This NDF was developed using the CITES e-NDF tool available at

https://user.cites-endf.org



Step 1: Preliminary Considerations

1.0) IS AN NDF NEEDED?

a) CITES Party	NAMIBIA
b) Management Authority (name, address, contact details)	Ministry of Environment, Forestry and Tourism Private Bag 13306 Windhoek Namibia Tel: (+264-61) 2842111
c) Scientific Authority (name, address, contact details)	Fax: (+264-61) 229936 Ministry of Fisheries and Marine Resources Private Bag 13355 Windhoek Namibia Tel: (+264-61) 2053084 Email Address: MFMRenquiries@mfmr.gov.na

1.1a) Is the specimen subject to CITES controls?

a) Species	Prionace glauca
b) Will species be exported?	Yes
Comments/Source(s) of information	
c) In what form is the product?	Mixed
Comments/Source(s) of information	Product form: Fins, Frozen Headed and Gutted meat carcass
d) Is the fishery domestic or high seas, or both?	Both
Is the fishery artisanal, large scale, or both?	Large scale
Comments/Source(s) of information	The blue sharks are mostly caught by the large pelagic sector.
e) Since it is a high seas fishery, has the management authority issued an Introduction from the Sea (IFS) Certificate?	Yes
Comments/Source(s) of information	Indontified as promote to experies at landing site, and has about affected.
f) Source of identification Comments/ Source(s) of information	Identified on permit, to species at landing site, and has chain of custody Blue sharks are caught under the Namibian large pelagic fishing right by the large pelagic sector. At landing sites they are identified to species level by Namibia's Fisheries inspectors. Onboard vessels skippers are required to complete a logbook of their catches and all activities onboard are observed by Fisheries Observers for compliance purposes.
How likely is the product to be correctly identified:	Likely
Question 1.1(a): Is the specimen subject to CITES controls?	Yes

1.1b) From which stock will the specimen be taken/was the specimen taken?

a) Ocean Basin	Atlantic Ocean
Comments/ Source(s) of information	The blue sharks are caught in the South Atlantic Ocean by the Namibian fleet.
b) Is this a shared stock (i.e. occurring in more than one EEZ and/or the high seas)?	Yes
Comments/Source(s) of information	It is a straddling stock ranging between Namibia's EEZ, the high seas and likely other Atlantic EEZ https://www.iucnredlist.org/ https://www.iucnredlist.org/species/39381/2915850
c) If the stock occurs in more than one EEZ, which other Parties share this stock? (If unknown, type "Unknown")	The stock occurs in other littoral states of the South Atlantic ocean
Comments/Source(s) of information	This species is a migratory species and therefore may be subjected to catch within the high seas by other countries https://www.iucnredlist.org/ https://www.iucnredlist.org/species/39381/2915850
d) If a high seas stock, which other Parties fish this stock? (If unknown, type "Unknown")	ICCAT contracting parties: EU Spain, EU Portugal, Brazil, Ghana, South Africa, Japan, China PR, Uruguay, etc. and possibly other non-contracting parties.

Comments/Source(s) of information	This species is a migratory species and therefore may be subjected to catch within the high seas by other countries 1. Report of the 2023 ICCAT Blue shark Stock Assessment Meeting https://www.iccat.int/Documents/Meetings/Docs/2023/REPORTS/2023_BSH_ENG.pdf 2. Report of the Standing Committee on Research and Statistics (SCRS) https://www.iccat.int/Documents/Meetings/Docs/2023/REPORTS/2023_SCRS_ENG.pdf
e) Which, if any, RFB(s) cover(s) the range of this stock? (If unknown, type "Unknown") Comments/ Source(s) of information	With respect to the South-east Atlantic Ocean: ICCAT, SEAFO, BCC, CECAF
f) Are all Parties listed above (which fish or share the stock concerned) members of the relevant RFB(s)?	Yes
Source(s) of information	All the above listed Parties are members of ICCAT., while more than one party above are from the other listed RFB(s).
g) Are there geographical management gaps? If so, list in comments	No
Source(s) of information	All fisheries that interact with blue sharks are regulated by management plans that implemented by the Namibia and ICCAT.
h) How reliable is the information on origin? Comments/Source(s) of information	Very reliable
Question 1.1(b): Can origin and stock be confidently identified?	Yes

1.2) Was (will) the specimen (be) legally obtained and is export allowed?

a) Strictly protected under wildlife legislation, a regional biodiversity Agreement, or (for a CMS Party) listed in CMS Appendix I?	No
	Not protected under Namibian legislation or regional agreements (BCC/SEAFO).
Comments/Source(s) of information	ICCAT Recommendation concerning the conservation of sharks caught in association with fisheries managed by ICCAT states that all sharks landed should have their fins naturally attached (fully/partially) through the point of first landing of the shark.
	Namibia monitors all landings at landing ports through fisheries inspectors and patrols at sea.
	www.mfmr.gov.na
b) Sourced from illegal fishing activities (e.g. in contravention of finning regulations, or where a TAC is zero or exceeded)?	No
Comments/Source(s) of information	
c) Taken from a no-take marine protected area or during a closed season?	No
Comments/ Source(s) of information	
d) Taken in contravention of RFB recommendations, if any?	No
Comments/ Source(s) of information	
e) Listed as a species whose export is prohibited?	No
Comments/Source(s) of information	
f) Of concern for any other reason?	No

Comments/Source(s) of information	
Question 1.2: Were specimens legally obtained?	Yes

1.3) What does the available management information tell us?

