

## MEMORANDUM OF UNDERSTANDING ON THE CONSERVATION OF MIGRATORY SHARKS

*(as amended by the Signatories at their 2<sup>nd</sup> Meeting, Costa Rica, February 2016)*

### THE SIGNATORIES,

**ARE AWARE** that the 8th meeting to the Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals (the Convention) adopted Recommendation 8.16 calling upon Range States of migratory sharks listed on Appendix I or II of the Convention to develop a global migratory sharks conservation instrument;

**RECALL** that some species of migratory sharks have priority for conservation actions through listing on the appendices of both the Convention as well as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES);

**RECOGNIZE** the critical role that migratory sharks play in marine ecosystems and local economies, and are concerned about the significant mortality of sharks, including those listed on Appendices I and II of the Convention from a range of impacts and threats including target fisheries, fisheries by-catch, illegal, unreported and unregulated (IUU) fishing, trophy hunting, marine debris, ecosystem modifications, anthropogenic disturbances, and increasing pressures on the marine environment due to climate change;

**ARE CONVINCED** that the vulnerability of migratory sharks to such threats warrants further development of conservation measures where they do not already exist, enhanced implementation and enforcement of existing conservation measures by States and regional economic integration organisations that exercise sovereignty, or jurisdiction, or both over any part of their range, and by States, flag vessels of which are engaged outside national jurisdictional limits in activities that may affect the conservation of sharks;

**ARE MINDFUL** of the need to ensure the provisions of this Memorandum of Understanding are consistent with other international shark conservation and management initiatives, including the Food and Agricultural Organization's (FAO) voluntary International Plan of Action (IPOA) for sharks, which calls upon States to develop and implement complementary National Plans of Action for sharks, and the 2007 United Nations General Assembly Resolution on Sustainable Fisheries;

**NOTE** that both the FAO, through IPOA-sharks, and the Convention have embraced a common objective, i.e. the need to ensure the conservation and management of migratory sharks and their long-term sustainable use, and that industry, consumers and conservation non-governmental organizations (NGOs) have critical complementary roles to play in achieving this objective;

**ARE CONSCIOUS** that Regional Fisheries Management Organizations (RFMOs) should be involved in the development and implementation of this Memorandum of Understanding by virtue of their mandate to bring fishing nations together to promote conservation and management of fish stocks, their knowledge and experience of migratory shark catches, and their scientific expertise critical to sound conservation and management decisions and that it will be necessary to work with and through these organizations to achieve the objectives of this Memorandum of Understanding, and to avoid duplication or inconsistency of efforts;

**RECOGNIZE** the role that Regional Seas Conventions (RSCs) where applicable have in the conservation of marine biodiversity and the importance of collaborating with these organizations to achieve the objectives of this Memorandum of Understanding;

**BELIEVE** that the conclusion and implementation of an international instrument in the form of a non-binding Memorandum of Understanding and a supporting Conservation Plan under Article IV.4 of the Convention will add value and contribute significantly to the enhanced conservation of migratory sharks by: (i) strengthening the political will to implement migratory shark conservation measures in a coordinated and timely fashion; (ii) bridging migratory shark fisheries and conservation interests; (iii) contributing to the implementation of the FAO's IPOA for sharks by linking it to this Memorandum of Understanding and building on it; and (iv) by capitalizing on the potential of the Convention's broad membership to add expertise to global conservation efforts in the areas of science, research, monitoring, compliance, enforcement, species identification, data collection and analysis, threat definition and reduction, habitat identification and protection, education and public awareness, information exchange, and capacity building;

**AIM TO** improve the conservation status of migratory sharks listed in Appendices I and II of the Convention through concerted and coordinated action, including compliance and enforcement efforts, on the part of the States that exercise jurisdiction over the range of these populations, and States whose flag vessels are engaged outside national jurisdictional limits in activities that may affect these populations;

**ACKNOWLEDGE** that, despite past and ongoing scientific research and monitoring, knowledge of the biology, ecology, and population dynamics of many migratory sharks is deficient, and that it is necessary to promote stronger co-operation between fishing nations on research, monitoring, enforcement and compliance in order to effectively implement conservation measures;

**FURTHER NOTE** that other species of sharks not currently listed on Appendices I and II of the Convention may also benefit from implementation of this Memorandum of Understanding as a consequence of more coordinated conservation efforts among Range States, shark fishing states, and shark trading states;

**EXPRESS** their desire to pursue the actions, where appropriate, set forth in this Memorandum of Understanding, in the spirit of mutual cooperation, to achieve and maintain a favourable conservation status for migratory sharks; and

## **HAVE REACHED THE FOLLOWING UNDERSTANDING:**

### **Section 1      Scope, Definitions and Interpretation**

1.        This Memorandum of Understanding is a non-legally binding instrument under Article IV, paragraph 4, of the Convention, as defined by Resolution 2.6 adopted at the Second Meeting of the Conference of the Parties to the Convention (Geneva, 11-14 October 1988).

2.        This Memorandum of Understanding is intended to apply to all migratory species of sharks included in Annex 1 of this Memorandum of Understanding.

