

SCIENTIFIC COMMITTEE TENTH REGULAR SESSION

Majuro, Republic of the Marshall Islands 6-14 August 2014

Issues for t-RFMOs in relation to the listing of shark and ray species by the Convention on International Trade in Endangered Species (CITES)

WCPFC-SC10-2014/ EB-IP-05

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Abstract

This paper identifies a number of potential issues for Regional Fisheries Management Organizations managing tuna and tuna-related species arising from the additional listings by CITES of sharks and rays at the most recent Conference of Parties. These new Appendix II listings of five sharks (oceanic whitetip, porbeagle, smooth hammerhead, scalloped hammerhead and great hammerhead sharks), and all species of manta rays, were adopted in March 2013 and will come into effect on 14 September 2014. After this time, all exports of these species, including landings in non-flag State ports, will require permits to be issued by the flag State CITES Management Authority. If an export permit is to be issued, legal acquisition and non-detriment findings (NDFs) must also be issued. An NDF represents a certification by an authorized CITES Scientific Authority that the proposed export is not detrimental to the survival of the species. Catches on the high seas which are landed in flag State ports do not require export permits but will require Introduction from the Sea certificates which also require NDFs. Based on Western and Central Pacific Fisheries Commission data holdings for 2010-2012, this paper lists the flag States and range States catching CITES-listed shark and ray species in order to identify which States may need to action CITES documentation procedures for catches of these species after 14 September 2014. In addition, this paper describes existing WCPFC stock status assessments and management tools that may be useful to national CITES Authorities when considering NDFs.

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1. Introduction

The text of the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) was agreed in Washington DC, USA in March 1973 and it entered into force in July 1975. There are currently 180 parties to the Convention, including most of the Western and Central Pacific Fisheries Commission (WCPFC) members, cooperating non-members and participating territories (CCMs)¹.

At CITES COP16 held in March 2013, four proposals for listing elasmobranch (shark and ray) species on Appendix II were adopted. An Appendix II listing recognises that although a species may not now necessarily be threatened with extinction, it may become so unless its trade is subject to strict regulation (CITES Convention, Article II.2). The four Appendix II listings adopted by a two-thirds majority of CITES parties present and voting at COP16 were:

- Oceanic whitetip shark (Carcharhinus longimanus);
- Scalloped hammerhead (*Sphyrna lewini*) and look-alikes smooth and great hammerhead (*Sphyrna zygaena* and *Sphyrna mokarran*) sharks;
- Porbeagle shark (Lamna nasus); and
- Manta rays (*Manta* spp.)².

These species join three species of shark (basking shark (*Cetorhinus maximus*), whale shark (*Rhincodon typus*) and great white shark (*Carcharodon carcharius*)), previously listed on Appendix II in 2002 (COP12), 2002 (COP12) and 2004 (COP13), respectively. Sawfishes (Pristidae, a family of rays) were listed on CITES Appendix I in 2007 (COP14) except for the freshwater sawfish (*Pristis microdon*) which was initially listed on Appendix II but moved to Appendix I at COP16. Listing on CITES Appendix I prohibits trade under all but exceptional circumstances (e.g. specimens for scientific or educational purposes).

In order to allow for necessary preparation for the implementation of the COP16 elasmobranch listings, it was agreed that implementation would be delayed for 18 months, i.e. until 14 September 2014. In supporting the porbeagle shark listing proposal at COP16, the EU pledged to provide €1.2 million to assist developing countries in the implementation of the shark and ray listings and these funds are currently supporting a number of activities by the CITES Secretariat and the United Nations Food and Agriculture Organization (FAO) including regional consultative workshops (CITES 2014a). Workshops have been held by CITES and FAO for African States (Casablanca Workshop, February 2014) and Asian States (Xiamen Workshop, May 2014), and other workshops have been held or are planned in Brazil, Australia, El Salvador, Fiji, India, Thailand, the United Arab Emirates and Yemen (CITES 2014b). A separate initiative, funded by Germany, is developing guidance for preparing CITES Non-Detriment Findings (NDFs) with specific reference to sharks (Mundy-Taylor et al. 2014). A draft of the guidance was distributed at a recent meeting of the CITES Animals Committee.

The objectives of this WCPFC Tenth Scientific Committee (SC10) information paper are to inform WCPFC CCMs regarding:

• the requirements arising from the imminent implementation of the CITES elasmobranch listings agreed at COP16;

¹ The Cook Islands, the Federated States of Micronesia, Kiribati, the Republic of the Marshall Islands, Nauru, Niue, Tonga and Tuvalu are not parties to CITES (CITES Secretariat, personal communication, June 2014). Chinese Taipei is also not a party to CITES.

