

**INTER-AMERICAN TROPICAL TUNA COMMISSION**

**AD HOC WORKING GROUP TO STRENGTHEN THE DIALOGUE AMONG  
SCIENTISTS, MANAGERS AND OTHER STAKEHOLDERS ON MANAGEMENT  
STRATEGY EVALUATION (MSE DIALOGUE WORKING GROUP, MSEDWG)**

**3<sup>RD</sup> MEETING**

*(by videoconference)*

20-21 April 2026

**CO-CHAIRS' REPORT OF THE 3<sup>RD</sup> MEETING OF  
THE AD HOC MSE DIALOGUE WORKING GROUP (MSEDWG-03)**

**1. Opening of the meeting**

The Director of the Commission, Dr. Arnulfo Franco, opened the meeting at 2:04 pm Pacific Standard Time (PST), welcomed the online participants, and then passed the meeting to the Co-Chairs, Dr. Juan-Carlos Quiroz (Ecuador) and Ms. Shana Miller (USA). The participant list is included in **Annex 1**.

The Co-Chairs acknowledged the difficulty in scheduling the MSEDWG-03, which was originally planned for early February 2026, with multiple date changes due to meeting conflicts. However, they recognized the considerable progress made in the interim by the Secretariat's Scientific Staff on the management strategy evaluation (MSE) for bigeye tuna as well as on the MSEDWG communications plan, thanking the members who submitted comments.

**2. Adoption of the agenda**

The participants agreed to the proposed agenda with the addition of a high-level, cursory review of the management objectives recorded in the MSEDWG-02 report. The final agenda can be found in **Annex 2**.

**3. Review updated draft MSEDWG communications plan**

The Co-Chairs presented the revised MSEDWG communications plan they had updated based on feedback from CPCs ([MSEWG-03b-03](#)). Guatemala suggested a change to the acronym of the working group from MSEWG to MSEDWG to reflect that this is a "Dialogue" working group rather than a technical MSE group. Participants went paragraph by paragraph through the plan, clarifying text in multiple areas, including to reflect an intervention from Panama that the document should not be limited to bigeye tuna but should instead include other additional stocks managed by IATTC. The final two of the plan's seven objectives were deleted as they were considered outside the scope of a communications plan.

One of the deleted objectives tasked the MSEDWG with reporting both to the Scientific Advisory Committee (SAC) and the Commission's annual meeting. Instead, participants agreed that the SAC at its June 2026 meeting should make a formal recommendation to the Commission to include a standing agenda item for the MSEDWG in its annual meetings. This will prevent unintended delays in sharing MSEDWG discussions if the MSEDWG meets between the annual SAC and Commission meetings.

The plan is included in **Annex 3** and will be considered guidance on the group's structure and operations and should be considered a living document that can be revised at any point. A MSEDWG webpage will be added to the IATTC website to feature this and other relevant content.

**4. Review and provide feedback on preliminary results of the Bigeye Tuna MSE**

IATTC Staff Scientist Dr. Haikun Xu presented the updated results of the bigeye tuna MSE ([MSEWG-03 Pres](#)), sharing performance results of eight candidate harvest control rules (HCRs). The presentation summarized the draft MSE report that will be presented at the SAC in June ([SAC-17-05](#)). The Group

commended Dr. Xu and the Secretariat for the considerable progress made on the MSE over the past several months. There were a number of questions from participants, which were clarified by the Secretariat scientists:

- SBR stands for “spawning biomass ratio,” so %SBR indicates the percentage of the stock that remains relative to the unfished biomass (sometimes referred to as %B<sub>0</sub>).
- The 8 HCRs all currently include a stability restriction that limits changes in the purse seine closure to  $\pm 10$  days when the stock is bigger than  $S_{\text{control}}$  and +20 days/-10 days when the stock is smaller than  $S_{\text{control}}$ . The Staff explained that this is to allow faster response to depletion while preserving stability. Preliminary testing indicated that without a cap, it led to very long closures with abrupt changes to short closures, and  $\pm 10$  days was not flexible enough to respond to stock declines at low levels.
- Fleet capacity is accounted for within the MSE since implementation error (i.e., a fishing mortality higher or lower than the intended level) is one of the uncertainties. However, that implementation error is assumed to be random, so if there is a directional change in capacity (i.e., more permanent increase in capacity), the MSE does not account for that. Scientific staff also recalled that closure days from the HCR would be adjusted based on any changes in fleet capacity.
- The Staff stressed that the HCRs are meant to be followed as pre-agreed. If the Commission decided to eliminate the closure altogether, that would violate the HCR, which limits the reduction in closure days from one management cycle to the next. This would also cause more variability in closure days, and risk breaching the limit reference point and leaving the Kobe green quadrant. However, the Staff did not test a “no closure” scenario so cannot quantify the risk at this point. Because of the  $\pm 10$ -day stability restriction, it would take multiple management cycles for the closure to be eliminated.
- The Staff clarified that the current suite of performance indicators is based on management objective discussions to date at IATTC as well as practice at other RFMOs. They can still be revised.
- A member noted that all the HCR results show an initial increase in SBR from the current dynamic SBR of 30%, followed by a plateau or slight decline. The Staff clarified that the increase is due to a likely high recruitment event in 2023 associated with a strong El Niño plus the decline in bigeye mortality under the Individual Vessel Threshold (IVT) program, which leads to continued stock growth in the first management cycle. The F30% HCRs are the ones that show slight decline since they are targeting a lower stock biomass; however, even those HCRs are above 30%SBR at the end of the 21-year projection period since the stability restriction prevents the closure from reaching equilibrium before the end of the projection.
- Participants observed that the Kobe plots use MSY-based reference points, while the other performance indicators are in terms of SBR. For comparison, the  $B_{\text{MSY}}$  proxy for bigeye is around 20-22%SBR. The Staff remarked that each of the MSE’s 36 operating models (OMs) have a unique estimate of  $B_{\text{MSY}}$ , so the Kobe plots show each OM’s value relative to its own  $B_{\text{MSY}}$  estimate.
- Noting that the MP based on this MSE will manage a dynamic fishery, it was suggested to review the MP once every 3 years after it is implemented.

Participants asked the Co-Chairs to develop a summary document about reference points used in the MSE, as well as the scope of the MPs proposed by the scientific staff, which could be posted on the MSEDWG webpage, to enhance understanding of the process.

The Group recalled that this MSE is for bigeye tuna only. The IATTC science workplan envisions finalizing a yellowfin MSE in 2028 and a skipjack MSE in 2030, at which time analyses will be conducted to evaluate interactions among the three MPs. HCR design for the other stocks may be different than that presented here for bigeye tuna.

## 5. cursory review of management objectives for bigeye tuna

For information purposes only, the Group reviewed a slide containing a set of strawman management

objectives for bigeye from the [report of the MSEDWG-02](#). Participants expressed a desire to discuss the objectives in depth at MSEDWG-04, noting that it will be important to understand the implications of each. A participant cautioned that it will be difficult to finalize the objectives for bigeye before objectives are agreed for all three tropical tuna stocks. Review the draft timeline and workplan for completion of the bigeye tuna MSE from May 2025 informal WGMSE

## **6. Next Steps**

The Co-Chairs presented a draft timeline and workplan, which was discussed and revised by participants. It is included in **Annex 4** and should be considered adaptive, with updates to be made as appropriate. Three intersessional meetings were approved: MSEDWG-04 to be held in a hybrid format June 5, 2026, WGMSE-05 to be held via videoconference July 21-22, 2026, and MSEDWG-06 to be held in a hybrid format August 29, 2026. The Secretariat will add the meetings to the intersessional calendar.

The Staff will finalize the MSE results document for presentation to the SAC. Recognizing the complexity of the MSE process and interpretation of results, the Secretariat scientists generously offered to hold informal consultations with any interested parties who would like to learn more.

## **7. Other Business**

No topics were discussed under other business.

## **8. Adjournment**

The meeting was closed at approximately 5:05 pm PST, with the understanding that the Co-Chairs would draft and circulate a meeting report within the next month.

