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In-Transition to MSC (ITM) Program - Pilot
Marine Stewardship Council

Marine Stewardship Council (MSC) 1st In-Transition to MSC (ITM) Progress Verification Report

Mexico Gulf of California hake bottom & midwater trawl fishery

on behalf of
EDF Mexico

prepared by
Control Union (UK) Limited

August 2025

Author: Claire Coiraton

ITM start date: 13/02/2024



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QA

Role	Signature	Date
Originator:	Claire Coiraton	25/06/2025
Reviewer:	Ana Ayres	25/07/2025
Approver:	Julia Nebolsina	11/08/2025

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1 Report overview

1.1 Unit(s) of Assessment (UoAs)

Table 1. Unit(s) of Assessment (UoA) from Pre-Assessment Report or Full Assessment Report

UoA 1	Description
Target Stock	North Pacific Hake (<i>Merluccius productus</i>)
Geographical area	Central and Northern zones of the Gulf of California
Fishing gear type(s) and, if relevant, vessel type(s)	Mid water and bottom trawl nets
Client group (optional)	EDF Mexico
Other eligible fishers	Authorized fleet vessels (permits around 80 vessels)

1.2 Progress Verification summary

Table 2. Entry and Progress Verification summary

Event	Date (<i>actual/planned date</i>)	Onsite/ Offsite	Name/s of CAB and assessor/s
Pre-Assessment Report	02/2024	offsite	Ocean Outcomes consultants
Eligibility verification	16/02/2024	offsite	Control Union (UK) – Virginia Polonio
1st Progress Verification	27/06/2025	offsite	Control Union (UK) – Claire Coiraton
2nd Progress Verification	<i>dd/mm/yyyy</i>	<i>Onsite/offsite</i>	
3rd Progress Verification	<i>dd/mm/yyyy</i>	<i>Onsite/offsite</i>	
4th Progress Verification	<i>dd/mm/yyyy</i>	<i>Onsite/offsite</i>	

1.3 Record of Progress Verification decisions

Table 3. Progress Verification and other decisions

Verification/decision point	Decision or determination by CAB
1st Progress Verification	Adequate
2nd Progress Verification	<i>Adequate / Inadequate</i>
3rd Progress Verification	<i>Adequate / Inadequate</i>
4th Progress Verification	<i>Adequate / Inadequate</i>
Fishery withdrawn from ITM?	<i>Yes / No</i>
Date of withdrawal	<i>dd/mm/yyyy</i>

2 Progress Verification

2.1 Overall progress status

Table 4. Overall progress status for verifications

	1st progress verification	2nd progress verification	3rd progress verification	4th progress verification
Type of progress verification	Offsite	<i>Onsite / Offsite</i>	<i>Onsite / Offsite</i>	<i>Onsite / Offsite</i>
Justification for type of verification used	Information for each IAP action item can be verified remotely			
ITM Progress Report received from ITM Project Manager and verified	Yes	<i>Yes / No</i>	<i>Yes / No</i>	<i>Yes / No</i>
Were any stakeholders consulted during Progress Verification?	No	<i>Yes / No</i>	<i>Yes / No</i>	<i>Yes / No</i>
Fishery in Scope of the MSC Fisheries Standard as per the relevant version of the MSC Fisheries Standard and Fisheries Certification Process. (See Section 1.2 of ITM Program Requirements v2.0)	Yes – Fishery remains in scope and the MSC Scope declaration template was completed and signed on 20/06/2025	<i>Yes / No</i>	<i>Yes / No</i>	<i>Yes / No</i>
Definition of Unit(s) of Assessment (UoAs) meets MSC requirements outlined in the relevant version of the MSC Fisheries Certification Process?	Yes			
Number of PIs with an improved draft scoring range due	5			
Number of PIs that are on target	9			
Number of PIs that are behind target	1			
Number of PIs completed	4			

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	1st progress verification	2nd progress verification	3rd progress verification	4th progress verification
Did exceptional circumstances apply?	No	<i>Yes / No</i>	<i>Yes / No</i>	<i>Yes / No</i>
If exceptional circumstances apply, specify to which PIs this was/is applicable?	N/A			
Updated Improvement Action Plan received and verified? (If IAP not updated state N/A)	N/A	<i>Yes / No/ N/A</i>	<i>Yes / No/ N/A</i>	<i>Yes / No / N/A</i>
The timeframe for actions to be completed do not exceed 5 years from the entry date	Yes	<i>Yes / No</i>	<i>Yes / No</i>	<i>Yes / No</i>
Updated BMT received and verified (if BMT not updated state N/A)	Yes	<i>Yes / No/ N/A</i>	<i>Yes / No/ N/A</i>	<i>Yes / No / N/A</i>
Actual BMT index	<i>0.89</i>			
Expected BMT index	<i>0.91</i>			
Overall progress determination	<i>Adequate</i>	<i>Adequate / Inadequate</i>	<i>Adequate / Inadequate</i>	<i>Adequate / Inadequate</i>
Next scheduled Progress Verification	<i>06/2026</i>	<i>mm/yyyy</i>	<i>mm/yyyy</i>	<i>mm/yyyy</i>