There are currently two species of manta rays (*M. birostris* and *M. alfredi*) but future changes in taxonomy within the genus *Manta* are anticipated (http://www.cites.org/eng/cop/16/prop/E-CoP16-Prop-46.pdf).

- which flag States have recently reported catching CITES-listed elasmobranch species, and the range States in which these species were caught, based on available data holdings;
- the potential for WCPFC assessments and management systems to be relevant resources when considering CITES documentation requirements.

The purpose of this paper is to assist WCPFC CCMs in understanding the relationship between the new CITES documentation requirements for elasmobranchs and relevant WCPFC conservation and management measures (CMMs). All of the information in this paper pertaining to CITES documentation is for guidance only. It is strongly suggested that all requirements, procedures and responsibilities with regard to CITES be clarified and confirmed with the relevant national authorities and/or the CITES Secretariat prior to undertaking any trade in CITES-listed elasmobranch species.

2. CITES Export Permit Requirements

2.1. Basic Requirements

Listing on CITES Appendix II requires that all exports, including landings in non-flag State ports, be permitted by the flag State's designated CITES Management Authority. If an export permit is to be issued, it must be accompanied by a non-detriment finding (NDF; made by the flag State's designated CITES Scientific Authority) and a legal acquisition finding (LAF; made by the flag State's designated CITES Management Authority). An NDF certifies that the proposed export is not detrimental to the survival of the species. An LAF certifies that the specimen was not obtained in contravention of the laws of that State for the protection of fauna and flora. In addition to these export requirements, catches on the high seas which are landed in flag State ports require Introduction from the Sea (IFS) certificates which also require NDFs (Mundy-Taylor et al. 2014). If high seas catches with IFS certificates and NDFs are to be exported, the export permit should take into consideration the NDF issued for the IFS and also issue an LAF³. A schematic of the requirements under various scenarios is shown in Figure 1.

Each party to CITES must designate at least one national Scientific Authority and one national Management Authority. All of the WCPFC CCMs which are parties to CITES have notified the CITES Secretariat of their national CITES Management Authorities and CITES Scientific Authorities. Although NDFs need not be made public, failure to nominate a national Scientific Authority has led in the past to concerns regarding whether certain States were issuing permits without the appropriate Scientific Authority findings (Reeve 2002). CITES appears to provide flexibility for NDFs to be issued on a regional basis for shark stocks occurring in the waters of more than one State and/or on the high seas. This type of regional NDF would ensure that all sources of mortality for the elasmobranch stock concerned are considered. In this sense it may be possible for a tuna RFMO or other regional organization to be designated by parties to CITES as a Scientific Authority for certain stocks (Mundy-Taylor et al. 2014).

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³ http://www.cites.org/eng/res/14/14-06R16.php

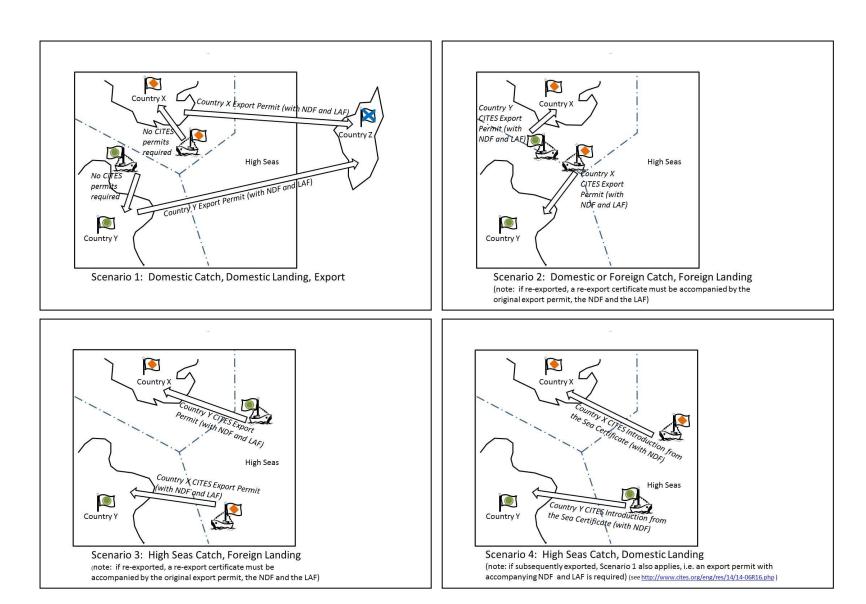


Figure 1. Four scenarios of catch, landing and/or export and the documentation required by CITES for each (see Mundy-Taylor et al. (2014) for more information).