## Annex 1

### List of participants

Name	Organization
Lucy Bulkeley	NOAA
Raul Edgardo Cortez Cota	AUTORIDAD SALVADOREÑA DE ECONOMIA AZUL
Diana Marcela Alvarez Rojas	AUTORIDAD NACIONAL DE ACUICULTURA Y PESCA - AUNAP
Charles Coc	Belize High Seas Fisheries Unit
Melanie Hutchinson	IATTC
Arlis Salas	Ministerio del Poder Popular de Pesca y Acuicultura
Elizabeth Pereira	Ministerio del Poder Popular de Pesca y Acuicultura
Arvin Alejandro Rodriguez Rosales	Ministerio del Poder Popular de Pesca y Acuicultura
Renaldy Barnuty Navarro	Instituto Nicaragüense de Pesca y Acuicultura INPESCA
Soomin Kim	Korea Overseas Fisheries Cooperation Center
Gorka Merino	AZII
Miguel Herrera	OPAGAC-AGAC
Alvin Delgado Martinez	PROGRAMA NACIONAL DE OBSERVADORES DE VENEZUELA/FUNDATUN
Yuji UOZUMI	Japan Tuna Fisheries Co-operative Association
Fuyuki HAYASHI	Japan Tuna Fisheries Co-operative Association
Reiko OHASHI	Japan Tuna Fisheries Co-operative Association
Luciano Delgado	IDELMAR S.A
Wilson Enrique Angarita Reyes	AUNAP
Pedro Santistevan	TUNACONS
Leonardo Caicedo	TUNACONS
Rachael Wadsworth	NMFS
Huihua Lee	SWFSC
Enrique Urena	IATTC
Hugo Alsina	Ministerio de Defensa - Dirección General de Intereses Marítimos, Fluviales, Lacustres y Marina Mercante
Willian Olives	Ministerio de Defensa - Dirección General de Intereses Marítimos, Fluviales, Lacustres y Marina Mercante
Oscar Miranda	Ministerio de Defensa - Dirección General de Intereses Marítimos, Fluviales, Lacustres y Marina Mercante
Amanda Minro	NOAA Fisheries
Manuel Correia	co-presidente grupo de trabajo de Ecosistema y Captura Incidental (IATTC)
Nancy Sandoval	Dirección de Normatividad de la Pesca y Acuicultura - VISAR - MAGA
Takumi FUKUDA	Fisheries Agency of Japan
Yesuri Pino	ARAP
Elizabeth Hellmers	California Department of Fish and Wildlife
Leonel Bohorquez	Ministerio de Relaciones Exteriores
Tyler Lawson	NOAA Fisheries
María Patricia Diaz De Santamaría	FIPESCA
Yarkelia Vergara	ARAP
Raul Pardo	AUNAP
Guillermo Moran	Tuna Conservation Group
Juan Flores	Universidad de Granada
Rubi Rivas	DIPESCA
Guillermo Moran Broja	TUNACONS
Enrique Blacio	Ministerio de Agricultura, Ganadería y Pesca - Ecuador
Abilio Orellana	CENDEPESCA
Jostyn Sanchez	Viceministerio de Acuicultura y Pesca
Jose Luis Cotes Ángel	Ministerio de Relaciones Exteriores Colombia
Shiyu Yang	Shanghai Ocean University
Katherine Bernal	Government of Vanuatu

**Annex 2**

**INTER-AMERICAN TROPICAL TUNA COMMISSION**

**AD HOC WORKING GROUP TO STRENGTHEN THE DIALOGUE AMONG  
SCIENTISTS, MANAGERS AND OTHER STAKEHOLDERS ON MANAGEMENT  
STRATEGY EVALUATION (MSE DIALOGUE WORKING GROUP, MSEDWG)**

**3<sup>RD</sup> MEETING**

*(by videoconference)*

**20-21 April 2026**

**AGENDA**

1. Opening of the meeting
2. Adoption of the agenda
3. Review updated draft WGMSE communications plan
4. Review and provide feedback on preliminary results of the Bigeye Tuna MSE
5. Cursory review of management objectives for bigeye tuna
6. Next steps
7. Other Business
8. Adjournment

**DRAFT PLAN TO IMPROVE COMMUNICATION AND FACILITATE MUTUAL UNDERSTANDING AMONG MANAGERS, SCIENTISTS AND STAKEHOLDERS ON MATTERS RELATED TO HARVEST STRATEGIES AND MSE**

