

Summary of the Third Meeting of Signatories to the Memorandum of Understanding on the Conservation of Migratory Sharks: 10-14 December 2018

The Third Meeting of Signatories (MOS3) to the Memorandum of Understanding (MOU) on the Conservation of Migratory Sharks convened from 10-14 December 2018 in the Principality of Monaco. Organized by the Convention on the Conservation of Migratory Species of Wild Animals, this was the third MOS since the Sharks MOU came into effect in 2011. It was attended by more than 100 participants, including by 38 Signatories and the European Union, Cooperating Partners, and observers.

During the meeting, Signatories agreed to:

- list eight species of sharks in Annex 1 of the MOU: the dusky shark; the common guitarfish; the bottlenose wedgefish/whitespotted wedgefish together with two lookalike species, the smoothnose wedgefish and whitespotted wedgefish/giant guitarfish; the oceanic whitetip shark; the angelshark; and the smooth hammerhead shark;
- a provision regarding lookalike species;
- a procedure for modifying Annex 1 of the MOU, addressing the listing criteria;
- terms of reference for the intersessional working group on conservation measures;
- the guidance for MOU Signatories and the Secretariat in their engagement with regional fisheries management organizations;
- a communication and awareness-raising strategy;
- a capacity-building programme;
- a budget increase of 10.4% for the upcoming triennium; and
- the programme of work 2019-2021.

A Brief History of the Sharks Memorandum of Understanding

A significant proportion of threatened shark species are migratory, some undertaking large-scale movements across ocean basins. These extensive migrations mean that conservation efforts in one state can be undermined by actions in the waters of other states or on the high seas. Such species, therefore, require conservation and management actions across their entire range. While a number of international instruments contain provisions for the conservation and management of migratory sharks, they have generally failed to deliver practical improvements in the conservation status of the species, and vulnerable populations are continuing to decline. A few other international organizations and agreements, such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), as well as

some regional fisheries management organizations (RFMOs) and regional instruments, such as the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, also address migratory sharks.

Origins of the Sharks MOU

The Convention on the Conservation of Migratory Species of Wild Animals (CMS) was adopted in 1979 in Bonn, Germany, in an effort to address vulnerable migratory species, and entered into force on 1 November 1983. CMS, or the Bonn Convention, recognizes that states must protect migratory species that live within or pass through their national jurisdiction, and aims to conserve terrestrial, marine and avian migratory species throughout their ranges. To date, CMS has 127 parties.

In this Issue

A Brief History of the Sharks Memorandum of Understanding	1
Report of the Meeting	2
Organizational Matters	3
Reports on Implementation	3
Analysis of National Reports	4
Amendment of Annex 1	4
Criteria for Species Inclusion in Annex 1	6
Conservation Measures	7
Engagement with Regional Fisheries Management Organizations	8
Communication and Awareness-raising	9
Capacity Building	10
Terms of Reference of the Advisory Committee	10
Partnerships and Cooperation	11
Programme of Work	11
Administrative and Budgetary Matters	13
Performance Review and Review of Annex 1	14
Closing Plenary	14
A Brief Analysis of the Meeting	14
Upcoming Meetings	15
Glossary	16

CMS was designed as a framework through which parties may conserve migratory species and their habitats by:

- adopting strict protection measures for migratory species characterized as endangered throughout all or a significant portion of their ranges (species listed in Appendix I of the Convention);
- concluding agreements for the conservation and management of migratory species that have an unfavorable conservation status or would benefit from international cooperation (species listed in Appendix II); and
- joint research and monitoring activities.

CMS also provides for the development of specialized regional agreements for Appendix II species. To date, there are seven legally binding agreements and 19 MOUs, including the Sharks MOU. The agreements and MOUs are open for signature to all range states of a particular species, regardless of whether they are a party to CMS.

The 8th meeting of the CMS Conference of the Parties (COP) in November 2005 adopted Resolution 8.5 which endorsed the development of a global instrument on migratory sharks, under the auspices of CMS, and urged cooperative action through a species-specific action plan. In Recommendation 8.16 (migratory sharks), the COP, *inter alia*:

- requests all parties to strengthen measures to protect migratory shark species against threatening processes;
- calls upon range states of CMS-listed migratory sharks to develop a global migratory sharks conservation instrument in accordance with CMS; and
- requests the Secretariat to explore avenues for cooperation with the UN Food and Agriculture Organization (FAO), CITES and relevant range states to enhance protection, conservation, and management of sharks.

The 12th CMS COP in October 2017:

- decided to amend the CMS Appendices to list: the whale shark on Appendix I; the blue shark, the dusky shark, and the white spotted wedgetfish on Appendix II; the angelshark on Appendices I and II; and the common guitarfish on Appendix II and its Mediterranean Sea population on Appendix I;
- designated concerted actions on the whale shark, angelshark, and mobulid rays; and
- confirmed that the CMS Secretariat will serve as the permanent Secretariat of the Sharks MOU.

Key Milestones

SHARKS I: The first meeting on International Cooperation on Migratory Sharks under the CMS (SHARKS I) (11-13 December 2007, Mahé, Seychelles) was convened to identify and elaborate an option for international cooperation on migratory sharks. Participants elaborated several options and prepared a general-purpose statement for the meeting, and an outcomes statement to guide future work. SHARKS I:

- welcomed the emerging consensus on either a global legally binding or non-legally binding instrument;
- supported the involvement of existing regional and intergovernmental organizations in the future governance arrangements for sharks; and
- agreed on key elements for the instrument.

An Intersessional Steering Group on Migratory Sharks was established, with the expectation of finalizing the instrument at CMS COP9.

SHARKS II: This meeting (6-8 December 2008, Rome, Italy) agreed that the instrument to guide the management of migratory

sharks should be non-legally binding in the form of a MOU under the CMS. Participants revised the proposed draft MOU and informally considered draft elements for the plan of action to be developed by an Intersessional Drafting Group, with expectation that both documents would be finalized and adopted at SHARKS III. Among the meeting's most contentious issues was whether to limit the MOU's scope to the basking, great white and whale sharks, or whether the spiny dogfish, porbeagle, and shortfin and longfin mako sharks should also be included.

SHARKS III: This meeting (10-12 February 2010, Manila, Philippines) reviewed the draft text of a non-legally binding MOU on the Conservation of Migratory Sharks under CMS, adopted the MOU, and opened it for signature.

MOS1: The first Meeting of the Signatories (24-27 September 2012, Bonn, Germany) established an Advisory Committee (AC), considered a draft conservation plan, administrative and budgetary matters, and Secretariat arrangements. The Conservation Plan was adopted, recognizing work was still needed on prioritizing actions. A working group on administration and budget addressed the terms of reference for the AC and the rules of procedure for amending the list of shark species covered by the MOU.

MOS2: This meeting (15-19 February 2016, San José, Costa Rica) amended Annex 1 of the MOU to add 22 additional shark and ray species, including the silky shark, the great hammerhead shark, the scalloped hammerhead shark, the reef manta ray, the giant manta ray, three species of thresher sharks, five species of sawfish, and nine species of mobula rays. This meeting further:

- added seven new cooperating partners to the MOU;
- reached agreement on a reporting format for Signatories;
- adopted an ambitious programme of work (POW) for the next triennium;
- amended the MOU with respect to sections on decision making, budget, cooperating partners, and the AC;
- amended Annex 3 (the Conservation Plan);
- approved the 2016-2018 budget and Trust Fund;
- agreed on a format for national reporting;
- approved the creation of a list of experts; and
- approved terms of reference for the AC, the Conservation Working Group (CWG) and cooperating partners.

The Sharks MOU currently has 48 Signatories and, together with the eight species listed during MOS3, contains 37 species of sharks and rays in its Annex 1.

Report of the Meeting

On Monday morning, 10 December, Melanie Virtue, CMS Secretariat, on behalf of Bradnee Chambers, CMS Executive Secretary, welcomed participants to MOS3.

Robert Calcagno, CEO, the Oceanographic Institute, Monaco, stressed that sharks, as "ocean ambassadors," portray the need for regional and international cooperation to cover their migratory journeys, and define the size and connectivity of marine protected areas (MPAs). Emphasizing the incomplete scientific knowledge on sharks, he addressed various methods used for shark conservation, including satellite tracking and genetic techniques, and urged data sharing. Calcagno quoted Prince Albert II of Monaco, noting that the threats sharks face are "a reflection of our world, globalized and complex," and called for sustainable management of fisheries and raising consumer awareness.

Emphasizing that her country's marine area is 36 times larger than its land territory, Isabelle Rosabrunetto, Director General, Ministry of Foreign Relations and Cooperation, Monaco,

highlighted national efforts for the integrated management of marine and coastal resources, and the protection of marine biodiversity, including support for the Sharks MOU. She underscored that sharks and rays “deserve our full attention,” noting that the scientific data are alarming, and that conservation efforts will greatly benefit from international cooperation.

Keynote address: On Monday evening, Pierre Frolla, Monegasque free diver and world record holder, Ecole Bleu, shared his diving experiences and emphasized the power of images to effectively communicate messages related to ocean conservation. Frolla noted that “the sea is not as black as people think,” portraying its beauty, especially that of aquatic species, and stressed that “children need to become the ambassadors of environmental protection to create their own world rather than inherit a wounded world from us.” In that respect, Frolla highlighted projects aiming at communication messages for school children produced by their peers.

Organizational Matters

On Monday morning, the Secretariat recalled that MOS2 held long discussions on the rules of procedure. She reminded delegates that new rules of procedures were adopted at MOS2, with bracketed text regarding Rules 12 (quorum) and 15 (decision making). She suggested that the rules of procedure (CMS/Sharks/MOS3/Doc.2.1) be adopted with: decision making guided by paragraph 18 of the MOU, which states that “the MOS should be the decision-making body of this MOU and decision making of the MOS should be by consensus”; and quorum guided by Rule 30 adopted at both MOS1 and MOS2, which states that the Chair may declare a session of the MOS open and permit the debate to proceed if at least half of the Signatories to the MOU are present, and may take a decision when representatives of at least one half of the Signatories are present. The US and the European Union (EU) supported the proposal, without prejudice to their own positions regarding Rules 12 and 15, and the Rules of Procedure were adopted.

Delegates elected Robert Calcagno (Monaco) as Chair and David Hogan (US) as Vice Chair.

Chair Calcagno stressed that threats for sharks are high, especially from fisheries; highlighted proposals for listings of shark species in the MOU Annex I; and called for coordinated conservation efforts, including information sharing.

Delegates adopted the provisional agenda and list of documents (CMS/Sharks/MOS3/Doc.4.1/Rev.2), and the provisional annotated agenda and meeting schedule (CMS/Sharks/MOS3/Doc.4.2).

The following countries agreed to serve as regional representatives on the Credentials Committee: Comoros for Africa; the US for North America; the UK for Europe; New Zealand for Oceania; Costa Rica for South and Central America and the Caribbean; and the United Arab Emirates (UAE) for Asia.