3.        For the purpose of this Memorandum of Understanding:

a)        "Conservation Plan" means the Migratory Sharks Conservation Plan to be adopted under this Memorandum of Understanding;

- b) "Advisory Committee" means the committee of persons qualified as experts in migratory shark science and management established under Section 7 of this Memorandum of Understanding;
- c) "Conservation status of migratory sharks" means the sum of all the influences acting on migratory sharks that may affect their long-term distribution and abundance;
- d) The conservation status is considered "favourable" when all the following conditions are met:
- i) population dynamics data relative to appropriate biological reference points indicate that migratory sharks are sustainable on a long-term basis as a viable component of their ecosystems;
  - ii) the distributional range and habitats of migratory sharks are not currently being reduced, nor are they likely to be reduced in the future to levels that affect the viability of their populations in the long term; and
  - iii) the abundance and structure of populations of migratory sharks remains at levels adequate to maintain ecosystem integrity;
- e) Conservation status will be taken as "unfavourable" if any of the conditions set out in sub paragraph 3. d) above are not met;

Nothing in sub-paragraphs d) and e) will affect the obligations under the Convention for Signatories that are also Convention Parties with respect to species listed under Appendix II of the Convention.

- f) "Convention" means the Convention on the Conservation of Migratory Species of Wild Animals signed at Bonn, Germany on 23 June 1979;
- g) "Convention Secretariat" means the body established under Article IX of the Convention;
- h) "Cooperating partner" means a non-Range State, an intergovernmental or a non-governmental organization, or other body or entity that associates itself with this Memorandum of Understanding in accordance with the provisions of paragraph 30;
- i) "Habitat" means any area in the range which contains suitable living conditions, particularly known aggregation, feeding and breeding sites, for migratory sharks;

j) "IPOA-Sharks" means the International Plan of Action for the conservation and management of sharks adopted at the 23rd session of the FAO Committee on Fisheries, February 1999;

k) "Range" means all the areas of water that a migratory shark inhabits, stays in temporarily, or crosses at any time on its normal migration route;

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

m) "Regional economic integration organisation" (REIO) means an organisation constituted by sovereign States of a given region which has competence in respect of matters governed by this Memorandum of Understanding and has been duly authorised, in accordance with its internal procedures, to sign this Memorandum of Understanding;

n) "RFMO" means an intergovernmental fisheries organization or arrangement, as appropriate, that has the competence to establish conservation and management measures;

o) "Secretariat" means the body established under paragraph 27 of this Memorandum of Understanding to assist in its administration, implementation and enforcement;

p) "Shark" means any of the migratory species, subspecies or populations in the Class *Chondrichthyes* (which includes sharks, rays, skates and chimaeras) that are included in Annex 1 of this Memorandum of Understanding;

q) "Shark finning" means the practice of removing any of the fins of a shark (including the tail) while at sea and discarding the remainder of the shark at sea;

r) "Signatory" means a Range State or a REIO that is a Signatory to this Memorandum of Understanding; and

s) "Taking" means taking, harvesting, hunting, fishing, capturing, harassing, deliberate killing or attempting to engage in any such conduct.

4. The Annexes form an integral part of this Memorandum of Understanding.

## **Section 2      Objective**

5.      The objective of this Memorandum of Understanding is to achieve and maintain a favourable conservation status for migratory sharks based on the best available scientific information, taking into account the socio-economic and other values of these species for the people of the Signatories.

## **Section 3      Fundamental Principles**

6.      The Signatories recognize that successful shark conservation and management require the fullest possible cooperation among governments, intergovernmental organizations, non-governmental organizations, stakeholders of the fishing industry and local communities, and engagement pursuant to this Memorandum of Understanding with the fisheries industry, FAO, RFMOs, as appropriate, RSCs, CITES, the Convention on Biological Diversity (CBD) and other relevant international organizations.

7.      The Signatories acknowledge the role as well as the scientific and political actions of States and RFMOs, as appropriate, which are responsible for the management of migratory shark fisheries, and the need to strengthen and improve their role in taking measures to improve or restore a favourable conservation status of sharks listed in Annex 1 of the Memorandum of Understanding.

8.      Sharks should be managed to allow for sustainable harvest where appropriate, through conservation and management measures based on the best available scientific information.

9.      In implementing the measures given in the Conservation Plan the Signatories should apply widely both an ecosystem and a precautionary approach.<sup>1</sup> Lack of scientific certainty should not be used as a reason for postponing measures to enhance the conservation status of sharks.

10.     Signatories may establish, by mutual consent, bilateral, sub-regional or regional management plans that are consistent with this Memorandum of Understanding.

## **Section 4      Conservation Plan**

11.     At its first session, the Meeting of the Signatories should adopt a Conservation Plan to be incorporated as an Annex to this Memorandum of Understanding.

12.     The Signatories should cooperatively strive to adopt, implement and enforce such legal, regulatory and administrative measures as appropriate to conserve and manage migratory sharks and their habitat. To this end, they should endeavour to implement progressively, individually or cooperatively, or

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<sup>1</sup> Rio Declaration on Environment and Development of 14 June 1992, Principle 15.

both, including by participation in or in cooperation with the FAO, RFMOs as appropriate, RSCs and other relevant international fora, those objectives described below and which include:

- a) Improving understanding of migratory shark populations through research, monitoring and information exchange;
- b) Ensuring that directed and non-directed fisheries for shark are sustainable;
- c) Ensuring to the extent practicable the protection of critical habitats and migratory corridors and critical life stages of sharks;
- d) Increasing public awareness of threats to sharks and their habitats, and enhance public participation in conservation activities; and
- e) Enhancing national, regional and international cooperation.