Trade between two non-parties to CITES does not require any CITES-specific documentation. However, trade between a non-party to CITES and a party to CITES requires that comparable documentation be provided by a designated competent authority in the non-party State (CITES Article X). It is also necessary for a non-party to CITES wishing to trade CITES Appendix II-listed species with parties to CITES to designate a scientific institution capable of advising that an export is not detrimental to the survival of the species concerned. Of the WCPFC CCMs that are not parties to CITES, the Cook Islands, the Federated States of Micronesia, Kiribati, the Republic of the Marshall Islands and Tonga have notified the CITES Secretariat of their competent authorities and designated scientific institutions⁴.

In addition to the distinction between parties and non-parties to CITES in terms of trade documentation requirements, parties to CITES may enter reservations with respect to the listing of specific species (Table 1). Entering a reservation results in the party being treated as a non-party with respect to trade in that particular species (CITES Article XXIII). In the case of the reservations shown in Table 1, those entered by Japan were accompanied by a declaration that Japan would "voluntarily conduct procedures related to export permits that are required under CITES, in accordance with its relevant laws and regulations" regardless of whether trading with a party or non-party to CITES.

Table 1. WCPFC CCMs which are parties to CITES that have entered reservations with respect to the CITES Appendix I and II listings of elasmobranchs. † indicates species whose listings will come into effect on 14 September 2014; ‡ indicates species whose listings are already in effect. Note that only species listings with reservations entered against them and only reservations entered by WCPFC CCMs are included in the table.

CITES Appendix	Species	Reservations entered by
II ‡/I †	Freshwater sawfish (Pristis microdon)	Canada
II †	Oceanic whitetip shark (Carcharhinus longimanus)	Canada, Japan
II †	Scalloped hammerhead shark (Sphyrna lewini)	Canada, Japan
II †	Great hammerhead shark (Sphyrna mokarran)	Canada, Japan
II †	Smooth hammerhead (Sphyrna zygaena)	Canada, Japan
II †	Porbeagle shark (Lamna nasus)	Canada, Japan
II †	Mantas (Manta spp.)	Canada
II ‡	Basking shark (Cetorhinus maximus)	Indonesia, Japan,
		Korea
II ‡	Great white shark (Carcharodon carcharius)	Japan, Palau
II ‡	Whale shark (Rhincodon typus)	Indonesia, Japan,
		Palau, Korea

2.2. Special Considerations

Within the WCPF Convention Area the catching, transport and landing of fish can be a complex process involving a number of national entities. There are thus several special considerations which may arise in determining the appropriate documentation for CITES-listed elasmobranch species in the WCPFC Convention Area. These issues include chartering, transhipment, and archipelagic waters, and are discussed below with reference to recent CITES guidance.

2.2.1. Chartering

A recent CITES resolution regarding Introduction from the Sea (CITES Resolution Conf 14.6 (Rev. CoP16)) provides text and guidance on how chartering arrangements may be handled when issuing CITES documentation. In some cases it may be possible for charter States to be considered as the State of Introduction, i.e. for IFS certificates (Figure 1, Scenario 4), or the State

⁴ http://www.cites.org/eng/cms/index.php/component/cp

of export, i.e. for export permits (Figure 1, Scenario 3). For this to occur, the following conditions must be met: i) both the charter State and the flag State must be parties to CITES; ii) the chartering arrangements should be consistent with the framework for chartering under the relevant Regional Fisheries Body (RFB)⁵; and iii) the CITES Secretariat should be informed in advance of the arrangement (Mundy-Taylor et al. 2014)⁶.

For IFS certificates (Figure 1, Scenario 4), if the above conditions are met, and the flag State and chartering State agree, chartered vessels catching CITES Appendix II species on the high seas may land these species in the chartering State under an IFS issued by the chartering State rather than under an export permit issued by the flag State of the chartered vessel. A similar option is available for chartered vessels catching CITES Appendix II species on the high seas and landing them in a third State (i.e. not the chartering State nor the flag State). Under this export scenario (Figure 1, Scenario 3), the export permit, NDF and LAF may be issued by the flag State in consultation and agreement with the chartering State; or ii) by the chartering State if authorization to do so is granted by the flag State and clearly specified in a chartering arrangement that is consistent with the relevant RFB framework (see above).

