

14TH MEETING OF THE SCIENTIFIC COMMITTEE

7 to 12 September 2026, Tórshavn, Faroe Islands

SC14 - Doc 06

Compilation of Reports from SC Intersessional Meetings - 2026

Secretariat

Background

The SPRFMO Scientific Committee (SC) continued the practice of holding web meetings, sessions and workshops during 2026, in the lead up to the 14th Annual Meeting of the SC. This document reproduces the summaries from the following meetings (all dates are UTC) where available –all meetings are in chronological order.

Abbreviations used throughout this document:

- SC: Scientific Committee
- JMWG: Jack Mackerel Working Group
- DWWG: Deep Water Working Group
- SQWG: Squid Working Group
- EWG: Ecosystems Working Group
- SGNTT: Salas y Gomez and Nazca Area Task Team
- JM-MSETT: Jack Mackerel Management Strategy Evaluation Task Team

Working group	Meetings/Sessions/Workshops	Date (UTC)
SC	Scientific Committee Coordination Meeting 01	25 March 2026
JMWG MSETT	Jack Mackerel MSE Task Team Meeting 01	26 March 2026
JMWG MSETT	WP1 Launch & Benchmark Preparation	9 April 2026
JMWG MSETT	Final Pre-Benchmark Preparation	30 April 2026
JMWG	Jack Mackerel Benchmark Workshop SCW16	18-22 May 2026
JMWG MSETT	Post-Lima / Pre-Intersessional Debrief	28 May 2026
JMWG MSETT	Pre-Wageningen Final Preparation	11 June 2026
JMWG MSETT	Jack Mackerel MSE Task Team Workshop SCW17	15-19 June
SGNTT	Salas y Gomez and Nazca TT meeting	2 July 2026
JMWG MSETT	Post-Wageningen: CMP Shortlist Review	24 July 2026
DWWG	Exploratory fishery applications (1/2026)	27 July 2026
SQWG	SPRFMO SC Third Squid Workshop	29 July-1 August 2026
EWG	Spatial distribution models Workshop	3-5 August 2026
JMWG MSETT	Pre-SC14 Draft Review	13 August 2026
EWG	Preparatory Session	14 August 2026
DWWG	Preparatory Session (2/2026)	18 August 2026
SC	Scientific Committee Coordination Meeting 02	24 August 2026
DWWG	Preparatory Session	25 August 2026
JMWG	Final SC14 Paper Sign-off	28 August 2026



1. Scientific Committee - Coordination Meeting 01 – 26 March 2026

Opening & introductions

The meeting opened with introductions and confirmation of attendance from multiple Members across time zones. No CNCPs or observers attended the meeting. The Chairperson thanked participants for attending given the time-zone challenges.

Commission outcomes and directions to the Scientific Committee

The Chair summarised requests and directions from the Commission relevant to the Scientific Committee, including work relating to:

- Jack Mackerel
- Deepwater fisheries
- Squid fisheries
- CBR mitigation
- Implementation of Electronic Monitoring (EM)
- Stock structure and area subdivision work
- Evaluation of a 20% up / 30% down threshold within the MSC framework

The Scientific Committee was reminded that electronic monitoring considerations should be incorporated into Scientific Committee outputs and Member reports.

Multiannual Workplan and intersessional meetings

The Chair reviewed the intersessional meeting planner and emphasised the importance of coordinating meeting dates across working groups and minimising the number of virtual meetings where possible.

The Scientific Committee agreed on several in-person workshops planned for 2026, including:

- Jack Mackerel Benchmark Workshop (Lima, 18–22 May 2026)
- MSE Workshop (Netherlands, June)
- Simulated Assessment Workshop (July)
- Ecosystem Workshop (July)

Further details and invitations for these workshops will be circulated in due course.

The Secretariat will circulate the formal data request to support the regional Squid stock assessment and finalise the assessment calendar.

14th SC Annual Meeting (SC14) planning and deadlines

The Chair reviewed planning for the 14th Scientific Committee Annual Meeting (SC14) in the Faroe Islands, including meeting dates, document submission deadlines, and proposed improvements to meeting structure and document requirements.

Proposed document submission requirements may include:

- Advance summary of the paper
- Plain-language summary for managers
- Explicit linkage to working group Terms of Reference or multi-annual workplan tasks

Participants also discussed feedback from previous meetings, including:

- Reducing meeting fatigue
- Improving sequencing of working group and plenary sessions
- Simplifying agendas
- Improving reporting from working groups



- Ensuring focus on decision-relevant scientific advice

Other business

Proposed revisions to the SC meeting format

The Chair presented a proposal to revise the structure of the Scientific Committee annual meeting to better separate technical discussions from management advice and improve efficiency.

The proposed structure included:

- Two days of pre-SC workshops
- Two preparatory technical session days
- One report drafting day
- Final plenary session for adoption of advice

Participants discussed the possibility of parallel preparatory sessions, noting concerns regarding impacts on small delegations and the need to ensure clear reporting back to plenary.

The possible use of a professional rapporteur to assist with report drafting was also discussed.

The Chair invited further feedback from Members on the proposed meeting format and indicated that revised options would be presented at a future coordination meeting.

Participants discussed the need to:

- Schedule a dedicated stock assessment meeting earlier in the year
- Issue a separate data request letter for squid data
- Ensure Members complete intersessional tasks circulated by the Secretariat
- Ensure early registration and accommodation booking for the SC14 meeting in the Faroe Islands

Action Items

The Chair indicated that additional coordination web meetings will be scheduled during the year, and the next coordination session is currently planned for August 2026.

The Secretariat will:

- Issue data requests and workshop invitations
- Maintain the Scientific Committee meeting planner
- Provide access to meeting materials via Microsoft Teams
- Circulate follow-up communications as required



2. JMWG MSETT Jack Mackerel MSE Task Team Meeting 01 – 27 March 2026

Summary

The JMWG MSE Task Team kickoff was held on Friday, 27 March 2026. The meeting focused on organizing the pre-benchmark work programme for the May benchmark in Lima and the June MSE workshop in Wageningen, with particular emphasis on the the BM03 abundance-index topic. We reviewed candidate assessment simplifications, and the transition from benchmark work into operating-model conditioning. Participants agreed that BM03 should be broadened from a single umbrella paper noting that the review should likely be split across several more focused contributions. This should include Chilean acoustic work, Chilean and Peruvian CPUE developments, and a metadata-style synthesis paper that documents data sources, timing, methods, and caveats across indices. Chile volunteered to lead the BM03 effort, and Peru agreed to coordinate on acoustic expertise and updated CPUE work.

The meeting also reviewed draft benchmark papers on the 2025 assessment model and next generation alternatives. Initial model simplifications suggested that dropping some legacy indices had limited effect on spawning biomass, while selectivity structure, especially for South Central Chile, remained highly influential. Participants also noted that time-varying catchability is likely capturing changes in availability and distribution rather than simple fishing-power changes, making it an important structural uncertainty to carry forward into MSE design.

Meeting Details

- Meeting: JMWG MSE Task Team Meeting 01/2026
- Date: 27 March 2026
- Organisation: South Pacific Regional Fisheries Management Organisation
- Working group: Jack Mackerel Working Group

Key Dates and Action Items

Time or deadline	Item	Importance
9-10 April 2026	Next preparatory task-team meeting	Review BM01 material and early BM03 paper plans before the benchmark
24 April 2026	BM03 submission deadline discussed in the meeting	Immediate preparation deadline for index-related benchmark papers
May 2026	Lima benchmark meeting	Review data, indices, and benchmark model material
June 2026	MSE workshop in Wageningen	Main workshop for management procedures and operating-model work
Mid-August 2026	Expected submission deadline for review material	Follow-up deadline to support later Scientific Committee review
After the benchmark	Potential virtual SC or intersessional review step	Needed if a new benchmark model requires formal review before later use



Agenda

1. Roll call, introductions, and access to meeting materials.
2. Review of the overall benchmark and MSE timeline.
3. Discussion of benchmark papers BM01, BM02, and BM03.
4. Discussion of abundance indices, acoustic work, and benchmark submissions.
5. Review of biological-data scope and data-sharing issues.
6. Review of assessment simplifications and implications for MSE conditioning.
7. Benchmark logistics, review process, and next steps.

Discussion Summary

Workplan and Schedule

Jim Ianelli opened the meeting as a kickoff session intended to organize the next two months of work. He emphasized that the May event is primarily a benchmark, but one that must resolve enough assessment structure to support the June MSE workshop. Participants discussed the compressed schedule and the need to keep regular meetings on the calendar so that BM papers and diagnostics advance before Lima.

1. Hold preparatory meetings in early April.
2. Submit BM03 and related benchmark material by 24 April 2026.
3. Use the May Lima benchmark to review indices, data inputs, and candidate model changes.
4. Shift into MSE-focused work for the June Wageningen workshop.
5. Prepare later review material for an August submission and review phase.

Benchmark Papers and BM03 Scope

Jim described a benchmark-paper structure in which BM01 documents the 2025 assessment model and candidate simplifications, BM02 explores next-generation base-model options, and BM03 covers indices of abundance. The discussion quickly converged on the view that BM03 is too broad as a single document and should be split into multiple papers.

1. A Chilean acoustic-survey paper, including results from the survey that had started roughly five days before the meeting.
2. Additional Chilean acoustic or vessel-opportunity material if available.
3. Chilean CPUE papers, including spatial-temporal analyses already developed in recent years.
4. A Peruvian CPUE/index paper using updated 2015-2025 information.
5. A metadata or review paper summarizing the characteristics, timing, methods, and caveats of each main index.

Ignacio Paya volunteered to coordinate BM03 and to work with contributors on the overall structure and leads.

Acoustic and Index Work

Chile reported that the current acoustic survey was underway and that preliminary biomass estimates might be available in time for the May benchmark. Chile also suggested involving additional acoustic specialists, including Mariano Gutierrez and Nicolas, in a more technical discussion of acoustic methods and interpretation.

Peru agreed to contact Mariano and supported splitting BM03 into several products. Peru also described ongoing work to produce a more robust updated CPUE series covering 2015-2025. The discussion treated Chilean and Peruvian index work as central benchmark inputs.

Participants also returned repeatedly to the idea of a metadata table. This was seen as a practical way to summarize when fleets operate, what data exist, how methods differ, and what limits apply to



interpretation of each series. That synthesis was viewed as useful both for the benchmark and for later MSE conditioning.

Data Scope, Biological Updates, and Data Sharing

Karolina asked whether BM03 is intended to review only indices or the broader stock-assessment data package. Jim noted that the current focus is on indices, though biological updates could also be relevant where new work exists. Chile reported no major biological updates ready for the benchmark. Peru reported new work on age-related data, including efforts to better represent smaller fish and a wider length range in age-structured inputs.

The meeting also highlighted the difference between coarse Secretariat-aggregated spatial data and the raw haul-level information needed for robust combined CPUE modeling. Niels stressed that a fully integrated offshore and regional CPUE would likely require haul-by-haul data sharing across members. Participants treated that as an important medium-term goal, but something unlikely to be fully resolved before the May benchmark.

Index Interpretation and Combined-Data Questions

Several speakers discussed whether the benchmark should aim to create a single standardized index across fleets or focus first on reviewing and documenting individual indices. Jim favored keeping all options open while prioritizing benchmark-ready documentation and index submissions. Niels argued that a combined cross-fleet CPUE remains the most robust long-term response to changing spatial distribution, but also noted the practical and political challenges of accessing compatible raw data.

Ignacio described Chile's recent work as using largely overlapping data streams across institutions for recent years, with differences arising more from methods and implementation than from wholly separate datasets. He also pointed to the importance of seasonal timing and within-year availability of data, noting that Chile can provide more current-year information than some other fleets. The meeting agreed that these differences should be documented explicitly in metadata and review papers rather than left implicit.

BM01 Simplifications and MSE Conditioning

Jim then reviewed the benchmark material on the current assessment model and candidate simplifications. The discussion highlighted several draft findings:

1. Removing some legacy or trimmed indices changed recruitment estimates more than spawning biomass.
2. Blocked selectivity experiments had larger-than-expected effects on rebuilding trajectories.
3. Much of that sensitivity appeared to originate from the South Central Chile fishery.
4. Time-varying catchability may be acting as a practical way to represent changes in availability and distribution.
5. Structural uncertainty should be carried into MSE conditioning rather than treated as only a parametric issue.

The group discussed whether harmonized treatment of northern components and recruitment-regime simplifications could help create more comparable operating-model inputs. Peru agreed to consider harmonization ideas internally and report back.

Reference Points, Projections, and Process

The final technical discussion covered how reference points and selectivity assumptions should be handled in projections and MSE simulations. The group indicated that using one fixed reference-point value per simulation draw is the usual approach, while the exact treatment of projection selectivity still needs to be settled after the benchmark.

Participants also discussed whether an intersessional review would be sufficient after the benchmark or whether a special Scientific Committee meeting might still be needed if a benchmarked model is to



be adopted formally before later MSE work. No final process decision was made, but the need for a reviewable and well-documented benchmark outcome was clear.

Benchmark Logistics

The meeting closed with practical discussion of the Lima benchmark. Ricardo indicated that the venue was expected to be confirmed in Lima, that Miraflores was a practical accommodation area, and that the meeting would likely run for five days from Monday to Friday. Participants also discussed reviewer participation and the need for the Secretariat to circulate official invitation and registration information soon.

Decisions and Agreements

1. BM03 should be split into several focused papers rather than handled as one large document.
2. Chile, through Ignacio Paya, volunteered to lead BM03 coordination.
3. Chile and Peru will advance acoustic and CPUE/index contributions for the May benchmark.
4. A metadata summary table should be prepared to document index timing, methods, and caveats across members.
5. BM01 simplification work should continue as support for benchmark review and later MSE conditioning.
6. Combined cross-fleet CPUE work remains a worthwhile medium-term objective, but not a realistic full deliverable for the immediate benchmark.
7. The exact post-benchmark review pathway still needs clarification.

Action Items

Action	Lead	Timing	Status
Confirm the exact August submission and review deadline	Jim Ianelli	Before later scheduling is finalized	Open
Lead BM03 coordination and contact contributors on scope and paper leads	Ignacio Paya	Before the next preparatory meeting	Open
Contact Mariano Gutierrez regarding acoustic participation	Criscely Lujan / Peru	Before the benchmark	Open
Compile an expanded list of working papers and record member contributions from the meeting	Jim Ianelli	Before the next meeting	Open
Document age-schedule or age-data updates raised during the meeting	Jim Ianelli	Before circulation of meeting notes	Open
Confirm lead authors for each BM03-related paper	Meeting participants	Before the next preparatory meeting	Open
Continue updated Peru CPUE work using 2015-2025 data	Peru	For benchmark submission by 24 April 2026 if possible	Open
Advance Chilean acoustic and CPUE benchmark contributions	Chilean participants	For the May 2026 benchmark	Open
Compile recent historical index papers referenced in discussion and circulate them to the group	Jim Ianelli with contributors	Before the next meeting	Open
Start a metadata table summarizing data collection, methods, timing, and coverage across indices	Jim Ianelli and BM03 contributors	Before the next meeting	Open
Present index methods and results at upcoming meetings ahead of the benchmark	Index-paper contributors	April 2026 meetings	Open
Check whether Chilean data already provided to SPRFMO are available at haul-level resolution	Ignacio Paya	Before the benchmark	Open



Check whether improvements have been made to artisanal trip-level or finer-scale data collection	Ignacio Paya	Before the benchmark	Open
Consider internally whether harmonized northern treatment is appropriate for benchmark and MSE work	Peru	Report back at a future meeting	Open
Circulate official Lima benchmark notice and registration/logistics details	Secretariat	As soon as available	Open
Provide support to participants needing help running or testing models	Jim Ianelli	Ongoing	Open

Key Questions for Future Meetings

8. Does the August timing refer to document submission, review start, or both?
9. Which indices and surveys are realistic benchmark deliverables for May 2026?
10. Should the benchmark aim only to review member indices, or also to standardize or combine them?
11. What biological updates, if any, should accompany BM03 submissions?
12. Can haul-level data be shared sufficiently to support stronger combined-index analyses?
13. How should within-year data and differences in seasonal timing across fleets be handled?
14. What rule should guide selection among alternative model configurations with different structural assumptions?
15. How should reference points and terminal selectivity periods be fixed for projections and MSE simulations?
16. Will a virtual SC review or other formal intersessional review be required after the benchmark?

References

This report is based on the supplied transcript and meeting summary for the JMWG MSE Task Team Meeting 01/2026 dated Friday, 27 March 2026. It is intended as an updated meeting-report draft using the same heading structure as the existing 01-2026 report source.



