SCIENTIFIC COMMITTEE
TWELFTH REGULAR SESSION

Bali, Indonesia
3-11 August 2016

ANNUAL REPORT TO THE COMMISSION
PART 1: INFORMATION ON FISHERIES, RESEARCH, AND STATISTICS

WCPFC-SC12-AR/CCM-04

COOK ISLANDS

Ministry *of* Marine Resources

GOVERNMENT OF THE COOK ISLANDS

WESTERN AND CENTRAL PACIFIC FISHERIES COMMISSION

Twelfth Regular Session of the Scientific Committee

August 3 – 11, 2016

Bali, Indonesia

COOK ISLANDS

Annual Fisheries Report

Scientific data was provided to the Commission in accordance with the decision relating to the provision of scientific data to the Commission by 30 April 2016.	**YES**

CONTENTS

1. Abstract

The 2015 Cook Islands National fleet consisted of twelve longline and three bunker vessels operating within the WCPFC Convention Area, south of the equator. Overall fishing effort in number of hooks increased slightly by only 1% from 2014 however the total catch of primary species[1] (1,906mt) decreased by 18%. Albacore accounted for 61% (1,167mt) of the total longline catch within the Convention Area, followed by yellowfin tuna at 18% (339mt) and bigeye at 8% (151mt). All National Fleet longline catch estimates are based on 100% logsheet coverage.

No vessels carried out marlin specific targeting and all catches of marlin species were taken as by-catch in the albacore longline fishery. Blue marlin was the most caught billfish species in 2015. 152mt of fish was reported in the artisanal fishery which spans across all 12 inhabited islands of the Cook Islands. Yellowfin tuna is the dominant catch of the artisanal fishery and is mostly caught by trolling, handlining and spearfishing. Artisanal fishery data is un-raised and based on reported catch only.

2015 was the first year the Cook Islands authorised foreign purse seine vessels in addition to the US Multilateral Treaty. The total purse seine catch estimate in the Cook Islands EEZ was 18,496mt. The Cook Islands has declared a purse seine limit for its EEZ of 1,250 days.

The retention of any shark or shark part within the Cook Islands EEZ is prohibited. Minimal shark retention is therefore taken by flagged vessels fishing in areas beyond national jurisdiction, with the exception of silky sharks and oceanic white tip sharks which is prohibited.

[1] Primary species for longline gear is described as albacore, yellowfin, bigeye, pacific bluefin and skipjack tuna, black, blue and striped marlin and swordfish

2. Background

In 2015, the Cook Islands tuna fishery consisted of longline fishing vessels targeting tuna and tuna like species. There is a significant artisanal fishery operating out of each of the inhabited islands and a historical troll fishery that existed in the mid 2000's. The majority of the longline fishing activity is concentrated in the Northern Cook Islands waters, in the areas north of 15°S. Some longline fishing also takes place in other areas of national jurisdiction within the WCPFC Convention Area. Historically purse seine fishing has been conducted in the CK EEZ by US Treaty vessels only. However, in 2015, the Cook Islands entered into a number of purse seine bilateral agreements with Korea and New Zealand. 2015 was the first year that purse seine fishing occurred outside the scope of the US Treaty. Negotiations are also currently underway for a Sustainable Fisheries Partnership Agreement with the European Union.

Albacore tuna is the main target species for Cook Island flagged longline vessels fishing in the Convention Area. These vessels are generally based out of foreign ports in Pago Pago and Apia. Their catch is mostly unloaded to the canneries. They may also unload some by-catch species in Apia, Rarotonga, and Cook Islands for the domestic market, or export via local Cook Island agents.

Two small locally based vessels operate out of Rarotonga and target a range of species that caters mainly for the local market with some exports to Japan, New Zealand and the USA. These vessels are below 80mt GRT and operate typically within 100nm of Rarotonga.

As of December 2012, the entire Cook Islands EEZ was declared a shark sanctuary, prohibiting the targeting or capturing of any shark species.

3. FLAG SATE REPORTING

3.1 Catch and Effort Trends

Total longline effort in the WCPFC-CA is approximately 6.2 million hooks (Table 1a), with approximately 4.8 million hooks of effort attributed to the CK EEZ (Table 1b). The total 2015 National Fleet catch of tuna and billfish within the Convention Area has decreased from previous years and is below the 2011-2015 average (Figure 1). The peak in total catch and effort during 2012 is an indication of the 17 additional chartered longline vessels introduced for a bigeye and swordfish Exploratory Program (Figure 1). The vast majority of Cook Islands fleet catches are taken within the Cook Islands EEZ with 23% taken beyond the EEZ in 2015 (Table 1b).

Albacore remains the primary catch species of the National Fleet within the WCPFC-CA, comprising 61% of the total 2015 catch, indicating a 6% increase in albacore catch from the previous year. This may be attributed to the addition of two longliners from the Cook Islands National fleet which were under charter in 2014. Yellowfin tuna catch composition decreased by 5% from 2014 to 2015, while bigeye catch remained at 8% of the total National Fleet catch (Figure 2).

[The Cook Islands artisanal fleet operates out of each inhabited island. Yellowfin tuna is the main pelagic target species of the artisanal fishery with more than 92mt of YFT caught in 2015 (Table 1a). Trolling, handlining, and spearfishing are the most common fishing methods used by artisanal

fishers. There is no mandate for artisanal fishers to provide catch and effort data, therefore all artisanal data is un-raised and is based on reported catches from each of the twelve inhabited Cook Islands where artisanal fishing takes place.]

Wahoo is the most dominant catch of non-target tuna species of the longline fishery totalling 41mt, and the second most caught species (Table 2) in the artisanal fishery following YFT (Table 1a). Based on available observer data, twelve interactions with species of special interest (turtles, sharks, seabirds and marine mammals) were recorded during National Fleet LL trips in 2015.

Table 1a. Annual catch in metric tonnes and effort estimates for the National Fleet by gear and primary species in the WCPFC Convention Area, 2011 – 2015. Longline catch estimates are raised using VMS data and nominal artisanal catches are not raised.

