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Gandhinagar, India, 17 - 22 February 2020  
Agenda Item 27.1

**PROPOSAL FOR THE INCLUSION OF  
THE WHITE-TIP SHARK (*Carcharhinus longimanus*)  
ON APPENDIX I OF THE CONVENTION\***

Summary:

The Federative Republic of Brazil has submitted the attached proposal for the inclusion of the Oceanic White-tip Shark (*Carcharhinus longimanus*) in Appendix I of CMS.

Rev.2 contains the original version of the document with one amendment that was made in the Range States section. Other amendments that were presented in Rev.1 had been removed again.

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## PROPOSAL FOR THE INCLUSION OF THE OCEANIC WHITE-TIP SHARK (*Carcharhinus longimanus*) ON APPENDIX I OF THE CONVENTION

### A. PROPOSAL

Inclusion of all populations of *Carcharhinus longimanus* on Appendix I

### B. PROPONENT

Brazil

### C. SUPPORTING STATEMENT

#### 1. Taxonomy

1.1 Class: Chondrichthyes, subclass Elasmobranchii

1.2 Order: Carcharhiniformes, Requin sharks

1.3 Family: Carcharhinidae

1.4 Genus: *Carcharhinus*

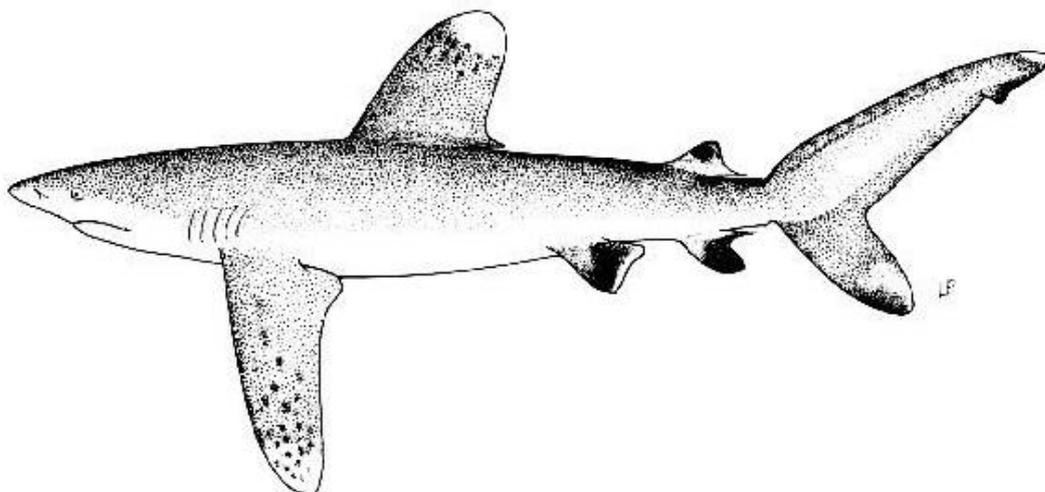
Species: *Carcharhinus longimanus* (Poey 1861)

#### 1.5 Common name(s)

English: oceanic white-tip shark

French: requin blanc

Spanish: tiburón oceánico



**Figure 1.** Oceanic whitetip shark (*Carcharhinus longimanus*). Source: FAO

### 2. Overview

*Carcharhinus longimanus* is a circumtropical shark species and the only true oceanic species within the *Carcharhinus* genus, occurring in waters between the 30°N and 35°S up to depths of 150 m. It is a species valued for its fins and meat, specially fins and for this reason, it has been targeted directly and indirectly by different types of fishing operations. Overall, global quantitative abundance estimates, and trends are lacking for the oceanic whitetip. Latest IUCN assessments however, showed that steep population declines have occurred in all oceans with significant historical declines also reported across its range. In the South Atlantic, substantially