3. JMWG MSETT Jack Mackerel MSE Task Team Meeting 02 – 9 April 2026

Summary

This report summarizes the JMWG MSE WP1 launch and benchmark-preparation meeting held on 9 April 2026, based on the automated transcript and discussion around the JM benchmark-preparation materials: JM_SCW_prep.

The meeting focused on preparations for the pre-benchmark process and the upcoming week-long benchmark workshop in Lima, including workshop logistics, the draft agenda, expectations for limited remote participation, and the sequencing of acoustic and CPUE sessions. Participants agreed that acoustic sessions should be prioritized early in the benchmark week, that CPUE index discussions should be scheduled on the second day, and that concrete CPUE paper plans should be prepared before the next intersessional virtual meeting.

The technical discussion then centered on acoustic methodology, the desired resolution of backscatter outputs, the use of age- or length-resolved indices to track cohorts, and Chilean work to convert acoustic information to biomass and build a standardized spatiotemporal acoustic index using SDM/TMB/INLA approaches. The group also reviewed simplified assessment alternatives, selectivity formulations, time-varying catchability, PER comments on the 2002 fleet change and regime structure, and new SAM-based diagnostics. Follow-up work includes incorporating PER comments into the main assessment document, preparing CPUE index plans, posting SAM outputs to the shared HTML materials, and implementing a catchability break for the Chile Acoustic North series.

Participants named in the discussion included Jim Ianelli (chair), Ignacio Payá, Aquiles Sepúlveda, José Zenteno, Luciano Espinoza, Sebastián Vásquez, Ana Alegre, Criscely Luján, Miriam Geronimo, Karolina Molla Gazi, Benoit Bergès, Niels Hintzen, Iago Mosqueira, Hyejin Song, Trent Timmiss, and additional delegates from Chile, Peru, Korea, the EU, Australia, and collaborating research institutions.

Key Discussion Summary

1. Workshop logistics and participation format

The Secretariat benchmark logistics email and coordinating page were circulated and acknowledged.

The benchmark workshop will remain primarily in-person and run across a full week in Lima. Limited remote participation was supported for selected sessions rather than continuous full-day streaming.

Peru confirmed that Microsoft Teams connectivity in the IMARPE auditorium should support virtual participation for those parts of the meeting.

The practical approach agreed was to schedule open sessions and periodic summaries at useful times for remote attendees.

2. Acoustic agenda scope and timing

Strong support was expressed for placing acoustic discussions early in the benchmark week so acoustic scientists can contribute before assessment and MSE topics narrow.

The acoustic agenda is intended as a technical working session for acoustic experts rather than a general training session.

Discussion emphasized moving beyond single biomass points toward finer acoustic products by location, length, or age so cohorts can be tracked more directly.

Participants also highlighted the need to review the full processing chain, from acoustic signal interpretation to biological sampling and the final index used in assessment.



Broader acoustic participation was encouraged, including IMARPE, IFOP, Nicolas on opportunity-vessel acoustic data, and possible external expertise from Alaska.

Chile described ongoing work to convert acoustic information to biomass and to develop a standardized spatiotemporal acoustic index using SDM, TMB, or INLA, and the group agreed to add time for preliminary Chilean results.

3. CPUE agenda and meta-analysis follow-up

A dedicated CPUE session structure is still needed, analogous to the acoustic agenda.

The group suggested holding CPUE index discussions on the second day of the benchmark week.

Ignacio volunteered to coordinate CPUE agenda development, with Niels supporting and Sebastián and José assisting on scripting and technical issues.

Existing CPUE historical-review work will anchor the discussion, but concrete plans for updated CPUE papers should be prepared before the next intersessional meeting.

Major CPUE issues flagged included fleet and gear differences, seasonal and regional coverage, catchability-block structure, and how alternative index treatments would affect the assessment and the MSE.

4. Combined-index concept and data constraints

Combining indices across fleets and countries remains an open question rather than an assumed benchmark product.

Peru emphasized that data-sharing and data-resolution constraints limit what can be combined immediately, particularly for haul-level or otherwise sensitive information.

Participants noted that a single combined index may obscure fleet-, region-, and season-specific dynamics because gears and spatial coverage differ materially.

The general view was that the benchmark should evaluate prepared products that are already largely developed rather than attempt full raw-data harmonization during the meeting itself.

5. Assessment configuration updates discussed

Jim reviewed updates on simplified assessment alternatives and the implications of those changes for stock trajectories.

Tests reducing the number of indices had very little effect on assessment history, whereas selectivity changes, especially blocked selectivity treatments, had much larger effects.

Restoring variable selectivity for South Central clarified why some blocked-selectivity runs diverged.

A completed run allowing time trends in catchability across the four indices was presented as nearly equivalent to combining indices into one.

PER noted that a 2002 fleet change in the far north and changes to productivity-regime structure can materially affect recent historical patterns and should be treated carefully and consistently across hypotheses.

Future-selectivity scenarios similar to those discussed in Seattle were considered straightforward to implement and should be retained as candidate scenarios.

6. Biological data context request

A request was raised for a concise overview of biological inputs and age- and length-composition sample sizes used in the assessment.

Participants noted that the assessment document currently lacks a compact synthesis of those biological inputs.



Karolina pointed to the technical annex as the main compiled source for stock-assessment inputs, including age-composition matrices.

A follow-up review of biological aspects from the 2022 benchmark was suggested so unresolved biological uncertainties can be identified clearly before the next meeting.

7. Benchmark deliverables vs longer-term workplan

A repeated concern was that benchmark deliverables must be more explicit and tangible before the meeting begins.

Niels stressed the need to bring near-final candidate indices and preparatory analyses to the benchmark so the meeting can evaluate concrete proposals rather than start from scratch.

Participants broadly agreed that the benchmark should be used to test and compare prepared alternatives in the assessment and MSE context, while follow-up methodological development should sit in the WP1 workplan.

This distinction between benchmark outputs and longer-term workplan items was reinforced as necessary for a decision-oriented process.

8. JJMSE repository update (Iago)

Iago reported that the repository had been cleaned and downsized to address maintainability and storage issues.

A historical archived release of the previous version has been retained for reference.

Main-branch protections are now in place, so contributors should work on branches or send changes to Iago for merging rather than pushing directly to main.

Large outputs will no longer be stored routinely in the repository; instead, zipped outputs and runs will be made available through a managed download workflow documented in the README.

A fuller walkthrough of the revised workflow, checks, and merge process is planned for the next meeting.

9. SAM diagnostic work update (Niels)

Niels presented SAM as a diagnostic complement to JJM rather than a replacement assessment framework.

SAM outputs were used to examine data-source weighting, process and observation error partitioning, retrospective behavior, and candidate selectivity-block breakpoints.

Retrospectives showed wide confidence bands and disagreement among datasets, particularly between offshore CPUE and Chilean acoustics, suggesting unresolved availability or movement issues.

Niels indicated that a catchability break is being added for the Chile Acoustic North series so early and late periods can be treated separately while retaining a common observation-variance structure.

He also plans to add configured GGM outputs beside SAM outputs in the shared HTML materials for ballpark comparison.

10. Travel/admin note

Visitor information for the Lima/Miraflores benchmark meeting was posted.

A preferred hotel rate and room block were reported as available until approximately 20 April 2026, after which alternative booking arrangements may be needed.

Decisions and Agreements

Keep acoustic-focused sessions early in the benchmark week and include time for Chilean acoustic-standardization results.



Schedule CPUE index discussions on the second day and prepare CPUE paper plans before the next intersessional virtual meeting.

Maintain a hybrid-access approach for selected sessions and periodic summaries rather than full continuous broadcast.

Use the modern-era segment of the problematic Chile northern acoustic series and drop early years from that index.

Distinguish benchmark outputs from longer-term WP1 development tasks so the benchmark can focus on concrete recommendations for MSE preparation.

Action Items

Action	Lead	Support	Target timing
Schedule open sessions and periodic summaries for remote participants and link the coordinating page in Teams	Meeting coordinator	Ana, Secretariat	Before benchmark
Finalize draft acoustic session agenda, including Chilean standardization and opportunity-vessel acoustics	Ignacio / Chile team	IMARPE, IFOP, Nicolas, other acoustic experts	Before next intersessional call
Draft CPUE session agenda, historical review framing, and priority decision points	Ignacio	Niels, Sebastián, José	Before next intersessional call
Integrate PER comments on the 2002 fleet change and regime treatment into the main assessment document	PER (Criscely Luján)	Jim, assessment subgroup	Near-term
Prepare plans for the CPUE index component and identify candidate products to bring to benchmark	Ignacio and Niels	Sebastián as needed	Before next intersessional call
Review 2022 benchmark biological aspects and identify unresolved biological uncertainties	To be assigned	Karolina / interested members	Before next meeting
Locate and post the technical annex link with stock-assessment input summaries	To be assigned	Jim / site maintainers	Before next meeting
Meet separately to define new CPUE indices and preparatory analyses for benchmark-ready products	Niels	Ignacio, Sebastián	Before benchmark
Present the revised repository workflow, merge process, and archive access at the next meeting	Iago	All contributors	Next meeting
Add SAM outputs to the shared HTML materials and include configured GGM comparisons	Niels	Jim	Near-term
Push the catchability-break update for the Chile Acoustic North series and continue residual/correlation diagnostics	Niels	Assessment subgroup	Immediate / near-term
Post finalized SAM materials and meeting notes once approved	Jim / meeting support	Niels	After approval



Open Issues / Risks to Track

Data-access and data-resolution constraints may prevent development of new combined indices during the benchmark itself.

The trade-off between simplification for MSE tractability and retaining key recent dynamics remains unresolved, especially for selectivity and catchability behavior.

Acoustic products may need finer location-, length-, or age-resolution before the group can judge how they should be weighted in assessment.

The relationship between structural simplification and quantified uncertainty in the MSE remains an open technical question.

Spatial shifts in fishing behavior may require additional catchability blocks, and those spatial issues need to be carried into benchmark preparation.

Next Step

Prepare and circulate benchmark-ready agenda drafts and candidate index products for the acoustic and CPUE sessions before the next intersessional meeting, so the benchmark can evaluate concrete proposals rather than use workshop time on first-stage development.



4. JMWG MSETT Jack Mackerel MSE Task Team Meeting 03 – 30 April 2026

Summary

This report summarizes the JMWG benchmark-preparation meeting held on 30 April 2026, based on the automated transcript and discussion around the JM benchmark-preparation materials: JM_SCW_prep.

The meeting focused on final preparations for the May benchmark workshop in Lima, including confirmation of the venue, review of the draft benchmark agenda, paper deadlines, expectations for CPUE and acoustic contributions, and how the benchmark should feed directly into operating-model conditioning and management-procedure work. Participants confirmed that the benchmark will be held at the Jose Antonio Hotel in Miraflores, with remote access available for selected sessions through Microsoft Teams.

The technical discussion emphasized the need for concrete benchmark recommendations on each abundance index, including whether each index should be used in the assessment, used for operating-model conditioning, and/or projected as part of a management procedure. Important issues included possible extensions of benchmark paper deadlines to 7 May 2026, the need to accommodate new or split CPUE series in the JMWG, interpretation of the 2026 Chilean acoustic and CPUE information under changing environmental conditions, treatment of Far North recruitment-regime structure, selectivity assumptions for recent and future years, and diagnostics for potential management-procedure input indices.

Participants named in the discussion included Jim Ianelli, Ana Alegre Norza, Criscely Lujan, Miriam Geronimo, Benoit Berges, Ignacio Paya, Karolina Molla Gazi, Luciano Espinoza, Iago Mosqueira, Niels Hintzen, Jose Zenteno, Aquiles Sepulveda, and additional participants from Peru, Chile, the EU, PFA, and collaborating institutions.

Meeting Details

- Meeting: JMWG benchmark-preparation meeting 03/2026
- Date: 30 April 2026
- Organisation: South Pacific Regional Fisheries Management Organisation
- Working group: Jack Mackerel Working Group
- Main focus: Final benchmark agenda, index and biological-data preparation, assessment/OM linkages, and MSE workflow

Key Dates and Action Times

Time or deadline	Item	Importance
5 May 2026	Chilean Jack Mackerel Scientific Committee meeting and local CPUE/acoustic workshop	Chile will use this meeting to review CPUE and acoustic material before final benchmark submissions
7 May 2026	Requested extended deadline for some benchmark papers	Allows time for Chilean review, recent acoustic-survey interpretation, and PER benchmark-paper preparation
May 2026	Benchmark workshop in Lima, Peru	Main decision point for assessment inputs, benchmark recommendations, and OM conditioning setup
Benchmark Thursday afternoon	Candidate time for MSE/OM coordination with Iago and Benoit	Allows rapid resolution of OM and MP setup questions during the benchmark week
June 2026	MSE workshop	Uses benchmark outputs to condition operating models and refine management procedures



Key Discussion Summary

1. Venue, participation, and meeting logistics

- Ana confirmed that the May benchmark workshop will be held at the Jose Antonio Hotel in Miraflores, the same venue used for the 2024 Scientific Committee meeting and workshop.
- The venue avoids daily commuting to IMARPE and is expected to provide suitable working space.
- Remote access will be supported for selected parts of the benchmark through Microsoft Teams, with hotel Wi-Fi expected to be available.
- Jim will ask the Secretariat for the current participant list, including expected in-person and online participation.
- The group discussed rapporteur support; no dedicated rapporteurs were confirmed, but meeting recording and possible additional note-taking support were identified as options.

2. Paper deadlines and benchmark expectations

- Several participants noted that benchmark paper preparation is under time pressure.
- Ignacio requested moving the Chilean contribution deadline to 7 May because the Chilean Scientific Committee will meet on 5 May and because the northern Chile acoustic survey had only just finished.
- Criscely asked whether Peru could also provide benchmark papers during the following week; this was treated as reasonable given the compressed schedule.
- Benoit and Iago clarified that the MSE/OM paper does not need to provide a final set of operating models before the benchmark. The immediate need is to describe the conditioning method and make the workflow ready to accept benchmark decisions.
- Jim emphasized that the benchmark should produce the main recommendations on data use, model configuration, and MSE inputs rather than require all final MSE products beforehand.

3. Benchmark agenda structure

- The draft benchmark agenda retains an acoustic focus early in the week, followed by CPUE, biological inputs, assessment-model specification, projections, and report adoption.
- Acoustic discussions are expected to include technical interpretation of acoustic products and preparation of summary recommendations for the benchmark report.
- CPUE discussion will use the coordination material developed in mid-April, including the index inventory, methodological comparisons, effort-creep review, catchability/availability blocks, and index-weighting questions.
- The benchmark should evaluate each abundance index in relation to three uses: the assessment model, operating-model conditioning, and potential management-procedure input data streams.
- The final benchmark report should be adopted quickly enough to support the June MSE workshop and operating-model work.

4. Biological input overview

- Karolina reported that she is preparing an R Markdown overview of age-length compositions and associated biological data used in the assessment.
- Jim asked that the overview document not only list biological inputs but also summarize the resolution of the data submitted to SPRFMO, including whether data are final age-length keys, length frequencies, sample sizes, or more detailed submissions.
- Niels agreed to work with Karolina and provide background on how biological sampling data submitted for the assessment have been processed over roughly the past 15 years.
- The group identified this biological-input overview as useful both for benchmark review and for later operating-model conditioning.

5. New 2026 Chilean acoustic and CPUE information

- Ignacio reported that the northern Chile acoustic survey had observed an important change in jack mackerel abundance and distribution, with fish close to the seafloor and difficult to survey acoustically.



- Preliminary expectation, before final calculations, was that northern acoustic biomass could be substantially lower than in the previous year.
- Ignacio linked the pattern to changing environmental conditions, including positive sea-temperature anomalies and the possible development of a strong El Nino event.
- Aquiles cautioned that the recent information should not be dismissed as an exceptional outlier. He noted that low northern biomass, lower catches, and CPUE declines beginning in 2024 may indicate a real recent trend that should be treated carefully in the assessment and operating models.
- Participants agreed that the benchmark should consider the new 2026 information as part of the system reality, while also documenting environmental and availability mechanisms that may affect interpretation.

6. CPUE and acoustic index treatment in JJM

- Ignacio asked how the JJM could accommodate updated CPUE series, including possible use of the current GLM-based series up to a break year and a new spatiotemporal series after that.
- Jim noted that the JJM can accommodate a break in catchability for a specific year or split a series where methods or coverage have changed.
- The group again emphasized that index interpretation is confounded with selectivity and fishery catchability, so benchmark recommendations should consider how index fits interact with selectivity changes.
- Ignacio also questioned whether a single index, particularly Acoustic North, remains suitable as a basis for a harvest-control-rule input under the new 2026 information.
- Niels emphasized that Acoustic North fits poorly in SAM and other diagnostic analyses and that its ecological relationship to the rest of the data remains unclear. He noted that the benchmark assessment should not be expected to mirror Acoustic North directly.

