
STATUS OF DEVELOPMENT AND IMPLEMENTATION OF NATIONAL PLANS OF ACTION FOR SEABIRDS AND SHARKS, AND IMPLEMENTATION OF THE FAO GUIDELINES TO REDUCE MARINE TURTLE MORTALITY IN FISHING OPERATIONS

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PURPOSE

To provide the Scientific Committee with the opportunity to update and comment on the current status of development and implementation of National Plans of Action for seabirds and sharks, and the implementation of the FAO guidelines to reduce marine turtle mortality in fishing operations, by each CPC.

BACKGROUND

NPOA-Sharks

In 1999, member countries of the United Nations Food and Agriculture Organisation of the United Nations (FAO) developed the International Plan of Action for the Conservation and Management of Sharks (IPOA–Sharks; FAO 1999). The IPOA–Sharks suggests that members develop a National Plan of Action if their vessels conduct targeted fishing for sharks or if they regularly catch sharks in fisheries targeting other species.

The IPOA–Sharks (FAO 1999) has the objective, “to ensure the conservation and management of sharks and their long-term sustainable use” and prescribes the following aims:

- Ensure that shark catches from directed and non-directed fisheries are sustainable.
- Assess threats to shark populations, determine and protect critical habitats and implement harvesting strategies consistent with the principles of biological sustainability and rational long-term economic use.
- Identify and provide special attention, in particular to vulnerable or threatened shark stocks.
- Improve and develop frameworks for establishing and coordinating effective consultation involving all stakeholders in research, management and educational initiatives within and between States.
- Minimize unutilized incidental catches of sharks.
- Contribute to the protection of biodiversity and ecosystem structure and function.
- Minimize waste and discards from shark catches in accordance with article 7.2.2.(g) of the *Code of Conduct for Responsible Fisheries* (for example, requiring the retention of sharks from which fins are removed).
- Encourage full use of dead sharks.
- Facilitate improved species-specific catch and landings data and monitoring of shark catches.
- Facilitate the identification and reporting of species-specific biological and trade data.

The IPOA Sharks requires each member nation that take shark in their fisheries to prepare a shark assessment report (SAR) with the aim of identifying conservation, management and any other issues associated with the shark catch. If necessary, these issues can then be addressed in a NPOA–Sharks. The SAR is to be updated regularly to report the status of shark stocks as assessments are made and to identify gaps in knowledge. The NPOA–Sharks requires collection and ongoing synthesis of compatible data at the appropriate resolution, including *inter alia* commercial data and data leading to improved species identification and, eventually, abundance indices.

The shark data collected by IOTC CPCs for trans-boundary, highly migratory and high seas shark stocks should be done through international collaboration and data sharing systems and all shark data should be made available to relevant subregional and regional fisheries organisations, and the FAO (IPOA–Sharks 1999).

NPOA-Seabirds

In 1998, member countries of the United Nations Food and Agriculture Organisation of the United Nations (FAO) developed the International Plan of Action for reducing incidental catch of seabirds in longline fisheries (IPOA–Seabirds; FAO 1998). The IPOA–Seabirds suggests that members develop should conduct an assessment of their longline fisheries to determine if a problem exists with respect to incidental catch of seabirds. If a problem exists, States should adopt a National Plan of Action for reducing the incidental catch of seabirds in longline fisheries.

The original purpose of the FAO NPOA-Seabirds was to address concerns about longline fishing. However, recent information has shown significant concerns about seabird bycatch in several other capture fisheries, especially gillnet fishing. The 2009 FAO Best Practice Technical Guidelines (FAO 2009a), developed to assist in the preparation of NPOA-Seabirds, explicitly includes advice on longline, trawl and gillnet fisheries.

FAO Guidelines to Reduce Sea Turtle Mortality in Fishing Operations

At the 26th FAO–COFI Session in March 2005, the *Guidelines to Reduce Sea Turtle Mortality in Fishing Operations* (FAO 2009b), were adopted. Following adoption of ‘the guidelines’, it was recommended that they be implemented by all regional fisheries bodies and management organisations;

Subsequently, the IOTC adopted legally binding text within a Resolution, that all CPCs of the Commission implement ‘the guidelines’ (in Resolution 09/06 which was superseded by Resolution 12/04).