population declines have been observed and their frequency of capture or even sightings is increasingly rare. Both the IUCN and the Government of Brazil (which also uses IUCN guidelines to assess the conservation status of species occurring in their jurisdictions) classify the species as vulnerable (VU). According specialists however, this species should be uplisted in the next assessment due continuous fishing pressure, increase of fishing effort and absence of fishing management. ICCAT itself recognizes this as a matter of concern and Brazil adopted the recommendations suggested by this committee in 2008. Among the main recommendations, we highlight the prohibition of the retention, landing and marketing of this species in Brazilian territory. Although Brazil has banned its retention, landing and marketing since 2008, recent information shows that Brazilian companies has imported meat from other countries and indeed the species never ceased to be landed. There are no management measures for sharks in the area. *C. longimanus* populations have declined globally, with some regions experiencing declines of more than 90%. As other carcharhinids (e.g., *C. falciformis*) they exhibit conservative life history parameters, such as: low productivity and slow recovery from overexploitation. There is no population size information for this species anywhere in the world. A listing on Appendix I of CMS would engages CMS Parties (currently numbering 124) to strictly protect the species, conserve and restore their habitats, mitigate obstacles to their migration, and control other factors that might endanger them.



**Figure 2.** Distribution of *Carcharhinus longimanus*. Source: IUCN

### 3 Migrations

#### 3.1 Kinds of movement, distance, the cyclical and predicable nature of the migration

*C. longimanus* is a large oceanic shark species, with active and strong swimming capabilities. As part of the Cooperative Shark Tagging Program of the National Marine Fishery Service, 542 *C. longimanus* were tagged from 1962 to 1993. During this period, only 6 individuals were recaptured, moving from the Gulf of Mexico to the Atlantic coast of Florida, from the Lesser Antilles to the central Caribbean Sea and along the equatorial Atlantic Ocean. The longest tracked distance for this species was 1,226 km, and the maximum speed was 17.5 NM/day (32.4 km/day) (Kohler et al., 1998). Howey-Jordan et al. (2013) tracked 11 *C. longimanus* tagged in the vicinity of Cat Island, Bahamas. During the tracking period of 30 to 245 days, each individual moved 290 to 1,940 km away from the initial tagging site. Four of these individuals moved in a southeastern direction towards the Lesser Antilles, three remained

mostly within the exclusive economic zone of the Bahamas, and one individual moved in northeastern direction for approximately 1,500 km. The majority of these individuals spend the first  $\pm$  30 days within the waters of the Bahamas and returned to these waters after  $\pm$  150 days. Maximum displacement from initial tagging location occurred from the end of June through September. Backus et al. (1956) indicates that *C. longimanus* possibly leaves the Gulf of Mexico in winter months and will move south as the temperature drops below 21°C. Howey-Jordan et al. (2013) report that only part of the tagged animals undertake long-distance movements, whereas the other part of the 11 tagged animals remained within or within the vicinity of the Bahamas.

### **3.2 Proportion of the population migrating, and why that is a significant proportion:**

Unknow but probably 100%.

## **4. Biological data (other than migration):**

Tolotti et al. (2017) et al. reported fine-scale vertical movements of oceanic whitetip sharks (*Carcharhinus longimanus*)

### **4.1 Distribution (current and historical):**

*Carcharhinus longimanus* is a circumtropical species and the only true oceanic species within the *Carcharhinus*-genus, occurring in waters between the 30°N and 35°S latitudes (CITES, 2013) (Figure 2). It is considered to be one of the most widespread shark species, ranging across all tropical and subtropical waters (Baum et al., 2015). Within the eastern Atlantic Ocean, *C. longimanus* occurs from northern Portugal to Angola (including possibly the Mediterranean Sea). In the western Atlantic the species ranges from the United States to Argentina, including the entire Gulf of Mexico and Caribbean Sea. In the Indian Ocean, *C. longimanus* occurs from South Africa to Western Australia, including the entire Red Sea. In the Pacific the species is distributed from China to East Australia. Within the central Pacific the species occurs off all islands (Hawaii, Samoa, Tahiti). Within the eastern Pacific, *C. longimanus* occurs from southern California to Peru (CITES, 2013; Ebert et al., 2013).

