

## **Revised roadmap for the ICCAT MSE processes adopted by the Commission in 2024**

This schedule is intended to guide the development of harvest strategies for priority stocks identified in *Recommendation by ICCAT on the development of Harvest Control Rules and of Management Strategy Evaluation* (Rec. 15-07) (North Atlantic albacore, North Atlantic swordfish, eastern and western Atlantic bluefin tuna, and tropical tunas). It builds on the initial roadmap that was appended to the 2016 Annual Meeting report, which has been revised regularly based on the SCRS advice and Commission decisions. It provides an aspirational timeline that is subject to revision and should be considered in conjunction with the stock assessment schedule that is revised annually by the SCRS. Due to the amount of cross-disciplinary dialogue that may be needed, intersessional Panel meetings and/or meetings of the Standing Working Group on Dialogue between Fisheries Scientists and Managers (SWGSM) will be necessary. However, the exact timeline for delivery is contingent on funding, prioritization, and other work of the Commission and SCRS. Tasks are divided into four categories: Commission intersessionally, SCRS development, SCRS implementation, and Commission at Annual Meeting.

		<i>Northern Albacore</i>	<i>Bluefin Tuna</i>	<i>Northern Swordfish</i>	<i>Tropical Tunas (BET, YFT, Eastern SKJ)</i>	<i>Western Skipjack</i>	<i>South Atlantic Albacore</i>	<i>Blue Shark</i>
2025	Commission intersessionally			<p>COMM (PA4) to develop an exceptional circumstances protocol through an iterative consultation process with the SCRS that provides, inter alia, guidance on a range of appropriate management responses should exceptional circumstances be found to occur</p>	<p>COMM (PA1) to provide guidance to the SCRS on how to handle: trade-offs in species yields; changes in effort over time; changes in gear use over time; changes in closure periods over time; and, variable allocations over time (and therefore changes in geospatial effort and gear type over time).</p> <p>COMM (PA1) to meet intersessionally, with SCRS participation, to:</p> <ul style="list-style-type: none"> <li>- discuss CMPs, operational management objectives, and performance indicators</li> <li>- refine CMP(s)</li> <li>- recommend final operational management objectives and identify performance indicators</li> </ul> <p>Ambassadors' meetings to be held.</p>	Ambassadors' meeting to be held.		

		<i>Northern Albacore</i>	<i>Bluefin Tuna</i>	<i>Northern Swordfish</i>	<i>Tropical Tunas (BET, YFT, Eastern SKJ)</i>	<i>Western Skipjack</i>	<i>South Atlantic Albacore</i>	<i>Blue Shark</i>
<b>2025</b>	SCRS development	<p>SCRS to finalize the grid of reference and robustness OMs based on Stock Synthesis as part of a new MSE.</p> <p>SCRS to finalize the improvement of the Observation Error Model.</p> <p>SCRS to test the adopted MP on the new reference uncertainty grid.</p> <p>SCRS to test alternative candidate MPs (e.g., based on JABBA model, or empirical).</p>		<p>SCRS to provide final advice to COMM (PA4) on criteria for determining exceptional circumstances and inclusion in the exceptional circumstances protocol to be developed by Panel 4 in consultation with the SCRS.</p> <p>The SCRS to continue to develop robustness scenarios, as requested by COMM.</p>	SCRS to finalize MSE results, incorporating feedback from COMM through PA1.	<p>SCRS to finalize MSE results, incorporating feedback from COMM through PA1.</p> <p>SCRS to develop climate change scenarios to test robustness of MPs.</p>	<p>Secretariat to compile and share necessary catch data for Stock Assessment by April per the workplan.</p> <p>SCRS to establish an ALB-S MSE Technical Team.</p>	

		<i>Northern Albacore</i>	<i>Bluefin Tuna</i>	<i>Northern Swordfish</i>	<i>Tropical Tunas (BET, YFT, Eastern SKJ)</i>	<i>Western Skipjack</i>	<i>South Atlantic Albacore</i>	<i>Blue Shark</i>
<b>2025</b>	SCRS implementation	SCRS to evaluate existence of exceptional circumstances in accordance with the EC protocol.	SCRS to evaluate existence of exceptional circumstances in accordance with the EC protocol.  SCRS to advise COMM of the TAC for 2026-2028 that results from the MP.	Should a final EC protocol be ready well in advance of the SCRS annual meeting, SCRS to evaluate existence of exceptional circumstances in accordance with that protocol.				