IOTC Resolution 12/04 *on the conservation of marine turtles* states:

- Para. 2. *Contracting Parties and Cooperating Non-Contracting Parties (hereinafter referred to as “CPCs”) will implement, as appropriate, the FAO Guidelines.*
- Para. 5. *CPCs shall report to the Commission in the annual implementation report, in accordance with Article X of the IOTC Agreement, their progress of implementation of the FAO Guidelines and this Resolution.*
- Para. 16. *CPCs are encouraged to support developing countries in their implementation of the FAO Guidelines and this Resolution.*

DISCUSSION

In 2016, “*The SC NOTED the differences in the status of turtles and the lack of clarity regarding whether FAO guidelines are being followed and AGREED that each CPC would update its status and provide supporting text as justification for review by the SC*” (IOTC-2016-SC19-R, para. 86).

The most recent updated table of progress in implementing NPOA-Sharks, NPOA-Seabirds and the FAO Guidelines to Reduce Sea Turtle Mortality in Fishing Operations as reported by CPCs to the Secretariat, is provided in Appendix I.

RECOMMENDATION/S

That the Scientific Committee **NOTE** and **CONSIDER** paper IOTC–2019–SC22–06 which details the current status of development and implementation of National Plans of Action for seabirds and sharks, and the implementation of the FAO guidelines to reduce marine turtle mortality in fishing operations, by each CPC, and provides updates where appropriate.

APPENDIX

Appendix I: 2019: Status of development and implementation of National Plans of Action (NPOA) for seabirds and sharks and implementation of the FAO guidelines to reduce marine turtle mortality in fishing operations.

LITERATURE CITED

- FAO 1998. International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries. United Nations Food and Agriculture Organisation, Rome. <http://www.fao.org/fishery/ipoa-seabirds/en>
- FAO 1999. The international plan of action for the conservation and management of sharks. United Nations Food and Agriculture Organisation, Rome. <http://www.fao.org/fishery/ipoa-sharks/en>
- FAO 2009a. FAO. Fishing operations. 2. Best practices to reduce incidental catch of seabirds in capture fisheries. FAO Technical Guidelines for Responsible Fisheries. No. 1, Suppl. 2. Rome, FAO. 2009. 49p. <http://www.fao.org/docrep/012/i1145e/i1145e00.pdf>
- FAO 2009b. The guidelines to reduce sea turtle mortality in fishing operation. United Nations Food and Agriculture Organisation, Rome. <http://www.fao.org/docrep/012/i0725e/i0725e00.htm>

APPENDIX I

2019: STATUS OF DEVELOPMENT AND IMPLEMENTATION OF NATIONAL PLANS OF ACTION (NPOA) FOR SEABIRDS AND SHARKS AND IMPLEMENTATION OF THE FAO GUIDELINES TO REDUCE MARINE TURTLE MORTALITY IN FISHING OPERATIONS

CPC	Sharks	Date of Implementation	Seabirds	Date of implementation	Marine turtles	Date of implementation	Comments
MEMBERS							
Australia		1 st : April 2004 2 nd : July 2012		1 st : 1998 2 nd : 2006 3 rd : 2014 NPOA in 2018.		2003	<p>Sharks: 2nd NPOA-Sharks (Shark-plan 2) was released in July 2012, along with an operational strategy for implementation: http://www.daff.gov.au/fisheries/environment/sharks/sharkplan2</p> <p>Seabirds: Has implemented a Threat Abatement Plan [TAP] for the Incidental Catch (or Bycatch) of Seabirds During Oceanic Longline Fishing Operations since 1998. The present TAP took effect from 2014 and largely fulfills the role of an NPOA in terms of longline fisheries. http://www.antarctica.gov.au/data/assets/pdf_file/0017/21509/Threat-Abatement-Plan-2014.pdf. Australia developed in 2018, an NPOA to address the potential risk posed to seabirds by other fishing methods, including longline fishing in state and territory waters, which are not covered by the current threat abatement plan.</p> <p>Australia is developing an NPOA to address the potential risk posed to seabirds by other fishing methods, including longline fishing in state and territory waters, which are not covered by the current threat abatement plan.</p> <p>Marine turtles: Australia's current marine turtle bycatch management and mitigation measures fulfill Australia's obligations under the FAO-Sea turtles Guidelines.</p>
Bangladesh							<p>Sharks: No information received by the Secretariat.</p> <p>Seabirds: No information received by the Secretariat.</p> <p>Marine turtles: No information received by the Secretariat.</p>
China		–		–			<p>Sharks: China is currently considering developing an NPOA for sharks.</p> <p>Seabirds: Development has not begun.</p> <p>Marine turtles: No information received by the Secretariat.</p>