### **4.2 Population (estimates and trends):**

Sharks and rays are vulnerable to overexploitation due to overfishing and the K-selected life history characteristics of the species (Dulvy et al., 2014). *C. longimanus*, once among the most abundant oceanic sharks, has experienced serious declines as high as 70% within the western North Atlantic between 1992 and 2000. This species is assessed to be critically endangered in the Northwest and Western Central Atlantic (Baum et al., 2015). Anecdotal data exists for this species, originating from fisheries (Bonfil et al., 2008). Overall, global quantitative abundance estimates and trends are lacking for the oceanic whitetip. However, there are several studies on the abundance trends for a few regions and/or populations of oceanic whitetip sharks. There is also a recent stock assessment for the oceanic whitetip shark in the Western and Central Pacific (Rice and Harley 2012). Thus, the following section provides some insight into the abundance trends of the species. It should be noted that catch records of sharks, especially non-target shark species, are often inaccurate and incomplete. The oceanic whitetip shark is predominantly caught as bycatch and the reporting requirements for bycatch species have changed over time and differ by organization, and have therefore affected the reported catch

Atlantic Ocean:

Data on *C. longimanus* from the Atlantic Ocean comes from studies varying on gear or data source. According to Baum et al. (2003), based on logbook data of the U.S. pelagic longline fleet, *C. longimanus* has experienced a 70% population decline between 1992 and 2000 within the Northwestern Atlantic Ocean and Gulf of Mexico. Based on the same dataset, Cortés et al.

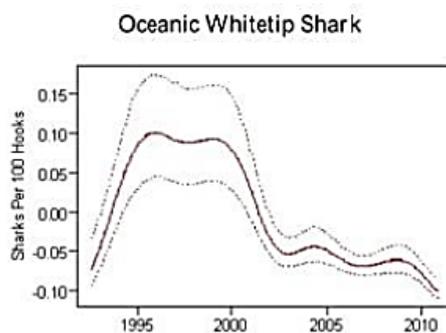
(2008) estimated a decline of 57% for this species from 1992 to 2005 (as cited by CITES, 2013). The results of interferences based on logbook data has been subject of debate (Burgess et al., 2005; Baum et al., 2005), as a change of fishing methods and practices could cause a bias in this data. During a survey from 1992 to 1997 in the southwestern equatorial Atlantic Ocean (Brazilian exclusive economic zone), 29% of the total elasmobranch catches were *C. longimanus*. After the blue shark (*Prionace glauca*), *C. longimanus* was the most common species among the elasmobranch catches (Lessa et al., 1999). Elasmobranchs constituted for 95% of the bycatch in the Spanish swordfish fishery in the Atlantic and Mediterranean Sea in 1999 (Mejuto et al., 2002). *C. longimanus* only made up 0.2% of the total elasmobranch catches (by rounded weight) within this fishery. The species was present in 4.7% of the purse seine sets in the eastern Atlantic Ocean (Santana et al., 1997; Bonfil et al., 2008). Per 1000 hooks set, Domingo (2004) reports a catch rate of this species of 0.006 sharks in the southern Atlantic and 0.09 sharks off western Africa (as cited in Bonfil et al., 2008). Data from the Japanese longline fleet operating in the Atlantic Ocean indicates that *C. longimanus* makes up 0.12% of the bycatch of elasmobranch species (Senba and Nakano, 2005). Although several studies indicate that large pelagic sharks (including *C. longimanus*) declined over the past decades, the magnitude of these declines is unclear, due to sampling differences and origin of the data. Young et al. (2016) list several tagging studies of Atlantic Oceanic Whitetip sharks from the Gulf of Mexico, Bahamas and Brazilian longline fleet in the Central Atlantic. Even though these studies only followed a limited number of animals some observations can be made. The sharks preferred to remain at relatively shallow depth in warm waters with temperatures between 24 and 30°C and several seemed to show a strong site fidelity returning to the place they were tagged after traveling thousands of kilometers (Tolotti et al. 2015a).

