**FINAL REPORT**

of the consultancy

Second Evaluation of the

Improvement project for the longline fishery for

TRANSMARINA in Ecuador

(Three - Year Audit)

by

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for

**TRANSMARINA (Ecuador)**

**July 23, 2021**

EXECUTIVE OVERVIEW

This report is the result of the evaluation work of the third year of implementation of the Action Plan of the so-called Longline Fishery Improvement Project of the company TRANSMARINA. This project seeks to correct, within 3 years, the shortcomings and problems detected in the pre-assessment that was carried out in 2016 by the company MRAG America and prepare the fishery, for its full assessment under the MSC standard. Due to the exceptional circumstances caused by the COVID-19 pandemic, the project has not been able to progress during the one-year period and, therefore, the third-year assessment is being carried out in 2021 and not in 2020 as it should have been. It is therefore necessary to extend the duration of the FIP by one more year (December 2023) in order to be able to adequately finalise the actions designed in the Action Plan.

TRANSMARINA is a company dedicated to the capture, processing and commercialization of fishery products located in Montecristi - Manabí (Ecuador). It has a fleet of four industrial longliners that catch tuna and tuna-like species in the Pacific Ocean in the area managed by IATTC.

To learn about the progress of the project, a virtual workshop was held on April 27, 2021, to learn about the progress of the different activities of the FIP.

The workshop was organized by TRANSMARINA, with the participation of the company's representatives in Montecristi and representatives of the Ecuadorian Fisheries Administration, IPIAP and CIAT and other stakeholders.

Through the information obtained during the workshop and the documentation provided by TRANSMARINA, this report has been prepared.

All this information has allowed us to have an adequate idea of the status of the project and the evolution of the actions proposed in the action plan that was made in 2017.

Most of the actions have two or more entities (industry, IPIAP, SRP, IATTC, TRANSMARINA) as responsible and collaborators. TRANSMARINA has a specific role in the set of actions of the FIP, but it is not the only entity in charge of correcting those problems that derive from the implementation of management and/or control measures that depend only on the Managers. Therefore, the evaluation of the tasks in which the companies are not involved is based on evidence provided by TRANSMARINA staff and by the representatives of the different institutions (CIAT; Undersecretariat of Fisheries Resources of Ecuador (SRP) and the Public Institute for Aquaculture and Fisheries Research (IPIAP)).

The "ANALYSIS FOR EACH MSC PRINCIPLE" section analyses each of the actions and the results obtained in the 2nd year of implementation of the FIP.

In the section "ANALYSIS OF PERFORMANCE INDICATORS", for each Performance Indicator that did not reach a minimum score of SG80 in the pre-assessment, an assessment has been made of its possible value once the FIP implementation period is over.

In addition, the reference and tracking tool has been applied for the 2 scenarios (3 species) to know the evolution of MSC indicators in each year of implementation of the Action Plan and the project status analysis has been include in relation to the ISSF good practice guide for longline tuna fisheries.

TRANSMARINA's FIP has many points in common with the TUNACONS FIP, especially in Principles 1 and 3, and therefore some actions are similar and are worked jointly between the two Projects.

Two of the target species of the fishery are the same in both cases (yellowfin tuna and bigeye tuna). In the case of TRANSMARINA, the southern albacore species is also included. In this sense, the fishing area of the TRANSMARINA fleet includes not only those of the East Pacific Ocean but also those of the West Pacific and, therefore, its fishing operations are carried out both in the IATTC management area.

Although TRANSMARINA is the client and promoter of this FIP, part of the actions includes in the AP have other fishery stakeholders as responsible and/or collaborators, especially the Inter-American Tropical Tuna Commission, the Undersecretariat of Fishery Resources and the Public Institute for Aquaculture and Fisheries Research (IPIAP). Part of the unfinished actions would be related to the work of the stakeholders. In addition, due to the overlapping of fishing zones and target species, for certain actions, other fishing operators, not involved in the FIP, must also act in compliance with the commitments derived from the project, especially in the implementation and compliance with new rules and regulations.

In general, the progress of the actions has been uneven, and this is reflected in the projection of the expected results of the MSC Performance Indicators through the BMT tool. Overall progress is lower than expected for this third year.

For this analysis, ACDR data from the MSC full certification process of the TUNACONS purse seine tuna fishery, which has, like TRANSMARINA's, yellowfin tuna and bigeye tuna as target species in the same fishing area, have been considered. The results of the annual report published by ISSF on the possible scoring of the different indicators of MSC Principles 1 and 3 in the different tuna fisheries in all oceans have also been considered.

In this regard, yellowfin tuna was the species that would score best in a full assessment. All the Principle 1 indicators are at or above SG80. This is not the case for bigeye tuna, which worsens its status with respect to the previous assessment. Albacore remains with the same probable scores as in the first assessment of the FIP.

In relation to the Plan's actions, those related to Principle 3 are the ones that have advanced the most during this period. However, it is important to note that closing actions does not always imply a change in the score of the MSC indicators associated with this Principle.

Actions related to Principle 2 have made partial progress and only one, 2.3.2, is considered completed during this period. Although this progress is significant, the greatest weight of it lies in the adoption of the PAN ATUN by the Ecuadorian Administration. This NPOA is considered a fundamental tool for the management of tuna fisheries in the country.

The observer program in the evaluated fleet is 100% but there are negative elements that are conditioning the related actions to be completed. Although data on interactions are collected through the observer program, the information from the three years of data accumulated by the program, especially for seabirds, has not yet been analysed. A collaboration agreement has recently been signed between the Government of New Zealand and WWF Ecuador to improve the identification of seabirds in purse seine and longline fishing processes by Ecuadorian observers in South Pacific waters (with special emphasis on the black petrel).

Regarding actions related to ecosystem information and analysis, like what was considered in the first evaluation of the FIP, there is no additional information available on the impacts of the fishery on the marine ecosystem.

Regarding Principle 3, it is considered that there has been significant progress in closing actions and as a result, at least one indicator IC3.2.3 would improve its score in a full evaluation. The incorporation of the PAN ATUN into Ecuadorian regulations is a key advance for the overall progress of the actions. However, as it has not been 100% adopted and evaluated, the actions related to this Principle cannot be closed.

In short, it is considered that the TRANSMARINA FIP has not progressed according to what was foreseen for year 3 in the BMT analysis (include at the end of the document). The progress of most of the actions has been conditioned by the situation generated by the COVID-19 global pandemic that has prevented the realization of meetings and other activities necessary for the progress of the Plan.

Given that the FIP is for 3 years and that this is a relatively new fishery in Ecuador and with a small fleet in terms of number of units, it is recommended to maintain and improve, as far as possible and for an additional year, the program of activities to achieve the best results prior to the start of a full MSC assessment.

The situation of Principle 1 is complex, especially for bigeye tuna, and additional management measures need to be put in place within IATTC to try to improve its population status and reach the minimum score required by the MSC standard.

With respect to Principle 3, it is essential that the PAN ATUN, as mentioned above, is implemented and the effectiveness of its measures can be evaluated.

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# ABBREVIATIONS

|  |  |
| --- | --- |
| **ALB**  | Albacore Tuna *(Thunnus alalunga)* |
| **AMP**  | Marine Protected Area |
| **AIDCP**  | Agreement on the International Dolphin Conservation Program |
| **APP**  | Threatened, Protected, or Endangered Species |
| **BET**  | Bigeye Tuna (Bigeye Tuna, *Thunnus obesus*) |
| **BMT** | Benchmarking Tool  |
| **CBR**  | Reproductive Biomass Quotient |
| **CIAT**  | Inter-American Tropical Tuna Commission (IATTC) |
| **CPC**  | Members and Cooperating Non-Members of the Commission (CIAT) |
| **CRP**  | Potential Reproduction Quotient |
| **CPUE**  | Capture per unit effort |
| **EAM**  | Highly Migratory Species  |
| **FIP** | Fishery Improvement Project  |
| **HCR**  | Harvest Control Rules (Harvest Control Rules)  |
| **HRR** | Reference and Tracking Tool |
| **SG**  | Scoring Guideposts (SG= Scoring Guideposts) |
| **IC** | Performance Indicator (PI) |
| **IPIAP**  | Public Institute for Fisheries and Aquaculture Research |
| **INDNR**  | Illegal, undocumented, unregulated capture fishing |
| **LL** | Longliner |
| **MAGAP**  | Ministry of Agriculture, Livestock, Aquaculture and Fisheries |
| **MAP** | Ministry of Aquaculture and Fisheries |
| **MSC**  | Marine Stewardship Council |
| **MPCEIP** | Minister of Production, Foreign Trade, Investment and Fisheries |
| **NCP**  | Fishing Control Standards |
| **NMFS**  | U.S. National Marine Fisheries Service (National Marine Fisheries Service) |
| **NGO**  | Non-governmental organization |
| **OPO**  | Eastern Pacific Ocean |
| **OROP** | Regional Fishery Management Organization (RFMO) |
| **PAN** | National Action Plan |
| **PAT** | Shark Action Plan |
| **PBR**  | Risk-Based Protocol  |
| **FIP** | Fishery Improvement Project |
| **PDR** | Point of Recruitment Impairment (PRI) |
| **PRL** | Limit Reference Points |
| **PRO** | Benchmarks Objective |
| **CPR** | Requirements for MSC Fisheries Certification |
| **RCC** | Capture Control Rules |
| **RMS**  | Maximum Sustainable Yield |
| **SBR** | Spawning Biomass Ratio (Spawning Biomass Ratio) |
| **SCV** | Monitoring, Control and Surveillance |
| **SKJ** | Skipjack (Skipjack, *Katsuwonus pelamis*) |
| **SLB** | Vessel Location System |
| **SRP** | Undersecretariat of Fisheries Resources |
| **TAC** | Maximum Allowable Quota |
| **UoA** | Evaluation Unit |
| **UdC** | Certification Unit |
| **VMS** | Vessel Monitoring Systems (Vessel Monitoring Systems) |
| **WWF**  | Worldwide Fund for Nature |
| **YFT**  | Yellowfin Tuna (Yellowfin Tuna, *Thunnus albacares*) |
| **EEZ**  | Exclusive Economic Zone |

# INTRODUCTION

This report is the result of the evaluation work of the third year of implementation of the Action Plan of the so-called Longline Fishery Improvement Project of the TRANSMARINA company. This project seeks to correct, within 3 years, the shortcomings and problems detected in the pre-assessment that was carried out in 2016 by the company MRAG America and prepare the fishery, for its full assessment under the MSC standard.

However, due to the situation generated by the COVID-19 pandemic, no progress has been made on certain actions according to the timelines included in the Action Plan. Therefore, it is necessary to extend the duration of the FIP by one more year (December 2023) to be able to complete the actions designed in the Action Plan.

TRANSMARINA has a fleet of four industrial longliners that catch tuna and tuna-like species in the Pacific Ocean in the area managed by IATTC. However, it is currently only operating with two vessels in this modality.

To learn about the progress of the project, on April 25, 2021, a virtual workshop was held with representatives of the company in Manta, with the participation of people linked to the Ecuadorian Fisheries Administration, IPIAP and IATTC, among others, via video conference.

The information obtained during this workshop and the information provided by TRANSMARINA has been used to prepare this report.

All this information has allowed us to have a proper idea of the status of the project and the evolution of the actions proposed in the action plan that was made in 2017.

# REPORT METHODOLOGY

For a better understanding of the results of the evaluation process, the section "ANALYSIS FOR EACH MSC PRINCIPLE" integrates, for each of the actions, the information contained in the Action Plan, followed by the results obtained in the 2nd year for each of them and the reference to the supporting documents provided. With this information, a critical analysis is made for each of the actions.

Most of the actions have two or more entities (industry, IPIAP, SRP, IATTC, TRANSMARINA) as responsible and collaborators. TRANSMARINA has a specific role in the set of actions of the FIP, but it is not the only entity in charge of correcting those problems that derive from the implementation of management and/or control measures that depend only on the Managers. Therefore, the evaluation of the tasks in which the companies are not involved is based on evidence provided by TRANSMARINA staff and by the representatives of the different institutions (IATTC; Undersecretariat of Fisheries Resources of Ecuador and IPIAP).

In the section "ANALYSIS OF PERFORMANCE INDICATORS", for each Performance Indicator that did not reach a minimum score of SG80 in the pre-assessment, an assessment has been made of its possible value at the end of the FIP work period (3 years).

Finally, the reference and tracking tool has been applied for the 2 scenarios (3 species) to know the evolution of the MSC indicators each year of implementation of the Action Plan.

# ANALYSIS FOR EACH MSC PRINCIPLE

Next, each action or task proposed in the Action Plan is addressed independently for each of the three MSC principles according to the methodology explained above.

## PRINCIPLE 1. Stock status for target populations and harvesting strategies

**Proposed actions:**

**1.1 Objective: To support, participate and complete where appropriate the Purse Seine Fishery Improvement Plan in its objectives and actions corresponding to MSC Principles 1 and 3.**

**1.1.1 The creation of a Memorandum of Understanding between Tunacons, WWF and TRANSMARINA**

Achieved in the first year of the FIP. Not assessed in this report.

**1.2 Objective: More precautionary management for tropical tunas in the EPO.**

**1.2.1 Reduction of uncertainty levels in the assessments of Bigeye and Yellowfin in the EPO**

The PI corresponding to the stock status for the target stocks, in this case Yellowfin, Bigeye, and South Pacific Albacore Tuna, requires that it can be determined with a high probability that the stock is above the point at which recruitment would be affected.

Yellowfin and Bigeye Tuna.

For YFT, the current spawning biomass quotient indicates that the stock is slightly overfished but has been fluctuating around MSY since 2009. For the BET stock, although the SPR and spawning biomass and fishing mortality ratios indicate that from 2013 to 2014 the stock was slightly above MSY, and the stock is no longer overfished nor is overfishing occurring; between 2005 and 2010 there was a decline in stock biomass, and it is now at the lowest level ever recorded in the history of the fishery. The assessment carried out by the IATTC does not express the state of the stock in terms of probability, so it is not possible to state that it is highly probable that the stock is above the point at which recruitment would be affected.

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| **Responsible entities** | TRANSMARINA/TUNACONS/WWF/SRP/IATTC |
| **UoA** | Bigeye and Yellowfin |
| **Priority** | Media |
| **Implementation period** | 12 months |
| **State of the action** | Reinforcement of activities undertaken in FIP TUNACONS |
| **Related MSC indicators** | IC 1.1.1 |
| **Milestones** | Milestone 1 <12 months: Results of BET and YFT assessments conducted by IATTC showing a high probability (>80%) that both stocks are above Blim (In the case of IATTC assessments this is Blim, corresponding to Spawning Biomass below which recruitment would be affected). |
| **Evidence** | IATTC/SAC assessment reports |

This activity is already underway as part of the Purse Seine fishery action plan. The progress of the activity and the achievement of the objective will also be linked to the corresponding indicators in the longline fishery FIP.

**Actions carried out by TRANSMARINA in the third year of the FIP**

In 2019, the TUNACONS technical team conducted an external review of the bigeye tuna assessment and, on the other hand, followed up on the IATTC technical workshops.

The situation resulting from the pandemic has hampered the normal dynamics of the Commission. During 2020, hardly any meetings were held and there have been significant delays in the presentation of results and in the approval of new measures.

In this period between the two FIP evaluations, IATTC's work related to the following has been followed up:

1) Revision of the assessment model incorporating new data on the size of Bigeye and Yellowfin species caught in the longline fleet. This year the model results showed higher uncertainties for Bigeye tuna.

2) Stock assessments of the main tropical tuna species.