1.3a) Global information

a) Reported global catch	The blue sharks global catch (landed and reported) was estimated in 2019 as 189 783 t (Poseidon 2022). The catch was estimated by reconciling FAO data with catch data reported to the tuna Regional Fisheries Management Organizations (RFMOs) (Poseidon 2022).
Comments/Source(s) of information	https://oceana.org/wp-content/uploads/sites/18/2022/11/Oceana_BlueShark_Final_DEC2022.pdf
b) Species distribution	Blue sharks have a wide species distribution in all oceans from tropical to temperate waters worldwide from 62°N and 54°S; where water temperatures mainly range between 12°C and 20°C, although it can also be found in a greater temperature range.
Comments/Source(s) of information	https://www.iccat.int/Documents/Meetings/Docs/2023/REPORTS/2023_SCRS_ENG.pdf
c) Known stocks/populations	 There are no data available on the absolute global population size of the blue shark. Genetic results suggest one global population, with weak or no differentiation within and between ocean basins (Ovenden et al. 2009, King et al. 2015, Leone et al. 2017, Verissimo et al. 2017, Bailleul et al. 2018).
Comments/Source(s) of information	Rigby, C.L. et al. 2019. <i>Prionace glauca</i> . The IUCN Red List of Threatened Species 2019: e.T39381A2915850. http://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T39381A2915850.en
d) Main catching countries	The main catching countries (reporting catches) are members of ICCAT. Reporting by other countries is unknown.
Comments/Source(s) of information	International Commission for the Conservation of Atlantic Tunas: http://www.iccat.org/

e) Main gear types by which the species is taken	Longline
Comments/ Source(s) of information	
f) Global conservation status	Current IUCN Status: Near Threatened (Date Assessed: 6 November 2018; Year Published: 2019. Previous IUCN Status: 2009 - Near Threatened (NT) and 2000 - Lower Risk/near threatened (LR/nt)
Comments/ Source(s) of information	http://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T39381A2915850.en http://dx.doi.org/10.2305/IUCN.UK.2009-2.RLTS.T39381A10222811.en
g) Multilateral environmental agreements	CITES convention (Appendix II) and ICCAT convention (Recommendation 21-11)
Comments/Source(s) of information	https://www.iccat.int/Documents/Recs/compendiopdf-e/2021-11-e.pdf

1.3b) Stock/context-specific information

a) Stock assessments	The 2023 Blue Shark Stock Assessment was conducted for the northern and southern Atlantic stocks only using two modeling approaches, Just Another Bayesian Biomass Assessment (JABBA), and integrated statistical assessment model, Stock Synthesis (SS3).
	Based on the combined results from the two stock assessment model platforms, the South Atlantic blue shark stock in 2021 was not overfished (B2021/BMSY = 1.29, with 95% confidence interval: 0.89 - 1.81) but is undergoing overfishing (F2021/FMSY = 1.03 with 95% confidence interval: 0.45 – 1.55). The joint Kobe phase plot indicates that there is a 46.5% probability that the stock currently falls within the orange quadrant, a 44.7% probability that the stock falls within the green quadrant, and 8.02% probability of being in the red quadrant, with less than 1% chance that it is in the yellow quadrant.
	Projections were conducted for a range of fixed catches for the period 2024 to 2033. Ten catch scenarios were applied, starting in a zero-catch scenario, and in intervals of 2,500 t from 15,000 t to 32,500 t, also including the estimated combined MSY level 27,711 t. If current catch levels (average of 2019-2021) of about 35,000 t are maintained, the stock is expected to rapidly
	decline in biomass, with a risk of falling below 20% of the estimated BMSY reference level in a few years.
Comments/Source(s) of information	https://www.iccat.int/Documents/Meetings/Docs/2023/REPORTS/2023_SCRS_ENG.pdf
b) Main management bodies	ICCAT, FAO-IPOA, CITES
Comments/ Source(s) of information	

c) Cooperative management arrangements	The Common Oceans Areas Beyond National Jurisdiction Program (ABNJ) aims to improve cooperation between tuna RFMOs. • ICCAT is a partner specifically on sustainable management of tuna RFMOs and biodiversity project.
Comments/ Source(s) of information	http://www.fao.org/in-action/commonoceans/en/
d) Non-membership of RFBs	All of the main catching countries in the South Atlantic Ocean are members of ICCAT.
Comments/Source(s) of information	
e) Nature of harvest	 The blue sharks are taken in Namibia as bycatch in the commercial longline fisheries (tuna, swordfish). Elsewhere in the Atlantic Ocean, by other ICCAT members, they are taken using the same fishing method.
Comments/Source(s) of information	
f) Fishery types	Pelagic Longline
Comments/Source(s) of information	 The blue sharks are taken in Namibia as bycatch in the commercial longline fisheries (tuna, swordfish). Elsewhere in the Atlantic Ocean, by other ICCAT members, they are taken using the same fishing method.
g) Management units	 In the Atlantic Ocean, the main body responsible is ICCAT. Namibia has developed several national instruments such as policy guidelines, laws and regulations, by incorporating ICCAT Resolutions and other conservation and management measures stipulated under ratified conventions.
Comments/ Source(s) of information	https://mfmr.gov.na/home
h) Products in trade	Fins, Meat (Headed and Gutted)

Comments/Source(s) of information	

1.3c) Data and data sharing

	Total catch for 2022: 4694 tons;
a) Reported national catch(es)	Average total catch for 2018-2022: 3801.20 tons.
Comments/Source(s) of information	https://www.iccat.int/Documents/Meetings/Docs/2023/REPORTS/2023_SCRS_ENG.pdf
b) Are catch and/or trade data available from other States fishing this stock?	Yes, catch data are reported to ICCAT by member states fishing in the Atlantic Ocean on a yearly basis.
Comments/Source(s) of information	
c) Reported catches by other States	Access to data by other states managed under ICCAT are available: Nominal Catches, Fleet Characteristics, Catch and Effort data and Size Sampling data.
Comments/ Source(s) of information	http://www.iccat.org/ https://www.iccat.int/en/accesingdb.html
d) Catch trends and values	The stock assessment for the blue sharks in South Atlantic and available catch data are in 1.3 b and 1.3 c. The catches of both the northern and southern blue shark stocks had an increasing trend since early 1970s. The peak for the South Atlantic catches was observed in 2019 with 37317 t. Recent blue shark catches for the South Atlantic show an increasing trend.
Comments/Source(s) of information	https://www.iccat.int/Documents/Meetings/Docs/2023/REPORTS/2023_SCRS_ENG.pdf
e) Have RFBs and/or other States fishing this stock been consulted during or contributed data during this process?	No, but the main fishing states report their landings to ICCAT, which is publicly available through the Secretariat.
Comments/Source(s) of information	International Commission for the Conservation of Atlantic Tunas: http://www.iccat.org/

