



**MEMORANDUM OF UNDERSTANDING
ON THE CONSERVATION OF
MIGRATORY SHARKS**

CMS/Sharks/MOS4/Doc.8.1

1 February 2023

Original: English

4th Meeting of the Signatories (Sharks MOS4)
Bonn, 28 February – 2 March 2023
Agenda Item 8

ANALYSIS OF NATIONAL REPORTS

(Prepared by the Secretariat)

1. An analysis of all National Reports from Signatories, received by the Secretariat by 3 February 2023 is provided in [Annex 1](#).
2. [Annex 2](#) provides an overview of Signatories that are Range States for each of the species listed in Annex 1 of the MOU in accordance with paragraph 3(l) of the MOU.

Background

3. In accordance with paragraph 15(b) of the Memorandum of Understanding on the Conservation of Migratory Sharks (Sharks MOU), Signatories are required to report on the implementation of the MOU and its Conservation Plan to each Meeting of the Signatories (MOS).
4. To facilitate and harmonize the reporting process, MOS3 agreed to establish an Intersessional Working Group (IWG – Reporting) to further develop the national reporting form and Terms of Reference for the IWG were adopted ([CMS/Sharks/Outcome.3.11](#)).
5. As a result, a new national reporting form was developed using online survey software that is available to the Secretariat. The disadvantage of this tool is that intermediate versions cannot be saved. It must instead be completed in one session. Due to this, an 'offline' version of this form was also made available (via Microsoft Word and Excel) and shared with Signatories.
6. In October 2022, a draft version of the national reporting format was circulated to Focal Points for revision and endorsement and an additional question regarding barriers to cooperation and partnership was added following revisions.

Analysis

7. As of 3 February 2023, the Secretariat had received 17 National Reports out of a possible 49 Signatory States including the European Union (EU), which were uploaded to the [meeting website](#) as they were submitted. The EU submitted a joint report which comprised reports of nine Member States, four of which are also Signatories to the Sharks MOU individually. Three of these submitted their National Reports twice, as part of the joint EU report and individually. Thus, the total number of reports analyzed for this document was 23, including those submitted by the EU.

8. Differences in the level of detail provided by respondents presented difficulties in analysing the results. The Secretariat has therefore based its analysis on information categories that were included in most reports. In addition, the Secretariat would like to note, that due to the diversity of formats, some of the information provided by Signatories may have been misinterpreted. Therefore, Signatories are invited to highlight any inconsistencies between the information contained in this analysis and their reported information
9. This report is split into four sections, which present the analysis of the data in a combination of tables, figures, and prose, followed by conclusions and recommendations for future national reporting.

Range States

10. The Secretariat developed an overview, provided in Annex 2, showing for each species listed in Annex 1 of the MOU which Signatories are Range States for them in accordance with paragraph 3(l) of the MOU:

“3. For the purpose of this Memorandum of Understanding:

...(l) “Range State” means any State that exercises jurisdiction over any part of the range of migratory sharks, or a State, flag vessels of which are engaged outside its national jurisdictional limits in taking, or which have the potential to take, migratory sharks;”

11. As per the definition of a “Range State” this also includes countries capturing Annex 1-listed species outside their waters even though these might not occur in their national waters. The Secretariat deems it important to be highlighted as many commitments captured by the MOU text are referring to Range States.
12. The overview is based on information included in the International Union for Conservation of Nature (IUCN) Red List of Threatened Species database and National Reports from Signatories on the occurrence of Annex 1-listed species within areas of national jurisdiction and their capture by Signatories outside their respective areas of national jurisdiction.

Action requested:

13. The Meeting is requested to:
 - a) Take note of the analysis of National Reports, contained in Annex 1.
 - b) Take note of the overview of Signatories that are Range States for each of the species listed in Annex 1 of the MOU in accordance with paragraph 3(l) of the MOU, contained in Annex 2.
 - c) Provide guidance to the Secretariat on future reporting.

ANNEX 1

ANALYSIS OF NATIONAL REPORTS

Species in your area of National Jurisdiction

7. Please open the [excel spreadsheet](#) that you were provided for your country by the Secretariat. Use the spreadsheet to review the status of Annex 1-listed sharks and rays in your national jurisdiction. Once complete, please email the spreadsheet, along with this word document, to the Secretariat (fenella.wood@cms.int)

Please contact the Secretariat if you have any difficulty accessing the spreadsheet or require additional advice and support to complete the spreadsheet.

- I have downloaded the spreadsheet successfully
 I could not download the spreadsheet

Please review the status of each species provided. If you disagree with the status provided, please enter an alternative status using the drop-down list.

1. 19 out of 23 respondents successfully submitted a spreadsheet to be included in their National Report.
2. The Secretariat notes that some of the spreadsheets were not readily available via the online links provided in the online version of the form and apologizes for any inconvenience. This was later corrected.
3. 17 out of 23 respondents completed the spreadsheet concerning question 7.
4. 11 Signatories reported a combined total of 85 incorrectly identified shark and ray presences by the [International Union for Conservation of Nature™ \(IUCN\) Red List of Threatened Species](#). Please see more details in Table 1. Where a spreadsheet was submitted, but the presence status was not indicated for some or all species, the Secretariat has assumed that this meant agreement with the status provided by the IUCN.

Table 1. The presence status of CMS- and Sharks MOU-listed sharks and rays found in the waters of national jurisdiction for each Signatory. A red box indicates where the status reported by the Signatory differed from the presence status provided by the IUCN Red List of Threatened Species (IUCN), total number of matches for each Signatory is provided, with a maximum of 37. A grey box indicates where no information was provided by the Signatory about the presence of the species, and where available the IUCN presence status has been provided instead. R = Extant (Resident), V = Extant (Vagrant), PE = Possibly Extant, PX = Possibly Extinct, X = Extinct, U = Presence Uncertain, - = Doesn't Occur, ? = Unknown.

	<i>Alopias pelagicus</i>	<i>Alopias superciliosus</i>	<i>Alopias vulpinus</i>	<i>Anoxypristis cuspidata</i>	<i>Carcharhinus falcatrimus</i>	<i>Carcharhinus leucas</i>	<i>Carcharhinus limbatus</i>	<i>Carcharodon carcharias</i>	<i>Cetorhinus maximus</i>	<i>Isurus oxyrinchus</i>	<i>Isurus paucus</i>	<i>Lamna nasus</i>	<i>Mobula alfredi</i>	<i>Mobula birostris</i>	<i>Mobula eregoodoo</i>	<i>Mobula hypostoma</i>	<i>Mobula japonica</i> ¹	<i>Mobula kuhlii</i>	<i>Mobula mobular</i>	<i>Mobula munkiana</i>	<i>Mobula rochebrunei</i> ²	<i>Mobula tarapacana</i>	<i>Mobula thurstoni</i>	<i>Pristis clavata</i>	<i>Pristis pectinata</i>	<i>Pristis pristis</i>	<i>Pristis zijsron</i>	<i>Rhincodon typus</i>	<i>Rhinobatos tibiro</i>	<i>Rhynchobatus australiae</i>	<i>Rhynchobatus djiddensis</i>	<i>Rhynchobatus laevis</i>	<i>Sphyrna lewini</i>	<i>Sphyrna mokarran</i>	<i>Sphyrna zygaena</i>	<i>Squalus acanthias</i>	<i>Squatina squatina</i>	Matches with IUCN		
Australia	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	R	R	R	-	-	PE	R	R	-	R	R	R	-	R	-	-	R	R	R	R	-	37		
Côte d'Ivoire	PX	R	R	-	R	R	U	?	?	?	R	-	-	PE	-	PE	R	-	R	-	PE	R	R	-	PX	PX	-	R	R	-	-	-	?	R	?	-	-	30		
Denmark	-	-	R	-	-	-	-	-	R	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	NA	
Ecuador	R	R	R	-	R	R	-	R	R	R	R	-	-	R	-	-	R	-	R	R	-	R	R	-	-	U	-	R	-	-	-	-	-	R	R	R	-	-	36	
EU	-	R	R	-	R	R	R	R	R	R	R	R	-	R	-	-	R	-	R	-	-	R	R	-	-	-	-	R	R	-	-	-	-	R	R	R	R	R	37	
France	R	R	R	-	R	R	R	R	R	R	R	R	R	R	-	R	R	-	R	R	PE	-	PE	R	-	R	R	R	R	-	R	R	R	R	R	R	R	R	20	
Germany	-	-	R	-	-	-	-	-	U	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	PX	35
Greece (EU)	-	R	R	-	-	-	R	R	R	R	-	R	-	-	-	-	R	-	R	-	-	-	-	-	-	-	-	-	R	-	-	-	-	R	R	R	R	R	NA	
Ireland (EU)	-	R	R	-	-	-	-	-	R	R	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	NA
Kenya	R	R	PE	-	R	R	-	R	-	R	R	?	PE	V	PE	-	R	R	R	-	-	PE	PE	-	-	U	R	R	-	R	U	U	R	R	R	-	-	31		
Lithuania (EU)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	NA	
Madagascar	R	R	PE	-	R	R	R	R	-	R	R	-	R	R	PE	-	PE	PE	PE	-	-	PE	PE	-	-	R	U	R	-	-	-	-	-	R	R	R	-	-	37	
Malta (EU)	-	?	?	-	-	-	?	?	?	?	-	?	-	-	-	-	-	-	?	-	-	-	-	-	-	?	-	-	?	-	-	-	?	?	?	?	?	?	NA	