7. Far North regime structure and projection implications

- Criscely summarized PER feedback on Far North model structure, noting substantial literature support for a late-1990s regime shift with implications for recruitment and productivity.
- PER views the regime structure as an important structural component that should be considered explicitly in operating models rather than removed purely as a simplification.
- PER will consider whether similar regime-structure issues may apply beyond the Far North and how those ideas may affect reference points and performance metrics.
- Peru also noted ongoing monitoring of the 2026 environmental impacts on jack mackerel in Peruvian waters, where lower catches and juvenile presence have been observed.

8. SAM diagnostics and assessment model fitting

- Niels reported that SAM converges but struggles with high-dimensional one-step-ahead residual calculations because some parameters are poorly defined.
- Karolina noted difficulty running the model and observed that the north acoustic index was not fit well in the diagnostic report.
- Ignacio stressed that early and recent portions of the North Acoustic Biomass Index differ because early surveys covered a restricted area, and those periods should not be mixed without accounting for the change.
- Niels indicated that his SAM setup already separates relevant periods and that he had identified an issue in Jim's reduced-data setup that he could fix.
- The diagnostic role of SAM remains focused on understanding fit, selectivity grouping, data conflicts, and candidate model configuration rather than replacing JJM as the assessment framework.

9. Operating-model grid and MSE workflow

- Iago presented the current MSE workflow as a flexible grid that can accept benchmark outputs and rerun conditioning once the final assessment model is specified.



- The current grid includes stock hypotheses, stock-recruitment assumptions, steepness options, movement assumptions, selectivity/catchability treatments, and future-selectivity scenarios.
- Jim asked members to think about whether the current grid columns should remain and whether additional axes of uncertainty should be added.
- The benchmark should distinguish reference-set operating models from robustness-set operating models. Reference cases represent the main plausible uncertainty set, while robustness cases test management procedures against less likely but important alternatives.
- Ignacio asked about future selectivity transitions from recent estimated selectivity to longer-period average selectivity. Iago clarified that previous Seattle work used a moving-window transition to avoid abrupt jumps, and that the same mechanism can be retained.

10. Candidate management-procedure input diagnostics

- Iago reviewed diagnostic work using receiver-operating-characteristic style metrics to evaluate how well indices identify whether spawning biomass is increasing or decreasing.
- Offshore CPUE appeared more informative than some other indices for that specific task, even though it is shorter, because it more often moved in the same direction as estimated spawning biomass over the period examined.
- Jim and Iago emphasized that this diagnostic is task-specific and not a general measure that an index is globally better.
- Ignacio requested additional plots showing the direct relationship between each index and spawning biomass, and noted that lags may be important for indices that track younger fish rather than spawning biomass directly.
- Iago agreed to add explanatory material and consider diagnostics for combined indices, additional metrics, scatter plots, and possible lagged relationships.

Decisions and Agreements

1. The May benchmark workshop will be held at the Jose Antonio Hotel in Miraflores, with selected remote participation through Microsoft Teams.
2. Several benchmark-paper contributions may be provided after the earlier deadline, with 7 May 2026 used as a practical target for updated Chilean, Peruvian, and MSE/OM material.
3. The benchmark agenda should explicitly evaluate each index for assessment use, operating-model conditioning, and possible management-procedure input use.
4. Updated 2026 acoustic and CPUE information should be considered at the benchmark rather than ignored as exceptional, while environmental and availability explanations should be documented.
5. Biological-data inputs should be summarized before the benchmark, including the resolution and processing pathway of submitted age, length, and sample-size information.
6. SAM and related diagnostic models will continue to support evaluation of data conflicts, selectivity, and index interpretation, but JJM remains the main benchmark assessment framework.
7. The benchmark should produce an agreed OM grid or equivalent table that identifies reference-set and robustness-set uncertainties for the MSE workshop.



Action Items

Action	Lead	Support	Target timing
Finalize the benchmark agenda, including acoustic, CPUE, biological-input, assessment-specification, projection, and report-adoption sessions	Jim	All participants	Before benchmark
Confirm the current in-person and remote participant list with the Secretariat	Jim	Secretariat	Near-term
Provide selected remote-access arrangements and Teams link for benchmark sessions	Ana / PER host team	Secretariat	Before benchmark
Review Chilean CPUE and acoustic materials through the Chilean Scientific Committee and local workshop	Ignacio / Chile team	Chilean Scientific Committee	5 May 2026
Submit updated Chilean benchmark contributions, including CPUE and acoustic material	Ignacio / Chile team	Jose, Aquiles, Sebastian, others	Around 7 May 2026
Submit Peruvian benchmark paper material and feedback on Far North regime structure	Criscely / PER team	Ana, Miriam, Peruvian colleagues	Around 7 May 2026
Prepare MSE/OM method material that can accept final benchmark model decisions	Iago / Benoit	Jim	Around 7 May 2026
Prepare an R Markdown overview of biological inputs and age-length compositions	Karolina	Niels	Before benchmark
Summarize data resolution and processing of submitted biological data over recent assessment history	Niels	Karolina, Secretariat as needed	Before benchmark
Fix and update the reduced-data SAM diagnostic setup and circulate revised material	Niels	Jim	Near-term
Add explanatory material for ROC/AUC index diagnostics, including direct index-biomass plots and possible lagged relationships	Iago	Benoit, Jim	Before or during benchmark
Consider whether combined-index diagnostics can be added for MP input evaluation	Iago	Benchmark/MSE subgroup	Before or during benchmark
Add recent-selectivity and future-selectivity transition assumptions to the benchmark discussion list	Jim	Ignacio, Iago	Benchmark agenda
Consider whether Far North regime-shift structure affects other model areas, reference points, and performance metrics	PER team	Assessment/MSE subgroup	Benchmark discussion
Schedule a dedicated MSE/OM coordination session during the benchmark, potentially late Thursday	Jim	Iago, Benoit, Niels	Benchmark week



Open Issues / Risks to Track

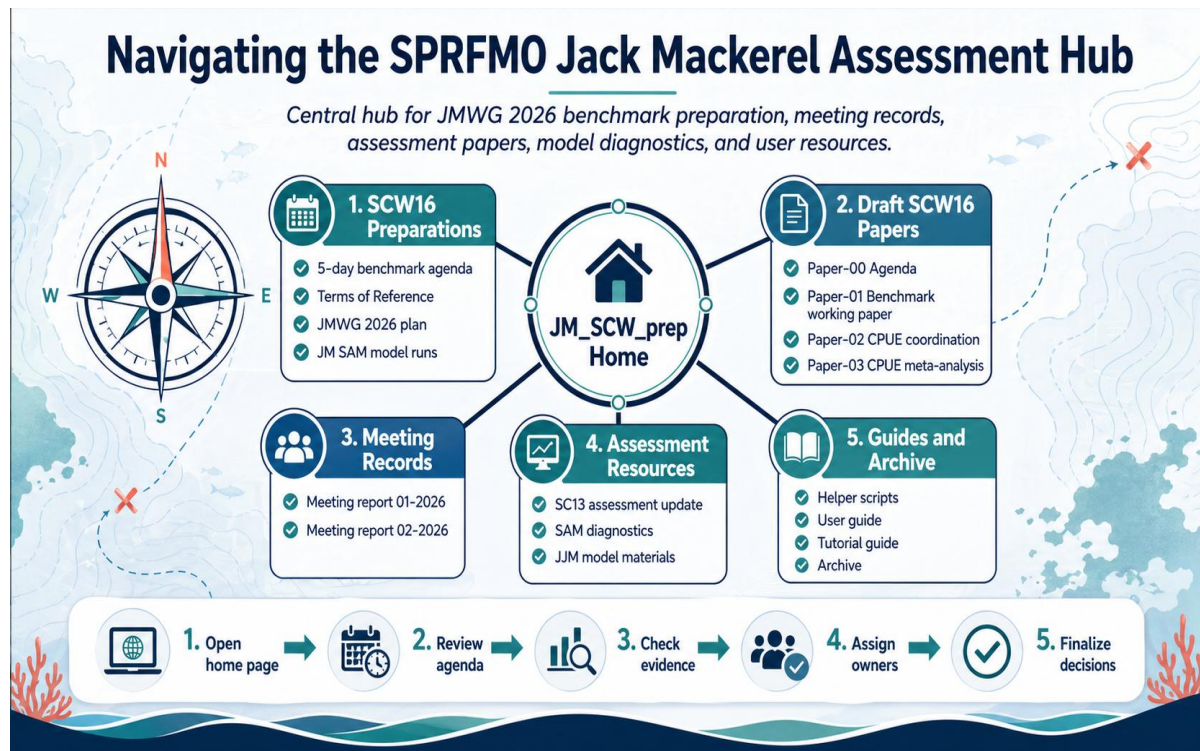
- The 2026 acoustic and CPUE information may materially change recent assessment interpretation, but final data and age/length information are not yet available.
- Acoustic North remains difficult to reconcile with other data sources and may not provide a reliable direct proxy for spawning biomass or a stand-alone management-procedure input.
- Index interpretation remains confounded with selectivity and catchability assumptions in the assessment model.
- The benchmark must balance model simplification for MSE tractability against structural features that members view as scientifically important, including Far North regime structure and recent environmental effects.
- The OM grid still needs final agreement on reference-set and robustness-set dimensions, especially selectivity, recruitment, stock-structure, and environmental/regime assumptions.
- Remote participation can support selected sessions, but the workshop is not planned as a fully hybrid meeting.

Next Step

Finalize and circulate the benchmark agenda and updated working-paper expectations before the May benchmark, with special attention to the 7 May submissions, biological-input overview, index-use recommendations, and an OM-grid table that can feed directly into the June MSE workshop.

References

This report is based on the supplied automated transcript for the JMWG benchmark-preparation meeting held on 30 April 2026. It is intended as a meeting-report draft using the same structure and rendering conventions as Meeting reports 01-2026 and 02-2026.





5. Jack Mackerel Benchmark Workshop (SCW16), 18-22 May 2026

The SPRFMO Scientific Committee Jack Mackerel Benchmark Workshop (SCW16) took place between 18 and 22 May 2026, in person, in Lima, Peru.

SCW16 covered topics such as updated growth estimates, standardised CPUE modelling, as well as review of the single and two-stock hypothesis implementations of the JJM assessment model and estimation of reference points.

The workshop was hosted by Peru.

The final report of the SCW16 is available on the SPRFMO website on the following link:
https://www.sprfmo.int/assets/Meetings/SC_WS/SCW16-JM-Benchmark-Workshop/JMWG-Benchmark-Meeting-report-2026-final.pdf



6. Jack Mackerel MSE Task Team Meeting 04 – 28 May 2026

Summary

This report summarizes the JMWG virtual follow-up meeting held on 28 May 2026, based on the automated transcript and discussion of recent jack mackerel benchmark assessment runs and operating-model conditioning needs. The meeting focused on disagreements among historical and updated Peruvian acoustic and CPUE inputs, candidate model configurations for the MSE operating model, and how to communicate the large change in perceived stock status emerging from the benchmark update. The main technical issue was that recent Peruvian acoustic information pulls the Peruvian biomass trend downward, apparently because jack mackerel have redistributed offshore relative to coastal survey coverage, while the updated Peruvian CPUE series is shorter and flatter than the historical series. The working proposal at the end of the meeting was model 0.14, equivalent to model 1.03 / 1.03 with the Peruvian acoustic S1 and S2 indices excluded and a 2018 catchability break added to the Peruvian CPUE. This model was proposed for operating-model conditioning and MSE work, not for immediate fishery advice. Members were asked to review the outputs and raise any substantive concerns by Monday, 1 June 2026.

Meeting Details

- Meeting: JMWG virtual follow-up on benchmark assessment runs and MSE conditioning
- Date: 28 May 2026
- Main purpose: Identify a pragmatic proposed assessment model for operating-model conditioning
- Proposed working model: model 0.14, defined as model 103 without Peruvian acoustics and with a 2018 Peruvian CPUE catchability break
- Immediate deadline: final sensitivity requests to Jim on 28 May 2026; member review by 1 June 2026

Key Discussion Summary

1. Peruvian Acoustic Index

Peruvian participants explained the rationale for truncating the historical acoustic series in 2013. The former acoustic index was considered informative for the earlier period, when jack mackerel were distributed closer to the coast and more consistently detected by coastal-oriented surveys. Since the 2000s, jack mackerel appear to have shifted offshore, reducing the ability of the Peruvian survey track to measure a consistent fraction of the stock. The group distinguished ordinary bias in a relative index from potential bias in the trend of an index. The concern for the updated Peruvian acoustic information is trend bias caused by changing habitat distribution and survey coverage, rather than only imprecision in individual survey estimates. Several participants supported excluding the new Peruvian acoustic indices from the proposed working model while treating improved acoustic availability modelling as a research priority.

2. CPUE Inputs and Sensitivity Runs

Jim reviewed the benchmark model sequence beginning from model 0.0 / 1.14, including sensitivities replacing Chilean or Peruvian CPUE series, dropping acoustic data, reinstating historical selectivity ties, and testing an informal nominal Peruvian CPUE. The sensitivity results indicated that Peruvian acoustics and the treatment of Peruvian CPUE are major drivers of divergence between single-stock and two-stock hypotheses.



Chile raised concerns that the updated Peruvian CPUE is shorter and flatter than the previous series and that a small number of early points in the updated series strongly affect perceived stock status. Peruvian participants clarified that the new CPUE uses an improved standardization approach, includes artisanal and industrial fleets, and that the earliest points are mainly from the artisanal fleet targeting jack mackerel. The group agreed that the report should document the CVs, coverage, and weighting of abundance indices clearly.

3. 2018 Catchability Break

Niels proposed a 2018 catchability break for the Peruvian CPUE to reflect a change in jack mackerel distribution and availability to the fleet. Model 13, defined as model 12 with the 2018 catchability break, improved the likelihood by roughly 50 points and appeared to resolve some two-stock convergence problems. Participants agreed that the logical next configuration was to combine this catchability break with the model that drops Peruvian acoustics. The final proposed configuration discussed in the meeting was therefore model 0.14: model 103 with the Peruvian acoustic indices excluded and the 2018 CPUE catchability break added.

4. MSE Conditioning and Communication

The immediate objective is to condition operating models and keep the MSE schedule moving so candidate management procedures can be considered by the Commission. Participants emphasized that the benchmark update may change stock perception substantially, but the purpose of this step is not to provide annual fishery advice. Several participants requested more time to review diagnostics before formally agreeing to the proposed model. There was also discussion of Kobe plots and whether they are appropriate when productivity regimes and availability may shift. Jim and Iago suggested that depletion-based metrics, comparing biomass with and without fishing under the model, may be a more useful communication tool than relying only on Kobe plots.

Decisions and Agreements

1. Model 0.14 will be treated as the proposed working assessment model for operating-model conditioning, subject to member review through 1 June 2026.
2. Model 0.14 excludes the new Peruvian acoustic S1 and S2 indices and retains the updated Peruvian CPUE with a 2018 catchability break.
3. The updated Peruvian CPUE will remain the working CPUE series for this benchmark step; the historical CPUE will not be reinstated as the base case at this stage.
4. The report and diagnostics should clearly document abundance-index CVs, weighting, and coverage assumptions.
5. The Peruvian acoustic information should remain an active research topic, including possible use of habitat distribution maps to adjust survey availability.
6. Further discussion should proceed by email unless new diagnostics reveal a substantive issue that has not already been discussed.



Action Items

Action	Lead	Timing
Finalize model 0.14, run full diagnostics, and update the report and assessment repository	Jim Ianelli	28 May 2026
Submit any additional explicit sensitivity requests, with rationale	All members	28 May 2026
Review the proposed model outputs and identify any substantive new issues	Member delegations	By 1 June 2026
Share side-by-side plots comparing model 12 and model 13	Niels Hintzen	Near term
Share benchmark-change slides and narrative support for external communication	Niels Hintzen	Near term
Check and document CVs, weighting, and coverage for CPUE and other abundance indices	Jim Ianelli / modelling team	Report update
Collaborate on habitat-map methods to improve interpretation of Peruvian acoustic survey availability	Peru, Jim Ianelli, interested collaborators	Research follow-up
Exchange exact MCMC code and JJMR fixes needed for reproducible diagnostics	Jim Ianelli and Iago Mosqueira	Before 1 June 2026
Develop robustness-test scenarios for MSE related to alternative stock-status and productivity assumptions based on 2025 model, and compare risks and potential yield	Iago Mosqueira	MSE preparation

Open Issues

- Whether the first four updated Peruvian CPUE points need additional diagnostic treatment or uncertainty weighting.
- How best to present the comparison between historical and updated Peruvian CPUE series.
- Whether depletion metrics should be added alongside, or instead of, Kobe plots for communication.
- How to communicate that model uncertainty is larger than the usual assessment confidence bands imply.
- Whether failure to agree on the proposed working model by 1 June 2026 would require reducing the scope of the MSE contractor's work.