Step 2: Biological and conservation concerns

2.1) What is the level of intrinsic biological vulnerability of the species?

a) Median age at maturity Comments/ Source(s) of information	5-15 years
b) Median size at maturity Comments/ Source(s) of information	over 200 cm TL
c) Maximum age/longevity in an unfished population	10-25 years
Comments/Source(s) of information	https://www.iccat.int/Documents/CVSP/CV080_2023/n_4/CV080040528.pdf
d) Maximum size	over 300 cm TL
Comments/Source(s) of information	https://www.iccat.int/Documents/CVSP/CV080_2023/n_4/CV080040528.pdf https://www.iccat.int/Documents/SCRS/Manual/CH2/2_2_1_1_BSH_ENG.pdf
e) Natural mortality rate (M)	0.17-0.4
Comments/Source(s) of information	https://www.iccat.int/Documents/CVSP/CV080_2023/n_4/CV080040528.pdf https://www.iccat.int/Documents/SCRS/Manual/CH2/2_2_1_1_BSH_ENG.pdf
f) Maximum annual pup production (per mature female)	over 15 pups per year

Medium level of vulnerability
High
Some behavioral factors to increase risk to stock
interval: 0.45 – 1.55. https://www.iccat.int/Documents/SCRS/Manual/CH2/2_2_1_1_BSH_ENG.pdf
B2021/BMSY = 1.29, with 95% confidence interval: 0.89 - 1.81; F2021/FMSY = 1.03 with 95% confidence
25-50% baseline abundance
The Atlantic stock is widespread and not fragmented across its range.
Ocean basin, unrestricted, limited fragmentation
North Atlantic, 0.299 in the South Atlantic, and 0.264–0.331 in the Indian Ocean (Dulvy et al. 2008, Cortes et al. 2015, Murua et al. 2018).
The Blue Shark has the highest known population growth rates for pelagic sharks; that is, 0.287–0.314 in the
0.15-0.35
https://www.iccat.int/Documents/SCRS/Manual/CH2/2_2_1_1_BSH_ENG.pdf
https://www.iccat.int/Documents/CVSP/CV080_2023/n_4/CV080040528.pdf
On each breeding season, females give birth on average to 37 pups, usually 45-50 cm TL, although smaller and larger sizes can be reached occasionally (Mas et al, 2023).

2.2) What is the severity and geographic extent of the conservation concern?

Conservation or stock assessment status:

Has a Fisheries stock assessment been conducted?	Yes
If yes, what is the Fisheries stock assessment status?	The stock is not overfished BUT is undergoing overfishing
Comments/Source(s) of information	Based on the combined results from the two-stock assessment model platforms (SS3 and JABBA), the South Atlantic blue shark stock in 2021 was not overfished (B2021/BMSY = 1.29, with 95% confidence interval: $0.89 - 1.81$) but is undergoing overfishing (F2021/FMSY = 1.03 with 95% confidence interval: $0.45 - 1.55$).
	The joint Kobe phase plot indicates that there is a 46.5% probability that the stock currently falls within the orange quadrant (not overfished but subject to overfishing), a 44.7% probability that the stock falls within the green quadrant (not overfished not subject to overfishing), and 8.02% probability of being in the red quadrant (overfished and subject to overfishing), with less than 1% chance that it is in the yellow quadrant (overfished but not subject to overfishing)
Has a National Redlist Assessment been conducted?	No
Comments/Source(s) of information	
What is the Regional IUCN Redlist Assessment?	The species, population, or stock has been assessed and is moderately threatened (NT, VU or equivalent)

Comments/Source(s) of information	Regional assessments were previously done for: The Arabian Seas - Near Threatened, assessed in 2017 (Jabado et all. 2017). Mediterranean - Critically Endangered, assessed in 2016. https://www.iucnredlist.org/species/39381/16553182 Europe - Near Threatened, assessed 2014. https://www.iucnredlist.org/species/39381/4892 4261
What is the Global IUCN Redlist Assessment?	The species, population, or stock has been assessed and is moderately threatened (NT, VU or equivalent)
Comments/ Source(s) of information	Near Threatened. Assessed in 2018; Rigby, C.L., Barreto, R., Carlson, J., Fernando, D., Fordham, S., Francis, M.P., Herman, K., Jabado, R.W., Liu, K.M., Marshall, A., Pacoureau, N., Romanov, E., Sherley, R.B. & Winker, H. 2019. Prionace glauca. The IUCN Red List of Threatened Species 2019: e.T39381A2915850. http://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T39381A2915850.en
What are the population trends? Comments/ Source(s) of information	Area of distribution and/or population density is stable or increasing
What is the geographic extent/scope of conservation concern?	Identified threats affect the national/regional stock of the species
Comments/ Source(s) of information	
Overall geographic conservation concern:	Medium level of concern

Step 3: Pressure on the Species

3.1) What is the severity of trade pressure on the stock of the species concerned?

a (i) Magnitude of legal trade	Low
ii) What is the level of confidence in the answer?	Medium
Comments/Source(s) of information	The Namibian catches of blue sharks within the South Atlantic is quite low when compared to the overall TAC set by ICCAT. The blue sharks have only been listed on Appendix II recently and the confidence level of legal trade while listed on CITES Appendix II is unknown.
b (i) Magnitude of illegal trade	Low
ii) What is the level of confidence in the answer?	Not applicable (Severity of pressure is unknown)
Comments/ Source(s) of information	Not known since the blue sharks have only been recently listed on CITES Appendix II, however their fins dominate the global fin trade with their meat dominating the increasing global meat trade.
Overall trade pressure:	Low
Overall level of confidence:	Low