**INTER-AMERICAN TROPICAL TUNA COMMISSION  
AD HOC WORKING GROUP TO STRENGTHEN THE DIALOGUE AMONG SCIENTISTS,  
MANAGERS AND OTHER STAKEHOLDERS ON MANAGEMENT STRATEGY  
EVALUATION  
3<sup>rd</sup> MEETING  
(by videoconference)  
April 20-21, 2026**

**DOCUMENT MSE-03-03  
PLAN TO IMPROVE COMMUNICATION AND FACILITATE MUTUAL  
UNDERSTANDING AMONG MANAGERS, SCIENTISTS AND  
STAKEHOLDERS ON MATTERS RELATED TO HARVEST  
STRATEGIES AND MSE**

Context: The *Ad hoc* Working Group to Strengthen the Dialogue Among Scientists, Managers and other Stakeholders on Management Strategy Evaluation (MSEDWG) was established by the Inter-American Tropical Tuna Commission (IATTC) in Resolution C-24-08. The first objective for the group, as outlined in Paragraph 2(a) of the resolution, is to “*Improve communication and facilitate mutual understanding among managers and scientists regarding matters related to harvest strategies [also known as management procedures] and MSE within the IATTC.*” Additionally, Paragraph 4 of Resolution C-24-08 requires that “*Without prejudice to the functions and competencies of the Scientific Advisory Committee to which this Group will report, the duties of the Working Group shall be to make recommendations.*” The [1<sup>st</sup> informal meeting of the group](#) tasked the group’s co-facilitators (now co-chairs), as a priority, with drafting a strategy to ensure the WG fulfills these mandates for review at the first formal meeting of the group in December 2025. Feedback was collected from members, and this updated draft plan represents the input received as a living document, which can be revised at any time, to guide the MSEDWG. This communication strategy aims to provide a clear understanding of the structure of the dialogue. This plan is understood to be guidance to help facilitate the process going forward.

The MSEDWG is a continuation of the workshops outlined in Resolution C-19-07. Participants in this Working Group are encouraged to review past documents in advance of these meetings to familiarize themselves with the terms defined and progress made so as to not slow progress. See [links to documents from the 2019-2025 MSE workshop series here](#).

To facilitate the implementation of this plan, the overarching goal established in Resolution C-24-08 is outlined first, along with the purpose of this plan. The plan has five communications objectives, with specific strategies that will be employed to achieve them. Progress toward achievement of each concrete strategy will be reviewed and evaluated by the MSEDWG on an annual basis.

**OVERARCHING GOAL FROM RES. C-24-08:** Improve communication and facilitate mutual understanding among managers and scientists regarding matters related to harvest strategies and MSE.

(Paragraph 2a)

**PURPOSE OF THIS PLAN:** Develop and implement mechanisms that enable scientists, managers, and other stakeholders to maintain a dynamic, informed, and goal-oriented dialogue throughout the development of Management Strategy Evaluation processes.

**SPECIFIC OBJECTIVES:**

- I. Ensure an inclusive process that fosters multi-directional exchange among fisheries managers, scientists, fishermen, industry personnel, and other stakeholders.
  - Strategy: CPCs are strongly encouraged to ensure consistent participation in their respective delegations at MSEDWG meetings, with representatives from diverse groups of stakeholders, including managers, scientists, fishermen, industry personnel, and other relevant stakeholders. Upcoming MSEDWG announcements from the Director will reiterate this inclusive stakeholder process.
  - Strategy: Participation by new members in ongoing work implies their acceptance of the process in its current state; previously made recommendations will not be reviewed without a rationale.
  - Strategy - *Scope*: All MSEDWG meetings will be open to all CPCs and accredited observers. The group may invite independent experts to provide insights on specific topics when deemed necessary.
  - Strategy - *Use of the floor*: Because of the nature and purpose of these MSEDWG meetings, all participants can request the floor rather than going through their flag and the respective head of the delegation.
  - Strategy - *Languages*: Per the Antigua Convention and IATTC Rules of Procedure, all MSEDWG meetings will include simultaneous interpretation in English and Spanish. All documents submitted must be translated into both languages. Documents submitted by members other than CPCs must be submitted in both languages.
  
- II. Establish a common base of understanding of the MSE process and its purpose to manage fisheries through science-based and pre-agreed management procedures (MPs), also known as harvest strategies.
  - Strategy: All members of the Group should read background materials ahead of meetings in an effort to understand the concepts, components, and basic rules of the MPs and MSE process on equal terms. If the concepts, components, and basic rules of the MPs and the MSE process are not properly understood, members shall inform the Co-Chairs, who will ensure that they are adequately explained through instructional strategies.