¹ *Mobula japonica* (now included as *Mobula mobular* according to recent taxonomic changes)
² *Mobula rochebrunei* (now included as *Mobula hypostoma* according to recent taxonomic changes)

	<i>Alopias pelagicus</i>	<i>Alopias superciliosus</i>	<i>Alopias vulpinus</i>	<i>Anoxypristis cuspidata</i>	<i>Carcharhinus falcatirostris</i>	<i>Carcharhinus lesionotus</i>	<i>Carcharhinus limbo</i>	<i>Carcharodon carcharias</i>	<i>Cetorhinus maximus</i>	<i>Isurus oxyrinchus</i>	<i>Isurus paucus</i>	<i>Lamna nasus</i>	<i>Mobula alfredi</i>	<i>Mobula birostris</i>	<i>Mobula eregoodoo</i>	<i>Mobula hypostoma</i>	<i>Mobula japanica</i> ¹	<i>Mobula kuhlii</i>	<i>Mobula mobular</i>	<i>Mobula munkiana</i>	<i>Mobula rochebrunei</i> ²	<i>Mobula tarapacana</i>	<i>Mobula thurstoni</i>	<i>Pristis clavata</i>	<i>Pristis pectinata</i>	<i>Pristis pristis</i>	<i>Pristis zijsron</i>	<i>Rhincodon typus</i>	<i>Rhinobatos djiboutensis</i>	<i>Rhynchobatus djiboutensis</i>	<i>Rhynchobatus djiboutensis</i>	<i>Rhynchobatus laevis</i>	<i>Sphyrna lewini</i>	<i>Sphyrna mokarran</i>	<i>Sphyrna zygaena</i>	<i>Squalus acanthias</i>	<i>Squatina squatina</i>	Matches with IUCN
Monaco	-	PE PE	-	-	-	-	-	PE PE PE	-	R	-	-	-	-	-	R	-	R	-	-	-	-	-	U U	-	-	PE	-	-	-	-	U PE PE PE PE	PX	24				
New Zealand	-	R R	-	-	V V	R R R	-	R	R	R	-	R	-	R	-	R	-	R	-	-	-	PE	-	-	-	-	V	-	-	-	-	-	-	R R	-	33		
Romania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	37		
Saudi Arabia	R PE	-	-	R R PE	-	-	R	-	R	-	-	R	PE	R	-	-	V PE	-	-	R R	-	-	-	-	-	U R	-	R R R R	R R R R	R R R R	R R R R	U	-	-	32			
Senegal	U	R R	?	R R R	U U	R	U PE R	R	R	U PE R	R	R	R	?	?	?	?	?	?	?	PE	R	?	PX PX	?	R R	?	?	?	R R R R	R R R R	R	?	R	15			
South Africa	R R R	-	R	R R R	V	R	V V	R R R	R	R	R	R	R	R	-	R R R	-	-	R R	-	-	R R	-	E-t E-t E-t	R	-	-	R	-	R R R R	R R R R	R R R R	R R R R	-	30			
Spain (EU)	-	-	R	-	V	R R R	R R R	R R R	R R R	R R R	-	-	-	-	-	R	-	R	-	-	-	-	-	-	-	-	-	R	-	-	-	R R R R	R R R R	R R R R	R R R R	NA		
Sweden	-	-	-	-	-	-	-	R	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	PX	36		
UK	-	R R	-	-	-	-	-	R R	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R R R	R	37			
Yemen	R R R	U	R R R	PE	-	R R	-	R R	-	R R	-	R R	PE	-	-	R	-	-	-	PE PE	-	-	U U	R	-	R R	-	R R	R R	R R	R R	-	-	-	37			

8. Do your vessels catch (landed, transhipped, or discarded) any Annex 1-listed sharks and rays WITHIN your area of national jurisdiction? *

- Yes
- No

9. If yes, please report species-specific catch information within your area of national jurisdiction on the **spreadsheet** provided.

Please provide information on species that are caught (landed, transhipped, or discarded).

*Please infill **column F** on the spreadsheet for each species. There is a drop-down list for you to use with the following options: 'taking occurs', 'taking potentially occurs', 'taking does not occur', 'unknown' or 'not applicable'.*

*Please provide any additional information in **column G**, for example links to publicly available reports that may contain relevant data.*

- I have added species-specific information to the spreadsheet
- Not applicable

5. Question 8 was answered by all 23 respondents. Of those completing question 9, 21 respondents indicated that 'Taking Occurs' or 'Taking Potentially Occurs' of CMS- and Sharks MOU-listed sharks and rays (hereafter "Annex 1 species") within their area of national jurisdiction.
6. Regarding those caught, 11 respondents indicated that 'Taking Occurs' or 'Taking Potentially Occurs' of CMS Appendix 1-listed sharks and rays within their area of national jurisdiction.
7. The species that were most commonly indicated as 'Taking Occurs' or 'Taking Potentially Occurs' were *Squalus acanthias* (12 respondents), *Isurus oxyrinchus* (12 respondents), *Lamna nasus* (11 respondents) and *Alopias vulpinus* (11 respondents). Please see further details in Tables 2 and 3 and Figure 1.
8. Germany, New Zealand, and Romania provided detailed information on the quantity of catch for some or all species taken within their area of national jurisdiction, these details are summarized in Table 3.
9. Other respondents provided the sources where the information on the taking of shark and ray species, within and outside of national jurisdictions, came from. These details are included in paragraph 14.

10. Do your vessels catch (landed, transhipped, or discarded) any Annex 1-listed sharks and rays OUTSIDE of your area of national jurisdiction? *

- Yes
 No

11. If yes, please report species-specific catch information outside of your area of national jurisdiction on the **spreadsheet** provided.

Please provide information on species that are caught (landed, transhipped, or discarded).

*Please infill **column H** on the spreadsheet for each species. There is a drop-down list for you to use with the following options: 'taking occurs', 'taking potentially occurs', 'taking does not occur', 'unknown' or 'not applicable'.*

*Please provide any additional information in **column I**, for example links to publicly available reports that may contain relevant data.*

- I have added species-specific information to the spreadsheet
 Not applicable

10. Question 10 was answered by all 23 respondents. Of those completing question 11, 13 respondents indicated that 'Taking Occurs' or 'Taking Potentially Occurs' of Annex 1 species outside their area of national jurisdiction by their flagged vessels.
11. Of those caught, seven respondents indicated that 'Taking Occurs' or 'Taking Potentially Occurs' of CMS Appendix 1-listed sharks and rays outside their area of national jurisdiction by their flagged vessels.
12. The species that were most commonly indicated as 'Taking Occurs' or 'Taking Potentially Occurs' were *Squalus acanthias* (8 respondents), *Isurus oxyrinchus* (7 respondents), and *Carcharhinus falciformis* (7 respondents). Please see further details in Tables 2 and 3 and Figure 1.
13. Germany and New Zealand provided detailed information on the quantity of catch for some or all species taken by their flagged vessels outside of their area of national jurisdiction, these details are summarized in Table 3.
14. Sources where further details of these catches, from both within and outside of areas of national jurisdiction, can be found below, where provided in submitted spreadsheets:
- Details of catches of *Carcharhinus obscurus* by Australia can be found at: <https://fish.gov.au/report/304-Dusky-Whaler-2020>
 - Details of catches of *Sphyrna lewini* by Côte d'Ivoire can be found at: https://www.researchgate.net/publication/345841734_PRINCIPALES_ESPECES_DE_POISSONS_MARINS_DE_COTE_D%27IVOIRE and details of catches of several species can be found at: MINEDD, 2020: Rapport de l'Etat de l'Environnement Marin et côtier de la Côte D'Ivoire (REEM-CI), and Projet Gestion Intégrée de l'Aire Marine et côtière d'Abidjan à Assinie (GIAMAA / CIAPOL)
 - Ecuador provided many sources of fisheries data, please see the [national report](#) for more information.