13. The Signatories recognize that in order to be successful in these endeavours they should make every effort, as appropriate and subject to the availability of necessary resources, to:

- a) Cooperate with relevant organizations so as to facilitate the work conducted in relation to the Conservation Plan;
- b) Engage with the fisheries industry, FAO, RFMOs as appropriate, conservation NGOs, RSCs and other international organizations that deal with fisheries to develop a working relationship, analyze the strengths and weaknesses of current conservation and management initiatives, and involve them in the improvement and execution of the Conservation Plan;
- c) Promote practical and enforceable conservation recommendations within relevant RFMOs and RSCs by the Signatories to this Memorandum of Understanding that are members of the RFMOs and RSCs;
- d) Build research, data collection, monitoring, compliance and enforcement capacity;
- e) Promote and coordinate stock assessments and research in collaboration with appropriate fishery management and scientific bodies;

f) Identify and conduct studies of shark migration, aggregation, critical habitats, ecology, behaviour and life stages, and, to the extent practicable, protect the sites;

g) Facilitate the timely access to and exchange of information necessary to coordinate conservation and management measures, and facilitate training in data quality;

h) Regulate or manage the harvest of sharks in order to address shark finning and, where not already in place, enact legislation or regulations to prohibit shark finning, including by considering taking measures, as appropriate, to require that sharks be landed with each fin naturally attached in line with UN General Assembly Resolution 62/177 and with Recommendation 4.114 of the International Union for the Conservation of Nature;

i) Prohibit the taking of species listed in Appendix I of the Convention in accordance with Article III of the Convention;

j) In fisheries catching sharks other than those listed in point i above, encourage relevant bodies to set targets based on the best available science for fish quotas, fishing effort and other restrictions to help achieve sustainable use;

k) Ensure development and implementation of Plans of Action - Sharks in accordance with FAO's voluntary IPOA-Sharks;

l) Ratify or accede to those international instruments relevant to the conservation and management of migratory sharks and their habitats in order to enhance the legal protection of migratory shark species;

m) Formulate, review, revise and harmonize national legislation and regulations, as necessary, relevant to the conservation and management of migratory sharks and their habitats;

n) Create and maintain species-specific national records of shark catches, landings and discards; and

o) Encourage other States to sign this Memorandum of Understanding.

14. These measures should be implemented taking into account the competencies and capabilities of Signatories under their domestic laws.

## **Section 5      Implementation, Reporting and Financing**

15.      Each Signatory should:

a)      Designate a focal point for communication among Signatories and for coordinating implementation measures and activities under this Memorandum of Understanding and the Conservation Plan, and communicate the complete contact details of this authority, and any subsequent changes thereto, to the Convention Secretariat; and

b)      Endeavour to provide to the Secretariat a regular national report on the implementation of this Memorandum of Understanding and the Conservation Plan, the frequency and timing of which should be determined at the first Meeting of the Signatories.

c)      Endeavour to provide annual voluntary contributions to facilitate the effective implementation of the Memorandum of Understanding and delivery of the conservation plan.

16.      Signatories will endeavour to finance from national and other sources the implementation of the measures within their competency necessary for the conservation of migratory sharks. In addition, they will endeavour to assist each other on a bilateral or multilateral basis in the implementation and financing of key points of the Conservation Plan, including capacity building and training, and seek assistance from other sources for the financing and implementation of their strategies or equivalent measures.

17.      A fund may be established to meet expenses related to the participation of developing countries at sessions of the Meeting of the Signatories, the Advisory Committee or any other meeting which may be called upon by Signatories through its governing body. This does not preclude such expenses being met by other arrangements, bilateral or otherwise.

## **Section 6      Meeting of the Signatories**

18.      The Meeting of the Signatories should be the decision-making body of this Memorandum of Understanding. Without prejudice to Paragraph 33 of the Memorandum of Understanding the Signatories should make every effort to reach agreement on all matters of substance by consensus. Detailed rules governing the possibilities of proceeding to vote will be laid down in the Rules of Procedure referred to in Paragraph 21 of the Memorandum of Understanding.

19.      The Convention Secretariat should convene the first session of the Meeting of the Signatories as soon as possible after the date on which this Memorandum of Understanding comes into effect. The Meeting of the Signatories should decide on the frequency of its sessions thereafter, bearing in mind the benefits of holding those sessions in conjunction with meetings of the Conference of the Parties to the Convention.



20. Progress in implementing the Memorandum of Understanding, including amendments to Annex 1, should be assessed by the Signatories at each session of the Meeting of the Signatories.

21. At its first session, the Meeting of the Signatories should adopt its own rules of procedure governing, among other matters, the attendance and participation of observers, and make provision for transparency in the activities relating to the Memorandum of Understanding and timely access to the records and reports relating to the Memorandum of Understanding. Such rules should not be unduly restrictive.

22. Any State not a Signatory to the Memorandum of Understanding, the United Nations, any specialised Agency of the United Nations, any regional economic integration organization, and any secretariat of relevant international conventions and other instruments, particularly those concerned with the conservation and management of marine living resources or conservation and management of sharks, may participate as observers at the first session of the Meeting of the Signatories and its subsidiary bodies. For future sessions, such participation should be subject to the rules of procedure.