***Supporting documents:***

* DOCUMENT SAC-10-08 INDICATORS OF STOCK STATUS FOR YELLOWFIN TUNA IN THE EASTERN PACIFIC OCEAN
* DOCUMENT SAC-10-07CONDITION OF YELLOWFIN TUNA IN THE EASTERN PACIFIC OCEAN IN 2018 AND OUTLOOK FOR THE FUTURE. Carolina V. Minte-Vera, Haikun Xu, Mark N. Maunder. IATTC
* DOCUMENT SAC-10-06 INDICATORS OF THE STATUS OF BIGEYE TUNA IN THE EASTERN PACIFIC OCEAN Haikun Xu, Mark N. Maunder, Cleridy E. Lennert-Cody and Marlon Román
* DOCUMENT SAC-07-04a: CHANGES IN SIZE FREQUENCY RANGER DATA AND THEIR EFFECTS ON THE YELLOWFIN AND BIGEYE TUNA STOCK ASSESSMENT MODELS
* DOCUMENT IATTC-93-01 TUNAS, BILLFISHES, AND OTHER PELAGIC SPECIES IN THE EASTERN PACIFIC OCEAN IN 2017.
* DOCUMENT SAC-08-04b: CONDITION OF YELLOWFIN TUNA IN THE EASTERN PACIFIC OCEAN IN 2016 AND PROSPECTS FOR THE FUTURE
* DOCUMENT SAC-08-04a: CONDITION OF BIGEYE TUNA IN THE EASTERN PACIFIC OCEAN IN 2016 AND PROSPECTS FOR THE FUTURE
* DOCUMENT SAC-09-05 STATUS OF BIGEYE TUNA IN THE EASTERN PACIFIC OCEAN IN 2017 AND OUTLOOK FOR THE FUTURE.
* DOCUMENT SAC-09 INF-B INVESTIGATION OF SUBSTANTIAL CHANGE IN ESTIMATED F MULTIPLIER FOR BIGEYE TUNA IN THE EASTERN PACIFIC OCEAN
* REPORT ON THE TUNA FISHERY, STOCKS, AND ECOSYSTEM IN THE EASTERN PACIFIC OCEAN IN 2019
* DOCUMENT SAC-11-05 STOCK STATUS INDICATORS (SSI) FOR TROPICAL TUNAS IN THE EASTERN PACIFIC OCEAN
* DOCUMENT SAC-11-06 REV BIGEYE TUNA IN THE EASTERN PACIFIC OCEAN, 2019: BASELINE ASSESSMENT
* DOCUMENT SAC-11 INF-F REV IMPLEMENTING REFERENCE POINT-BASED FISHERY HARVEST CONTROL RULES WITHIN A PROBABILISTIC FRAMEWORK THAT CONSIDERS MULTIPLE HYPOTHESES
* DOCUMENT SAC-11-08 REV RISK ANALYSIS FOR THE MANAGEMENT OF TROPICAL TUNA FISHERIES IN THE EASTERN PACIFIC OCEAN, 2020
* INTER-AMERICAN TROPICAL TUNA COMMISSION; Stock Assessment Report 20; CONDITION OF TUNA AND FISH STOCKS IN 2018; La Jolla, California - 2019.
* DOCUMENT SAC-11-07 REV YELLOWFIN TUNA IN THE EASTERN PACIFIC OCEAN, 2019: BASELINE ASSESSMENT
* DOCUMENT SAC-11 INF-J REV RISK ANALYSIS FOR YELLOWFIN TUNA: REFERENCE MODELS AND THEIR RELATIVE WEIGHTS

**Analysis of compliance with FIP AP actions in the third year:**

IATTC conducted assessments for bigeye and yellowfin in 2019 and the results have been published in 2020.

The IATTC in 2020 presented the results of the new assessment models used for Bigeye and Yellowfin. The main conclusions were:

* Yellowfin is in healthy condition with low levels of risk.
* In the case of Bigeye Tuna, the population is in the vicinity of the management objective. However, attention should be paid to risk levels.

In addition, the stock assessments for the 2 species of tropical tunas, according to results for Yellowfin and Bigeye tuna species, do not show overfishing.

In this regard, the main results of the evaluations for these two species are presented below:

**Bigeye Tuna:**

1. This year's baseline assessment of bigeye tuna in the eastern Pacific Ocean is the basis for a risk analysis used to provide management advice (SAC-11-08). The risk analysis encompasses alternative hypotheses about states of nature. The hypotheses were developed in a hierarchical framework that addressed uncertainties and problems with previous assessments.

2. Unlike previous assessments that relied on a base case model with an assumed steepness of 1.0 for the stock-recruitment relationship, this benchmark assessment integrates a total of 14 benchmark models, each with four steepness assumptions (0.7, 0.8, 0.9, and 1.0).

3. The 14 reference models include in this assessment are developed within a hierarchical framework and combine components that address three important uncertainties from the past assessment: a) the apparent recruitment regime shift (R shift), b) the lack of fit to the longline fishery length composition data with assumed asymptotic selectivity, and c) the steepness of the stock-recruitment relationship.

4. The 44 converged model runs for this assessment indicate that:

a. In the early 2020s, the spawning biomass (S) of bigeye ranged from 14 to 212% of the level at the dynamic maximum sustainable yield (MSY) (SRMS\_d); 26 suggest that it was below that level.

b. During 2017-2019, fishing mortality (F) for bigeye ranged from 51 to 223% of the level at MSY (FRMS); 26 runs suggest it was above that level.

c. In early 2020, the spawning biomass (S) of bigeye ranged from 51% to 532% of the limit reference level (LIMS); five runs suggest that it was below that limit.

d. During 2017-2019, bigeye fishing mortality ranged from 32% to 114% of the limit reference level (LIMIT reference level (LIMIT); three runs suggest it was above that limit.

5. All the benchmark models suggest that a lower slope value corresponds to more pessimistic estimates of population condition: lower S and higher F relative to the benchmarks. However, all short-term models and two environmental models (Env-Fix and Env-Mrt models) estimate that, regardless of the assumed value for steepness, S is below SRMS\_d and F above FRMS, in early 2020, while the Gro and Sel models estimate the opposite. The remaining reference models estimate a different population condition in early 2020 depending on the assumed value for steepness.

6. The results of the reference models are combined in a risk analysis to provide management advice (SAC-11-08).

Therefore, it is considered that, unlike the first evaluation of this action, the new bigeye assessment methodology has considered the uncertainties of past evaluations, helping to reduce them. Therefore, and given that the objective of the action is to reduce uncertainties in the assessment of the species, **the action is completed**.

**Yellowfin tuna:**

1. The baseline assessment of yellowfin tuna in the eastern Pacific Ocean (EPO) in 2019 forms the basis of a risk analysis used to provide management advice (SAC-11-08, SAC11-INF-J). The risk analysis encompasses alternative hypotheses about states of nature. The hypotheses were developed in a hierarchical framework that addresses uncertainties and issues in previous assessments.

2. Unlike previous assessments, which relied on a base case model with an assumed steepness of 1.0 for the stock-recruitment relationship, the present benchmark assessment integrates 12 benchmark models, each with four steepness assumptions (0.7, 0.8, 0.9, and 1.0), totaling 48 models.

3. The 12 reference models are developed in a hierarchical framework, and combine components related to three important uncertainties in the previous assessment: a) supersensitivity to the inclusion of new data, mainly from the index of longline abundance and inconsistencies between this index and the purse seine indices; b) lack of fit to the fishery length composition data with assumed asymptotic selectivity, and c) the skewness of the stock-recruitment relationship.

In addition, new fishery definitions were implemented, and new spline selectivity functions were adopted for most fisheries.

4. The 48 models for the present evaluation indicate that:

a. At the beginning of 2020, the spawning biomass (S) of yellowfin ranged from 49% to 219% of the level at dynamic MSY (SRMS\_d); 12 models suggested that it was below that level.

b. During 2017-2019 the fishing mortality (F) of yellowfin ranged from 40% to 168% of the level at MSY (FRMS); 14 models suggested that it was above that level.

c. At the beginning of 2020, spawning biomass (S) ranged from 145% to 345% of the limit reference level (SLIMIT); no model suggested that it was below the limit.

d. During 2017-2019, yellowfin fishing mortality ranged from 22% to 65% of the limit reference level (LIMIT reference level (LIMIT); no model suggested that it was below the limit.

5. All models suggest that lower steepness values correspond to more pessimistic estimates of stock status: lower S and higher F relative to reference points. However, models assuming fixed growth, a linear relationship between the abundance index and stock abundance, no change in selectivity over time, and asymptotic selectivity for the purse seine fishery catching the largest fish (BASE), estimated that, regardless of steepness, the stock was below the MSY level (S<MSYRMS\_d) and fishing mortality was above that level (F>FRMS) in the early 2020s.

On the other hand, models that assume dome-shaped selectivity for the purse seine fishery that catches the largest fish (DS, TBM.DS, TBE.DS, DDQ.DS). The stock status in early 2020 estimated by the remaining models depends on the value assumed for steepness.

6. A key uncertainty not addressed in the reference models in this assessment is the spatial structure of the yellowfin tuna stock in the EPO. Future work to improve the assessment will focus on this issue.

7. The results of the reference models are combined in a risk analysis to provide management advice (SAC-11-08).

As indicated for bigeye tuna, **this action is completed**. The stock assessment methodologies have been modified with the objective, among others, of reducing the uncertainties that existed in the previous ones.

However, in both cases, it is important to maintain the scientific work plan of updating/performing stock assessments of the various species (Staff Research Plan).

**1.2.2 Development and implementation of catch strategies and specific HCR for tropical tunas in the EPO**

MSC IC 1.2.1 requires the existence of a robust and precautionary capture strategy and that its effectiveness is likely and evaluated against the objectives.

Except for Albacore PS, management measures for tropical tunas remain multi-species, so individual species-specific harvest strategies should be developed using the precautionary reference SBR levels as the basis for each species.

Each strategy should contain a detailed description of:

1. How the exploitation strategy is designed to influence the state of the stock,
2. How the elements of the strategy work together to achieve stock management objectives. Specific actions to be taken, as well as milestones to be achieved within RFMOs to meet the MSC Standard for this IC, are beyond the scope of this document.
3. The management strategy must be fully evaluated to ensure its effectiveness in maintaining stocks at baseline levels.

This action should be carried out by the IATTC, but the fishery should be actively involved in promoting and requesting its achievement through the Ecuadorian representation in the RFMO.

This activity is already underway as part of the Purse Seine fishery action plan and support management at IATTC is required to complete the assessment work. The progress of the assessment and the achievement of the objective will also be linked to the corresponding indicators in the longline fishery FIP.

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| **Responsible entities** | TRANSMARINA/TUNACONS/WWF/SRP/IATTC |
| **UoA** | Bigeye and Yellowfin |
| **Priority** | Media |
| **Implementation period** | 18 months |
| **State of the action** | Reinforcement of activities undertaken in FIP TUNACONS |
| **Related MSC indicators** | IC 1.2.1 |
| **Milestones** | Milestone 2 <12 months: The SAC recommends specific measures for each tropical species. Milestone 3 <18 months: Measures are adopted by species within the framework of a new IATTC resolution. |
| **Evidence** | IATTC/SAC assessment reports with recommendations IATTC plenary meeting reports, with resolutions adopted. |

**Actions carried out by TRANSMARINA in the third year of the FIP**

There is insufficient information provided by TRANSMARINA regarding the progress of this action.

***Supporting documents:***

* DOCUMENT SAC-10-08 INDICATORS OF STOCK STATUS FOR YELLOWFIN TUNA IN THE EASTERN PACIFIC OCEAN DOCUMENT SAC-10-07CONDITION OF YELLOWFIN TUNA IN THE EASTERN PACIFIC OCEAN IN 2018 AND OUTLOOK FOR THE FUTURE. Carolina V. Minte-Vera, Haikun Xu, Mark N. Maunder. IATTC DOCUMENT SAC-10-06 INDICATORS OF THE STATUS OF BIGEYE TUNA IN THE EASTERN PACIFIC OCEAN Haikun Xu, Mark N. Maunder, Cleridy E. Lennert-Cody and Marlon Román
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* DOCUMENT SAC-08-04c: UPDATED INDICATORS OF THE STATUS OF BARREL TUNA IN THE EASTERN PACIFIC OCEAN
* DOCUMENT SAC-08-04b: CONDITION OF YELLOWFIN TUNA IN THE EASTERN PACIFIC OCEAN IN 2016 AND PROSPECTS FOR THE FUTURE
* DOCUMENT SAC-08-04a: CONDITION OF BIGEYE TUNA IN THE EASTERN PACIFIC OCEAN IN 2016 AND PROSPECTS FOR THE FUTURE
* DOCUMENT SAC-09-05 STATUS OF BIGEYE TUNA IN THE EASTERN PACIFIC OCEAN IN 2017 AND OUTLOOK FOR THE FUTURE.
* DOCUMENT SAC-09 INF-B INVESTIGATION OF SUBSTANTIAL CHANGE IN ESTIMATED F MULTIPLIER FOR BIGEYE TUNA IN THE EASTERN PACIFIC OCEAN
* REPORT ON THE TUNA FISHERY, STOCKS, AND ECOSYSTEM IN THE EASTERN PACIFIC OCEAN IN 2019
* DOCUMENT SAC-11-05 STOCK STATUS INDICATORS (SSI) FOR TROPICAL TUNAS IN THE EASTERN PACIFIC OCEAN
* DOCUMENT SAC-11-06 REV BIGEYE TUNA IN THE EASTERN PACIFIC OCEAN, 2019: BASELINE ASSESSMENT
* DOCUMENT SAC-11 INF-F REV IMPLEMENTING REFERENCE POINT-BASED FISHERY HARVEST CONTROL RULES WITHIN A PROBABILISTIC FRAMEWORK THAT CONSIDERS MULTIPLE HYPOTHESES
* DOCUMENT SAC-11-08 REV RISK ANALYSIS FOR THE MANAGEMENT OF TROPICAL TUNA FISHERIES IN THE EASTERN PACIFIC OCEAN, 2020
* INTER-AMERICAN TROPICAL TUNA COMMISSION; Stock Assessment Report 20; CONDITION OF TUNA AND FISH STOCKS IN 2018; La Jolla, California - 2019.
* DOCUMENT SAC-11-07 REV YELLOWFIN TUNA IN THE EASTERN PACIFIC OCEAN, 2019: BASELINE ASSESSMENT
* DOCUMENT SAC-11 INF-J REV RISK ANALYSIS FOR YELLOWFIN TUNA: REFERENCE MODELS AND THEIR RELATIVE WEIGHTS
* RESOLUTION C-16-02 HARVEST CONTROL RULES FOR TROPICAL TUNAS (YELLOWFIN, BIGEYE, AND SKIPJACK)
* RESOLUTION C-17-02 CONSERVATION MEASURES FOR TROPICAL TUNAS IN THE EASTERN PACIFIC OCEAN DURING 2018-2020 AND AMENDMENT OF RESOLUTION C-17-01
* RESOLUTION C-20-05 RESOLUTION ON CONSERVATION AND MANAGEMENT MEASURES FOR TROPICAL TUNAS IN 2021

**Analysis of compliance with AP actions in the third year:**

Some actions of the TRANSMARINA FIP are like those already implemented in the TUNACONS FIP. There is an MOU between both FIPs to seek synergies in certain actions and processes to avoid duplication of effort and, in the case of P1, to work in a coordinated manner in the aspects that refer to the bigeye and yellowfin tuna situation.

In this specific case, this action has no specific progress in relation to the provisions of the FIP. Within the IATTC, the specific resolution on control rules and reference points for the 3 species of tropical tunas, including bigeye and yellowfin, which are subject to permanent technical evaluations, remain in force. (RESOLUTION C-16-02)

At the 2018 IATTC scientific meeting the benchmark assessments for each species were presented (RESOLUTION C-16-02) but there has been no progress in this regard.