On Monday afternoon, Credentials Committee Chair Jamie Rendell (UK) reported that 22 credentials had been accepted, with 16 outstanding. On Friday, he noted that a few Signatories had outstanding credentials and suggested amending the Rules of Procedure to clarify the process in the future.

The Secretariat introduced the document on admitting observers (CMS/Sharks/MOS3/Doc.6.1/Rev.1), noting the further addition of Blue Resources Trust and Collecte Localisation Satellites Argos. She also noted text in accordance with Rule 6(1) of the Rules of Procedure, regarding observer participation for any non-Signatory states, UN body, regional organization, or

relevant secretariat. The Signatories agreed to admit all observers present at MOS3.

In a signing ceremony on Wednesday afternoon, Defenders of Wildlife joined the MOU as a Cooperating Partner, noting its two decades of work on sharks and interest in generating regional support for shark conservation.

Reports on Implementation

Report of the Secretariat: On Monday morning, Andrea Pauly, CMS Secretariat, introduced the Secretariat’s report (CMS/Sharks/MOS3/Doc.7.1). She highlighted the addition of nine new Signatories since MOS2, bringing the total to 48, and requested Signatories that have not yet nominated focal points to do so. She also noted the MOU now has 12 Cooperating Partners.

On activities related to the CWG, she highlighted, *inter alia*, commissioning two gap analyses on activities for the conservation of species listed in Annex 1 under relevant fisheries-related bodies (CMS/Sharks/MOS3/Inf.17) and shark and ray bycatch mitigation measures employed by fisheries management bodies (CMS/Sharks/MOS3/Inf.18).

On work related to the AC, she noted a survey of Signatories on capacity gaps related to implementing the MOU and Conservation Plan. On support for the intersessional working group (IWG), she highlighted development of draft text on the communication and awareness-raising strategy under the MOU’s POW 2016-2018.

On support for Signatories, she noted participation in workshops related to implementation of shark- and ray-related decisions under CITES and CMS, and support for a Regional International Union for Conservation of Nature (IUCN) Red List Workshop. She also highlighted: training workshops on outreach; website improvements; and social media developments.

Regarding cooperation, synergies, and meetings with CMS and CITES, she reported on, *inter alia*, the listing of five additional species of sharks and rays in CMS Appendices, and adoption of three proposals for “Concerted Action” for whale sharks, mobulid rays, and angelsharks at CMS COP12.

Reports of Signatories and Cooperating Partners:

On Monday, MOS3 Chair Calcagno invited signatories and cooperating partners to provide brief comments on their national reports. Côte d’Ivoire highlighted work to protect seven shark species found in national waters, including four listed in Annex 1. Madagascar noted the development of a national roadmap for management of sharks and rays. The UAE stressed the adoption of the first National Plan of Action for sharks and rays and highlighted its 2018 “UAE Shark Assessment Report.”

Somalia and others emphasized the role of fisheries in achieving shark conservation. Mauritania referenced his country’s work on regulatory activities to comply with the Sustainable Development Goals. Guinea noted challenges related to lack of necessary equipment for fishery conservation. Senegal commented on the need for enhanced capacity building to assist stakeholders in its territory. The Philippines underscored the role of protected areas. Brazil noted this was their first meeting as a Signatory, and thanked the Secretariat for its assistance.

Shark Advocates International said that much work remains to be done, including strict protection for CMS Appendix I species, which is still lacking in most range states.

Report of the Advisory Committee: On Monday, AC Chair John Carlson (US) presented the AC Report (CMS/Sharks/MOS3/Doc.7.3), noting all regional positions in the AC were filled and a request to extend the AC’s term to ensure its mandate is fulfilled.

He highlighted future tasks including: providing advice on implementation of species and habitat conservation, including on whale sharks; offering guidelines on bycatch mitigation strategies; assisting on engagement with RFMOs; and supporting the CMS Secretariat on future listings.

The EU enquired on the relationship between the CMS and the AC, suggesting discussing this in the agenda item allocated to the AC. Mauritania queried about the AC nomination procedure, term renewals, and costing that would influence a future financing strategy. MOS3 Vice Chair Hogan suggested revisiting these issues when discussing the AC terms of reference.

On Thursday, MOS3 discussed how to streamline communications among the Secretariat, the AC, and the CMS Scientific Council. The Secretariat pointed to a proposed procedure (CMS/Sharks/MOS3/Inf.19), explaining that when needing to consult bodies, such as CITES, FAO and RFMOs, they do so first by a request to the secretariats of these bodies. She observed that if such requests must be sent first to Signatories and then to the AC, the approval process could be delayed.

Recognizing the need for efficiency in information exchange, the EU and the UK urged for maintaining internal integrity and protocols regarding procedure. MOS3 Vice Chair Hogan suggested the Secretariat act as a clearinghouse to receive requests to be forwarded to the AC, and when time permits, send requests to Signatories for guidance and input.

Report of the Intersessional Working Group: On Monday, Australia presented the IWG Report, highlighting its efforts to develop a draft communication and awareness-raising strategy for the Sharks MOU (CMS/Sharks/MOS3/Doc.12.1). She said the draft strategy was modeled after the African-Eurasian Waterbird Agreement, indicating consensus was not reached on the relationship between the MOU and CMS.

Analysis of National Reports

On Monday morning, the Secretariat presented the analysis of national reports (CMS/Sharks/MOS3/Doc.8.1), stressing that the Secretariat received 26 national reports by 15 November 2018, with approximately half of the Signatories using the relevant online form for reporting. She noted that: Signatories have informed the Secretariat about technical problems and lack of available, relevant data; and the information received was not harmonized in all cases. She highlighted main conclusions of the analysis, including: high-levels of incidental bycatch of CMS Appendix I species; targeted catch for four species of mobulids; lack of or partial legal protection in place for CMS Appendix I species in many countries; and the need to strengthen existing collaboration to allow for more successful conservation approaches.

The US said it was difficult to report on all the implementation efforts for each of the species included in CMS Appendix I using the online format. She noted that many Signatories have struggled with the format and the online reporting tool, calling for a standardized, but flexible, process to enhance the quality and quantity of data. Mauritania called for additional assistance to developing countries, including relevant training for drafting their national reports. Senegal supported improving the online tool.

The Secretariat highlighted legislation gaps, as well as lack of data on catch and by-catch levels of CMS Appendix I species. MOS3 Vice Chair Hogan suggested establishing a working group to address the issue intersessionally. The US, Australia, Mauritania, and the EU supported the suggestion. A working group was established on the methodology to develop, refine, and

propose improvements to the online reporting tool. On Monday evening, an informal group met to develop the terms of reference (TOR) for the working group.

On Wednesday afternoon, MOS3 Vice Chair Hogan indicated a draft TOR of the IWG on national reporting was available (CMS/Sharks/MOS3/CRP3). The EU requested activities be considered indicative, while noting the need to better define process elements, such as how to take items forward, in what time frames, and who should serve as Chair. MOS3 Vice Chair Hogan suggested the existing IWG Chair could continue if Signatories agreed and noted the IWG should conclude its work prior to the third AC meeting.

Responding to Senegal's query on how to evaluate effectiveness of measures taken, MOS3 Vice Chair Hogan suggested reference should be to the Conservation Plan and decisions taken by the MOS, encouraging Signatories to provide new drafting if useful so the MOS can approve the TOR.

On Thursday morning, the Secretariat introduced the proposed TOR for an IWG on national reporting (CMS/Sharks/MOS3/CRP3/Rev.1), which were approved with minor editorial amendments.

On Friday morning, Signatories adopted the Draft TOR of the IWG on national reporting.

Final Outcome: The final outcome (CMS/Sharks/MOS3/CRP3/Rev.2) contains the TOR of the IWG on national reporting. It notes that the purpose of the IWG is to review the current content and format of the national reports and provide advice to MOS4 on streamlining the reporting format, ensuring questions are focused on the MOU priorities and that the reporting platform is user-friendly.

The decision further: contains the *modus operandi* of the IWG, noting it will work remotely by email and will be co-chaired by the US and Australia; addresses IWG membership; and offers a timeline for finalization of relevant work.

Amendment of Annex 1

On Monday afternoon, the Secretariat introduced the document on amending Annex 1 (CMS/Sharks/MOS3/Doc.9.1/Rev.1). She explained the document includes three parts: proposals for listing additional species in Annex 1; criteria for amending Annex 1; and a revised format for listing proposals.

On Tuesday morning, the Secretariat introduced five species added to the CMS Appendices I and II during CMS COP12 (UNEP/CMS/COP12/Doc.25.1.21/Rev.1 – Doc.25.1.25/Rev.2), as well as three species proposed directly from Signatories (CMS/Sharks/MOS3/Doc.9.1.1/Rev.1, Doc.9.1.2, and Doc.9.1.3), for listing in MOU Annex 1. Following initial discussions, a working group was formed to address pending listing proposals for the blue shark, the angelshark, and the two lookalike species of the bottlenose wedgefish, the smoothnose wedgefish and the whitespotted wedgefish. The working group met throughout the week. All listing proposals were discussed on Tuesday, unless otherwise noted.

Dusky Shark: The Secretariat introduced the proposal to list the dusky shark (*Carcharhinus obscurus*), originally suggested for listing on the CMS Appendices by Honduras (UNEP/CMS/COP12/Doc.25.1.21/Rev.1), noting that dusky shark populations have significantly declined from historic levels. AC Chair Carlson indicated the dusky shark meets the criteria for migratory species and for unfavorable conservation status. Senegal supported the listing. The dusky shark was listed in Annex 1 of the MOU with no further comments.

Blue Shark: Samoa and Sri Lanka, proponents of listing the blue shark (*Prionace glauca*) in the CMS Appendices at COP12, presented the proposal. They noted their disappointment for only listing the species in CMS Appendix II, stressing it is “the world’s most killed and traded shark.” They underscored that no management plans are in place for much of the blue shark’s range and expressed concern for increased catch levels and limited relevant data. AC Chair Carlson said the species meets the migratory criteria, but not the criteria on unfavorable conservation status, noting that, according to best available science, the blue shark is not considered to be threatened with extinction.

New Zealand, South Africa, Australia, and the US opined that the blue shark should not be listed in MOU Annex 1, underscoring that rigorous scientific criteria should be used for listings. They argued, *inter alia*, that the species: is not overfished and conservation challenges are mainly located in the Mediterranean Sea; has a large economic benefit and is not under risk; and is maintaining itself as a vital component of the ecosystem according to population dynamics data.

The EU, the UK, Germany, Côte d’Ivoire, Brazil, the Pacific Regional Environment Programme (SPREP), and Humane Society International (HSI), on behalf of Blue Resources Trust, Wildlife Conservation Society, Pew Charitable Trusts, Florida International University, the International Fund for Animal Welfare, Shark Advocates International, Save Our Seas Foundation, Project Aware, the Manta Trust, Marine Wildlife Watch of the Philippines, Universidad Jorge Tadeo Lozano, Sea Shepard Legal, Defenders of Wildlife, and MarAlliance, supported the listing. The UK stressed that “there is much uncertainty about the species and the effectiveness of existing measures is unproven,” noting that whether action should be taken before an acute problem arises is a deeper question for the MOU.