23. Any relevant scientific, environmental, cultural, fisheries or technical body concerned with the conservation and management of marine living resources or the conservation and management of sharks, may participate as an observer at the first session of the Meeting of the Signatories and its subsidiary bodies. For future sessions, such participation should be subject to the rules of procedure.

## **Section 7      Advisory Committee**

24. The first Meeting of the Signatories should establish an Advisory Committee, comprising persons qualified as experts in migratory shark conservation science and management. The tasks of the Advisory Committee will be defined by the MOS and should include:

a) Providing expert advice, information and making recommendations including suggestions on new initiatives and on the implementation of this Memorandum of Understanding, to the Secretariat and the Signatories, as necessary and when appropriate;

b) Analysing, as necessary, scientific assessments and making recommendations on the conservation status of shark populations listed in Annex 1 and others which may be contemplated for inclusion;

c) Preparing a report on its activities for each advisory session of the Meeting of the Signatories to be submitted to the Secretariat in ample time before the session of the Meeting of the Signatories;

d) Recommending to the Secretariat the convening of an urgent session of the Meeting of the

Signatories in view of emergencies which may arise; and

e) Carrying out any other task referred to it by the Meeting of the Signatories.

25. Members of the Committee should be appointed as representatives of the Regions by the Signatories from each Region. The Regions and the number of representatives for each Region are set out in Annex 2. The Advisory Committee should elect a Chair and Vice-chair. The Advisory Committee may invite other experts to attend its meetings.

26. The Advisory Committee should conduct its work through collaboration by electronic means whenever possible, with the Chair of the Committee providing a report on the Committee's work to each session of the Meeting of the Signatories. Where the need arises, meetings of the Advisory Committee should be convened by the Chair of the Committee in consultation with the Secretariat, and where possible, such meetings should be held in conjunction with the sessions of the Meeting of the Signatories.

## **Section 8 Secretariat**

27. The Signatories to this Memorandum of Understanding share the view that:

a) A Secretariat should be established by the Meeting of the Signatories as soon as possible, based in an appropriate organization or institution. The role of the Secretariat may include assisting in the administration and implementation of this Memorandum of Understanding by coordinating, communicating, facilitating and reporting on relevant activities and events, and performing such other functions as may be assigned by the Signatory States; and

b) The Convention Secretariat should act as the interim Secretariat to this Memorandum of Understanding until a permanent Secretariat is established and may, subject to the availability of resources, use the services of any reliable organization to support the coordination of this Memorandum of Understanding.

## **Section 9 Cooperation with other Bodies**

28. The Secretariat could consult and cooperate with other relevant organizations such as those referred to in Section 3 paragraph 6, as appropriate, to assist in the implementation of this Memorandum of Understanding, including through the exchange of information.

## **Section 10      Final Provisions**

29. This Memorandum of Understanding is open for signature by the Range States and regional economic integration organisations of the shark species listed in Annex 1 of this Memorandum of Understanding.

30. Non-range states, inter-governmental and international and national non-governmental organizations, or other relevant bodies and entities may associate themselves with this Memorandum of Understanding through their signatures as cooperating partners, after having being invited to sign to it on the basis of a decision by the Signatories, in particular with respect to the implementation of the Conservation Plan.

31. This Memorandum of Understanding will commence on the first day of the month following the month on which there are at least 10 Range State signatures. Thereafter it will commence for any other Signatory on the first day of the month following the date of signature by that Signatory.

32. This Memorandum of Understanding will remain open for signature indefinitely at the seat of the Convention Secretariat. The cooperation of the Signatories should continue indefinitely but any Signatory may terminate its participation by providing one year's written notice to all other Signatories through the Secretariat.

33. The Memorandum of Understanding, including the Annexes, may be modified by the Meeting of the Signatories. Such modifications should be by consensus.

34. The original text of this Memorandum of Understanding in the English, French, and Spanish languages, each version being equally authentic, will be deposited with the Convention Secretariat, which should act as the Depositary. The Depositary should, after consultations with the Governments concerned, prepare official versions of the text of this Memorandum of Understanding in Arabic, Russian, Chinese, German and other languages. The working languages for all matters related to this Memorandum of Understanding should be English, French and Spanish.

**Opened for signature at Manila on this Twelfth day of February 2010**

**Annex 1 to the MOU: Species covered by this Memorandum of Understanding and their ranges**

<b>Rhincodontidae</b>	<i>Rhincodon typus</i>
<b>Cetorhinidae</b>	<i>Cetorhinus maximus</i>
<b>Lamnidae</b>	<i>Carcharodon carcharias</i>
	<i>Isurus oxyrinchus</i>
	<i>Isurus paucus</i>
	<i>Lamna nasus</i>
<b>Squalidae</b>	<i>Squalus acanthias</i> (Northern Hemisphere populations)
<b>Pristidae</b>	<i>Anoxypristis cuspidata</i>
	<i>Pristis clavata</i>
	<i>Pristis pectinata</i>
	<i>Pristis zijsron</i>
	<i>Pristis pristis</i>
<b>Mobulidae</b>	<i>Manta alfredi</i>
	<i>Manta birostris</i>
	<i>Mobula mobular</i>
	<i>Mobula japanica</i>
	<i>Mobula thurstoni</i>
	<i>Mobula tarapacana</i>
	<i>Mobula eregoodootenkee</i>
	<i>Mobula kuhlii</i>
	<i>Mobula hypostoma</i>
	<i>Mobula rochebrunei</i>
	<i>Mobula munkiana</i>
<b>Carcharhinidae</b>	<i>Carcharhinus falciformis</i>
<b>Sphyrnidae</b>	<i>Sphyrna mokarran</i>
	<i>Sphyrna lewini</i>
<b>Alopiidae</b>	<i>Alopias superciliosus</i>
	<i>Alopias vulpinus</i>
	<i>Alopias pelagicus</i>