3.2) What is the severity of fishing pressure on the stock of the species concerned?

a (i) Fishing mortality (retained catch)	Low
ii) What is the level of confidence in the answer?	Medium
Comments/ Source(s) of information	
b (i) Discard mortality	Low
ii) What is the level of confidence in the answer?	High
	Namibia's domestic law does not permit any dead discards.
Comments/ Source(s) of information	Marine Resources Act 27 of 2000 www.mfmr.gov.na
c (i) Size/age/sex selectivity	Low
ii) What is the level of confidence in the answer?	High
Comments/Source(s) of information	The blue shark is a bycatch within the Tuna and Swordfish targeting pelagic longline fisheries and therefore no size/age/sex selectivity.
d (i) Magnitude of illegal, unreported and unregulated (IUU) fishing	Low
ii) What is the level of confidence in the answer?	High
Comments/Source(s) of information	Unknown, species only recently listed on CITES Appendix II in 2022 and this listing only comes into effect November 2023.
Overall severity of fishing mortality:	Low
Overall level of confidence:	High

Step 4: Existing Management Measures

4.1) Are existing management measures appropriately designed and implemented to mitigate pressures affecting the stock?

<u>Pressure</u> - Magnitude of Legal Trade	
Existing management measure	Marine Resources Act 27 of 2000
Is it a Sub-national/National, or Regional/International measure?	Sub National/National
Is the measure generic, species-specific or both?	Generic
Relevant monitoring, control, and surveillance (MSC) measure(s)	Namibia has developed several national instruments such as policy guidelines, law and regulations, and plan of action to guide the process of implementation of the commitments made under international treaties. Marine Resources Act (2000) is the main legal instrument that provides for the management, regulation, conservation and development of fisheries and aquatic resources in Namibia, and gives effect to Namibia's obligations under certain international and regional fisheries agreements. Marine Resources Act provides for regulation, control and management of fishing activities by the foreign boats in Namibia waters. The Act is administered by the Ministry of Fisheries and Marine Resources. Some current regulations enacted provide some protection for shark.
Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)
Are relevant data collected and analysed to inform management decisions?	Comprehensive data collected AND analysed to inform management
Is management consistent with expert advice?	Consistent

Is the management measure effective at addressing the pressure? Yes
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<u>Pressure</u> - Magnitude of Legal Trade	
Existing management measure	FAO Port State Measurement Agreement
Is it a Sub-national/National, or Regional/International measure?	Regional/International
Is the measure generic, species-specific or both?	Generic
Relevant monitoring, control, and surveillance (MSC) measure(s)	Outline minimum set of standards measures for Parties to apply when foreign vessels seek entry into their ports or while in their ports.
Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)
Are relevant data collected and analysed to inform management decisions?	Comprehensive data collected AND analysed to inform management
Is management consistent with expert advice?	Consistent
Is the management measure effective at addressing the pressure?	Yes

Pressure - Magnitude of Legal Trade	
Existing management measure	CITES listing of requiem sharks on Appendix II
Is it a Sub-national/National, or Regional/International measure?	Regional/International
Is the measure generic, species-specific or both?	Species specific
Relevant monitoring, control, and surveillance (MSC) measure(s)	Listing of all requiem sharks on CITES Appendix II
Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)

Are relevant data collected and analysed to inform management decisions?	Comprehensive data collected AND analysed to inform management
Is management consistent with expert advice?	Consistent
Is the management measure effective at addressing	Yes
the pressure?	

<u>Pressure</u> - Magnitude of Legal Trade	
Existing management measure	Licensing system of vessels in all Namibian fisheries
Is it a Sub-national/National, or Regional/International measure?	Sub National/National
Is the measure generic, species-specific or both?	Generic
Relevant monitoring, control, and surveillance (MSC) measure(s)	All vessels are required to obtain a license in order to fish commercially within Namibia's 200-mile exclusive economic zone (EEZ). Namibia executes its flag-state responsibility by requiring all vessels that fly the Namibian flag to also have a specific license to harvest any marine resources in waters outside of the Namibian EEZ.
Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)
Are relevant data collected and analysed to inform management decisions?	Comprehensive data collected AND analysed to inform management
Is management consistent with expert advice?	Consistent
Is the management measure effective at addressing the pressure?	Yes

<u>Pressure</u> - Magnitude of Illegal Trade	
Existing management measure	Marine Resources Act 27 of 2000
Is it a Sub-national/National, or Regional/International measure?	Sub National/National

Is the measure generic, species-specific or both?	Generic
Relevant monitoring, control, and surveillance (MSC) measure(s)	Namibia has developed several national instruments such as policy guidelines, law and regulations, and plan of action to guide the process of implementation of the commitments made under international treaties. Marine Resources Act (2000) is the main legal instrument that provides for the management, regulation, conservation and development of fisheries and aquatic resources in Namibia, and gives effect to Namibia's obligations under certain international and regional fisheries agreements. Marine Resources Act provides for regulation, control and management of fishing activities by the foreign boats in Namibia waters. The Act is administered by the Ministry of Fisheries and Marine Resources. Some current regulations enacted provide some protection for sharks.
Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)
Are relevant data collected and analysed to inform management decisions?	Comprehensive data collected AND analysed to inform management
Is management consistent with expert advice?	Consistent
Is the management measure effective at addressing the pressure?	Yes

<u>Pressure</u> - Magnitude of Illegal Trade	
Existing management measure	FAO Port State Measurement Agreement
Is it a Sub-national/National, or	Regional/International
Regional/International measure?	Regional/International
Is the measure generic, species-specific or both?	Generic
Relevant monitoring, control, and surveillance	Outline minimum set of standards measures for Parties to apply when foreign vessels seek entry into
(MSC) measure(s)	their ports or while in their ports.
Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)

Are relevant data collected and analysed to inform management decisions?	Comprehensive data collected AND analysed to inform management
Is management consistent with expert advice?	Consistent
Is the management measure effective at addressing the pressure?	Yes