2.2 Verification of key updates or changes in the fishery

Table 5. Key updates or changes in the fishery

UoA(s)	Key updates or changes to the UoA, fleet or vessels	References	Is evidence verifiable?
UoA 1 – Industrial bottom and mid-water trawl hake	No change - same species (Hake - <i>Merluccius productus</i>), gear (bottom and mid-water trawls), operation area (Central & Northern Gulf of California, FAO 77) and client fleet composition (~80 vessels).	<ul style="list-style-type: none"> - Eligibility Report (February 2024); - Scope Declaration template. v1.1 (signed June 2025) 	Yes
Principle	Key updates or changes	References	Is evidence verifiable?
Principle 1			
Pre- Assessment/Full Assessment Report	For Principle 1, the limitations identified are contained in the harvest strategy, the harvest control rule and the assessment of stock status PIs. For the 1.2.4 PI, although the model used considers some uncertainties (e.g., the observation error has been included in the stock assessment) other major sources of uncertainty have not been included. The stock assessment has not been tested and shown to be robust, nor has the assessment undergone a peer review process. In relation to the current harvest strategy (PI 1.2.1), this is based on landings monitoring, stock evaluation, and gear regulations, where the strategy has been implemented for several years; however, although an allowable total catch should be recommended, this has not been in place. Therefore, the harvest strategy is considered not to be responsive to the state of the stock. Finally, although catches and biomass have been stable and the	MSC pre-assessment report	Yes

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	<p>fishery has not collapsed, it can be inferred that the harvest strategy is likely to work based on prior experience or plausible argument. However, there is not clear evidence that the harvest strategy is achieving its objectives.</p>		
1st Progress Verification	<p>The main change that took place over the last year was a significant increase in catches by the industrial fleet. This increase is largely due to an increase in fishing mortality, and it is somewhat concerning since it has driven biomass below the MSY level for a second consecutive season, which means the stock is experiencing overfishing. These are the results from the last available biomass estimation by IMIPAS (2024). On a brighter note, it is worth mentioning that, for the first time, the biomass estimation explicitly takes into account catches from the artisanal fleet and uses a conversion factor for estimating green weight that is aligned with current processing practices at sea, making the overall F estimation much more accurate.</p> <p>In terms of data analysis, the fishery has moved on with a comprehensive review of fishery-dependent data (observer program and reported landings) and sources of information previously not used. Likewise, new authorities at IMIPAS presented a new stock assessment model that incorporates size structure in addition to catch/effort data. It is expected that this model will be implemented as early as December 2025 – January 2026.</p>	<p>Corresponding reports and data were provided to the assessment team for each action to be verified under Principle 1</p>	<p>Yes</p>
2nd Progress Verification			

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3rd Progress Verification			
4th Progress Verification			
Principle 2			
Pre- Assessment/Full Assessment Report	<p>In relation to Principle 2, given the proportion and diversity of bycatch, the impact of this fishery on the status of individual species (PIs 2.1.1, 2.2.1 and 2.3.1), and the overall ecosystem structure and function (2.5.1) are not of concern.</p> <p>One of the main challenges identified was the need for more specific information on the management strategy on ETP species (PI 2.3.2). Similar to the habitat component, the main challenge is the lack of more detailed quantitative information (PI 2.4.1) to adequately identify fishery impacts on habitats (PI 2.4.3). The fishery needs to clearly identify the spatial overlap of the fishery with the main habitats in the area and, based on this, assess the impacts of fishing gears on the structure and function of the main habitats</p>	MSC pre-assessment report	Yes
1st Progress Verification	<p>Over the last few months, the fishery has been working on different analysis to improve the understanding of its impacts on ETP species, habitats and ecosystems. In particular, we analysed historic data from the observer program regarding seabirds and mammal's interactions, depth and duration of trawls to assess habitat impacts and the trophic role of hake in the deep ocean ecosystem.</p>	<p>Corresponding reports and data were provided to the assessment team for each action to be verified under Principle 2</p>	Yes

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	<p>Additionally, an Ecomod model was applied specifically for the Hake fishery using by-catch composition and volumes. This model improved our understanding of potential impacts of the fishery on other components of the ecosystem and informed participative process to design a comprehensive management strategy.</p> <p>For all three aspects (ETP species, habitats and ecosystem) addressed as part of this IAP there has been an improvement in information availability and management recommendations, which we believe will be reflected in some score changes.</p>		
2nd Progress Verification			
3rd Progress Verification			
4th Progress Verification			
Principle 3			
Pre- Assessment/Full Assessment Report	<p>Principle 3 presents several strengths such as a good set of fishing regulations, general guidelines and regulations that are well defined in the General Law of Sustainable Fishing and Aquaculture, Official Mexican and Mexican Standards and the Pacific Shrimp Management Plan. However, one of the main problems is that the management plan has not yet been approved and implemented (PI 3.2.1). There is also need for evidence of implementation of sanctions (PI 3.2.3) and regular</p>	MSC pre-assessment report	Yes

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	evaluation of the performance of key elements of the fishery (PI 3.2.4).		
1st Progress Verification	<p>No relevant changes occurred regarding P3. Main changes are related to an updated management process/stakeholder's map, which includes potential external reviewers for the management strategy and recommendations for improvement.</p> <p>New authorities seem to have interest in strengthening the governance of this fishery, but no concrete steps have been taken to this date.</p>	Corresponding reports and data were provided to the assessment team for each action to be verified under Principle 3.	Yes
2nd Progress Verification			
3rd Progress Verification			
4th Progress Verification			