Year	Gear	Effort	ALB	BET	YFT	SKJ	PBF	BLM	BUM	MLS	SWO
2011	LL	69,704 Hhks	2,182	925	394	135	0	24	39	16	41
2012	LL	156,684 Hhks	2,757	1624	693	308	0	37	93	28	140
2013	LL	62,244 Hhks	1,354	208	346	40	0	11	35	12	16
2014	LL	53,644 Hhks	1,186	184	504	137	0	11	30	19	14
	Troll	9,200 Hk Hrs	21	0	0	0	0	0	0	0	0
	Artisanal	32,349 Hrs	2.54	0.28	116.1	15.67	0	0.2	6.851	0	0.142
2015	LL	61,826 Hhks	1,167	151	339	86	0	15	36	19	18
	Artisanal	18,713 Hrs	1.27	0.32	92.2	11.33	0	0	0.8	0	0

Table 1b. Annual catch estimates in metric tonnes for the National Fleet by gear and primary species within and beyond national jurisdiction in 2015. Operational logsheet data is raised using VMS data. Nominal artisanal data is not raised.

Area	Gear	Effort	ALB	BET	YFT	SKJ	PBF	BLM	BUM	MLS	SWO
CK EEZ	LL	48,218 Hhks	936	80	228	84.6	0	15	33.4	18.8	17
	Artisanal	18,713 Hrs	1.27	0.32	92.2	11.33	0	0	0.8	0	0
Beyond CK EEZ	LL	10,112 Hhks	34.59	3.155	13.88	1.405	0.015	0	2.6	0.15	0.92

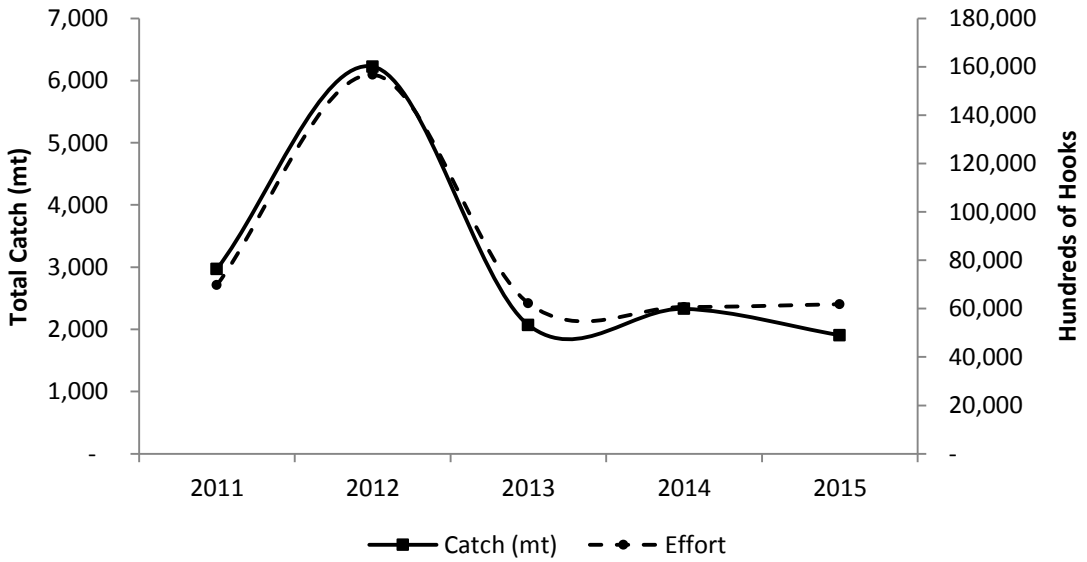

Figure 1. Historical total annual catch estimates for the National Longline Fleet for the WCPFC Convention Area, 2011 – 2015.

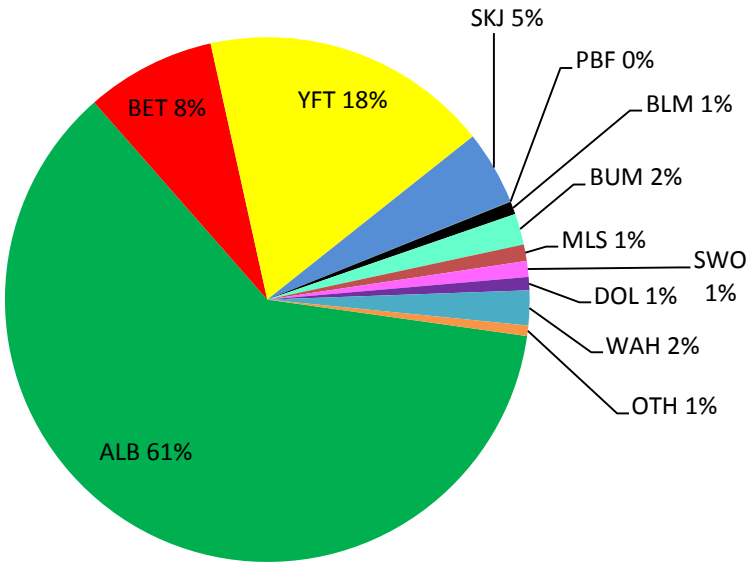

Figure 2. Total catch composition of the National Longline Fleet fishing within the WCPFC-CA in 2015.

Table 1c. Annual un-raised catch estimates in metric tonnes for the National Longline Fleet, by primary species and broad ocean area for 2011-2015.