FAO noted that the same criteria can be used to derive different conclusions, creating confusion. He used the example of both increasing and decreasing percentages of a given shark species in the Hong Kong fin market used as an indicator of increased pressures.

MOS3 Vice Chair Hogan noted that consensus does not exist on listing the blue shark and suspended consideration of the sub-item to allow for informal consultations.

On Wednesday afternoon, AC Chair Carlson indicated that the AC had considered the International Council for the Exploration of the Sea Report and retained its position, noting the AC takes its role of reviewing proposals for species listing seriously and without prejudice.

On Thursday afternoon, Samoa reported that no consensus was reached on listing the blue shark and, with Sri Lanka, suggested that the proposal be reconsidered at MOS4 when more information is available. AC Chair Carlson noted upcoming RFMO assessments of blue shark populations to occur during 2020 and 2021.

Angelshark: Monaco described its proposal to add angelshark (*Squatina squatina*) to Annex 1, as outlined in its proposal to CMS COP12 (UNEP/CMS/COP12/Doc.25.1.23), citing historical data showing north-south and seasonal coastal movements as evidence of its migratory nature. Germany stressed its status as perilously close to extinction. Senegal recalled that the CMS Scientific Council took into account historical information in its decision to list the species under CMS Appendices I and II. The EU said the new information presented lent support for its inclusion. The US opposed the listing, noting the MOU’s

guidance on not automatically listing species added to the CMS Appendices and encouraged Monaco to present updated information on its migratory nature for consideration at MOS4.

MarAlliance cautioned against drawing conclusions from tag retrieval data obtained from the tagging location, and from migratory behavior of congeneric species. Shark Advocates International highlighted the need to clarify the status of proposed species and thus CMS Parties’ obligations.

Explaining the AC’s recommendation against its listing, AC Chair Carlson said it considered historical information and concluded the data did not establish migratory movements across international boundaries.

On Wednesday and Thursday afternoon, following discussions in the working group, Monaco requested more time to discuss the angelshark, noting consensus may be possible.

On Friday, Monaco announced that a compromise was reached for listing the angelshark in Annex 1 with the condition that a text clarifying this decision is included in the meeting report. The US, supported by Australia, stressed that this should not set a precedent for future listing proposals, noting that the listing criteria should be respected not to jeopardize the status of the MOU as a legal instrument. The EU underscored the exceptional circumstances that warranted the decision, thanking all Signatories for their flexibility. Australia urged for specific conservation action on the angelshark within the next triennium.

AC Chair Carlson said that the accompanying text sheds light on the migratory status of the angelshark, noting many recent sightings of the species are in the waters off Northwest Turkey, in close proximity to Greek waters. Consequently, seasonal inshore-offshore migrations assumed to be exhibited by the species would result in crossings of national jurisdictional boundaries. Furthermore, while listed as a prohibited species in EU fishing regulations and by the General Fisheries Commission for the Mediterranean, international cooperation with Northwest African states would be beneficial to the conservation of the species. In light of new information, the Signatories decided to apply the precautionary approach and list the angelshark in Annex 1 of the MOU.

Common Guitarfish: The Secretariat introduced the proposed listing of common guitarfish (*Rhinobatus rhinobatus*) to Annex 1, originally submitted separately to CMS COP12 by Israel, Senegal, Togo, and Mauritania (UNEP/CMS/COP12/Doc.25.1.24(a-d)). Senegal explained the listing request, stating it: is targeted by coastal fishing for its flesh and fins; is captured as bycatch; and has experienced drastic reductions, including extirpation in some parts of range states. AC Chair Carlson said it meets the migratory criteria and those for unfavorable conservation status, with documented declines especially in the Mediterranean. South Africa supported the proposal and the guitarfish was listed in Annex 1 of the MOU.

Bottlenose Wedgefish/Whitespotted Wedgefish: The Secretariat introduced the proposed listing of bottlenose wedgefish/whitespotted wedgefish (*Rhynchobatus australiae*) to Annex 1 (UNEP/CMS/COP12/Doc.25.1.25/Rev.2), together with the listing of two lookalike species, smoothnose wedgefish (*Rhynchobatus laevis*) and the whitespotted wedgefish/giant guitarfish (*Rhynchobatus djiddensis*) (CMS/Sharks/MOS3/Doc.9.1.3), as submitted by the Philippines.

The Philippines pointed out that the IUCN Red List categorizes the species as endangered, and suggested following the precautionary principle. AC Chair Carlson said the bottlenose wedgefish meets the criteria for unfavorable conservation status,

underscoring heavy exploitation in Southeast Asia and the Arabian Sea. He also stated that although the species has not been listed as migratory, recent data, including from fishermen, conclude otherwise.

Australia indicated support for the listing, but queried how to list the two lookalike species, noting this will be discussed in a separate proposal on how to address lookalike species. MOS3 agreed to list the bottlenose wedgefish, and agreed to revisit listing the lookalike species with the proposal on lookalikes.

On Friday morning, Australia, supported by the Philippines, queried if the approved decision on a mechanism for lookalike species means that the two additional lookalike species were listed. MOS3 Vice Chair Hogan responded that these two species were now also listed.

Oceanic Whitetip Sharks: The Secretariat introduced the proposed listing of oceanic whitetip sharks (*Carcharhinus longimanus*) to Annex 1 (CMS/Sharks/MOS3/Doc.9.1.1/Rev.1), as proposed by Brazil, noting it is not yet listed by CMS.

Brazil stressed that the species is critically endangered in the Northeast Atlantic and is listed under CITES. AC Chair Carlson stated that this species meets the criteria of a long-distance migrant, crossing regional and jurisdictional boundaries of over 2270 kilometers. He noted that while the IUCN mentions it as vulnerable, it is critically endangered in the Northwest and Western Central Atlantic, meeting criteria for unfavorable conservation status.

Samoa, the US, the Philippines, Senegal, Costa Rica, and Ecuador supported the listing proposal. Samoa cautioned against inconsistencies across relevant treaties. The US noted this would complement the CITES listing and highlighted its listing under the US Endangered Species Act. Addressing the relevant CMS listing, and indicating this species was previously observed in West Africa and is now virtually unrecorded, Senegal suggested discussing it at a future CMS COP. MOS3 approved the listing of the oceanic whitetip shark in Annex 1.

Smooth Hammerhead Shark: The EU, proponent of the listing of the smooth hammerhead shark (*Sphyrna zygaena*), presented the proposal (CMS/Sharks/MOS3/Doc.9.1.2). She noted that the species' global population is classified by the IUCN Red List as vulnerable, and stressed that lack of scientific certainty on the population status should not be a reason to postpone a decision. She added that two more hammerhead species are already listed in MOU Annex 1, encouraging the same level of attention for the smooth hammerhead shark.

AC Chair Carlson noted that the species meets the migratory criteria and those for unfavorable conservation status, stressing: evidence for both latitudinal and inshore-offshore migrations; and that populations of hammerhead sharks have declined, although robust species-specific population trends are not available.

Monaco, Senegal, Mauritania, the Philippines, Comoros, Ecuador, Brazil, Costa Rica, and the Wildlife Conservation Society, on behalf of many non-governmental organizations (NGOs), supported the listing, and the smooth hammerhead shark was listed in Annex 1 of the MOU.

Final Outcome: Signatories agreed to list eight species in Annex 1 of the Sharks MOU: the dusky shark; the common guitarfish; the bottlenose wedgefish/whitespotted wedgefish together with two lookalike species, the smoothnose wedgefish and whitespotted wedgefish/giant guitarfish; the oceanic whitetip shark; the angelshark; and the smooth hammerhead shark.

Criteria for Species Inclusion in Annex 1

On Monday afternoon, the Secretariat outlined an evaluation matrix based on a species level of depletion and the extent of its migratory nature.

On Tuesday, the Secretariat introduced the suggested amendments on criteria for the inclusion of species in Annex 1 of the MOU, and on modifying the species list (CMS/Sharks/MOS3/Doc.9.1.Rev.1, Annexes 1 and 3). She outlined the proposals, which include: using categories of "highly migratory," "regional migratory," "sub-regional migratory," and "smaller scale coastal migrations or non-migratory" to better differentiate between the geographical extent of migrations; developing a matrix to clearly determine whether a species meets the criteria and to prioritize species for listing based on their level of depletion and extent of their migratory nature; and suggesting a provision on lookalike species, which notes that if differentiation from an Annex 1 listed species is difficult and confusion is likely, species or species groups may be listed as lookalike species.

Regarding the categorization on the geographical extent of migrations, the US and the Philippines supported the amendment. The EU noted that she cannot agree with citing specific species' examples in the sub-categories as this prejudices future discussions.

Regarding the matrix to prioritize species for listing, the EU, supported by the US and Senegal, stressed that the listing criteria should not be amended, noting that the matrix offers a good starting point for prioritizing work after the listing of species in Annex 1.

Regarding the lookalike species, the EU, the US, and Senegal supported the amendment. Australia noted that the amendment is not consistent with CMS practice on lookalike species. AC Chair Carlson explained the rationale behind the proposal, noting that for some species, taxonomy is very difficult and risk of confusion is great. The US noted that migratory and lookalike species are not defined in the MOU text, noting the need to consider the issue at MOS4.

On Friday morning, Signatories adopted the Modification of the Species List (Annex 1) of the MOU without amendment.

Final Outcome: The final outcome (CMS/Sharks/MOS3/CRP1) describes the procedure for modifying the species list (Annex 1) of the MOU and addresses the listing criteria for the inclusion of species.

Regarding the procedure for modifying Annex 1, the final outcome notes that:

- the Annex may be modified by consensus at any MOS session;
- proposals for modification may be made by any Signatory, describing the process and timing for submissions;
- modifications should be made by consensus as provided for under paragraphs 18 and 33 of the MOU; and
- any shark or ray species listed on the CMS Appendices will automatically be considered by the AC as a proposed listing on Annex 1 of the MOU, describing the procedure that should apply, and the Rules of Procedure and the TOR for the AC, without prejudice to the final listing decision of the MOU.

Regarding the listing criteria for species inclusion, the final outcome:

- notes that Annex 1 shall list migratory species with an unfavorable conservation status, as well as those that have a conservation status that would significantly benefit from international cooperation;
- describes the conditions under which the conservation status is considered "favorable" or "unfavorable";

- better differentiates between the geographical extent of migrations, applying the categories of “highly migratory,” “regional migratory,” “sub-regional migratory,” and “smaller scale coastal migrations or non-migratory”;
- notes that the broad, biological criteria used under CMS should be used under the MOU; and
- states that, notwithstanding CMS rules, species may be listed as lookalike species, if differentiation from an Annex 1 listed species is difficult and confusion with the latter is likely, further stressing that a lookalike species does not necessarily have to meet all criteria for inclusion in Annex 1 itself.