## **Annex 2 to the MOU: Regions and Advisory Committee representation**

Africa: 2

Asia: 2

North America: 1

Europe: 2

Oceania: 1

South, Central America & the Caribbean: 2

### **Annex 3 to the MOU: Conservation Plan**

#### **Overall Principles:**

- I. This Conservation Plan applies exclusively to those migratory species of sharks<sup>1</sup> included in Annex 1 of this Memorandum of Understanding. Depending on the occurrence of a species, Signatories may set species-specific priorities.
- II. This Conservation Plan aims to complement, develop and promote the objectives and actions described in this Memorandum of Understanding to conserve and manage migratory sharks and their habitat. In particular, it establishes a comprehensive list of actions to further the objectives and actions of Section 4 of this Memorandum of Understanding.
- III. These objectives and related activities below should be implemented by Signatories either individually or cooperatively or both, as appropriate, including through:
  - a. Participation in and cooperation with the Food and Agriculture Organization of the United Nations (FAO) and, as appropriate, Regional Fisheries Management Organizations (RFMOs), Regional Seas Conventions and Action Plans (RSCAPs), and other relevant biodiversity-related MEAs;
  - b. Establishment of regional, sub-regional and any other cooperative arrangements considered by the Signatories to be necessary; and
  - c. Cooperation with the Secretariat.
- IV. Signatories should, periodically evaluate the effectiveness of efforts and strategies to implement this plan, with the technical and scientific support of the Secretariat and the Advisory Committee, as well as consider revisions or amendments if necessary to strengthen its effectiveness or applicability, consistent with Section 6 of this Memorandum of Understanding.
- V. Signatories endeavour to create synergies amongst their respective national and regional administrations responsible for environmental and fisheries-related policies as they affect sharks so as to facilitate the universal implementation of the contents of the Conservation Plan into their governmental programmes.
- VI. Signatories are encouraged to prioritize implementation of these actions with highest scores for priority.
- VII. Signatories are encouraged to use this Conservation Plan, as a whole or only parts of it, and translate it into national or regional actions.
- VIII. The Conservation Plan combines short-term and long-term activities

**Objective A:** Improving understanding of migratory shark populations through research, monitoring and information exchange

Activities	Priority <sup>2</sup>	Time frame <sup>3</sup>	Responsible entity <sup>4</sup>
<b>1. Ecological research, monitoring and data collection</b>			
1.1 Identify priority research, monitoring and training needs, taking into account regional differences.	5	short, ongoing	SIG, MULTI, AC
1.2 Endeavour to develop capacity in research, data collection, monitoring and facilitate training in data quality.	5	ongoing	SIG, MULTI
1.3 Compile relevant data, improve ecological knowledge and conduct baseline studies on: <ul style="list-style-type: none"> <li>– shark populations including studies on populations dynamics, structure and abundance;</li> <li>– essential shark habitats;</li> <li>– shark distributional range through acoustic, mark recapture and other programmes;</li> <li>– shark aggregations;</li> <li>– shark behaviour;</li> <li>– shark ecology;</li> <li>– the seasonal and spatial migration patterns and routes of sharks;</li> <li>– shark taxonomy; and</li> <li>– environmental factors with impacts on sharks.</li> </ul>	5	short, ongoing	SIG, MULTI
1.4 Conduct long-term monitoring of shark populations in order to assess their conservation status and trends.	5	short, ongoing	SIG, MULTI
1.5 Identify and prioritize (with a view to developing conservation measures): <ul style="list-style-type: none"> <li>– critical shark habitats including critical migration routes;<sup>5</sup></li> <li>– critical seasons;<sup>6</sup></li> <li>– critical life stages;<sup>7</sup> and</li> <li>– shark populations.</li> </ul>	5	short, ongoing	SIG, MULTI
1.6 Assess and prioritize threats to sharks from human activities (especially fisheries) and identify the species most vulnerable to them.	5	short, ongoing	SIG, MULTI