Area	Year	ALB	BET	YFT	SKJ	PBF	BUM	BLM	MLS	SWO
1. WCPFC Convention Area	2011	2,008.63	276.30	515.70	51.69	0	18.26	9.87	6.175	16.34
	2012	2,967.19	1,603.35	713.10	310.97	1.25	95.44	29.43	36.352	124.383
	2013	1,341.04	200.20	337.83	38.74	0.09	33.47	13.33	11	17.578
	2014	1,186.20	184.15	504.95	137.90	0.37	30.93	11.33	19.55	14.91
	2015	1,167	151	339	86	0	15	36	19	18
2. WCPFC Convention Area (Sth of Equator)	2011	2,008.63	276.30	515.70	51.69	0	18.26	9.87	6.175	16.34
	2012	2,967.19	1,603.35	713.10	310.97	1.25	95.44	29.43	36.352	124.383
	2013	1,341.04	200.20	337.83	38.74	0.09	33.47	13.33	11	17.578
	2014	1,186.20	184.15	504.95	137.90	0.37	30.93	11.33	19.55	14.91
	2015	1,167	151	339	86	0	15	36	19	18
3. WCPFC Convention Area (Nth of Equator)	2011	-	-	-	-	-	-	-	-	-
	2012	0.735	56.371	4.515	0	0.024	2.672	0	0.446	5.852
	2013	-	-	-	-	-	-	-	-	-
	2014	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-
4. WCPO Area	2011	2,008.63	276.30	515.70	51.69	0	18.26	9.87	6.175	16.34
	2012	2,967.19	1,603.35	713.10	310.97	1.25	95.44	29.43	36.352	124.383
	2013	1,341.04	200.20	337.83	38.74	0.09	33.47	13.33	11	17.578
	2014	1,186.20	184.15	504.95	137.90	0.37	30.93	11.33	19.55	14.91
	2015	1,167	151	339	86	0	15	36	19	18
5. WCPO (Sth of Equator)	2011	2,008.63	276.30	515.70	51.69	0	18.26	9.87	6.175	16.34
	2012	2,967.19	1,603.35	713.10	310.97	1.25	95.44	29.43	36.352	124.383
	2013	1,341.04	200.20	337.83	38.74	0.09	33.47	13.33	11	17.578
	2014	1,186.20	184.15	504.95	137.90	0.37	30.93	11.33	19.55	14.91
	2015	1,167	151	339	86	0	15	36	19	18
6. WCPO (Nth of Equator)	2011	-	-	-	-	-	-	-	-	-
	2012	0.735	56.371	4.515	0	0.024	2.672	0	0.446	5.852
	2013	-	-	-	-	-	-	-	-	-
	2014	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-
7. North Pacific Ocean	2011	-	-	-	-	-	-	-	-	-
	2012	0.735	56.371	4.515	0	0.024	2.672	0	0.446	5.852
	2013	-	-	-	-	-	-	-	-	-
	2014	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-
8. South Pacific Ocean	2011	2,008.63	276.30	515.70	51.69	0	18.26	9.87	6.175	16.34
	2012	2,967.19	1,603.35	713.10	310.97	1.25	95.44	29.43	36.352	124.383
	2013	1,341.04	200.20	337.83	38.74	0.09	33.47	13.33	11	17.578
	2014	1,186.20	184.15	504.95	137.90	0.37	30.93	11.33	19.55	14.91
	2015	1,167	151	339	86	0	15	36	19	18

Table 2. Annual catch estimates in metric tonnes for the National Fleet in the WCPFC Convention Area for non-target and by-catch species (including key shark species) for 2015. Shark estimates are raised using logsheet catch estimates; nominal artisanal catches are not raised.

Gear	SSP	SFA	DOL	LAG	OIL	WAH	BSH	FAL	OCS	MAK	THR	SPZ	RHN
LL	3.64	0.44	15.5	4.27	0.43	40.8	0	0	0	0	0	0	0
Artisanal	0.012	0.2	10.75	0	0.64	15.3	0	0	0	0	0	0	0

3.2 Catch and Effort Spatial Distribution

In 2015, around 75% of all National Longline Fleet fishing effort took place within the Cook Islands EEZ. This is substantial decrease in in-zone effort of 22% of the National Fleet as two longliners were licenced to fish in both Tokelauan and Samoan EEZs. In zone effort from the National Fleet is quite distinct between the northern and southern fisheries delineated around 15°S. There is a prominent band of fishing effort from the North West and northern central zones of the EEZ with increased yellowfin and albacore catch west of Pukapuka Island. This pattern is typically attributed to the fact that most Cook Island flagged vessels operate out of Pago Pago, American Samoa conducting shorter, more frequent trips to the CK EEZ and therefore not travelling very far into the zone. Approximately 13% of the total national fleet fishing catch was taken within Tokelauan waters and a further 11% in Samoan waters. A small amount of effort around Rarotonga is ascribed by the small domestic fleet that operates out of Avatiu (Figure 3a).

2014 annual catch and effort distribution (Figure 3b) follows a similar spatial trend in zone to that of 2013, with most effort being concentrated within the CK EEZ and strongly delineated between the north and south, as well as some catch in Niue EEZ. The swordfish and bigeye exploratory program in 2012 however, had a much larger catch of bigeye, both in zone and on the high seas (Figure 3c). This is because of the arrangement that allowed all catch of the Chinese charter vessels be attributed to the Cook Islands during their 2012 licencing period.

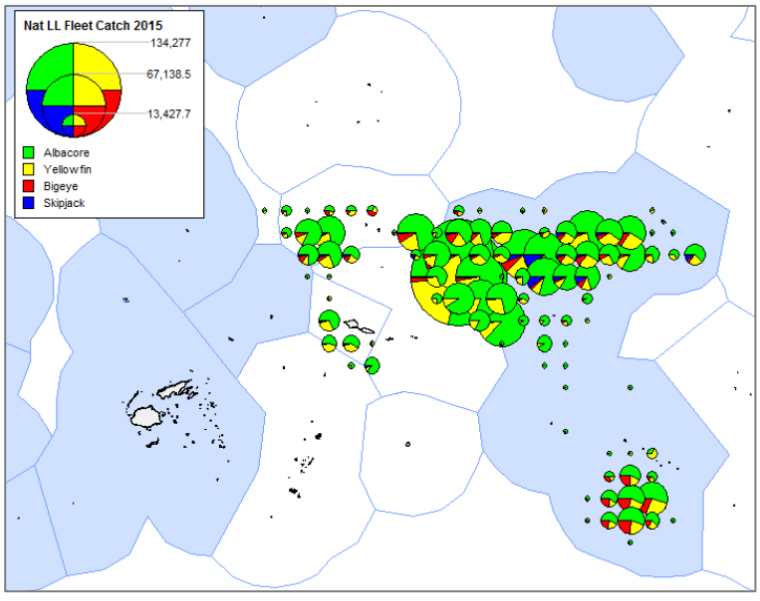

Figure 3a. Catch distribution (1° x 1°) of key tuna species for the National Longline Fleet within the WCPFC-CA 2015.