## Pacific Ocean

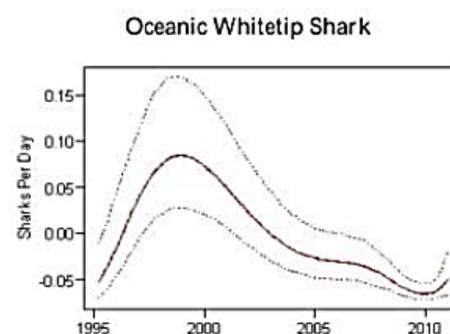
Catches of *C. longimanus* within the Pacific Ocean have been included in a number of fishery dependent studies. Based on catches of the Japanese longline fishing fleet, a significant difference in catch-per-unit-effort (CPUE) of *C. longimanus* between the period of 1967 – 1970 and the period of 1992 – 1995 was reported. Within the east of the study area (east of the 180° latitude), an increase of 40 to 80% was determined just above the equator (10°N), whereas slightly further north (10° - 20°N) a decrease of 30 to 50% was reported for the species (Matsunaga and Nakano, 1999; Bonfil et al., 2008). However, just like the studies conducted in the Atlantic, the authors reported that multiple variables could cause a bias in these trends. Another study based on Japanese research longline surveys indicates that *C. longimanus* comprised of 22.5% of the total shark catches in the western Pacific and 21.3% in the eastern Pacific (Taniuchi, 1990, as cited in CITES, 2013). Within the tropical western and central Pacific Ocean, *C. longimanus* is among the four most caught species in the tuna longline fishery and is the second most caught species (after silky sharks, *Carcharhinus falciformis*) in the tuna purse sein fishery (Williams, 1999). For this same region, Lawson (2011) analyzed the results of the observer program of the longline (1991 - 2011) and purse seine (1994 - 2011) tuna fishery. For the longline fishery, *C. longimanus* were observed on 43% of the fishing trips, with a decreasing trend in sharks per 100 hooks over the study period (Figure 3). A similar trend was determined based on observer data from the purse seine fishery, as the number of sharks per day declined over the study period (Figure 4). Similar, but slightly different trends were published for this region by Clarke et al. (2013). This study concluded that catch rate of *C. longimanus* within the longline fishery declined with 17% per year. Two studies describe the catches of *C. longimanus* in the pelagic longline fishery based in Hawaii (Walsh et al., 2009). The first study describes how CPUE (defined as the number of sharks per 1,000 hooks) decreased in deep and shallow longline sets. The CPUE for the shallow set lines decreased from 0.351 for the period of 1995 to 2000, to 0.161 sharks per 1,000 hooks from 2004 to 2006. The CPUE of longline sets deployed in deep water decreased from 0.272 to 0.060 sharks per 1,000 hooks for the same periods respectively (Walsh et al., 2009). A later study indicated that over the period from 1995 to 2010, the CPUE of this species decreased with 90% from 0.428 to 0.036 sharks per 1,000 hooks (Walsh and Clarke, 2011).

## Indian Ocean

According to Santana et al. (1997; as cited by Bonfil et al., 2008), *C. longimanus* was present in 16% of the purse seine nets deployed by the Spanish and French fishing fleets operating in the western Indian Ocean. Catches of *C. longimanus* in the shark longline fishery operating off northern Maldives decreased from 19.9% in 1987 – 1988 to 3.5% in 2002 – 2004 (Anderson et al., 2011; CITES, 2013). For many elasmobranch species, including *C. longimanus*, inferences based on historical (logbook) data tend to be biased by multiple variables. Changes in fishing techniques, species targeting, and unreported catches can cause biases in trends. However, as many cited studies show, populations of *C. longimanus* although the magnitude of decline remains unclear, this species is likely threatened by overfishing on a global scale (Baum et al., 2015). In 2016, Young et al. conducted an extensive review of available literature on the state of the global Oceanic Whitetip Shark population as part of a Status Review to assess the species for the Endangered Species list in the US. They summarized that: overall, evidence (both quantitative and qualitative) suggests that while the oceanic whitetip shark was once considered to be one of the most abundant and commonly encountered pelagic shark species wherever it occurred, this oceanic species has likely undergone population abundance declines of varying magnitudes throughout its global range. Where more robust information is available, declines in oceanic whitetip shark abundance range from 86% to greater than 90% in some areas of the Pacific Ocean (with declines observed across the entire basin), and between 57%-88% in the Atlantic and Gulf of Mexico. Although information from the Indian Ocean is highly uncertain and much less reliable, the best available information points to varying magnitudes of decline, with the species becoming rare across the basin over the last 20 years. The only population that currently shows a stable trend, based on standardized CPUE observer data, is the Northwest Atlantic. The trend of oceanic whitetip catches in the Hawaii-based pelagic longline fishery may have also potentially stabilized at a post-decline depressed state in recent years. In addition to CPUE trends, which can often be misleading and unreliable due to uncertainties in standardization, stock structure and other factors, other abundance indices such as trends in occurrence and composition of the species in catch data, as well as biological indicators (e.g., mean length or weight, etc.) also indicate significant and continuing declines of oceanic whitetip in a large portion of its range.