For the moment the conservation measures applied in the reference species are operating well as they maintain the populations in a healthy state and these measures have been extended during the year 2021 (RESOLUTION C-20-05). In addition, as already commented in the previous action, the methodologies of the assessments have been modified due to the uncertainties existing in those previously carried out.

However, it is important to note that, in May 2021, the 2nd IATTC SSM workshop was held where the objectives, possible reference points and control rules began to be reviewed. This workshop is part of the provisions of IATTC Resolution C-19-07 and that have among other objectives, to comply with Resolution C-16-02 which urges the IATTC scientific staff to continue testing reference points and harvest control rules to support the adoption of a permanent CER by the Commission. In addition, the European Union secured the necessary funds to complete the MSE work plan by 2023.

Although the action is not considered completed.

**1.2.3 Harvest strategy for Albacore PS including HRCs**

Currently there is no regional management strategy for Albacore PS with the elements required by the MSC standard (MSY-based limit and target points).

The RFMO(s) in charge of the management of this species (IATTC, WCPFC) should agree and implement a regional harvest strategy, incorporating limit and target reference points (management objectives), so that the strategy responds to the state of the stock and the elements of the strategy work together to maintain the stock around the target reference level.

Once a capture strategy based on threshold and target points has been adopted, defined HRCs must then be agreed upon.

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| **Responsible entities** | TRANSMARINA/WWF/SRP/IATTC/WCPFC |
| **UoA** | South Pacific Albacore |
| **Priority** | Media |
| **Implementation period** | 36 months |
| **State of the action** | New |
| **Related MSC indicators** | IC 1.2.1 IC 1.2.2 |
| **Milestones** | Milestone 4 <12 months: SAC and SC WCPFC identify limit and target benchmarks for ALB PS stock. Milestone 5 <24 months: SAC and SC WCPFC agree on and propose a set of management and HRC measures for the ALB PS Milestone 6 <36 months: IATTC and WCPFC adopt benchmark-based conservation measures for ALB PS and HRCs |
| **Evidence** | SAC/SC reports with benchmarking.SAC/SC reports with proposed management measures and a set of HRCs. IATTC/WCPFC Plenary Meeting Reports and Resolutions adopted for the management of the ALB PS |

This activity is not exclusive to the TRANSMARINA longline fishery action plan. The achievement of this action should be promoted solely by TRANSMARINA, although it is possible to seek the support of other groups with similar interests such as other fleets pursuing certification in the WCPFC area.

**Actions carried out by TRANSMARINA in the third year of the FIP**

There has been no progress in relation to the previous evaluation.

***Supporting documents:***

* CONSERVATION AND MANAGEMENT MEASURE FOR SOUTH PACIFIC ALBACORE Conservation and Management Measure 2015-02
* Stock assessment for south Pacific albacore tuna. WCPFC-SC11-2015/SA-WP-06 Rev 1 (4 August 2015). SCIENTIFIC COMMITTEE- ELEVENTH REGULAR SESSION, Pohnpei, Feder a ted States of Micronesia 5-13 August 2015.

**Analysis of compliance with AP actions in the third year:**

The status of the previous assessment of this action remains unchanged. The outcome of milestone 4 of the Action Plan "<12 months: SAC and SC WCPFC identify limit and target benchmarks for ALB PS stock" but not enough progress has been made in this direction to be considered as achieved.

The IATTC Scientific Advisory Committee in 2018 recommended doing SPC work in the Eastern and Central Pacific to develop joint stock assessment work for this species, this work has not yet been initiated and therefore a basis for joint albacore stock assessment has not been formed.

Due to the situation generated by the COVID-19 pandemic, the proposed work could not be carried out. **Therefore, this action has not been able to progress in this evaluation period**. it is necessary to extend the duration of the FIP by one more year (December 2023) to be able to complete the actions designed in the Action Plan.

**1.2.4 Confirm the solidity of the CERs adopted and verify their effectiveness**

The MSC standard requires that adopted HRCs be robust to uncertainty and that their effectiveness be evaluated and confirmed.

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| **Responsible entities** | TRANSMARINA/TUNACONS/WWF/SRP/IATTC |
| **UoA** | Bigeye and Yellowfin |
| **Priority** | Media |
| **Implementation period** | 18 months |
| **State of the action** | Reinforcement of activities undertaken in FIP TUNACONS |
| **Related MSC indicators** | IC 1.2.1 IC 1.2.2 |
| **Milestones** | Milestone 7 <12 months: The SAC performs sensitivity analyses and simulations to evaluate the robustness and effectiveness of the adopted HRCs. Milestone 8 <18 months (alternative): HRCs are externally evaluated, and their robustness and effectiveness are confirmed. |
| **Evidence** | SAC reports with conclusions/recommendations. External review reports (alternative). Modification (if applicable) of current HRCs |

TRANSMARINA shall promote and support, through available means (Ecuadorian administration, interest group built in conjunction with TUNACONS or others), the performance by the IATTC of sensitivity analyses and simulations to evaluate and confirm the robustness and performance of the adopted HRCs.

**Actions carried out by TRANSMARINA in the third year of the FIP**

The advice of the external expert specialist in stock assessment models is maintained to reinforce advice to the government and business sector according to the information provided. This expert has participated in different workshops and meetings organized by the IATTC staff since 2019 to review the bigeye and yellowfin assessment models.

The IATTC staff should present in 2021 a Work Plan to strengthen the tropical tuna assessment model at the next Scientific Advisory Committee. This Plan should have been presented by now, but due to the COVID-19 pandemic, no progress has been made.

**FIP action has not been completed.**

Therefore, it is necessary to extend the duration of the FIP by one more year (December 2023) to be able to complete the actions designed in the Action Plan.

***Supporting documents:***

* RESOLUTION C-17-01: CONSERVATION OF TUNAS IN THE EASTERN PACIFIC OCEAN DURING 2017
* RESOLUTION C-17-02: CONSERVATION MEASURES FOR TROPICAL TUNAS IN THE EASTERN PACIFIC OCEAN DURING 2018-2020 AND AMENDMENT OF RESOLUTION C-17-01
* MINUTES OF THE 92ND IATTC MEETING APPROVING RESOLUTION C-17-02
* RESOLUTION C-20-05 RESOLUTION ON CONSERVATION AND MANAGEMENT MEASURES FOR TROPICAL TUNAS IN 2021

**Analysis of compliance with AP actions in the third year:**

Milestone 7 <12 months: The SAC performs sensitivity analyses and simulations to evaluate the robustness and effectiveness of the adopted HRCs.

The action has not been completed. However, an expert was hired to reinforce the advice to the Government and the business sector and has participated in different workshops that IATTC has organized to review the bigeye and yellowfin assessment model.

However, the point of work required by milestone 7 has not yet been reached, although, as discussed for Action 1.2.2, there is a funded work program to advance scientific staff through the organization of management strategy evaluation workshops and the adoption of a permanent HRC by the Commission. Yet, despite progress, the **FIP action has not been completed.**

**1.3 Objective: Strengthening of the catch strategy for tropical tunas in the EPO**

**1.3.1 Preservation Measures Proposal**

Build a platform for the Ecuadorian tuna sector from which to reach a consensus with the Ecuadorian government on proposals for improving the current management of tuna stocks in the EPO. Proposals from this forum can be forwarded to the IATTC for consideration. The objective is to ensure that the stocks are at a level of high productivity and low probability of overfishing recruitment. If this is not the case, there should be evidence that there is a rebuilding strategy. It is important to ensure that stocks are maintained at a level above or consistent with Brms. There is already independent work by government and industry to set quotas and decrease BET (Existing Activity) catches, but other recovery measures will need to be taken if necessary.

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| **Responsible entities** | TRANSMARINA/TUNACONS/WWF/SRP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | Media |
| **Implementation period** | Permanent |
| **State of the action** | Reinforcement of activities undertaken in FIP TUNACONS |
| **Related MSC indicators** | IC 1.1.1 IC 1.2.1 |
| **Milestones** | Milestone 9 <12 months: Constitution of a tuna platform including the industrial longline sector. |
| **Evidence** | Reports of meetings held for the constitution of the platform. Statutes showing the general objectives of the platform and its members. 3 |

This activity is already underway as part of the purse seine fishery action plan and should be complemented by TRANSMARINA's collaboration in promoting conservation measures for longline fleets in the EPO. Its progress and the achievement of the objective will also be linked to the corresponding indicators in the longline fishery FIP.

**Actions carried out by TRANSMARINA in the third year of the FIP**

Compliance with the conservation measures for tropical tunas approved in resolution 17 02 (2017 to 2020) for purse seine and longline that were extended to 2021 is maintained.

***Supporting documents:***

* MEMORANDUM OF UNDERSTANDING BETWEEN TUNA CONSERVATION GROUP (TUNACONS) AND TRANSMARINA S.A. FOR TECHNICAL COOPERATION IN THE IMPLEMENTATION OF THE FISHERY IMPROVEMENT PROJECT (FIP) ON PRINCIPLES 1 AND 3 FOR THE TUNA PURSE SEINE FISHERY IN THE EASTERN PACIFIC OCEAN.

**Analysis of compliance with AP actions in the third year:**

Milestone 9 <12 months: Constitution of a tuna platform including the industrial longline sector.

The signing of the MOU between TRANSMARINA and TUNACONS can be considered the basis of the platform demanded in this milestone.

The purpose of this Memorandum of Understanding (MOU) is to formalize and provide a framework for cooperation between TUNACONS and TRANSMARINA S.A. in the development of principles 1 and 3 of the Fishery Improvement Projects (FIP) for the purse seine and longline tuna fishery operating in the Eastern Pacific Ocean mainly for the Yellowfin and Bigeye tuna species.

The action is considered completed, although evidence of the operation and cooperation of the parties must be presented through agreements or minutes of meetings (among others) held. In this regard, no such evidence has been presented.

Resolution 17-02 on conservation measures for purse seine and longline has been extended to 2021. Therefore, although the action is completed, according to the milestones, it is advisable to check the evidence in the next evaluation period.

Therefore, it is necessary to extend the duration of the FIP by one more year (December 2023) to be able to complete the actions designed in the Action Plan.

**1.3.2 Design and implement a solid Reduction Plan of the fishing capacity in the EPO**

The Ecuadorian Government should continue to promote before the IATTC the design of a comprehensive plan for reducing fishing capacity in the EPO. It is believed that the adoption of a comprehensive plan will contribute to the conservation of the main species of tropical tunas.

The delegation of Ecuador promoted in the IATTC a reference framework for fleet capacity reduction in the EPO (documented in the report of the 17th meeting of the permanent working group, presented at the 90th annual meeting of the IATTC). Such framework has been adopted in 2016 and is constituted in the document ¨Elements *for the implementation of a fleet capacity management plan in the IATTC¨4*. This process will be continued with the design of an Integrated Fleet Management Plan, which includes a component for capacity reduction. Ecuador's role in the development of this initiative has been and will continue to be crucial.

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| **Responsible entities** | TRANSMARINA/TUNACONS/WWF/SRP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | Media |
| **Implementation period** | 24 months |
| **State of the action** | Reinforcement of activities undertaken in FIP TUNACONS |
| **Related MSC indicators** | IC 1.1.1 IC 1.2.1  |
| **Milestones** | Milestone 10 <18 months: Design of an Integrated Fleet Management Plan. Milestone 11 <24 months: Implementation of a Comprehensive Fleet Management Plan |
| **Evidence** | IATTC reports including proposals for the plan. Adoption of the Integrated Fleet Management Plan. Report of plenary meetings. IATTC Resolutions |

This activity is already underway as part of the Purse Seine fishery action plan. The progress of the activity and the achievement of the objective will also be linked to the corresponding indicators in the longline fishery FIP.

**Actions carried out by TRANSMARINA in the third year of the FIP**

No progress has been made due to the stoppage of activities caused by the COVID-19 pandemic. It is expected that, during 2021, work will resume to develop a proposal for a Capacity Management Plan containing a component for fleet capacity reduction in the EPO.

***Supporting documents:***

No documents

**Analysis of compliance with AP actions in the third year:**

It is not considered closed because the work to prepare the Management Plan proposal has been halted due to the situation generated by the COVID-19 pandemic.

Therefore, it is necessary to extend the duration of the FIP by one more year (December 2023) to be able to complete the actions designed in the Action Plan.

**1.3.3 Improve the monitoring of tuna longline fleets in the EPO**

The effectiveness of the management strategy depends on the availability of detailed information for all fleet segments. In the case of the tuna longline fisheries there are information gaps and the level of detail collected for these could be improved so that the data set allows effective management to be designed and implemented. It would be necessary to improve the quality of the information collected where gaps exist and particularly to ensure that all fleet segments, and in particular longline, are adequately monitored.

It would be necessary to properly characterize all tuna longline fleets operating in the IATTC convention area and monitor them at the minimum levels that would ensure information to support the catch strategy.

To achieve this action, TRANSMARINA should request the Ecuadorian administration to explicitly support the IATTC staff recommendation to increase observer coverage levels in the longline fishery from 5% to 20% and to improve overall compliance levels with minimum data requirements as per recent IATTC5 requests to CPCs.

In addition to this and in the exercise of guaranteeing that the observers carry out their work as efficiently as possible and without setbacks or pressure, TRANSMARINA should at the same time promote through the Ecuadorian delegation, the adoption of minimum safety conditions for observers working aboard tuna purse seiners or longliners within the framework of the IATTC. These provisions should be adopted in the framework of a specific resolution or be contemplated in the framework of the existing one.

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| **Responsible entities** | TRANSMARINA/TUNACONS/WWF/SRP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | Media |
| **Implementation period** | Permanent |
| **State of the action** | Reinforcement of activities undertaken in FIP TUNACONS |
| **Related MSC indicators** | IC 1.2.1 IC 1.2.3 |
| **Milestones** | Milestone 12 < 6 months: SAC proposals for improved coverage and monitoring of longline fleets in the EPO Milestone 13 <12 months: Proposals for recommendations at IATTC including strengthening compliance with minimum reporting requirements, ensuring safety and conditions on board for observers, incorporating SAC recommendations into proposals Milestone 14 <24 months: Adoption of specific measures for effective implementation of minimum requirements and expanded and enhanced monitoring |
| **Evidence** | SAC reports with results and recommendations Proposals to the IATTC incorporating recommendations to improve monitoring and compliance with the resolutions in force.Measures explicitly adopted in resolutions  |

This activity is exclusively part of TRANSMARINA's longline fishery action plan. The progress of the activity and the achievement of the target will be the responsibility of TRANSMARINA and will be linked to the corresponding indicators in the longline fishery FIP.

**Actions carried out by TRANSMARINA in the third year of the FIP**

In 2018 (already evaluated in the first year) an MOU was signed with Instituto Nacional de Pesca (IPIAP) to develop an Observer program on board the TRANSMARINA tuna longline fleet.

The observer program has been active in the TRANSMARINA fleet with 100% coverage since that year and there are already records of three years of observer activity.

We supported and participated in the First Electronic Monitoring Workshop organized by IATTC to implement these systems in tuna purse seine and longline fleets.

***Supporting documents:***

* RESOLUTION C-19-08 IATTC RESOLUTION ON SCIENTIFIC OBSERVERS ON LONGLINE VESSELS. Amends and replaces C-11-08 Observers on longline vessels.
* RESOLUTION C-18-07 RESOLUTION ON ENHANCING THE SAFETY OF OBSERVERS AT SEA: EMERGENCY ACTION PLAN

**Analysis of compliance with AP actions in the third year:**

This action includes, for the first three years of the FIP, two milestones at 6, 12 and 24 months respectively:

* Milestone 12 < 6 months: SAC proposals for improved coverage and monitoring of longline fleets in the EPO
* Milestone 13 <12 months: Proposals for recommendations at IATTC including strengthening compliance with minimum reporting requirements, ensuring safety and conditions on board for observers, incorporating SAC recommendations into proposals
* Milestone 14 <24 months: Adoption of specific measures for effective implementation of minimum requirements and expansion and improvement of monitoring.