No information could be found regarding CITES permit requirements for a chartered vessel fishing and landing domestically (i.e. in the chartering State; as in Scenario 2 but limited to cases where the landing State is the chartering State). It may be the case that the catch and landing of such a chartered vessel does not require a CITES export permit as long as the three conditions listed above are met. This situation should be confirmed with national CITES authorities and/or the CITES Secretariat.

2.2.2. Transhipment

The same CITES text and guidance (CITES Resolution Conf. 14.6 (Rev. Cop16)) provides information on how transhipment would affect CITES documentation requirements. In the case of IFS, i.e. the transhipment involves transporting an elasmobranch caught on the high seas by a fishing vessel flagged to a certain State to a landing port in that same State (Figure 1, Scenario 4), the act of transhipping does not change the documentation requirements or the document-issuing parties. However, the IFS certificate should be issued prior to transhipment, or "satisfactory proof" that the IFS certificate already exists or will be issued before the elasmobranchs are landed should be obtained by the master of the transhipment vessel. For exports (Figure 1, Scenarios 2 or 3) too, transhipping does not affect the documentation requirements, but export permits should be issued or confirmed by the transhipment vessel master prior to receiving the transhipped specimens.

2.2.3. Archipelagic waters

CITES text and guidance on IFS certificates (CITES Resolution 14.6 (Rev. Cop16)) clarifies that 'the marine environment not under the jurisdiction of any State' (referred to in this section of this paper as "the high seas") means those marine areas beyond the areas subject to the sovereignty or sovereign rights of a State consistent with international law, as reflected in the United Nations Convention on the Law of the Sea. This suggests that if archipelagic and internal waters are present in any of the scenarios shown in Figure 1, these waters are to be treated as domestic waters when considering the applicable CITES documentation requirements.

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⁵ In the case of WCPFC see CMM 2012-05 (Charter Notification Scheme)

⁶http://www.cites.org/eng/res/14/14-06R16.php

3. WCPFC Elasmobranch Assessment and Compliance Resources for CITES Considerations

At the 65th meeting of the CITES Standing Committee, held 7-11 July 2014, a working group was formed to review implementation challenges associated with the new shark listings. Part of the mandate of this working group includes examining the role of RFMOs, and the CITES Secretariat has acknowledged the importance of bringing CITES and fisheries authorities together (IISD 2014). In order to take an initial step in this direction, this section presents a summary of WCFPC assessment and compliance resources that national CITES Scientific and Management Authorities may find useful when considering CITES documentation issues.

3.1. WCPFC Elasmobranch Status Assessments

WCPFC first articulated which of the over 1,000 elasmobranch species were priorities for conservation and management in 2008 when it designated seven species as "key shark species". Since then another seven species have been added to the key species list (Table 2). For these key shark species catch and effort data must be provided, and the stock status of several of the key species has been investigated by the Secretariat of the Pacific Community (the WCPFC's Scientific Services Provider; SPC-OFP 2014).

Table 2. WCPFC key shark species, the years in which they were designated as key species and most recently assessed, and the year each was listed by CITES (if applicable).

WCPFC Key Shark Species	WCPFC Key	Stock	Indicator or	Year Listed by
	Species	Assessment	Other Analysis	CITES? (CITES
	Listing	Agreed?	Produced?	Appendix)
Blue shark	2008	In progress (N.	2011	
(Prionace glauca)		Pacific only)		
Shortfin mako shark	2008		2011 (<i>Isurus</i> spp.	
(Isurus oxyrinchus)			only)	
Longfin mako shark	2008		2011 (<i>Isurus</i> spp.	
(Isurus paucus)			only)	
Oceanic whitetip shark	2008	Finalized	2011	2013 (II)
(Carcharhinus longimanus)		(2012)		
Bigeye thresher shark	2008		2011 (Alopias	
(Alopias superciliosus)			spp. only)	
Common thresher shark	2008		2011 (Alopias	
(Alopias vulpinus)			spp. only)	
Pelagic thresher shark	2008		2011 (Alopias	
(Alopias pelagicus)			spp. only)	
Silky shark	2009	Finalized	2011	
(Carcharhinus falciformis)		(2013)		
Porbeagle shark	2010			2013 (II)
(Lamna nasus)				
Great hammerhead shark	2010			2013 (II)
(Sphyrna mokarran)				
Scalloped hammerhead shark	2010			2013 (II)
(Sphyrna lewini)				
Smooth hammerhead shark	2010			2013 (II)
(Sphyrna zygaena)				
Winghead shark	2010			
(Eusphyra blochii)	1			
Whale shark	2012		2013	2002 (II)
(Rhincodon typus)				

At present, stock assessments of two of the key shark species have been endorsed by the WCPFC and another (blue shark) will be discussed at the tenth meeting of the Scientific Committee (August 2014). Of the two completed shark stock assessments, both oceanic whitetip shark (Rice and Harley 2012) and silky shark (Rice and Harley 2013) were found to be both overfished and currently subject to overfishing.