7. Jack Mackerel MSE Task Team Meeting 05 – 11 June 2026

1. Draft of SCW17 Paper 02

The JMWG reviewed the suite of papers and supporting material prepared for SCW17, including the rationale for separating the post-benchmark model-development work from the completed SCW16 benchmark documentation. The work undertaken since SCW16 was described as an evolution of the assessment toward models suitable for conditioning the operating models (OMs) to be used in the Management Strategy Evaluation (MSE).

Particular attention was given to the development from benchmark model 0.14 toward model 0.16. This included revisions to the treatment of the Peruvian CPUE series and selectivity. New nominal artisanal and industrial Peruvian CPUE series had been incorporated with reduced weighting in the model through larger CVs. The analysis of Peruvian fleet selectivity indicated that a highly parameterised time-varying selectivity formulation provided relatively little improvement in model fit. A simpler block-based approach was therefore preferred, and the Peruvian participants indicated that they were more comfortable with the configurations represented by models 0.15 and 0.16.

A significant technical issue was identified concerning the treatment of catchability in the Chilean northern acoustic index. Participants noted an apparent large increase in estimated catchability that did not appear consistent with the approximately 30% increase in survey area. Examination of the control files and model outputs revealed uncertainty regarding the location and implementation of the catchability break, including discrepancies between the control file, diagnostic plots and .rep output. The group agreed that this required resolution outside the meeting. A sensitivity run maintaining constant catchability was proposed, together with the possible development of a model 0.17 if a correction to model 0.16 proved necessary. Jim Ianelli undertook to investigate the discrepancy and circulate the findings, with support from Niels Hintzen and others.

The group also discussed the operating models to be taken forward into the MSE. Despite reservations regarding aspects of the diagnostics, there was support for continuing with model 0.16 and the model used at SC13 as alternative OMs, consistent with previous correspondence, in order not to delay the MSE process. The value of examining how an MP tuned to one OM performs when applied to the alternative OM was also noted.

Chile advised that its recently circulated document on proposed harvest control rules was intended as preliminary information rather than a completed scientific paper. A fuller scientific paper is expected to be prepared following completion of the underlying project for presentation to SC14.

2. Update on performance metrics, scheduling for reporting to SC14

The group discussed the performance measures that will be required to evaluate candidate management procedures and communicate MSE results to the Scientific Committee.

It was confirmed that the existing approach based on **Kobe-style stock status**, including biomass and fishing mortality relative to MSY-based reference points, remained relevant. This was considered particularly useful because these measures are already familiar to stakeholders and managers. Dynamic B_0 has also been calculated for the OMs and could provide an additional depletion-based performance indicator.

Alternative approaches for presenting reference points were discussed, including comparisons of F_{MSY} with $F_{35\%}$ as a proxy under different productivity assumptions. These were presented primarily as potential ways of helping the Scientific Committee understand changes in estimated stock status rather than as replacements for the existing Kobe framework.



The group noted that the ultimate objective is to have meaningful MSE results available for consideration by SC14, with candidate MPs being forwarded to managers rather than relying solely on conventional stock-assessment advice. The upcoming SCW17 workshop will therefore be important for finalising the performance measures, testing candidate MPs and determining how the results and associated trade-offs should be presented to the Scientific Committee.

3. MP specifications update (data, tuning, HCR, Buffer/K60)

The group reviewed progress on the technical framework for implementing and testing candidate management procedures. Documentation had been prepared describing the MSE software, functions and overall MP workflow, and this was considered useful for ensuring that participants have a common understanding of the framework. Iago Mosqueira agreed to update the inventory and supporting documentation.

The software repository was being actively updated ahead of SCW17. The development branch was expected to be merged into the main repository, and an updated list of required packages and versions would be circulated. Participants were advised that it would be preferable to align software installations at the workshop to avoid compatibility issues. Large MCMC outputs will be distributed separately through releases or university-hosted storage rather than being included directly in the repository.

Discussion of HCR specifications included Chile's proposed hybrid rule, which incorporates a minimum catch of approximately 270,000 tonnes and an upper constraint. It was confirmed that the current framework can implement HCRs that directly determine catch or a catch multiplier from indicators such as CPUE or SSB/SSB_{MSY} . Incorporating an explicit minimum catch should also be technically feasible, although the precise implementation depends on whether the HCR operates in absolute catch terms or through a catch multiplier.

The group also discussed possible cross-validation of the principal FLR-based MSE framework against OpenMSE/ShortCAT. Chile expressed interest in further developing this work and potentially obtaining assistance from Tom Carruthers. Participants agreed that the priority for SCW17 should be to ensure that the existing FLR framework and MPs are functioning correctly. Comparison with OpenMSE could then be undertaken if time and resources permit.

Further work on MP specifications, including tuning and associated implementation parameters, was expected to continue during SCW17. **The source material does not record a substantive final decision on Buffer/K60 at this meeting**, so this should remain an open matter rather than implying that an agreed specification was reached.

4. Discussion on robustness scenario matrix

The group considered several sources of uncertainty that will be relevant when developing the robustness scenarios for the MSE.

A central issue is **structural uncertainty in the operating models**. The proposed use of both model 0.16 and the SC13 model provides an opportunity to examine whether candidate MPs remain robust under materially different representations of stock dynamics. One proposed approach is to tune an MP under one OM and then apply it to the alternative OM, allowing the group to quantify the risks and trade-offs associated with assuming the wrong representation of the stock.

Stock productivity and environmental variability were also identified as important dimensions for robustness testing. Tom Carruthers is expected to participate in SCW17 and contribute expertise on how environmental change, including El Niño-related conditions, could affect productivity. This is expected to support discussion of alternative productivity assumptions within the robustness framework.

Other uncertainties raised during the meeting included CPUE treatment, catchability assumptions, survey configuration, stock-recruitment relationships and alternative productivity levels. The discussion of dynamic B_0 , steepness and alternative reference-point assumptions also illustrated the potential sensitivity of stock status and management outcomes to these modelling choices.



The group did not finalise the robustness scenario matrix during this meeting. Rather, these discussions identified several dimensions that should be considered at SCW17 when agreeing the final set of scenarios against which candidate MPs will be tested.

Key follow-up before SCW17 included resolving the model 0.16 catchability discrepancy and circulating the results; undertaking sensitivity testing and determining whether model 0.17 is required; reconditioning the relevant OMs if necessary; updating and merging the MSE repository and circulating package requirements; and making the preliminary Chilean HCR information available to participants.



8. Jack Mackerel MSE Workshop (SCW17) – 15-19 June 2026

The SPRFMO Scientific Committee Jack Mackerel Management Strategy Evaluation Workshop (SCW17) took place between 15 and 19 June 2026, in person, in Wageningen, The Netherlands.

SCW17 objective was to evaluate and shortlist the Candidate Management Procedures (CMP) for jack mackerel to be recommended to the Scientific Committee (SC) in advance of the SC annual meeting, in September 2026.

The final report of the SCW17 is available on the SPRFMO website on the following link:
https://www.sprfmo.int/assets/Meetings/SC_WS/SCW17-JM-MSE-Workshop/SCW17-MSE-Workshop-report-v2.pdf



9. Salas y Gomez and Nazca Task Team Meeting 01 – 2 July 2026

Opening of the meeting

The Coordinator of the Salas y Gomez and Nazca Task Team, Jordi Tablada (NZL), opened the meeting and welcomed participants to the virtual meeting of the Salas y Gómez and Nazca Task Team (a list of participants can be found in Annex 1 of this summary report).. The Coordinator invited introductions by delegation and noted apologies received from the Cook Islands, whose representative was unable to attend due to a conflicting meeting, and welcomed all participants before outlining the objectives of the meeting.

The Coordinator explained that the meeting formed part of the Task Team's ongoing work to support the Scientific Committee in its consideration of scientific advice concerning the Salas y Gómez and Nazca Ridges Area. Emphasis would be placed on reviewing the results of the completed evaluation of information against the agreed Evaluation Criteria, considering the preliminary assessment of fishing impacts, discussing the structure of the report to be submitted to SC14, and identifying potential recommendations and next steps.

Agenda adoption

The proposed agenda was introduced without amendment and was adopted by the Task Team (see Annex 2 of this summary report).

The Coordinator encouraged Members to focus discussions on identifying areas of agreement and clarifying any remaining scientific differences, with the objective of progressing the work sufficiently for consideration by SC14.

Assessment against Evaluation Criteria: Summary of Results

The Coordinator introduced the summary of Members' assessments against the Evaluation Criteria (see [Assessment EC SGN Results.pdf](#)) and thanked all Members who had submitted their assessment. It was noted that the compiled assessment represented an important milestone in the Task Team's work and reflected the significant effort invested by Members in reviewing the available evidence.

Members observed that the assessment demonstrated substantial progress towards evaluating the proposed area against the agreed criteria. Chile highlighted that a new scientific information had become available since earlier discussions, including recently published literature, updated analyses and additional supporting documentation. It was recognised that these new sources of information are likely to strengthen the scientific basis for the assessment and address some knowledge gaps.

The discussion acknowledged that, while broad agreement had emerged across much of the assessment, differing interpretations remained regarding some of the Evaluation Criteria and the level of evidence required to satisfy them. Several Members considered that the available scientific evidence was sufficient to support positive findings against a number of criteria, whereas others maintained a more precautionary interpretation and considered that further information would strengthen confidence in particular aspects of the assessment.

Participants recognised that uncertainty is an inherent characteristic of marine science and that scientific advice must necessarily be developed using the best available information. The absence of complete certainty should not prevent the Task Team from providing advice, provided that uncertainties were clearly identified and transparently communicated.



It was emphasised that the role of the Task Team was to evaluate the scientific information available against the agreed criteria, rather than to formulate management decisions. Members generally supported maintaining this distinction throughout the report. Following discussion, the Task Team agreed that the summary assessment provided a useful basis for the preparation of advice to SC14. Remaining differences in interpretation would be documented transparently within the report, together with the scientific rationale supporting the different views where appropriate.

Evaluation of fishing impacts

The Coordinator introduced the agenda item by noting that the evaluation of fishing impacts being undertaken by Chile constituted an important component of the overall scientific assessment.

Dr Carlos Gaymer on behalf of Chile gave a presentation on the impacts of fisheries in the assessed area, using data from both SPRFMO and IATTC fisheries. Carlos presented historical and recent bycatch data from the multiple fisheries operating within the assessed area. While some of the data had been previously been presented (IATTC bycatch reported data), other hadn't been (SPRFMO observer data).

Members considered the available information regarding the spatial distribution and intensity of fishing activity within the proposed area, together with the current understanding of benthic habitats and the distribution of vulnerable marine ecosystems. The discussion recognised that substantial progress had been made in compiling spatial information and improving understanding of the interaction between historical fishing activities and sensitive benthic features.

Several Members noted that recent scientific work had significantly improved the available evidence regarding benthic ecosystems within the Salas y Gómez and Nazca Ridges area. Participants welcomed the increasing availability of high-resolution mapping, habitat characterisation and ecological studies, which together provided a more comprehensive understanding of the area's biodiversity and ecological significance than had previously been available.

The discussion also considered the extent to which existing fishing activities overlapped with areas of particular ecological importance. Members observed that the available information indicated relatively limited fishing activity in some parts of the proposed area, while recognising that fishing effort had historically been concentrated in specific locations. Several participants emphasised the importance of considering both the historical footprint of fishing activity and the potential for future fishing when evaluating ecological impacts.

Some Members highlighted the need to distinguish between evidence of fishing activity and evidence of ecological impact. It was observed that fishing effort alone does not necessarily demonstrate significant adverse effects, and that the evaluation should continue to be guided by scientific evidence regarding ecosystem vulnerability, habitat characteristics and recovery potential.

The Coordinator concluded that the evaluation of fishing impacts represented an important component of the overall assessment and noted that additional refinements would be incorporated into the draft report prior to SC14.

Structure of the Task Team report to the SC

The Coordinator introduced a preliminary outline for the report that would be presented to the Scientific Committee and invited comments on its overall structure and organisation. The Coordinator proposed that a small group of participants would lead the development of the report, and once a draft was completed it could be shared with the wider group to incorporate further comments and changes.

Members generally supported the approach and the structure outlined by the Coordinator. Participants considered that such a structure would provide a logical presentation of the evidence and clearly distinguish scientific findings from management considerations.



Several Members emphasised the importance of ensuring that the report accurately reflected both areas of consensus and those issues on which differing scientific interpretations remained. It was agreed that any differing views should be presented objectively and supported by appropriate scientific rationale, thereby providing the Scientific Committee with a transparent account of the discussions undertaken by the Task Team.

The Secretariat noted that a draft report would continue to be refined following the meeting and circulated to Members for further review prior to its submission to SC14.

Potential Recommendations

The Task Team discussed a range of potential recommendations that could accompany the scientific assessment. Members agreed that any recommendations should remain firmly grounded in the scientific evidence presented within the report and should avoid extending beyond the scientific mandate of the Task Team. It was generally agreed that the results of the assessment against the Evaluation Criteria supported the ecological significance of the assessed area, and that there is enough evidence to affirm that the threshold to consider enhanced management measures has been met. Given the information related to benthic habitats, participants were comfortable with a potential recommendation to exclude bottom trawl from the assessed area (noting bottom trawl hasn't occurred in the area for several years).

Participants considered that potential recommendations could include proposals for further scientific research, continued development of habitat mapping, additional analysis of fishing impacts, and ongoing refinement of the scientific information available for future assessments. Members also recognised the value of continuing collaborative work between scientists from different delegations in order to further improve the evidence base.

The Coordinator noted that the recommendations would continue to be refined during preparation of the draft report and would remain subject to further review by Members before being presented to SC14.

Objectives: Discussion on feedback provided by Members

The Coordinator invited Members to consider the comments received on the draft objectives prepared during the intersessional period.

The discussion focused on ensuring that the objectives remained scientifically robust, clearly articulated and appropriately aligned with the mandate of the Scientific Committee. Members generally agreed that the objectives should describe the scientific purpose of the assessment rather than imply any predetermined management outcome.

Participants also discussed the importance of maintaining consistency between the objectives, the Evaluation Criteria and the conclusions ultimately presented within the report. Several Members suggested refinements to improve clarity and ensure that the objectives accurately reflected the scope of work undertaken by the Task Team. It was agreed that further discussion regarding objectives could be delayed until the SC14 meeting.

Conclusion and next steps

In concluding the meeting, the Coordinator thanked all participants for their constructive engagement and acknowledged the considerable amount of work completed by Members during the intersessional period.

The Secretariat outlined the anticipated timetable for completing the draft report, including the incorporation of comments arising from the meeting, further refinement of the assessment against the Evaluation Criteria, completion of the fishing impact assessment, and preparation of recommendations for consideration by SC14.



Members agreed to continue their collaboration intersessionally and to provide any remaining comments or additional scientific information within the agreed timeframes. The Coordinator noted that further virtual meetings could be convened if required to resolve outstanding issues before the Scientific Committee meeting.

The Coordinator closed the meeting by thanking Members, observers and the Secretariat for their contributions and expressed confidence that the work undertaken by the Task Team would provide a valuable scientific contribution to SC14.

Action items

1. Chile to share the presentation on fishing impacts
2. Chile to incorporate bycatch data (from the SPRFMO Secretariat) from the buffer area, if available
3. Coordinator to draft one or two recommendations regarding the results of the assessment and the use of bottom trawling within the assessed area (see proposed text in [SGNTT draft recommendations 3 July 2026.docx](#))
4. Coordinator to agree with the Chair of the SC the process to be followed at the next SC14 meeting.
5. Coordinator to organise and coordinate development of Task Team report to the SC14



10. Jack Mackerel MSE Task Team Meeting 06 – 24 July 2026

Executive summary

The task team reviewed work completed after the Wageningen MSE workshop, including operating-model conditioning, corrections to the power-ramp harvest control rule, candidate-management-procedure tuning, and robustness tests. The discussion identified two principal candidate management procedures for continued evaluation: MP29, which uses a hockeystick harvest control rule, and MP32, which uses a power-ramp rule. These remain candidates rather than a final recommendation.

Both procedures were tuned against the same long-term biological objective: an approximately 60% probability of being in the dynamic Kobe-green condition during 2041–2050 under the reference operating model. In the reference comparisons, MP29 generally provided higher short-term catch and lower interannual catch variability. MP32 responded more quickly when the combined index declined and performed comparatively well under some adverse recruitment scenarios. Members emphasized that the differences were often modest and should not be described as establishing an “optimal” procedure. The choice of an MP belongs to the Commission and their weighing of trade-offs.