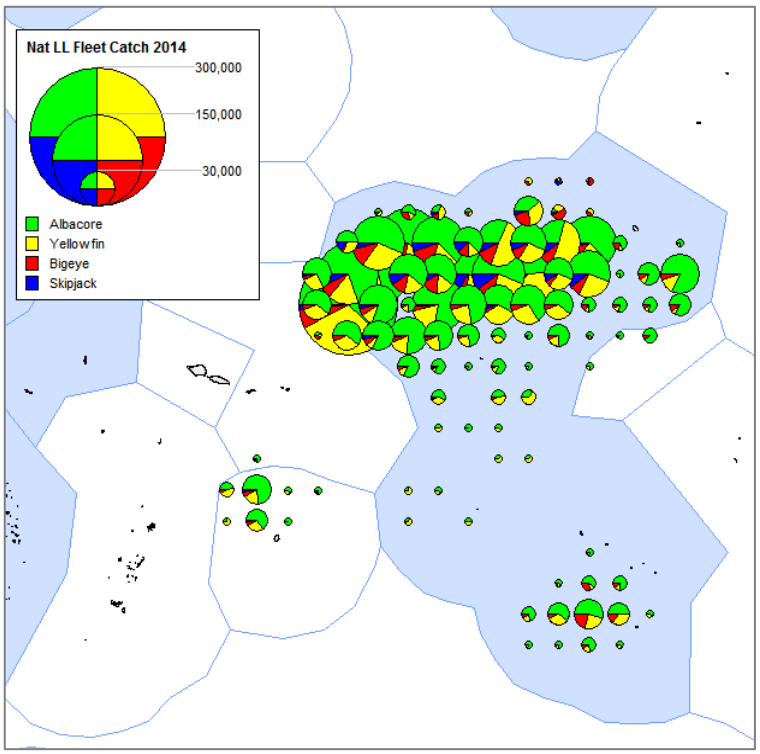

Figure 3b. Catch distribution (1° x 1°) of key tuna species for the National Longline Fleet within the WCPFC-CA 2014.

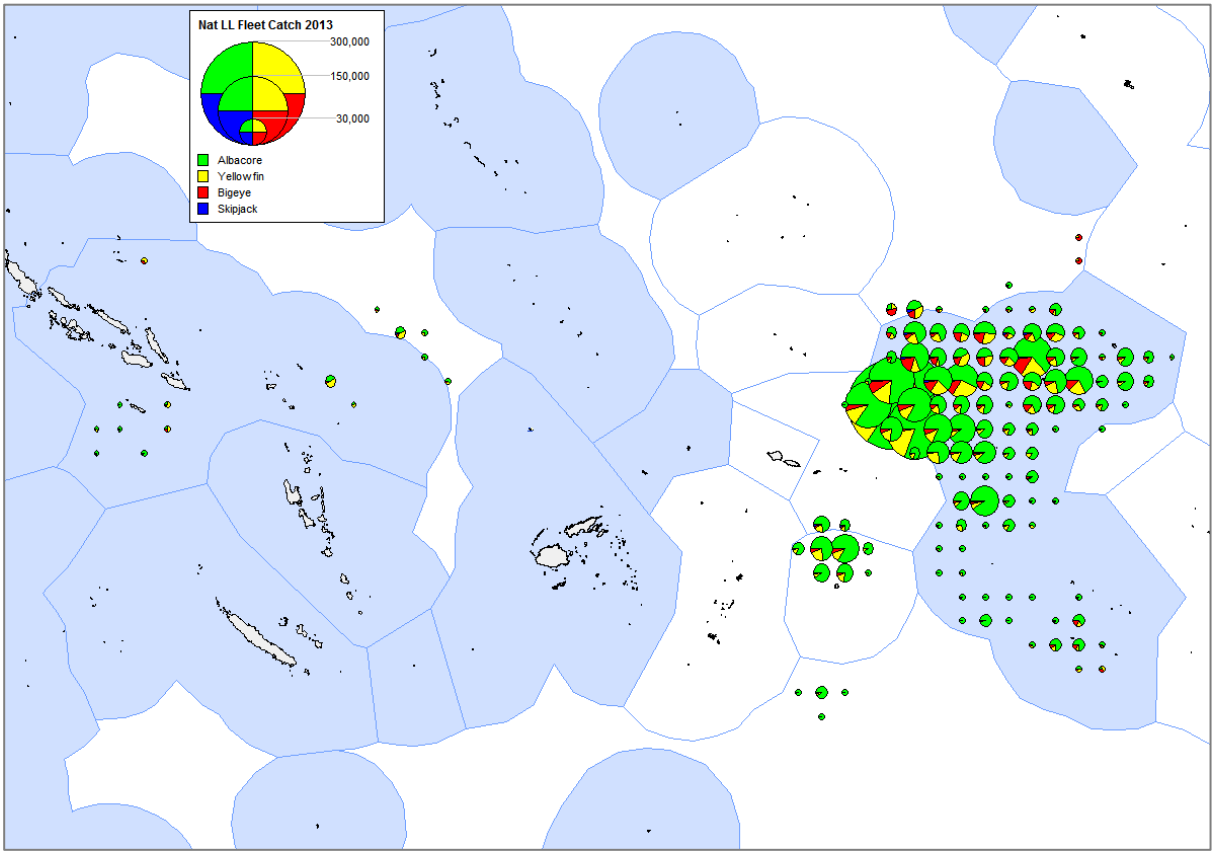

Figure 3c. Catch distribution (1° x 1°) of tuna species for the National Longline Fleet within the WCPFC-CA 2013.