<u>Pressure</u> - Magnitude of Illegal Trade	
Existing management measure	CITES listing of requiem sharks on Appendix II
Is it a Sub-national/National, or Regional/International measure?	Regional/International
Is the measure generic, species-specific or both?	Species specific
Relevant monitoring, control, and surveillance (MSC) measure(s)	Listing of requiem sharks on CITES Appendix II IN 2022. This measure comes into effect November 2023.
Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)
Are relevant data collected and analysed to inform management decisions?	Comprehensive data collected AND analysed to inform management
Is management consistent with expert advice?	Consistent
Is the management measure effective at addressing the pressure?	Yes

<u>Pressure</u> - Magnitude of Illegal Trade	
Existing management measure Licensing system of vessels in all Namibian fisheries	
Is it a Sub-national/National, or	Sub National/National
Regional/International measure?	
Is the measure generic, species-specific or both?	Generic

Relevant monitoring, control, and surveillance (MSC) measure(s)	All vessels are required to obtain a license in order to fish commercially within Namibia's 200-mile exclusive economic zone (EEZ). Namibia executes its flag-state responsibility by requiring all vessels that fly the Namibian flag to also have a specific license to harvest any marine resources in waters outside of the Namibian EEZ.
Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)
Are relevant data collected and analysed to inform management decisions?	Comprehensive data collected AND analysed to inform management
Is management consistent with expert advice?	Consistent
Is the management measure effective at addressing the pressure?	Yes

<u>Pressure</u> - Magnitude of Illegal Trade	
Existing management measure	Issuance of CITES permits
Is it a Sub-national/National, or Regional/International measure?	Sub National/National
Is the measure generic, species-specific or both?	Generic
Relevant monitoring, control, and surveillance (MSC) measure(s)	Namibia's CITES managing authority (Ministry of Environment, Forestry and Tourism) issues all CITES export permits of all listed species. These permits are used by the authorities to monitor exports.
Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)
Are relevant data collected and analysed to inform management decisions?	Comprehensive data collected AND analysed to inform management
Is management consistent with expert advice?	Consistent
Is the management measure effective at addressing the pressure?	Yes

<u>Pressure</u> - Magnitude of Illegal Trade	
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Existing management measure	Sea, air and shore patrols
Is it a Sub-national/National, or Regional/International measure?	Sub National/National
Is the measure generic, species-specific or both?	Generic
Relevant monitoring, control, and surveillance (MSC) measure(s)	Systematic sea patrols aim to ensure compliance with fishing conditions by licensed vessels through regular at-sea inspections. Air patrols detect and deter unlicensed fishing vessels and monitor the movement and operations of the licensed fleet. Shore patrols ensure compliance by both recreational and commercial fishers with conservation measures for inshore resources.
Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)
Are relevant data collected and analysed to inform management decisions?	Comprehensive data collected AND analysed to inform management
Is management consistent with expert advice?	Consistent
Is the management measure effective at addressing the pressure?	Yes

Pressure - Fishing mortality (retained catch)	
Existing management measure	Marine Resources Act 27 of 2000
Is it a Sub-national/National, or Regional/International measure?	Sub National/National
Is the measure generic, species-specific or both?	Generic
Relevant monitoring, control, and surveillance (MSC) measure(s)	All fisheries that encounter this species have gear controls in place that limit the amount of gear, characteristics that control size selectivity (e.g. hook size), etc. The controls ensure constraints on overall fishing effort, the size of species caught, etc. as provided under Namibia's Marine Resources Act 27 of 2000.
Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)
Are relevant data collected and analysed to inform management decisions?	Comprehensive data collected AND analysed to inform management

Is management consistent with expert advice?	Consistent
Is the management measure effective at addressing the pressure?	Yes

<u>Pressure</u> - Fishing mortality (retained catch)	
Existing management measure	FAO Port State Measurement Agreement
Is it a Sub-national/National, or Regional/International measure?	Regional/International
Is the measure generic, species-specific or both?	Generic
Relevant monitoring, control, and surveillance (MSC) measure(s)	Outline minimum set of standards measures for Parties to apply when foreign vessels seek entry into their ports or while in their ports.
Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)
Are relevant data collected and analysed to inform management decisions?	Comprehensive data collected AND analysed to inform management
Is management consistent with expert advice?	Consistent
Is the management measure effective at addressing the pressure?	Yes

Pressure - Fishing mortality (retained catch)	
Existing management measure	Licensing system of vessels in all Namibian fisheries
Is it a Sub-national/National, or	Sub National/National
Regional/International measure?	Sub National/ National
Is the measure generic, species-specific or both?	Generic

	All vessels are required to obtain a license in order to fish commercially within Namibia's 200-mile
	exclusive economic zone (EEZ). Namibia executes its flag-state responsibility by requiring all vessels
	that fly the Namibian flag to also have a specific license to harvest any marine resources in waters
Relevant monitoring, control, and surveillance	outside of the Namibian EEZ. The Namibian Ministry of Fisheries and Marine Resources maintains vessel
(MSC) measure(s)	lists via licensing systems. This ensures that all Namibian commercial fisheries are limited entry.
	Management agencies use license details to maintain communication with fishers. Licensed fishers are
	required to provide catch and effort reports on a regular basis. Enforced by Fisheries Observers who are
	deployed onboard vessel at-sea and port inspections by Fisheries Inspectors.
Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)
Are relevant data collected and analysed to inform	Comprehensive data collected AND analysed to inform management
management decisions?	Comprehensive data collected AND analysed to inform management
Is management consistent with expert advice?	Consistent
Is the management measure effective at addressing	Voc
the pressure?	Yes

Pressure - Fishing mortality (retained catch)	
Existing management measure	Issuance of CITES permits
Is it a Sub-national/National, or Regional/International measure?	Sub National/National
Is the measure generic, species-specific or both?	Generic
Relevant monitoring, control, and surveillance (MSC) measure(s)	The CITES managing authority (Ministry of Environment, Forestry and Tourism) issues all export permits for listed species. The exports are monitored through this process.
Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)
Are relevant data collected and analysed to inform management decisions?	Comprehensive data collected AND analysed to inform management
Is management consistent with expert advice?	Consistent