Tests using only fishery-dependent indices produced a more responsive indicator but slightly lower short-term catch and greater catch variability. The group agreed to retain all five indices for the present analysis. Members stressed that the northern Chile acoustic survey is the only fishery-independent index in the current set and provides information that cannot be replaced fully by fishery-dependent series.

The two-stock robustness tests identified important stock-specific risks. Without movement, the southern stock met the agreed performance benchmark, while the northern stock did not unless the simulated distribution of catch shifted by approximately 3.07 percentage points from north to south. With movement, equal weighting of northern and southern indices could cause the combined indicator to rise while southern spawning biomass declined. No tested catch distribution produced the desired long-term result for both stocks in that movement scenario. The group therefore recommended tracking northern and southern indices separately and incorporating divergence between them into the exceptional-circumstances process.

Further work before SC14 includes final 500-replicate tuning runs, a limited comparison of annual TAC-change constraints, completion of banking-and-borrowing tests, clearer diagnostic figures, a technical annex, and a concise synthesis for members. The formal submission target discussed was 8 August, although the technical annex may follow during 10–14 August. A follow-up meeting was proposed for 13 August.

1. Purpose and scope

The meeting was convened to:

- review technical work completed after the Wageningen MSE workshop;
- examine the narrowed candidate-management-procedure set;
- review robustness tests and their interpretation;
- clarify how annual advice would be calculated with future data;
- identify exceptional-circumstance considerations; and
- agree on the remaining analyses and reporting needed for SC14.

The task team’s role is to provide results and a clear technical synthesis to the Scientific Committee. The Scientific Committee will consider those results when developing advice to the Commission. No final management procedure was selected at this meeting.



2. Technical progress since the workshop

The analysts reported the following changes:

- Additional performance measures were added, including vulnerable biomass and dynamic reference-point measures.
- Projected index errors now include iteration-specific variability, autocorrelation, and cross-correlation among indices.
- A straight-slope harvest rule was added as a structural comparison.
- Errors in the power-ramp rule were corrected. The correction did not materially change the broad workshop conclusions but was necessary for consistent implementation.
- An effort constraint was added to avoid unrealistic projected effort.
- The operating-model grid was retained around the one-stock reference model, with alternatives for steepness, assessment configuration, selectivity, recruitment, two-stock structure, and movement.

The analysts will add distributions of the index-error standard deviations and autocorrelation parameters to the technical report so members can see the uncertainty used in projection.

3. Candidate management procedures

The tuning process was deliberately nested. Analysts first compared targets within each harvest-control-rule family, then examined the effect of a minimum catch, an index limit, alternative index sets, replicate number, and robustness scenarios.

Working label	Meeting identifier	Rule	Catch target	Annual TAC-change constraint
HS+20	MP29	Hockeystick	2,000 kt	-15% / +20%
PR+20	MP32	Power ramp	1,500 kt	-15% / +20%

Both procedures use a 270-kt minimum catch, an index limit of 0.1, and the mean of all five standardized indices. The working labels are intended to make the comparison easier to follow. “HS” denotes hockeystick, “PR” denotes power ramp, and “+20” identifies the 20% maximum annual increase. MP numbers should be retained in technical tables for traceability.

3.1 Hockeystick candidate

Within the hockeystick family, a 2,000-kt target provided a useful balance among short-term catch, long-term catch, biological performance, and catch variability. Adding a 270-kt minimum catch and an index limit of 0.1 modestly reduced interannual catch variability. This configuration became MP29.

3.2 Power-ramp candidate

The power-ramp rule reduces catch more rapidly when the index falls below its trigger. A 1,500-kt target, 270-kt minimum catch, and index limit of 0.1 provided the preferred configuration within this family and became MP32.

3.3 Comparison

Both candidates were tuned to approximately the same long-term biological objective. Their main contrasts were:

- MP29 generally produced higher short-term catch and lower interannual catch variability.
- MP32 responded more quickly to a declining index and showed somewhat stronger recovery under the tested recruitment-crash and cyclic-recruitment scenarios.
- MP29 appeared less sensitive to the alternative selectivity scenario, but the observed differences were small and were affected partly by changes in the FMSY reference point.

Neither result supports calling one procedure “optimal.” The procedures represent different trade-offs for Scientific Committee and Commission consideration.



4. Choice of indices

The standard candidate procedures use five standardized indices: northern Chile acoustic biomass, Chilean CPUE, Peruvian artisanal and industrial indices, and offshore CPUE. The annual indicator is based on a three-year rolling mean of their combined standardized values.

The CPUE-only comparison omitted the acoustic series. It responded more quickly to changes in simulated stock status but produced slightly lower short-term catch and higher short-term catch variability. The differences in overall performance were limited. The group agreed to retain all indices for the current candidate runs.

Members asked that the report avoid describing the acoustic survey only as a source of noise. The survey is the only fishery-independent abundance index in the current set. Fishery-dependent indices may respond to fuel prices, fleet behavior, market conditions, spatial access, and other factors unrelated to abundance. The final report should explain this complementary role and provide clearer figures comparing index responsiveness.

Only recent observations enter the annual management calculation. Earlier standardized values shown in historical plots do not affect the current three-year indicator.

5. Replicates and tuning

Comparisons using 100 and 500 simulation replicates produced similar trigger estimates and performance summaries. The agreed computational approach was:

use 100 replicates for broad exploration and sensitivity testing; and

use 500 replicates for final tuning and the reduced candidate set.

Final reported candidate results should therefore be based on the 500-replicate runs when available.

6. Robustness findings

6.1 Two-stock hypothesis without movement

When the one-stock candidates were applied to the two-stock operating model, the southern stock remained above the agreed performance benchmark but the northern stock declined. An exploratory change in simulated catch distribution of approximately 3.07 percentage points from north to south brought both stocks to the 60% long-term benchmark in the no-movement case.

This result does not constitute an allocation recommendation. It illustrates that a total TAC applied to two separately exploited biological components can create stock-specific risk if the resulting catch distribution is not represented explicitly. The agreed neutral term for the report is “catch distribution”; “catch share” and “allocation” should be avoided in describing this sensitivity test.

Peru confirmed that it intends to continue its independent monitoring, assessment, and management of the northern component. Under that arrangement, the primary question for the SPRFMO candidate procedure is whether the southern stock remains adequately protected when the procedure is applied under a one-stock assumption.

6.2 Two-stock hypothesis with movement

In the movement scenario, biomass shifted from the southern to the northern stock. Because the five indices were weighted equally, increases in the two Peruvian indices could raise the combined indicator even while southern spawning biomass declined. The procedure could therefore recommend increasing catches for a declining southern component.

No tested catch distribution achieved the 60% long-term benchmark for both stocks in this movement scenario. The meeting did not conclude that this scenario is occurring. Rather, it identified an observable warning signal: persistent divergence between northern and southern indices. Northern and southern index groups should be tracked separately each year, and material divergence should be considered explicitly in the exceptional-circumstances protocol.



6.3 Alternative selectivity

The alternative selectivity placed more fishing pressure on younger fish. This changed FMSY and therefore changed F/FMSY-based risk measures even when catch and spawning-biomass trajectories were relatively similar. Comparisons should distinguish effects caused by the reference-point definition from effects caused by the management procedure itself.

MP29 appeared somewhat less sensitive than MP32 to this selectivity change, but members cautioned that the differences were small and should not be overstated.

6.4 Recruitment scenarios

The recruitment tests included a discrete recruitment crash and a seven-year cyclic reduction. MP32 responded more quickly and produced stronger long-term recovery in these tests, although catch variability could be higher. These results illustrate the intended structural contrast between the two candidate rule shapes.

Other annex runs, including alternative steepness and assessment configurations, were not judged to change the main conclusions materially.

7. Data timing and annual application

The simulations assume that most data are available with a one-year lag. Offshore CPUE is assumed to have a two-year lag. Consequently, calculation of catch advice during 2026 for application in 2027 would use:

2025 values for the northern Chile acoustic, Chilean CPUE, and Peruvian indices; and
the 2024 value for offshore CPUE.

Within a three-year indicator window, the offshore series would therefore contribute only the available observations. The current implementation does not use same-year 2026 observations in the 2027 calculation. Any proposal to use a draft 2026 acoustic result would require an explicit change to the agreed data-availability rule.

At the time of the meeting, the complete 2025 inputs were not yet assembled, so a final 2027 MP-based catch calculation could not be produced.

2 8. Annual TAC-change limits and banking and borrowing

The base candidates used a maximum annual TAC decrease of 15% and increase of 20%. Members discussed a limited and justified set of additional constraints rather than a large grid of combinations: the reverse asymmetry: -20% / $+15\%$;
a symmetric $\pm 15\%$ constraint, reflecting manager-questionnaire responses; and
 -30% / $+20\%$, reflecting the Commission task discussed in relation to paragraph 63 of the Commission report.

The final subset should be supported by the manager-questionnaire record and the Commission request. These alternatives should be retuned rather than compared using an unchanged trigger. Ten-percent banking-and-borrowing simulations were still running at the time of the meeting. The technical report should state whether this provision materially changes performance.

3 9. Exceptional circumstances and current fishery information

The meeting identified two matters for exceptional-circumstance review:

1. divergence between northern and southern abundance indices, particularly under a possible two-stock-with-movement interpretation; and
2. whether current 2026 survey and fishery information lies outside the range represented by the operating models or is inconsistent with MP expectations.

Participants provided preliminary oral updates:

Chile reported more than 80,000 t caught during July in the south-central fishery, principally near Valdivia and Chiloé, with fish generally above 40 cm and no observed juvenile concentration in those areas. Fishing was expected potentially to continue into September.



Peru reported approximately 5,000 t caught by the industrial fleet in the SPRFMO area and approximately 27,000 t within Peruvian waters, with the artisanal fleet active. Participants noted that southward movement during El Niño conditions has historical precedent. These were preliminary meeting reports rather than validated data submissions. They do not, by themselves, establish exceptional circumstances. Updated catch, survey, and index data should be reviewed together against the operating-model distributions and the formal exceptional-circumstances criteria.

4 10. Matters for Scientific Committee consideration

1. whether MP29 and MP32 provide an adequate central comparison of rule shape;
2. which annual TAC-change constraints should be retained for Commission consideration;
3. whether retaining all five indices is appropriate, including the role of the fishery-independent acoustic survey;
4. how separate northern and southern index trends should enter annual monitoring and exceptional-circumstance review;
5. how the two-stock robustness findings should be interpreted given Peru's separate monitoring and management of the northern component;
6. whether banking and borrowing materially changes candidate performance;
7. whether final candidate results should be based on 500 replicates; and
8. whether additional contractor work after SC14 is required and, if so, how it would be authorized and funded.

5 11. Reporting schedule

The formal document-submission target discussed was 8 August. The analysts indicated that a complete technical annex and draft executive summary would more realistically be available around 10–14 August. The meeting agreed that technical quality and member review were important and that the main synthesis could be circulated while the annex was finalized.

A follow-up meeting was proposed for Thursday, 13 August. Susana was asked to circulate the meeting notice.

6 12. Action register

Action	Lead	Timing/status
Circulate the updated presentation and provide access through Teams or GitHub	Jim Ianelli; Iago Mosqueira and Benoît Bergès	Following the meeting
Provide corrections to the candidate documentation and registry	Iago Mosqueira and Benoît Bergès; all members	Member review
Add distributions of index-error SD and autocorrelation parameters	Iago Mosqueira and Benoît Bergès	Technical annex
Add clearer plots of index responsiveness and HCR slopes	Iago Mosqueira and Benoît Bergès	Technical annex
Explain the value of the acoustic survey as a fishery-independent index	Iago Mosqueira and Benoît Bergès	Technical annex and synthesis
Complete final tuning using 500 replicates	Iago Mosqueira and Benoît Bergès	Before final candidate results



Use neutral “catch distribution” wording in two-stock analyses	All authors	Immediate
Continue northern-stock monitoring and provide current Peruvian fishery information	Criscely Lujan and Peru	SC14 materials
Track northern and southern indices separately	Analysts and task team	Annual implementation/ECP
Prepare the technical annex and a draft executive summary	Iago Mosqueira and Benoît Bergès	Target approximately 10 August
Prepare and circulate the task-team meeting report	Jim Ianelli	This document
Retrieve manager-questionnaire responses supporting TAC-limit choices	Jim Ianelli	Before final scenario selection
Complete and circulate TAC-limit comparisons	Analysts; Jim Ianelli	Before SC14 review
Complete and circulate 10% banking-and-borrowing results	Iago Mosqueira and Benoît Bergès	Pending
Provide updated 2025 catch data	SPRFMO Secretariat	Pending
Assess current evidence against exceptional-circumstances criteria	Jim Ianelli and task team	Before SC14
Update the candidate website, Slick material, and plain-language OM/MP map	Jim Ianelli	Ongoing
Circulate notice for the 13 August follow-up meeting	Susana	As soon as practicable

7 13. Source and review note

This report was prepared from the meeting transcript and automated meeting summary. It is a concise record of discussion and agreed follow-up, not a verbatim transcript. Preliminary oral catch reports and technical values should be checked against formal submissions and the contractor technical annex before the document is finalized.



11. Deepwater Working Group Meeting 01 – 27 July 2026

Opening

a) Meeting arrangements

The Chairperson of the Deepwater WG, Mr Trent Timmiss, opened the meeting and gave a brief introduction. Chair then invited participants to introduce themselves. A list of participants is available in Annex 1 of this summary report.

b) Adoption of the agenda

The agenda was adopted as outlined in Annex 2 of this summary report

c) Meeting documents

The meeting documents were posted on the SPRFMO SC14 website under the deepwater tab, in particular documents SC14-DW02, SC14-DW03, SC14-DW04 and SC14-DW05 were discussed.

Australian toothfish FOP consideration

Australia presented SC14-DW02, a proposal for exploratory toothfish fishing on the Macquarie Ridge during 2027–2029. Australia presented a short review of the current 2024–2026 program objectives, and summarised 2025 fishing: one mid-July trip with two observers (100% observed sets), ~35,000 hooks deployed, ~2.5 t Patagonian toothfish caught, 10 fish tagged (~4 tags/t), ~1.5 t bycatch dominated by hake and grenadiers, and ~0.5 kg of VME indicator sponges recorded.

The 2027–2029 plan proposes continuation at the same Macquarie Continuation research block targeting Patagonian toothfish across seamounts (600–2,500 m), using automatic longline gear up to 5,000 hooks with updated line spacing, a total catch cap of 40 t, retention of the 2023 risk assessment noting seabirds as highest risk but proposing proven mitigations, chondrichthyans released alive, and data collection comprising at least one observer, electronic monitoring, tagging at ≥3 fish/t with 60% overlap, and regular reporting to SPRFMO SC.

Attendees asked clarifying questions about geospatial outputs and species identification, and discussed whether limited new data should prompt a risk-assessment update. One participant asked about KMZ/KML availability and the southern “Hake” reference, the DWWG Chairperson suggested it is a different hake species to what occurs in the Atlantic and it clarified it was blue antimora. A question about tagged fish and Macquarie Island fishery tagging rates, and Australia indicated that tagging rates in the Macquarie Island Fishery had varied through time but that over 22,000 tags had been released in the fishery.

The group debated endorsing the proposal ahead of a toothfish-transition workshop, agreed to a conditional endorsement pending any relevant issues that may be raised at the toothfish workshop on 6 September, and the DWWG Chairperson committed to recording that conditional support in the workshop report as follows

Pending the outcomes of the 6 September workshop, the DWWG recommended that the SC

- a. note the Australian proposal and its Fisheries Operation Plan for an exploratory demersal longline fishery for toothfish in the Macquarie Ridge Continuation Research Block;
- b. recognise the cautious, exploratory nature of the proposal;
- c. recognise the scientific benefits of the proposed data collection, especially for understanding the connectivity of Toothfish species with surrounding areas and to establish population estimates of toothfish in the area;
- d. approve the Data Collection Plan included in the proposal; and



- e. advise the Commission that the proposal is acceptable in terms of Articles 2 and 22, CMM 13-2024 (exploratory fisheries), CMM 03-2025 (bottom fisheries) and the BFIAS.

Cook Islands trap FOP consideration

The Cook Islands presented SC14-DW04 which is a proposal to continue an exploratory fishery with traps to test crab and lobster potential and collect scientific data. The proposal includes the Northern and Foundation Seamount target areas. The Cook Islands indicated an update on 2025 exploratory fishing will be submitted to SC 14 soon.

The Cook Islands outlined management arrangements including CPUE-based closures, day and catch limits, traps-per-line limits, and temporal closures for lobster spawning. They reported the last trip caught ~21 tonnes of crabs and 10 lobsters, described low but consistent crab CPUE with no stock response, and said the Kopernik area remains closed pending further investigation.