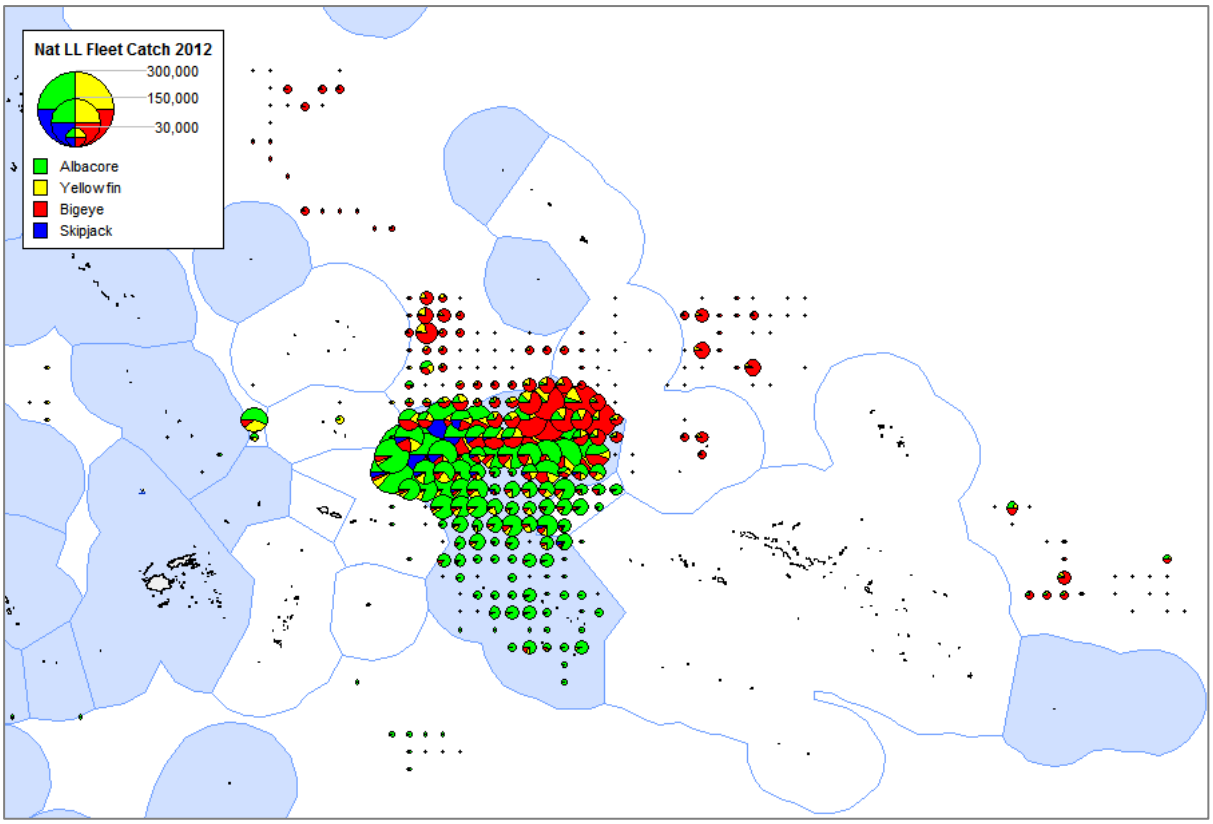

Figure 3d. Catch distribution (1° x 1°) of tuna species for the National Longline Fleet within the WCPFC-CA 2012.

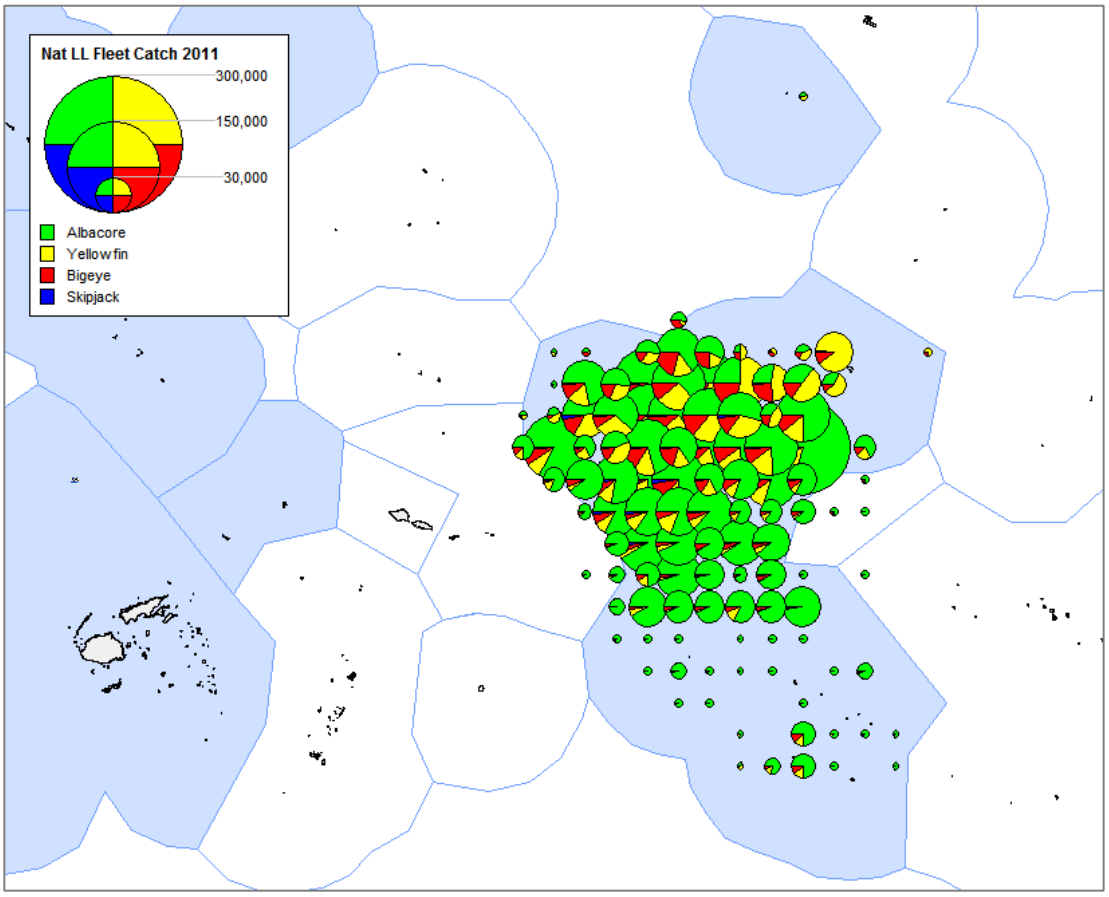

Figure 3e. Catch distribution (1° x 1°) of tuna species for the National Longline Fleet within the WCPFC-CA 2011.

3.3 Licencing and Fleet Structure

Currently, the Cook Islands commercial longline fishery is limited by a cap of 50 vessels authorised to fish within the EEZ. In 2015, the Cook Islands National fleet consisted of twelve longline vessels and three bunker vessels operating within the WCPFC-Convention Area. All twelve longline vessels were active and authorised to fish within the Convention Area. Among these, two domestically based vessels were licenced to fish within national jurisdiction only. Eight vessels were authorised to fish both within the Cook Islands EEZ and the High Seas, though rarely fished beyond the waters of national jurisdiction, and an additional two longline vessels were authorised to fish on the high seas and were licenced in both Samoa and Tokelau. The majority of the National Fleet vessels were between 51 and 200 GRT (Table 3). All National Fleet vessels licenced to fish in zone are prohibited to fish within 12nm (territorial seas) of all islands and 24nm of Rarotonga. Purse seine vessels are prohibited to fish within 24nm of all islands and 48nm of Rarotonga. A total of 315 artisanal vessels actively fished throughout the Cook Islands in 2015.