- d) Details of catches of *Alopias pelagicus*, *Isurus oxyrinchus*, *Lamna nasus*, *Squalus acanthias*, and *Squatina squatina* caught by France were from the SACROIS dataset.
 - e) Kenya provided many sources of fisheries data, please see the [national report](#) for more information.
 - f) Details of catches of *Carcharhinus falciformis* and *Carcharhinus longimanus* by Madagascar can be found in the National Plan of Action for the Conservation and Sustainable Management of Sharks and Rays and Implementation Plan for the Conservation and Sustainable Management of Sharks and Rays.
 - g) Senegal provided many sources of fisheries data, please see the [national report](#) for more information.
 - h) Details of catches of all species by South Africa can be found at: <https://www.tandfonline.com/doi/abs/10.2989/1814232X.2015.1044471>.
 - i) Details of catches of all species caught by Spain were from electric logbooks (Diario electrónico de Abordo (DEA)).
 - j) Details of catches of *Cetorhinus maximus*, *Sphyrna zygaena*, *Lamna nasus*, and *Squalus acanthias* by Sweden can be found at: <https://pub.epsilon.slu.se/27572/1/b%C3%B6rjesson-p-et-al-220419.pdf>. Noting that *Lamna nasus* and *Squalus acanthias* are taken as bycatch.
 - k) The UK provided in-depth information from the Centre for Environment, Fisheries, and Aquaculture Science (CEFAS) at-sea observer programme for species that were caught. Please see the [national report](#) for more details.
15. A comparison was made between the presence statuses in Table 1 and the capture information presented in Table 2. Seven respondents indicated that their country catches or potentially catches Annex 1 species that are not currently reported as being present (either Extant (Resident), Extant (Vagrant), or Possibly Extant) in their area of national jurisdiction.
16. Annex 2 provides an overview of all Annex 1-listed species for which Signatories are Range States in accordance with paragraph 3(l) of the MOU:
- “3. For the purpose of this Memorandum of Understanding:
- ...(l) “Range State” means any State that exercises jurisdiction over any part of the range of migratory sharks, or a State, flag vessels of which are engaged outside its national jurisdictional limits in taking, or which have the potential to take, migratory sharks;”
17. In line with the definition of a "Range State," the Signatories should be cognizant that they are also considered Range States with regard to Annex 1-listed species that may not be occurring in their national waters but are being harvested outside of their jurisdictional boundaries.
18. The Secretariat has noted that there was a mistake in the English and French versions of the national report spreadsheet in column H, where Signatories were asked for information WITHIN their national jurisdiction, where it should have been OUTSIDE of their national jurisdiction.

Table 2: CMS- and Sharks MOU-listed sharks and rays caught within and outside of national jurisdiction boundaries by Sharks MOU Signatories. Columns highlighted blue signify a species that is listed on CMS Appendix I. X = taking occurs, / = taking potentially occurs, ? = unknown. For further details on the quantity of catches for Germany, New Zealand, and Romania, as indicated by numbers, see Table 3.

Signatory	Area where catches occurred (within or outside areas of national jurisdiction)	<i>Alopias pelagicus</i>	<i>Alopias superciliosus</i>	<i>Alopias vulpinus</i>	<i>Anoxypristis cuspidata</i>	<i>Carcharhinus falciformis</i>	<i>Carcharhinus</i>	<i>Carcharhinus obscurus</i>	<i>Carcharodon carcharias</i>	<i>Cetorhinus maximus</i>	<i>Isurus oxyrinchus</i>	<i>Isurus paucus</i>	<i>Lamna nasus</i>	<i>Mobula alfredi</i>	<i>Mobula birostris</i>	<i>Mobula eregoodoo</i>	<i>Mobula hypostoma</i>	<i>Mobula japonica</i> ³	<i>Mobula kuhlii</i>	<i>Mobula mobular</i>	<i>Mobula munkiana</i>	<i>Mobula rochebrunei</i> ⁴	<i>Mobula tarapacana</i>	<i>Mobula thurstoni</i>	<i>Pristis clavata</i>	<i>Pristis pectinata</i>	<i>Pristis pristis</i>	<i>Pristis zijsron</i>	<i>Rhincodon typus</i>	<i>Rhinobatos rhinobatos</i>	<i>Rhynchobatus</i>	<i>Rhynchobatus</i>	<i>Rhynchobatus laevis</i>	<i>Sphyrna lewini</i>	<i>Sphyrna mokarran</i>	<i>Sphyrna zygaena</i>	<i>Squalus acanthias</i>	<i>Squatina squatina</i>	
Australia	Within	X	X	X	X	X	X	X		?	X	X	X	X	X	X			/	?					X	X	X	X						X	X	X	X		
	Outside																																						
Côte d'Ivoire	Within	?	/	/		X	X				X	X								/			/	/												X	X		
	Outside		/	/		/	X					X								/			/	/											X				
Denmark	Within																																						
	Outside																																						
Ecuador	Within	/	/	/		/	/			/	/															/								/	/	/			
	Outside	/	/			/					/																							/	/	/			
European Union	Within	?	?	X	?	?	?	?	?	?	X	?	X	?	?	?	?		?	/	?		?	?	?	?	?	?	?	?	?	?	?	?	?	X	?	X	X
	Outside			X		X				X	X	X	X																									X	X
France	Within			X							X		X																									X	X
	Outside			X							X																											X	
Germany	Within																																					X1	
	Outside								X2				X3																									X4	
Greece (EU)	Within			/																																			
	Outside																																						
Ireland (EU)	Within	?	?	?	?	?	?	?	?	?	?	?	X	?	?	?	?		?	?	?		?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	X	?
	Outside																																						
Kenya	Within	X	X	/	?	X			?	?	X	X	?						X	X													X	/	/	X	X		
	Outside	X	X	/		X			?		X	X	?						X	X													X	/	/	/		X	
Lithuania (EU)	Within																																						
	Outside																																						

³ *Mobula japonica* (now included as *Mobula mobular* according to recent taxonomic changes)

⁴ *Mobula rochebrunei* (now included as *Mobula hypostoma* according to recent taxonomic changes)

Signatory	Area where catches occurred (within or outside areas of national jurisdiction)	Species																																							
		<i>Alopias pelagicus</i>	<i>Alopias superciliosus</i>	<i>Alopias vulpinus</i>	<i>Anoxypristis cuspidata</i>	<i>Carcharhinus falciformis</i>	<i>Carcharhinus</i>	<i>Carcharhinus obscurus</i>	<i>Carcharodon carcharias</i>	<i>Cetorhinus maximus</i>	<i>Isurus oxyrinchus</i>	<i>Isurus paucus</i>	<i>Lamna nasus</i>	<i>Mobula alfredi</i>	<i>Mobula birostris</i>	<i>Mobula eregoodoo</i>	<i>Mobula hypostoma</i>	<i>Mobula japonica</i> ³	<i>Mobula kuhlii</i>	<i>Mobula mobular</i>	<i>Mobula munkiana</i>	<i>Mobula rochebrunei</i> ⁴	<i>Mobula tarapacana</i>	<i>Mobula thurstoni</i>	<i>Pristis clavata</i>	<i>Pristis pectinata</i>	<i>Pristis pristis</i>	<i>Pristis zijsron</i>	<i>Rhincodon typus</i>	<i>Rhinobatos rhinobatos</i>	<i>Rhynchobatus</i>	<i>Rhynchobatus laevis</i>	<i>Sphyrna lewini</i>	<i>Sphyrna mokarran</i>	<i>Sphyrna zygaena</i>	<i>Squalus acanthias</i>	<i>Squatina squatina</i>				
Madagascar	Within					X	X																																		
	Outside					X	X																																		
Malta (EU)	Within			X						X		X								/																			X	X	
	Outside											X																										X			
Monaco	Within											/																													
	Outside																																								
New Zealand	Within	/5	X6					? 8	10	X1		X1		14						15										16						?1	X1				
	Outside		/7					? 9		/12		?																								?1					
Romania	Within																																					X2			
	Outside																																								
Saudi Arabia	Within	? ?			X ?	? ?	? ?		X			? ?	? ?					? ?				? ?		? ?		? ?		? X	? ?	? X	? X	? X	? X								
	Outside																																								
Senegal	Within	? X	X ?	X	X X	X X	X ?	? ?	X ?	/	X	X X	X ?	? ?	? ?			? ?	/	X ?											X	X	X ?	X ?	X ?	X X	X ?	X			
	Outside																																								
South Africa	Within	X X	X		/ /	X				X /	/ /	X X	X				X X	X		X X	X	X X								X	/ /	/ /	/ /	/ /		X	/ /	/ /	/ /	/ /	
	Outside	/ /	/ /		/ /	/ X				/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	
Spain (EU)	Within									X	X																													X	
	Outside					X				X	X																														X
Sweden	Within											/																												X	
	Outside											/																												X	
United Kingdom	Within																																							X	
	Outside																																							X	
Yemen	Within	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	
	Outside	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X	X X

Table 3: Further details on the quantity of catches by Germany, New Zealand, and Romania, indicated in Table 2.