In addition to these three species, makos and threshers were included in an indicators analysis presented in 2011 (Clarke 2011, Clarke et al. 2013). However, due to a lack of reliable species-specific data, only genera-level indicators could be produced and with the exception of makos in the North Pacific, significant population trends were not identified (Clarke et al. 2013).

A summary of whale shark interactions with purse seine gear was produced in 2012 (SPC-OFP 2012) and updated in 2013 (Harley et al. 2013). An approximately 50% decline in whale shark interactions with "free school" purse seine sets (i.e. sets which were not recorded as intentionally set on whale sharks) was noted over the preceding ten years but it was not clear if this reflects an increase in avoidance of whale sharks, a decline in stock abundance, biases in the data or other factors.

The other WCPFC key shark species (i.e. porbeagle and hammerhead sharks) have not yet been the subject of stock status analyses. Part of the reason for this is that these species were added to the list of key shark species after research priorities were set for the WCPFC Shark Research Plan in 2010. Other reasons relate to a lack of reported hammerhead shark catches, both species- and genus-specific, in all datasets; and, for porbeagle sharks, a low number of reliable observer-recorded catches combined with a large number of dubious logsheet records (see Section 4 and Appendix 1).

These existing elasmobranch datasets and assessments, as well as ongoing work conducted by the WCPFC, its Scientific Services Provider, and its CCMs individually (e.g. Brodziak and Walsh 2014) comprise useful resources for consideration of NDFs relating to CITES export permits and IFS certificates. In addition to utilizing these existing resources, National CITES authorities may also consider whether they wish to designate a regional organization as one of their Scientific Authorities to advise on NDF decisions (Mundy-Taylor et al. 2014; see Section 2.1).

3.2. WCPFC Compliance Systems

WCPFC has also developed a number of conservation and management measures (CMMs) and compliance systems since its inception in 2004. National CITES Management Authorities may wish to refer to these systems when considering LAFs in support of CITES export permits.

With specific regard to elasmobranch catches there are four pertinent WCPFC CMMs, summarized as follows:

- CMM 2010-07 requires full utilization of sharks, or live release of unutilized sharks, and maintenance of a 5% fin-to-carcass weight ratio as a means of controlling finning (first implemented in January 2008; see Clarke (2013) for detailed implementation history);
- CMM 2011-04 prohibits retention, transhipping, storing or landing of oceanic whitetip sharks and calls for release with as little harm as possible (implemented January 2013);
- CMM 2012-04 prohibits purse seine setting on a whale shark if it is sighted prior to the set, and calls for safe release of the whale shark if is inadvertently encircled in the net (implemented January 2014);
- CMM 2013-08 prohibits retention, transhipping, storing or landing of silky sharks and calls for release with as little harm as possible (implemented 1 July 2014).

Other CMMs which are fundamental to legal fishing operations for highly migratory fish stocks in the WCPF Convention Area include, *inter alia*:

- CMMs 2004-03, 2013-03, 2013-04 and 2013-10 pertaining to the marking, identification, authorization and notification to the WCPFC's Record of Fishing Vessels;
- CMM 2009-06 giving the regulations for authorized transhipment activities;
- CMM 2010-06 describing the listing and de-listing procedures for the WCPFC's list of vessels presumed to have carried out illegal, unreported and unregulated fishing activities (IUU Vessel List);
- CMM 2011-02 specifying the requirements for fishing vessels to communicate with the WCPFC's Vessel Monitoring System; and
- CMM 2012-05 establishing the procedures for charter arrangements in the WCPFC.

WCPFC CCMs self-report on their compliance with these CMMs in their Annual Reports-Part 2. These reports are not in the public domain, but are accessible to national authorities via their designated WCPFC points of contact. In addition, the WCPFC prepares annual CCM-specific Compliance Monitoring Reports which are summarized and attached as a public document to the Commission's Annual Meeting's Summary Report; these reports cover the previous calendar year's activities. While compliance against a large number of the WCPFC's CMMs is assessed each year, due to time constraints the annual meeting of the Technical and Compliance Committee does not necessarily present compliance findings for all active CMMs. Conversely, there are some cases in which individual CCMs are not assessed against specific CMMs or CMM clauses due to non-applicability, non-reporting or other reasons.

