

**RESOLUTION 23/07**  
**ON REDUCING THE INCIDENTAL BYCATCH OF SEABIRDS IN LONGLINE FISHERIES**

**The Indian Ocean Tuna Commission (IOTC),**

RECALLING Resolution 12/06 *On reducing incidental bycatch of seabirds in longline fisheries*;

RECOGNIZING the need to strengthen mechanisms to protect seabirds in the Indian Ocean and to harmonise such mechanisms across tuna RFMOs;

NOTING the adoption of optional hook-shielding measures by the WCPFC in 2018;

TAKING INTO ACCOUNT the United Nations Food and Agriculture Organization (FAO) International Plan of Action for Reducing the Incidental Catch of Seabirds in Longline Fisheries (IPOA-Seabirds);

NOTING the previous recommendations of the IOTC Scientific Committee, in agreement with the IOTC Working Party on Ecosystems and Bycatch (WPEB) on measures to mitigate seabird interactions as outlined in their 2007, 2009, 2011, 2016 and 2022 Reports;

RECOGNIZING that in 2022 the Scientific Committee recommended that the Commission consider including hook-shielding devices as an additional option for seabird bycatch mitigation measures in Resolution 12/06;

ACKNOWLEDGING that to date some IOTC Contracting Parties and Cooperating Non-Contracting Parties (hereinafter referred to as “CPCs”) have identified the need for, and have either completed or are near finalising, their National Plan of Action on Seabirds;

RECOGNIZING the global concern that some species of seabirds, notably albatrosses and petrels, are threatened with extinction;

NOTING that the Agreement on the Conservation of Albatrosses and Petrels, which opened for signatures at Canberra on 19 June 2001, has entered into force and continues to update best-practice mitigation advice;

NOTING that the ultimate aim of the IOTC and CPCs is to achieve a zero bycatch of seabirds for fisheries under the purview of the IOTC, especially threatened albatrosses and petrel species in longline fisheries;

BEARING in mind studies undertaken in other longline tuna fisheries, demonstrating the economic benefit of measures to mitigate incidental bycatch of seabirds, by significantly increasing catches of targeted species;

ADOPTS, in accordance with the provisions of Article IX, paragraph 1 of the IOTC Agreement, the following:

1. CPCs shall record data on seabird incidental bycatch by species, notably through scientific observers in accordance with Resolution 22/04 and report these annually. Observers shall to the extent possible take photographs of seabirds caught by fishing vessels and transmit them to national seabird experts or to the IOTC Secretariat, for confirmation of identification.
2. CPCs that have not fully implemented the provisions of the IOTC Regional Observer Scheme outlined in paragraph 3 of Resolution 22/04 shall report seabird incidental bycatch through logbooks, including details of species, if possible.

3. CPCs shall provide to the Commission as part of their annual reports, information on how they are implementing this measure.
4. CPCs shall seek to achieve reductions in levels of seabird bycatch across all fishing areas, seasons, and fisheries through the use of effective mitigation measures, while giving due consideration to the safety of crew members and the practicability of mitigation measures.
5. In the area south of 25 degrees South latitude, CPCs shall ensure that all longline vessels use at least two of the three mitigation measures in Table 1 or, alternatively, use hook-shielding devices (as described in Table 2) as a stand-alone measure. These measures should also be considered for implementation in other areas, as appropriate, consistent with scientific advice.
6. Mitigation measures used pursuant to paragraph 5 shall conform to the minimum technical standards for these measures, as shown in Table 1 and Table 2.
7. The design and deployment for bird scaring lines should also meet the additional specifications provided in Annex I.
8. The Scientific Committee will continue to review and make recommendations to the Commission on advancements and best practice in seabird bycatch mitigation as they become available. This will include, by 2024 at the latest, developing advice to the Commission on best practice branch line weighting.
9. CPCs who elect to use hook-shielding devices as a mitigation method are encouraged to share their experience with other CPCs, as appropriate, through the Working Party on Ecosystems and Bycatch.
10. The use of hook-shielding devices must be consistent with all other IOTC Resolutions.
11. This Resolution shall enter into force on 1 July 2024.
12. As of 1 July 2024, the Resolution 12/06 *On reducing incidental bycatch of seabirds in longline fisheries* is superseded by this Resolution.