-Taiwan,China		1 st : May 2006 2 nd : May 2012		1 st : May 2006 2 nd : Jul 2014		<p>Sharks: No revision currently planned.</p> <p>Seabirds: No revision currently planned.</p> <p>Marine turtles: Wildlife Protection Act introduced in 2013, Protected Wildlife shall not be disturbed, abused, hunted, killed, traded, exhibited, displayed, owned, imported, exported, raised or bred, unless under special circumstances recognized in this or related legislation. <i>Cheloniidae spp.</i>, <i>Caretta Caretta</i>, <i>Chelonia mydas</i>, <i>Eretmochelys imbricate</i>, <i>Lepidochelys olivacea</i> and <i>Dermochelys coriacea</i> are listed into List of Protected Species. Domestic Fisheries Management Regulation on Far Sea Fisheries request all fishing vessels have to carry line cutters ,de-hookers and hauling net in order to facilitate the appropriate handling and prompt release of marine turtles caught or entangled.</p>
Comoros		-		-		<p>Sharks: Shark fishing is prohibited</p> <p>Seabirds: There is no fleet in operation south of 25 degrees south.</p> <p>Marine turtles: According to the Comoros Fisheries Code Article 78, fishing, capture, possession and marketing of turtle and marine mammals or of protected aquatic organisms is strictly forbidden in accordance with national legislation in force and International Conventions applicable to the Comoros.</p>
Eritrea						<p>Sharks: No information received by the Secretariat.</p> <p>Seabirds: No information received by the Secretariat.</p> <p>Marine turtles: No information received by the Secretariat.</p>
European Union		5 Feb 2009		16-Nov-2012	2007	<p>Sharks: Approved on 05-Feb-2009 and it is currently being implemented.</p> <p>Seabirds: The EU adopted on Friday 16 November an Action Plan to address the problem of incidental catches of seabirds in fishing gears.</p> <p>Marine turtles: European Union Council Regulation (EC) No 520/2007 of 7 May 2007 lay down technical measures for the conservation of marine turtles including articles and provisions to reduce marine turtle bycatch. The regulation urges Member States to do their utmost to reduce the impact of fishing on sea turtles, in particular by applying the measures provided for in paragraphs 2, 3 and 4 of the resolution.</p>

France (territories)		5 Feb 2009		2009, 2011		2015	<p>Sharks: Approved on 05-Feb-2009.</p> <p>Seabirds: Implemented in 2009 and 2011. 2009 for Barrau’s petrel and 2011 for Amsterdam albatross.</p> <p>Marine turtles: Implemented in 2015 for the five species of marine turtles that are present in the southwest Indian Ocean.</p>
India							<p>Sharks: In preparation. In June 2015, India published a document entitled “Guidance on National Plan of Action for Sharks in India” which is intended as a guidance to the NPOA-Sharks, and seeks to (1) present an overview of the current status of India’s shark fishery, (2) assess the current management measures and their effectiveness, (3) identify the knowledge gaps that need to be addressed in NPOA-Sharks and (4) suggest a theme-based action plan for NPOA-Sharks.</p> <p>Seabirds: India has determined that seabird interactions are not a problem for their fleets. However, a formal evaluation has not yet taken place which the WPEB and SC require.</p> <p>Marine turtles: No information received by the Secretariat.</p>
Indonesia		–		–			<p>Sharks: Indonesia has established an NPOA for sharks and rays in 2015-2019</p> <p>Seabirds: An NPOA was finalized in 2016</p> <p>Marine turtles: Indonesia has established an NPOA for Marine Turtles but this does not fully conform with FAO guidelines. Indonesia has also been implementing Ministerial Regulation 12/2012 regarding captured fishing business on high seas to reduce turtle bycatch.</p>
Iran, Islamic Republic of		–		–		–	<p>Sharks: Have communicated to all fishing cooperatives the IOTC resolutions on sharks. Have in place a ban on the retention of live sharks.</p> <p>Seabirds: I.R. Iran determined that seabird interactions are not a problem for their fleet as they consist of gillnet vessels only. i.e. no longline vessels.</p> <p>Marine turtles: No information received by the Secretariat.</p>
Japan		03-Dec-2009		03-Dec-2009			<p>Sharks: NPOA–Shark assessment implementation report submitted to COFI in July 2012 (Revised in 2016)</p> <p>Seabirds: NPOA–Seabird implementation report submitted to COFI in July 2012 (Revised in 2016).</p> <p>Marine turtles: All Japanese fleets fully implement Resolution 12/04.</p>