The 2018 IATTC staff recommendation on management and data collection, states that, "Resolution C-11-08 requires that at least 5% of the fishing effort of longline vessels greater than 20 m in overall length carry a scientific observer. However, 5% coverage is too low to calculate accurate estimates of catches of species infrequently caught in these fisheries, such as some sharks of conservation concern; 20% coverage is the minimum level necessary for these estimates. Both the staff and the Committee have recommended that this level of coverage be adopted for longline vessels greater than 20 m length overall."

At the 93rd Meeting of the Inter-American Tropical Tuna Commission held on August 24-30, 2018, Colombia and Mexico presented an amendment proposal (IATTC-93 F-2) TO RESOLUTION C-11-08 about increasing the observer coverage on longline vessels to 20%. However, this proposal was rejected by some Asian countries. This proposal is aligned with milestone 12.

Resolution C-19-08, which replaces C-11-08, also does not include an increase in the percentage of observer coverage (5%), although it leaves it up to the CPCs to ensure that the coverage is representative of their fleet's activities.

In Ecuador, the MOU signed between TRANSMARINA and IPIAP, "aims to formalize and provide a framework for the relationship between TRANSMARINA S. A. and IPIAP to develop an onboard monitoring program and scientific and technological research on the industrial tuna longline fishing fleet of the company TRANSMARINA S. A." Currently the program is underway, covering all the company's vessels, and three years of information have been covered.

In relation to observer safety, Resolution C-18-07 on improving the safety of observers at sea: emergency action plan, would meet the requirements of milestone 13.

The action has been completed in accordance with milestones 12 and 13 of the Action Plan but not Milestone 14 as specific actions have not yet been taken. It is considered that TRANSMARINA/TUNACONS and other national stakeholders (SRP, WWF) have supported proposals to increase the percentage of observer coverage to 20% in accordance with the objectives of the action. In addition, TRANSMARINA has supported and participated in the First Electronic Monitoring Workshop organized by IATTC.

Therefore, it is necessary to extend the duration of the FIP by one more year (December 2023) to be able to complete the actions designed in the Action Plan.

**1.3.4 Review and reinforce the catch strategy and the HCR using specific management measures for the longline (capacity limitation, closures, number of hooks and others)**

It is considered that the existing catch strategy is not complete and does not consider all the uncertainties by not incorporating management elements that contemplate the role and specificities of all the participating fleets, which should include longlining.

This activity is not part of the Purse Seine fishery action plan. The progress of the activity and the achievement of the target will be the responsibility of TRANSMARINA and will be linked to the corresponding indicators in the longline fishery FIP.

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| **Responsible entities** | TRANSMARINA /WWF/SRP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | Media |
| **Implementation period** | Permanent |
| **State of the action** | New |
| **Related MSC indicators** | IC 1.1.1 IC 1.2.1 |
| **Landmark** | Milestone 15 < 12 months: Specific proposals for measures for longline fleets within the tuna constituted platform (see action 1.3.1, milestone 9) Milestone 16 < 18 months: Proposals for recommendations in the IATTC that include such proposals. |
| **Evidence** |  Reports of tuna platform meetings showing proposals for measures in longline fleets -Reports of IATTC plenary meetings and proposals presented by the platform. |

This could be an objective rather than an activity. In any case, the instruments to achieve it can be proposed by the stakeholders with more specific actions. Likewise, this action should be integrated within objective 1.3.1 and added as supplementary or parallel measures to the EPO Integrated Fleet Management Plan reflected in action 1.3.2.

**Actions carried out by TRANSMARINA in the third year of the FIP**

 NO DATA

***Supporting documents:***

No documents

**Analysis of compliance with AP actions in the third year:**

Milestone 15 < 12 months: Specific proposals for measures for longline fleets within the tuna constituted platform (see action 1.3.1, milestone 9).

No specific harvest control rules have been defined for the tuna longline fishery in accordance with the objectives of the action.

The PAN ATUN, promoted by the TUNACONS FIP, is considered the national management tool for the management of the tuna fishery in Ecuador. The PAN ATUN includes mechanisms for the improvement of key aspects of the fishery such as research or a national strategy for the tuna fishery. Since the PAN ATUN is already approved, but not yet 100% implemented, it is not possible to evaluate the results of its application including relevant information for adopting new management measures.

The action is not considered closed for the reasons described in the preceding paragraph.

Therefore, it is necessary to extend the duration of the FIP by one more year (December 2023) to be able to complete the actions designed in the Action Plan.

## PRINCIPLE 2

**2.1 Objective: Improve the information available on the impact of the fishery on the components of Principle 2 (primary, secondary species, ETP, habitats and ecosystem).**

**2.1.1 Implementation of a long-term observer or EMS program**

The TRANSMARINA longline fishery requires adequate monitoring that:

Characterize as accurately as possible the specific composition of catches, discards, releases, and mitigation strategies where appropriate, including catches of primary and secondary species.

-Record direct and indirect interactions with APP species and characterize the causes, estimate fishing mortalities based on national and international limits, and verify that the FAD does not pose a threat to their recovery.

Collect information in an appropriately designed database to analyze results, evaluate impacts and support management strategies.

There are currently electronic monitoring systems (EMS) whose operation and effectiveness have been proven and which could also be considered as a possibility for the development of this action.

The information collected, in addition to filling the gaps for a detailed assessment of the MSC P2, should comply with the requirements and recommendations already existing in the IATTC. The resulting information should be made available and analysed by a relevant scientific institution or one linked to the monitoring and management of the fleet, either at the IATTC, SRP or IPIAP level.

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| **Responsible entities** | TRANSMARINA /WWF/SRP/IPIAP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | Media |
| **Implementation period** | Permanent |
| **State of the action** | High |
| **Related MSC indicators** | IC 2.1.3, 2.2.3, 2.3.3, 2.4.3, 2.5.3 |
| **Milestones** | Milestone 17 <6 months: Design of a strategic monitoring plan with the creation of a database. Milestone 18 <12 months: Establishment of an agreement for collection and analysis of program data. Milestone 19 <12 months: Implementation of onboard fleet monitoring program.  |
| **Evidence** | Strategic monitoring plan and data base -Agreement and terms of reference for data management and analysis Effective implementation of observer or electronic monitoring. |

This information should be used to feed into the research plan (developing management strategies for the conservation of ETP species), and to inform managers on whether the strategies developed are bearing fruit.

**Actions carried out by TRANSMARINA in the third year of the FIP**

A cooperative MOU was established with IPIAP for on-board monitoring with observers to define a record of primary, secondary and ETP.

***Supporting documents:***

TRANSMARINA Longline Fleet 1st Year Data Report

MoU between TRANSMARINA and IPAIP (Ex INP) on observer program

**Analysis of compliance with AP actions in the third year:**

The signing of an MOU with the National Fisheries Institute has been the basis for meeting the three milestones of the Action Plan that should have been achieved in the first 12 years of its implementation:

Milestone 17 <6 months: Design of a strategic monitoring plan with the creation of a database.

Milestone 18 <12 months: Establishment of an agreement for collection and analysis of program data.

Milestone 19 <12 months: Implementation of onboard fleet monitoring program.

The above three milestones were considered partially achieved in the first-year review of the TRANSMARINA FIP. Through the MoU signed between IPIAP and TRANSMARINA, an observer program was implemented, including the development of a list of bycatch species. There is evidence of the progress of this program through the publication of the first annual report of data from the longline fleet obtained under the action of the program. However, with the documentation analysed there is no complete evidence that data exists for all species susceptible to be caught. Thus, in the data report, the authors acknowledge that interactions with seabirds or marine mammals were not recorded. Regarding sea turtles, the report specifies that there were no interactions with any specimens during the fishing trips analysed.

In any case, there is evidence of the creation and feeding of the database of information collected through the observer program during the three years of its implementation.

There are no references to other (electronic) monitoring systems as proposed in the action plan.

This action is considered partially completed but not yet finalized since there is no evidence that work is being done to implement an electronic monitoring system for the fleet.

Therefore, it is necessary to extend the duration of the FIP by one more year (December 2023) to be able to complete the actions designed in the Action Plan.

**2.1.2 Specific training of observers (mitigation, ETP species and sharks)**

The information that must be collected to fill the existing gaps is relatively complex, involving all the components of Principle 2. The number of species to be identified is high and ideally observers should be able to monitor mitigation manoeuvres, alternative measures, and eventually collect size samples and samples for biological analysis. Therefore, it is highly recommended that the observers that form part of the monitoring program be properly qualified and receive prior training on species identification, data collection systems and mitigation measures to be implemented during the fishery. Such training can be based on the recommendations and material available at the IATTC, which should be complemented with the results and needs identified during the pattern and discussion workshops.

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| **Responsible entities** | TRANSMARINA /WWF/SRP/IPIAP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | High |
| **Implementation period** | 12 months |
| **State of the action** | New |
| **Related MSC indicators** | IC 2.1.3, 2.2.3, 2.3.3, 2.4.3, 2.5.3 |
| **Milestones** | Milestone 20 <12 months: Observer training workshop |
| **Evidence** | Training materials (see milestone 17). Evidence of the workshops. |

**Actions carried out by TRANSMARINA in the third year of the FIP**

***SEE COMPLIANCE ANALYSIS***

This action was completed in the first year of implementation of the FIP.

**2.1.3 Captains Training and Discussion Workshop**

These workshops can serve as a platform to discuss potential alternative measures, obtain relevant information on the operation of the fishery and its interactions to assist in the improvement plan, as well as inform skippers and officers on board in detail about the FIP and its objectives.

In addition, training workshops on non-target species (sharks) and turtle ETP management procedures can improve survival rates of non-target species and ETPs. The implementation of good management procedures has been shown to be effective in reducing longline interactions with turtles and birds to reduce associated mortality. A training workshop should be organized so that the fleet is informed and can review and adopt proper handling procedures. The contents of these workshops can include methodology for collecting information according to IATTC standards, implementation of mitigation measures for sharks, birds, turtles and cetaceans, update on existing regulations both at the IATTC and SRP levels, etc. These workshops can serve as a platform to discuss potential alternative measures (see milestone 25).

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| **Responsible entities** | TRANSMARINA /WWF/SRP/IPIAP/EPESPO |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | High |
| **Implementation period** | Permanent |
| **State of the action** | New |
| **Related MSC indicators** | IC 2.1.2, 2.2.2, 2.3.2, 2.4.2, 2.5.2 IC 2.1.3, 2.2.3, 2.3.3, 2.3.3, 2.4.3, 2.5.3 |
| **Milestones** | Milestone 21 <12 months: Organization of a discussion and pattern formation workshop. |
| **Evidence** | Training materials. Evidence of the workshops. |

These workshops should be held periodically, in order to train new skippers, review new IATTC measures and collect information on any operational changes in the fishery.

**Actions carried out by TRANSMARINA in the third year of the FIP**

***Supporting documents:***

Certificate of completion of the courses and list of participants.

**Analysis of compliance with AP actions in the third year:**

Milestone 21 <12 months: Organization of a discussion and pattern formation workshop.

During the months of July and August 2020, Capacity Building Workshops on the Code of Good Practices on board for Crewmembers and Captains (70 students) of TRANSMARINA's longline fleet (ALTAR 8, ALTAR, 10 and ALTAR 21) were carried out. Therefore, the action is considered completed.

**2.2 Objective: To estimate the impact of the fishery on the components of Principle 2.**

**2.2.1 Updating of the list of species under Principle 2**

The determination of species under Principle 2 has been done in a precautionary manner, assuming the possibility that the % catches could be underestimated. The information collected through the monitoring program will be used to accurately determine the species composition of catches and interactions with APP species according to the MSC 2.0 standard. Depending on the results, it is possible that some actions may be modified, or new actions may be required.

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| **Responsible entities** | TRANSMARINA /WWF/External Consultant/IPIAP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | High |
| **Implementation period** | 30 months |
| **State of the action** | New |
| **Related MSC indicators** | IC 2.1.3, 2.2.3, 2.3.3, 2.4.3, 2.5.3 |
| **Milestones** | Milestone 22 <30 months: Review of species under P2  |
| **Evidence** | P2 Update Report |

**Actions carried out by TRANSMARINA in the third year of the FIP**

It is expected that based on IPIAP's technical reports, work on possible impacts on the ecosystem can be developed.

***Supporting documents:***

IPIAP first year observer report on the tuna longline fleet

**Analysis of compliance with AP actions in the third year:**

This action has only one Milestone that must be achieved before the 30 months start date of the Action Plan.

It is not considered finalized since there is no final list of species for the longline fleet made from the observations of the on-board observer program. In addition, information on secondary bycatch species such as seabirds or marine mammals is missing.

According to IATTC information (Document SAC-09-11 ecosystem considerations) there is insufficient information for the longline fleet regarding catches of non-target species.

Therefore, it is necessary to extend the duration of the FIP by one more year (December 2023) to be able to complete the actions designed in the Action Plan.

**2.2.2 Determine the level of impact of the UoA on the different components under Principle 2**

The information gathered through the monitoring program will serve to accurately determine the species composition of the catches and to estimate qualitatively and quantitatively the interactions with species under principle 2. Based on this information, the impact of the ESU on primary and secondary species should be reassessed more precisely and ensure that it does not impede the recovery or reconstitution of those whose populations are below their biological levels, in cases where they are major species (>5% or >2% for vulnerable species). More precise determination of the specific composition and whether or not the impacts are unacceptable if they proceed will determine the need for a strategy beyond the existing measures to be implemented as part of action 2.3.3.

In the case of ETP species, we will estimate whether these impacts are within the limits of national and international requirements for the protection of ETP species and estimate the combined effects of the MSC ESU on the populations. Depending on the results, it is possible that some actions may be modified, and new actions may be required[[1]](#footnote-2).

The impact assessment should be carried out with the assistance of the IATTC and the research organization in Ecuador that is managing the monitoring program data. The national research plan (see action 3.4.1) should also include among its objectives the analysis of this information to determine such impacts.

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| **Responsible entities** | TRANSMARINA /WWF/External Consultant/SRP/IATTC/IPIAP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | High |
| **Implementation period** | 36 months |
| **State of the action** | New |
| **Related MSC indicators** | IC 2.2.1, 2.3.1, 2.5.1 |
| **Milestones** | Milestone 23 <36 months: Review and estimate of quantitative impacts on species under P2 (see action 3.4.1).  |
| **Evidence** | Impact review results report  |

**Actions carried out by TRANSMARINA in the third year of the FIP**

No data

***Supporting documents:***

IPIAP first year observer report on the tuna longline fleet

**Analysis of compliance with AP actions in the third year:**

This action has only one Milestone that must be achieved before the 36 months start date of the Action Plan.

While the IPIAP observer program and the collection of information should be considered an important step in analyzing the impact of the fishery, information from the three years since the program was implemented has not yet been analysed.

Therefore, the action is not yet completed.

Therefore, it is necessary to extend the duration of the FIP by one more year (December 2023) to be able to complete the actions designed in the Action Plan.

**2.3 Objective: Management and mitigation of potential fishery impacts**

**2.3.1 Review of alternative measures for mitigation of unwanted species (target, primary, secondary and ETP)**

The MSC 2.0 standard requires for each of the respective management PIs for target, primary, secondary and APP species, that the EBU reviews and implements alternative measures for the mitigation of unwanted catches. If it can be demonstrated that for a given component (Principle 1, Principle 2) all catch of all species is retained, then the review and implementation of alternative measures is not necessary (this information will be available as soon as data from the monitoring program is available). In the case of ETP species, such mitigation measures relate to minimizing mortality of ETP species as a result of direct or indirect effects of the fishery.