Activities	Priority <sup>2</sup>	Time frame <sup>3</sup>	Responsible entity <sup>4</sup>
1.7 Establish conservation targets and indicators to assess progress towards reaching these targets at the species population level, and develop species-specific reference points for enhanced conservation measures.	5	medium	SIG, MULTI, AC
<b>2. Information exchange</b>			
2.1 Facilitate the timely access to and exchange of information necessary to coordinate conservation and management measures.	5	medium	SIG, MULTI, AC
2.2 Recommend standard methods and set minimum levels of data collection and adopt or develop a recommended set of protocols for research, monitoring, and information exchange.	5	short	SIG, MULTI, AC
2.3 Determine and, where appropriate, develop the most suitable methods for information dissemination.	5	medium	SIG, SEC, MULTI, AC
<p>2.4 Regularly exchange scientific and technical information and expertise among:</p> <ul style="list-style-type: none"> <li>– national governments;</li> <li>– scientific institutions;</li> <li>– non-governmental organizations and civil society;</li> <li>– international organizations; and</li> <li>– the private sector.</li> </ul> <p>in order to develop and implement best practice approaches to the conservation of sharks and their habitats.</p>	5	medium	SIG, MULTI, AC
2.5 Create a directory of experts and organizations concerned with shark conservation on a regional and global level.	5	long	SIG, SEC, MULTI, AC
2.6 Disseminate traditional knowledge on sharks and their habitats.	5	long	SIG, MULTI



**Objective B:** Ensuring that directed and non-directed fisheries for sharks are sustainable – In pursuing activities described under this objective Signatories should endeavour to cooperate through RFMOs, the FAO, RSCAPs and biodiversity-related MEAs as appropriate.

Activities	Priority <sup>2</sup>	Time frame <sup>3</sup>	Responsible entity <sup>4</sup>
<b>3. Fisheries-related research and data collection</b>			
3.1 Promote stock assessments and related research.	4	short	SIG, MULTI
3.2 Develop programmes to establish baseline data and facilitate reporting at a species-specific level on: <ul style="list-style-type: none"> <li>– shark catch rates;</li> <li>– fishing gear used in shark fisheries;</li> <li>– the amount of incidental and directed taking;</li> <li>– the amount of waste and discards;</li> <li>– size and sex of individuals caught; and</li> <li>– fisheries methods that are sustainable and responsible and protect the habitat.</li> </ul>	4	short	SIG, MULTI
<b>4. Ecologically sustainable management of shark populations, including monitoring, control and surveillance</b>			
4.1 Develop and adopt best practice guidance for the conservation and management of shark populations based on the best available scientific knowledge and following a precautionary and ecosystem approach.	3	short	SIG, MULTI
4.2 Develop programmes to monitor directed shark fisheries and shark bycatch, including programmes such as vessel monitoring systems, inspections and on-board observer or monitoring programmes.	3	short	SIG, MULTI
4.3 Prohibit the taking of species in accordance with paragraph 13 i of the MoU.	3	medium	SIG
4.4 Ensure that mortality rates arising from fishing activities do not exceed levels resulting in a significant decline of populations following the precautionary approach in proactively setting conservation and management measures at all times.	3	medium	SIG, MULTI
4.5 Encourage relevant bodies to set targets for fish quotas, fishing effort and other restrictions to help achieve sustainable use in line with the best available scientific advice and using the precautionary approach to ensure that all shark catch is within sustainable limits.	4	short	SIG, MULTI
4.6 Consider the development or application of certification systems for sustainable shark products.	2	long	SIG, MULTI

<b>Activities</b>	<b>Priority<sup>2</sup></b>	<b>Time frame<sup>3</sup></b>	<b>Responsible entity<sup>4</sup></b>
<b>4.7</b> Encourage the consideration of including shark conservation criteria in existing certification systems for sustainable fisheries.	2	long	SIG, MULTI
<b>4.8</b> Encourage no increase in and minimize the use of plastics and non-degradable materials in fishing operations.	1	long	SIG, MULTI
<b>4.9</b> Encourage the participation of indigenous and local communities (ILC) in the fishery management process.	2	medium	SIG, MULTI
<b>4.10</b> Ensure that the global moratorium on all large-scale pelagic driftnet fishing is fully implemented on the high seas of the world's oceans and seas, including enclosed seas and semi-enclosed seas, in accordance to UN General Assembly Resolution 46/215 <sup>8</sup> .	4	short	SIG, MULTI
<b>5. Bycatch</b>			
<b>5.1</b> To the extent practicable, develop and/or use selective gear, devices, and techniques to ensure that the take of sharks in fisheries is sustainable and appropriately managed and that mortality of non-utilized catches is minimized to the greatest extent possible.	3	medium	SIG, MULTI
<b>5.2</b> Liaise and coordinate with fishing industries, fisheries management organizations, academic institutions and environmental non-governmental organizations (NGOs) to develop and implement incidental capture mitigation mechanisms in national waters and on the high seas, prioritizing work to avoid the capture of protected sharks in accordance with paragraph 13 i of the MoU.	4	short	SIG, MULTI
<b>5.3</b> Promote capacity building for the safe handling and release of sharks.	3	short	SIG, MULTI
<b>6. Cooperation through RFMOs, RSCAPs and FAO</b>			
<b>6.1</b> Encourage implementation of conservation and management measures adopted by RFMOs, RSCAPs, biodiversity-related MEAs and FAO.	5	short	SIG
<b>6.2</b> Develop and implement National Plans of Action for Sharks - NPOA-Sharks - to manage sharks within a State's jurisdictional waters and for the regulation of the activities of States' fleets fishing on the High Seas in accordance with FAO's voluntary International Plan of Action for Sharks - IPOA-Sharks - also taking into account UN General Assembly Resolutions 59/25 <sup>9</sup> and 61/105 <sup>10</sup> .	5	short	SIG, MULTI
<b>6.3</b> Promote practical and enforceable conservation recommendations based on the best available science within relevant RFMOs, RSCAPs, biodiversity-related MEAs and FAO.	4	short, ongoing	SIG
<b>7. Policy, legislation and law enforcement</b>			
<b>7.1 Review of domestic policy</b>			
<b>7.1.1</b> Review domestic policies and laws to address gaps or impediments to the conservation and management of sharks and their habitats.	4	medium	SIG