Kenya			n.a.	–		<p>Sharks: A National Plan of Action for sharks is being developed and shall put in place a framework to ensure the conservation and management of sharks and their long-term sustainable use in Kenya. Preliminary meetings have been held and there are plans to finalise the NPOA by 2017.</p> <p>Seabirds: Kenya does not have any flagged longline vessels on its registry. There is no evidence of any gear seabird interaction with the current fishing fleet. Kenya does not therefore consider developing NPOA seabirds as necessary for the time being.</p> <p>Marine turtles: The Kenyan fisheries law prohibits retention and landing of turtles caught incidentally in fishing operations. Public awareness efforts are conducted for artisanal gillnet and artisanal longline fishing fleets on the mitigations measures that enhance marine turtle conservation.</p>
Korea, Republic of		08-Aug-11		2014 – domestic fisheries	–	<p>Sharks: Currently being implemented.</p> <p>Seabirds: This has already been applied in domestic fisheries and there are plans to submit an IPOA-seabirds to FAO by the end of 2018.</p> <p>Marine turtles: All Rep. of Korea vessels fully implement Res 12/04.</p>
Madagascar		–		–		<p>Sharks: Development has not begun.</p> <p>Seabirds: Development has not begun.</p> <p>Note: A fisheries monitoring system is in place in order to ensure compliance by vessels with the IOTC's shark and seabird conservation and management measures.</p> <p>Marine turtles: There is zero capture of marine turtle recorded in logbooks. All longliners use circle hooks. This has been confirmed by onboard observers and port samplers.</p>
Malaysia		2008 2014		–	2008	<p>Sharks: A revised NPOA-sharks was published in 2014.</p> <p>Seabirds: To be developed</p> <p>Marine turtles: A NPOA For Conservation and Management of Sea Turtles had been published in 2008. A revision will be published in 2017.</p>

Maldives, Republic of		Apr 2015	n.a.	–		<p>Sharks: Maldives has developed the NPOA-Sharks with the assistance of Bay of Bengal Large Marine Ecosystem (BoBLME) Project. A stakeholder consultation for the NPOA-Sharks was held in April of 2014. The NPOA-Sharks is in the finalization process and is expected to be published in November of 2014. The longline logbooks ensure the collection of shark bycatch data to genus level. Maldives would be reporting on shark bycatch to the appropriate technical Working Party meetings of IOTC.</p> <p>Seabirds: Article 12 of IPOA states that if a ‘problem exists’ CPCs adopt an NPOA. IOTC Resolution 05/09 suggests CPCs to report on seabirds to the IOTC Scientific Committee if the issue is appropriate’. Maldives considers that seabirds are not an issue in the Maldives fisheries, both in the pole-and-line fishery and in the longline fishery. The new longline fishing regulations has provision on mitigation measures on seabird bycatch.</p> <p>Marine turtles: Longline regulation has provisions to reduce marine turtle bycatch. The regulation urges longline vessels to have dehookers for removal of hook and a line cutter on board, to release the caught marine turtles as prescribed in Resolution 12/04.</p>
Mauritius		2016				<p>Sharks: The NPOA-sharks has been finalised; it focuses on actions needed to exercise influence on foreign fishing through the IOTC process and licence conditions, as well as improving the national legislation and the skills and data handling systems available for managing sharks.</p> <p>Seabirds: Mauritius does not have national vessels operating beyond 25°S. However, fishing companies have been requested to implement all mitigation measures as provided in the IOTC Resolutions. Marine turtles: Marine turtles are protected by the national law. Fishing companies have been requested to carry line cutters and de-hookers in order to facilitate the appropriate handling and prompt release of marine turtles caught or entangled.</p>
Mozambique		–		–		<p>Sharks: Drafting of the NPOA-Shark started in 2016. At this stage, a baseline assessment was performed and the relevant information of coastal, pelagic and demersal shark species along the Mozambican coast was gathered. The ongoing process is expected to be completed by the end of 2018.</p> <p>Seabirds: Mozambique is regularly briefing the Masters of their fishing vessels on the mandatory requirement to report any seabird interaction with longliner fleet.</p> <p>Marine turtles: see above.</p>
Oman, Sultanate of						<p>Sharks: An NPOA-sharks is currently being drafted and is due to be finalized in 2017</p> <p>Seabirds: Not yet initiated.</p> <p>Marine turtles: The law does not allow the catch of sea turtles, and the fishermen are requested to release any hooked or entangled turtle. The longline fleet are required to carry out the line cutters and de-hookers.</p>