German vessels 2017 - 2022	X1	3 kg <i>Squalus acanthias</i> in GER EEZ – discarded 15 kg <i>Squalus acanthias</i> in GER EEZ – landed
	X2	11000 kg <i>Cetorhinus maximus</i> in GBR - discarded 2500 kg <i>Cetorhinus maximus</i> in IRL – discarded
	X3	400 kg <i>Lamna nasus</i> in IRL - discarded 102 kg <i>Lamna nasus</i> in GBR – landed
	X4	35 kg <i>Squalus acanthias</i> in DNK - discarded 1291 kg <i>Squalus acanthias</i> in GBR - discarded 100 kg <i>Squalus acanthias</i> in IRL - discarded 15 kg <i>Squalus acanthias</i> in NOR - discarded 357 kg <i>Squalus acanthias</i> in NOR - landed 132 kg <i>Squalus acanthias</i> in GBR - landed 60 kg <i>Squalus acanthias</i> in DNK - landed
New Zealand	X5	Over the last 4 years, average commercial catch of <i>Alopias superciliosus</i> has been 0.32 tonnes.
	X6	Over the last 4 years, average commercial catch of <i>Alopias vulpinus</i> has been around 50 tonnes.
	X7	Over the last 4 years, commercial catch of <i>Alopias vulpinus</i> outside New Zealand fisheries waters has been around 0.18 tonnes.
	X8	Over the last 4 years, there have been 53 reported captures of <i>Carcharodon carcharias</i> in commercial fisheries, of those 36 were reported to have been released alive and 17 were discarded dead.
	X9	Over the last 4 years, there has been 1 reported capture of <i>Carcharodon carcharias</i> outside New Zealand fisheries waters
	X10	Over the last 4 years, there have been 23 reported captures of <i>Cetorhinus maximus</i> in commercial fisheries, of those 15 were reported to have been released alive and 8 were discarded dead.
	X11	<i>Isurus oxyrinchus</i> is managed under New Zealand's quota management system which requires all commercial catch to be landed except under certain conditions. Over the last 4 years, the annual average commercial catch was around 74 tonnes, of which 10% landed, and remainder were released alive.
	X12	Over the last 4 years, commercial catch of <i>Isurus oxyrinchus</i> outside New Zealand fisheries waters has been around 0.76 tonnes.
	X13	<i>Lamna nasus</i> is managed under New Zealand's quota management system which requires all commercial catch to be landed except under certain conditions. Over the last 4 years, the annual average commercial catch was around 70 tonnes, of which under 50% was released alive, around 3% landed, and the remainder discarded dead but accounted for within the catch limit.
	X14	Over the last 4 years, there have been 9 reported captures of <i>Manta birostris</i> in commercial fisheries, all released alive.
	X15	Over the last 4 years, there have been 109 reported captures of <i>Mobula mobular</i> in commercial fisheries, of those 108 were reported to have been released alive and 1 was discarded dead.
	X16	Over the last 4 years, there has been 1 reported capture of <i>Rhincodon typus</i> in commercial fisheries and released alive.
	X17	around 16 tonnes of <i>Sphyrna zygaena</i> are caught each year, and the proportion of the catch that is retained and reported is unknown.
	X18	Over the last 4 years, commercial catch of <i>Sphyrna zygaena</i> outside New Zealand fisheries waters has been around 0.02 tonnes.

	X1 9	<i>Squalus acanthias</i> is managed under New Zealand's quota management system which requires all commercial catch to be landed except under certain conditions. Over the last 4 years, average commercial catch of <i>Squalus acanthias</i> has been around 5 tonnes. The majority of the catch (69%) is released alive, with the remainder landed.
Romani	X20	Official statistics of picked dogfish catches landed on ports in 2018 is 0.512 t (512 kg), 2019 is 0.576 t (576 kg), 2020 is 0.880 t (880 kg) and in 2021 is 0.667 t (667 kg). Fishing only as a complementary species, TAC for the year - 13.5 t.

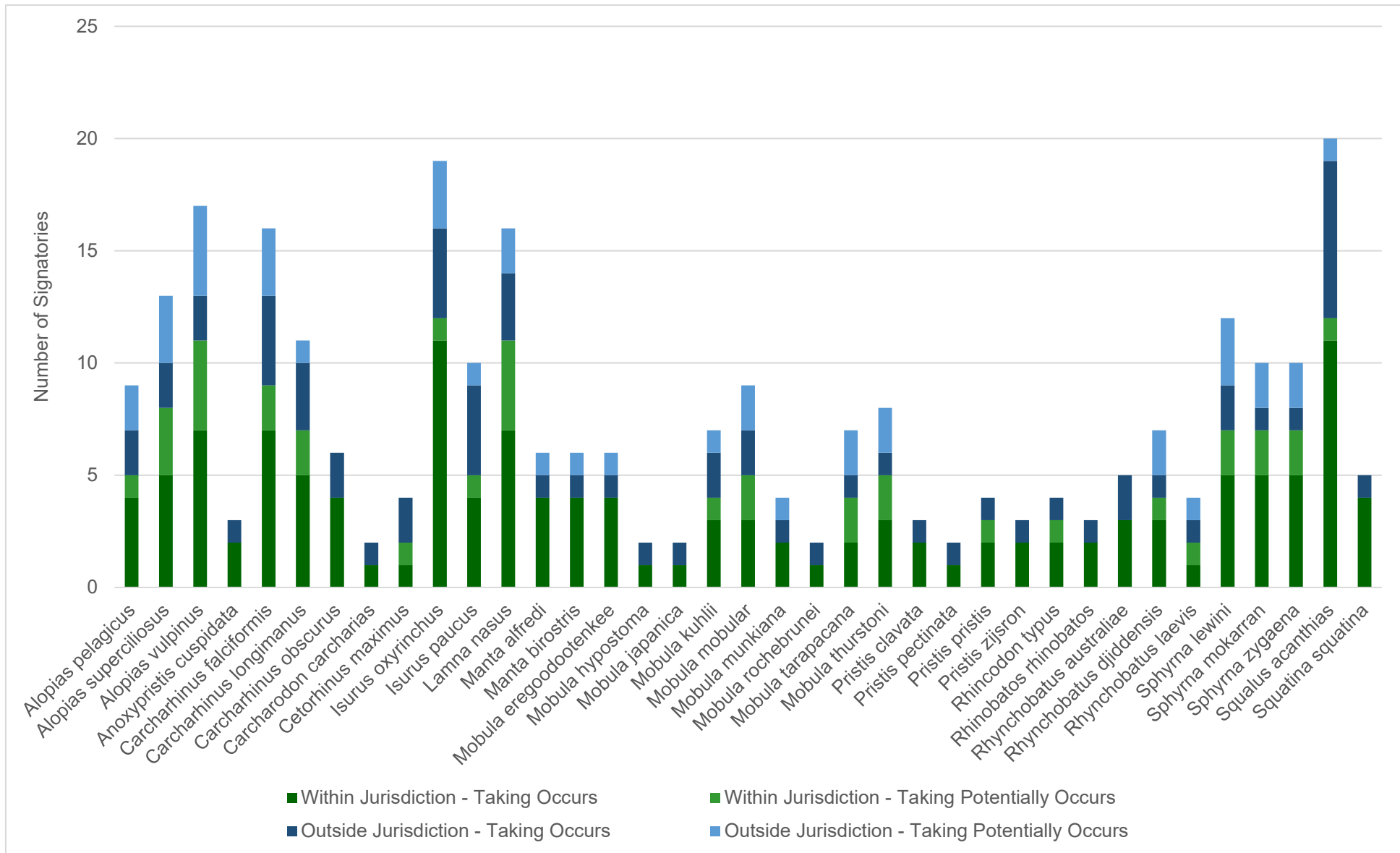


Figure 1. The total number of Signatories to the Sharks MOU (and additional Member States of the EU that completed a national report) that catch CMS- and Sharks MOU-listed sharks and rays within and outside of national jurisdiction boundaries, as indicated by the national reports.

Management and conservation measures

12. Are any Annex 1-listed sharks and rays protected or have a managed fishery? *

- Yes
- No

13. If yes, please include details of protection measures or managed fisheries for each species in the **spreadsheet** provided.

These could include national, supranational regulations or the implementation of Regional Fisheries Body measures.

*Please infill **column J** on the spreadsheet for each species.*

- I have added species-specific information to the spreadsheet
- Not applicable

19. Question 12 was answered by all 23 respondents. 21 respondents indicated that they have protection measures or a managed fishery for at least one Annex 1-listed species.

20. The most commonly protected species or species with a managed fishery are *Cetorhinus maximus* and *Mobula mobular*, each with ten respondents indicating that they have protection measures in place.

14. Are there any regulations concerning Annex 1-listed sharks and rays currently in the process of being proposed or implemented? *

- Yes
- No

15. If yes, please include details of the proposed or in the process of implementation in the **spreadsheet** provided.

*Please infill **column K** on the spreadsheet for each species.*

- I have added species-specific information to the spreadsheet
- Not applicable

21. Question 14 was answered by all 23 respondents. 14 respondents indicated that they are currently in the process of proposing or implementing regulations concerning Annex 1-listed species.

22. The most common species to have a regulation currently being proposed or implemented were *Alopias superciliosus*, *Carcharhinus longimanus*, *Carcharodon carcharias*, *Mobula mobular*, *Sphyrna lewini*, *Sphyrna mokarran*, and *Sphyrna zygaena*, each with seven respondents.