Revised format for listing proposals: On Monday afternoon, the Secretariat introduced the format for listing proposals (CMS/Sharks/MOS3/Doc.9.1/Rev.1), indicating that it is modeled after the format for species inclusion within CMS appendices and modified for the MOU. MOS3 Vice Chair Hogan suggested delegates review the report for more substantive discussions later in the week.

On Tuesday afternoon, the Secretariat introduced the revised format for listing proposals (Annex 4 of CMS/Sharks/MOS3/Doc.9.1/Rev.1), explaining that MOS1 had adopted the CMS format for proposals to amend CMS Appendices, but CMS revised the format at COP12 (UNEP/CMS/Resolution 11.33 (Rev. COP12)/Annex 2). Signatories approved the revised format, with a minor amendment.

On Friday morning, Signatories adopted the format for proposals to amend Annex 1 of the MOU without further amendment.

Final Outcome: The revised format for proposals to amend Annex 1 (CMS/Sharks/MOS3/CRP2) consists of the proposal, the proponent, and the supporting statement, which includes:

- taxonomy;
- an overview of the proposal;
- migrations, including kinds of movement, distance, nature of migration, and proportion of the population migrating;
- biological data, including distribution, population estimates and trends, habitat description, biological characteristics, and the role of the taxon in its ecosystem;
- conservation status and threats;
- protection status and species management;
- effects of the proposed amendment;
- anticipated benefits and potential risks of the amendment;
- range states;
- consultations;
- additional remarks; and
- references.

Conservation Measures

Species-specific Conservation Measures for Species listed in Annex 1 of the Sharks MOU: On Wednesday morning, AC Chair Carlson introduced the document on species-specific conservation measures for Annex 1 species (CMS/Sharks/MOS3/Doc. 10.1/Rev.1), explaining that the Signatories tasked the CWG to assist the AC with:

- compiling relevant biological data of Annex 1;
- reviewing and identifying species-specific priority research and conservation needs; and
- providing guidelines on implementation of MOU Annex 1 listings.

He explained the CWG developed 11 factsheets (CMS/Sharks/MOS3/Inf.15 a-k) for listed species or species groups: basking shark; great white shark; hammerhead sharks; mako

sharks; mobulids; porbeagle; sawfishes; silky shark; spiny dogfish; thresher sharks; and whale shark. The factsheets include information on, *inter alia*:

- biology;
- distribution;
- critical sites;
- population status and trends;
- threats;
- key gaps in knowledge, management, and conservation;
- legal status; and
- recommendations for conservation and management actions.

AC Chair Carlson suggested the factsheets be considered living documents, subject to updates as new information becomes available, and explained actions requested of the MOS to, *inter alia*: take note of the factsheets; adopt recommended measures contained in Annex 1 to the document; and consider the measures for later implementation.

In response to comments by the US and the EU, who said they were not prepared to approve the factsheets without further review, MOS3 Vice Chair Hogan suggested Signatories direct questions or comments to the AC for continued refinement, and turned the discussion to the recommendations in Annex 1.

In response to questions from New Zealand and the EU about the intent of the recommended measures, the Secretariat clarified that, consistent with a request from the Signatories, the recommendations were intended to help identify existing gaps to help prioritize actions, for possible inclusion into current or future POWs.

Signatories established a working group to meet in the margins, organized by the AC Chair, to consider how to progress, with Australia and South Africa noting that, given the absence of technical expertise for some countries, intersessional work may be required. To address a request from Senegal for translation services, Signatories agreed to submit written comments for translation and to consider dedicated plenary time with translation for final discussions.

On Thursday, AC Chair Carlson reported on discussions from the working group on factsheets related to species-specific conservation measures. He noted Signatories were not prepared to take final action on the factsheets without consulting their relevant experts, but agreed on TOR for approving the factsheets. He highlighted, *inter alia*: usefulness of the factsheets for providing guidance to Signatories and for encouraging others to sign the MOU; and potential development of a factsheet that is more action-driven than species-driven.

Noting the factsheets do not represent positions of Signatories, the EU expressed preference for “lighter language” to avoid triggering an approval process that could unnecessarily delay the availability of the factsheets. The Manta Trust requested allowing cooperating partners to comment as well, which South Africa supported with the caveat that such additions should provide content-based information for regions within which they work.

On Friday morning, Signatories adopted the Draft TOR of the IWG on Conservation Measures without amendment.

Final Outcome: The TOR for the IWG on conservation measures (CMS/Sharks/MOS3/CRP7) include:

- general considerations, that, *inter alia*: MOS3 was not ready to take decision on the AC’s recommended species-specific conservation measures; the factsheets were useful as information and for guidance; an additional factsheet should summarize actions across species; and the factsheets with information on the Shark MOU should be updated;

- tasks, *inter alia*, that: factsheets should be reviewed by Signatories; the AC will finalize factsheets based on Signatories' comments; and factsheets need regular updates by the AC based on new information; and
- a process to review species factsheets, *inter alia*, that: the Secretariat will make factsheets available to Signatories for comments by 31 March 2019; the Secretariat will facilitate communication between Signatories and the AC; the AC Chair, with support from South Africa, will compile comments; the AC will finalize factsheets based on comments received and provide a final version to Signatories by 30 April 2019; and without Signatories' objections by the end of June 2019, the Secretariat will make factsheets available.

Habitat Conservation: On Wednesday, AC Chair Carlson introduced relevant documents (CMS/Sharks/MOS3/Doc.10.2, and Inf.14). He highlighted AC recommendations on the implementation of Activity 9.1 of the Conservation Plan, which requests Signatories to “designate and manage conservation areas, sanctuaries, or temporary exclusion zones along migration corridors and in areas of critical habitat, including those on the high seas in cooperation with relevant RFMOs, and Regional Seas Conventions and Action Plans, where appropriate, or take other measures to remove threats to such areas.” Carlson outlined general considerations regarding spatial planning, and noted that Signatories should review the AC recommendations and consider them in any national or regional marine spatial planning activities and MPA management.

Kenya and Senegal suggested that MPAs serve multiple uses, including supporting a range of species that are important for shark and ray conservation. Ecuador and Senegal highlighted the importance of networks of MPAs. The Dutch Elasmobranch Society stressed that spatial management is not only about MPAs, but includes any spatial measure.

The US suggested a case-by-case application of marine spatial planning. She proposed adding language from the report of the second AC meeting, which, *inter alia*, notes that:

- spatial management approaches often have limited benefits for highly mobile and migratory species;
- shark sanctuaries have been criticized because they are limited to states with certain socio-economic features, may have insufficient enforcement, may lead to over-exploitation and degradation of other resources and habitats not included in the shark sanctuary regulations, and lead to diversion of resources from other fisheries management and conservation measures; and
- although shark sanctuaries may have the intended effect of reducing shark mortality, there is a need to address bycatch within shark sanctuary regulations, and to collect baseline data.

On Friday morning, Signatories adopted guidance on habitat conservation without amendment.

Final Outcome: The final outcome (CMS/Sharks/MOS3/CRP4) contains the recommendations of the AC to MOS3 on spatial management and the implementation of Activity 9.1 in the Conservation Plan. It includes general considerations that spatial management, *inter alia*:

- is not considered to be the “single option” for managers and is just one of the tools that can be used, noting that for some species, a combination of approaches might be required;
- should consider options on a case-by-case basis, and the merits will depend on a range of factors, including location, species, and life history stage;
- can have wider economic benefits;

- will generally require appropriate enforcement, the resourcing of which depends on location and area covered;
- requires a sound understanding of critical sites in space to be most effective;
- may be preferable in some instances towards other ecological features (e.g. geological structures or prey species) that could have indirect benefits to elasmobranchs, rather than towards the elasmobranch per se; and
- would benefit from the use of appropriate and standardized terminology.

The outcome further includes species-specific spatial management considerations for sawfishes, the white shark, mako sharks, the basking shark, the spiny dogfish, the whale shark, the silky shark, thresher sharks, hammerhead sharks, the porbeagle, and mobulids.

Engagement with Regional Fisheries Management Organizations

On Wednesday afternoon, the Secretariat presented the document on engagement with RFMOs (CMS/Sharks/MOS3/Doc.11.1), including a draft procedure for the Sharks MOU to interact with RFMOs on activities to, *inter alia*, build bridges between conservation and management and facilitate information flow, so representatives attending respective meetings are informed of decisions from related fora. She addressed several issues, including: the level of engagement; the need for dedicated representatives to the Sharks MOU and relevant RFMOs; and which RFMOs to prioritize for engagement.

The EU, supported by the US, suggested: identifying which meetings would be most relevant to attend, given the high number of RFMOs and related meetings, and the need to interact efficiently; and drafting letters of cooperation between the Sharks MOU and different RFMOs, where appropriate.

FAO, supported by CITES, shared experiences working with RFMOs (CMS/Sharks/MOS3/Inf.22). CITES said attending committee meetings or smaller technical meetings can be useful to build relationships.

On behalf of several NGOs, Shark Advocates International suggested interacting not only with tuna RFMOs, but RFMOs generally. Underscoring that overfishing remains a main threat to sharks, she noted a lack of recognition of the Sharks MOU's existence and called for bridging the gap between RFMOs and CMS, including by sharing technical and policy advice.

MOS3 Vice Chair Hogan shared a sample briefing note in Annex 2 of the document. Referring to the briefing note, New Zealand asked if it would be possible to provide species-specific suggestions and consistency relevant across RFMOs. MOS3 Vice Chair Hogan noted that such compiled information requires a considerable workload and has resource implications, encouraging Signatories' engagement, especially by those that are part of RFMOs. The EU, supported by Australia, suggested this be conducted as a collective exercise.

MOS3 Vice Chair Hogan suggested advancing this issue over the next few years and, before a conclusion is reached, addressing items on a case-by-case basis.

On Thursday afternoon, the EU expressed support for an enhanced level of engagement with RFMOs, but did not favor having MOU representation at every RFMO meeting, given resource limitations. She suggested potential areas for enhanced cooperation between the MOU and RFMOs, including, *inter alia*:

- posting a list of relevant RFMO meetings in advance to help identify priorities for cooperation, taking into account budget considerations;
- identifying areas for potential cooperation between the Secretariats of RFMOs and the MOU, such as exchange of data or information on research projects;
- adding an agenda item to inform Signatories about relevant RFMO activities; and
- enhancing visibility about RFMO actions or relevant workshops, for example by including information on the MOU website.

Australia requested adding text that Signatories should encourage relevant RFMOs to promote the MOU's objectives, particularly with regard to fishing for the Southern Bluefin Tuna.

On Friday morning, Signatories returned to the Suggestions for Engagement with RFMOs (CMS/Sharks/MOS3/CRP8). The Secretariat recalled considerable discussion on how best to engage with RFMOs, which RFMOs, and who should do so, indicating language was softened to allow flexibility.