**Figure 3.** Number of *Carcharhinus longimanus* per 100 hooks in the western and central Pacific tuna longline fishery. Source: Lawson (2011)



**Figure 4.** Number of *Carcharhinus longimanus* per day in the western and central Pacific tuna purse seine fishery. Source: Lawson (2011)

### 4.3 Habitat (short description and trends)

Young et al. (2016) report *C. longimanus* as a truly oceanic species usually found far offshore in the open sea in waters over 200m deep. The species occurs in both coastal and pelagic zones, utilizing shallow habitats from surface waters to a depth of 20 meters. The oceanic whitetip has been reported from waters between 15°C and 28°C, however the species exhibits a strong preference for the surface mixed layer in water with temperatures above 20°C. It can

tolerate colder waters down to 7.75°C for short periods in deep dives into the mesopelagic zone below the thermocline (>200 m), presumably for foraging (Howey-Jordan et al. 2013; Howey et al. 2016).

The low tolerance to lower water temperatures appear to create a barrier between the western Atlantic and Indo-Pacific population. Ruck (2016) found genetic differentiation between the populations on both sides of the tip of South Africa.

#### **4.4 Biological characteristics**

The Oceanic Whitetip is one of the most widespread sharks, ranging across entire oceans in tropical and subtropical waters (Young et al. 2016). It is an oceanic-epipelagic shark, usually found far offshore in the open sea with a preference for surface waters but it has been reported to depths of 1,082 m (Weigmann 2016, Bonfil et al. 2008, Tolotti et al. 2015). It reaches a maximum size of 350 cm total length (TL), possibly 395 cm TL; males mature at 168-198 cm TL and females at 175-224 cm TL (Ebert et al. 2013, Weigmann 2016, D'Alberto et al. 2017). Reproduction is placental viviparous with litter sizes of 1-15 that increase with female size; gestation period is 10-12 months with most likely a biennial reproductive cycle and size at birth of 57-77 cm TL (Bonfil et al. 2008, Last and Stevens 2009, Seki et al. 1998, Clarke et al. 2015). The rate of population increase is thought to be low and has been estimated at 0.039-0.067 (Smith et al. 2008), or 0.110 (Dulvy et al. 2008), although these are based on younger age at maturity and maximum age than since reported, which implies the population increase rate could be lower. There is regional variation in age estimates; female age at maturity is 4.5-8.8, 6.5 and 15.8 years and maximum age is 11, 17 and 24.9 years in Northwest Pacific, Southwest Atlantic, and Western Central Pacific, respectively (Seki et al. 1998, Lessa et al. 1999, Liu and Tsai 2011, Joung et al. 2016, D'Alberto et al. 2017). Studies have verified annual periodicity of band formation but none have yet validated the age estimates. Using the precautionary approach, the older ages at maturity of 15.8 years and maximum age of 24.9 years are used for a generation length of 20.4 years across all regions.

#### **4.5 Role of the taxon in its ecosystem**

Trophic Level: 4.2 ±0.4 se; Based on diet studies.

### **5. Conservation status and threats**

#### **5.1 IUCN Red List Assessment (if available)**

Critically Endangered A2bd (Rigby et al. in prep).

#### **5.2 Equivalent information relevant to conservation status assessment**

Vulnerable A4d (ICMBio 2011)

#### **5.3 Threats to the population (factors, intensity)**

The Oceanic Whitetip Shark is caught globally as target and bycatch in pelagic commercial large-scale and small-scale longline fisheries, purse seine and gillnet fisheries. The majority of the catch is taken as bycatch of industrial pelagic fleets in offshore and high-seas waters (Camhi et al. 2008). It is also captured in coastal longlines, gillnets, trammel nets and sometimes trawls, particularly in areas with narrow continental shelves (Camhi et al. 2008, Martinez-Ortiz et al. 2015). The species is generally retained for the meat and fins (Clarke et al. 2006a, Clarke et al. 2006b, Dent and Clarke 2015, Fields et al. 2017), unless regulations prohibit retention. Under-reporting of catches in the pelagic and domestic fisheries is likely (Dent and Clarke 2015).