23. The Secretariat has noted the confusion with the choice of words in questions 14 and 15. The wording was difficult to interpret correctly and thus resulted in a large variation

of responses, some identified regulations that are currently being proposed and some identified regulations that are already implemented.

16. Have you established other conservation measures for Annex 1-listed sharks and rays in your area of national jurisdiction? *

- Yes
 No

17. If yes, please include details of the conservation measures in the **spreadsheet** provided.

These could include activities including research, capacity building, training, habitat conservation, etc.

*Please infill **column L** on the spreadsheet for each species.*

- I have added species-specific information to the spreadsheet
 Not applicable

24. Question 16 was answered by all 23 respondents. 16 respondents indicated that they have other conservation measures for Annex 1 species at a species-specific level, namely.
25. The most common species to have other conservation measures was *Carcharhinus longimanus*, with seven respondents.
26. To address questions 13, 15, and 17, respondents were asked to complete columns J, K, and L of the national reporting spreadsheet which was completed to varying levels of detail. Some measures were for specific species or genera or were more general measures that apply to that species.
27. An overview of the number of respondents with each of the three conservation and management measures, covered by questions 12 to 17, can be seen in Figure 2. A respondent was considered to have a measure in one of the three categories where they entered text in the corresponding column of the spreadsheet. The text was only discounted, where the text explicitly said there were no conservation measures for the species. Despite the confusion in questions 14 and 15, the results have been included in Figure 2 to show overall protection and conservation measures.
28. The species with the most protection measures across the three categories were *Alopias superciliosus*, *Carcharhinus longimanus*, *Carcharodon carcharias*, *Mobula mobular*, and *Sphyrna zygaena*, all with 22 respondents indicating some form of protection or conservation measure.

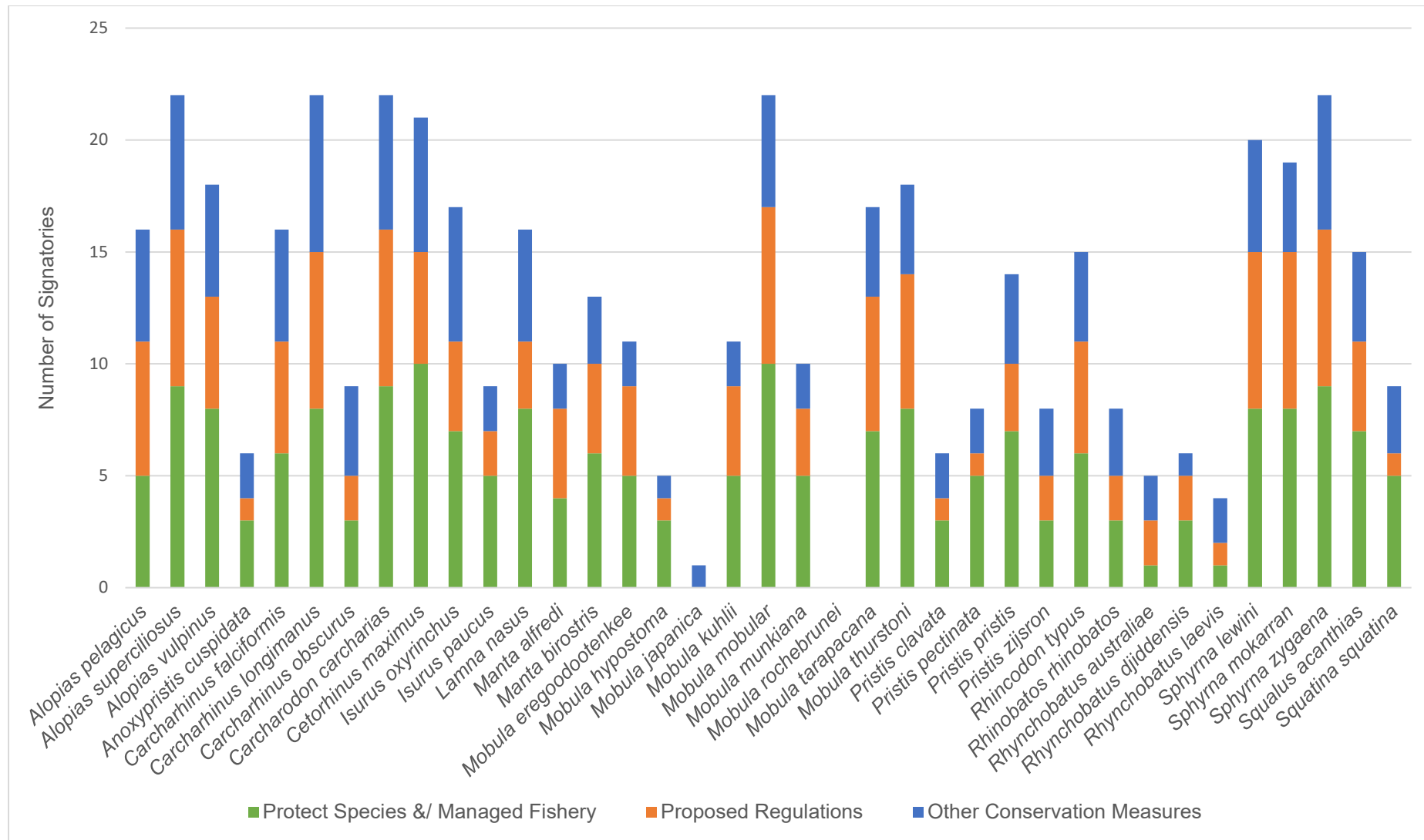


Figure 2. The total number of Signatories to the Sharks MOU (and additional Member States of the EU that completed a national report) that indicated whether they have protection or a managed fishery in place for a CMS- and Sharks MOU-listed sharks and rays (green, question 12), whether there are regulations currently being proposed or implemented (orange, question 14), or other conservation measures in place (blue, question 16).

Cooperation

18. Are you cooperating with other Signatories or NGOs on the implementation of the Sharks MOU and its Conservation Plan? *

Please provide details of the cooperation.

Click or tap here to enter text.

29. Question 18 was answered by 19 out of 23 respondents, to varying levels of detail.
30. 12 Signatories indicated that they are cooperating with other Signatories or NGOs to implement the Sharks MOU and its Conservation Plan. Six respondents specified that they were not cooperating with other Signatories or NGOs. An overview of some of the examples of cooperation is listed below:
- a) Australia engages with the following RFMOs: Commission for the Conservation of Southern Bluefin Tuna (CCSBT); Indian Ocean Tuna Commission (IOTC); Southern Indian Ocean Fisheries Agreement (SIOFA); South Pacific Regional Fisheries Management Organization (SPRFMO); Western & Central Pacific Fisheries Management Commission (WCPFC). Australia is a member of the Pacific Environment Programme (SPREP), which launched the Pacific Islands Regional Marine Species Programme 2022-2026, a component of which is the Pacific islands Sharks and Rays Action Plan 2022-2026.
 - b) Ecuador participates under the framework of the Eastern Tropical Pacific Marine Conservation Corridor, which is a collaboration between Costa Rica, Panama, Colombia, Ecuador, and NGOs, it promotes the responsible use and management of resources so that economic activities in the region are sustainable and continue to provide benefits.
 - c) Kenya participates in several regional and international organizations and bodies concerned with fisheries management. The KeFS closely monitors the fishing activities of both national and foreign-flagged vessels licensed to fish in inshore waters and the EEZ.
 - d) Madagascar is cooperating with the Wildlife Conservation Society on the development and implementation of the Action Plan and Implementation Plan on the Conservation and Sustainable Management of sharks and rays.
 - e) New Zealand has been collaborating with Conservation International to study the biological movements of giant manta (*Mobula birostris*) and post-release survival and movements of spine-tail devil rays (*Mobula mobular* = *Mobula japonica*).
 - f) Romania is cooperating with other Black Sea countries, mainly with Bulgaria, Turkey, and Georgia.
 - g) Saudi Arabia is a member of Regional Organization for the Protection of the Marine Environment (ROPME) and Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA) – both regional organisations that aim to streamline conservation and management measures for the Red Sea, Gulf of Aden and the Arabian Gulf. Through these agreements we believe Saudi Arabia aligns with work from other regional neighbours.
 - h) Senegal cooperates with the member countries of the sub-regional fisheries commission; Programme Régional de Conservation de la Zone Côtière et Marine en Afrique de l'Ouest (PRCM), Réseau Régional d'Aires Marines Protégées en Afrique de l'Ouest (RAMPAO), and Bird LIFE.

- i) Sweden is cooperating on several relevant measures taken within the Northeast Atlantic Fisheries Commission (NEAFC).
- j) Yemen noted that they were cooperating with International Fund for Animal Welfare (IFAW), raising awareness, and defining the Sharks MOU. All activities were almost stopped later due to the war, and they are seeking support to set standards for protecting and regulating fishing.