Activities	Priority <sup>2</sup>	Time frame <sup>3</sup>	Responsible entity <sup>4</sup>
<b>7.2 International trade</b>			
<b>7.2.1</b> Develop and implement strategies that seek to ensure that sharks and shark products entering international trade are harvested and traded in accordance with existing conservation and management measures and applicable regulations including those of CITES and RFMOs.	4	medium	SIG
<b>7.2.2</b> Develop and implement additional measures to ensure legal and sustainable international trade in sharks and shark products.	2	medium	SIG
<b>7.3 Finning<sup>11</sup></b>			
<b>7.3.1</b> Where not already in place, consider enacting legislation or regulations requiring sharks to be stored on board and landed with each fin naturally attached in line with applicable UN General Assembly Resolutions, including 62/177 <sup>12</sup> , and 66/68 <sup>13</sup> and with applicable decisions from IUCN, including motion 4.114 <sup>14</sup> , and relevant RFMOs.	5	short	SIG
<b>7.4 Law enforcement</b>			
<b>7.4.1</b> Implement and enforce existing fisheries conservation and management measures and trade regulations on shark fisheries through effective monitoring, control and surveillance.	4	short	SIG
<b>7.4.2</b> Implement specific measures where gaps are identified and develop capacity in compliance and law enforcement.	3	medium	SIG
<b>7.4.3</b> Cooperate on law enforcement, including through bilateral/multilateral agreements, and intelligence and information sharing.	2	medium	SIG
<b>8. Economic incentives</b>			
<b>8.1</b> Work to reform, phase out and eliminate subsidies resulting in unsustainable use of sharks.	3	medium	SIG, MULTI
<b>8.2</b> Develop opportunities for alternative livelihoods for and together with local communities.	4	short	SIG, MULTI

**Objective C:** Ensuring to the extent practicable the protection of critical habitats and migratory corridors and critical life stages of sharks

Activities	Priority <sup>2</sup>	Time frame <sup>3</sup>	Responsible entity <sup>4</sup>
<b>9. Conservation activities</b>			
9.1 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 RSCAPs where appropriate, or take other measures to remove threats to such areas.	3	long	SIG, MULTI
9.2 Integrate shark and shark habitat protection in environmental impact or risk assessments for marine and coastal development projects.	3	short	SIG, MULTI
9.3 Develop, implement and assess spatial and/or seasonal closures of fishing areas to reduce incidental capture of sharks, particularly to protect nursery grounds as well as aggregation areas for mating and pupping.	2	long	SIG, MULTI
9.4 Promote the protection of the marine environment from land-based and maritime pollution that may adversely affect shark populations.	2	long	SIG, MULTI
9.5 Avoid the mortality of juvenile sharks and fecund females in order to maintain population levels and to ensure population viability.	3	long	SIG, MULTI
<b>10. Legislation</b>			
10.1 Contribute to developing legislation to protect species and their critical habitats and ensure implementation of regulations and policies on national, regional and global scale.	2	medium	SIG, MULTI
<b>11. Economic incentives</b>			
11.1 Develop incentives for adequate protection of areas of critical habitats inside and outside protected areas.	2	Long	SIG

**Objective D:** Increasing public awareness of threats to sharks and their habitats, and enhance public participation in conservation activities

Activities	Priority <sup>2</sup>	Time frame <sup>3</sup>	Responsible entity <sup>4</sup>
<b>12. Awareness raising</b>			
12.1 Increase knowledge of the ecosystem services provided by sharks and knowledge about sharks in their marine environment.	2	ongoing	SIG, MULTI
12.2 Raise public awareness of threats to sharks and their habitats.	2	medium	SIG, MULTI
12.3 Raise public awareness of this Memorandum of Understanding and its objectives.	3	medium	SIG, MULTI
<b>13. Stakeholder participation</b>			
<p>13.1 Encourage the participation of the following stakeholders in the implementation of this Conservation Plan:</p> <ul style="list-style-type: none"> <li>– government institutions;</li> <li>– non-governmental organizations;</li> <li>– indigenous and local communities;</li> <li>– commercial and recreational fishing communities;</li> <li>– the private sector;</li> <li>– scientists;</li> <li>– academia; and</li> <li>– the general public.</li> </ul>	4	short, ongoing	SIG, MULTI
13.2 Develop and apply methods of co-management and/or public participation with local fishery communities in shark fishing.	2	long	SIG, MULTI