## 5.4 Threats connected especially with migrations

Unknow

## 5.5 National and international utilization

Although there is a limited market for oceanic whitetip meat in some areas, mainly through artisanal fisheries, as stated earlier the main driver for the fishery (directed and bycatch) is the high value of the fins on the international market. *C. longimanus* fins are large and deemed prime quality in the Hong Kong fin market. This makes them one of the most valuable fins on the Hong Kong market (the largest international fin market), with values ranging between \$45–85 per kg (Clarke et.al. 2006b).

## 6. Protection status and species management

### 6.1 National protection status

Shark finning has been banned in Brazil since 2012 after the publication of Interministerial Normative Instruction No. 14, of November 26, 2012. It is allowed only the landing of sharks and rays with all the fins naturally attached to the body of the animal. In December 2014, Brazil approved its National Action Plan for the Conservation of Elasmobranchs in Brazil. Apart from general requirements for all catches of elasmobranchs to be sustainable, the plan focus on 12 priority species which do not include specific regulations to manage or protect the oceanic whitetip shark. However, the Brazilian Interministerial Normative Instruction No. 01, of March 12, 2013, prohibits directed fishing, retention on board, transshipment, landing, storage, transportation and marketing of oceanic whitetip shark (*Carcharhinus longimanus*), in Brazilian jurisdictional waters and on national territory. Also, in the Brazilian list of Endangered Fish and Aquatic Invertebrates in force, Ordinance No. 445 of December 17, 2014, the oceanic whitetip shark is classified as “Vulnerable”.

### 6.2 International protection status

#### FAO:

In 1998 the International Plan of Action for Conservation and Management of Sharks (IPOA Sharks) was agreed for all species of sharks and rays. The IPOA-Sharks is a voluntary international instrument, developed within the framework of the 1995 FAO Code of Conduct for Responsible Fisheries, that guides nations in taking positive action on the conservation and management of sharks and their long-term sustainable use. Its aim is to ensure the conservation and management of sharks and their long-term sustainable use, with emphasis on improving species-specific catch and landings data collection, and the monitoring and management of shark fisheries. The code sets out principles and international standards of behavior for responsible fishing practices to enable effective conservation and management of living aquatic organisms while considering impacts on the ecosystem and biodiversity. The IPOA-Sharks recommends that FAO member states ‘should adopt a national plan of action for the conservation and management of shark stocks (NPOA-Sharks), if their vessels conduct directed fisheries for sharks or if their vessels regularly catch sharks in nondirected fisheries’. Several range states have developed national action plans: Australia, Brazil, Canada, Egypt, Democratic People's Republic of Korea; Japan; Mexico; New Zealand; Oman; South Africa; United States, as well as regional action plans: Pacific Island States, the Central American Isthmus (OSPESCA), the EU and the Mediterranean.

#### RFMO's

All relevant RFMO's have developed management measures banning the retention of oceanic whitetip shark.

**CITES:**

CITES works by subjecting international trade in specimens of selected species to certain controls. All import, export, re-export and introduction from the sea of species covered by the Convention must be authorized through a licensing system. Each Party to the Convention must designate one or more Management Authorities in charge of administering that licensing system and one or more Scientific Authorities to advise them on the effects of trade on the status of the species. The species covered by CITES are listed in three Appendices, according to the degree of protection they need. the oceanic whitetip shark was listed under Appendix II of CITES in 2013.

Appendix-II specimens require:

- An export permit or re-export certificate issued by the Management Authority of the State of export or re-export is required.
- An export permit may be issued only if the specimen was legally obtained and if the export will not be detrimental to the survival of the species.

RFMO	Area	Year established	Description
ICCAT	Atlantic	2010	Recommendation 10-07: prohibits the retention, transshipping, landing, storing, selling, or offering for sale any part or whole carcass of oceanic whitetip sharks in any fishery
IOTC	Indian Ocean	2013	Resolution 13-06: prohibits the retention, transshipment, landing, or storing of any part or whole carcass of oceanic whitetip sharks. The retention prohibition of oceanic whitetip shark exempts “artisanal fisheries operating exclusively in their respective EEZ for the purpose of local consumption.”
IATTC	Eastern Pacific	2011	Resolution C-11-10 for the conservation of oceanic whitetip sharks caught in association with fisheries in the Antigua Convention Area. This Resolution prohibits Members and Cooperating Non-Members (CPCs) from retaining onboard, transshipping, landing, storing, selling, or offering for sale any part or whole carcass of oceanic whitetip sharks in the fisheries covered by the Antigua Convention.
WCPFC	Western-Central Pacific	2011	2011-04 that prohibits retaining onboard, transshipping, storing on a fishing vessel, or landing any oceanic whitetip shark, in whole or in part, in the fisheries covered by the Convention. WCPFC also adopted 2014-05 (effective July 2015) that requires each national fleet to choose either banning wire leaders or banning the use of shark lines.