In addition to the WCPFC CMMs listed above there may be other rules and regulations which apply to fishing operations for elasmobranchs and affect the legality of their acquisition. For example, depending on the circumstances of which gear type is used by which vessel in which location other WCPFC requirements for observer coverage, mitigation measures for non-target species, target species catch limits or special reporting requirements may apply. Furthermore, national, sub-regional and regional regulations may also apply and influence legal acquisition status.

4. WCPFC CCMs potentially affected by the CITES Listings

CITES permitting requirements govern the international trade in listed species. However, due to the lack of species-specific codes for elasmobranch species in most national trade statistics commodity coding systems, it is difficult to know which countries have in the past, or are currently, trading in species for which CITES Appendix II listings are about to be implemented. To work around this data gap, SPC data holdings for catch records of CITES Appendix II species were accessed and summarized (presence/absence) by flag State and location of catch. Five databases are summarized separately in Appendix 1 (i.e. longline observer, longline logsheet (operational), longline logsheet (aggregated), purse seine observer and purse seine logsheet), and in combination in Table 3. These tables provide an indication of which WCPFC CCMs may, as flag (or chartering) States, need to issue CITES export permits, NDFs and LAFs for elasmobranch product trade, assuming that past catch patterns continue and that some specimens may be retained and traded. The tables also indicate which range (or port) States may receive landings of CITES-listed sharks and rays caught in nearby Exclusive Economic Zones (EEZs) and may need to check CITES export documentation upon landing/import.

Table 3. Flag States catching CITES-listed species and the location (EEZ or International Waters) of catch for 2010-2012 based on SPC data holdings. Dark shading indicates species present in observer dataset (longline and/or purse seine); light shading indicates species present in logsheet dataset only (longline operational, longline aggregate and/or purse seine). OCS=oceanic whitetip shark, SPK=great hammerhead shark, SPZ=smooth hammerhead shark, SPL=scalloped hammerhead shark, SPN=hammerhead shark (not necessarily CITES-listed), POR=porbeagle shark, RHN=whale shark, WSH=great white shark, BSK=basking shark, RMB=giant manta ray, RMJ=manta ray, SAW=sawfish.

CITES Appendix Composite of Five Datasets Flag	II OCS	II SPK	II SPZ	II SPL	II SPN	II POR	II RHN	II WSH	II BSK	II RMB	II RMJ	I SAW
Australia												
China												
Cook Islands												
Ecuador El Salvador												
European Union												
Fed States Micronesia												
Fiji												
French Polynesia												
Japan												
Kiribati												
Korea												
Marshall Is.												
New Caledonia												
New Zealand												
Papua New Guinea												
Philippines												
Samoa												
Solomon Islands												
Chinese Taipei												
Tuvalu												
United States												
Vanuatu												
EEZ												
Australia												
CNMI												
Cook Islands												
Fed States Micronesia												
Fiji												
French Polynesia												
International Waters												
Japan												
Kiribati												
Marshall Is.												
Matthew & Hunter												
Nauru												
New Caledonia												
New Zealand												
Niue												
Palau												
Papua New Guinea												
Pitcairn												
Samoa												
Solomon Islands												ļ
Tokelau												1
Tonga												1
Tuvalu												1
United States												ļ
Vanuatu												1
Wallis & Futuna												

While these tables are useful as an indication of which States may need to prepare to handle CITES documentation requirements, there are a number of factors which caution against using them as a definitive guide to the presence of CITES-listed species in a particular CCMs' catch or EEZ. First, the flag States shown represent a mix of actual flag States and chartering States, and EEZ locations may be approximations (in the case of aggregated data). Second, species identifications may not always be reliable, particularly in the case of logsheet data, and observer coverage on longline vessels is not uniform across all fleets (observer data are given more weight in the summary shown in Table 3.) Third, some WCPFC CCMs are not reporting elasmobranchs to species, therefore some of their catch of the CITES-listed species will not appear in the tables. (In some cases, a general category for hammerheads is used (SPN) and these records are shown in the tables, but general "shark" (SHK) records are not shown (SPC-OFP 2014)). Fourth, and finally, some WCPFC CCMs do not report discarded elasmobranchs and thus the species may be present in the catch but not appear in the tables. (This is less of a concern in this particular example as the issue is whether any CITES-listed species would be traded, and if a species is discarded it cannot be traded. However, as noted by SPC-OFP (2014), purse seine logsheets suggest that all sharks are discarded whereas purse seine observer records show some sharks being retained or finned. Therefore, according to purse seine observer records there could be some specimens entering trade).