**Table 1. Mitigation measures**

<b>Mitigation</b>	<b>Description</b>	<b>Specification</b>
Night setting with minimum deck lighting	No setting between nautical dawn and before nautical dusk.  Deck lighting to be kept to a minimum.	Nautical dusk and nautical dawn are defined as set out in the Nautical Almanac tables for relevant latitude, local time and date.  Minimum deck lighting should not breach minimum standards for safety and navigation.
Bird-scaring lines (Tori lines)	Bird-scaring lines shall be deployed during the entire longline setting to deter birds from approaching the branch line.	<p>For vessels greater than or equal to 35 m:</p> <ul style="list-style-type: none"> <li>• Deploy at least 1 bird-scaring line. Where practical, vessels are encouraged to use a second tori pole and bird scaring line at times of high bird abundance or activity; both tori lines should be deployed simultaneously, one on each side of the line being set.</li> <li>• Aerial extent of bird-scaring lines must be greater than or equal to 100 m.</li> <li>• Long streamers of sufficient length to reach the sea surface in calm conditions must be used.</li> <li>• Long streamers must be at intervals of no more than 5m.</li> </ul> <p>For vessels less than 35 m:</p> <ul style="list-style-type: none"> <li>• Deploy at least 1 bird-scaring line.</li> <li>• Aerial extent must be greater than or equal to 75 m.</li> <li>• Long and/or short (but greater than 1 m in length) streamers must be used and placed at intervals as follows: <ul style="list-style-type: none"> <li>○ Short: intervals of no more than 2 m.</li> <li>○ Long: intervals of no more than 5 m for the first 55 m of bird scaring line.</li> </ul> </li> </ul> <p>Additional design and deployment guidelines for bird-scaring lines are provided in Annex I of this Resolution.</p>
Line weighting	Line weights to be deployed on the snood prior to setting.	<p>Greater than a total of 45 g attached within 1 m of the hook or;</p> <p>Greater than a total of 60 g attached within 3.5 m of the hook or;</p> <p>Greater than a total of 98 g weight attached within 4 m of the hook.</p>

**Table 2.** Hook-shielding devices

<b>Mitigation</b>	<b>Description</b>	<b>Specification</b>
Hook-shielding devices <sup>1</sup>	Hook-shielding devices, listed by the Parties to the Agreement on the Conservation of Albatross and Petrels as Best Practice Advice, that encase the point and barb of baited hooks to prevent seabird bycatch during setting shall be used.	<p>Hook-shielding devices that comply with the following performance characteristics. Devices must:</p> <ul style="list-style-type: none"> <li>• encase the point and barb of the hook until it reaches a depth of at least 10 m or has been immersed for at least 10 minutes;</li> <li>• meet current minimum standards for branch line weighting, as follows: greater than a total of 45 g attached within 1 m of the hook or; greater than a total of 60 g attached within 3.5 m of the hook or; greater than a total of 98 g weight attached within 4 m of the hook.</li> <li>• be designed to be retained on the fishing gear rather than lost.</li> </ul>

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<sup>1</sup> Hook-shielding devices can be used as a stand-alone measure, subject to meeting line weighting requirements.