Is the management measure effective at addressing the pressure?	Yes
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<u>Pressure</u> - Fishing mortality (retained catch)	
Existing management measure	VMS Regulations
Is it a Sub-national/National, or Regional/International measure?	Sub National/National
Is the measure generic, species-specific or both?	Generic
Relevant monitoring, control, and surveillance (MSC) measure(s)	All Namibian licensed vessels are required under the VMS Regulations to implement an on-board electronic monitoring system.
Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)
Are relevant data collected and analysed to inform management decisions?	Comprehensive data collected AND analysed to inform management
Is management consistent with expert advice?	Consistent
Is the management measure effective at addressing the pressure?	Yes

<u>Pressure</u> - Discard mortality	
Existing management measure	Marine Resources Act 27 of 2000
Is it a Sub-national/National, or Regional/International measure?	Sub National/National
Is the measure generic, species-specific or both?	Generic
Relevant monitoring, control, and surveillance (MSC) measure(s)	Namibia's Marine Resources Act 27 of 2000 does not allow for any discards at sea. This means that all catches should be retained onboard and landed at landing ports for inspection by Fisheries Inspectors. All blue shark catches from the large pelagic right holders are submitted to ICCAT and relevant authorities. The monitoring at sea is done by Fisheries Observers onboard these vessels and if any violation is observed, this is reported to the fisheries authorities.

Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)
Are relevant data collected and analysed to inform management decisions?	Comprehensive data collected AND analysed to inform management
Is management consistent with expert advice?	Consistent
Is the management measure effective at addressing the pressure?	Yes

<u>Pressure</u> - Size/age/sex selectivity	
Existing management measure	Marine Resources Act 27 of 2000
Is it a Sub-national/National, or Regional/International measure?	Sub National/National
Is the measure generic, species-specific or both?	Generic
Relevant monitoring, control, and surveillance (MSC) measure(s)	The Minister of Fisheries and Marine Resources can determine necessary management and conservation measures, including TACs, effort limitations, fishing-gear specifications, protection of juvenile fish through measures such as minimum allowable mesh size, grid selectivity device, minimum fish sizes to be landed, restrictions on by-catch, temporal and spatial closures and measures for shared/straddling stocks
Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)
Are relevant data collected and analysed to inform management decisions?	Comprehensive data collected AND analysed to inform management
Is management consistent with expert advice?	Expert advice partially implemented
Is the management measure effective at addressing the pressure?	Partially

<u>Pressure</u> - Size/age/sex selectivity	
Existing management measure	Gear controls

Is it a Sub-national/National, or Regional/International measure?	Sub National/National
Is the measure generic, species-specific or both?	Species specific
Relevant monitoring, control, and surveillance (MSC) measure(s)	All fisheries that encounter blue sharks have gear controls in place that limit the amount of gear, characteristics that control size selectivity (e.g., hook size), etc. The controls ensure constraints on overall fishing effort and the size of species caught. There are regular port and at-sea inspections of gear to ensure compliance with regulations.
Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)
Are relevant data collected and analysed to inform management decisions?	Comprehensive data collected AND analysed to inform management
Is management consistent with expert advice?	Consistent
Is the management measure effective at addressing the pressure?	Yes

<u>Pressure</u> - Magnitude of IUU fishing	
Existing management measure	Licensing system of vessels in all Namibian fisheries
Is it a Sub-national/National, or Regional/International measure?	Sub National/National
Is the measure generic, species-specific or both?	Generic
Relevant monitoring, control, and surveillance (MSC) measure(s)	All vessels are required to obtain a license in order to fish commercially within Namibia's 200-mile exclusive economic zone (EEZ). Namibia executes its flag-state responsibility by requiring all vessels that fly the Namibian flag to also have a specific license to harvest any marine resources in waters outside of the Namibian EEZ. This ensures that all Namibian commercial fisheries are limited entry. The management agencies use this license details to maintain communication with fishers. Licensed fishers are required through the above-mentioned Act to provide catch and effort reports on a regular basis. Enforced by at-sea by Fisheries Observers and port inspections by Fisheries Inspectors.

Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)	
Are relevant data collected and analysed to inform management decisions?	Comprehensive data collected AND analysed to inform management	
Is management consistent with expert advice?	Consistent	
Is the management measure effective at addressing the pressure?	Yes	

Pressure - Magnitude of IUU fishing		
Existing management measure	VMS Regulations	
Is it a Sub-national/National, or Regional/International measure?	Sub National/National	
Is the measure generic, species-specific or both?	Generic	
Relevant monitoring, control, and surveillance (MSC) measure(s)	All Namibian licensed vessels are required to use approved Vessel Monitoring Systems (VMS) that informs on the location of fishery operations and ensures no fishing occurs in closed areas, or during closure periods.	
Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)	
Are relevant data collected and analysed to inform management decisions?	Comprehensive data collected AND analysed to inform management	
Is management consistent with expert advice?	Consistent	
Is the management measure effective at addressing the pressure?	Yes	

<u>Pressure</u> - Magnitude of IUU fishing	
Existing management measure Namibia's National Plan of Action to prevent, deter and eliminate illegal, unreported and unregulated fishing	
Is it a Sub-national/National, or Regional/International measure?	Sub National/National

Is the measure generic, species-specific or both?	Generic
Relevant monitoring, control, and surveillance (MSC) measure(s)	Namibia's National Plan of Action Against IUU Fishing was endorsed in 2007 and is currently implemented.
Overall assessment of compliance regime	Good (comprehensive relevant compliance measures in place)
Are relevant data collected and analysed to inform management decisions?	Comprehensive data collected AND analysed to inform management
Is management consistent with expert advice?	Consistent
Is the management measure effective at addressing the pressure?	Yes