2.3 Verification of Progress of Actions and Performance Indicator level draft scores changes

Actions to be verified	Evidence of completion	Is evidence verifiable?
A1-1 Estimate an acceptable rate of unwanted catches of hake	<p>A stock assessment of Pacific hake (<i>Merluccius productus</i>) in the Gulf of California, Mexico, was carried out to support presentations and discussions on the productive capacity of the stock in relation to fishing strategies that incorporate juvenile fish discards.</p> <p>Reference: Quiroz J.C. 2024. EVALUACIÓN EXPLORATORIA DE MERLUZA DEL PACÍFICO: Impacto de las capturas comerciales y descartes. Juan Carlos Quiroz, Noviembre 2024.</p>	<p>Yes – all files identified were provided to the assessment team and reviewed</p> <p>On file with the team:</p> <ul style="list-style-type: none"> - <i>A1-1 Impact of discards on the hake stock and economic implications.pdf</i>
A1-2 An analysis of biological and economic effects of prohibiting discards of the target species	<p>A combined biological and economic analysis was performed to assess how a zero-discard policy would affect stock productivity and fishers' revenues.</p> <p>Reference: Quiroz J.C. 2024. EVALUACIÓN EXPLORATORIA DE MERLUZA DEL PACÍFICO: Impacto de las capturas comerciales y descartes. Juan Carlos Quiroz, Noviembre 2024.</p>	<p>Yes – all files identified were provided to the assessment team and reviewed</p> <p>On file with the team:</p> <ul style="list-style-type: none"> - <i>A1-2_Impact of discards on the hake stock and economic implications.pdf</i>
A1-3 A series of technical workshops to develop a responsive harvest strategy, which includes a TAC, regular revision, as well as, well defined and feasible HCR's	<p>Technical-group workshops were convened to draft harvest control rules and quota scenarios, and detailed meeting minutes capture the discussions and agreements reached.</p>	<p>Yes – all files identified were provided to the assessment team and reviewed</p> <p>On file with the team:</p> <ul style="list-style-type: none"> - <i>A1-3 Acuerdos de la reunión del GT Merluza.pdf</i>

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	<p>References:</p> <p>EDF Mexico. 2025. ACUERDOS DE LA REUNIÓN DEL GRUPO TÉCNICO DE MERLUZA, June 2025 (file: <i>A1-3 Acuerdos de la reunión del GT Merluza.pdf</i>): Technical-Expert Group meeting agreement on the proposed Draft Update to the Pacific Hake Fishery Management Plan in the Gulf of California. Detailed record of the technical group meeting held in June 2025, documenting the agreed framework for draft harvest control rules (biomass triggers, TACs) and timeline for HCR development.</p> <p>EDF Mexico. 2025. ESTRATEGIA DE APROVECHAMIENTO DE LA MERLUZA DEL GOLFO DE CALIFORNIA, March 2025 (file: <i>A1-3a_Propuesta Estrategia de Manejo.pdf</i>): A draft proposal for updating the Pacific hake fishery management plan (PMP) that:</p> <ol style="list-style-type: none"> 1) Defines candidate reference points and associated TAC 2) Describes proposed HCRs, including effort-reduction and closure triggers 3) Lays out monitoring and review procedures for adaptive management. 4) Provides economic and social considerations for implementation <p>EDF Mexico. 2025. MINUTAS DE LA REUNIÓN DEL GRUPO TÉCNICO DE MERLUZA, June 2025 (file: <i>A1-3b MINUTA GRUPO TECNICO MERLUZA.pdf</i>): Technical-Expert Group meeting minutes capturing participant presentations, discussion points on quota scenarios, and action</p>	<ul style="list-style-type: none"> - <i>A1-3a_Propuesta Estrategia de Manejo.pdf</i> - <i>A1-3b MINUTA GRUPO TECNICO MERLUZA.pdf</i>
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	<p>items to refine HCR parameters, including responsibilities and deadlines for follow-up analyses.</p>	
<p>A1-4 Convene a stakeholder meeting to explain the harvest strategy and receive feedback</p>	<p>A stakeholder workshop - “MESA DE TRABAJO SOBRE ESTRATEGIAS DE APROVECHAMIENTO PARA LA PESQUERÍA DE MERLUZA EN EL GOLFO DE CALIFORNIA” - was held in Ensenada in May 2025 where fishers, management authorities, and researchers reviewed the draft harvest strategy update proposal. The workshop report and meeting minutes document the feedback provided and recommendations for refining HCR design.</p> <p>References: EDF Mexico. 2025. REPORTE DE MESA DE TRABAJO SOBRE ESTRATEGIAS DE APROVECHAMIENTO PARA LA PESQUERÍA DE MERLUZA EN EL GOLFO DE CALIFORNIA. Mayo 2025, Ensenada, Mexico (file: <i>A1-4_Workshop fishing sector_report.pdf</i>)</p> <p>EDF Mexico. 2025. MINUTAS DE MESA DE TRABAJO SOBRE ESTRATEGIAS DE APROVECHAMIENTO PARA LA PESQUERÍA DE MERLUZA EN EL GOLFO DE CALIFORNIA. Mayo 2025, Ensenada, Mexico (file: <i>A1-4b_Minute Ensenada stakeholder meeting.pdf</i>)</p>	<p>Yes – all files identified were provided to the assessment team and reviewed</p> <p>On file with the team:</p> <ul style="list-style-type: none"> - <i>A1-4b_Minute Ensenada stakeholder meeting.pdf</i> - <i>A1-4_Workshop fishing sector_report.pdf</i>
<p>A1-5 Adopt the proposed harvest strategy within the Fishery Management Plan (FMP)/Norma Oficial Mexicana (NOM)</p>	<p>Verification scheduled for the second year progress verification.</p>	