New Zealand queried whether the document still had usefulness if it is only subjective advice, noting a lack of agreement on a process regarding who should represent the MOU and at which RFMO meetings. She suggested pairing it to essential guidelines and a list of priority RFMOs.

Shark Trust, on behalf of several NGOs, reiterated "great concern" that overfishing leads to loss of sharks and rays, noting scientific advice is not heeded by RFMOs. Pointing to documentation on this (CMS/Sharks/MOS3/Inf.21), she suggested as priorities, *inter alia*: prohibiting mobula ray retention at the Indian Ocean Tuna Commission, and the Western and Central Pacific Fisheries Commission; expanding mobulid protections at the Inter-American Tropical Tuna Commission and basic safeguards for hammerheads; and ensuring science-based limits for shortfin mako sharks at the International Commission for the Conservation of Atlantic Tuna.

The EU suggested the Secretariat circulate a list of prioritized RFMO meetings. New Zealand proposed using text provided by the US, under the heading, "Guidance for Sharks MOU Signatories and the Secretariat in their Engagement with RFMOs." Australia suggested the IWG develop concrete suggestions on such guidance, asking whether it could be useful if RFMO representatives attended an AC meeting. South Africa observed that the document has transitioned considerably, to which the EU said its purpose remains and it is better to adopt something than wait for MOS4.

Signatories met in an informal drafting group to finalize changes and then adopted the Guidance with a minor, editorial amendment.

Final Outcome: The Guidance for MOU Signatories and the Secretariat in their engagement with RFMOs (CMS/Sharks/MOS3/CRP8/Rev.1) is directed, *inter alia*, to the Secretariat to:

- enhance collaboration with RFMOs via signing Memoranda of Cooperation or other mechanisms;
- liaise and communicate with RFMOs to identify opportunities for joint activities, including capacity-building activities for conservation and management of species listed in Annex 1; and
- enhance visibility of MOU activities in RFMOs and vice versa. Signatories are directed to:
 - actively promote and raise awareness of Sharks MOU objectives;

- liaise with RFMOs to identify opportunities for joint activities, including capacity-building for conservation and management of Annex 1 listed species;
- keep the Secretariat and Signatories informed about discussions relevant to Sharks MOU listed species taking place in fisheries fora; and
- support adoption of measures consistent with the MOU objectives and its Conservation Plan.

These measures include:

- ensuring shark catch is within sustainable limits;
- requiring sharks be landed with fins naturally attached;
- recommending safe handling and release of sharks and mobulid rays caught incidentally;
- improving data collection on catch and effort, biological data, bycatch, and discard and release information;
- mitigating bycatch and associated mortality and reduce entanglement;
- supporting research programmes to assess and monitor shark species status in RFMO conventions; and
- applying precautionary management approaches on fisheries that catch sharks.

Communication and Awareness-raising

On Wednesday afternoon, Australia, Co-Chair of the IWG, presented the draft communication and awareness-raising strategy (CMS/Sharks/MOS3/Doc.12.1), noting it includes two options on communication. Option A brands the MOU as part of the CMS family and Option B brands the MOU as a standalone instrument under the UN.

The US, the EU, Côte d'Ivoire, and Senegal supported Option A. The draft communication and awareness-raising strategy for the MOU was approved with no further comments.

On Friday morning, Signatories revisited the communication and awareness-raising strategy for the Sharks MOU and adopted it without amendment.

Final Outcome: The Communication and Awareness-Raising Strategy for the Sharks MOU (CMS/Sharks/MOS3/CRP6) brands the MOU as part of the CMS family and, among others:

- establishes communication objectives, approaches and principles aligned to those of CMS;
- recognizes the Strategy as a guiding document for Sharks MOU's communication actors, including the Secretariat, Signatories, Cooperating Partners, and CMS; and
- supports the implementation of the Sharks MOU as well as improves recognition of the Sharks MOU as the global instrument to conserve and manage sharks.

The strategy aims to, *inter alia*:

- highlight achievements and effectiveness of the Sharks MOU and its Conservation Plan;
- convey why sharks matter and draw attention to threats to sharks;
- increase the number of Signatories and Cooperating Partners, and reinforce existing Signatories' and Cooperating Partners' commitments;
- engage partners and mobilize resources for shark conservation and management;
- enhance cooperation with relevant fisheries organizations, multilateral environmental agreements, and Regional Seas Conventions and Action Plans;
- define the Sharks MOU niche, including to bridge conservation and sustainable use, and provide a global platform for chondrichthyan species; and

- recognize target groups including: Signatories, non-Signatory range states, relevant international organizations, donors, private sector, research organizations, and the public.

Capacity Building

On Wednesday afternoon, the Secretariat introduced the relevant documents (CMS/Sharks/MOS3/Doc.13.1, and Inf.13). She reminded delegates that under the POW 2016-2018, the Secretariat was required to:

- fund and support national and international training courses;
- identify and review gaps in capacity and training needs of Signatories;
- assist Signatories with the implementation of the Conservation Plan; and
- contribute to joint capacity-building workshops with CMS and Cooperating Partners.

She noted that the document contains two annexes. Annex 1 includes the results of the survey on specific Signatories' capacity-building needs related to the implementation of the Conservation Plan and the POW. Annex 2 contains the draft capacity-building programme for the MOU, including key activities to address capacity-building needs. The Secretariat indicated that it is funded by voluntary and in-kind contributions of Signatories and other donors, and undertaken, as appropriate, in cooperation with other relevant organizations.

The EU supported the draft capacity-building programme. The US, noting the voluntary nature of the activities, called for non-binding language and requested changing "shall" to "should" throughout the document.

On Friday morning, Signatories adopted the Capacity-Building Programme for the Sharks MOU without amendment.

Final Outcome: The Capacity-Building Programme for the Sharks MOU (CMS/Sharks/MOS3/CRP5) includes:

- technical capacity, including trainings and materials in multiple languages;
- policy development, including guidance on national legislation and information;
- compliance and enforcement of CMS-listed species;
- habitat conservation and rehabilitation;
- development and management of conservation plans;
- awareness-raising and communication/community participation;
- cooperation with other range states; and
- funding.

The Programme, *inter alia*:

- aims to guide relevant parties to improve capacity to implement the Sharks MOU Conservation Plan;
- includes activities of highest priority to address Signatories' main capacity-building needs;
- contains an evaluation procedure, including the use of a survey;
- is funded through voluntary contributions and in-kind contributions; and
- addresses cooperation with other relevant organizations to carry out capacity-building activities.

Terms of Reference of the Advisory Committee

On Monday afternoon, the Secretariat introduced the proposed revised TOR for the AC (CMS/Sharks/MOS3/Doc.14.1), explaining the revision would allow regions to appoint new or reappoint existing members to address the anticipated high turnover of members and loss of continuity under the current

structure. CITES, highlighting existing collaboration on marine species and fisheries actors, suggested MOS3 consider whether CITES and/or FAO should have a role as a standing invited expert for increased collaboration and synergies.

On Thursday morning, the Secretariat introduced amendments to the AC TOR (CMS/Sharks/MOS3/CRP9). A lengthy discussion took place on the terms that the AC members serve. The original suggestion was that AC members should serve for a minimum period of two regular MOS. Each region would then have the option to either appoint a new AC member, or to re-appoint their existing representative, if available, until the next regular MOS. This procedure could be repeated at each MOS.

Senegal supported the proposal, noting that in light of relative lack of relevant experts in Africa, more flexibility is needed. South Africa, supported by Senegal, opined that a third term should not be the maximum, calling for flexibility. South Africa also stressed that changing half of the AC at a given time would not maintain continuity. The EU expressed flexibility, noting the need to balance retaining expertise in the AC and renewing its membership.

The US, supported by Mauritania, cautioned against AC members serving in perpetuity and suggested that "AC members should serve for a minimum period of two consecutive regular MOS and may be nominated one final time to serve for a third consecutive MOS." Australia, supported by Senegal, proposed amending the US proposal to read that AC members "should, if possible, not serve for longer than three terms."

Australia proposed that no more than three AC members should be replaced simultaneously. Senegal emphasized that all members from a given region should not be replaced simultaneously. The EU, opposed by Australia, proposed replacing no more than one representative per region at the same time.

The text, as amended, stated that "AC members should serve for a minimum period of two consecutive regular MOS and where possible not longer than for three terms. Renewal of members of the AC should take into account consideration of the continuity of the Committee. As such, where possible, no more than three members should be replaced simultaneously, nor should two members of a region be replaced at the same time."

On Thursday afternoon, Australia proposed text seeking to balance the desire for stability, continuity, and renewal of the AC, including among regions, suggesting that the Secretariat maintain a table to track who is eligible for replacement or ongoing work.

MOS3 further considered nominations to the AC. FAO requested including a seat on the AC for the FAO and/or CITES, as highlighted in its information document (CMS/Sharks/MOS3/Inf.22), noting potential to improve coordination across fisheries and conservation initiatives as highly relevant to the MOU workplan. MOS3 Vice Chair Hogan opined that providing a seat would require amending the MOU. The EU suggested the AC consider a more proactive effort to invite relevant experts. The US noted the MOU allows both scientific and management experts, and queried how to strengthen the AC science-policy interface.

The Secretariat invited regions to nominate their AC members. South Africa suggested retaining Mika Diop (Senegal), requesting additional time for an East African representative to be finalized. Noting they had not yet consulted their region for confirmation, the UAE said they were happy to retain Rima Jabado (UAE) and Moonyeen Nida Alava (Philippines). The EU indicated it will retain James Ellis (UK) and Marino Vacchi (Italy). The US reaffirmed John Carlson (US) would remain on the AC. New

Zealand indicated Lesley Gidding-Reeve (Australia) will remain. Costa Rica said Mario Espinoza (Ecuador) will remain and Carlos Silva (Colombia) will join the AC.

On Friday morning, CITES reiterated FAO and CITES willingness to participate in the AC's work. Mauritania called for appointing alternate members for extraordinary circumstances in the future, supported by the EU, as well as focusing on relevant research bodies to draw relevant expertise. Australia reminded Signatories that the AC TOR allows the AC Chair or the Secretariat to invite additional experts.

The AC TOR were adopted with a pending nomination to the AC from Africa.

Final Outcome: The new AC composition was approved with a pending nomination for Africa. The AC TOR (CMS/Sharks/MOS3/CRP9) include the original terms adopted previously, and updated terms on nomination and appointment procedures, including on:

- the AC's mandate and tasks, *inter alia*: to assist Signatories in the MOU's implementation, including the Conservation Plan; members serve in their individual capacity; and the Secretariat serves as clearinghouse of Signatories' requests for AC advice;
- the AC's main tasks include: providing expert advice; analyzing scientific assessments and making recommendations on the conservation status of Annex 1 shark populations or others that may be contemplated for inclusion; preparing an AC activities report for each MOS to be submitted to the Secretariat beforehand; and recommending the Secretariat to convene an urgent MOS session if emergencies arise; and
- size and composition, noting that the AC should comprise 10 experts in migratory shark conservation, science, and management, with Signatories striving for balance among expertise areas, and that members should be appointed as regional representatives.