## ANNEX I

### SUPPLEMENTAL GUIDELINES FOR DESIGN AND DEPLOYMENT OF TORI LINES

#### **Preamble**

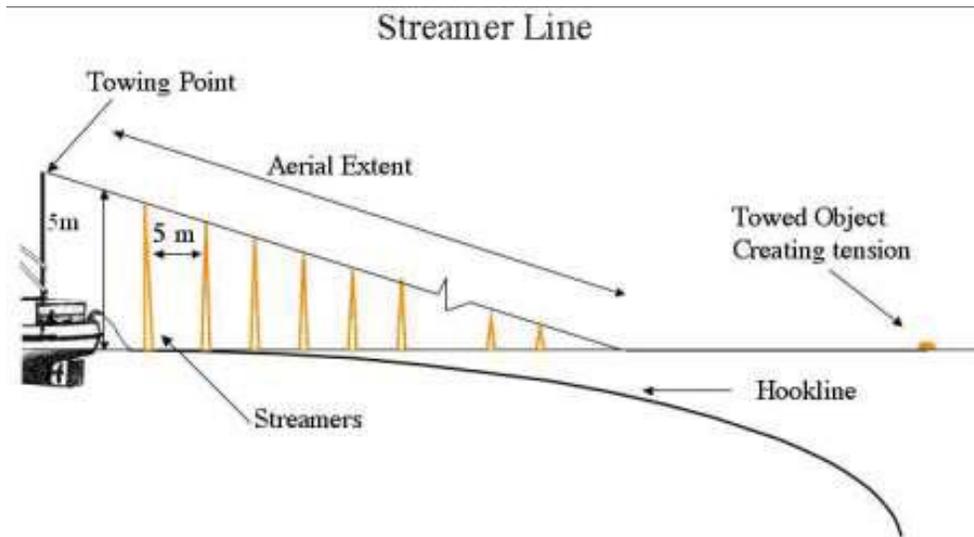
Minimum technical standards for deployment of tori lines are found in Table 1 of this Resolution, and are not repeated here. These supplemental guidelines are designed to assist in the preparation and implementation of tori line regulations for longline vessels. While these guidelines are relatively explicit, improvement in tori line effectiveness through experimentation is encouraged, within the requirements of Table 1 in the Resolution. The guidelines take into account environmental and operational variables such as weather conditions, setting speed and ship size, all of which influence tori line performance and design in protecting baits from birds. Tori line design and use may change to take account of these variables provided that line performance is not compromised. On-going improvement in tori line design is envisaged and consequently review of these guidelines should be undertaken in the future.

#### **Tori line design** (see Figure 1)

1. An appropriate towed device on the section of the tori line in the water can improve the aerial extension.
2. The above water section of the line should be sufficiently light that its movement is unpredictable to avoid habituation by birds and sufficiently heavy to avoid deflection of the line by wind.
3. The line is best attached to the vessel with a robust barrel swivel to reduce tangling of the line.
4. The streamers should be made of material that is conspicuous and produces an unpredictable lively action (e.g. strong fine line sheathed in red polyurethane tubing) suspended from a robust three-way swivel (that again reduces tangles) attached to the tori line.
5. Each streamer should consist of two or more strands.
6. Each streamer pair should be detachable by means of a clip so that line stowage is more efficient.

#### **Deployment of tori lines**

1. The line should be suspended from a pole affixed to the vessel. The tori pole should be set as high as possible so that the line protects bait a good distance astern of the vessel and will not tangle with fishing gear. Greater pole height provides greater bait protection. For example, a height of around 7 m above the water line can give about 100 m of bait protection.
2. If vessels use only one tori line it should be set to windward of sinking baits. If baited hooks are set outboard of the wake, the streamer line attachment point to the vessel should be positioned several meters outboard of the side of the vessel that baits are deployed. If vessels use two tori lines, baited hooks should be deployed within the area bounded by the two tori lines.
3. Deployment of multiple tori lines is encouraged to provide even greater protection of baits from birds.
4. Because there is the potential for line breakage and tangling, spare tori lines should be carried onboard to replace damaged lines and to ensure fishing operations can continue uninterrupted. Breakaways can be incorporated into the tori line to minimize safety and operational problems should a longline float foul or tangle with the in-water extent of a streamer line.
5. When fishers use a bait casting machine (BCM), they must ensure coordination of tori line and machine by: i) ensuring the BCM throws directly under the tori line protection, and ii) when using a BCM (or multiple BCMs) that allows throwing to both port and starboard, two tori lines should be used.
6. When casting branchline by hand, fishers should ensure that the baited hooks and coiled branchline sections are cast under the tori line protection, avoiding the propeller turbulence which may slow the sink rate.
7. Fishers are encouraged to install manual, electric or hydraulic winches to improve ease of deployment and retrieval of tori lines.



**Figure 1.** Diagram of Bird Scaring Streamer Line.