The measures to be considered may initially be based on those that already exist as part of the IATTC recommendations.

Among the measures to be adopted, a section should be including in the logbook to record lost gear with the geographic coordinates of the event and specifications of the lost gear (number of hooks, types of hooks, length of longline, etc.). Likewise, their recovery should be promoted to the extent possible. This will make it possible to evaluate the overlap of fishing operations with existing habitats to expand the information needed for a strategy that includes habitats and ecosystems if necessary.

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| **Responsible entities** | TRANSMARINA /WWF/SRP/IATTC |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | High |
| **Implementation period** | Permanent (every 5 years) |
| **State of the action** | New |
| **Related MSC indicators** | IC 2.1.2, 2.2.2, 2.3.2, 2.4.2, 2.5.2 |
| **Milestones** | Milestone 24 <6 months: Logbook Modification Milestone 25 <12 months: Measurement Review |
| **Evidence** | New logbook templates Measurement review report for P2 UoA |

A review process (every 5 years) of alternative measures should be carried out based on the interactions that exist for ETP species and other components of Principle 2. Such measures may be specifically developed or known to work in similar fleets and should be reviewed and updated as information from the monitoring program becomes available.

**Actions carried out by TRANSMARINA in the third year of the FIP**

These issues are expected to build on the results of the IPIAP to analyze possible mitigation measures that may be necessary.

A Code of Conduct for the longline fleet has been published under IATTC, SRP and ISSF criteria.

***Supporting documents:***

* Logbook models
* Code of Conduct
* RESOLUTION C-19-04 RESOLUTION TO MITIGATE IMPACTS ON SEA TURTLES

**Analysis of compliance with AP actions in the third year:**

Milestone 24 <6 months: Modification of Logbooks. IPIAP has implemented and new logbooks are operational to collect interaction data on ETP species and other P2 components. However, not all the necessary variables are yet collected in them. Thus, interactions with seabirds, although integrated into the database, have not yet been analysed.

Milestone 25 <12 months: Review of measures. There is no information on the review of IPIAP observer data collection systems.

IATTC, through RESOLUTION C-19-04 to mitigate impacts on sea turtles, has established specific measures for this group of species covering both purse seine and longline fishing gear.

Mitigation measures for interactions with ETP species or other ecosystem impacts have not yet been implemented. This is expected to be done following the implementation of the Code of Conduct.

This action has not been completely fulfilled in accordance with the milestones foreseen in the Plan.

Therefore, it is necessary to extend the duration of the FIP by one more year (December 2023) to be able to complete the actions designed in the Action Plan.

**2.3.2 Appropriation of a code of conduct and implementation of mitigation measures during fishing operations**

Following the skipper training workshops (see activities 2.1.3) and the adoption of alternative measures (see activity 2.3.1) and a code of conduct will be adopted detailing the handling procedures to be applied at the fleet level.

The code of conduct must include the adoption of an adequate policy of prohibition of finning by TRANSMARINA, including adequate training of crew members (see actions 2.1.2 and 2.1.3) and disincentives (sanctions).

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| **Responsible entities** | TRANSMARINA /WWF/Auditor |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | High |
| **Implementation period** | 24 months |
| **State of the action** | New |
| **Related MSC indicators** | IC 2.1.2, 2.2.2, 2.3.2, 2.4.2, 2.5.2, 2.2.1,2.3.1 |
| **Milestones** | Milestone 26 <18 months: Adoption of a code of good practice Milestone 27 <18 months: Effective implementation of measures Milestone 28 <24 months: Code of Conduct Audit |
| **Evidence** | Publication of the Code of Conduct Audit of the Code of Conduct |

The application of the code of conduct must be monitored through the monitoring program and will be audited by an independent entity.

**Actions carried out by TRANSMARINA in the third year of the FIP**

Work is underway to develop the Code of Conduct for the longline fleet under IATTC, SRP and ISSF criteria.

***Supporting documents:***

Code of Conduct

**Analysis of compliance with AP actions in the third year:**

There is a Code of Conduct adopted by the TRANSMARINA fleet in accordance with the objectives of this action.

Therefore, the action is completed.

**2.3.3 Development of a management strategy and reinforcement of existing measures to ensure that the fishery does not represent an unacceptable impact for species under P2 (primary, secondary and ETP)**

The absence of baseline information prevents the existence of a management strategy for the species under principle 2. Determine the levels of impact quantitatively, if these are unacceptable, if national or international levels are exceeded with respect to interactions with HHP species or if the fishery prevents the recovery of those components that require it. The necessary information will be obtained through the actions proposed in the previous points (2.1.1, 2.2.1, 2.2.2).

The progress of information gathering will help to further define the strategy as previous actions are completed. (2.2.2) Precautionary and while information is being gathered and impact levels are being determined:

Existing IATTC measures related to sharks and ETP species (especially turtles and birds) should be binding and have mechanisms to encourage and verify compliance, so that it is very likely that the requirements for their protection will be met.

Existing measures at the IATTC and SRP levels should be expanded and strengthened to improve their effectiveness considering the monitoring results.

There should be a reasonable degree of confidence in the performance of the measures, which should be supported by direct information on fleet performance and stock status of ETP species and primary and secondary species (mostly sharks).

Management measures such as estimating the optimal number of hooks, establishing closed areas or size or catch limits should be including in the evaluation so that these measures can be available to form part of a strategy if needed.

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| **Responsible entities** | TRANSMARINA /WWF/SRP/IATTC |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | High |
| **Implementation period** | 36 months |
| **State of the action** | New |
| **Related MSC indicators** | IC 2.2.1, 2.3.1, 2.1.2, 2.2.2, 2.3.2 |
| **Milestones:** | Milestone 29 <36 months: Make IATTC measures binding (see milestone 15) Milestone 30 <36 months: Implement mechanisms to incentivize and verify compliance with measures Milestone 31 <36 months: Review implementation and effectiveness of measures (see action 2.2.2) |
| **Evidence** | **Modification of Ecuadorian regulations or IATTC resolutions** Incentives, sanctions and verification of measures Report on the adequacy of the existing strategy |

**Actions carried out by TRANSMARINA in the third year of the FIP**

No evidence of progress has been presented for this action.

***Supporting documents:***

* Agreement between WWF Ecuador and the Government of New Zealand for the development of the project "Monitoring of the Black Petrel in the waters of the south-eastern Pacific Ocean of Ecuador".
* Resolution No. MAAE-SPN-2021-001 through which the Action Plan for the Conservation of Sea Turtles in Ecuador 2021 - 2030 is approved and made official.

**Analysis of compliance with AP actions in the third year:**

Given that the previous two actions (2.3.1 and 2.3.2) have not yet been completed, this action is not considered to have progressed as planned for all potential bycatch species groups in the longline fishery. Complete analysis of observer information will be key to implementing further management measures.

Resolution No. MAAE-SPN-2021-001, which approves and formalizes the Action Plan for the Conservation of Sea Turtles in Ecuador 2021 - 2030, includes specific measures to minimize the impact of longline fishing fleets. It is also important to highlight the recent update of the National Shark Action Plan by the SRP.

In relation to seabirds, it is important to highlight the agreement between the Government of New Zealand and WWF Ecuador for the development of the project "Monitoring of the Black Petrel in the waters of the southeaster Pacific Ocean of Ecuador", whose main objective is to train Ecuadorian fishery observers to collect information on sightings at sea and interactions of petrels with fishing gear.

However, although progress has been made towards achieving the objectives of action 2.3.3, it cannot yet be considered complete, since it is considered necessary to process the information from the observer program and derive specific management strategies for those species groups that do not yet have them.

Therefore, it is necessary to extend the duration of the FIP by one more year (December 2023) to be able to complete the actions designed in the Action Plan.

## Principle 3: Fishery management and governance system

**3.1 Objective: National strategy for the management of the tuna fishery**

This activity: already existing as part of the tuna purse-seine FIP work plan, consists of the development or amendment of national regulations for those industrial tuna fisheries, with particular emphasis on those that incorporate the IATTC regulatory framework in addition to the Ecuadorian one. Broadly speaking, TRANSMARINA should support the development of this objective, currently underway in the form of the PAN ATUN, in all its aspects and especially in those that refer to the Ecuadorian longline fleet.

**3.1.1 Adoption of a national strategy for the management of the tuna fishery in Ecuador**

TRANSMARINA shall be incorporated into the process initiated under the Ecuadorian purse-seine FIP work plan. This strategy shall be part of the National Tuna Action Plan (Activity 3.2.1) and regardless of the progress made up to the date of adoption of this plan; it should incorporate any measures for the tuna longline fishery that are developed as a result of previous actions 1.3.1, 1.3.3, 1.3.3, 1.3.4, 2.3.1, 2.3.3. Any strategy identified for the longline fleet should be integrated as part of the National Tuna Action Plan.

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| **Responsible entities** | TRANSMARINA /TUNACONS/WWF/SRP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | Media |
| **Implementation period** | 12 months |
| **State of the action** | Reinforcement of activities undertaken in FIP TUNACONS |
| **Related MSC indicators** | IC 1.2.1, 2.1.2, 2.2.2, 2.3.2, 2.4.2, 2.5.2, 3.1.1, 3.1.3, 3.2.1, 3.2.2, 3.2.2, 3.2.4, 3.2.5  |
| **Milestones** | Milestone 32 <12 months: Adoption of a national tuna strategy consolidating measures (see actions 1.3.1, 1.3.4, 2.3.2 and 2.3.3). |
| **Evidence** | Reports. Strategy approaches and objectives. |

This activity is already underway as part of the Purse Seine fishery action plan and should be specifically complemented by TRANSMARINA as described. The progress of the activity and the achievement of the objective will also be linked to the corresponding indicators in the longline fishery FIP.

**Actions carried out by TRANSMARINA in the third year of the FIP**

The National Tuna Action Plan (PAN ATUN) has been finalized, published and adopted. Its publication was made through Ministerial Agreement 0184-A of the Ministry of Production, Exports, Investments and Fisheries issued through the Undersecretariat of Fisheries Resources.

***Supporting documents:***

* Presentation by CONSTRUFERCA S.A. on the progress of Ecuador's Tuna Plan

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**Analysis of compliance with AP actions in the third year:**

According to Milestone 32, a national tuna strategy should have been adopted 12 months after the start of the AP.

Ecuador's Tuna Plan originated as an action of the TUNACONS FIP which prioritized this strategy as one of the most important of the entire project. Other actions of the project were linked to the publication and adoption of this Plan.

The adoption of the Plan, due to the situation of the COVID-19 pandemic, has been slower than expected, although it is considered that, as indicated by the Ecuadorian fisheries administration, the Plan is now adopted by the different stakeholders involved in it. For this, and in relation to the objectives and results of the action, it is considered that there is a national strategy for the management of the tuna fishery and longline tuna fisheries are integrated into the national policy in Ecuador. Therefore, the action is completed.

**3.1.2 Updating or development of regulatory instruments for all fleets and fishing gears involved in the tuna fisheries.**

At the Ecuadorian level, agreement # 174 which transposes IATTC regulations should be extended to transpose into Ecuadorian law any adopted regulations that apply to the Ecuadorian longline fleet. This should, at a minimum, include the obligations regarding data provision and minimum observer coverage (C-03-05 and C-11-08). All regulations and amendments shall constitute the Regulatory Framework within the Tuna Action Plan (Action 3.1.3).

In addition, the results of workshops with shipowners, research programs and other collaborative initiatives within and outside Ecuador will contribute to the development of national standards for the management of the Ecuadorian tuna fishery.

Amendments to the regulations required by activities described in this plan, in particular the activities (and others requiring revision of legislation) should be consolidated as part of this activity.

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| **Responsible entities** | TRANSMARINA /TUNACONS/SRP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | Media |
| **Implementation period** | 12 months |
| **State of the action** | Reinforcement of activities undertaken in FIP TUNACONS |
| **Related MSC indicators** | IC 3.1.1, 3.2.1, 3.2.3 |
| **Milestones** | Milestone 33 <12 months: Amendments to the regulations  |
| **Evidence** | Fishing regulations in Ecuador |

This activity was part of the Purse Seine fishery action plan (TUNACONS) and should be specifically complemented by TRANSMARINA according to the results of action 3.1.1. The progress of this activity and the achievement of the objective will also be linked to the corresponding indicators in the longline fishery FIP.

**Actions carried out by TRANSMARINA in the third year of the FIP**

Monitoring that the Ecuadorian Administration adopts the IATTC resolutions immediately in the national regulations. There has been no need so far for any additional specific regulation at the national level for this fishery. Similar to the third year of implementation of the FIP.

***Supporting documents:***

AGREEMENT No. MPCEIP-SRP-2019-0184-A - National Tuna Action Plan

**Analysis of compliance with AP actions in the third year:**

This action considers it necessary for there to be a mechanism through which the processes for the adoption of IATTC resolutions by the Ecuadorian Administration are clearer and are reflected in Ecuadorian regulations.

As specified in the first year's FIP review, there is no specific mechanism to consolidate procedures and regulations related to tuna fisheries in Ecuador. However, it has been verified that the mechanism for the implementation of IATTC resolutions by the Ecuadorian Administration is practically immediate once they are approved within the RFMO. On the other hand, the PAN ATUN is aimed at the integral management of industrial tuna fishing fleets, so TRANSMARINA's longline fleet activities would be including in this regulation.

The action is considered completed in the third year of the FIP.

**3.1.3 Development of a Tuna Action Plan for Ecuador**

The management of tropical tunas at the IATTC level is not carried out with a catch strategy and specific management objectives, so this should be redefined, at least at the national level while promoting its modification at the IATTC level. The development of these objectives should be part of an integrated management of the fishery. As a result of this, the development of a Tuna Action Plan for Ecuador is proposed, where the specific objectives are including as a core part from which the other management, conservation, research and monitoring issues are derived.

The plan should include a comprehensive and precautionary strategy to respond to the impacts caused by the fishery on target species, bycatch and APP and the ecosystem in general. It should also include, among others, **the general and specific management objectives**, the regulatory framework; management strategies and management tools for each fleet, industrial and artisanal purse seine and longline; a monitoring and research plan, control, and surveillance; education and communication; decision making process and other national strategies for the sustainability of the resource. Several elements to be including in the Action Plan are described in activities proposed in this document, such as the management strategy for the tuna fishery, the regulatory framework, the research plan, etc. The Action Plan will constitute an important management tool at the national level.

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| **Responsible entities** | TRANSMARINA /TUNACONS/SRP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | Media |
| **Implementation period** | 12 months |
| **State of the action** | Reinforcement of activities undertaken in FIP TUNACONS |
| **Related MSC indicators** | IC 3.2.1, P1 and P2 |
| **Milestones** | Milestone 34 <12 months: Adoption of a National Action Plan **that** includes species-specific targets for tunas. |
| **Evidence** | Transposition of the Plan into legal instruments |

It is proposed to hire a consultant to induce and coordinate the participatory process for the design and adoption of such a plan at the national level. Once approved in Ecuador, it can be presented to the IATTC as a contribution from a member country, which can serve other countries as a model for the management of their tuna resources.

This activity is already underway as part of the Purse Seine fishery action plan and should be specifically complemented by TRANSMARINA to incorporate strategic objectives for the management of PS Albacore and any other tuna as appropriate into the action plan. Its progress and the achievement of the objective will also be linked to the corresponding indicators in the longline fishery FIP.