With regard to nomination and appointment procedures, the TOR note, *inter alia*, that:

- AC members should serve for a minimum two consecutive MOS meetings and where possible not longer than three terms;
- renewal of AC members should consider the Committee's continuity;
- where possible, no more than three members should be replaced simultaneously, nor should two members of a region be replaced at the same time; and
- AC member replacement will be tracked and managed by the Secretariat to balance stability, continuity, and renewal.

Regions with members eligible or identified for potential replacement will be notified when meeting documents are distributed prior to the coming MOS. Regions will need to consult their members and come to the MOS ready to advise the Secretariat whether a current member is retained, or a new member appointed.

Partnerships and Cooperation

On Wednesday afternoon, the Secretariat introduced the document on cooperation with CMS on implementation of concerted actions for sharks and rays (CMS/Sharks/MOS3/Doc.15.1), which includes suggestions for MOU engagement on three species already covered or proposed for inclusion by the MOU: whale sharks, mobulid rays, and angelsharks. She noted the AC had not reviewed the concerted action on angelsharks as it was not yet an Annex 1 species.

On whale sharks, she highlighted, *inter alia*: development of relevant national legislation; addressing key threats; increased

understanding and awareness; and a pledge by the Philippines to organize a regional range state workshop in Southeast Asia.

On mobulid rays, she noted: reduction of incidental bycatch; work with communities; and improvements in monitoring and data collection. On angelsharks, she highlighted: activities to improve the species' overall profile; increased understanding of species distribution; identifying new collaboration activities; and support from Monaco for workshops to create regional action plans.

During discussions, the EU expressed support for the proposal. MOS3 Vice Chair Hogan noted the proposed actions did not appear to have significant budgetary impacts. The Manta Trust requested inclusion of a reference to its recent action plan on mobulid rays. With no further comments, Signatories approved the MOU implementation support as recommended.

On Friday morning, Signatories approved the document on cooperation with CMS on the implementation of concerted actions for sharks and rays with an editorial amendment following the angelshark listing.

Final Outcome: The final outcome on cooperation with CMS on the implementation of concerted action for sharks and rays (CMS/Sharks/MOS3/CRP12) recognizes, *inter alia*:

- that "concerted action" is to foster activities by parties, range states and relevant organizations to improve the conservation status of CMS-listed species;
- that the Sharks MOU is an agreement in accordance with Article 4(4) of CMS and aims to implement CMS Appendix II, which lists species that would benefit from international cooperation;
- close cooperation with CMS on sharks and rays in CMS Appendices included in MOU Annex 1; and
- concerted actions by the Signatories on: whale shark (included in Annex 1 of the document); mobulid rays (Annex 2); and angelshark (Annex 3).

Programme of Work

On Wednesday, the Secretariat introduced the POW to support MOU implementation (CMS/Sharks/MOS3/Doc.16.1). She noted that Annex 1 of the document contains a draft POW that lists activities of high priority, which should be undertaken in the next triennium 2019-2021. These include:

- ongoing or not fully implemented activities from the POW 2016-2018 identified as high priority activities in the Conservation Plan;
- new activities recommended to MOS3 by the AC and the CWG;
- core tasks of the AC with support from the CWG; and
- core tasks of the Secretariat.

Annex 2 of the document contains the status of implementation of the POW 2016-2018.

The EU emphasized that many activities in the POW are ambitious compared to the means and capacities for implementation. She noted it might be useful to regroup some activities, to avoid duplicating ongoing work in different bodies, and called for estimating related costs. South Africa suggested consolidating relevant activities to portray Signatories' priorities.

On fisheries management and data collection, FAO suggested that Signatories consider other effective area-based measures in addition to MPAs, consistent with the relevant decision of the Convention on Biological Diversity. South Africa urged data collection in a more cohesive manner. The EU sought clarification on how different activities interact. She pointed to an upcoming

meeting where RFMOs will gather to discuss bycatch, including on sharks and rays, and urged identifying “what is already there and what is missing” before creating new activities. Referring to cooperation between CITES and FAO (CMS/Sharks/MOS3/Inf.22), CITES cautioned that its experts have noted low data and data collection, and stressed the need for independent data, including on bycatch, to ensure fish stocks’ recovery.

MOS3 Vice Chair Hogan described activities on: cooperation and partnerships; management of the Secretariat; and support for meetings of the MOS, AC, and working groups. Mauritania suggested translation of documents and interpretation during meetings also be conducted in Arabic, as a UN language. The Secretariat clarified that, during the setup of the Sharks MOU, Signatories agreed that French, Spanish, and English would be the official languages, noting efforts to translate into Arabic are pursued when financial resources are available.

MOS3 Vice Chair Hogan outlined activities on: support for the AC; implementation of the MOU; and fundraising and mobilization of resources. The US requested clarifications regarding the fundraising strategy. The Secretariat responded that while the MOU does not have a fundraising strategy, CMS does, adding that some Signatories fund specific activities. South Africa suggested that Cooperating Partners or other NGOs interested in specific activities indicate their willingness to assist. Australia proposed developing a focused fundraising strategy for the MOU, including coordination across activities in the POW.

On Thursday afternoon, the Secretariat noted that several activity suggestions remain open and some were revised after initial discussion. Following an EU suggestion, MOS3 Vice Chair Hogan proposed establishing a working group to meet on Thursday evening to discuss remaining issues, including cost and priority ranking of activities.

On Friday morning, Australia, New Zealand, and the EU noted that activities in the POW do not include targeted actions, stressing the need for specific targets on “what we are going to achieve in the next triennium.” The EU further highlighted the lack of a mechanism for taking decisions intersessionally, urging “finding ways to do things without having to wait for the formal MOS.”

Signatories decided to establish an IWG, chaired by Mauritania, to identify targeted actions for the MOU POW over the next triennium. MOS3 Vice Chair Hogan noted that Mauritania, in collaboration with the Secretariat, will reach out to Signatories and Cooperating Partners intersessionally to seek interest and develop relevant TOR. Signatories and cooperating partners volunteered to join the IWG on the POW, including Australia, Brazil, Monaco, the EU, Sweden, the US, the UK, Portugal, Monaco, New Zealand, Guinea, CITES, IUCN, Shark Trust, Sharks Advocates International, HSI, the Manta Trust, International Fund for Animal Welfare, Project AWARE, MarAlliance, among others.

The Secretariat referred to outlying issues in the POW, namely Activity 13, suggesting new text to “implement guidance to the Secretariat and the Signatories on their engagement with RFMOs as agreed.” Signatories approved the POW with the amended text.

Final Outcome: An IWG, chaired by Mauritania, was established to identify targeted action for the MOU POW for the next triennium. The POW 2019-2021 to support the implementation of the MOU (CMS/Sharks/MOS3/CRP11) includes a list of activities, mandate, priority ranking, timeframe, responsible entity, funding, and comments.

The activities are categorized as follows:

- **species conservation and habitat conservation**, noting that the Secretariat, with support from the AC, is requested to: assist the Philippines and Monaco with the organization of regional workshops on the conservation of whale sharks in Southeast Asia and the angelshark in the Mediterranean, respectively; develop and prioritize suggested areas of action with options by taxa, region, and other relevant factors; support Signatories with the identification of regional and local projects; and identify suitable partners for implementation and manage funding agreements for conservation projects, when instructed by Signatories to do so;
- **fisheries management and data collection, including bycatch**, requesting the Secretariat to, *inter alia*: encourage collation of data relevant to RFMOs and stock assessments, and promote their dissemination; promote research focusing on identifying species-selective fishing gear and bycatch mitigation measures; set up a repository for relevant information; finalize existing species factsheets and draft factsheets for newly listed species; and improve monitoring, implementation, and enforcement of relevant spatial management measures, where appropriate;
- **capacity building**, including the capacity-building programme to assist Signatories with the Conservation Plan implementation;
- **cooperation and partnerships**, requesting the Secretariat to: cooperate with the CMS family on matters related to shark conservation; strengthen synergies and collaborate with CITES and FAO; implement the process and activities to engage with RFMOs; establish partnerships and strengthen collaboration with other relevant international organizations and agreements; encourage all range states to join the CMS and the MOU; and liaise with the IUCN Shark Specialist Group;
- **management of the Secretariat**, requesting the Secretariat to: manage and implement the MOU budget; prepare annual budget implementation reports and project reports; inform and raise awareness about the MOU; prepare publications; compile information, review data, and liaise with stakeholders; facilitate and encourage regular information exchange and cooperative activities; represent the MOU at meetings of other intergovernmental agreements; prepare reports of Secretariat activities; and recruit and manage the staff and interns;
- **support for meetings**, requesting the Secretariat to undertake arrangements for MOS4, AC3, and AC4;
- **support of the AC**, requesting the Secretariat to assist the AC Chair to facilitate the work of the Committee;
- **implementation of the MOU**, requesting the Secretariat to review the implementation of the Conservation Plan and the POW and present a report to MOS4; and liaise with non-signatory range states to provide them with the necessary information to join the MOU and facilitate accession; and
- **fundraising and mobilization of resources**, requesting the Secretariat to identify existing and new opportunities for financial resources to support the long-term implementation of the Conservation Plan and the POW, including developing a fundraising strategy for the MOU; raise funds and voluntary annual contributions from Signatories; raise funds for joint projects; explore possibilities of alternative funds; and support funding applications and opportunities for Signatories and Cooperating Partners.

Administrative and Budgetary Matters

Report on the Implementation of the Budget for the Triennium 2016-2018: On Monday afternoon, the Secretariat introduced the report on the implementation of the budget for the triennium 2016-2018 (CMS/Sharks/MOS3/Doc.17.1), including the status of voluntary contributions and an overview of expenditures. She noted an agreed budget of EUR 1,172,747 for the triennium, indicating that voluntary contributions amounted to only EUR 683,719, equating a shortfall of 42%. The EU said that due to the nature of the budget setup, the EU is only able to finance specific activities. Reminding delegates that the success of the MOU relies on the Secretariat taking actions and requires financial resources to do so, MOS3 Vice Chair Hogan invited delegates to take note of the report and engage in substantial discussion later in the week. Signatories took note of the report.

Proposed Budget for the Triennium 2019-2021: On Tuesday afternoon, the Secretariat introduced the proposed budget for the triennium 2019-2021 (CMS/Sharks/MOS3/Doc.17.2) and its five annexes, outlining the different budget scenarios contained in Annexes 1-3:

- a zero/nominal increase of 0.1%, similar to current budget, but with budget lines for working group meetings;
- a 10.4% increase, reflecting a staffing upgrade to P3, based on the CMS conclusion that the MOU was one of the most complex CMS daughter agreements, and for interpretation and report writing costs; or
- a 14.4% increase, for AC activities and additional costs related to further engagement with RFMOs.