Step 5: Non-Detriment Finding and related advice

5.0	Non-Detriment Finding and related advice			
5.1	Based on the outcomes of the previous sections, is it possible to make a positive NDF (with or without associated conditions)?			
	STEP 1: Can/should an NDF be made?			
	Section 1.1(a): Is the specimen subject to CITES controls? Yes			
	Section 1.1(b): Can origin and stock be confidently identified? Yes			
	Section 1.2: Were specimens legally obtained? Yes			
	STEP 2: Intrinsic biological vulnerability and conservation concern			
	Section 2.1: Intrinsic biological vulnerability:	Medium level of vulnerability		
	Section 2.2: Conservation concern:	Medium level of concern		

	STEP 3: Pressure on species			STEP 4: Existing management measures
	Pressure	Level of severity (Questions 3.1 and 3.2)	Level of confidence (Questions 3.1 and 3.2)	Are the management measures effective at addressing the concerns/ pressures/impacts identified?
	Trade pressures:			
a)	Magnitude of legal trade	Low level of risk	Medium level of confidence	Yes
b)	Magnitude of illegal trade	Low level of risk	Not applicable (Severity of pressure is unknown)	Yes
	Fishing pressures:			
a)	Fishing mortality (retained catch)	Low level of risk	Medium level of confidence	Yes
b)	Discard mortality	Low level of risk	High level of confidence	Not Applicable
c)	Size/age/ sex selectivity	Low level of risk	High level of confidence	Not Applicable
d)	Magnitude of illegal, unreported and unregulated (IUU) fishing	Low level of risk	High level of confidence	Not Applicable

Automated Recommendation: Oto 2 - Not recommended 2.1 to 5 - Not recommended unless mitigation measures applied 5.1 to 8 - Possible with conditions 8.1 to 10 - Recommended	8.7	Recommended	
Based on the above information, can a positive NDF be made?	' YAS WILDOUL CONDITIONS .		
Enter any reasoning/comments:			
The population of the blue shark (<i>Prionace glauca</i>) is part of the South Atlantic stock. This NDF for Namibia is "recommended without conditions". Thus, enabling trade to continue in this newly listed species while improvements are made to existing fisheries and trade management. This will be done through monitoring frameworks, while additional research activities and management measures are adopted as outlined in Section 6.			
NDF expiry (recommended validity: 1 or 2 years): This NDF is valid for 2 years (from November 2023 till November 2025) and will be re-evaluated after 2 years, to gauge progress against the recommendations in Section 6 and update it with newly acquired data, before agreeing to a new bi-annual NDF from November 2025-2027.			

Step 6: Automated recommendations

Recommendations ordered based on severity of pressure

Recommendation	Population monitoring (fisheries-independent data)	
Is this recommendation applicable?	Yes	
Aims, objectives, implementation, relevant compliance measures, and other notes/comments	Maintain the current status of the observer programme whereby they collect species-specific data on size and sex and aim at improving the data collection on sharks by expanding this programme to improve species-specific data on maturity composition of catches for blue sharks and other pelagic sharks. Also aim at improving where necessary collecting biological information on ICCAT non-retention shark species.	
Potential lead agencies	Ministry of Fisheries and Marine Resources Fisheries Observer Agency	
Timeframe	This is already an ongoing programme. The aim is to strengthen this programme through training fisheries observers on new recommendations that are implemented by ICCAT at its Commission meetings. Timeframe: Annually	
Recommendation	Fisheries monitoring (fisheries-dependent data)	
Is this recommendation applicable?	Yes	
Aims, objectives, implementation, relevant compliance measures, and other notes/comments	Maintain and improve where necessary the current status of collecting species-specific fisheries data on catches through logbooks and landings as they are needed to ensure harmonization of data from different sources (e.g. ICCAT and FAO). Where necessary Namibia can look into establishing an informal communication group consisting of shark identification experts (both local and international), in order to identify sharks and/or shark products with a camera photo at short notice. This applies when shark products are exported. Currently the product form is fins and Headed and Gutted meat, so this measure does not apply as yet.	

Potential lead agencies	Ministry of Fisheries and Marine Resources; Fisheries Observer Agency; Ministry of Environment, Forestry and Tourism (CITES managing authority); Ministry of Finance and public enterprises (customs department)		
Timeframe	Namibia is currently already monitoring fisheries dependent data through logbooks, annual monthly return submissions, etc.		
Recommendation	Monitoring of domestic and international trade volumes and characteristics		
Is this recommendation applicable?	Yes		
Aims, objectives, implementation, relevant compliance measures, and other notes/comments Potential lead agencies	Create new data collection initiatives to quantify more precisely blue shark fin exports and identify and monitor shark fins and meat products at species level. Evaluate the current methodology for random sampling of shark fins for export in conjunction with the Namibian Customs authorities. Ministry of Fisheries and Marine Resources Ministry of Environment, Forestry and Tourism (CITES Managing authorities) Ministry of Finance and public enterprises (customs department)		
Timeframe	Within 36 months		
Recommendation	Documentation schemes		
Is this recommendation applicable?	Yes		
Aims, objectives, implementation, relevant compliance measures, and other notes/comments	Evaluate and monitor specific catch or trade documentation schemes for sharks. Create new data collection initiatives to quantify more precisely blue shark fin exports and identify and monitor blue shark fin and meat products at species level. Assess present methods for the random sampling of fins for export in conjunction with the Namibian Customs.		