19. Have you identified the need, or do you have a request for cooperation with other Signatories or Cooperating Partners to implement the Conservation Plan within your country/region? For example a relevant Regional Fisheries Body. *

Please describe.

Click or tap here to enter text.

- 31. Question 19 was answered by 19 out of 23 respondents, to varying levels of detail.
- 32. Nine respondents indicated that they have identified the need for, or would like to request, cooperation with other Signatories or Cooperating Partners. Ten respondents specified that they do not currently require cooperation.
- 33. Three respondents (Ecuador, Malta, and Senegal) identified the need to cooperate with Regional Fisheries Bodies (RFBs). Four respondents (Germany, Kenya, Romania, and South Africa) identified the need to cooperate with other countries.
- 34. Ecuador specifically highlighted several organizations that it would benefit to cooperate with to implement the Conservation Plan, these included North America Oceanographic and Atmospheric Agency (NOAA), Inter-American Tropical Tuna Commission (IATTC), University of Costa Rica, Centro de Investigaciones, Marine Research Centre (UCR-CIMAR), Instituto del Mar del Peru (IMARPE).
- 35. Madagascar indicated that they need strong cooperation with partners working on shark conservation and conservation and sustainable management of sharks to implement the action plan and implementation plan documents.
- 36. Yemen said that they would like to do the following:
 - a) Promote stock assessments and related research.
 - b) Develop programmes to establish baseline data and facilitate reporting at a species-specific level on shark catch rates, fishing gear used in shark fisheries, the amount of incidental and directed taking, the amount of waste and discards, size and sex of individuals caught, and fisheries methods that are sustainable and responsible and protect the habitat.
 - c) Develop and implement National Plans of Action for Sharks.
 - d) Contribute to developing legislation to protect species and their critical habitats and ensure implementation of regulations and policies on national, regional, and global scales.

20. Have you identified any barriers preventing cooperation and partnership to implement the Sharks MOU and its Conservation Plan? *

Please describe.

Click or tap here to enter text.

37. In October 2023, a draft version of the national reporting format was circulated to Focal Points for revision and endorsement. This version did not include question 20 as this was later added after revisions. Six out of 23 national reports were completed using the draft version of the form and not the final version, circulated on 23 November 2022.
38. Question 20 was answered by 11 out of 17 respondents that completed the final form (which included question 20). With three respondents (Madagascar, Senegal, and Yemen) identifying that they do have barriers preventing cooperation and partnership, more details are provided below:
- Madagascar noted that partners and cooperators who work on shark conservation do not know each other, and that shark conservation and sustainable management documents are not disseminated among partners.
 - Senegal identified funding, training, and equipment as barriers.
 - Yemen noted that there is no budget to support protection efforts, there is an inadequacy of local laws to protect sharks, and a lack of training and capacity-building programmes.

Capacity and materials

21. What capacity needs have you identified in your country? Please provide details. *

This could include, but not limited to, training, equipment, materials, funding, data collection etc.

Click or tap here to enter text.

39. Question 21 was answered by 22 out of 23 respondents. 18 respondents identified that they have capacity needs and only four respondents specified that they do not currently have any capacity needs.
40. The most common capacity need identified was training (mentioned by nine respondents), followed by funding (mentioned by seven respondents). A short overview of the information that each respondent provided is highlighted below.
- Côte d'Ivoire has indicated that they need capacity building to develop an inventory of shark species in their waters.
 - Ecuador has identified several lines of education and outreach work, including developing an educational programme for fishing captains, training programme on responsible tourism, include shark week in national school curriculum, training programme for all involved in the shark supply chain, and training for journalists.
 - France has identified that they require more human resources.
 - Germany has identified the need to fill existing knowledge gaps about the Chondrichthyan species in German waters including their stock structure and reproductive biology, identify important nursery areas, migration patterns, and

- habitat use, and collect species-specific catch and bycatch data, to name a few.
- e) Greece has identified that they require training, equipment, materials, funding, and data collection.
 - f) Ireland has identified that they require training, legislation and official controls to be performed by Sea Fisheries Protection Officers on Sharks and Rays.
 - g) Lithuania has identified the need for training of observers and fisheries inspectors for the high seas.
 - h) Malta has identified the need for technical training on the collection of data along with the necessary equipment and funding.
 - i) Kenya has identified several areas of capacity needs, including training on data collection and species identification, enhancing the capacity of hardware, research funding, and technical support to develop and implement National shark conservation strategy for Kenya, enhance transboundary conservation measures, developing best practice guides, enhance public knowledge, regulate fisheries more effectively, and enhance conservation of shark habitats.
 - j) Madagascar has noted that they would like capacity-building grants to be open to everyone.
 - k) Monaco has identified the need for further data collection.
 - l) New Zealand has identified a lack of funding for research, limiting its ability to implement the MOU and Conservation Plan.
 - m) Romania has identified that there is little data on *Squalus acanthias* available for population analyses, so the training of experts to tag sharks and determine age is important.
 - n) Saudi Arabia has identified the need for capacity building in species identification, fisheries management, management of critically endangered species, bycatch reduction and to collaborate with local fisheries.
 - o) Senegal has identified the need for training in species identification, monitoring of landings, data collection, purchase of nets, measuring and weighing equipment, motorized canoes, multi-parameter kits, computers, underwater drones, raising awareness of good practice among those involved, dissemination of results, financing of monitoring and surveillance, and updating identification guide.
 - p) South Africa has identified that a regional species assessment needs to be funded and independent expertise is provided.
 - q) Yemen endeavors to develop capacity in research, data collection, monitoring and facilitate training in data quality.

22. What regional (or national) identification guides, and safe handling and release guidelines do you use? *

Please provide citation and internet link. If national guides can be made available to other Signatories, please email them as a PDF to fenella.wood@cms.int.

Click or tap here to enter text.

- 41. Question 22 was answered by 21 out of 23 respondents, detailing that 19 Countries do use some form of a guide, either for identification or safe handling and release.
- 42. Many resources were shared by respondents and are presented in Table 4, where links were available.

Table 4. Links to guides for species identification and safe handling and release are provided by each respondent.

Signatory	Link to guide
Australia	https://www.afma.gov.au/sites/default/files/uploads/2014/11/Shark-Handling-Guide-2016-Update.pdf
Denmark	See national report
Ecuador	See national report
EU	https://oceans-and-fisheries.ec.europa.eu/ocean/marine-biodiversity/sharks_en
France	https://www.researchgate.net/publication/345774077_PISCIBUS_MARI_NIS_Guide_des_poissons_marins_Europe_et_eaux_adjacentes_-_Version_provisoire_11 https://sumaris-project.com/wp-content/uploads/2020/09/Identification-guide-FR-SUMARiS.pdf https://www.fao.org/3/i9152fr/i9152fr.pdf https://archimer.ifremer.fr/doc/00259/37002/ https://archimer.ifremer.fr/doc/00342/45287/ https://www.documentation.ird.fr/hor/fdi:010049964 https://archimer.ifremer.fr/doc/00353/46431/
Germany	https://www.sharktrust.org/german
Greece (EU)	https://www.fao.org/3/i9152en/i9152en.pdf
Ireland (EU)	https://www.sfpa.ie/Advice-Education/Advice-to-Industry#1480268-shark-trust-fisheries-advisories---sharks-skates--rays
Lithuania (EU)	https://www.fao.org/documents/card/en/c/c101ff06-00d9-4721-9e6e-549efdcecd6e/ ; https://www.dfo-mpo.gc.ca/species-especes/sharks/identify-eng.html#speciesTable%20 ; https://www.fishbase.de/
Malta (EU)	https://www.fao.org/3/cc0830en/cc0830en.pdf https://www.fao.org/3/i9152en/i9152en.pdf
Sweden	https://www.havochvatten.se/download/18.41e6a25314de03413504501/1434027833128/vasterhavets-hajar-och-rockor.pdf
Madagascar	See national report
New Zealand	https://www.doc.govt.nz/globalassets/documents/conservation/marine-and-coastal/marine-conservation-services/resources/identification-guide-protected-fish-and-reptiles.pdf https://www.inshore.co.nz/fileadmin/user_upload/Purse_Seine_Operational_Procedures.pdf https://www.inshore.co.nz/fileadmin/user_upload/Setnet/op_setnet_2_1.pdf https://deepwatergroup.org/wp-content/uploads/2020/10/Sharks-OP-V3.pdf https://www.wcpfc.int/doc/supplcmm-2010-07/best-handling-practices-safe-release-sharks-other-whale-sharks-and https://www.wcpfc.int/doc/supplcmm-2012-04/guidelines-safe-release-encircled-animals-including-whale-sharks
Senegal	http://www.rampao.org/IMG/pdf/guide_d_identification_de_principales_especies_de_requins.pdf https://www.cms.int/sharks/en/document/onboard-guide-identification-sharks-and-rays-west-africa
South Africa	https://sharkattackcampaign.co.za/resources/

43. The most commonly used guides were from the FAO (mentioned by four respondents).

23. Please send any documents related to the conservation and management of Annex 1-listed sharks and rays that should be included in the Info Hub (<https://www.cms.int/sharks/en/sharks-mou-infohub>) to fenella.wood@cms.int.