**Barcelona Convention (Mediterranean):**

The Oceanic Whitetip shark is listed in Appendix II of the Barcelona Convention, affording it protection from fishing activities taking place in the Mediterranean region. All species listed in Appendix II must be released unharmed and alive to the extent possible, therefore cannot be retained on board, transhipped, landed, transferred, stored, sold, displayed or offered for sale (Recommendation GFCM/36/2012/1). The recommendation continues to stipulate that all vessels encountering these species must record information on fishing activities, catch data, incidental taking, release and/or discarding events in a logbook or similar document, then all logged information must be reported to national authorities. Finally, additional measures should be taken to improve such data gathering in view of scientific monitoring of the species.

**The Protocol Concerning Specially Protected Areas and Wildlife (SPA Protocol)**

The SPAW protocol of the Cartagena convention is the only cross border legal instrument for species and habitat protection in the wider Caribbean region. Oceanic Whitetip was added to Annex III protocol in March 2017. Species on Annex III may be utilized on a rational and sustainable basis, but parties are obliged to in co-operation with other Parties, formulate, adopt and implement plans for the management and use of such species, this can include:

1. the prohibition of all non-selective means of capture, killing, hunting and fishing and of all actions likely to cause local disappearance of a species or serious disturbance of its tranquility;
2. the institution of closed hunting and fishing seasons and of other measures for maintaining their population;
3. the regulation of the taking, possession, transport or sale of living or dead species, their eggs, parts or products

**6.3 Management measures**

In Brazil a National Action Plan for the Conservation and Management of Sharks and Rays is on the run, following similar procedures and methodology used by de IPOA-Sharks from FAO. The first five-year cycle (2012-2019) is finishing and the main advances were related with the increase in number and size of marine protected areas, environmental education and research. The creation of large marine protected areas embracing the seamounts chain of Trindade-Vitória and the Islands of Fernando de Noronha, Rocas Atoll, and the seamounts of Saint Peter and Saint Paul will help to protect the migration, mating and feeding areas. The efficiency to protect these two large areas will depend on the surveillance systems used (e.g. VMS, sea observers). Also, another several marine protected areas distributed along the Brazilian coast would help to protect the pupping grounds and nursery areas of the oceanic white tip sharks. Conversely, the most difficult task of the plan is how to reduce the fishing mortality over pups, juveniles and adults, caused by different types of gear (trawls, gillnets, longlines, handlines, rod and reel) along the continental shelf and slope, and this point will depend on agreements between the Ministries of Environment, Agriculture and Foreign Affairs. At the same time Chico Mendes Institute for Biodiversity Conservation (ICMbio) is developing an integrated monitoring system of the elasmobranch catches, along the Brazilian coastal states. However, there isn't a national sea observers program working effectively which could help Brazilian authorities to know the levels of catches for *C. longimanus*.

## 6.4 Habitat conservation

### 5 Population monitoring

At a federal level, Chico Mendes Institute for Biodiversity Conservation (ICMBio), with the help of its research centers, is developing a monitoring program along the Brazilian Coast (Called “Monitora”), to assess the catches of marine elasmobranchs by the different types of fishing gear. The registry of oceanic white-tip shark catches is included in this program. The program consists to identify places where sharks and rays species are landed, obtain data about fishing effort and catches, perform biological sampling and if possible, conduct some fishing cruise with sea-observers. The data obtained will help to assess the exploitation levels of *C. longimanus* and depending on the quality of the information, could help to understand the spatial-temporal distribution of the species, its conservation status, pupping grounds and nursery areas. Also, biological sampling will help to study the age and growth, reproduction, and population structure of the species for stock assessment purposes. Along the southern coast of Brazil, industrial and artisanal fisheries are also monitored by this “Monitora” program, whose activities are managed by one of the ICMBio Research Centers (CEPSUL), located in Itajaí, Santa Catarina State.