Potential lead agencies	Ministry of Fisheries and Marine Resources; Ministry of Environment, Forestry and Tourism (CITES Managing authorities); Ministry of Finance and public enterprises (customs department)	
Timeframe	Within 36 months	

Recommendation	Export quotas	
Is this recommendation applicable?	Yes	
Aims, objectives, implementation, relevant compliance measures, and other notes/comments	Work towards establishing an annual blue shark fin export quota, based on the appropriate ICCAT management measures.	
Potential lead agencies	Ministry of Fisheries and Marine Resources; Ministry of Finance and public enterprises (customs department)	
Timeframe	Within 36 months	
Recommendation	Limited entry	
Is this recommendation applicable?	Yes	
Aims, objectives, implementation, relevant compliance measures, and other notes/comments	Namibia's Monitoring, Control and Surveillance (MCS) system has evolved over the years into what is today widely regarded by the international community as a very effective system. A crucial element has been the financial, human and material support from the Namibian government. The costs to Government and industry of MCS and other management activities has been kept commensurate with the value of the sector. An integrated program of inspection and patrols at sea, on land and in the air ensures continuing compliance with Namibia's fisheries laws. The major features of the program are Fisheries Observer Programme, Compliance and enforcement, Sea, air and shore patrols, Monitoring of landings, Vessel reporting and a Vessel monitoring system.	
Potential lead agencies	Ministry of Fisheries and Marine Resources; Directorate of Maritime affairs	
Timeframe	Already existing	
Recommendation	Fishing time restrictions	
Is this recommendation applicable?	No	

Aims, objectives, implementation, relevant
compliance measures, and other
notes/comments

As a contracting party to ICCAT, Namibia complies with recommendations made by ICCAT for this fishery. There is currently no recommendation by ICCAT regarding this measure.

Recommendation	Fishing gear restrictions
Is this recommendation applicable?	Yes
Aims, objectives, implementation, relevant compliance measures, and other notes/comments	As a contracting party to ICCAT, Namibia complies with the gear restrictions as recommended by ICCAT for this fishery. The gear used in the large pelagic sector of Namibia are longline and Pole & Line gear.
Potential lead agencies	ICCAT; Ministry of Fisheries and Marine Resources
Timeframe	Already existing
Recommendation	Permanent area closures
Is this recommendation applicable?	No
Aims, objectives, implementation, relevant compliance measures, and other notes/comments	As a contracting party to ICCAT, Namibia complies with recommendations made by ICCAT for this fishery. There is currently no recommendation by ICCAT regarding this measure.
Recommendation	No-take MPAs
Is this recommendation applicable?	No
Aims, objectives, implementation, relevant compliance measures, and other notes/comments	As a contracting party to ICCAT, Namibia complies with recommendations made by ICCAT for this fishery. There is currently no recommendation by ICCAT regarding this measure. Namibian regulations do not allow fishing within the 200 m isobar.
Recommendation	Total allowable catch
Is this recommendation applicable?	No

Aims, objectives, implementation, relevant	As a contracting party to ICCAT, Namibia complies with recommendations made by ICCAT for this fishery.
compliance measures, and other	There is currently no recommendation by ICCAT regarding this measure. ICCAT has an overall
notes/comments	TAC for the entire South Atlantic blue sharks but not country allocated TACs.
Recommendation	Individual quota
Is this recommendation applicable?	No

Aims, objectives, implementation, relevant compliance measures, and other notes/comments	As a contracting party to ICCAT, Namibia complies with recommendations made by ICCAT for this fishery. There is currently no recommendation by ICCAT regarding this measure. ICCAT has an overall TAC for the entire South Atlantic blue sharks but not country allocated TACs.
Recommendation	Fishing trip limits
Is this recommendation applicable?	No
Aims, objectives, implementation, relevant compliance measures, and other notes/comments	As a contracting party to ICCAT, Namibia complies with recommendations made by ICCAT for this fishery. There is currently no recommendation by ICCAT regarding this measure.
Recommendation	Prohibited retention
Is this recommendation applicable?	No
Aims, objectives, implementation, relevant compliance measures, and other notes/comments	As a contracting party to ICCAT, Namibia complies with recommendations made by ICCAT for this fishery. There is currently no recommendation by ICCAT regarding this measure.
Recommendation	Fish size limits
Is this recommendation applicable?	No
Aims, objectives, implementation, relevant compliance measures, and other notes/comments	As a contracting party to ICCAT, Namibia complies with recommendations made by ICCAT for this fishery. There is currently no recommendation by ICCAT regarding this measure.
Recommendation	Product form restrictions
Is this recommendation applicable?	No
Aims, objectives, implementation, relevant compliance measures, and other notes/comments	As a contracting party to ICCAT, Namibia complies with recommendations made by ICCAT for this fishery. There is currently no recommendation by ICCAT regarding this measure.
Recommendation	Move-on provisions

Is this recommendation applicable?	No
Aims, objectives, implementation, relevant compliance measures, and other notes/comments	As a contracting party to ICCAT, Namibia complies with recommendations made by ICCAT for this fishery. There is currently no recommendation by ICCAT regarding this measure.
Recommendation	Bycatch reduction devices (BRDs)
Is this recommendation applicable?	No
Aims, objectives, implementation, relevant compliance measures, and other notes/comments	As a contracting party to ICCAT, Namibia complies with recommendations made by ICCAT for this fishery. There is currently no recommendation by ICCAT regarding this measure.
Recommendation	Protection of breeding females
Is this recommendation applicable?	No
Aims, objectives, implementation, relevant compliance measures, and other notes/comments	As a contracting party to ICCAT, Namibia complies with recommendations made by ICCAT for this fishery. There is currently no recommendation by ICCAT regarding this measure.

Step 6.2: Additional measures (user defined)

Additional measures

Additional measure	Protection of breeding females
Aims, objectives, implementation, relevant compliance measures, and other notes/comments	Find techniques to assist in maximizing live release of pregnant sharks.
	Ministry of Fisheries and Marine Resources;
Potential lead agencies	Fisheries Observer Agency (Namibia)
Timeframe	36 months

Additional measure	Post-release mortality
Aims, objectives, implementation, relevant compliance measures, and other notes/comments	The aim is to address an information gap on the impact the Namibian pelagic longline fisheries have on Blue Shark. That is, to investigate post-release mortality of this species.
Potential lead agencies	ICCAT; Ministry of Fisheries and Marine Resources; Fisheries Observer Agency (Namibia)
Timeframe	12 months