**Objective E:** Enhancing national, regional and international cooperation

Activities	Priority <sup>2</sup>	Time frame <sup>3</sup>	Responsible entity <sup>4</sup>
<b>14. Cooperation among governments</b>			
14.1 Identify specific management issues where cooperation among States is required for successful conservation and management.	5	short, ongoing	SIG, MULTI
14.2 Enhance institutional capacities and competencies in shark identification, management and conservation techniques to generate technical support for the implementation of the Memorandum of Understanding at the national, regional and international level.	5	short	SIG, MULTI
14.3 Strengthen existing and develop new mechanisms, where required, for cooperation and effective consultations involving stakeholders in research, management among coastal and fishing states, as well as with relevant IGOs and RFMOs and regional seas conventions, at the sub-regional level.	3	Medium	SIG, MULTI
14.4 Develop networks, including those for information and data, for cooperative management of shared populations, within or across sub-regions, and, where appropriate, formalize cooperative management arrangements.	3	Medium	SIG, MULTI
14.5 Cooperate, where possible, in the establishment of transboundary marine protected areas using ecological rather than political boundaries.	3	Long	SIG
14.6 Conduct collaborative studies and monitoring in pursuing activities described in objective A and B above where appropriate.	3	Medium	SIG, MULTI
<b>15. Cooperation with existing instruments and organizations related to shark conservation</b>			
15.1 Cooperate, as appropriate, with: <ul style="list-style-type: none"> <li>– the fisheries industry;</li> <li>– FAO;</li> <li>– RFMOs;</li> <li>– RSCAPs;</li> <li>– UN entities such as UNCLOS, UNEP and biodiversity-related MEAs (e.g. CBD, CITES and Ramsar);</li> <li>– the World Trade Organization, Interpol and the World Customs Organization; and</li> </ul> IGOs and NGOs engaged with shark conservation, and other international organizations that deal with fisheries.	5	Short, ongoing	SIG, SEC, AC, MULTI

Activities	Priority <sup>2</sup>	Time frame <sup>3</sup>	Responsible entity <sup>4</sup>
<b>16. Accession to international instruments relevant for the conservation and management of sharks</b>			
<b>16.1</b> Ratify or accede to those international instruments relevant to the conservation and management of migratory sharks and their habitats in order to enhance the legal protection of migratory shark species.	3	Medium	SIG
<b>16.2</b> Encourage Signatories that have not already done so to become Parties to: <ul style="list-style-type: none"> <li>– the Convention on Migratory Species (CMS);</li> <li>– global fisheries agreements such as the UN Fish Stocks Agreement (1995), the FAO Compliance Agreement (1993), the FAO Port State Measures Agreement (2009) and other relevant international instruments;</li> <li>– RFMOs that can adopt conservation and management measures in relation to sharks, or comply with such conservation and management measures as cooperating non-members; and</li> </ul> the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).	3	Medium	SIG
<b>16.3</b> Encourage Signatories to implement the FAO Code of Conduct for Responsible Fisheries (1995).	5	Short	SIG

<sup>1</sup> “Sharks” means any of the migratory species, subspecies or populations in the Class Chondrichthyes (which includes sharks, rays, skates and chimaeras) that are included in Annex 1 of this Memorandum of Understanding as defined in paragraph 3 p of the MOU.

<sup>2</sup> Prioritizes activities on a scale of 1-5 with “1” being of lowest and “5” being of highest priority. At MOS 1 the Advisory Committee was requested to develop these priority rankings and to submit its suggestions to MOS 2 for the Signatories’ consideration and approval.

<sup>3</sup> Gives the time frame for starting the implementation of an activity. At MOS 1 the Advisory Committee was requested to develop the content of this column and to submit its suggestions to MOS 2 for the Signatories’ consideration and approval. The Secretariat would suggest distinguishing between short-, medium-, long-term and ongoing activities.

<sup>4</sup> Gives the primary responsibilities or modes of cooperation for implementing the actions included in this Conservation Plan using the following codes: SIG=Signatories, SEC=Secretariat, MULTI=multilateral fora, organizations or arrangements, AC=Sharks MoU Advisory Committee. Given the nature and range of the actions some responsibilities may be shared or undertaken by more than one entity so more than one identifying code may be displayed. At MOS 1 the Advisory Committee was requested to develop the content of this column and to submit its suggestions to MOS 2 for the Signatories’ consideration and approval.

<sup>5</sup> Critical habitats are defined as those habitats which have a key role for the conservation status of a shark population. This includes feeding, hunting, mating, birthing, pupping and aggregation sites as well as corridors between these sites such as migration routes.

<sup>6</sup> Critical seasons are defined as a specific time in a year which has a key role for the conservation status of shark populations. Depending on the species this includes feeding, hunting, mating, birthing, aggregation seasons.

<sup>7</sup> Depending on species, critical life stages can include eggs, neonates, juveniles or adult females based on based best available science

<sup>8</sup> General Assembly Resolution 46/215 on Large-scale pelagic drift-net fishing and its impact on the living marine resources of the world's oceans and seas.

<sup>9</sup> General Assembly Resolution A/RES/59/25 on Sustainable fisheries, including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instruments.

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<sup>10</sup> General Assembly Resolution A/RES/61/105 on Sustainable fisheries, including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instruments.

<sup>11</sup> Finning: Practice of removing any of the fins of a shark (including the tail) while at sea and discarding the remainder of the shark at sea.

<sup>12</sup> General Assembly Resolution A/RES+G12/62/177 on Sustainable fisheries, including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instruments.

<sup>13</sup> A/RES/66/68 - Sustainable fisheries, including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instruments.

<sup>14</sup> IUCN Recommendation 4.114 of IUCN on a global policy against shark finning.