		<i>Northern Albacore</i>	<i>Bluefin Tuna</i>	<i>Northern Swordfish</i>	<i>Tropical Tunas (BET, YFT, Eastern SKJ)</i>	<i>Western Skipjack</i>	<i>South Atlantic Albacore</i>	<i>Blue Shark</i>
2025	Commission at Annual Meeting		COMM to continue use of the MP to set TAC on the predetermined timescale defined in the MP setting.	COMM to adopt exceptional circumstances protocol.		COMM to consider final evaluation of CMPs, and adopt an MP, including the TACs, at the Annual Meeting.	COMM (PA3) will be informed and provide feedback on SCRS work.	<p>The SCRS shall inform the Commission, by 2025 on the feasibility, cost and options for developing an MSE framework. In this work, the SCRS should discuss and list the main sources of uncertainty, from the last assessment, that should be considered in the MSE.</p> <p>The Commission shall discuss operational management objectives, and performance indicators for CMPs.</p>

2026 and beyond*	Commission intersessionally	PA2 will provide guidance to SCRS on updated management objectives and performance statistics.				In 2026, SCRS to develop an exceptional circumstances protocol through an iterative consultation process that provides, inter alia, guidance on a range of appropriate management responses should exceptional circumstances be found to occur.	(2027): COMM (PA3) at an intersessional Meeting to review draft MSE results and narrow down CMPs.	<p>(2026): SCRS to finalize the uncertainty grid and OM conditioning. Discussion and testing what variables should be in the reference grid and which should be considered as robustness tests.</p> <p>(2026-2027): SCRS to work on CMP development no later than 2026. A selection of CMPs with the best performance, as per COMM management objectives, should be selected by 2027.</p> <p>(2026-2027): COMM (PA4) to meet intersessionally, with SCRS participation, to:</p> <ul style="list-style-type: none"> <li>- discuss CMPs, operational management objectives, and</li> </ul>
------------------	-----------------------------	--	--	--	--	---	---	--

		<i>Northern Albacore</i>	<i>Bluefin Tuna</i>	<i>Northern Swordfish</i>	<i>Tropical Tunas (BET, YFT, Eastern SKJ)</i>	<i>Western Skipjack</i>	<i>South Atlantic Albacore</i>	<i>Blue Shark</i>
<b>2026 and beyond*</b>								<p>performance indicators;</p> <p>- refine CMPs;</p> <p>- recommend final operational management objectives and identify performance indicators.</p> <p>Ambassadors' meetings to be held.</p>

2026 and beyond*	SCRS development	<p>SCRS to test alternative candidate MPs (e.g., based on JABBA model, or empirical).</p> <p>SCRS to complete new MSE in 2026.</p>	SCRS to review the MP in 2027-2028 as outlined in Rec. 22-09.	The SCRS to review the MP on a pre-determined schedule, as defined by COMM.	SCRS to provide final advice to COMM (PA1) on criteria for determining exceptional circumstances and inclusion in the exceptional circumstances protocol to be developed by Panel 1 in consultation with the SCRS.	In 2026, SCRS to provide final advice to COMM (PA1) on criteria for determining exceptional circumstances and inclusion in the exceptional circumstances protocol to be developed by Panel 1 in consultation with the SCRS.	<p>SCRS to conduct a stock assessment using Stock Synthesis 3.</p> <p>SCRS to agree on:</p> <ul style="list-style-type: none"> <li>- Major sources of uncertainty to be considered in the MSE;</li> <li>- MSE framework structure;</li> <li>- Reference and robustness set of operating models;</li> </ul> <p>SCRS to incorporate feedback from COMM/PA3.</p> <p>(2027): SCRS to condition operating models</p> <p>SCRS to start testing CMPs</p> <p>SCRS to incorporate feedback from COMM/PA3.</p>	
------------------	------------------	--	---	---	--	---	--	--