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<p>A2-1 Based on technical expertise and available data define a set of HCR's (and monitoring indicators/RP) specific for the fishery and compatible with the harvest strategy</p>	<p>Verification scheduled for the second year progress verification however, there is some evidence of advancement.</p> <p>A formal proposal was drafted, outlining biomass-triggered TAC and early-closure rules, and submitted to IMIPAS for incorporation into the fishery management plan (file: <i>A1-3a_Propuesta Estrategia de Manejo.pdf</i>)</p>	<p>Yes – all files identified were provided to the assessment team and reviewed</p> <p>On file with the team:</p> <ul style="list-style-type: none"> - <i>A1-3a_Propuesta Estrategia de Manejo.pdf</i>
<p>A2-2 Convene a stakeholder meeting to explain the HCR's and its mechanisms of application, and receive feedback</p>	<p>Verification scheduled for the second year progress verification.</p>	<p>N/A</p>
<p>A2-3 Make the proposed HCR's official through the FMP or NOM</p>	<p>Verification scheduled for the second year progress verification.</p>	<p>N/A</p>
<p>A3-1 Adopt the proposed logbook system, where reports of discards and processing procedures are mandatory fleetwide</p>	<p>Verification scheduled for the second year progress verification</p>	<p>N/A</p>
<p>A3-2 Estimate hake catches outside the UoA and incorporate them into the stock assessment</p>	<p>Verification scheduled for the second year progress verification, however ITM Project Manager has shared evidence of some advancement.</p> <p>Preliminary estimates of hake catch outside the UoA, including artisanal and bycatch data, were developed and used to refine the stock assessment model for improved mortality estimates (file: <i>Inf_Invest_Merluza_2024_IMIPAS.pdf</i>)</p>	<p>Yes – all files identified were provided to the assessment team and reviewed</p> <p>On file with the team:</p> <ul style="list-style-type: none"> - <i>Inf_Invest_Merluza_2024_IMIPAS.pdf</i>

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<p>A4-1 An analysis of all observer data collected in relation to potential interactions with ETP species over the last 8 years</p>	<p>A combined analysis of onboard observer program and CONAPESCA official landing statistics recorded from 2015 to 2023 was conducted to estimate fleet-wide incidental capture rates and identify species groups affected. Results confirmed low seabird and sea lion bycatch, allowed to establish a baseline for sustainability in the region and recommend bycatch response protocols.</p> <p>Reference: Stavrinaky A., 2024 CAPTURAS INCIDENTALES DE ESPECIES SENSIBLES EN LA PESQUERIA DE MERLUZA DEL GOLFO DE CALIFORNIA. ANALISIS 2015 – 2023 (file: <i>A4-1_Analisis 2015-2023 Capturas incidentales ETP.pdf</i>)</p>	<p>Yes – all files identified were provided to the assessment team and reviewed</p> <p>On file with the team:</p> <ul style="list-style-type: none"> - <i>A4-1_Analisis 2015-2023 Capturas incidentales ETP.pdf</i>
<p>A4-2 Convene a technical workshop, including representatives of the fishing sector, to review the analysis’s results and propose a comprehensive management strategy</p>	<p>A technical workshop with fishing-sector representatives and experts was convened in June 2025 to review the 2015–2023 ETP interaction analysis, gather sector perspectives, and draft comprehensive management measures for ETP mitigation.</p> <p>Reference: EDF Mexico. 2025. ACUERDOS DE LA REUNIÓN DEL GRUPO TÉCNICO DE MERLUZA, June 2025 (file: <i>A1-3 Acuerdos de la reunión del GT Merluza.pdf</i>): Technical-Expert Group meeting agreement on the proposed Draft Update to the Pacific Hake Fishery Management Plan in the Gulf of California. Detailed record of the technical group meeting held in June 2025,</p>	<p>Yes – all files identified were provided to the assessment team and reviewed</p> <p>On file with the team:</p> <ul style="list-style-type: none"> - <i>A1-3_Acuerdos de la reunión del GT Merluza.pdf</i>

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	documenting the agreed framework for draft harvest control rules (biomass triggers, TACs) and timeline for HCR development	
A4-3 Adopt the chosen strategy as part of the FMP/NOM	Verification of formal adoption and gazetting of ETP response protocols into the Fishery Management Plan and NOM (Norma Oficial Mexicana) is scheduled for Year 2 progress verification.	N/A
A5-1 Perform a comprehensive literature and expert knowledge review to better understand the potential impacts of the UoA on habitats at a local scale	<p>A comprehensive literature and expert-knowledge review was conducted, synthesizing scientific studies, technical reports, and stakeholder input to identify and characterize potential impacts of the Gulf of California hake fishery on local benthic habitats at multiple spatial scales.</p> <p>Reference: Stavrinsky A., 2024 Análisis Espacial y de Consecuencias (CSA) para la Pesquería de Arrastre de Merluza del Golfo de California. (file: <i>A5-1_Analisis CSA Merluza.pdf</i>)</p>	<p>Yes – all files identified were provided to the assessment team and reviewed</p> <p>On file with the team: - <i>A5-1_Analisis CSA Merluza.pdf</i></p>
A5-2 Using that information the HTG will perform a CSA to attain fishery-specific results	<p>A Consequence Spatial Analysis (CSA) of the Pacific hake fishery was conducted in November 2024 to semi-quantitatively score habitat productivity and spatial interaction attributes across two biomes, yielding a conditional MSC score of 70 and recommending continued use of observer data for formal habitat impact assessments.</p>	<p>Yes – all files identified were provided to the assessment team and reviewed</p> <p>On file with the team: - <i>A5-1_Analisis CSA Merluza.pdf</i></p>

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	Reference: Stavrinaky A., 2024 Análisis Espacial y de Consecuencias (CSA) para la Pesquería de Arrastre de Merluza del Golfo de California. (file: <i>A5-1_Analisis CSA Merluza.pdf</i>)	
A6-1 Develop a cohesive management strategy based on results from A5-2, the fishery's dynamic and trackable indicators.	Scheduled for Year 2 progress verification	N/A
A6-2 Adoption of the proposed strategy in the FMP or NOM	Scheduled for Year 2 progress verification	N/A
A7-1 Use information attained in A5-1 to define potential indicators of habitat impacts and/or to improve current data streams	Scheduled for Year 2 progress verification, however there is evidence of advancement: Hake fishery CSA obtained data were applied to derive candidate habitat-impact indicators and propose enhancements to the currently implemented observer and logbook data collection protocols Reference: Stavrinaky A., 2024 Análisis Espacial y de Consecuencias (CSA) para la Pesquería de Arrastre de Merluza del Golfo de California. (file: <i>A5-1_Analisis CSA Merluza.pdf</i>)	Yes – all files identified were provided to the assessment team and reviewed On file with the team: - <i>A5-1_Analisis CSA Merluza.pdf</i>
A8-1 Develop a cohesive management strategy based on the fishery's dynamic, available information on potential ecosystem impacts and trackable indicators.	Scheduled for Year 2 progress verification	N/A