Table 3. Number of National Fleet vessels by gear, size and authorised area, active within the WCPFC Convention Area 2011-2015.

Year	00-50 GRT		51-200 GRT		201-500 GRT	500+ GRT		Total
	LL	Artisanal	LL	Troll	LL	LL	Bunker	
2011	2	n/a	19		3	0		24
2012	2	286	19		3	0		24
2013	2	358	19		3	0		24
2014	0	420	12	1	1	0		14
2015	0	315	10		1	1	3	15

4. COASTAL SATE REPORTING

4.1 Catch and Effort Trends

The Cook Islands purse seine fishery has been limited to 1250 days as notified to the WCPFC. Foreign flagged longline vessel catch within the CK EEZ totalled 4,916mt (Table 4), comprising 77% of the total in zone catch. Cook Island flagged vessels accounted for the remaining 23% of the total in zone catch (Figure 4a). Again, albacore comprised 53% of the foreign flagged in zone catch composition, followed by yellowfin tuna (27%) and bigeye (11%) (Figure 4b). The US Fleet was the dominant purse seine fleet taking 66% of the overall purse seine catch followed by Korea (30%), Kiribati (4%) and New Zealand (<1%) (Figure 4c). Foreign flagged purse seine vessel catch totalled 18,496mt (Table 4). The catch was dominated by skipjack tuna, comprising 96% of the total purse seine catch (Figure 4d).

Table 4. Annual catch estimates in metric tonnes for all licensed foreign vessels by gear within the Cook Islands EEZ, for tuna and billfish species in 2015. Operational logsheet data was raised using VMS data, with 72% logsheet coverage for foreign flagged longline vessels and 76% logsheet coverage for foreign purse seine vessels.

Foreign Vessels	Gear	Effort	ALB	BET	YFT	SKJ	PBF	BLM	BUM	MLS	SWO	Total (inc OTH)
CK EEZ	LL	107,654 Hhks	2,618	530.5	1,315	85	0.5	5.8	165.5	5	26	4,916
	PS	353 days	0	555	96.5	17,827	0	1	1	0	0	18,496

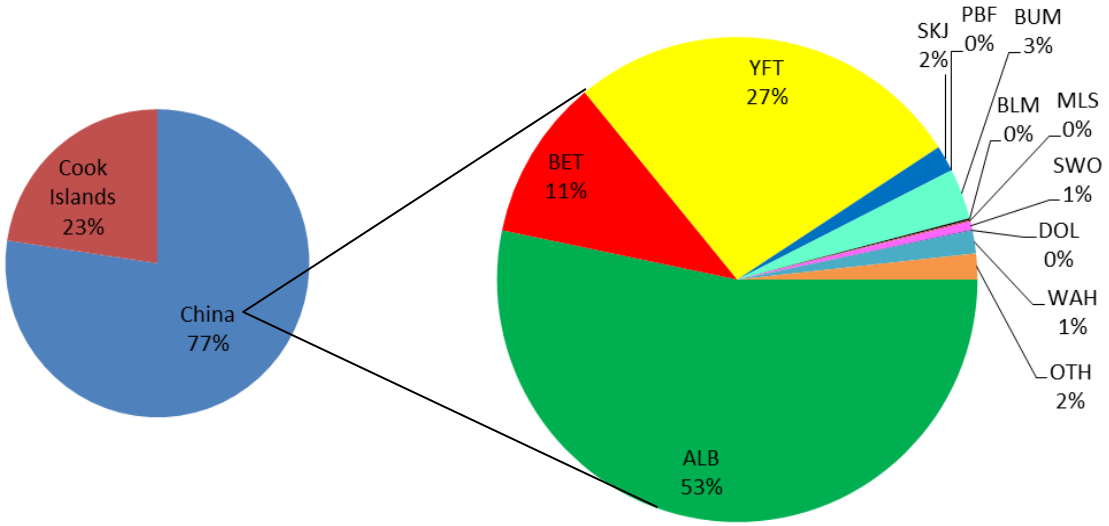

Figure 4a (left) and 4b (right). Longline catch composition within the CK EEZ by flag (left) and by Chinese fleet and species (right).

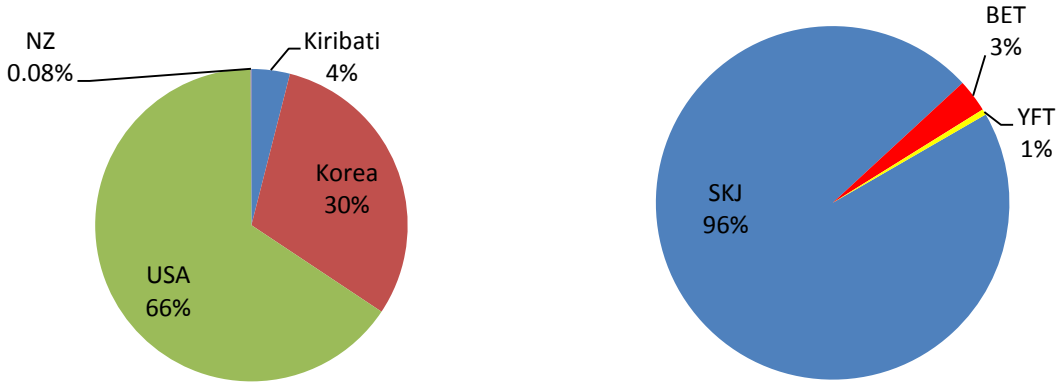

Figure 4c (left) and 4d (right). Purse seine catch composition within the CK EEZ by flag (left) and species (right).

A total of fifty-one Non-Cook Island flagged vessels were licenced and authorised to operate within the Cook Islands EEZ during 2015; 26 longliners and 25 purse seiners (Table 5). Foreign flagged fishing in 2015 was undertaken by two Chinese longline companies, two Korean purse seine companies and a New Zealand purse seine company. The Cook Islands is also a party to the US Multilateral Treaty however purse seine vessels under this agreement are not included here.

Table 5. Number of active Non-Cook Island flagged vessels by gear authorised to operate within the Cook Islands EEZ by size in 2015.