The risk assessment covered teleosts, cephalopods, elasmobranchs, seabirds, marine mammals, turtles, and VMEs, noting medium trap catchability for some teleosts, low elasmobranch catchability with mandatory release, low seabird interactions after mitigation (macerated offal, no dumping during sets), required stoppage when cetaceans approach, and uncertain VME spatial overlap but physical-damage risk leading to a closed Kopernik Valley and move-on rules at 1% VME indicator taxa threshold.

The Cook Islands noted the fishery has operated intermittently for five years, and has proposed extending the experimental fishery for three more years under existing conditions, and committed to continued biological data collection including expanded genetic sampling to assess lobster stock structure. The Cook Islands confirmed there are two observers on board the boat who both observe and record data from every fishing operation.

New Zealand asked whether the species-level risk assessment applied to both the Northern Seamounts and Kopernik Seamount, and the Cook Islands confirmed it covers both areas collectively while noting insufficient data—particularly for the northern area—to conduct separate assessments. Further data collection will allow updating or splitting the assessments in the future.

New Zealand questioned the "low" mortality designation for released cephalopods, arguing benthic octopus are vulnerable to predation during descent. The Cook Islands acknowledged the point and agreed to amend the assessment to "medium" mortality in the revision.

The USA raised that an interim limit reference point of 20% on page 12 may be a typo and the Cook Islands confirmed this will be corrected in a revision. The USA also queried how the 10-year rule in CMM13 should be interpreted and the Cook Islands explained their interpretation is "fishing for 10 years" not necessarily consecutive years, noting operational gaps and the potential need for Commission-level discussion.

Eco NZ queried biological data for lobsters and crabs and area differences. The Cook Islands explained ongoing biological sampling, seasonal gaps due to lobster closures. It was further clarified that the preliminary indication is that there is single crab species, but this is pending NIWA confirmation, and there are plans to collect genetic samples to be analysed by external genetic experts.

The EU asked about advancing the Kopernik Valley local closure to an official VME closure under Annex 9 of the CMM3. The Cook Islands responded that the local closure was precautionary based on high VME CPUE, there is no pipeline to SPRFMO for an official VME closure, and additional analysis (e.g., camera footage and refined spatial definition) would be required to support a formal proposal.

The DWWG Chairperson summarised that subject to the agreed minor amendments (cephalopod predation risk and BLIM typo) to be incorporated in a Rev_1 that the DWWG supported this application.



Pending a submission of a Rev_1, the DWWG recommended that the SC

- a. note the Cook Islands proposal and its Fisheries Operation Plan for an exploratory trap fishery for crabs and lobsters in the Northern and Foundation Seamounts.
- b. recognise the cautious, exploratory nature of the proposal;
- c. recognise the scientific benefits of the proposed data collection, especially for testing the crab and lobster fishery potential and collecting scientific data associated with the fishery
- d. approve the Data Collection Plan included in the proposal; and
- e. advise the Commission that the proposal is acceptable in terms of Articles 2 and 22, CMM 13-2024 (exploratory fisheries), CMM 03-2025 (bottom fisheries) and the BFIAS.

Cook Island dropline FOP consideration

The Cook Islands presented SC14-DW03 a proposal to undertake exploratory fishing for hapuka. The Cook Islands reviewed the inaugural hapuka trip results and emphasized that hapuka dominated the catch by weight and number while bycatch was minimal. They described biological and genetic data collection objectives, management settings including a 500t TAC plus 100t bycatch allowance, catch limits by seamount both annual and by trip, and interim reference points tied to an initial CPUE baseline pending data validation.

The Cook Islands presented an interim risk assessment addressing catchability and mortality risks across pelagic and benthic teleosts, sharks, squid, seabirds, and species of special interest, concluding overall low risk given gear design, release practices, and restrictions such as banning wire traces and prohibiting offal discharge. They described trialing two drop-line designs to minimize seabed contact and noted a precautionary 100t cumulative bycatch cap for non-target species.

The Cook Islands requested an extension of exploratory fishing from July 2027 year to June 2030.

In response to queries, the Cook Islands reported no observed depredation by toothed whales and described vessel protocol to remove gear if large whales approach. They reported that most whale sightings have been distant baleen whales. The Cook Islands confirmed no wreckfish/blue-nosed groper have been caught but observers are instructed to watch for them and deeper fishing in the future may yield different species.

There was a suggestion to use existing Northern Seamount habitat models (e.g., Georgie-Neral 2021) to improve the VME risk assessment.

There was a question about maintaining cephalopods in the risk assessment given zero catches, the Cook Islands responded that they prefer keeping squid in the assessment because larger squid can be taken on drop lines and recommended re-evaluation after further effort.

A separate exchange debated whether two observers observing all sets should be reported as “200%” coverage. The Cook Islands clarified that two observers are on board and both observe every set, explaining this is commonly expressed as “200%” in other fisheries, and he offered to reword if it causes concern and to verify the manuscript wording.

The discussion established that vessels will carry two observers who will perform different tasks on the same set—examples given were one collecting biological samples and another weighing catch—and that this arrangement was confirmed as acceptable.

Eco NZ questioned whether spreading fishing effort across a large area will yield data sufficient for long-term hapuka stock assessments and whether depletion methods might be preferable. The Cook Islands responded that after about five years of data the team can evaluate assessment approaches, that they are collecting length, age, and CPUE data, and that genetics will guide spatial aggregation choices for analyses. One participant recommended prioritizing genetic methods given historical difficulties estimating *Polyprion* stocks and the Cook Islands confirmed the current data will support genetic analyses such as close-kin mark-recapture, with methods to be decided later and reviewed by the SC.



The DWWG recommended that the SC

- a. note the Cook Islands proposal and its Fisheries Operation Plan for an exploratory Hapuka in the Northern and Foundation Seamounts.
- b. recognise the cautious, exploratory nature of the proposal;
- c. recognise the scientific benefits of the proposed data collection, especially for hapuka fishery potential and collecting scientific data associated with the fishery
- d. approve the Data Collection Plan included in the proposal; and
- e. advise the Commission that the proposal is acceptable in terms of Articles 2 and 22, CMM 13-2024 (exploratory fisheries), CMM 03-2025 (bottom fisheries) and the BFIAS.

EU toothfish FOP consideration

The European Union introduced the exploratory toothfish fishing proposal (SC14-DW05) for the SPRFMO Area covering 2027–2029 and noted the existing 2024–2026 exploratory period is not yet complete because 2026 fishing periods remain to be finalised.

The proposed area has been labelled the George V Fracture Zone and includes substantial deep-water habitat with bathymetry shown to about 2,500 meters.

The EU described the nominated vessel TRONIO, a 2005 Spanish double-line longliner (ICE Class 1C) whose positively buoyant main line reduces benthic contact, with weights and anchors being the primary seabed contact points. They also noted operational details about hooks often being above the seafloor.

Bird-scaring lines are used, a bird exclusion device, off-haul discard processing, hook removal from discards, and independent observer coverage (national Spanish observer plus SISO observer via Capricorn Marine) to mitigate bycatch and monitor compliance. The EU reported these measures have effectively eliminated interactions.

The operational plan requests roughly 60–80 fishing days per year between 1 May and 15 November with likely offload/refuel in Hobart, sets are limited to 5,000 hooks or less with 3 nm spacing between sets and no repeated lines within a calendar year.

Biomass assessments used Chapman recapture methods for block A with high uncertainty (2025 mean ~12,149 t; lower CI ~7,270 t), leading to a conservative proposal of 3% extraction of the lower CI (218 t for Research block A). An analogous 188 t was proposed for Research Block B despite no tag recaptures in B, based on the proportion of suitable seabed in each area. The TAC requests of 218 t for block A and 188 t for block B are precautionary.

The EU reported cross-fishery tag recaptures from Macquarie that indicate long-distance movements and highlighted a lack of recaptures from several other fisheries, noting migration and stock-connectivity questions remain open.

Bycatch rates in 2025 were reported as very low, with some incidental benthic fauna observed on camera (first recorded seapens on silty bottom); updated ecological risk assessments using BFIAS incorporated additional years of data, resulting in lowered risk categories where multi-year zeros were recorded.

The EU outlined the exploratory fisheries data collection plan, confirming the types of data to be gathered, including tag recoveries and VME information, and emphasised the importance of tag-recovery data for stock assessments. The South Atlantic Environmental Research Institute (SAERI) will analyse vessel and observer data, perform stock assessments, and collaborate with Spanish scientists who supply observers and science support.

New Zealand recommend updating any references to the BFIA standard to the most recent 2025 version, which EU undertook to do.

Pending the outcomes of the 6 September workshop, the DWWG recommended that the SC



- a. note the EU proposal and its Fisheries Operation Plan for an exploratory demersal longline fishery for toothfish in the George V Fracture Zone;
- b. recognise the cautious, exploratory nature of the proposal;
- c. recognise the scientific benefits of the proposed data collection, especially for understanding the connectivity of Patagonian toothfish with surrounding areas and to establish population estimates of toothfish in the area;
- d. approve the Data Collection Plan included in the proposal; and
- e. advise the Commission that the proposal is acceptable in terms of Articles 2 and 22, CMM 13-2024 (exploratory fisheries), CMM 03-2025 (bottom fisheries) and the BFIAS.

Summary and recommendations

The DWWG undertook to circulate a meeting summary for comment and allow 2 weeks for comments before finalising it and presenting it to the SC.

Actions

- Australia will provide more detailed information on the 2025 fishing in a report to the SC (as part of the SC materials).
- Cook Islands will submit a paper with the 2025 catch data for its exploratory fisheries by the SC paper deadline.
- Cook Islands will request the vessel to perform a repeat non-extractive test fishing effort on the next trip because the previous set used too few traps to yield reliable CPUE data.
- Cook Islands will amend the risk assessment to change the cephalopod mortality rating and correct the BLIM typo in a Rev_1.
- The DWWG Chairperson will discuss the CMM 10-year interpretation with the USA delegation before the meeting and after the toothfish workshop and consider recommending SC advice to the Commission.
- The EU may update published line sink-rate figures to incorporate recent Bottle sink test results (approximately 0.68 m/s) and confirm compliance with seabird mitigation standards.
- The EU will check and confirm the BFIA standard version cited in the EU proposal.

Recommendations

Pending the outcomes of the 6 September workshop, the DWWG recommended that the SC

- a. note the Australian proposal and its Fisheries Operation Plan for an exploratory demersal longline fishery for toothfish in the Macquarie Ridge Extension Research Block;
- b. recognise the cautious, exploratory nature of the proposal;
- c. recognise the scientific benefits of the proposed data collection, especially for understanding the connectivity of Patagonian toothfish with surrounding areas and to establish population estimates of toothfish in the area;
- d. approve the Data Collection Plan included in the proposal; and
- e. advise the Commission that the proposal is acceptable in terms of Articles 2 and 22, CMM 13-2024 (exploratory fisheries), CMM 03-2025 (bottom fisheries) and the BFIAS.

Pending a submission of a Rev_1, the DWWG recommended that the SC

- a. note the Cook Islands proposal and its Fisheries Operation Plan for an exploratory trap fishery for crabs and lobsters in the Northern and Foundation Seamounts.
- b. recognise the cautious, exploratory nature of the proposal;



- c. recognise the scientific benefits of the proposed data collection, especially for testing the crab and lobster fishery potential and collecting scientific data associated with the fishery
- d. approve the Data Collection Plan included in the proposal; and
- e. advise the Commission that the proposal is acceptable in terms of Articles 2 and 22, CMM 13-2024 (exploratory fisheries), CMM 03-2025 (bottom fisheries) and the BFIAS.

The DWWG recommended that the SC

- a. note the Cook Islands proposal and its Fisheries Operation Plan for an exploratory Hapuka in the Northern and Foundation Seamounts.
- b. recognise the cautious, exploratory nature of the proposal;
- c. recognise the scientific benefits of the proposed data collection, especially for hapuka fishery potential and collecting scientific data associated with the fishery
- d. approve the Data Collection Plan included in the proposal; and
- e. advise the Commission that the proposal is acceptable in terms of Articles 2 and 22, CMM 13-2024 (exploratory fisheries), CMM 03-2025 (bottom fisheries) and the BFIAS.

Pending the outcomes of the 6 September workshop, the DWWG recommended that the SC

- a. note the EU proposal and its Fisheries Operation Plan for an exploratory demersal longline fishery for toothfish in the George V Fracture Zone;
- b. recognise the cautious, exploratory nature of the proposal;
- c. recognise the scientific benefits of the proposed data collection, especially for understanding the connectivity of Patagonian toothfish with surrounding areas and to establish population estimates of toothfish in the area;
- d. approve the Data Collection Plan included in the proposal; and
- e. advise the Commission that the proposal is acceptable in terms of Articles 2 and 22, CMM 13-2024 (exploratory fisheries), CMM 03-2025 (bottom fisheries) and the BFIAS.



12.Squid Workshop (SCW18) – 29 July-1 August 2026

The SPRFMO Scientific Committee Stock Assessment and Simulated Assessment Workshop of Jumbo Flying Squid (SCW18) took place between 29 July and 1 August 2026, in person, in Shanghai, China.

The SCW18 focused on the stock assessment and simulated assessment of jumbo flying squid (*Dosidicus gigas*) in the SPRFMO Convention Area. It supports the work of the Squid Working Group and the Assessment Simulation Task Team by reviewing available assessment data, candidate stock assessment models, model assumptions, diagnostics, sensitivities, simulation scenarios, and expected outputs for consideration by SC14.

The final report of the SCW18 is available on the SPRFMO website on the following link: https://www.sprfmo.int/assets/Meetings/SC_WS/SCW18-Squid-Stock-Assessment-Workshop/SCW18-squid3_meeting_report.pdf.



13. Ecosystems Workshop (SCW19) – 3-5 August 2026

The SPRFMO Scientific Committee Ecosystems Workshop (SCW19) took place between 3 and 5 August 2026, in person, in Shanghai, China.

The workshop combined plenary presentations, technical discussions, breakout sessions, and collaborative working groups aimed at identifying priorities, harmonising approaches, and developing recommendations for future intersessional activities.

The SCW19 aims to contributing to broader ecosystem-based fisheries management, climate change assessment initiatives, and ecosystem-informed scientific advice within the SPRFMO Scientific Committee.

The final report of the SCW18 is available on the SPRFMO website on the following link: https://www.sprfmo.int/assets/Meetings/SC_WS/SCW19-Ecosystems-Workshop/SPRFMO-SCW19-Report.pdf.



14. Jack Mackerel Working Group Preparatory Session – 13 August 2026

Opening of the meeting

The purpose of the meeting was to review the SC14 paper set, distinguish new work from updates to the SCW16 benchmark and SCW17 materials, and consider how the MSE package will support Scientific Committee advice.

Meeting summary

Participants reviewed the planned SC14 papers, focusing on whether each document represented new work, updated an earlier analysis, or remained substantially unchanged from the SCW16 benchmark and SCW17 workshop. Chile reported that the paper on spatio-temporal modelling of Chilean CPUE data had been updated.

The Chair outlined the purpose and relationship of the JM papers associated with the MSE package. He expressed appreciation for the Secretariat's support in arranging an independent desk review of the package. The review was completed before 8 August 2026, allowing the Chair to prepare a response paper and implement its principal recommendations in the revised MSE materials.

The invited expert, Dr Iago Mosqueira, updated the group on his responses to some of the aspects of the independent review report. He will include those and the foundational aspects of the software used for the MSE in his report to SC14. He confirmed that he will be available during the Scientific Committee meeting to address any requested refinements or further clarifications.

Chile described its internal MSE project report, which will be available to the Scientific Committee. Chile thanked the MSE team for incorporating relevant Chilean stakeholder considerations into the SPRFMO Scientific Committee project. Chile clarified that its submission should be considered a supplement to the JMWG package rather than a competing analysis, while noting that it may provide useful elements for the next round of MSE development for the Commission.

The group exchanged informal updates on current fishery conditions in Peru and Chile. Peru reported that catch within its jurisdiction had declined considerably compared with recent years. There were also reports that parts of the industrial purse-seine fleet had extended their operations beyond Peru's EEZ. Chile reported that fishing conditions within its zone had improved during recent weeks, with vessels operating farther south and fishing activity extending northward as far as Valparaíso. Chile and other members indicated that they expect to provide provisional estimates of total 2026 catches during SC14 for use in the next assessment.

Regarding the conduct of the assessment, the group stressed the need to ensure that an appropriately experienced expert is available to compile the updated data and undertake the required model runs. Several participants expressed concern about the limited time available both to discuss the MSE work and to complete an assessment incorporating the updated data and model arising from the SCW16 benchmark.

The group also discussed the updated banking-and-borrowing section of the SCW17 report. Participants noted that this topic will require further discussion and clarification at SC14.