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A8-2 Adoption of the proposed strategy in the FMP or NOM	Scheduled for Year 2 progress verification	N/A
A9-1 A comprehensive analysis of all potential impacts of UoA on the ecosystem, including the trophic role of hake and fishing gear interactions with other components of the ecosystem	<p>A peer-reviewed Ecopath ecosystem model was developed using observer and fishery-independent data to map Pacific hake's trophic interactions, quantify ecosystem impacts under multiple fishing scenarios, and provide uncertainty analyses through sensitivity testing.</p> <p>Reference: Morales Zárate V.Z., 2024 Modelación del rol ecológico de la merluza (<i>Merluccius productus</i>) en el sistema demersal del Golfo de California, México. EDF Mexico, Noviembre 2024 (file: <i>A9-1_Modelación del rol ecológico de la merluza.pdf</i>)</p>	<p>Yes – all files identified were provided to the assessment team and reviewed</p> <p>On file with the team: - <i>A9-1_Modelación del rol ecológico de la merluza.pdf</i></p>
A10-1 Request that previously adopted management objectives should be incorporated into the FMP	<p>A letter dated 29 July 2024 was sent BY fishery client to Dr. Pablo R. Arenas Fuentes, Director General del <i>Instituto Mexicano de Investigación Pesquera y Acuicola Sustentables</i> (IMIPAS), requesting inclusion of five consensus management objectives (TAC fluctuation limit, continued survey cruises, mortality control, bycatch limits, discard reduction) into the Pacific Hake Fishery Management Plan.</p> <p>Reference: Letter: <i>A10-1_Carta a IMIPAS objetivos.pdf</i></p>	<p>Yes – all files identified were provided to the assessment team and reviewed</p> <p>On file with the team: - Letter: <i>A10-1_Carta a IMIPAS objetivos.pdf</i></p>
A10-2 Adoption of proposed management objectives in the FMP	Scheduled for Year 2 progress verification	N/A

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<p>A11-1 Request regular fleet inspections by CONAPESCA officers</p>	<p>A letter dated 29 July 2024 was submitted by fishery client to Juan Ignacio Cabrera Osuna, Director General de Inspección y Vigilancia at CONAPESCA formally requesting stricter and regular surveillance of hake vessels at key ports to ensure compliance and deter unpermitted fishing.</p> <p>Reference: Letter: <i>A11-1_Carta a CONAPESCA lyV.pdf</i></p>	<p>Yes – all files identified were provided to the assessment team and reviewed</p> <p>On file with the team:</p> <ul style="list-style-type: none"> - Letter: <i>A11-1_Carta a CONAPESCA lyV.pdf</i>
<p>A11-2 Keep a detailed record of frequency and findings of inspections</p>	<p>CONAPESCA inspection and surveillance logs were compiled, detailing inspection counts and compliance trends; however, no public sanction records exist. A Freedom of Information request was submitted to CONAPESCA and SEMAR (Secretaria de Marina) for enforcement outcome data. The VMS program experienced coverage lapses during provider transition, and full system reinstatement remains unconfirmed, highlighting gaps in operational monitoring-</p> <p>Reference: CONAPESCA inspection records: <i>A11-2_Records Inspección y Vigilancia.pdf</i></p>	<p>Yes – CONAPESCA inspection logs on file with the team; enforcement data pending FOI</p> <p>On file with the team:</p> <ul style="list-style-type: none"> - <i>A11-2_Records Inspección y Vigilancia.pdf</i>
<p>A12-1 Mapping the current performance evaluation process of the management system</p>	<p>A technical report was prepared by EDF Mexico presenting a comprehensive description of the Pacific hake fishery management system, detailing the roles of IMIPAS, FIP stakeholders, EDF, CONAPESCA, and SEMAR; outlining annual IMIPAS performance-report workflows; and</p>	<p>Yes – all files identified were provided to the assessment team and reviewed</p> <p>On file with the team:</p> <ul style="list-style-type: none"> - <i>A12-1_Estructura proceso de evaluación EM.pdf</i>

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	<p>proposing strategies for external evaluation aligned with MSC criteria.</p> <p>Reference:</p> <p>EDF Mexico, 2024. MAPEO DEL PROCESO ACTUAL DE EVALUACIÓN DE DESEMPEÑO DEL SISTEMA DE MANEJO PESQUERO (file: <i>A12-1_Estructura proceso de evaluación EM.pdf</i>)</p>	
<p>A12-2 Identify potential external reviewers and mechanisms for participation/feedback</p>	<p>EDF Mexico held an internal working group meeting on 27 November 2024 to generate a roster of qualified external reviewers—including academic experts, international agencies, and NGO specialists—to provide periodic peer review and feedback on the fishery’s evaluation reports.</p> <p>Reference:</p> <p>EDF Mexico, 2024. NOTAS DE REUNIÓN INTERNA DE TRABAJO. 27 de noviembre de 2024, Mexico (file: <i>A12-2_Potenciales revisores EM.pdf</i>)</p>	<p>Yes – all files identified were provided to the assessment team and reviewed</p> <p>On file with the team:</p> <ul style="list-style-type: none"> - <i>A12-2_Potenciales revisores EM.pdf</i>
<p>A12-3 Introduce a consistent external evaluation process at least for key parts of the management system</p>	<p>Scheduled for Year 2 progress verification</p>	<p>N/A</p>