GRT Range	Longline	Carrier	Bunker	Purse seine	Total
0-10	-	-	-	-	-
10-50	-	-	-	-	-
50-200	7	-	-	-	7
200-500	19	-	-	-	19
500+	-	-	-	25	-
Total	**26**	**-**	**-**	**25**	**51**

5. Socio-economic Factors

High operating costs out of Rarotonga continue to hinder domestic industry growth. Only two small scale domestic fresh fish vessels operate out of and unload to local markets in Rarotonga. Some Chinese flagged vessels continue to operate out of Pago Pago but will unload to shipping containers in the port of Rarotonga. Here, their catch is transhipped from vessel to shipping container and shipped back to American Samoa. The local economy benefits from the purchase of fuel; temporary labour to assist with the unloading's, purchase of provisions and associated port fees. These vessels are also permitted to seasonally sell frozen by-catch to local businesses. This activity allows the Ministry of Marine Resources to conduct routine port side boarding and inspections and port sampling of catches.

6. Future Prospects of the Fishery

For the past two years, the Ministry of Marine Resources has been exploring the mechanisms for introducing a quota management system (QMS) applicable to albacore and bigeye in the longline fishery. A number of technical working groups that included support from FFA and SPC were conducted in 2014 to help develop a QMS for the Cook Islands. In 2015 steps were made to begin aligning all fishing licences to the calendar year (Jan 1st – Dec 31st) in anticipation of the QMS. A new Marine Resources Bill has been developed and is set to be tabled in Parliament in the coming months. New regulations to the longline fishery are also being drafted, with an accompanying Fishery Plan. The QMS system is now planned for implementation in 2017 pending legislative approval.

7. Research and Statistics

7.1 Status of Tuna Fishery Data Collection Systems

a) Logsheet data collection and verification

100% logsheet coverage was achieved for the National longline fleet in 2015. Most logsheets are received as original copies via the post after the completion of a trip or, received in electronic format via email either weekly or after the completion of a trip (scanned). Unloading forms are received by most foreign flagged vessels however some reinforcement is still required for the National Fleet in submitting additional data from time to time. Four National Fleet vessels participated in electronic reporting trials using the SPC eTUNAlog software in 2015. So far this trial is working well for the two domestic vessels using the program in Rarotonga. These vessels undertake short trips (< 1 week) and so the MMR is able to provide feedback and training more regularly. The two trial vessels operating out of Pago Pago spend longer at sea and are consequently more difficult to provide timely feedback to. The trials are on-going into 2016. The SPC OFP also rolled out the implementation of TUFMAN2 to the Cook Islands in December. This has greatly improved the data reception, checking and sharing capacity of the Cook Islands. TUFMAN2 has also supported the eTUNAlog trials.

b) Observer Programme

The Cook Islands National Observer Program has grown significantly in recent years. In 2015 there were 5 Non-Cook Island observers, 4 of which were based out of Apia and 1 in Rarotonga. A total of 245 observed sea days were achieved on Cook Island flagged vessels in 2015, within the WPCFC-CA with an overall coverage of approximately 12.8% (Table 6). Almost 14% of this coverage applies to one vessel that fished beyond the CK EEZ.

Table 6. Estimated annual coverage of operational catch and effort, port sampling and observer data for the National Fleet, by gear, active in the WCPFC Convention area for 2011 – 2015.

Year	Operational Catch & Effort	Port Sampling	Observer Data (days at sea)
2011	77%	3.5%	1.3%
2012	82.5%	10.4%	5.7%
2013	97%	16%	8.9%
2014	97%	23%	9.8%
2015	100%	35%	12.8%

c) Port Sampling Programme

All port sampling occurs in Rarotonga on the small domestic fresh fish longliners that average 2-3mt per trip. Approximate coverage of port sampling of the Domestic National Fleet in 2015 was 35% (Table 6). For the purposes of QMS verification, port sampling coverage will need to significantly increase in the foreign ports where our licenced vessels choose to unload, namely Pago Pago, Apia, Suva and Papeete.

d) Unloading/Transhipment

Four Chinese flagged longliners transhipped in the port of Avatiu, Rarotonga in 2015, unloading frozen albacore, bigeye and yellowfin from the vessel to shipping containers. Approximately 25% of these transhipments in Rarotonga were fully monitored by Marine Resources staff.

7.2 Research Activities

No major research activities were carried out during 2015.

Appendix 1

CMM Reporting 2015

<table>
<tr><th>CMM Reference</th><th>Description</th><th>Response</th></tr>
<tr><td>CMM 05-03</td><td>North Pacific Albacore</td><td>NOT APPLICABLE
Cook Islands flagged vessels did not fish North of the equator in 2015.</td></tr>
<tr><td>CMM 06-04</td><td>South West Striped Marlin</td><td>Striped Marlin is not specifically targeted by Cook Islands flagged vessels. All catches of MLS were reported as by-catch in the albacore longline fishery.
Nine vessels caught 373 MLS, totalling 16.4mt in the Convention Area south of 15˚S.</td></tr>
<tr><td>CMM 09-03</td><td>South West Pacific Swordfish</td><td>The Cook Islands have no vessels specifically targeting swordfish; all catch of swordfish are taken as by-catch.
Two vessels flagged to the Cook Islands caught 185 Swordfish totalling 10.2mt in the Convention Area South of 20˚S.</td></tr>
<tr><td>CMM 09-06</td><td>Transhipments</td><td>NOT APPLICABLE
Vessels flagged to CK did not conduct any transhipment activities within the Convention Area.</td></tr>
<tr><td>CMM 10-05</td><td>South Pacific Albacore</td><td>Two CK flagged vessels fishing South of 20˚S caught 2,726 South Pacific Albacore, weighing 53.08mt in total.</td></tr>
<tr><td>CMM 10-07</td><td>Sharks</td><td>After the establishment of a shark sanctuary in late 2012, the retention of shark by any vessel in the Cook Islands EEZ is prohibited. However, some shark retention may arise from CK flagged vessels fishing on the high seas or in other areas of national jurisdiction.
The total number of observed sharks caught by longliners as stated in the observer report is 314. Two were retained and 312 were discarded in the year 2015. Observer data coverage on CK flagged LL vessels in 2015 was 12.8%.