15. Ecosystems Working Group Preparatory Session – 14 August 2026

Opening of the meeting

a) Meeting arrangements

The Chairperson of the Ecosystems Working Group, Sebastian Vasquez, opened the meeting and welcomed all participants. A list of participants is available in Annex 1 of this document. The meeting was a preparatory session for the 14th session of the Scientific Committee, to be held in September 2026 in the Faroe Islands.

b) Adoption of the agenda

The agenda was adopted as outlined in Annex 2 of this summary report.

c) Meeting documents

The meeting documents were posted on the SPRFMO SC14 website¹ under the ecosystems tab. Document numbers SC14-Eco01, SC14-Eco02, and SC14-Eco03 are submitted to the SC.

d) Opening of the meeting

The Chair opened the preparatory session for the Ecosystems Working Group's work toward the next SC14 meeting, and outlined a discussion of intersessional contributions, the Shanghai workshop outcomes, the ecosystem status profile, and the special issue on habitat monitoring.

Agenda item 2 on intersessional work and contributions to SC14

The Chair reviewed two working papers submitted by the Peruvian delegation on mackerel abundance and habitat conditions in Peruvian waters (SC14-Eco02 and SC14-Eco03).

Agenda item 3 on outcomes of the SCW19 workshop on species distribution modelling and environmental data harmonization

The Chair introduced the SCW19 ecosystem workshop, held in Shanghai from 3–5 August 2026, which focused on species distribution modelling (SDM) and environmental data harmonization for ecosystem and climate applications. The workshop focused on establishing a shared workflow and regional framework rather than immediately implementing models. The proposed framework is flexible and question-driven, with Jack Mackerel and Jumbo Flying Squid selected as initial species and regional abundance indices identified as a pilot application.

Workshop participants reviewed the existing metadata inventory, identified coverage gaps, and agreed that interoperability should be the primary harmonization objective. They also identified reference environmental products, emphasized alignment with climate products, and noted that oxygen and other biogeochemical variables require additional evaluation. Discussions at the workshop emphasized regional downscaling, bias correction, inclusion of adjacent coastal zones, and collaboration with working groups and the Secretariat. Implementation principles include shared workflows, reproducibility, ecological and statistical validation, and a three-year progression from harmonization to testing and implementation.

¹ <https://www.sprfmo.int/meetings/scientific-committee/14th-sc-2026>



The proposed work plan for the EWG includes completing the metadata inventory, establishing data-access protocols, harmonizing biological and environmental information, developing guidance and shared scripts, and validating reference products. It also includes producing regional products and coordinating with the Secretariat and related working groups. The next phase will develop pilot applications for Jack Mackerel and Jumbo Flying Squid using common datasets and workflows. The group plans a second technical workshop focused on implementation, preliminary regional products, periodic review, and progressive expansion. The workshop identified the need for an external expert, regional data repositories, coordination across scientific groups, and knowledge exchange. The expected benefits include improved indicators, stronger climate-informed advice, better ecosystem-based management, and enhanced scientific capacity.

Invited comments on the workshop report highlighted synergies with the Data Working Group, and the discussion emphasized coordination on data management, repositories, accessibility, workflows, protocols, and sharing experience across working groups.

The Chair presented a series of proposed priority intersessional activities for implementation following SC14:

1. Data and metadata
 - a. Complete and maintain the metadata inventory
 - b. Review Secretariat-held biological, fisheries, operational, and observer data
 - c. Recover relevant products from previous EWG initiatives
 - d. Develop shared templates and documentation
2. Environmental products
 - a. Validate reference products, particularly dissolved oxygen
 - b. Develop common processing workflows and derived variables
 - c. Continue regional downscaling and bias correction
 - d. Evaluate additional biogeochemical products and indicators
3. SDM development
 - a. Prepare common technical guidance and best practices
 - b. Define datasets and workflows for pilot applications
 - c. Develop preliminary SDM applications for jack mackerel and jumbo flying squid
 - d. Explore spatio-temporal and forecasting SDM approaches
4. Collaboration and infrastructure
 - a. Develop regional data repositories
 - b. Coordinate with relevant species WGs and the Secretariat
 - c. Prepare a second technical SDM workshop with invited experts
 - d. Ensure capacity building and knowledge exchange

Agenda item 4 on ecosystem status profiles (ESP)

The Chair reviewed the ecosystem status profile activity, its limited progress, and the broad framework proposed at the previous Scientific Committee meeting. The meeting participants recognized that a complete profile would require substantial datasets, indicators, and multidisciplinary contributions, while also noting its value for interpreting stock-assessment trends and supporting ecosystem-based management. The Chair proposed starting with a small set of available indicators to establish a baseline and capture ecosystem changes associated with El Niño and other environmental conditions. The meeting participants supported the ecosystem approach but recommended beginning with habitat characterization for key species and a simpler profile informed by approaches used in Australia. The Chair agreed that the previous framework was overly ambitious and endorsed a progressive, three-year



implementation while considering relevant examples from the United States, New Zealand, and Australia.

The EWG will prepare a late paper for SC14, refining the prototype through intersessional work, and producing a consolidated profile with expanded assessment in 2027.

Agenda item 5 on the special issue on habitat modelling

The Chair introduced the final agenda topic concerning the special issue on habitat monitoring. The issue originated from the former habitat monitoring working group and a symposium held in Concepción, Chile, in 2023, but its scientific-journal publication remains pending. The Chair reviewed Secretariat-related questions, 2026 coordination roles, and the revised available funding. The group considered using the funding for open-access publication support and discussed the Deep Sea Research Part II special issue, which has received 21 submissions and is progressing through editorial review. The Chair explained that some articles may be accepted and published online by the next Scientific Committee meeting, while the complete special issue may take longer. He identified preparation of an initial ecosystem status profile as the main priority before the next meeting, with emphasis on documenting ecosystem impacts associated with El Niño conditions.

Conclusion and next steps

The meeting concluded, and the next steps were agreed:

- a. Establish an access protocol for the data inventory
- b. Complete the metadata inventory and review Secretariat, biological, fisheries, operational, and observer datasets
- c. Develop shared templates and documentation to support reproducibility
- d. Develop common processing workflows and derived variables
- e. Validate reference environmental products, including dissolved oxygen and other biogeochemical variables
- f. Continue regional climate downscaling and bias-correction work
- g. Develop preliminary species distribution model applications for Jack Mackerel and Jumbo Flying Squid
- h. Define datasets and workflows for the pilot applications
- i. Prepare technical guidance and best practices for species distribution modelling
- j. Identify an external expert to participate in the second technical species distribution model workshop
- k. Prepare the second technical species distribution model workshop with invited experts
- l. Coordinate with relevant species working groups and the Secretariat
- m. Discuss workflows and protocols for information access at the next Scientific Committee meeting
- n. The Chair will prepare an initial indicator-based ecosystem status profile as a late working paper for SC14. This initial profile will be refined and expanded through subsequent intersessional work with EWG Members
- o. Peru will provide input on El Niño conditions at SC14



16. Deepwater Working Group Preparatory Web Meeting 02 – 18 August 2026

Opening of the meeting

a) Meeting arrangements

The Chairperson of the Deepwater Working Group, Trent Timmiss, opened the meeting and welcomed all participants. A list of participants is available in Annex 1 of this document. The meeting was a preparatory session for the 14th session of the Scientific Committee, to be held in September 2026 in the Faroe Islands.

b) Adoption of the agenda

The agenda was adopted as outlined in Annex 2 of this summary report. The agenda covers two items to be discussed at SC14: agenda item 6d on encounter reviews, and agenda item 6b on deepwater assessments.

c) Meeting documents

The meeting documents were posted on the SPRFMO SC14 website² under the deepwater tab. Document numbers SC14-Obs04, SC14-DW16, SC14-DW12, SC14-DW17, and SC14-DW15 are referenced in the agenda in Annex 2 of this summary report.

d) Opening of the meeting

The Chair outlined five papers submitted to SC14 that would be discussed during this meeting, including two papers on the 2024 VME encounter on the Central Lord Howe Rise Fishery Management Area and additional papers on VME bioregionalisation, VME abundance models, and orange roughy stock structure.

Agenda item 2 on encounter reviews

The Chair announced the order in which the VME encounter papers would be discussed, and the meeting participants anticipated that full agreement on the encounter papers might not be reached during the meeting and requested to reserve time for further discussion at the next preparatory session of the DWWG and at SC14.

The Chair noted that SC14-Obs04 was a restricted paper, as the authors were in the process of publishing the results in a scientific journal and did not want the paper available on the website. The paper had been circulated to registered Heads of Delegation and it was clarified at the meeting that all members of registered delegations are eligible to receive the paper. Some participants noted they had only received the paper in the last 24 hours and had not had time to properly review the paper. One participant noted that they had provided full papers to SPRFMO in the past and still had the results published externally after the fact and encouraged the paper to be made available on the SPRFMO website.

Greenpeace presented SC14-Obs04, which reported on their 2025 expedition to the Central Lord Howe Rise and described the drop-tow camera systems and the imagery equipment used to collect direct observational data from the seafloor. At the Central Lord Howe, four transects were completed in the area the encounter occurred in, but an ROV failure limited the ability to explore and reduced survey flexibility; the team also lacked high-resolution bathymetry and relied partly on fisheries trawl-track data.

² <https://www.sprfmo.int/meetings/scientific-committee/14th-sc-2026>



The presentation also summarized key results from the expedition. All visible fauna were identified during real-time review, with observations recorded alongside metadata. Selected footage subsections were subsequently analysed using scaled still images. Images were selected for analysis only if they included at least one VME indicator taxon and were not randomly selected. Analysis included identification to the finest taxonomic scale possible, manual counts, colony-height measurements, density estimates, and application of the Baco et al (2023)³ framework, which operationalizes the five 2009 [FAO Deep Sea Fisheries Guidelines](#) VME criteria.

Greenpeace contracted Dr. Di Tracy to analyse footage from dives four, six, and seven and recorded diverse benthic communities containing seven VME indicator taxa groups. Gorgonian corals were the most frequently encountered, followed by sponges, black corals, and colonial stony corals, with taxa frequently associated with hard substrates. Dive four had 24% of qualifying images classified as VMEs, primarily because of higher sponge colony heights and potentially century-old sponges. Dive six had 40% of images classified as VMEs, mainly because of dense crinoid aggregations and taxon richness, while dive seven had 77% of selected images classified as VMEs because of high taxon richness, old bamboo coral specimens and reef-forming stony coral.

Greenpeace noted the results indicated structurally complex, co-occurring VME indicator taxa that met FAO criteria concerning fragility, life-history traits, and structural complexity. They characterised the estimates as conservative because of patchy distributions and survey constraints.

There was discussion about the position of the tows provided on the maps in SC14-Obs04 and it was clarified they were all stern positions of the boat. There was also discussion about serious limitations of the Baco et al. (2023) study used in both qualitative and especially quantitative data analysis using single images, along with the VME criteria from the 2009 FAO Deep Sea Fisheries Guidelines. Particular concern was about designation of single images as VME based on calculated densities of VME indicator taxa and comparing them with mean densities of the same taxa from Baco et al. (2023) paper.

New Zealand presented SC14-DW16, an update of [SC13-DW09](#) which contained New Zealand's review of a Vulnerable Marine Ecosystem (VME) Encounter that occurred in 2024 on a New Zealand-flagged vessel that was bottom trawling in the SPRFMO Convention Area (Central Lord Howe Rise Fishery Management Area).

The encounter was first reviewed at SC13 and it was decided to defer proposing management recommendations until the new video footage from the Greenpeace Cruise could be reviewed at SC14. Rather than request the original video imagery from Greenpeace and re-analyse it, New Zealand preferred to review Greenpeace's analysis based on the high qualifications of the scientists involved to avoid duplication.

New Zealand noted the review concluded that the available information indicated the potential presence of a VME both within and adjacent to the encounter area, although it cannot be categorically stated as definite VME presence. The presentation emphasized the limitations of relying on individual images and the need for broader spatial sampling before using imagery to support area closures. New Zealand concluded that some individual corals and sponges might exceed an approximate 100-year age benchmark, but their rarity and site-level uniqueness remained debatable. The combined evidence supported the presence of several VME indicator taxa but did not provide a definitive conclusion that a VME was present. The analysis presented in SC13-DW09 showed that habitat suitability modelling indicated moderate to high suitability for deep-water coral habitat, while abundance modelling predicted medium to low coral abundance and did not establish VME presence.

³ Baco AR, Ross R, Althaus F, Amon D, Bridges AEH, Brix S, Buhl-Mortensen P, Colaco A, Carreiro-Silva M, Clark MR, Du Preez C, Franken ML, Gianni M, Gonzalez-Mirelis G, Hourigan T, Howell K, Levin LA, Lindsay DJ, Molodtsova TN, Morgan N, Morato T, Mejia-Mercado BE, O'Sullivan D, Pearman T, Price D, Robert K, Robson L, Rowden AA, Taylor J, Taylor M, Victorero L, Watling L, Williams A, Xavier JR, Yesson C. Towards a scientific community consensus on designating Vulnerable Marine Ecosystems from imagery. PeerJ. 2023 Oct 12;11:e16024. doi: 10.7717/peerj.16024.



The discussion that followed highlighted that Greenpeace's direct-observation data provided an important additional dimension to the review but did not significantly alter the analysis of potential significant adverse impacts.

New Zealand presented recommendations for SC14 to acknowledge the data, the presence of VME indicator taxa, and the support provided to the previous SC13-DW09 findings. The recommendations also stated that VME presence was not definitively demonstrated, that the existing significant-adverse-impact analysis remained valid, and that the SC should recommend to the Commission to reopen the 2024 encounter area subject to later review if relevant information emerged. The Chair clarified the requirements of CMM03-2025 which outlines what SC must consider in reviewing an encounter in paragraph 33.

The Chair presented the draft recommendations to the meeting participants, with recommendations in green agreed and the remaining ones (in yellow) needing further discussion before or at the SC:

The Deepwater Working Group recommended that the SC:

Notes

1. that direct footage of the encounter area has been collected, and that the analysis undertaken demonstrated the presence of VME indicator taxa in the encounter area,
2. that this supports the finding in [SC13-DW09](#) that suggested the potential presence of a VME,
3. that VME presence was not definitively demonstrated by either the indirect analysis or direct observation data;
 - a. [Noted that SPRFMO does not have a standard to definitively demonstrate a VME]
 - b. [Note there is an item on the workplan to determine a standard]
 - c. [CMM3 para 33 d) requires SC to consider if a VME does occur or is likely to occur]
4. that the analysis in [SC13-DW09](#) relating to significant adverse impacts remains valid and the best available scientific information [pick up GP video analysis]

It is further recommended that the SC recommends that the Commission:

1. **[Agrees]** that the 2024 Encounter Area is re-opened to fishing]; and
2. **Notes** that this decision should be reviewed by the Scientific Committee if further relevant information is received.

Agenda item 3 on deepwater assessments

New Zealand presented their progress on improved particle dispersal modelling for validation of the South Pacific VME Bioregionalisation (SC14-DW12).

New Zealand outlined that the purpose of this paper is to update the Scientific Committee on the progress made towards improving the particle dispersal modelling approach used as one validation tool in a multiple-lines-of-evidence approach for the bioregionalisation for Vulnerable Marine Ecosystem (VME) indicator taxa previously reported to the Scientific Committee ([SC13-DW10](#)). The dispersal model presented in SC13-DW10 is based on a relatively coarse-resolution (10 km x 10 km grid) global ocean reanalysis product, which was updated to a finer resolution (5 km x 5 km). This higher resolution model was then used to investigate the impact of realistic biological behaviour, in particular vertical swimming, on particle dispersal through a number of dispersal scenarios. Preliminary results indicated that the connectivity matrices for the different dispersal scenarios generally indicated higher levels of self-connectivity than connectivity among different bioregions. The biologically realistic larval behaviours incorporated into the dispersal modelling has a significant impact on dispersal patterns and connectivity, with greater dispersal for particles advected near the surface for extended periods. The next phase of work will include developing a higher resolution model for part of the Louisville Seamount Chain and to examine dispersal patterns in more detail, with a particular emphasis on particle transport from different parts of the same bioregion, and to evaluate a broader



range of pelagic larval duration (PLD) while incorporating biological constraints on survival, such as depth thresholds. Together, these refinements will improve the biological realism of the dispersal modelling and ensure that its outputs are more relevant to VME indicator taxa.

The discussion that followed questioned the level of confidence supporting the claim that the model incorporated biologically realistic larval behaviour. It was clarified that the swimming speeds and depth profiles were grounded in literature and that the selected scenarios covered a broad range of dispersal and connectivity outcomes, while acknowledging that survival and mortality had not yet been incorporated. Meeting participants then reviewed agreed future work involving higher-resolution ocean modelling, finer-scale dispersal, transport between fragmented areas, broader pelagic larval durations, survival constraints, and expanded literature review.