**Actions carried out by TRANSMARINA in the third year of the FIP**

The National Tuna Action Plan is finalized, approved and officially published, although it is not fully developed due to the COVID-19 pandemic situation.

According to the information provided, the Plan will be developed over the next year in coordination with the SRP.

***Supporting documents:***

AGREEMENT No. MPCEIP-SRP-2019-0184-A - National Tuna Action Plan

**Analysis of compliance with AP actions in the third year:**

Milestone 34 <12 months: Adoption of a National Action Plan that includes species-specific targets for tunas.

The PAN ATUN has still been approved by the Government of Ecuador, although its contents are not yet fully developed. However, given that the action is aimed at the development and adoption of the Plan, the action is considered completed.

**3.1.4 Design of an intervention strategy for the IATTC**

Proposal of a strategy to promote the adoption of measures and resolutions within the IATTC. Within this strategy, all the other issues of this action plan that require discussion and agreements with the IATTC can be considered. On the other hand, the Tuna Action Plan can serve as a structured and effective intervention strategy for Ecuador before the IATTC.

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| **Responsible entities** | TRANSMARINA /TUNACONS/SRP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | Media |
| **Implementation period** | 24 months |
| **State of the action** | Reinforcement of activities undertaken in FIP TUNACONS |
| **Related MSC indicators** | IC 3.2.1, P1 and P2 |
| **Milestones** | Milestone 35 <24 months: Strategy approach and formalization, including objectives and instruments. |
| **Evidence** | Documents, minutes and other |

This activity is already underway as part of the Purse Seine fishery action plan and should be specifically complemented by TRANSMARINA to incorporate issues related to actions 1.3.1, 1.3.2, 1.3.3, 1.3.3, 1.3.4 and 2.3.3 as well as any others as appropriate. The progress of the strategy and the achievement of the objective will also be linked to the corresponding indicators in the longline fishery FIP.

**Actions carried out by TRANSMARINA in the third year of the FIP**

This strategy is part of the contents of the Tuna PAN.

***Supporting documents:***

AGREEMENT No. MPCEIP-SRP-2019-0184-A - National Tuna Action Plan

**Analysis of compliance with AP actions in the third year:**

Milestone 35 <24 months: Strategy approach and formalization, including objectives and instruments.

The only milestone for this action must be reached before the end of the second year of the FIP.

The adoption of the National Tuna Action Plan is a tool that defines, among other elements, the national and international strategy for the management of the tuna fishing activities of the Ecuadorian fleets. Therefore, this tool should be considered as an intervention strategy before the IATTC.

Therefore, this action is completed.

**3.2 Objective: To improve the processes for decision making**

**3.2.1 Review of the IATTC decision-making system**

Ecuadorian stakeholders suggest that the IATTC develop a system that is more participatory, transparent, and where scientific advice has greater weight. The system should explain which fstakeholders have more weight in decision-making and why. Greater participation of Ecuadorian representatives in IATTC forums is required.

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| **Responsible entities** | TRANSMARINA /TUNACONS/WWF/SRP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | Media |
| **Implementation period** | 12 months |
| **State of the action** | Reinforcement of activities undertaken in FIP TUNACONS |
| **Related MSC indicators** | IC 3.2.2 |
| **Milestones** | Milestone 36 <12 months: approaches to IATTC to improve transparency and participation in decision making. IATTC reports. Documents. Minutes. Action Plan.  |
| **Evidence** | National |

This activity is already underway as part of the Purse Seine fishery action plan. The progress of the activity and the achievement of the objective will also be linked to the corresponding indicators in the longline fishery FIP.

**Actions carried out by TRANSMARINA in the third year of the FIP:**

TUNACONS continues to work with IATTC delegates to improve and make information and decision-making more transparent.

The external evaluation recommended a series of actions to improve IATTC's decision-making system. An Action Plan was approved to develop activities on this topic.

***Supporting documents:***

AGREEMENT No. MPCEIP-SRP-2019-0184-A - National Tuna Action Plan

**Analysis of compliance with AP actions in the third year:**

Milestone 36 <12 months: approaches to IATTC to improve transparency and participation in decision making. IATTC reports. Documents. Minutes. Action Plan.

This action is analysed through the progress of the TUNACONS FIP and based on the MoU between TRANSMARINA and TUNACONS given the similarity of the same and the capacity of TUNACONS within the IATTC and reflected in this MoU.

TUNACONS has made representations to the IATTC to improve transparency and decision making. This is an action that is the responsibility of IATTC in accordance with the AP. These efforts are fundamentally centred on the Open Letter to IATTC that was sent from the TUNACONS and OPAGAC Fisheries Improvement Projects.

During 2018, the external evaluation of the organization recommended a series of actions to improve IATTC's decision-making system. An Action Plan was approved to develop activities on this topic.

However, and like the previous evaluation of the progress of TRANSMARINA's FIP; there is no record that the IATTC has made the review of its decision-making system despite the recommendations that, in this regard, arose from the consultancy that the IATTC itself hired between 2015 and 2016. There is no additional information for the years 2019, and 2020. Especially in the latter, the pandemic has slowed down or postponed the usual functioning of the IATTC.

Therefore, the action is not yet considered completed.

Therefore, it is necessary to extend the duration of the FIP by one more year (December 2023) to be able to complete the actions designed in the Action Plan.

**3.2.2 Create a procedure for internal decision making**

Creation of a procedure by which the Ministry and the SRP present evidence that decision making is transparent, participatory, smooth and efficient. Continued stakeholder participation is required. This task should be part of Ecuador's Tuna Action Plan.

This activity is already underway as part of the Purse Seine fishery action plan. The progress of the activity and the achievement of the objective will also be linked to the corresponding indicators in the longline fishery FIP.

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| **Responsible entities** | TRANSMARINA /TUNACONS/WWF/SRP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | Media |
| **Implementation period** | 12 months |
| **State of the action** | Reinforcement of activities undertaken in FIP TUNACONS |
| **Related MSC indicators** | IC 3.2.2 |
| **Milestones** | Milestone 37 <12 months: Make explicit in the National Action Plan (see action 3.1.3) how the decision-making process is developed in the Ecuadorian administration.  |
| **Evidence** | Documents. Minutes. National Action Plan |

**Actions carried out by TRANSMARINA in the third year of the FIP**

It is part of the results of the consultant's work.

***Supporting documents:***

AGREEMENT No. MPCEIP-SRP-2019-0184-A - National Tuna Action Plan

**Analysis of compliance with AP actions in the third year:**

Milestone 37 <12 months: Make explicit in the National Action Plan (see action 3.1.3) how the decision-making process is developed in the Ecuadorian administration.

Since this action refers directly to the National Tuna Action Plan, it is completed as the PAN ATUN has already been published and is in the process of adopting all its component elements.

**3.3 Objective: To update and strengthen the monitoring, control and surveillance system (MCS).**

This year, there is also no evidence of systematic non-compliance by TRANSMARINA's EU fleet. The Undersecretariat of Fisheries Resources, present at the FIP follow-up meeting, did not comment on possible violations by the TRANSMARINA longline fleet or the industrial tuna fleet.

No vessels appear on the IATTC IUU lists or those of any other regional organization or public registry.

The IATTC records compliance through satellite vessel monitoring (VMS), a list of vessels that engage in IUU practices, port-level controls, observers, research logs, and transhipments surveillance. Through these mechanisms the IATTC records information on illegal practices and infractions. The tasks required to strengthen the monitoring, control and surveillance system in Ecuador are:

**3.3.1 TRANSMARINA's support to the process of infrastructure reinforcement, verification of MCS compliance for the Ecuadorian tuna fleet, particularly the smaller fleet and the company's own fleet.**

**The** objective of this action is to follow up on the implementation procedure for satellite monitoring of tuna fleets between the MPCEIP and the DIRNEA.

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| --- | --- |
| **Responsible entities** | TRANSMARINA /TUNACONS/SRP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | Media |
| **Implementation period** | 12 months |
| **State of the action** | Reinforcement of activities undertaken in FIP TUNACONS |
| **Related MSC indicators** | IC 3.2.3 |
| **Milestones** | Milestone 38 <12 months: TRANSMARINA provides evidence of satellite tracking across its fleet and compliance with SRP and IATTC requirements.  |
| **Evidence** | Documentation. Certificates. Reports. Inspection reports. |

**Evidence**

VMS data transmission contracts

This activity is already underway as part of the Purse Seine fishery action plan and should be specifically complemented by TRANSMARINA to clarify and ensure systematic compliance with the obligations and procedures for daily fisheries reporting and baseline information to the appropriate bodies and according to the minimum standards required by the IATTC.

TRANSMARINA shall transparently demonstrate systematic compliance by its fleet with its VMS reporting obligations and procedures and provide data on the level of overlap of fishing activities with protected areas and seabird risk zones (Galapagos) to be including with the information to be used to review P2 (see action 2.2.1 and 2.2.2).

Its progress and the achievement of the objective will be linked to the corresponding indicators in the longline fishery FIP.

**Actions carried out by TRANSMARINA in the third year of the FIP**

The Undersecretariat of Fisheries Resources maintains its MCS for all fishing fleets in Ecuador.

According to the information presented by the SRP during the TRANSMARINA FIP follow-up meeting, the control and surveillance system (SCV) is maintained for all industrial fleets in Ecuador and therefore for the company's vessels.

***Supporting documents:***

ORGANIC LAW FOR THE DEVELOPMENT OF AQUACULTURE AND FISHING- Official Gazette Supplement No. 187, April 21, 2020.

**Analysis of compliance with AP actions in the third year:**

Milestone 38 <12 months: TRANSMARINA provides evidence of satellite tracking across its fleet and conforms to SRP and IATTC requirements.

This action, after the third year and without any sanction or infraction by TRANSMARINA's fleet, is considered closed. However, it is important that TRANSMARINA submits a report containing all the information requested for the compliance of the action.

**3.3.2 Implement new sanctions and fines for non-compliance or infringement**

The new Fisheries Law, which has already been approved, includes a regulatory framework that, according to the SRP, is very demanding in the field of controls and sanctions.

Both organizations will promote and participate in the process of development and adoption of the new fishing law so that the new sanctioning scheme is effective for Ecuadorian tuna fleets.

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| --- | --- |
| **Responsible entities** | TRANSMARINA /TUNACONS/WWF/SRP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | Media |
| **Implementation period** | 12 months |
| **State of the action** | Reinforcement of activities undertaken in FIP TUNACONS - Ongoing action |
| **Related MSC indicators** | IC 3.2.2 |
| **Milestones** | Milestone 39 <12 months: Adoption of new SRP sanction regime |
| **Evidence** | National legislation. Others. |

This activity is already underway or completed as part of the Purse Seine fishery action plan. The progress of the activity and the achievement of the objective will also be linked to the corresponding indicators in the longline fishery FIP.

**Actions carried out by TRANSMARINA in the third year of the FIP**

The system of sanctions and fines of the Undersecretariat of Fishing Resources is in force and applies to all fleets. Ecuador's new Fisheries Law applies.

***Supporting documents:***

Presentation SRP FIP follow-up meeting

**Analysis of compliance with AP actions in the third year:**

Milestone 39 <12 months: Adoption of a new SRP sanctions regime.

The new fisheries law includes a new regime of sanctions. The new law has been developed with the participation of the European Union's DG MARE, as well as FAO and WWF. In parallel, work is being carried out on the new regulation that will accompany the Law, although the new sanctions are applicable independently of the new regulation.

This action has been completed.

**3.3.3. Design a strategy to reduce illegal, unreported and unregulated fishing**

The new regulation has as its guideline to combat illegal fishing.

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| --- | --- |
| **Responsible entities** | TRANSMARINA /TUNACONS/WWF/SRP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | Media |
| **Implementation period** | 12 months |
| **State of the action** | Reinforcement of activities undertaken in FIP TUNACONS - Ongoing Action |
| **Related MSC indicators** | IC 3.2.2 |
| **Milestones** | Milestone 40 <12 months: Consolidate the strategy to combat IUU fishing in the National Tuna Action Plan. |
| **Evidence** | IATTC Reports. Documents. Minutes. National Action Plan |

As part of the purse seine fishery action plan, an IUU strategy has been designed that applies to all Ecuadorian fleets. The progress of the strategy and the achievement of the objective will also be linked to the corresponding indicators in the longline fishery FIP.

**Actions carried out by TRANSMARINA in the third year of the FIP**

Ecuador has a MCS system to combat IUU fishing.

The Undersecretariat of Fisheries Resources has approved a NATIONAL ACTION PLAN TO PREVENT, DISALLOW AND ELIMINATE UNDECLARED AND UNREGULATED ILLEGAL FISHING through AGREEMENT Nr. MAGAP-M.A.G. A. P-2015-0001-A.

In addition, Ecuador is a signatory to the FAO agreement on Port State measures.

***Supporting documents:***

AGREEMENT No. MPCEIP-SRP-2019-0184-A - National Tuna Action Plan

**Analysis of compliance with AP actions in the third year:**

Milestone 40 <12 months: Consolidate the strategy to combat IUU fishing in the National Tuna Action Plan.

The NATIONAL ACTION PLAN TO PREVENT, DISALLOW AND ELIMINATE UNDECLARED AND UNREGULATED ILLEGAL FISHING, in force through AGREEMENT Nr. MAGAP-M.A.G. A. P-2015-0001-A is a key piece in the national policy against IUU fishing.

Since the Tuna NAP is already approved and published, this action is considered closed.

**3.3.4 Strengthen monitoring measures to ensure that finning does not occur**

Following the implementation of the obligation to land sharks with their fins attached, there have been seizures of large quantities of fins that have escaped the control of the measures. This measure is raised in view of the potential risk that the current system may not be sufficient to ensure that this does not occur. The MSC standard requires, in the case where there is an obligation to land naturally attached fins, that independent verification methods are in place. The relevant authorities in Ecuador should design and implement an at-sea monitoring mechanism with a minimum of 5% coverage of fishing operations or verification of landings in port and unloading areas to ensure that finning does not occur in any case.

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| **Responsible entities** | TRANSMARINA/WWF/SRP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | Media |
| **Implementation period** | 12 months |
| **State of the action** | New |
| **Related MSC indicators** | IC 3.2.2 |
| **Milestones** | Milestone 41 <12 months: SRP strengthens inspection system to ensure that discharge coverage covers all areas. |
| **Evidence** | Technical reports. Minutes. Inspection certificates. |

This activity is not part of the purse seine fishery action plan. The development of this action will depend on TRANSMARINA. Its progress and the achievement of the objective will also be linked to the corresponding indicators in the longline fishery FIP.

**Actions carried out by TRANSMARINA in the third year of the FIP**

Ecuador maintains stringent regulations on shark finning bans and the SRP continues to monitor them.

***Supporting documents:***

AGREEMENT No. MPCEIP-SRP-2019-0184-A - National Tuna Action Plan

**Analysis of compliance with AP actions in the third year:**

Milestone 41 <12 months: SRP strengthens the inspection system to ensure that discharge coverage covers all areas.

The observer program covers 100% of the fleet and no finning on board is reported. The SRP has not issued any infraction report for carrying out this activity in the TRANSMARINA fleet according to the information provided in the follow-up meeting by the Undersecretariat staff.

The action has been completed.

**3.4 Objective: Development of a national research plan**

**3.4.1 Prepare a national research plan.**

This should be complemented with the IATTC Research Plan. It is necessary to identify information gaps and develop a national strategy that contributes in an effective and structured way to the IATTC scientific program. This program can be part of the National Tuna Action Plan, should receive feedback from the IATTC, and should be updated periodically.