The US supported an increased budget to address staffing needs, and called on all Signatories to make contributions. Highlighting shortfalls in voluntary contributions, Germany and the UK said increases could not be supported. Decision making on the budget scenarios was suspended pending decisions on other agenda items with budgetary implications.

On Friday morning, Sweden supported the second budget scenario, which foresees a 10.4% increase to the current budget. Germany, host of the CMS Secretariat, with Australia, supported the second scenario, without the staffing upgrade to P3 and without an increase in equipment-related costs. The Secretariat responded that equipment-related costs may be reduced, but not eliminated. With these amendments the modified scenario that foresees a 10.4% increase in the voluntary contributions for the next triennium was adopted, and the indicative table on voluntary contributions was also amended to reflect this decision.

On the scale of indicative contributions contained in Annex 4, the Secretariat explained the contributions are guidelines and noted that:

- the United Nations Environment Programme (UNEP) cannot send invoices unless the MOU has a scale and a request for invoices;
- some Signatories prefer not to receive an invoice from UNEP or may wish to deviate from the amount listed; and
- Signatories could opt to instruct the Secretariat accordingly.

Signatories discussed pros and cons of invoicing, with Senegal and others objecting to the term “invoice,” noting it suggests contributions are not voluntary. Mauritania stressed the importance of invoicing for encouraging contributions. MOS3 Vice Chair Hogan said the Secretariat would propose text to address concerns.

On proposed changes to the TOR for the MOU Trust Fund 2019-2021 (CMS/Sharks/MOS3/Doc.17.2, Annex 5), the Secretariat explained it would, *inter alia*: extend the Trust Fund

to the end of 2021; change the deadline for making the proposed budget available to Signatories from 30 to 60 days before the next MOS; and establish an operating reserve at 15% of expenditures or at least USD 100,000, whichever is higher.

The Secretariat presented draft text on a procedure to send letters for voluntary contributions from Signatories on Thursday morning, which included that: Signatories will use an indicative table for contributions; the table will be used to request annual payments from Signatories; Signatories wishing not to receive an invoice should inform the Secretariat; and a deadline for contributions will be provided.

The US suggested the MOS “take note” of the indicative table. New Zealand queried as to when contributions would be requested and if Signatories will be reminded. Senegal asked about Signatories not present at MOS3, underscoring that they should also be able to opt out of such written requests for voluntary financial contributions. The Secretariat noted that this process would be included in the meeting report for those not at MOS3 to react, as appropriate. The US suggested that if a country chooses to opt out of receiving such letters, it should only have to do so once, explaining her country’s procedures that make it difficult to contribute if a letter is received. MOS3 Vice Chair Hogan lauded Signatories for advancing a flexible process where Signatories can opt in or out of an invoice or voluntary letter, suggesting they test this in the next triennium.

On Thursday morning, the Secretariat further addressed the revised draft TOR for the administration of the MOU Trust Fund 2019-2021.

A lengthy discussion ensued on a paragraph stating that the threshold of eligibility for funding delegates to attend MOS should be set at 0.2% based on the UN scale of assessments and, as a general rule, to exclude from such eligibility countries from the EU, other European countries with developed economies, and countries that have payments in arrears of three years or more. Delegates finally agreed to retain reference to exclusion from eligibility criteria for countries from the EU and remove reference to countries that have payments in arrears of three years or more, noting the voluntary character of contributions. The threshold of eligibility for funding delegates was bracketed pending consultations with capitals.

Regarding specificities of voluntary contributions, delegates amended a paragraph, following an intervention by the US, to read: “Signatories that wish to receive an invoice to guide their voluntary contributions may request to receive such invoices from UNEP, as well as that contributions should be paid to the bank account of the UN.” New Zealand queried whether this formulation is satisfactory under the UN system regarding invoices to be issued. The final decision was left pending.

Delegates also agreed that: invoices, if requested, should be based on the list of indicative voluntary contributions, where possible, and unless otherwise instructed by Signatories, given that these are voluntary contributions; and if the indicative voluntary contribution of a Signatory determined were to be more than 22% of the budget, the contribution of that Signatory should be no more than 22% of the budget for the financial year.

On Friday morning, the US announced that brackets could be lifted regarding the threshold of eligibility for funding delegates, and Signatories approved the Trust Fund TOR.

Final Outcome: MOS3 agreed to a 10.4% increase in the budget for the next triennium, without the staffing upgrade to P3. The final outcome (CMS/Sharks/MOS3/CRP10) contains TOR for the administration of the MOU Trust Fund, including that:

- the Trust Fund shall be extended by three years to provide financial support for the MOU aims and shall be administered by UNEP under the UN Financial Regulations and Rules and the UN Staff Regulations and Rules;
- there should be an operating reserve of at least 15% of estimated annual expenditure or USD 100,000, whichever is higher;
- the threshold of eligibility for funding delegates to attend the MOS should be set at 0.2% based on the UN scale of assessment and as a general rule to exclude from such eligibility countries from the EU, and other European countries with developed economies;
- the Trust Fund's financial resources should be derived from voluntary contributions;
- Signatories that wish to receive an invoice to guide their voluntary contributions may request to receive such invoices from UNEP, and these invoices should be based on the list of indicative voluntary contributions;
- if the indicative voluntary contribution of a Signatory is determined to be more than 22% of the budget, the contribution of that Signatory should be no more than 22% of the budget for the financial year;
- budget estimates covering the income and expenditure for the three calendar years should be submitted to the MOS, and the estimates for each calendar year should be specified according to budget lines;
- the budget should be adopted by consensus at the MOS; and
- extra-budgetary contributions may be accepted for purposes consistent with the MOU objectives and should be in accordance with terms and conditions agreed upon between the contributor and the Secretariat.

Performance Review and Review of Annex 1

On Wednesday afternoon, the EU introduced the documents (CMS/Sharks/MOS3/Doc.18.1 and 18.1/Add.1). She noted that the underlying idea is to improve the way the MOU functions, clarifying, *inter alia*: work on national reports; ways to use best available tools; and criteria and categorization for listings. She stressed that the proposal does not imply a specific way forward, but rather opens the discussion for future decisions.

Australia, the US, and New Zealand said there is merit in having a regular performance review, noting the need to further discuss ways to improve the functioning of the MOU, including its listings. Côte d'Ivoire and Kenya welcomed the EU proposal. Kenya emphasized the need to take into account both review and evaluation. The EU noted that the suggestion is "in embryonic stage," stressing that TOR may be developed and further discussed at MOS4.

MOS3 Vice Chair Hogan emphasized that "we want to review, but also evaluate, assess, and measure," and noted that the EU, in collaboration with interested Signatories, will work on the TOR to be submitted at MOS4.

Closing Plenary

Melanie Virtue, speaking on behalf of CMS Executive Secretary Bradnee Chambers, lauded progress and offered closing remarks on MOS3 accomplishments, including: the establishment of three IWGs; discussion on species listings and the nature of the listings; guidance on habitat conservation; and the capacity-building programme. Andrea Pauly, CMS Secretariat, commended the Principality of Monaco and delegates for their efforts.

Offering closing remarks, Chair Calcagno underscored the commitment of Prince Albert II of Monaco to science-informed decision making, and progress at MOS3 to commit to shark conservation and shark awareness, pointing to the Oceanographic Institute of Monaco's publication, "Living with Sharks: A Toolbox to Combat Shark Risk." He closed the meeting at 12:41pm.

A Brief Analysis of the Meeting

Sharks on the Rock

"A better understanding of sharks, the technology available today, and a collective effort to manage our activities, should enable us to share the ocean with sharks." Prince Albert II of Monaco

Meeting in Monaco, Signatories to the Memorandum of Understanding on the Conservation of Migratory Sharks (Sharks MOU) gathered for the third time to ensure sharks will remain in our seas and oceans. Globally, shark populations are in serious decline: nearly one-quarter of the world's chondrichthyan species (sharks, rays, skates, and chimaeras) are threatened with extinction. Long portrayed as fish to be feared, marine scientists and resource managers understand that we ignore their health at our peril. As sharks and rays swam in the aquarium waters below and in the Mediterranean Sea outside, Signatories met in the Oceanographic Museum, to promote a peaceful coexistence between humans and sharks.

This brief analysis will assess progress by the Signatories to improve the conservation status of migratory sharks and examine the steps it is taking to further develop the MOU, so as to continue to "enable us to share the ocean with sharks."

Navigating Offshore

Key accomplishments during MOS3 included the addition of eight species to Annex 1, creation of three intersessional working groups, and a sense that the MOU is moving more strongly into implementation of conservation actions.

Annex 1 Additions: Including species on the MOU's Annex 1 is a prerequisite for promoting species-specific conservation measures, also acting as a "signal" to enhance awareness about a species' plight. Under the MOU, candidate species must meet criteria establishing its conservation status as "unfavorable," and its nature as a "migratory" species. As a daughter agreement to the Convention on the Conservation of Migratory Species of Wild Animals (CMS), the Sharks MOU has flexibility to address individual migratory species or groups of migratory species. However, previous listings only included species already on CMS Appendix II.

MOS3 decisions on nine species proposals demonstrated the MOU's growing importance. Listings of the dusky shark and common guitarfish followed previous decisions by the CMS. But the bottlenose wedgefish/whitespotted wedgefish, oceanic whitetip shark, and smooth hammerhead shark are not listed on the CMS appendices, demonstrating the MOU's capabilities. The decision not to add the blue shark, even though it is a CMS Appendix II species and migratory, signaled the Signatories' willingness to follow the recommendation of its Advisory Committee (AC), which indicated that available data do not establish an unfavorable conservation status for the blue shark.

Somewhat more complicated was the down-to-the-wire decision to list the angelshark, a species in clear peril (and listed on both CMS Appendices I and II), but for which the

AC concluded the species did not meet the MOU criteria for “migratory.” The compromise decision, which some saw as partly political, given Monaco was the chief proponent for its listing, while others described as “elegant,” was accompanied by language noting that the decision should not set a precedent.

The decision to revise the MOU to allow listing of “lookalike” species, even if the lookalikes do not fully meet Annex 1 listing criteria, goes beyond the CMS, which does not have such provisions. Two lookalike wedgefishes—the smoothnose wedgefish and whitespotted wedgefish/giant guitarfish—were listed following approval to list the bottlenose wedgefish/whitespotted wedgefish. Some participants suggested that divergence from the CMS reflected not just a sense of maturity, but also the inherent value of decision making based on advice of the world’s shark experts, hinting that the CMS Scientific Council might consider adding a sharks councillor position.

While there was some heartache about the failure to list the blue shark, participants generally seemed happy with the listings. Several seasoned participants suggested the MOU may need to be amended to build in flexibility for action where there is scientific uncertainty about whether species meet both the migratory and conservation criteria.