According to recent (2010-2012) catch data over 20 WCPFC CCMs have recorded oceanic whitetip sharks in their catch and almost all of these record at least one of the CITES-listed species of hammerhead shark. Porbeagle sharks are frequently recorded on logsheets, but are only recorded by observers in one EEZ (i.e. New Zealand). A similar situation exists for basking sharks (i.e. most records from logsheets only), and in both cases it is likely that misidentification by fishing crew (e.g. mako sharks recorded as porbeagle sharks) or mis-recording on logsheets (e.g. blue sharks (BSH) recorded as basking sharks (BSK)) is occurring. Whale sharks are frequently encountered but are not retained (see Appendices 4 & 5) and thus would not be traded. Manta rays are also frequently encountered and according to observer records are sometimes retained (see Appendix 4). Great white sharks are occasionally encountered and according to observers are always retained (see Appendices 1 & 4). Sawfishes have not been reported in the catch records.

5. Conclusions

This paper has attempted to provide an introduction to CITES documentation requirements which as of 14 September 2014 will apply to a number of elasmobranch species frequently encountered in fishing operations within the WCPF Convention Area. While the summarized requirements presented here are intended to be as factually correct and comprehensive as possible, in some cases the implementation of the COP16 elasmobranch listings will cover new ground for CITES. WCPFC CCMs expecting to handle CITES documentation for any of these species are urged to clarify and confirm all requirements, procedures and responsibilities with the relevant national authorities and/or the CITES Secretariat. As an RFMO with responsibilities for tuna-associated species such as elasmobranchs the WCPFC maintains a number of useful stock status assessment and compliance resources and welcomes dialogue with CCMs on issues relating to the implementation of the new CITES listings.

6. Acknowledgements

The authors would like to extend a special thanks to Glenn Sant of TRAFFIC Oceania for his invaluable advice on a number of issues covered in this paper. The paper also benefitted from input provided by Glenn Hurry and Angela Abolhassani (WCPFC), Shelton Harley (SPC) and Ian Freeman (FFA). The preparation of this paper was supported by the Global Environment

Facility-funded Areas Beyond National Jurisdiction Tuna Project implemented by FAO in cooperation with WCPFC.

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Appendix 1. Longline observer data showing the presence (shaded)/absence (unshaded) of CITES-listed species by flag State and the location (EEZ or International Waters) of catch for 2010-2012 based on SPC data holdings. The second and third rows present the total number recorded and the percentage retained (if available) for the three year period. See Table 3 caption for species abbreviations.

LL Observer	OCS	SPK	SPZ	SPL	SPN	POR	RHN	WSH	BSK	RMB	RMJ	SAW
# recorded	2,585	38	47	46	29	1,151	1	6	0	89	0	0
% retained:	0.07	0.95	0.25	0.71	0.03	0.09	0.00	1.00	na	0.00	na	na
Flag							1	1	1	T T	1	
Australia												
China												
Cook Islands												
Ecuador												
El Salvador												
European Union												
Fed States Micronesia												
Fiji												
French Polynesia												
Japan												
Kiribati												
Korea												
Marshall Is.												
New Caledonia												
New Zealand												
Papua New Guinea												
Philippines												
Samoa												
Solomon Islands												
Chinese Taipei												
Tuvalu												
United States												
Vanuatu												
EEZ												
Australia												
CNMI												
Cook Islands												
Fed States Micronesia												
Fiji												
French Polynesia												
International Waters												
Japan												
Kiribati												
Marshall Is.												
Matthew & Hunter												
Nauru												
New Caledonia												
New Zealand												
Niue Palau												
Papua New Guinea												
Pitcairn												
Samoa												
Solomon Islands												
Tokelau												
Tonga												
Tuvalu												
United States												
Vanuatu												
Wallis & Futuna												

Appendix 2. Longline logsheet (operational) data showing the presence (shaded)/absence (unshaded) of CITES-listed species by flag State and the location (EEZ or International Waters) of catch for 2010-2012 based on SPC data holdings. The second and third rows present the total number recorded and the percentage retained (if available) for the three year period. See Table 3 caption for species abbreviations. Note that some flag States do not provide operational data for catch on the high seas and in their own EEZs. † indicates potential mis-identification issues (see Section 4).