		<i>Northern Albacore</i>	<i>Bluefin Tuna</i>	<i>Northern Swordfish</i>	<i>Tropical Tunas (BET, YFT, Eastern SKJ)</i>	<i>Western Skipjack</i>	<i>South Atlantic Albacore</i>	<i>Blue Shark</i>
<b>2026 and beyond*</b>							<p>(2028): SCRS to finalize testing CMPs.</p> <p>SCRS to communicate results to PA3.</p> <p>(2029 and beyond) SCRS to engage with PA3 on discussion on path for final MP selection SCRS to develop an exceptional circumstances protocol (ECP).</p>	

		<i>Northern Albacore</i>	<i>Bluefin Tuna</i>	<i>Northern Swordfish</i>	<i>Tropical Tunas (BET, YFT, Eastern SKJ)</i>	<i>Western Skipjack</i>	<i>South Atlantic Albacore</i>	<i>Blue Shark</i>
<b>2026 and beyond*</b>	SCRS implementation	<p>SCRS to evaluate existence of exceptional circumstances in accordance with the EC protocol.</p> <p>SCRS to conduct periodic assessments to ensure that the conditions considered in MP testing are still applicable to the stock.</p>	<p>SCRS to evaluate existence of exceptional circumstances in accordance with the EC protocol.</p> <p>SCRS to conduct periodic assessments to ensure that the conditions considered in MP testing are still applicable to the stock.</p>	<p>SCRS to evaluate existence of exceptional circumstances in accordance with the EC protocol.</p> <p>SCRS to conduct periodic assessments to ensure that the conditions considered in MP testing are still applicable to the stock.</p>	<p>SCRS to develop an exceptional circumstances protocol through an iterative consultation process that provides, inter alia, guidance on range of appropriate management responses should exceptional circumstances be found to occur.</p> <p>(2027): SCRS to evaluate existence of exceptional circumstances in accordance with the EC protocol.</p> <p>SCRS to conduct periodic assessments to ensure that the conditions considered in MP testing are still applicable to the stocks.</p>	<p>SCRS to evaluate the existence of exceptional circumstances in accordance with the EC protocol.</p> <p>SCRS to conduct periodic assessments to ensure that the conditions considered in MP testing are still applicable to the stock.</p>	(2029 and beyond): SCRS to evaluate application of exceptional circumstances, to the extent possible.	

		<i>Northern Albacore</i>	<i>Bluefin Tuna</i>	<i>Northern Swordfish</i>	<i>Tropical Tunas (BET, YFT, Eastern SKJ)</i>	<i>Western Skipjack</i>	<i>South Atlantic Albacore</i>	<i>Blue Shark</i>
<b>2026 and beyond*</b>	Commission at Annual Meeting	<p>COMM to continue use of the MP to set management measures on the predetermined timescale defined in the MP setting.</p> <p>Per <a href="#">Rec. 21-04</a>, COMM to consider adoption of new MP in 2026.</p>	<p>COMM to continue use of the MP to set TAC on the predetermined timescale defined in the MP setting.</p> <p>COMM to review the MP in 2028.</p>	<p>COMM to continue use of the MP to set TAC on the predetermined timescale for MP setting.</p>	<p>COMM to adopt an MP, including the TACs.</p> <p>COMM to adopt exceptional circumstances protocol in 2027 as a new Annex in MP.</p> <p>COMM to continue use of the MP to set TACs on the predetermined timescale for MP setting.</p>	<p>COMM to continue use of the MP to set TAC on the predetermined timescale for MP setting.</p>	<p>COMM (PA3) will be informed and provide feedback on SCRS work.</p> <p>(2027): COMM (PA3) to evaluate list of CMPs.</p> <p>(2028): Provide advice to SCRS on any final changes.</p> <p>(2029 and beyond): COMM (PA3) to adopt MP and ECP as a new Annex in MP.</p>	<p>(Nov 2027 or 2028): COMM to adopt an MP.</p> <p>(2028): SCRS and COMM to finalize the EC protocol, to be adopted from this point forward.</p>

\* Assumes that the workplan is accomplished as described.

#### LIST OF ACRONYMS:

**BET** = Bigeye tuna  
**BFT** = Bluefin tuna  
**COMM**=Commission  
**CMP** = Candidate Management Procedure  
**HCR** = Harvest Control Rule  
**MP** = Management Procedure  
**MSE** = Management Strategy Evaluation  
**OM** = Operating Model  
**SCRS** = Standing Committee on Research and Statistics  
**TAC** = Total Allowable Catch  
**TRO** = Tropical tunas