2.4 Status at Performance Indicator level

2.4.1 Principle 1 Performance Indicator level score changes and rationales – Fisheries Standard v2.01

Principle 1 – Performance Indicator level score changes and rationales		
1.2.1 – Harvest Strategy	Progress status	Justification
1st Progress Verification	<i>On target</i>	<p>Baseline & Target: – Entry draft score and Year 1 expected score are 60–79 per IAP and BMT schedule.</p> <p>Progress Achieved: – Completed discard-impact studies using observer program data and official landing data (avisos de arribo – CONAPESCA) to assess impact at national level (A1-1, A1-2) – Held nine stakeholder technical workshops with local governments, scientists and fishers (A1-3, A1-4) to inform about strategy design and receive feedback. – Produced and submitted a detailed catch-strategy paper—including TAC scenarios—to IMIPAS (A2-1). – Integrated artisanal catch data and updated green-weight conversion factors into 2024 IMIPAS biomass calculations, improving F accuracy.</p> <p>Gap: – No formal TAC or interim exploitation control adopted; biomass remains below B_{MSY} for a second season, indicating the strategy has not yet proven responsive.</p> <p>Conclusion: These efforts maintain the PI within its 60–79 draft range, meeting the Year 1 target. Formal adoption of TAC or effort controls is needed in Year 2 to elevate the score to ≥ 80</p> <p>A1-1, A1-2 – Discard-impact studies A1-3, A1-4 – Workshop reports A2-1 – Catch-strategy paper IMIPAS 2024 biomass report</p>

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2nd Progress Verification		
3rd Progress Verification		
4th Progress Verification		
1.2.2 – Harvest control rules and tools	Progress status	Justification
1st Progress Verification	<i>On target</i>	<p>Baseline & Target: – Entry draft score and Year 1 expected score are both 60–79, with the first improvement to ≥ 80 required in Year 2 (BMT schedule).</p> <p>Progress Achieved: – Hake technical group (GT Merluza) developed and stakeholder-reviewed a draft HCR package (A2-1) featuring: 1. Biomass-triggered TAC tiers. 2. Early-closure rule when mean catch size reaches the IMIPAS LRP. – Draft HCRs have been formally submitted to IMIPAS for inclusion in the FMP, satisfying the Year 1 milestone of having complete draft rules ready for regulatory process.</p> <p>Gap: – The draft HCRs are not yet legally adopted or gazetted; formal adoption is scheduled for Year 2.</p> <p>Conclusion: Maintaining the 60–79 draft range with a finalized draft HCR package meets the Year 1 target, so PI 1.2.2 is On target, with formal adoption required in Year 2 to elevate the score.</p> <p>A2-1 – Draft HCR package A1-4 – Workshop report A1-3b – GT Merluza minutes</p>
2nd Progress Verification		

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3rd Progress Verification		
4th Progress Verification		
1.2.3 – Information and monitoring	Progress status	Justification
1st Progress Verification	<i>On target</i>	<p>Baseline & Target:</p> <ul style="list-style-type: none"> – Entry draft score was 60–79 due to incomplete integration of discard and artisanal data and irregular landing verification. – Year 1 target: lift to ≥ 80 by fully incorporating new data streams into stock-assessment models and improving monitoring protocols. <p>Progress Achieved:</p> <ul style="list-style-type: none"> – Observer-program data (2015–2023) on discard volumes and size structure were used for the first time to model population impacts under alternative fishing-mortality scenarios (A1-1). – The 2024 IMIPAS stock assessment now explicitly includes artisanal catch data, discards, and an updated live-weight conversion factor, enhancing biomass and F estimates. – Although the electronic logbook system remains pending (A3-1), authorities have fully utilised observer data for management, demonstrating operational acceptance. <p>Gap:</p> <ul style="list-style-type: none"> – Direct, systematic landing-verification by CONAPESCA remains limited; electronic logbooks need formal rollout to institutionalise data capture. <p>Conclusion:</p> <p>Despite some verification gaps, the integration of new datasets and improved assessment precision meet SG 80 requirements, elevating PI 1.2.3 to the ≥ 80 range for Year 1</p> <p>A1-1 – Discard-impact study 2024 IMIPAS assessment report</p>
2nd Progress Verification		

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3rd Progress Verification		
4th Progress Verification		

2.4.2 Principle 2 Performance Indicator level score changes and rationales – Fisheries Standard v2.01

Principle 2 – Performance Indicator level score changes and rationales		
2.3.2 – ETP species management strategy	Progress status	Justification
1st Progress Verification	<i>On target</i>	<p>Baseline & Target:</p> <ul style="list-style-type: none"> – Entry draft score was 60–79 due to absence of regular review mechanisms for ETP mitigation. – Year 1 target: lift to ≥ 80 by establishing and reviewing formal ETP management strategies. <p>Progress Achieved:</p> <ul style="list-style-type: none"> – Aggregated nine-year observer dataset analysed (A4-1), confirming interactions limited to seabirds (7 mortalities) and sea lions (2 live releases); no interactions with turtles, threatened sharks, or endangered fish. – Draft ETP response protocol developed and circulated via GT Merluza workshops (A1-3), detailing crew handling, observer recording, and gear best practices. – Seabird expert working group convened to formulate specific mitigation measures (e.g., offal management, lighting adjustments) for incorporation into the Management Plan. – Established an annual review mechanism via observer data audits and expert working-group meetings to regularly evaluate ETP measures. <p>Gap:</p> <ul style="list-style-type: none"> – No significant gaps remain for Year 1; next steps include formal adoption of the response protocol into regulatory instruments. <p>Conclusion:</p> <p>These actions satisfy SG 80 requirements for ETP management, demonstrating a robust, regular review process and appropriate mitigation strategies, thus achieving the ≥ 80 target for Year 1</p>
2nd Progress Verification		
3rd Progress Verification		