<table>
<tr><th colspan="4">Source: Observer Data – 12.8% coverage</th></tr>
<tr><th>Species</th><th>Number</th><th>Retained</th><th>Discarded</th></tr>
<tr><td>LONG FINNED MAKO SHARK</td><td>8</td><td>0</td><td>8</td></tr>
<tr><td>COOKIE CUTTER SHARK</td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>BIGEYE THRESHER SHARK</td><td>3</td><td>1</td><td>2</td></tr>
<tr><td>DEVIL MANTA RAY (Mobula nei)</td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>SILKY SHARK</td><td>67</td><td>0</td><td>67</td></tr>
<tr><td>SILVER TIP SHARK</td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>PELAGIC STING-RAY</td><td>153</td><td>0</td><td>153</td></tr>
<tr><td>OCEANIC WHITE-TIP SHARK</td><td>26</td><td>0</td><td>26</td></tr>
<tr><td>BLUE SHARK</td><td>30</td><td>1</td><td>29</td></tr>
<tr><td>SHORT FINNED MAKO SHARK</td><td>24</td><td>0</td><td>24</td></tr>
<tr><td>WHALE SHARKS</td><td colspan="3">no reported interactions</td></tr>
<tr><td>SMOOTH HAMMERHEAD SHARK</td><td colspan="3">no reported interactions</td></tr>
<tr><td>Total</td><td>314</td><td>2</td><td>312</td></tr>
</table>
</td></tr>
</table>

		Longline logsheet coverage for the CK National Fleet was 100%. Logsheet estimates of shark catches and discards/releases are outlined in the table below.

Source: Logsheet data – 100% coverage

Species	Fate	Catch (n)	Catch (mt)
MAKO SHARKS	Released	38	0
PORBEAGLE SHARK	Released	3	
SCALLOPED HAMMERHEAD	Released	1	
THRESHER SHARKS	Released	9	0
HAMMERHEAD SHARKS	Released	3	0
OCEANIC WHITE-TIP SHARK	Released	266	0
BASKING SHARK	Released	2	0
BLUE SHARK	Released	1,341	0
PELAGIC STING-RAY	Released	579	0
SILKY SHARK	Released	331	0
WHALE SHARKS	No reported interactions	0	0
	Total	**2,576**	**0**

CMM 11-03	Cetaceans	**NOT APPLICABLE** The Cook Islands does not have any flagged purse seine vessels.
CMM 11-04	Oceanic White-Tip Shark	According to logsheet data, 149 oceanic white tip sharks were reported as released. According to observer data, 21 oceanic white tip interactions were observed in all of which the shark was released. 10 sharks were released alive and healthy, 5 sharks were released alive, injured and distressed and the remaining 6 sharks were released dead.
CMM 12-04	Whale Sharks	**NOT APPLICABLE** The Cook Islands do not have any flagged purse seine vessels.
CMM 12-07	Seabirds	No seabird interactions were recorded from logsheets or observer data.
CMM 13-08	Silky Sharks	According to logsheet data, 146 silky sharks were released. Longline logsheet data for 2015 was 100%. According to observer data recorded, 67 Silky sharks were released in 2015. 36 sharks were released alive and healthy; 8 sharks were released alive, injured and stressed, 2 sharks were released alive but dying and the remaining 21 sharks were released dead.
Observer Coverage WCPFC11 Decision	Longline	Observer coverage is measured using 'at sea days'. Based on an estimated 1,915 VMS days, and 245 observed days, coverage of the National Fleet in the WCPFC-CA for 2015 is 12.8%.
CMM 15-02	South Pacific Albacore	This requirement is covered by the comprehensive operational data that is provided to the WCPFC.

Appendix 2

WCPFC12 Decision (para 532) – CDS Mass Balance Reconciliation Trial (2013 data only)

Table 1a. Minimum requirements for Disposal of Species (Export or Domestic Market)

Year:	2013
Species:	ALBACORE
Flag CCM:	Cook Islands
Catch Location (CCM EEZ or WCPFC HS):	Cook Islands EEZ
Gear Code:	Longline
Source of Data:	Unloading forms completed by vessel company agents (metric tonnes)

Unloading Port/Market	**Destination**					**Grand Total**
	American Samoa	**Local Market**	**New Zealand**	**USA**	**Not Stated**	
APIA						
LOCAL MARKET APIA		7.24				7.24
AVATIU						
EXPORT			3.45	0.133		3.587
LOCAL MARKET AVATIU		20.76				20.76
PAGO PAGO						
CANNERY	470.52			22.87	97.305	590.7
LOCAL MARKET PAGO		1.42				1.42
Grand Total	**470.52**	**29.42**	**3.45**	**23.00**	**97.305**	**623.71**

Table 1b. Minimum requirements for Disposal of Species (Export or Domestic Market)

Year:	2013
Species:	BIGEYE
Flag CCM:	Cook Islands
Catch Location (CCM EEZ or WCPFC HS):	Cook Islands EEZ
Gear Code:	Longline
Source of Data:	Unloading forms completed by vessel company agents (metric tonnes)

Unloading Port/Market	**Destination**					**Grand Total**
	American Samoa	**Local Market**	**New Zealand**	**USA**	**Not Stated**	
APIA						
LOCAL MARKET APIA		1.92				1.92
AVATIU						
EXPORT			1.755	0.466		2.221
LOCAL MARKET AVATIU		3.566				
PAGO PAGO						
CANNERY	89.26			1.282	13.321	103.861
LOCAL MARKET PAGO						
Grand Total	**89.26**	**5.489**	**1.755**	**1.748**	**13.321**	**111.571**

Table 1c. Minimum requirements for Disposal of Species (Export or Domestic Market)

Year:	2013
Species:	YELLOWFIN
Flag CCM:	Cook Islands
Catch Location (CCM EEZ or WCPFC HS):	Cook Islands EEZ
Gear Code:	Longline
Source of Data:	Unloading forms completed by vessel company agents (metric tonnes)

Unloading Port/Market	**Destination**					**Grand Total**
	American Samoa	**Local Market**	**New Zealand**	**USA**	**Not Stated**	
APIA						
LOCAL MARKET APIA		1.8				1.8
AVATIU						
EXPORT			1.518	0.155		1.673
LOCAL MARKET AVATIU		6.624				6.624
PAGO PAGO						
CANNERY	157.356			1.925	23.589	182.87
LOCAL MARKET PAGO						
Grand Total	**157.356**	**8.424**	**1.518**	**2.08**	**23.589**	**192.967**