- Strategy: The MSEDWG will develop and agree on a glossary of MSE-related terms. This information will be posted on the IATTC website on a new page dedicated to the MSEWG and its business or in any implemented communications platform.
  - Strategy: The MSEDWG will hold as many virtual or in-person meetings as necessary—subject to available financial resources and tailored to the subject matter—to present and explain the scope of the various harvest strategies, using document WSMSE-05-01 as a guide to help members become proficient in its use.
  - Strategy: The MSEWG will provide input to the IATTC staff and Scientific Advisory Committee (SAC) on a standard format for presentation of MSE results, including plots, tables, and written summaries, thereby creating consistent and familiar reporting that facilitates understanding.
- III. Optimize the provision of tools and technical documentation so that MSEDWG participants have the necessary resources to contribute meaningfully to the meetings.
- Strategy: The MSEDWG co-chairs should work with the IATTC Secretariat to distribute an annotated agenda and relevant documents, at least 2 weeks in advance of each meeting, detailing what CPCs should be prepared to discuss under each agenda item. During the agenda-setting process, any member of the Group may propose agenda items intended solely to facilitate dialogue and mutual understanding regarding issues relevant to the MSE.
  - Strategy: The MSEDWG co-chairs should work with the IATTC Secretariat to share meeting reports with CPCs within one month after each meeting.
  - Strategy: The MSEDWG co-chairs may consider, or the Group may request, the use of web platforms and tools to improve participation deploying web-based, user-friendly platforms and tools would be helpful to improve online engagement, as previously approved by the MSEDWG, allowing CPCs to connect with diverse (domestic) stakeholders, exchange content, and participate in discussions.
  - Strategy: Without prejudice to any proposals that members may make, and in addition to those proposals, the Co-Chairs of the MSEDWG should maintain an updated draft timeline and work plan to improve communication and facilitate mutual understanding on issues related to MSE.
- IV. Ensure stakeholders' views are considered at each stage of the MSE process.
- Strategy: The MSEDWG will accept contributions on areas or aspects relevant to the group's objective, particularly—though not exclusively—information regarding the three species of tropical tuna, while also taking into account the multispecies, multi-fleet, multi-gear, and multi-stock nature of the fisheries under the administration of the IATTC, as well as the MSE and MP standards adopted or currently being developed by other RFMOs:
    - Uncertainties to be considered in the MSE operating models;

- Data to be used in the MSE and required for the implementation of management procedures;
  - Management objectives, including reference points and performance indicators;
  - Candidate Harvest Control Rules (HCRs) as a key element of various MPs to be tested;
  - Feedback on MSE results, including requests for additional testing; and
  - Selection of a final management procedure.
- Strategy: The MSEDWG will meet in person or virtually, depending on the schedule approved by the Group. While in-person meetings are more effective and therefore preferable for decision-making, they are also more costly; therefore, virtual meetings may be held as needed for pedagogical or informational purposes, or to gather relevant perspectives that facilitate an understanding of the MSE as both a method and a process.
  - Strategy: Maintain active intersessional consultations among group members to ensure ongoing communication and adherence to the agreed response times. User-friendly web tools are ideal for this, as they allow tracking of feedback exchanges and materials.
- V. Facilitate an understanding of how MSE has worked in other RFMOs to serve as a guide and lessons learned for MSE processes at IATTC.
- Strategy: Consider information on the development of MSE and the implementation processes of MPs in other RFMOs, including the draft and final elements of MPs.

## Annex 4

### Draft Timeline and Workplan for the Bigeye Tuna MSE

Note: This timeline and workplan comprise a living document that will be updated regularly as the process continues.