Pakistan						<p>Sharks: Sharks are landed with the fins attached and each and every part of the body of sharks are utilised. A stakeholder consultation workshop was conducted from 28-30 March 2016 to review the actions of the draft NPOA - Sharks. The draft NPOA was circulated to the key stakeholders and comments were received with an end-date of 30 June 2016. The final version of the NPOA - Sharks has been submitted to the provincial fisheries departments for endorsement. Meanwhile, the provincial fisheries departments have passed notification on catch, trade and/or retention of sharks including Thresher sharks, hammerheads, oceanic whitetip, whale sharks, guitarfishes, sawfishes, wedgefishes and mobulids.</p> <p>Seabirds: Pakistan considers that seabird interactions are not a problem for the Pakistani fishing fleet as the tuna fishing operations do not include longline vessels.</p> <p>Marine turtles: Pakistan has already framed Regulations regarding the prohibition of catching and retaining marine turtles. As regards to the reduction of marine turtle bycatch by gillnetters; presently Marine Fisheries Department (MFD) in collaboration with International Union for Conservation of Nature (IUCN) Pakistan, is undertaking an assessment. Stakeholder Coordination Committee Meeting was conducted on 10th September 2014. The “Turtle Assessment Report (TAR)” will be finalized by February 2015 and necessary guidelines / action plan will be finalized by June 2015. As per clause-5 (c) of Pakistan Fish Inspection & Quality Control Act, 1997, “Aquatic turtles, tortoises, snakes, mammals including dugongs, dolphins, porpoises and whales etc” are totally forbidden for export and domestic consumption.</p>
Philippines		Sept. 2009		-		<p>Sharks: Under periodic review.</p> <p>Seabirds: Development has not begun. Marine turtles: No information received by the Secretariat.</p>
Seychelles, Republic of		Apr-2007		-		<p>Sharks: Seychelles has developed and is implementing a new NPOA for Sharks for years 2016-2020</p> <p>Seabirds: SFA is collaborating with Birdlife South Africa to develop an NPOA for sea bird. A consultant will be recruited to start development in December 2017</p> <p>Marine turtles: An NPOA for turtles is planned to start in 2018.</p>
Sierra Leone						<p>Sharks: No information received by the Secretariat.</p> <p>Seabirds: No information received by the Secretariat.</p> <p>Marine turtles: No information received by the Secretariat.</p>