MSC version 2.0 no longer includes an indicator *per se* to assess whether a research plan is in place, however, it is considered necessary to meet fishery-specific objectives.

|  |  |
| --- | --- |
| **Responsible entities** | TRANSMARINA /TUNACONS/WWF/SRP/IATTC/IPIAP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | Media |
| **Implementation period** | Permanent |
| **State of the action** | Reinforcement and expansion of activities undertaken in FIP TUNACONS - Action already in progress |
| **Related MSC indicators** | IC 2.1.3, 2.2.3, 2.3.3, 2.4.3, 2.5.3 |
| **Milestones** | Milestone 42 <24 months: A national research plan is elaborated, identifying objectives and necessary means (economic and technical). |
| **Evidence** | National tuna research plan |

This activity is already underway as part of the Purse Seine fishery action plan and should be specifically complemented by TRANSMARINA to incorporate the information and conclusions drawn from the monitoring program and especially those objectives related to studies on the impact and status of secondary species populations, especially silky sharks, thresher sharks and hammerhead sharks. The progress of the monitoring program and the achievement of the objective will also be linked to the corresponding indicators in the longline fishery FIP.

**Actions carried out by TRANSMARINA in the third year of the FIP**

Under development by the consultant

***Supporting documents:***

AGREEMENT No. MPCEIP-SRP-2019-0184-A - National Tuna Action Plan

**Analysis of compliance with AP actions in the third year:**

Point 5 of the National Tuna Action Plan includes population monitoring and scientific research to ensure the sustainability of the industrial tropical tuna fishery.

However, this Plan has not yet been fully adopted and, therefore, there is no specific research plan in place.

The action has not been closed. Therefore, it is necessary to extend the duration of the FIP by one more year (December 2023) to be able to complete the actions designed in the Action Plan.

**3.5 Objective: To evaluate the management system**

The IATTC has internal mechanisms in place to regularly evaluate key parts of the management system against its objectives. In addition, the first external performance audit of the overall IATTC and AIDCP management system was recently conducted (Moss-Adams, 2016.)9. That analysis focused on the achievements of the IATTC and resulted in 24 findings with several recommendations each, related to three main categories: governance, management, and science.

Internal and external audits should be part of the system and should occur regularly. The objective is that they be used as review and feedback mechanisms. The IATTC has prepared an action plan based on the findings and recommendations of the external evaluation (P. Guerrero, pers. comm.) to be reviewed 3 months later.

In Ecuador, public entities have an internal evaluation system called Government by Results, GPR, which supports performance audits and achievement of results. It is important to reinforce this system within the SRP, using existing tools and/or adopting external recommendations for quality control of information and compliance with objectives. It is also necessary for the SRP to contract external audits to review the functioning of the national tuna fishery management system on a periodic basis. The results of internal and external audits can be used to follow up on the fishery improvement program and also to promote other necessary changes to strengthen management.

The result of this objective will be the formalization of periodic external review mechanisms at the IATTC and SRP levels.

This objective is already completed as part of the TUNACONS purse seine fishery action plan.

**3.5.1 Perform external evaluation and continue internal periodic evaluations (IATTC Technical Committee).**

This task was recently completed (Moss-Adams, 2016) but should be adopted on a permanent basis. For the conduct of internal IATTC assessments, the constitution of an IATTC technical committee is proposed.

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| **Responsible entities** | TRANSMARINA /TUNACONS/WWF/SRP/IATTC |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | Media |
| **Implementation period** | Permanent |
| **State of the action** | Reinforcement and expansion of activities undertaken in FIP TUNACONS - Action already in progress |
| **Related MSC indicators** | IC 3.2.4 |
| **Milestones** | Milestone 43 <24 months: Formalize a periodic internal and external evaluation scheme.  |
| **Evidence** | Resolutions. IATTC Reports |

This activity is already underway or completed as part of the Purse Seine fishery action plan. The progress of the activity and the achievement of the objective will also be linked to the corresponding indicators in the longline fishery FIP.

**Actions carried out by TRANSMARINA in the third year of the FIP**

An external evaluation of the IATTC was carried out, the results of which have been transformed into an Action Plan to improve its performance.

***Supporting documents:***

- External Evaluation IATTC-AIDCP-Performance-Review-Final-Report SPN

- Performance Action Plan 0277-410 Commissioners re Performance review final report - Draft action plan - 2nd circulation with attached comments SPA

AGREEMENT No. MPCEIP-SRP-2019-0184-A - National Tuna Action Plan

**Analysis of compliance with AP actions in the third year:**

An external evaluation of IATTC's performance was conducted in 2016. In addition, there is an action plan, which was developed by the IATTC Director to implement the recommendations of the evaluation and was approved at the last regular meeting.

TUNACONS has supported efforts to have the IATTC review and adopt the action plan prepared by the Director to implement the recommendations of the IATTC external evaluation.

The plan has been adopted and therefore the action would be partially fulfilled according to the FIP review carried out in the third year. However, the mechanisms for conducting internal reviews are still pending implementation. The PAN ATUN includes the mandate to carry out management system evaluations at all levels, including internal, and therefore the legal basis to carry them out would exist, although it has not been implemented.

The action is not considered completed, although the closing date is initially 24 months. Therefore, it is necessary to extend the duration of the FIP by one more year (December 2023) to be able to complete the actions designed in the Action Plan.

**3.5.2 Form a Technical Committee in Ecuador to conduct periodic audits of the management system.**

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| --- | --- |
| **Responsible entities** | TRANSMARINA /TUNACONS/WWF/SRP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | Media |
| **Implementation period** | Permanent |
| **State of the action** | Reinforcement and expansion of activities undertaken in FIP TUNACONS - Action already in progress |
| **Related MSC indicators** | IC 3.2.4 |
| **Milestones** | Milestone 44 <18 months: Build a technical committee in Ecuador to evaluate the management system.  |
| **Evidence** | Meeting reports. Committee constitution. Minutes. Objetives |

This activity is already underway or completed as part of the Purse Seine fishery action plan. The progress of the activity and the achievement of the objective will also be linked to the corresponding indicators in the longline fishery FIP.

**Actions carried out by TRANSMARINA in the third year of the FIP**

It will be reflected in the work developed by the consultant.

***Supporting documents:***

No documents

**Analysis of compliance with AP actions in the third year:**

Milestone 44 <18 months: Build a technical committee in Ecuador to evaluate the management system.

According to the information provided during the evaluation visit, this technical committee is contemplated in the National Tuna Action Plan. Therefore, it cannot be evaluated since, although the Plan is already approved, there has not been time to fully implement it. Therefore, the action is not considered closed according to the Action Plan. Therefore, it is necessary to extend the duration of the FIP by one more year (December 2023) to be able to complete the actions designed in the Action Plan.

**3.5.3 Implement periodic internal and external audits in Ecuador**

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| --- | --- |
| **Responsible entities** | TRANSMARINA /TUNACONS/WWF/SRP |
| **UoA** | Bigeye, Yellowfin, Albacore PS |
| **Priority** | Media |
| **Implementation period** | Permanent |
| **State of the action** | Reinforcement and expansion of activities undertaken in FIP TUNACONS - Action already in progress |
| **Related MSC indicators** | IC 3.2.4 |
| **Milestones** | Milestone 45 <24 months: Formalize procedures and periodicity for management reviews in Ecuador. |
| **Evidence** | Audit of the management system. Meeting reports Committee objectives. Review schedule. |

This activity is already underway or completed as part of the Purse Seine fishery action plan. The progress of the activity and the achievement of the objective will also be linked to the corresponding indicators in the longline fishery FIP.

**Actions carried out by TRANSMARINA in the third year of the FIP**

Without concrete progress in relation to the first year, the Ecuadorian State has its own mechanisms for internal reviews of the Ministry's management, but the results are not known.

***Supporting documents:***

No documents

**Analysis of compliance with AP actions in the third year:**

Milestone 45 <24 months: Formalize procedures and periodicity for management reviews in Ecuador.

This action has no concrete results in the third year of the FIP. However, TRANSMARINA considers that the Ecuadorian State has its own mechanisms to evaluate its policies and procedures. However, it should be demonstrated how the system is evaluated. The approval and full implementation of the PAN ATUN should serve to bring this action to a close.

The action is not closed. Therefore, it is necessary to extend the duration of the FIP by one more year (December 2023) to be able to complete the actions designed in the Action Plan.

**4. Form a multisectoral committee to follow up on the TRANSMARINA FIP.**

It is recommended that a committee (technical and administrative) be formed to direct the activities of this TRANSMARINA Fishery Improvement Plan. Such a group should include representatives from government, industry, NGOs to monitor the work plan and progress of the activities identified in this document (Activities 1 to 3 and corresponding tasks). It is anticipated that TRANSMARINA and the Ecuadorian administration will select appropriate representatives from each sector and the Companies will finance periodic follow-up meetings.

The committee will follow up on all the activities and tasks of this plan and therefore its formation and operation will have an impact on the development and success of all of them and, indirectly, on all the MSC indicators.

**Actions carried out by TRANSMARINA in the third year of the FIP**

There is no information on this item

***Supporting documents:***

No documents

**Analysis of compliance with AP actions in the third year:**

During the elaboration process of the National Plan for industrial tuna fishing (for purse seine and longline) that was published by Ministerial Agreement 0184 as a management tool of the Government, it is contemplated in its numeral 6.1 that the Undersecretariat of Fishing Resources shall 6.1. Establish spaces for consultation, dialogue and coordination between public and private stakeholders.

Therefore, it was considered that it was not necessary to maintain the TRANSMARINA FIP monitoring committee since the PAN ATUN contains more adequate tools that should serve to establish monitoring mechanisms for the different tuna fisheries in Ecuador, including the TRANSMARINA longline fishery. Therefore, this action has no continuity.

# ANALYSIS OF PERFORMANCE INDICATORS

The results of compliance with the actions of the Action Plan have served, after the third year of work of the TRANSMARINA FIP, so that some of the MSC performance indicators could modify their score in the event of a full assessment of the fishery.

In the first assessment of the 17 indicators analysed that scored below SG<80 in the pre-assessment for albacore species, only one of them, IC3.2.2, met the threshold of SG≥80. Bigeye and yellowfin had 18 indicators scored below SG80. As for albacore, the same indicator for P3, would exceed SG80 in the case of a full assessment for the other two species.

After this second review of the implementation of the FIP, some of the indicators of the different Principles would improve, as will be explained below, but without reaching the expected results of the HRR analysis include in the Action Plan.

The approval of the TUNA Plan is considered a key step in the improvement of several of the indicators. However, since it is not yet 100% implemented, this improvement is considered not completed in this third-year evaluation.

One of the most relevant aspects in relation to the improvement of scores for several of the principle 2 indicators is the observer coverage in the longline fleets. On the one hand, since the first year of implementation of the Plan, all vessels include in the TRANSMARINA FIP have observers on board based on a MoU that was signed between the company and IPIAP.

This system of trained observers collects information relevant to P2, but there are still information gaps (although there is information collected by the observer program, there are still no results of its analysis) and there is no analysis of it that would allow specific management measures to be taken.

On the other hand, the results of several of the AP actions were linked to the progress of the TUNACONS FIP since, especially for P1 and P3, they were the same actions. Given that the TUNACONS Fishery Improvement Plan has been completed and the fishery is in the process of full MSC assessment and, considering that there are other initiatives in the region for MSC certification of tuna fisheries that have to be harmonized for P1 indicators (YFT and BET) and in Principle 3, the score obtained in the TUNACONS ACDR is considered for this analysis.

Regarding P1, the uncertainties found in the last stock assessments carried out within IATTC for bigeye tuna and more recently for yellowfin, determine the need to use a precautionary approach while waiting for the improvement of the assessment methodologies and more precise results of the assessments.

Although some indicators would score lower than expected in the HRR, the overall balance is a slight improvement in the General BMT Index.

The complete scoring analysis data are include in the "Indicator Evaluation" table in Excel format attached to this report.

The following is a description of each of the CIs that scored below SG80 in the pre-assessment and their situation after the third year of the implementation of the FIP.

## PRINCIPLE 1

**IC 1.1.1 Status of the YFT and BET stock**

The 2019 assessments yielded mixed results for these two species in the EPO. Given that, as discussed above, both species are part of the target catches for the purse seine certification process in the TUNACONS EPO, and the ACDR report for the same is published, it is considered that YFT would at least achieve SG80 for this indicator and therefore pass.

In relation to bigeye tuna, the score for this indicator in the TUNACONS ACDR is 70 points. This is below the minimum required to pass.

Given that the final TUNACONS report has not yet been published, these scores are provisional, although, in relation to bigeye tuna, the certification scenario does not foresee it reaching the minimum required and, therefore, it would suspend Principle 1.

Given that the improvement of the bigeye tuna score is contingent on the results of new stock assessments, it is considered that, for the third-year review of the TRANMARINA FIP, the TUNACONS score should be accepted and await the evolution of the stock status.

**PROBABLE SCORE:** BET Pass with condition SG≥60; YFT Pass without condition SG≥80.

**IC 1.1.2 population reconstitution (YFT and BET)**

In the case of YFT, the fact that the stock evaluation results in a score of at least 80 for IC1.1.1 implies that stock reconstruction is not necessary and IC1.1.2 is not scored.

In the case of the BET and given that IC1.1.1.1 scores below SG80, it is considered that the population needs to be reconstructed so a SG of less than 80 would also be reached.

**PROBABLE SCORING:** BET: Pass SG≥60

**IC 1.2.1 Capture Strategy (YFT, BET)**

There are control rules and reference points established for IATTC fisheries in accordance with Resolutions C-16-02 and C-17-01, and therefore the PI should score above SG80 in the case of a full assessment for YFT according to the TUNACONS ACDR score.

Regarding BET, the TUNACONS ACDR considers that SG80 (SG75) would not be reached. In addition, the latest report on the status of tuna stocks in relation to MSC indicates that SG80 for this indicator for bigeye tuna (SG75) would also not be reached due to uncertainties in the latest assessments of the species and the change in methodology. According to the authors of the ISSF report there is insufficient evidence that the harvest strategy is meeting its objectives.

**PROBABLE SCORE YFT:** Pass (SG≥80); **BET:** Pass with condition SG≥60.

**IC 1.2.1 Capture strategy (ALBs)**

There is no new information to modify the score for this indicator.

The latest South Pacific albacore assessments have not considered fishery data for the entire EPO, so the eastern portion of the stock remains effectively unassessed. The Committee recommends that the IATTC staff work with the SPC to ensure that the entire south Pacific is included in future assessments.

According to ISSF, at WCPFC15 (December 2018), a provisional target reference point was agreed upon with the goal of achieving an 8% increase in CPUE relative to 2013 levels. The interim TRP was set at 56% SBF = 0, to be adjusted according to stock assessment estimates of the biomass required to achieve the target increase in CPUE (measured as vulnerable longline biomass in the stock assessments). A 20-year timeframe was agreed to achieve this management target. SPC was tasked with developing candidate HCRs during 2019 that would meet these requirements. An update of the 2015-02 CMM is considered necessary to reflect the targets and timelines agreed in 2018.

**PROBABLE SCORE: Pass with condition (SG≥75).**

**IC 1.2.2 Capture control standards and tools (YFT, BET)**

The 2017 score would be maintained. The IATTC has adopted catch control rules for tuna stocks that aim to reduce the exploitation rate as it approaches the limit reference point. The selection of the control rules, although planned for the third year, existing information allows confirming that there are appropriate and effective HCRs for bigeye and yellowfin tuna to control their exploitation. These HCRs have been established by IATTC Resolutions C-16-02 and C-17-01. The SG equal to or greater than 80 is achieved for all three species.

However, it is important to consider the latest ISSF review of the status of tuna stocks in relation to the MSC, in which SG80 for this indicator would not be reached for bigeye tuna SG60. The authors consider that there is currently no evidence that the existing harvest strategy will achieve its objectives. This score is maintained in the 2020 ISSF review.

