,590	19%	826	1%	123,790	3,464	109,159	80%	18,952	14%	7,801	6%	135,911	9,088	208,580	42,548	8,630	259,759
US	2013	40	42	8,380	5,028	95,967	91%	9,661	9%	458	0%	106,086	3,152	110,864	75%	24,957	17%	12,252	8%	148,074	8,183	206,920	34,627	12,726	254,273
US	2014	40	40	9,069	6,268	118,676	85%	20,579	15%	641	1%	139,896	3,717	143,424	83%	20,077	12%	9,608	6%	173,109	9,987	262,100	40,656	10,249	313,005
US	2015	39	39	6,988	5,904	110,355	88%	14,734	12%	764	1%	125,853	2,052	96,939	86%	10,565	9%	4,722	4%	112,226	7,956	207,294	25,298	5,486	238,079
US	2016	37	34	5,571	3,333	76,477	88%	9,475	11%	563	1%	86,515	2,177	92,554	81%	14,999	13%	7,068	6%	114,621	5,511	169,042	24,478	7,632	201,152
US	2017	34	34	5,623	2,652	45,901	77%	12,996	22%	432	1%	59,328	2,442	84,020	78%	15,863	15%	7,238	7%	107,121	5,095	129,921	28,859	7,670	166,449
US	2018	34	35	5,723	2,809	54,385	79%	13,999	20%	462	1%	68,846	2,894	101,552	80%	15,921	13%	9,767	8%	127,239	5,704	155,937	29,920	10,229	196,086

Table 7. (continued)

		,											_		_										
		VES	SELS	S	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)

	VESS	SELS		UNASSOCIATED SCHOOLS								ASSOCIATED SCHOOLS								TOTAL				
YEAR	YB	LOG	DAYS		SKIPJ	ACK	YELLO	WFIN	BIG	EYE	TOTAL		SKIPJA	СК	YELLOV	VFIN	BIGE'	ΥE	TOTAL		SKJ	YFT	BET	TOTAL
	10			SETS	МТ	%	МТ	%	МТ	%	MT	SETS	MT	%	МТ	%	МТ	%	МТ	SETS	MT	МТ	МТ	МТ
2010	276	265	52,165	38,149	690,122	76%	209,791	23%	8,067	1%	907,981	12,979	420,786	74%	105,731	19%	43,905	8%	570,422	51,407	1,115,121	317,801	52,306	1,485,228
2011	279	269	58,605	30,073	428,506	76%	130,827	23%	3,220	1%	562,553	21,750	623,763	74%	148,742	18%	66,158	8%	838,664	51,975	1,054,051	280,135	69,464	1,403,649
2012	285	286	54,352	36,078	623,002	74%	204,809	24%	8,474	1%	836,284	20,414	608,613	77%	131,146	17%	53,299	7%	793,057	56,631	1,233,323	336,460	61,893	1,631,676
2013	297	304	55,698	38,337	656,011	80%	150,113	18%	8,949	1%	815,076	18,395	569,537	73%	150,828	19%	61,148	8%	781,511	56,836	1,227,285	301,889	70,301	1,599,476
2014	308	314	53,788	38,225	745,326	79%	190,730	20%	9,766	1%	945,821	18,605	646,515	78%	125,723	15%	54,323	7%	826,559	56,913	1,393,486	317,168	64,408	1,775,061
2015	306	293	42,493	33,488	694,822	80%	167,553	19%	9,529	1%	871,903	13,662	560,532	81%	99,565	14%	35,936	5%	696,034	47,287	1,259,357	268,645	45,736	1,573,738
2016	293	268	44,206	31,879	654,133	75%	208,411	24%	10,173	1%	872,713	14,278	537,932	77%	112,121	16%	44,933	6%	694,987	46,335	1,196,416	322,374	55,429	1,574,219
2017	282	283	48,113	33,258	526,247	68%	240,698	31%	8,840	1%	775,784	16,998	515,495	76%	116,741	17%	45,779	7%	678,016	50,525	1,047,121	360,216	54,906	1,462,242
2018	272	257	44,994	32,823	629,790	77%	182,774	22%	9,911	1%	822,476	18,217	666,277	80%	117,201	14%	49,540	6%	833,013	51,233	1,300,432	302,053	59,851	1,662,336

- 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)												
ILLLI	2010	2011	2012	2013	2014	2015	2016	2017	2018				
CK	13,422	16,809	32,818	16,880	10,880	11,761	25,750	20,672	21,581				
CN	558,006	741,473	838,710	653,046	554,203	856,023	643,894	490,233	808,126				
FJ	27,971	91,025	167,297	135,836	128,960	83,827	87,789	45,608	28,846				
FM	84,884	94,564	110,591	85,598	123,995	149,576	158,253	167,500	362,863				
JP	591,056	544,105	513,557	453,786	393,618	347,416	283,968	286,896	302,504				
KI	0	19,487	50,227	27,577	23,868	36,636	56,821	37,121	40,604				
KR	728,899	803,678	771,103	626,874	603,157	506,797	586,401	473,107	567,738				
МН	16,828	16,763	20,679	6,286	0	585	63,220	138,797	104,151				
PF	0	242	147	246	437	18	1,122	13,033	5,189				
PG	24,589	51,692	40,188	14,849	19,232	7,883	4,492	2,789	35,323				
PW	0	0	0	0	0	0	626	7,503	89,094				
SB	66,738	12,757	5,497	3,942	421,448	560,754	5,396	9,821	185,859				
TV	3,436	26,925	69,189	16,219	16,809	18,844	12,927	15,818	12,376				
TW	1,248,359	1,547,615	1,710,738	1,237,662	1,031,881	1,207,708	1,291,770	1,385,543	1,058,135				
US	127,121	135,232	152,740	128,813	147,964	181,519	240,527	216,609	157,612				
VU	76,507	89,530	128,383	186,203	138,404	290,629	213,255	128,077	113,624				
	3,567,816	4,191,898	4,611,865	3,593,816	3,614,857	4,259,975	3,676,209	3,439,127	3,893,624				

- 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°N-10°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

- 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.

CCM	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.