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4th Progress Verification		
2.4.1 – Habitats outcome	Progress status	Justification
1st Progress Verification	<i>On target</i>	<p>Baseline & Target:</p> <ul style="list-style-type: none"> – Entry draft score was 60–79 based on limited habitat impact data. – Year 1 target: maintain 60–79 while conducting a detailed precautionary impact analysis. <p>Progress Achieved:</p> <ul style="list-style-type: none"> – Conducted a Consequence Spatial Analysis (CSA) in Q4 2024 (A5-1) using nine years of onboard observer data (haul depths, durations, GPS tracks) and official landing statistics. – Identified primary fishing at 200–300 m over resilient fine-sediment plains; seasonal cessation (~5 months/year) allows invertebrate community recovery. <p>Gap:</p> <ul style="list-style-type: none"> – CSA outputs are precautionary; no formal, peer-reviewed habitat impact report has not been published. <p>Conclusion:</p> <p>The CSA confirms low risk to habitat structure and function, maintaining the PI requirements within 60–79 range for Year 1, with a view to elevating to ≥ 80 in Year 2 upon completion of a peer-reviewed habitat-impact document.</p>
2nd Progress Verification		
3rd Progress Verification		
4th Progress Verification		
2.4.3 – Habitats information	Progress status	Justification
1st Progress Verification	<i>On target</i>	<p>Baseline & Target:</p> <ul style="list-style-type: none"> – Entry draft score was 60–79 based on limited spatial/temporal detail in habitat data. – Year 1 target: lift to ≥ 80 by providing high-resolution, reliable habitat-interaction information.

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		<p>Progress Achieved:</p> <ul style="list-style-type: none"> – Conducted a detailed CSA (A5-1) using nine years of observer haul data (locations, depths, durations, catch composition). – Confirmed fishing operations are localized to 200–300 m over fine-sediment plains that recover during ~7 months of non-fishing. – Integrated draft electronic logbook fields (A3-1) to record seafloor contact and substrate type, enriching future habitat data collection. <p>Gap:</p> <ul style="list-style-type: none"> – Full implementation of electronic logbooks is pending, though existing observer records already meet SG 80 information standards.. <p>Conclusion:</p> <p>These enhancements satisfy SG 80 requirements by delivering precise, spatially explicit habitat-interaction data and establishing groundwork for ongoing monitoring and scientific publication, thus fully meeting the Year 1 target.</p>
2nd Progress Verification		
3rd Progress Verification		
4th Progress Verification		
2.5.3 – Ecosystem information	Progress status	Justification
1st Progress Verification	<i>On target</i>	<p>Baseline & Target:</p> <ul style="list-style-type: none"> – Entry draft score was 60–79. – Year 1 target: lift to ≥ 80 by delivering comprehensive ecosystem-level data and uncertainty analysis. <p>Progress Achieved:</p> <ul style="list-style-type: none"> – Completed a quantitative Ecopath model (A9-1) incorporating nine years of observer & catch-effort data, spatial habitat layers, and trophic parameters.

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		<ul style="list-style-type: none"> – Model quantified hake’s trophic role and direct/indirect impacts on lower-trophic species. – Integrated fishery-dependent (landings, discards, bycatch) and fishery-independent survey inputs, enhancing spatial and functional resolution. – Performed uncertainty/sensitivity analyses on diet matrices and P/B ratios; model peer-reviewed by academic experts. <p>Gap:</p> <ul style="list-style-type: none"> – No major gaps remain for Year 1; next steps include annual updates and model validation against independent surveys to maintain ≥ 80 <p>Conclusion:</p> <p>These achievements fully satisfy the SG 80 information requirements, demonstrating that the fishery now has a robust, peer-reviewed ecosystem-monitoring framework in place.</p>
2nd Progress Verification		
3rd Progress Verification		
4th Progress Verification		

2.4.3 Principle 3 Performance Indicator level score changes and rationales – Fisheries Standard v2.01

Principle 3 – Performance Indicator level score changes and rationales		
3.2.1 – Fishery specific objectives	Progress status	Justification
1st Progress Verification	<i>Behind target</i>	<p>Baseline & target: Entry draft score was 60–79, with a Year 1 milestone to reach ≥ 80 by having formally defined, approved objectives integrated into the FMP/NOM (BMT schedule).</p> <p>Progress achieved:</p> <ul style="list-style-type: none"> - In December 2024, the fishery submitted a detailed “Carta a IMIPAS” (A10-1) proposing explicit management objectives aligned with MSC outcomes (e.g., target biomass, bycatch limits). - During the Year 1 stakeholder workshop (A1-4) these objectives were discussed and refined with sector and authority representatives. <p>Gap:</p> <ul style="list-style-type: none"> - The proposed objectives are not yet formally adopted into the official Fishery Management Plan or NOM through its publication in <i>Diario Oficial de la Federación</i> (DOF). Without legal incorporation or a Ministerial decree, the objectives remain draft and unenforceable. <p>Conclusion: This PI therefore remains in the 60–79 range and fails to meet the Year 1 expectation of ≥ 80.</p> <p>A10-1 – Carta a IMIPAS objetivos (Dec 2024) A1-4 – Workshop report (stakeholder review of objectives)</p>
2nd Progress Verification		
3rd Progress Verification		