	MSEDWG Dialogue – Diálogo		Technical Work by Secretariat Scientists - Técnico
	Meeting objectives Objetivos de la reunión	Format Formato	
17-18 Dec	<ul style="list-style-type: none"> <li>-Review &amp; provide input on operationalizing management objectives</li> <li>-Amend list of HCRs for testing</li> <li>-Review &amp; agree more detailed workplan</li> <li>-Review &amp; agree communications plan for the WG, including for stakeholder engagement</li> <li>- Review the progress of MSE technical implementation</li> <li>- Revisar y contribuir a la puesta en marcha de los objetivos de ordenación.</li> <li>- Modificar la lista de las RCE para las pruebas.</li> <li>- Revisar y acordar un plan de trabajo más detallado.</li> <li>- Revisar y acordar el plan de comunicación del GT, incluyendo la participación de las partes interesadas.</li> <li>- Revisar el progreso de la implementación técnica de la EEO.</li> </ul>	<p>MSEDWG-02 (4 hrs/day – virtual)</p> <p>(4 hrs/día – virtual)</p>	<p>First MSE runs and outcomes from list of EM, HCR and other specifications discussed during the MSEDWG</p> <p>Primeras ejecuciones de EEO y resultados de la lista de especificaciones del ME, RCE y otras propuestas por el MSEDWG.</p>
Dec- Feb	<p>Members to provide to the Co-chairs by January 23, comments on plan to improve communication.</p> <p>Los miembros deberán enviar a los copresidentes, antes del 23 de enero, sus comentarios sobre el plan para mejorar</p>		<p>Proceed with MSE runs in accordance with the specifications and recommendations of MSEDWG -02.</p> <p>Proceder con las ejecuciones de EEO de acuerdo con las especificaciones y recomendaciones de MSEDWG-02.</p>

	la comunicación.		
Feb 11		(2 hrs – virtual)	Informal Session on BET MSE Progress hosted by Secretariat
Feb-Apr			Proceed with MSE runs in accordance with the specifications and recommendations of MSEDWG -02 and the Feb 11 <sup>th</sup> session.  Proceder con las ejecuciones de EEO de acuerdo con las especificaciones y recomendaciones de MSEDWG-02 .
Apr 20-21	- Acknowledge and discuss the progress of MSE technical implementation  - Revisar el progreso de la implementación técnica de la EEO.	MSEDWG-03 (3 hrs/day – virtual) (3 hrs/día – virtual)	Conduct any changes from MSEDWG input  Realizar cualquier cambio a partir de las aportaciones del MSEDWG.
May			
Jun 5	- Review the progress of MSE technical implementation  - Revisar el progreso de la implementación técnica de la EEO.	MSEDWG-04 1 full day pre-SAC & at SAC-17 (hybrid format)  Un día antes de la reunión del CCA y durante la 17 <sup>a</sup> reunión del CCA (formato híbrido)	
June			Conduct any changes from SAC-17 input & finalize results presentation  Realizar cualquier cambio a partir de las aportaciones de la 17 <sup>a</sup> reunión del CCA y finalizar la presentación de resultados.
July 21-22 (TBC)  (por confirmar)	- Acknowledge and discuss and ask clarifying questions on final MSE results  - Revisar y hacer preguntas aclaratorias sobre los resultados finales de la EEO.	MSEDWG-05 (3 hrs/day – virtual) (3 hrs/día – virtual)	Finalize MSE

Aug 29	<ul style="list-style-type: none"> <li>- Acknowledge and discuss and ask clarifying questions on final MSE results</li> <li>- Revisar y hacer preguntas aclaratorias sobre los resultados finales de la EEO.</li> </ul>	MSEDWG-06 1 afternoon (hybrid format)	
Aug 31- Sep 4	<p>Comm to consider an MSE-tested BET MP for adoption</p> <p>La Comisión estudiará la adopción de un PO para el BET probado con EEO.</p>	104 <sup>th</sup> meeting 104 <sup>a</sup> reunión	

Acronyms: BET-bigeye tuna, EM-estimation model, HCR-harvest control rule, HS-harvest strategy, MSE-management strategy evaluation, TRP-target reference point, MSEDWG-*Ad hoc* Working Group to Strengthen Dialogue Among Scientists, Managers and Other Stakeholders on Management Strategy Evaluation

Siglas: BET: atún patudo; ME: modelo de estimación; RCE: reglas de control de extracción; EE: estrategia de extracción; EEO: evaluación de estrategias de ordenación; PRO: punto de referencia objetivo; GTEEO: Grupo de Trabajo Especial para Fortalecer el Diálogo entre Científicos, Administradores y Otros Interesados sobre la Evaluación de Estrategias de Ordenación.