**PROBABLE SCORING:** Pass YFT (SG≥80); Pass with BET condition (SG60)

**IC 1.2.2 Harvest control standards and tools (ALB)**

There are currently no harvest control standards and tools adopted in the WCPFC for South Pacific Albacore. The Work Plan for the Adoption of Harvest Strategies under CMM 2014-06, states that HCRs will be adopted in 2021.

ISSF maintains the same score for this indicator in its latest revision of November 2020.

**PROBABLE SCORE:** Pass with condition (SG60)

**IC 1.2.3 Information and monitoring (BET)**

This indicator is not analysed as it has a score of at least SG80 in the MSC pre-assessment. However, due to the current situation of bigeye tuna, additional measures need to be put in place to improve its score.

**PROBABLE SCORE:** Pass with condition (SG60) for BET

## PRINCIPLE 2

**IC 2.1.2 Primary: Management Strategy**

Several of the actions in the FIP for Principle 2 have not yet been completed, although, in general, there has been progress. In the third year FIP review, it was considered that the lack of relevant results was since they have been implemented for a short period of time and still needed to be further developed in order to know the results. Although there is already a group of trained and operational observers, the information from the logbooks (3 years of information) is not yet sufficient to adequately determine the impact of the fishery on all the components of Principle 2 of the MSC.

On the other hand, although the fishery is linked to the TUNACONS fishery by assimilating some of the advances of its Improvement Plan. This includes the species lists prepared by the consultant hired by TUNACONS. It is considered necessary to adequately review this list since longline and purse seine fisheries, despite pursuing the same target species, do not necessarily include the same bycatch species and, above all, the same catch percentages.

**PROBABLE SCORE:** Pass with condition (SG≥60).

**IC 2.1.3 Primary: Information and Monitoring**

The IPIAP on-board observer program as a result of the MoU with TRANSMARINA launched in the first year of implementation of the FIP has, among other tasks, to collect information to be able to respond to the status of primary, secondary and ETP species in the tuna longline fishery. There is already a group of trained and operational observers and 3 years of onboard monitoring have already been completed, but an analysis of the impact of the fishery has not yet been carried out.

In addition, landings point information is available from fisheries inspectors for the tuna longline fishery bycatch species. However, these data do not include all fishery interactions with Primary, Secondary and ETP species.

Given that the monitoring system has been implemented through observers, it is considered that this indicator would no longer score below SG60 in the case of a full assessment. Even so, a longer period of observer coverage is needed to have adequate information and to be able to take appropriate management actions. Therefore, SG80 is not yet considered to have been reached for the baseline indicator.

**PROBABLE SCORE:** Pass with condition (SG≥60).

**IC 2.2.1 Secondary: Status**

As for the previous indicators for primary species, several actions of the FIP for Principle 2 are incomplete and have not had relevant results since they have not been implemented for a long time and are still being adapted and improved.

Although the observer program has been initiated, it is not considered, like the first-year evaluation of the FIP, that there is enough valid information for IPIAP investigators to know the status of these according to the MSC indicator. However, the fact that a minimum of information is available, and that the observer program is still underway is considered a fundamental step for the benchmark to achieve an SG60 in a full MSC assessment.

**PROBABLE SCORE:** Pass with condition (SG≥60).

**IC 2.2.2 Secondary: Management Strategy**

No management strategies have been established for secondary species in the tuna longline fishery. The existing information provided by the observer system is not yet robust enough for IPIAP to issue recommendations to be used for management by the SRP.

IATTC DOCUMENT SAC-09-11 on ecosystem considerations published in 2018 at the 9th meeting of the Scientific Advisory Committee, considers that, in many cases, the reported catches of bycatch species of the longline fleet in the EPO should be considered as minimum estimates. IATTC considers necessary the improvement of bycatch species reporting for this fishing mode.

Therefore, it is not considered that there is an adequate management strategy compatible with the requirements of Principle 2 for secondary species and, therefore, SG60 would not be met for this indicator in a possible full assessment.

**PROBABLE SCORE:** Do not pass (SG< 60).

**IC 2.2.3 Secondary: Information/Monitoring**

The IPIAP on-board observer program as a result of the MoU with TRANSMARINA has been operational for three years and has, among other tasks, to collect information to be able to respond to the status of the primary, secondary and ETP species of the tuna longline fishery. There is already a group of trained and operational observers, but the logbook information from these three years has not yet been analysed.

On the other hand, although there is information on landing points through fishery inspectors, for species accompanying tuna longline fishery, this information is not complete according to the requirements of MSC Principle 2.

Given that the monitoring system has been implemented through observers, and there is information collected for three years, it is considered that this indicator would no longer score below SG60 in the case of a full evaluation.

**PROBABLE SCORE:** Pass with condition (SG≥60).

**IC 2.3.1 ETP: Condition**

Although the observer program covers 100% of the vessels and fishing trips, there is still not complete information on the status of the populations of the ETP species that may be affected by the tuna longline fishery. Although data are being collected through the observer program, there is not 100% information on all interactions. In addition, data on interactions with species that may be listed as ETP are not yet collected. This is the case of seabirds and there is still no adequate analysis of the information collected in this program.

**PROBABLE SCORE**: Pass with condition (SG≥60).

**IC 2.3.2 ETP: Management Strategy**

There are still not enough elements in fishery management related to the management of ETP species in the fishery.

There are some management tools applicable to this indicator within the framework of the IATTC. Thus, Document SAC-08-11 establishes staff recommendations for the management of the tuna fishery in the eastern Pacific Ocean. On the other hand, Resolution C-11-02 to mitigate the impact on seabirds of fishing for species covered by the IATTC, establishes mitigation measures for longline vessels in the Convention area. However, it is not considered that the existing measures currently in place to mitigate the effects of the longline fishery can be considered as a specific management strategy.

On the other hand, in Ecuador, although the TUNA NPOA has been adopted, it has not yet been fully adopted. In addition, the existing information on birds from the observer program has not been analysed to date. Therefore, the SRP does not have management tools adequate to the real situation of the fishery. These two tools, even though they are not 100% implemented, are considered sufficient to improve

**PROBABLE SCORE:** Pass with condition (SG≥60).

**IC 2.3.3 ETP: Information/Monitoring**

The IPIAP on-board observer program because of the MoU with TRANSMARINA has been implemented and has, among other tasks, to collect information to be able to respond to the status of the primary, secondary and ETP species of the dorado fishery. There is already a group of trained and operational observers. The information in the logbooks is already three years old and, although it has not yet been analysed, it is considered that, in a partial way, it is already representative to be able to do so. However, as mentioned above, the impact of the fishery on seabird species has not yet been analysed.

**PROBABLE SCORE:** Pass with condition (SG≥60).

**IC 2.5.1 Ecosystems: Status; IC 2.5.2 Ecosystems: Management Strategy; and PI 2.5.3 Ecosystems: Information.**

There is no relevant change in the key elements that would allow improving the score of these three indicators.

The results of the observer program will provide important information to better understand the ecosystem and the impact of the fishery. Analysis of this information has not yet begun.

**PROBABLE SCORE:** Pass with condition (SG≥60).

## PRINCIPLE 3

**IC 3.2.1 Specific fishery objectives**

There are specific HCRs and harvest strategies in place. IATTC has agreed interim target reference points for each stock and the WCPFC for southern albacore and these provide stock level targets that did not previously exist. The results of the latest assessments conducted by IATTC and according to the RTAs of the tuna fisheries under assessment in the EPO (TUNACONS) yellowfin tuna would be above the PRI. However, the case of bigeye is not similar. The latest assessment does not indicate an improvement in the status of the species in the EPO and therefore it is not considered that the fishery-specific objectives for this species are working adequately. In the case of Principle 2, there are still not enough adequate management mechanisms in the fishery to allow 100% compliance with the MSC objectives. On the other hand, the TUNA NPOA has been approved, although it is not 100% implemented.

**PROBABLE SCORE:** Pass with condition (SG≥60).

**IC 3.2.2 Decision-making processes**

The AP establishes that greater participation of Ecuadorian representatives in IATTC forums is required. However, there is no evidence that the IATTC has reviewed its decision-making system and therefore there are no changes with respect to what was indicated in the pre-assessment.

Due to the COVID-19 pandemic situation, many management processes and initiatives have been slowed or even postponed.

The internal decision-making procedure is part of the PAN ATUN already approved, but not 100% adopted.

The TUNA NAP sets the internal decision-making procedures and therefore until this Plan is finalized and adopted, IC will not present a score improvement.

**PROBABLE SCORING:** Pass with condition (SG ≥60)

**IC 3.2.3 Compliance with and enforcement of management measures**

The FIP actions related to this indicator were partially completed in the third year.

On the one hand, the MCS system already operates with the tuna and tuna longline fleets and there is an entire satellite control system that is in place and operational.

There is no evidence that the TRANSMARINA fleet is 100% monitored in accordance with the AP.

On the other hand, no evidence of non-compliance by the TRANSMARINA fleet in accordance with the Action Plan has been attached. Although there is no record of any non-compliance or sanction by the SRP fleet to this fleet.

**PROBABLE SCORE: Unconditional pass (SG≥80).**

**IC 3.2.4 Management system performance evaluation**

Although the external evaluation has been carried out at IATTC, the procedure has not been adopted on a permanent basis and is one of the necessary items proposed in the Action Plan.

The formation of a Technical Committee for internal audits and the implementation of a system of periodic internal and external audits of the management system in Ecuador include in the PAN ATUN, although it has not yet been implemented.

Therefore, the external evaluation procedure needs to be adopted on a permanent basis and is currently not adopted to improve the indicator score and for the NAP ATUN to implement the PAN ATUN.

**PROBABLE SCORE: Pass with condition (SG≥60).**

## Summary of progress of performance indicators

The attached tables show the progress of the different MSC indicators in relation to those obtained in the pre-assessment and to the results expected from the HRR analysis of the Action Plan.

In general, the progress of each of the three principles is less than expected in the HRR analysis, as will be seen in the following section.

**Principle 1**



**Principle 2**



**Principle 3**



## Use of the Benchmarking Tool (BMT)

The MSC BMT (Benchmarking and Tracking Tool) analysis is a tool to verify the progress of a Fishery Improvement Project for each year of implementation. The progress is compared with a prediction for each year that is made at the time of the formulation of the FIP. The tool analyses the results of the annual evaluations with respect to the expected results for that year. This allows to know the progress or not, in the probable score of each MSC performance indicator.

The following tables show the progress achieved for each of the scenarios (ALB and YFT and BET) and the complete results of the partial BMT application, which are include in Excel files attached to this report.

In both cases, progress has been small, below the expected results for the third year of the implementation of the Fishery Improvement Project.

**BMT results for bigeye tuna (BET)**



**BMT results for yellowfin tuna (YFT):**



**BMT results for albacore (ALB):**



# CONCLUSIONS AND RECOMMENDATIONS

## Conclusions

The initial Action Plan of the FIP for the longline tuna fishery of the TRANSMARINA company in Ecuador has been evaluated according to the milestones proposed for each of the actions contained in the Action Plan. In addition, the BMT tool has been used to calculate the progress of the MSC performance indicators. In order to be able to use the BMT tool, an estimate of the expected score for each PI for each year of implementation of the FIP was made in the preparation of the Action Plan. In this way, the annual evaluations make it possible to compare the expected results with the actual results and, thus, to direct the effort of pending actions or new actions towards achieving the expected results at the end of the FIP.

The TRANSMARINA FIP has many points in common with the completed TUNACONS FIP and especially, due to the differences in fishing gear, in Principle 1 and Principle 3.

Two of the target species of the fishery are the same in both cases (yellowfin tuna and bigeye tuna). In the case of TRANSMARINA, the albacore species is also include. In this sense, although the fishing area of the TRANSMARINA fleet includes only the waters of the Eastern Pacific Ocean, the southern albacore is distributed both in the area managed by IATTC and in the area managed by WCPFC, so the existing management measures in both areas of the Pacific are considered.

Although TRANSMARINA is the client and promoter of this FIP, part of the actions include in the AP have as responsible and/or collaborators other stakeholders of the fishery, especially the Inter-American Tropical Tuna Commission, the Undersecretariat of Fisheries Resources and the Public Institute of Fisheries and Aquaculture Research. Part of the unfinished actions would be related to the tasks of the stakeholders. In addition, due to the overlapping of fishing zones and target species, for certain actions, other fishing operators, not involved in the FIP, must also act in compliance with the commitments derived from the project, especially in the implementation and compliance with new rules and regulations.

In general, the progress of the actions has been uneven, and this is reflected in the projection of the expected results of the MSC Performance Indicators through the BMT tool. Overall progress is lower than expected for this third year. This is mainly due to the problems derived from the COVID-19 global pandemic that has made it impossible to hold or postpone meetings or trainings, among others.

In relation to the Plan's actions, those related to Principle 3 are the ones that have advanced the most during this period. However, it is important to note that closing actions does not always imply a change in the score of the MSC indicators associated with this Principle.

Actions related to Principle 2 have made partial progress and only one, 2.3.2, is considered completed during this period. Although this progress is significant, the greatest weight of it lies in the adoption of the PAN ATUN by the Ecuadorian Administration. This NPOA is considered a fundamental tool for the management of tuna fisheries in the country.

The observer program in the evaluated fleet is 100% but there are negative elements that are conditioning the related actions to be completed. Although data on interactions are collected through the observer program, the information from the three years of data accumulated by the program, especially for seabirds, has not yet been analysed.

Regarding actions related to ecosystem information and analysis, similar to what was considered in the first evaluation of the FIP, there is no additional information available on the impacts of the fishery on the marine ecosystem.

Regarding Principle 3, it is considered that there has been significant progress in closing actions and as a result, at least one indicator IC3.2.3 would improve its score in a full evaluation. The incorporation of the PAN ATUN into Ecuadorian regulations is a key advance for the overall progress of the actions. However, as it has not been 100% adopted and evaluated, the actions related to this Principle cannot be closed.

## Recommendations

Given that TRANSMARINA's FIP is scheduled for 3 years, and due to the delays derived from COVID-19, it is recommended to maintain the Improvement Plan for at least the next year. It is important that the observer program is working at 100% and its information is analysed with the objective of, if necessary, being able to take additional management measures by the SRP. This work is essential to improve the score for most of the principle 2 indicators that have scored below SG80.

Improvements to Principle 1 will depend on the outcome of the upcoming assessments of the target stocks in both IATTC and WCPFC as expected in 2019. Therefore, TRANSMARINA should, directly or delegated through TUNACONS, follow up on the results of these assessments and actively collaborate with the measures that could be implemented in both RFMOs.

Regarding Principle 3, it is essential that the PAN ATUN, already approved, be 100% implemented and the effectiveness of the measures derived from it be evaluated.

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# ANNEX 1 - EVALUATION WORKSHOP AGENDA

**Fishery Improvement Project (FIP) Evaluation Workshop, Eastern Pacific Ocean Tuna Longline Fishery**

**Tuesday, April 27, 2021**

10:00 a.m. Introduction of attendees and welcome (Guillermo Morán TRANSMARINA FIP Coordinator)

10:15 - 10:30 a.m. Brief explanation of how the Workshop works (consultant Luis Ambrosio)

10:30 - 10:50 a.m. Presentation of progress on general and Principle 1 actions proposed in the Action Plan. Guillermo Moran

10:50 - 11.10 a.m. Presentation of progress on Principle 2 actions proposed in the Action Plan. Guillermo Moran

11:10 - 11:30 a.m. Presentation of progress on Principle 3 actions proposed in the Action Plan. Guillermo Moran

11:30 -12:30 p.m. General discussion on recommendations for continuation of the Action Plan. (Luis Ambrosio)

1. [↑](#footnote-ref-2)