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4th Progress Verification		
3.2.3 – Compliance and enforcement	Progress status	Justification
1st Progress Verification	<i>On target</i>	<p>Baseline & target: Entry draft score and Year 1 milestone both in the 60 – 79 range (BMT).</p> <p>Progress achieved:</p> <ul style="list-style-type: none"> - In June 2024, the fishery formally requested regular fleet inspections by CONAPESCA to bolster MCS presence (A11-1). - By July 2024, CONAPESCA inspection and surveillance records were initiated (A11-2) and are now routinely collected, improving the transparency and frequency of compliance checks. <p>Gap:</p> <ul style="list-style-type: none"> - While inspection logs exist, no sanction or follow-up action data (e.g., infractions or penalties) have yet been recorded or made publicly accessible, limiting full enforcement evidence. <p>Conclusion:</p> <p>These steps satisfy the Year 1 requirement of establishing systematic compliance monitoring, keeping the PI within its 60 – 79 draft-score range</p>
2nd Progress Verification		
3rd Progress Verification		
4th Progress Verification		
3.2.4 – Management performance evaluation	Progress status	Justification
1st Progress Verification	<i>On target</i>	<p>Baseline & target: Entry draft score and Year 1 milestone both in the 60 – 79 range (BMT).</p> <p>Progress achieved:</p>

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		<p>- Process mapping: The fishery client reviewed and confirmed a structured management-performance evaluation process documented in A12-1, which outlines regular reviews of harvest strategy outcomes and ecosystem indicators.</p> <p>- Reviewer roster: A12-2 lists potential independent reviewers (academic and management experts) for periodic peer review of fishery performance.</p> <p>- Feedback loop: Outcomes from discard-impact analyses (A1-1) and HCR draft results (A2-1) are now formally fed back into annual performance evaluations under the mapped process.</p> <p>Gap:</p> <p>- While the process framework and roster exist, no completed cycle of peer-review evaluations has yet occurred.</p> <p>Conclusion:</p> <p>These developments meet the Year 1 requirement of establishing a documented, stakeholder-endorsed evaluation system, keeping the PI within its 60 – 79 range</p> <p>A12-1 – Estructura proceso de evaluacion EM (Mar 2025) A12-2 – Potenciales revisores EM (Mar 2025) A1-1 – Discard-impact study (Dec 2024) A2-1 – Draft HCR package (Mar 2025)</p>
2nd Progress Verification		
3rd Progress Verification		
4th Progress Verification		

3 References

EDF Mexico, 2024. MAPEO DEL PROCESO ACTUAL DE EVALUACIÓN DE DESEMPEÑO DEL SISTEMA DE MANEJO PESQUERO (file: *A12-1_Estructura proceso de evaluación EM.pdf*)

EDF Mexico, 2024. NOTAS DE REUNIÓN INTERNA DE TRABAJO. 27 de noviembre de 2024, Mexico (file: *A12-2_Potenciales revisores EM.pdf*)

EDF Mexico. 2025. ACUERDOS DE LA REUNIÓN DEL GRUPO TÉCNICO DE MERLUZA, June 2025 (file: *A1-3 Acuerdos de la reunión del GT Merluza.pdf*)

EDF Mexico. 2025. ESTRATEGIA DE APROVECHAMIENTO DE LA MERLUZA DEL GOLFO DE CALIFORNIA, March 2025 (file: *A1-3a_Propuesta Estrategia de Manejo.pdf*)

EDF Mexico. 2025. MINUTAS DE LA REUNIÓN DEL GRUPO TÉCNICO DE MERLUZA, June 2025 Pacific Hake Technical Expert Group meeting minutes, March 2025 (file: *A1-3b MINUTA GRUPO TECNICO MERLUZA.pdf*):

EDF Mexico. 2025. REPORTE DE MESA DE TRABAJO SOBRE ESTRATEGIAS DE APROVECHAMIENTO PARA LA PESQUERÍA DE MERLUZA EN EL GOLFO DE CALIFORNIA. Mayo 2025, Ensenada, Mexico (file: *A1-4_Workshop fishing sector_report.pdf*)

EDF Mexico. 2025. MINUTAS DE MESA DE TRABAJO SOBRE ESTRATEGIAS DE APROVECHAMIENTO PARA LA PESQUERÍA DE MERLUZA EN EL GOLFO DE CALIFORNIA. Mayo 2025, Ensenada, Mexico (file: *A1-4b_Minute Ensenada stakeholder meeting.pdf*)

Morales Zárate V.Z., 2024 Modelación del rol ecológico de la merluza (*Merluccius productus*) en el sistema demersal del Golfo de California, México. EDF Mexico, Noviembre 2024 (file: *A9-1_Modelación del rol ecológico de la merluza.pdf*)

Quiroz J.C. 2024. EVALUACIÓN EXPLORATORIA DE MERLUZA DEL PACÍFICO: Impacto de las capturas comerciales y descartes. Juan Carlos Quiroz, Noviembre 2024

Stavrinsky A., 2024 Análisis Espacial y de Consecuencias (CSA) para la Pesquería de Arrastre de Merluza del Golfo de California. (file: *A5-1_Analisis CSA Merluza.pdf*)

Stavrinsky A., 2024 CAPTURAS INCIDENTALES DE ESPECIES SENSIBLES EN LA PESQUERIA DE MERLUZA DEL GOLFO DE CALIFORNIA. ANALISIS 2015 – 2023 (file: *A4-1_Analisis 2015-2023 Capturas incidentales ETP.pdf*)



Control Union (UK) Limited
The Barn
Lake Court
Hursley
Winchester
Hampshire
SO21 2LD
United Kingdom
Tel: +44 (0)20 7488 2210
Email: infofishuk@controlunion.com
Web: uk.controlunion.com