Somalia						<p>Sharks: Somalia is currently revising its fisheries legislation (current one being from 1985) and will consider the development of NPOAs as part of this revision process.</p> <p>Seabirds: See above.</p> <p>Marine turtles: The Somali national fisheries law and legislation was reviewed and approved in 2014. This includes Articles on the protection of marine turtles. Further review of the National Law is underway to harmonize this with IOTC Resolutions and is expected to be presented to the new parliament for endorsement in 2017.</p>
South Africa, Republic of		–		2008		<p>Sharks: The NPOA-sharks was first approved and published in 2013. An update of the NPOA was provided in 2018.</p> <p>Seabirds: Published in August 2008 and fully implemented. The NPOA-seabirds has been earmarked for review.</p> <p>Marine turtles: The South African permit conditions for the large pelagic longline fishery prohibits landing of turtles. All interactions with turtles are recorded, by species, within logbooks and in observer reports, including data on release condition. Vessels are required to carry a de-hooker on board and instructions on turtle handling and release in line with the FAO guidelines are included in the South African Large Pelagic permit conditions. All turtle interactions in respective areas of competence are reported to the respective RFMOs. Recent South African led studies on impact of marine debris on turtles have been published in the scientific literature (Ryan et al. 2016). Marine turtle nesting sites in South Africa are protected by coastal MPAs since 1963.</p>
Sri Lanka						<p>Sharks: An NPOA-sharks has been finalized and is currently being implemented.</p> <p>Seabirds: Sri Lanka has determined that seabird interactions are not a problem for their fleets. However a formal review has not yet been provided to the WPEB and SC for approval.</p> <p>Marine turtles: Implementation of the FAO Guideline to Reduce Sea Turtle Mortality in Fishing Operation in 2015 was submitted to IOTC in January 2016. Marine turtles are legally protected in Sri Lanka. Longliner vessels are required to have dehookers for removal of hooks and a line cutter on board, to release the caught marine turtles. Gillnets longer than 2.5 km are now prohibited in domestic legislation. Reporting of bycatch has made legally mandatory and facilitated via logbooks.</p>
Sudan						<p>Sharks: No information received by the Secretariat.</p> <p>Seabirds: No information received by the Secretariat.</p> <p>Marine turtles: No information received by the Secretariat.</p>

Tanzania, United Republic of		–		–		<p>Sharks: Initial discussions have commenced.</p> <p>Seabirds: Initial discussions have commenced.</p> <p>Note: Terms and conditions related to protected sharks and seabirds contained within fishing licenses.</p> <p>Marine turtles: Sea turtles are protected by law. However as there is a national turtle and Dugong conservation committee that oversee all issues related to sea turtles and dugongs. There is no information so far with regards to interaction between sea turtles and long line fishery.</p>
Thailand		23-Nov-2005		–		<p>Sharks: Second NPOA-sharks currently being drafted.</p> <p>Seabirds: Development has not begun.</p> <p>Marine turtles: Not yet implemented.</p>
United Kingdom	n.a.	–	n.a.	–	–	<p>British Indian Ocean Territory (Chagos Archipelago) waters are a Marine Protected Area closed to fishing except recreational fishing in the 3nm territorial waters around Diego Garcia. Separate NPOAs have not been developed within this context.</p> <p>Sharks/Seabirds: For sharks, UK is the 24th signatory to the Convention on Migratory Species 'Memorandum of Understanding on the Conservation of Migratory Sharks' which extends the agreement to UK Overseas Territories including British Indian Ocean Territories; Section 7 (10) (e) of the <i>Fisheries (Conservation and Management) Ordinance</i> refers to recreational fishing and requires sharks to be released alive. No seabirds are caught in the recreational fishery.</p> <p>Marine turtles: No marine turtles are captured in the recreational fishery. A monitoring programme is taking place to assess the marine turtle population in UK (OT).</p>
Yemen						<p>Sharks: No information received by the Secretariat.</p> <p>Seabirds: No information received by the Secretariat.</p> <p>Marine turtles: No information received by the Secretariat.</p>

COOPERATING NON-CONTRACTING PARTIES						
Liberia						<p>Sharks: No information received by the Secretariat.</p> <p>Seabirds: No information received by the Secretariat.</p> <p>Marine turtles: No information received by the Secretariat.</p>
Senegal		25-Sept-2006		–		<p>Sharks: The Sub-Regional Fisheries Commission supported the development of a NPOA-sharks for Senegal in 2005. Other activities conducted include the organization of consultations with industry, the investigation of shark biology and social -economics of shark fisheries). The NPOA is currently being revised. Consideration is being made to the inclusion of minimum mesh size, minimum shark size, and a ban on shark finning.</p> <p>Seabirds: The need for a NPOA-seabirds has not yet been assessed.</p> <p>Marine turtles: No information received by the Secretariat.</p>

Colour key	
Completed	
Drafting being finalised	
Drafting commenced	
Not begun	