- Relevant documents for the Info Hub have been emailed to the Secretariat
- Not Applicable

44. Question 23 was answered by all 23 respondents, with additional resources submitted to the Secretariat by Ecuador, Denmark, Madagascar, New Zealand, and Senegal, and are included in their national reports.

Conclusions

45. Seventeen out of a possible 49 Signatories to the Sharks MOU submitted a national report before the deadline for inclusion within this analysis.

Substantive Conclusions

46. The presence statuses determined by the IUCN of all Annex 1 species matched those stated by eight countries, with 11 respondents confirming different statuses, and four respondents did not submit a spreadsheet.

47. The Secretariat noted with concern that 11 respondents, all of them CMS Parties, reported catch of CMS Appendix I-listed sharks and rays, within and/or outside of their national jurisdiction. Several respondents noted that catches were not intentional. However, this was not recorded by all respondents as it was not requested in the form. Therefore, not all catches can be determined as intentional or not. This should be corrected in a future version of the form.

48. The most commonly caught species, both within and outside of national jurisdictions, were *Squalus acanthias* and *Isurus oxyrinchus*.

49. Twelve respondents indicated that they were cooperating with other Signatories or NGOs to implement the Sharks MOU and its Conservation Plan. The issue included cooperating with non-Signatory Range States and Regional Fisheries Bodies. Nine respondents indicated that they wish to cooperate more.

50. There were limited responses regarding barriers preventing cooperation. Three Signatories indicated barriers, with lack of funding and training as the most common.

51. The majority of respondents indicated capacity needs for their country, with the most common being training and funding.

52. Most respondents did indicate that guides for species identification and safe handling and release were used in their country. This could be a valuable resource for other Signatories and Range States to benefit from such guides.

Format-related Conclusions

53. Only one respondent completed the online version of the national reporting form. Where forms were submitted, they were mostly completed in full, facilitating this analysis.
54. Data capture was not lost because of the different formats of the form, except for where the earlier draft version for endorsement of Signatories was used, resulting in some missing responses for question 20.
55. The Secretariat noticed during the analysis that some text errors occurred in the form and spreadsheet (questions 11, 14, and 15), which may have confused respondents.
56. Due to the open nature of questions 13, 15, and 17, these were difficult to draw conclusions from. It is suggested that future formats of the national reporting form include yes/no answers for protection measures for each species.
57. It was not possible to draw any definitive conclusions in relation to many of the aspects touched upon in the national reporting form due to many areas of free text, amendments by respondents to the format, and the use of the draft version of the form. There was a large variation in the detail and specificity of answers, which made some responses difficult to compare.
58. Many Signatories filled out the national reporting form well, despite these challenges, and the Secretariat would like to thank them for the time dedicated to completing the national report.

Recommendations for future national reporting formats

59. It would be ideal to receive National Reports from all 49 Signatories, particularly to obtain species list and catch information per Signatory, to know for which species Signatories are Range States.
60. Questions should be designed to be more yes/no questions, particularly for species-specific information in addition to free text, and multiple-choice questions for questions related to cooperation, capacity building, and protection measures.
61. Questions should prompt whether catches were intentional or not.
62. Future offline forms should be provided in a non-editable format to maintain consistency between replies.
63. In light of the limited resources of the Secretariat and the high costs of establishing and maintaining a tailor-made online reporting platform that would provide the options of saving intermediate progress and multiple user access, the Secretariat would advise returning to offline reporting until publicly available platforms are available that meet these requirements.

SIGNATORIES THAT ARE RANGE STATES OF SHARK AND RAY SPECIES LISTED IN ANNEX 1 OF THE MOU

1. The table below provides an overview of Signatories that are Range States for each species included in Annex 1 of the Sharks MOU. It summarizes information on (1) the occurrence of the species within areas of national jurisdiction of Signatories as well as their (2) capture by Signatories outside areas of national jurisdiction. This information is based on data included in the IUCN Red List of Threatened Species database and reports from Signatories on occurrence and capture.
2. In accordance with paragraph 3 (l) of the Sharks MOU
 3. *For the purpose of this Memorandum of Understanding:
... (l) "Range State" means any State that exercises jurisdiction over any part of the range of migratory sharks, or a State, flag vessels of which are engaged outside its national jurisdictional limits in taking, or which have the potential to take, migratory sharks;*
3. As per the definition of a "Range State" this also includes countries capturing Annex 1-listed species outside their waters even though these might not occur in their national waters. As many comments and objectives fall under the responsibilities of Range States, the table below is intended to provide an overview to Signatories on the list of species that they are considered to be a Range State of as per the definition under the Sharks MOU.

NB: Signatories which provided information through their National Reports are listed in white. Signatories highlighted in grey did not provide any additional information and the presence statuses below are based solely on the IUCN Red List. EU Member States that submitted presence information via national reports are not included here. A key is provided below for presence statuses. Cells with an * indicate where a Signatory reported catching the species (within areas of their national jurisdiction) but does not consider it extant in their area of national jurisdiction.

R	Extant (Resident)	PE	Possibly Extant	U	Presence Uncertain	X	Extinct	*	Caught within areas of national jurisdiction
V	Extant (Vagrant)	PX	Possibly Extinct	?	Unknown	-	Doesn't Occur	FV	Caught only outside areas of national jurisdiction by flag vessel

Signatory	<i>Alopias pelagicus</i>	<i>Alopias superciliosus</i>	<i>Alopias vulpinus</i>	<i>Anoxypristis</i>	<i>Carcharhinus</i>	<i>Carcharhinus</i>	<i>Carcharhinus</i>	<i>Carcharodon</i>	<i>Cetorhinus maximus</i>	<i>Isurus oxyrinchus</i>	<i>Isurus paucus</i>	<i>Lamna nasus</i>	<i>Mobula alfredi</i>	<i>Mobula birostris</i>	<i>Mobula eregoodoo</i>	<i>Mobula hypostoma</i>	<i>Mobula kuhlii</i>	<i>Mobula mobular</i>	<i>Mobula munkiana</i>	<i>Mobula tarapacana</i>	<i>Mobula thurstoni</i>	<i>Pristis clavata</i>	<i>Pristis pectinata</i>	<i>Pristis pristis</i>	<i>Pristis zijsron</i>	<i>Rhincodon typus</i>	<i>Rhinobatos</i>	<i>Rhynchobatus</i>	<i>Rhynchobatus</i>	<i>Rhynchobatus laevis</i>	<i>Sphyrna lewini</i>	<i>Sphyrna mokarran</i>	<i>Sphyrna zygaena</i>	<i>Squalus acanthias</i>	<i>Squatina squatina</i>		
Australia	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	R	R	-	PE	R	R	-	R	R	R	-	R	-	R	R	R	R	R	-	-	
Belgium	-	-	R	-	-	-	-	-	R	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U
Benin	-	PE	R	-	R	R	PE	R	R	R	R	PE	-	R	-	PE	-	R	-	PE	PE	-	PX	PX	-	R	R	-	-	-	-	R	R	-	-	-	
Brazil	-	R	R	-	R	R	R	R	R	R	R	R	-	R	-	R	-	R	-	PE	R	-	U	R	-	R	-	-	-	-	-	R	R	R	R	-	-
Chile	-	PE	R	-	-	-	PE	R	R	R	-	R	-	-	-	-	-	R	-	R	R	-	-	-	-	R	-	-	-	-	-	R	R	R	R	-	-
Colombia	R	R	R	-	R	R	R	PE	R	R	R	-	-	R	-	PE	-	R	R	PE	PE	-	U	R	-	R	-	-	-	-	R	R	R	R	-	-	
Comoros	R	R	-	-	R	R	-	PE	-	-	R	-	-	R	PE	-	PE	PE	-	PE	PE	-	-	-	-	-	-	-	-	-	R	R	-	-	-	-	
Congo (Brazzaville)	-	R	PE	-	R	R	-	R	R	R	-	-	-	R	-	PE	-	R	-	PE	R	-	PX	PX	-	R	R	-	-	-	R	R	-	-	-	-	
Costa Rica	R	R	R	-	R	R	R	PE	R	R	R	-	-	R	-	-	-	R	R	R	R	-	U	U	-	R	-	-	-	-	R	R	R	-	-	-	
Côte d'Ivoire	PX	R	R	-	R	R	U	?	?	?*	R	-	-	PE	-	PE	-	R	-	R	R	-	PX	PX	-	R	R	-	-	-	?*	R	?*	-	-	-	
Denmark	-	-	R	-	-	-	-	-	R	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	
Ecuador	R	R	R	-	R	R	-	R	R	R	R	-	-	R	-	-	-	R	R	R	R	-	-	U*	-	R	-	-	-	-	R	R	R	-	-	-	
Egypt	R	PE	R	-	R	R	PE	R	R	R	-	R	R	R	R	-	-	-	-	R	R	-	-	-	U	R	R	R	R	-	R	R	R	R	R	U	