LL Logsheet (operational)	OCS	SPK	SPZ	SPL	SPN	POR†	RHN	WSH	BSK†	RMB	RMJ	SAW
# recorded	4,820	2	0	0	948	48,361	0	2	197	0	0	0
% retained: Flag	na	na	na	na	na	na	na	na	na	na	na	na
Australia			l					l	l			
China												
Cook Islands												
Ecuador												
El Salvador												
European Union												
Fed States Micronesia												
Fiji												
French Polynesia												
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Samoa												
Solomon Islands												
Chinese Taipei												
Tuvalu												
United States												
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Australia												
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International Waters												
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Marshall Is.												
Matthew & Hunter												
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New Caledonia												
New Zealand												
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Solomon Islands												
Tokelau												
Tonga												
Tuvalu												
United States												
Vanuatu												
Wallis & Futuna												
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Appendix 3. Longline logsheet (aggregated) data showing the presence (shaded)/absence (unshaded) of CITES-listed species by flag State and the location (EEZ or International Waters) of catch for 2010-2012 based on SPC data holdings. The second and third rows present the total number recorded and the percentage retained (if available) for the three year period. See Table 3 caption for species abbreviations. Note that aggregated data are only available for two of the species shown. † indicates potential mis-identification issues (see Section 4).

LL Logsheet (agg)	OCS	SPK	SPZ	SPL	SPN	POR†	RHN	WSH	BSK	RMB	RMJ	SAW
# recorded	44,514	na	na	na	na	77,343	na	na	na	na	na	na
% retained:	na	na	na	na	na	na	na	na	na	na	na	na
Flag										ı		
Australia												
China												
Cook Islands												
Ecuador												
El Salvador												
European Union												
Fed States Micronesia												
Fiji												
French Polynesia												
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New Caledonia												
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Solomon Islands												
Chinese Taipei												
Tuvalu												
United States												
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CNMI												
Cook Islands												
Fed States Micronesia												
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French Polynesia												
International Waters												
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Marshall Is.												
Matthew & Hunter												
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New Caledonia												
New Zealand												
Niue												
Palau												
Papua New Guinea												
Pitcairn												
Samoa												
Solomon Islands												
Tokelau												
Tonga												
Tuvalu												
United States												
Vanuatu												
Wallis & Futuna												

Appendix 4. Purse seine observer data showing the presence (shaded)/absence (unshaded) of CITES-listed species by flag State and the location (EEZ or International Waters) of catch for 2010-2012 based on SPC data holdings. The second and third rows present the total number recorded and the percentage retained (if available) for the three year period. See Table 3 caption for species abbreviations.

PS Observer	OCS	SPK	SPZ	SPL	SPN	POR	RHN	WSH	BSK	RMB	RMJ	SAW
# recorded	467	18	4	13	32	0	523	1	3	1,043	21	0
% retained:	0.26	0.44	0	0.54	0.31	na	0	1	0.33	0.04	0.05	na
Flag							ı	ı	ı	1	1	
Australia												
China												
Cook Islands												
Ecuador												
El Salvador												
European Union												
Fed States Micronesia												
Fiji												
French Polynesia												
Japan												
Kiribati												
Korea												
Marshall Is.												
New Caledonia												
New Zealand												
Papua New Guinea												
Philippines												
Samoa												
Solomon Islands												
Chinese Taipei												
Tuvalu												
United States												
Vanuatu												
EEZ												
Australia												
CNMI												
Cook Islands												
Fed States Micronesia												
Fiji												
French Polynesia												
International Waters												
Japan												
Kiribati												
Marshall Is.												
Matthew & Hunter												
Nauru												
New Caledonia												
New Zealand												
Niue												
Palau												
Papua New Guinea Pitcairn												
Samoa												
Solomon Islands												
Tokelau												
Tonga												
Tuvalu												
United States											ļ	
Vanuatu	<u> </u>											
Wallis & Futuna												

Appendix 5. Purse seine logsheet data showing the presence (shaded)/absence (unshaded) of CITES-listed species by flag State and the location (EEZ or International Waters) of catch for 2010-2012 based on SPC data holdings. The second and third rows present the total number recorded and the percentage retained (if available) for the three year period. See Table 3 caption for species abbreviations. † indicates potential mis-identification issues (see Section 4).

PS Logsheet # recorded	OCS 92	SPK 1	SPZ 1	SPL 2	SPN 2	POR 0	RHN 165	WSH 0	BSK†	RMB 281	RMJ 0	SAW 0
% retained:	na	na	na	na	na	na	na	na	na	na	na	na
Flag												
Australia												
China												
Cook Islands												
Ecuador												
El Salvador												
European Union												
Fed States Micronesia												
Fiji												
French Polynesia												
Japan												
Kiribati												
Korea												
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International Waters												
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New Zealand												
Niue												
Palau												
Papua New Guinea												
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Samoa												
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Tonga												
Tuvalu												
United States												
Vanuatu												
Wallis & Futuna												