From Listing to Action: Recent research indicates that for species listed on CMS Appendix I, only 28% of the parties are meeting all of their obligations for strict protection. Listing alone, under CMS or the MOU, will not protect vulnerable species without meaningful implementation of conservation measures. Moving from listing species to agreements on concrete actions proved more challenging.

Work on species-specific conservation measures focused more on the AC’s draft factsheets, which were intended to provide background information about the listed species, rather than on the recommended measures for action proposed by the Conservation Working Group (CWG), to the frustration of some. One experienced participant lamented the lack of progress on specific conservation actions and said the “momentum arising from the listing decisions had slowed.” But others cited the discussions and enthusiasm for participating in intersessional work as evidence of increasing ownership of the process by the Signatories.

Cooperation and Partnerships: The participation of non-state actors is recognized as essential for the success of the MOU. Following the addition of Defenders of Wildlife at MOS3, the number of Cooperating Partners has increased to 12, with two more organizations likely to join in the near future. But while Signatories welcomed the engagement of civil society organizations, especially for their work on public awareness raising, most discussions at MOS3 centered on the need and options for enhanced cooperation with regional fisheries management organizations (RFMOs), as many recognize that overfishing and bycatch are leading the decline of sharks and rays. The final agreement outlining a process on how to engage with RFMOs helped close the meeting with a sense of momentum on an issue most participants considered critical to forward progress.

Purposeful Gathering

Sharks are often portrayed as silent, solitary stalkers. Or in the case of the wedgefish, as ambush predators flattened against the sandy bottom. Skates and rays may mass together in balletic schools. These ancient creatures of the sea often return to the same places year after year to rest, forage, and breed. While

Sharks MOU Signatories may not be able to gather in the same place for each meeting, such as the Oceanographic Museum’s inspiring blend of sea views and shark-filled aquariums, the Monaco meeting made clear that a regular assemblage of those most knowledgeable and concerned about chondrichthyans is both vital and essential to our continued ability to share the ocean with sharks.

While some procedural issues, such as decisions on voting remain to be addressed, MOS3 seemed to find both its footing and confidence, as participants become more comfortable with what they can and want to accomplish and how to go about it. The continued engagement and increasing number of Signatories and Cooperating Partners demonstrates a growing commitment for action on conservation of sharks. Critical to the MOU’s success will be implementation of conservation strategies at the national and regional levels, as well as finding the will to pay for the work of the MOU, either by Signatories meeting the budgeted level of voluntary contributions during the next triennium, or by developing a targeted fundraising strategy, as suggested during the meeting. In addition, attracting additional range states to sign the Sharks MOU, including more states from the Asian region, which significantly contributes to over-exploitation of sharks and rays, will be of utmost importance, to ensure global implementation of conservation efforts.

Upcoming Meetings

25th Session of the ISA Council (Part I): The International Seabed Authority Council will continue discussions on, *inter alia*, the payment mechanism and the draft exploitation regulations. **dates:** 25 February - 1 March 2019 **location:** Kingston, Jamaica **contact:** ISA Secretariat **phone:** +1-876-922-9105 **fax:** +1-876-922-0195 **email:** <https://www.isa.org.jm/contact-us> **www:** <https://www.isa.org.jm/>

Fourth Session of the UN Environment Assembly (UNEA): The theme of the fourth session of the UNEA is “Innovative solutions for environmental challenges and sustainable consumption and production.” It will be preceded by a meeting of the Open-Ended Committee of Permanent Representatives from 4-8 March 2019. **dates:** 11-15 March 2019 **location:** Nairobi, Kenya **contact:** UNEP **email:** beatpollution@unenvironment.org **www:** <http://web.unep.org/environmentassembly/>

BBNJ IGC-2: The second session of the Intergovernmental Conference on an international legally binding instrument on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction will continue work on the elements of a draft text of an international legally binding instrument. **dates:** 25 March - 5 April 2019 **location:** UN Headquarters, New York **contact:** UN Division for Ocean Affairs and the Law of the Sea **phone:** +1-212-963-3962 **email:** doalos@un.org **www:** <https://www.un.org/bbnj/>

IPBES 7: The seventh session of the plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES 7) will consider, *inter alia*: the report of the Executive Secretary on the implementation of the first work programme for the period 2014-2018; the global assessment of biodiversity and ecosystem services; review of the Platform at the conclusion of its first work programme; the Platform’s next work programme; and institutional arrangements. **dates:** 29 April - 4 May 2019 **location:** Paris, France **contact:** IPBES Secretariat **phone:** +49-228-815-0570 **email:** secretariat@ipbes.net **www:** <https://www.ipbes.net/event/ipbes-7-plenary>

ACAP AC11: The Eleventh Meeting of CMS Agreement on the Conservation of Albatrosses and Petrels (ACAP) Advisory Committee (AC11) will meet to provide expert advice and information to ACAP Parties, the Secretariat and others. Meetings of the Seabird Bycatch Working Group and the Population and Conservation Status Working Group will precede AC11 at the same venue from 6-8 May, and 9-10 May, respectively. **dates:** 13-17 May 2019 **location:** Florianópolis, Brazil **contact:** ACAP Secretariat **phone:** +61-3-6165-6674 **email:** <https://acap.aq/en/contact/acap-secretariat-staff> **www:** <https://acap.aq>

European Maritime Day 2019: This special day highlights the fundamental role that oceans and seas play in the lives of the coastal communities and citizens of the European Union. **date:** 20 May 2019 **location:** Lisbon, Portugal **www:** http://www.miss-ocean.com/Conferences_Exhibitions/European_Maritime_Days/European_Maritime_Day_Lisbon_2019.htm

CITES COP18: The 18th meeting of the Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) will be held directly following 71st meeting of the CITES Standing Committee. **dates:** 23 May - 3 June 2019 **location:** Colombo, Sri Lanka **contact:** CITES Secretariat **phone:** +41-22-917- 81-39/40 **fax:** +41-22-797-34-17 **email:** info@cites.org **www:** <https://cites.org/>

Our Ocean Wealth Summit: This conference will enable participating countries to share experiences in addressing the multiple challenges facing the oceans. **date:** 6-7 June 2019 **location:** Cork, Ireland **contact:** Marine Coordination Group Bureau **phone:** +353-1-6072902 **email:** MarineCoordinationGroupBureau@agriculture.gov.ie **www:** <https://www.ouroceanwealth.ie/>

SBSTTA 23: The 23rd meeting of Convention on Biological Diversity's Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) will review possible elements for the post-2020 framework, including any implications arising from the IPBES global assessment, the draft of the fifth edition of the Global Biodiversity Outlook as well as other relevant information and sources of knowledge. **dates:** 14-18 October 2019 (tentative) **location:** to be confirmed **contact:** CBD Secretariat **phone:** +1-514-288-2220 **fax:** +1-514-288-6588 **email:** secretariat@cbd.int **www:** <https://www.cbd.int/>

WG8J 11: The 11th meeting of the Open-Ended Working Group on Article 8(j) will examine the role of traditional knowledge, customary sustainable use and the contribution of the collective actions of indigenous peoples and local communities to the post-2020 global biodiversity framework. **dates:** 19-21 October 2019 (tentative) **location:** to be confirmed **contact:** CBD Secretariat **phone:** +1-514-288-2220 **fax:** +1-514-288-6588 **email:** secretariat@cbd.int **www:** <https://www.cbd.int/>

CMS COPI3: The 13th meeting of the Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals will convene to review implementation of the convention. **dates:** 15-22 February 2020 **location:** Gandhinagar, India **contact:** CMS Secretariat **phone:** +49-228-815-2401 **fax:** +49-228-815-2449 **email:** cms.secretariat@cms.int **www:** <http://www.cms.int>

SBSTTA 24: The 24th meeting of the CBD Subsidiary Body on Scientific, Technical, and Technological Advice (SBSTTA) is expected consider the draft of the post-2020 framework from a scientific and technical perspective. **dates:** 18-22 May 2020 (tentative) **location:** to be confirmed **contact:** CBD Secretariat **phone:** +1-514-288-2220 **fax:** +1-514-288-6588 **email:** secretariat@cbd.int **www:** <https://www.cbd.int/>

SBI 3: The third meeting of the CBD Subsidiary Body on Information (SBI 3) will consider a draft of the post-2020 framework, including related means to support and review implementation. **dates:** 25-29 May 2020 (tentative) **location:** to be confirmed **contact:** CBD Secretariat **phone:** +1-514-288-2220 **fax:** +1-514-288-6588 **email:** secretariat@cbd.int **www:** <https://www.cbd.int/>

The Second UN Ocean Conference: This conference will be co-hosted by the Governments of Kenya and Portugal and will focus on reviewing the implementation of SDG14, in particular the 2020 targets under SDG14. **dates:** June 2020 **location:** Lisbon, Portugal **contact:** EurOcean- European Centre for Information on Marine Science and Technology **phone:** +351-21-392- 4497 **email:** eurocean@fct.pt **www:** <http://www.eurocean.org/np4/802.html>

CBD COP 15, Cartagena Protocol COP/MOP 10, and Nagoya Protocol COP/MOP 4: The 15th meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD COP 15), the 10th Meeting of the Parties (COP/MOP 10) to the Cartagena Protocol on Biosafety and the 4th Meeting of the Parties (COP/MOP 4) to the Nagoya Protocol on Access and Benefit-sharing are expected to address a series of issues related to implementation of the Convention and its Protocols, and adopt the post 2020 global biodiversity framework. **dates:** October 2020 (TBC) **location:** Beijing, China **contact:** CBD Secretariat **phone:** +1-514-288-2220 **fax:** +1-514-288-6588 **email:** secretariat@cbd.int **www:** <https://www.cbd.int/>

Fourth Meeting of the Signatories to the Memorandum of Understanding on the Conservation of Migratory Sharks: The fourth meeting of the Signatories to the Memorandum of Understanding on the Conservation of Migratory Sharks will address amendment proposals, the Programme of Work, species listings, among other issues. **dates:** fourth quarter 2021 (tentative) **location:** TBC **contact:** Andrea Pauly, UNEP/CMS Secretariat **phone:** +49-228-815-2401 **fax:** +49-228-815-2449 **email:** andrea.pauly@cms.int **www:** <https://www.cms.int/sharks/>

For additional meetings, see <http://sdg.iisd.org/>

Glossary

AC	Advisory Committee
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMS	Convention on the Conservation of Migratory Species of Wild Animals
COP	Conference of the Parties
CWG	Conservation Working Group
FAO	Food and Agriculture Organization of the UN
HSI	Humane Society International
IUCN	International Union for Conservation of Nature
IWG	Intersessional Working Group
MOS	Meeting of the Signatories
MOU	Memorandum of Understanding
MPA	Marine protected area
NGO	Non-governmental organization
POW	Programme of Work
RFMO	Regional fisheries management organization
TOR	Terms of Reference
UAE	United Arab Emirates
UNEP	UN Environment Programme