Signatory	<i>Alopias pelagicus</i>	<i>Alopias superciliosus</i>	<i>Alopias vulpinus</i>	<i>Anoxypristis</i>	<i>Carcharhinus</i>	<i>Carcharhinus</i>	<i>Carcharhinus</i>	<i>Carcharodon</i>	<i>Cetorhinus maximus</i>	<i>Isurus oxyrinchus</i>	<i>Isurus paucus</i>	<i>Lamna nasus</i>	<i>Mobula alfredi</i>	<i>Mobula birostris</i>	<i>Mobula eregoodoo</i>	<i>Mobula hypostoma</i>	<i>Mobula kuhlii</i>	<i>Mobula mobular</i>	<i>Mobula munkiana</i>	<i>Mobula tarapacana</i>	<i>Mobula thurstoni</i>	<i>Pristis clavata</i>	<i>Pristis pectinata</i>	<i>Pristis pristis</i>	<i>Pristis zijsron</i>	<i>Rhincodon typus</i>	<i>Rhinobatos</i>	<i>Rhynchobatus</i>	<i>Rhynchobatus</i>	<i>Rhynchobatus laevis</i>	<i>Sphyrna lewini</i>	<i>Sphyrna mokarran</i>	<i>Sphyrna zygaena</i>	<i>Squalus acanthias</i>	<i>Squatina squatina</i>		
European Union	-	R	R	-	R	R	R	R	R	R	R	R	-	R	-	-	-	R	-	R	R	-	-	-	-	R	R	-	-	-	R	R	R	R	R	R	
France	R	R	R	-	R	R	R	R	R	R	R	R	R	R	-	R	-	R	-	R	PE	-	PE	R	-	R	R	R	R	-	-	-	R	R	R	R	R
Germany	-	-	R	-	-	-	-	-	U*	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	PX	
Ghana	-	R	R	-	R	R	PE	R	R	R	R	-	PE	-	PE	-	R	-	R	R	-	PX	PX	-	-	R	R	-	-	-	R	R	R	-	-		
Guinea	-	R	R	-	R	R	-	R	R	R	R	R	-	PE	-	R	-	PE	-	PE	PE	-	PX	PX	-	R	R	-	-	-	R	R	R	-	-		
Italy	-	R	R	-	-	-	R	R	R	R	-	R	-	-	-	-	-	R	-	-	-	-	-	-	-	-	R	-	-	-	-	-	R	R	R	R	
Jordan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-	
Kenya	R	R	PE	FV	R	R	-	R	-	R	R	?*	PE	V	PE	-	R	R	-	PE	PE	-	-	U	R	R	-	R	U*	U*	R	R	R	FV	-		
Liberia	-	R	R	-	R	R	PE	R	R	R	R	-	-	PE	-	PE	-	R	-	R	R	-	PX	PX	-	R	R	-	-	-	R	R	R	-	-		
Libya	-	R	R	-	-	-	R	R	R	R	-	R	-	-	-	-	-	R	-	-	-	-	-	-	-	-	R	-	-	-	-	-	R	R	R	R	
Madagascar	R	R	PE	-	R	R	R	R	-	R	R	-	R	R	PE	-	PE	PE	-	PE	PE	-	-	R	U	R	-	-	-	-	-	R	R	R	-	-	
Mauritania	-	R	R	-	R	R	PE	R	R	R	R	-	-	R	-	R	-	R	-	R	R	-	U	U	-	R	R	-	-	-	R	R	R	R	R	-	
Monaco	-	PE	PE	-	-	-	-	PE	PE	PE	-	R	-	-	-	-	-	R	-	-	-	-	U	U	-	-	PE	-	-	-	U	PE	PE	PE	PX		
Nauru	R	R	PE	-	-	R	-	PE	R	R	R	-	PE	PE	-	-	-	PE	-	PE	PE	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-	
Netherlands	-	-	R	-	-	-	-	R	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	PX	
New Zealand	-	R	R	-	-	V	V	R	R	R	-	R	-	R	-	-	-	R	-	-	PE	-	-	-	-	V	-	-	-	-	-	-	-	R	R	-	
Palau	R	PE	PE	-	-	R	-	PE	R	R	R	-	R	PE	-	-	-	PE	-	R	PE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Philippines	R	R	PE	-	R	R	-	R	R	R	R	-	R	R	PE	-	R	R	-	R	R	-	-	U	U	R	-	R	-	-	-	R	R	R	-	-	
Portugal	-	R	R	-	R	R	PE	R	R	R	R	R	-	R	-	-	-	R	-	R	R	-	-	-	-	R	R	-	-	-	-	R	R	R	R	-	
Romania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	
Samoa	R	PE	PE	-	-	R	-	R	R	R	R	-	PE	PE	-	-	-	PE	-	PE	PE	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-	
Saudi Arabia	R	PE	-	-	R	R	PE	-	-	R	-	-	R	PE	R	-	V	PE	-	R	R	-	-	-	U	R	-	R	R	R	R	R	R	U	-	-	
Senegal	U	R	R	?	R	R	R	U	U	R	U	PE	R	R	R	?	?	?	?	PE	R	?	PX	PX	?	R	R	?	?	?	R	R	R	?	R		
Somalia	R	R	R	U	R	R	PE	R	-	R	R	-	R	R	PE	-	R	R	-	PE	PE	-	-	R	U	R	-	R	R	-	R	R	R	R	-	-	
South Africa	R	R	R	-	R	R	R	R	V	R	V	V	R	R	R	-	R	R	-	R	R	-	X	X	X	R	-	-	R	-	R	R	R	R	R	-	
Sri Lanka	R	R	R	R	R	R	-	R	-	R	R	-	PE	R	PE	-	R	R	-	R	R	-	-	U	U	-	-	R	-	R	R	R	R	R	-	-	

Signatory	<i>Alopias pelagicus</i>	<i>Alopias superciliosus</i>	<i>Alopias vulpinus</i>	<i>Anoxypristis</i>	<i>Carcharhinus</i>	<i>Carcharhinus</i>	<i>Carcharhinus</i>	<i>Carcharodon</i>	<i>Cetorhinus maximus</i>	<i>Isurus oxyrinchus</i>	<i>Isurus paucus</i>	<i>Lamna nasus</i>	<i>Mobula alfredi</i>	<i>Mobula birostris</i>	<i>Mobula eregoodoo</i>	<i>Mobula hypostoma</i>	<i>Mobula kuhlii</i>	<i>Mobula mobular</i>	<i>Mobula munkiana</i>	<i>Mobula tarapacana</i>	<i>Mobula thurstoni</i>	<i>Pristis clavata</i>	<i>Pristis pectinata</i>	<i>Pristis pristis</i>	<i>Pristis zijsron</i>	<i>Rhincodon typus</i>	<i>Rhinobatos</i>	<i>Rhynchobatus</i>	<i>Rhynchobatus</i>	<i>Rhynchobatus laevis</i>	<i>Sphyrna lewini</i>	<i>Sphyrna mokarran</i>	<i>Sphyrna zygaena</i>	<i>Squalus acanthias</i>	<i>Squatina squatina</i>	
Sudan	R	R	-	-	R	R	R	PE	-	R	-	-	R	R	PE	-	-	-	-	R	PE	-	-	-	R	R	-	R	R	-	R	R	-	-	-	
Sweden	-	-	-	-	-	-	-	-	R	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	PX	
Syrian Arab Republic	-	PE	R	-	-	-	-	R	R	-	-	-	-	-	-	-	-	PE	-	-	-	-	-	-	-	R	-	-	-	-	R	-	R	R	U	
Togo	-	PE	R	-	R	R	PE	R	-	-	R	-	-	R	-	PE	-	R	-	PE	PE	-	PX	PX	-	R	R	-	-	-	R	R	-	-	-	
Tuvalu	R	PE	PE	-	-	R	-	PE	R	-	R	-	-	PE	-	-	-	PE	-	PE	PE	-	-	-	-	R	-	-	-	-	-	-	-	-	-	
UAE	R	R	-	R	R	R	-	-	-	R	R	-	-	R	-	-	R	-	-	R	R	-	-	-	R	R	-	R	R	R	R	R	R	-	-	
UK	-	R	R	-	-	-	-	-	R	R	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R
USA	-	R	R	-	R	R	R	R	R	R	R	R	R	R	-	R	-	R	-	R	PE	-	R	PX	-	R	-	-	-	-	-	R	R	R	R	-
Vanuatu	R	PE	PE	-	-	R	-	R	R	R	R	-	R	PE	-	-	-	PE	-	PE	PE	-	-	-	-	R	-	-	-	-	-	-	-	-	-	
Yemen	R	R	R	U*	R	R	R	PE	FV	R	R	FV	R	R	PE	FV	R	FV	FV	PE	PE	FV	FV	U*	U*	R	FV	R	R	FV	R	R	R	FV	FV	