## 7. Effects of the proposed amendment

### 7.1 Anticipated benefits of the amendment

Listing on international agreements, such as the CMS could help to drive improvements in national and regional management and facilitate collaboration between states, for this species.

An Appendix I listing is anticipated to lead to increased attention to legislative protection in range states and other oceanic white-tip shark conservation requirements

### 7.2 Potential risks of the amendment

No potential risks to oceanic white-tip shark conservation are foreseen from an Appendix I listing.

### 7.3 Intention of the proponent concerning development of an Agreement or Concerted Action

- International agreement Brazil-Uruguay-Argentina for the conservation and management of the oceanic white-tip shark, *Carcharhinus longimanus*, through their National Plans of Action, considering the species included in the CMS appendix 1.

- The Focal Points for the nominated taxon could be Roberta Aguiar dos Santos and Rodrigo Barreto, scientific authorities from one of the ICMBio Research Centers (CEPSUL), located in Itajaí, Santa Catarina State, Brasil, with the help of Gilberto Sales from Sea-Turtle Tamar project.

## 8. Range States

Angola; Antigua and Barbuda; Australia (Christmas Island; Cocos Keeling Islands; Heard Island and McDonald Islands; New South Wales, Northern Territory, Queensland, South Australia, Western Australia); Bahamas; Bangladesh; Barbados; Belize; Benin; Brazil; Brunei Darussalam; Cambodia; Cameroon; Cabo Verde; Chile; China; Colombia; Comoros; The Democratic Republic of the Congo; Costa Rica; Côte d'Ivoire; Cuba; Denmark (Faroe Islands); Djibouti; Dominica; Dominican Republic; Ecuador; Egypt; El Salvador; Equatorial Guinea; Eritrea; Fiji; France (French Guiana; French Polynesia; French Southern Territories; Guadeloupe; Martinique; New Caledonia; Réunion; Saint Martin) Gabon; Gambia; Ghana; Grenada; Guatemala; Guinea; Guinea-Bissau; Guyana; Haiti; Honduras; India; Indonesia; Israel; Jamaica; Japan; Jordan; Kenya; Liberia; Madagascar; Malaysia; Maldives; Marshall Islands; Mauritania; Mauritius; Mexico (Baja California, Baja California Sur, Campeche, Chiapas, Colima, Guerrero, Jalisco, Michoacán, Nayarit, Oaxaca, Quintana Roo, Sinaloa, Sonora, Tabasco, Tamaulipas, Veracruz, Yucatán); Morocco; Myanmar; Nauru; Netherlands (Aruba, Bonaire, Curaçao; Sint Eustatius and Saba; Sint Maarten); Nicaragua; Niger; New Zealand (Cook Islands; Niue, Tokelau); Norway (Bouvet Island); Oman; Pakistan; Palau; Panama; Papua New Guinea; Peru; Philippines; Portugal (Azores, Madeira); Puerto Rico; Saint Kitts and Nevis; Saint Lucia; Saint Vincent and the Grenadines; Samoa; Sao Tomé and Príncipe; Saudi Arabia; Senegal; Seychelles; Sierra Leone; Singapore; Slovenia; Solomon Islands; Somalia; South Africa (KwaZulu-Natal, Northern Cape Province, Western Cape); Spain (Canary Is.); Sri Lanka; Sudan; Suriname; United Republic of Tanzania; Thailand; Togo; Tonga; Trinidad and Tobago; Tuvalu; UK (Anguilla; Ascension and Tristan da Cunha; Bermuda, Saint Helena; Cayman Islands; Montserrat; Pitcairn; Turks and Caicos Islands; Virgin Islands); USA (Alabama; American Samoa; California, Connecticut, Delaware, District of Columbia, Florida, Georgia, Guam; Hawaiian Is., Johnston I., Louisiana, Maine, Maryland, Massachusetts, Mississippi, New Hampshire, New Jersey, New York, North Carolina, Northern Mariana Islands; Rhode Island, South Carolina, Texas, Virginia; Wake Is); Uruguay; Vanuatu; Bolivarian Republic of Venezuela; Viet Nam.

## 9. Consultations

## 10. Additional remarks

## 11. References

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