The Chair presented the draft recommendations to the meeting participants, and following consideration of the comments will present the following recommendations to SC14:

Notes

- a. that the particle tracking approach developed to contribute to validation of the South Pacific VME bioregionalisation has been improved by incorporating a higher-resolution regional model and the impact of biological behaviour.
- b. that the approach presented can resolve baroclinic instabilities and the resulting mesoscale eddy field.
- c. that the approach incorporates several biologically realistic scenarios of VME indicator taxa larval behaviours, such as vertical swimming and depth of dispersal, which have been shown to substantially influence larval dispersal pathways and connectivity patterns.

Agrees

- a. that, while results are still preliminary, incorporating behaviour and finer scale processes has improved upon the modelling previously used as one of several approaches to validate the bioregionalization of VME indicator taxa.
- b. that the particle tracking model should be progressed to include a higher resolution ocean model for part of the Louisville Seamount Chain to resolve fine scale dispersal patterns within Bioregions 6 and 7 in this region.
- c. that the dispersal patterns should be examined in more detail, with a particular emphasis on particle transport from disparate and fragmented areas, within same bioregion.
- d. that the analysis should evaluate a broader range of PLDs, while incorporating biological realism in constraints on survival, and that a broader literature review be conducted to identify the larval behaviour scenarios that best reflect the ecology of VME indicator taxa in the South Pacific.

New Zealand presented an update on the improvement of VME abundance models (SC14-DW17). New Zealand presented that the purpose of this paper is to provide an account of the progress made towards validation of existing spatial models of VME indicator taxa abundance, and the development of updated models through the addition of abundance data from unprocessed historical video imagery and a review of available environmental predictor variables for modelling. This work is reflected in item 2.5.2 of the Scientific Committee Multi-Annual Plan 2026-2028 "For VME taxa potentially at risk of SAI,



improve and validate abundance models, using independent data” (COMM14-Doc06). Nine additional DTIS stations were selected from locations expected to provide the greatest benefit to the predictive power of the abundance models. A multiple lines of evidence approach was agreed upon for validating and evaluating the existing models, and for updating and improving the abundance models. While it was not possible to complete these tasks prior to SC-14, agreements were reached in meetings of the Fisheries New Zealand South Pacific Working Group (SPACWG) on the prioritisation of available seafloor imagery sample data required for analysis and models, the potential replacement of critical predictor variables (with updated versions of such variables), and details of methods to be applied for validation.

During the discussion, it was noted that the Greenpeace data appeared potentially valuable but could not yet be assessed because the imagery and metadata were not available in time and that future use requires formal evaluation, standardization, funding, and decisions on timing and scope. Greenpeace noted that their data is available to any SPRFMO Member, and therefore available to validate and improve the models. The meeting participants then clarified that environmental predictor variables were included in the study, although the project can only review and incorporate available updated layers rather than update the layers themselves. The meeting participants discussed timeframes to replace transformed habitat suitability models with validated abundance models in relevant BFIA components, including assessments of significant adverse impacts and protection levels.

The Chair presented the draft recommendations to the meeting participants, and following consideration of the comments will present the following recommendations to SC14:

Notes

- a. that additional imagery data is currently being analysed for further development and validation of abundance models for VME indicator taxa

Agrees

- b. that while it was not possible to complete these tasks prior to SC-14, work should proceed towards validation of existing spatial models of VME indicator taxa abundance, and the development of updated models through the addition of abundance data from unprocessed historical video imagery and incorporate updated environmental predictor variables where they are available for modelling.
- c. Following the validation of the new abundance models, they should if time allows replace the transformed habitat suitability models for VME indicator taxa in the relevant components in the New Zealand and Australian BFIA 2027 update, including assessments of SAls and protection levels of VME indicator taxa afforded by current spatial management measures

Conclusion and next steps

The paper on the review of stock structure for orange roughy was not covered during this meeting due to the lack of time. The Chair will allocate time to discuss this work at the next preparatory session.

The meeting concluded, and the next steps were agreed:

- a. Further discussion on the Greenpeace and New Zealand encounter papers will be allocated during the 2nd preparatory session on 26 August 2026.
- b. The Chair will discuss access to the restricted papers with the Secretariat and Greenpeace, and work with the Secretariat and SC Chair to consider how to improve the process for handling restricted papers for future Scientific Committee meetings.



- c. The Chair will revise the recommendations to be provided to SC14, taking into account the comments made by meeting participants and circulate the changes to meeting participants within 48 hours.



17. Scientific Committee Preparatory Session – 24 August 2026

Opening & introductions

The SC Chairperson opened the meeting on the preparatory and coordination session for the 14th Scientific Committee to be held in Tórshavn, Faroe Islands in September 2026, and invited introductions from participants. A list of participants is available in Annex 1. The Chairperson thanked participants for attending given the time-zone challenges and outlined the purpose of preparing for the annual meeting in two weeks.

Adoption of the agenda

The agenda was adopted with no changes.

Summary of the intersessional work

The Chairperson summarised the intersessional programme, including four Scientific Committee Workshops (SCWs) that covered the Jack Mackerel benchmark and MSE work, as well as a workshop on Squid stock assessments, and an Ecosystems workshop on Spatial Distribution Modelling and environmental data harmonization. The SC Chairperson also noted the following Working Group meetings since the last SC coordination session in March 2026 and in preparation for SC14: seven meetings for the Jack Mackerel Working Group – with one more to be held on 28 August, three meetings of the Deepwater Working Group – with one more to be held on 26 August, a preparatory session for the Squid Working Group to be held during the pre-SC session in Tórshavn, and an Ecosystem Working Group meeting held earlier in August. A list of the meetings can be found in the SC Meeting Planner document available in Microsoft Teams.

14th SC Annual Meeting (SC14): detailed agenda and schedule

The Chair presented the scheduled dates for SC14:

- Pre-SC sessions from 5–6 September 2026
- SC14 meeting from 7–12 September 2026

The Faroe Islands host representative provided travel and participation reminders, including advance airport shuttle booking, outdoor excursion preparations, and the need for arrival information to support catering and logistical planning.

The host clarified that airport shuttles must be booked in advance. The Secretariat is collecting attendance information from delegations for pre-SC activities; the Chairperson noted that while the revised schedule shortens lunch, it expands an afternoon session and preserves open time for discussions that run beyond their planned allocations.

The SC Chairperson discussed the introduction of an independent rapporteur for the annual meeting. The rapporteur will draft the meeting report and Working Group Chairpersons remain responsible for providing notes and/or draft text from session discussions where the rapporteur or Secretariat is not present. The Secretariat will coordinate the work and engagement of the rapporteur, and the agenda includes dedicated drafting sessions needed to complete and adopt the report by Saturday, 12 September 2026.

The Chairperson revisited survey feedback requested at the SC13 meeting that informed some of the modifications and adaptations in the current SC14 agenda. Generally, the survey feedback requested that the SC Chairperson, among other things:

- Revisit the sequencing of the WG sessions and plenary
- Simplify or streamline the agenda structure



- Organise scientific presentations more strategically
- Keep the SC focused on management-relevant scientific work

Several iterations of the agenda were considered by the SC Chairperson, with the current version identified as the most efficient and comprehensive given the topics that need to be discussed, while allowing for time that can absorb any discussions that are not concluded in their allocated sessions.

Annual Reports – Q&A

The SC Chairperson introduced the Annual Reports, noting that these are not presented during the SC. The Annual Reports submitted by Members can be found on the SC14 meeting page⁴. The SC Chairperson requested that Members review [SC14-WP01 Questions and Answers regarding Annual Reports](#), already available in Teams, and provide a one-paragraph summary of their Annual Report to the document no later than 2 September 2026. These summaries will be included in the SC14 Meeting Report. Delegates are also invited to submit questions about the Annual Reports no later than 5 September, with responses provided no later than 10 September.

In summary, the following 2026 deadlines apply to the SC14-WP01:

- **Wednesday, 2 September:** Members submit one-paragraph summaries of their Annual Reports to the Annual Report Q&A document
- **Saturday, 5 September:** Delegates submit questions regarding the content of the Annual Reports
- **Thursday, 10 September:** answers are provided to the submitted questions

It was clarified by the Secretariat that only those delegates who provide letters of credential will be able to access the Teams workspace, which will be the area for co-working and collaborating during SC14.

SC Chairpersons nominations

The SC Chairperson noted that three Chairpersons must be appointed or reappointed for the Deepwater, Ecosystems, and Jack Mackerel Working Groups, whose terms are two years. Members were encouraged to prepare nominations for SC14.

Other business

During Other Business, the Secretariat reiterated the importance of submitting letters of credential, registering on the meeting website, and contributing summaries for the Annual Reports and submitted meeting documents. The SC Chairperson noted that preparatory work remains before the annual meeting and invited participants to continue communicating by email.

The new Science Manager for the Secretariat, Jessica Fuller, was introduced.

Closing

The SC Chairperson confirmed that there were no further substantive agenda items and moved to close the meeting. He acknowledged that work remains before the annual meeting and thanked participants for attending.

Action Items

Delegates are requested to:

- Ensure that all Letters of Credential have been sent to the Secretariat.
- Register for the meeting using the link provided by the Secretariat and found on the SC14 meeting page⁵.

⁴ <https://www.sprfmo.int/meetings/scientific-committee/14th-sc-2026>

⁵ <https://www.sprfmo.int/meetings/scientific-committee/14th-sc-2026>



- Pre-book their own transportation from Vágar Airport to their respective hotels. The Host Member has advised this is a necessary step.
- Provide a one-paragraph summary of their SC14-WP01 *Questions and Answers regarding Annual Reports*.
- Fill out the SC14-WP01 *Questions and Answers regarding Annual Reports* and respond to questions by the deadlines laid out by the SC Chair in Section 5 of this report.
- Propose nominations or reappointments for Chairpersons of SC Working Groups where the position will become vacant, as noted in Section 6 of this report.



18. Deepwater Working Group Preparatory Session – 25 August 2026

Opening of the meeting

a) Meeting arrangements

The Chairperson of the Deepwater Working Group, Trent Timmiss, opened the meeting and welcomed all participants. A list of participants is available in Annex 1 of this document. The meeting was a preparatory session for the 14th session of the Scientific Committee (SC), to be held in September 2026 in the Faroe Islands.

b) Adoption of the agenda

The agenda was adopted as outlined in Annex 2 of this summary report. The agenda was adopted with no changes.

c) Meeting documents

The meeting documents were posted on the SPRFMO SC14 website⁶ under the deepwater tab. Document numbers SC14-DW08, SC14-DW09, SC14-DW10, SC14-DW13, SC14-DW18, SC14-DW19, SC14-Obs01, SC14-Obs03, and SC14-Obs05 were discussed.

d) Opening of the meeting

The Chairperson outlined the meeting agenda, including the encounter review, shark-handling guide, exploratory fishing updates, orange roughy stock structure and observer papers. He also explained the intended timing for the encounter-review discussion, the relevant Scientific Committee sessions, and the upcoming end of his two-year term as Deepwater Working Group chair. The Chairperson requested participants to consider nominations for the next DWWG chair.

Updates from DWWG 2 discussions: encounter review

The Chairperson reviewed the CMM 03-2025 requirements for determining VME occurrence or likelihood to occur, assessing significant adverse impact (SAI) risk, and developing appropriate advice as set out in paragraph 33(d). New Zealand representatives presented their revisions to the recommendations, including clearer treatment of the evidence provided by the Greenpeace survey and a more explicit explanation of the reasoning behind New Zealand's proposed recommendation to the SC to reopen the encounter area.

The proposed recommendations stated that the available analysis was inconclusive regarding VME occurrence or likelihood to occur and noted the requirement for the SC to determine if a VME is known or likely to occur within the encounter area (as per paragraph 33(d) of CMM 03-2025) is a lower threshold than the requirement to identify a VME for listing in Annex 9 of CMM 03-2025. The following discussions among participants covered data sources, the explicit inclusion of the precautionary approach into the wording of the recommendations (as per Article 3.2(a) of the SPRFMO Convention) and clarified the interpretation of CMM 03-2025 para. 33.

Greenpeace did not support the recommendation from NZ to re-open the area temporarily closed following the 2024 VME encounter, and noted that [SC14-Obs04](#) provided direct evidence that VMEs exist within the encounter area, and this is the scale that SC must consider. Greenpeace stated their view that expedition findings from Central Lord Howe and the Northwest Challenger to confirm VMEs are known or are likely to occur at all undersea features surveyed and recommends that all seamounts should be listed on Annex 9 as they meet one or more of the internationally agreed FAO criteria to identify VMEs, as required under CMM 03-2025.

⁶ <https://www.sprfmo.int/meetings/scientific-committee/14th-sc-2026>



Several members indicated that they were not convinced that the evidence presented was sufficient to re-open the area to fishing. After discussion the DWWG made the following recommendations.

DWWG recommended that the Scientific Committee:

Notes

- a. That as required by the SPRFMO Convention in Article 3.2(a), the SC must apply the precautionary approach when considering the encounter review;
- b. that direct footage of the encounter area has been collected, and that the analysis undertaken demonstrated the presence of VME indicator taxa in the encounter area;
- c. that this supports the finding in [SC13-DW09](#) that suggested the potential presence of a VME;
- d. that analysis of the available data (including SC13-DW09, SC14-DW16, Commission paper and SC14-Obs04) is not conclusive as to the occurrence of, or the degree of likelihood of a VME in the encounter area;
 - i. noting that the Scientific Committee Multi-Annual Workplan is tasked with developing a standard to identify a VME eligible to be listed in Annex 9 of CMM 03-2025 (including the relevant scale at which VMEs should be considered) (Code 2.4.4); and
 - ii. noting that for the purposes of providing advice on management actions following a VME Encounter, CMM 03-2025 para. 33(d)(i) requires the Scientific Committee to determine if a VME is *known or is likely* to occur within the encounter area;
- e. that, consistent with the precautionary approach and given uncertainty of VME presence, SC13-DW09 and SC14-DW16 considered the potential for significant adverse impacts on any VMEs that might be present, if the encounter area was reopened, in line with CMM 03-2025 para. 33(d)(ii);
- f. that the analysis in [SC13-DW09](#) relating to significant adverse impacts, which was supported by alignment between the abundance and habitat suitability modelling outputs and direct observations collected by Greenpeace (SC14-Obs04), remains the best available scientific information for considering whether re-opening the encounter area will expose potential VMEs to significant adverse impacts; and
- g. that reopening the area is unlikely to result in significant adverse impacts at the scale of the FMA, BTMA or the 5nm Buffer Area surrounding the encounter area, but could lead to additional impacts at the scale of the encounter area or the UTF polygon; and
- h. that in developing management advice New Zealand considered the low fishing effort since 2008 within the encounter area, the assumption that similar fishing patterns continue in the future, the concentration of historical impacts within the encounter area, and the risk of displacing that fishing effort to other areas which may not have been previously subject to benthic impacts if the area remains closed;

It is further recommended that the SC recommends that the Commission:

1. **Agrees** to take a precautionary approach by maintaining the current temporary closure of the Encounter Area; and
2. **Notes** that this decision should be reviewed by the Scientific Committee if further relevant information is received.



Following the agreement of the recommendations, the High Seas Fishing Group stated noted they were disappointed that the DWWG has been unable to recommend reopening the encounter area. The encounter event was from a trawl at the edge of an established trawl lane that had been fished for many years without impact. HSFG are particularly concerned that the recommendation to keep the area closed is because of concern about impacts at the scale of the encounter area (one trawl track), even though there is agreement on no impact at the level of BTMA, FMA or even to the buffer area.

DSCC and Eco emphasised their view about the importance of the encounter area scale under the encounter review standard and the importance of applying the precautionary approach, mandated by the Convention and the standard. DSCC and Eco emphasised the direct and indirect evidence strongly suggested the presence of VMEs and likely continued trawling in the area indicated a significant risk of significant adverse impacts if the area was reopened.

CMM 03-2025 request on marine mammals, reptiles, and other species of concern

Australia presented its shark handling and release paper for SPRFMO bottom fisheries (SC14-DW08). The guidance addresses crew safety, trawl and longline handling practices, in-water and onboard release procedures, post-release survival, fishing-related injuries, bycatch reduction, and commonly encountered sharks, skates, rays, and chimeras. FAO requested that the FAO species codes be included in the report's species table and offered coordination support through the Deep Sea Fisheries Project. The DWWG supported this and recommended endorsement of its handling guidelines and considering further bycatch-reduction work; Australia will issue a revised version with the requested additions of the FAO code.

Pending the submission of rev_1 of the paper, the DWWG recommended that the Scientific Committee:

Notes

- the attached report prepared by Australia including the rev_1 to include FAO codes in Annex 2

RECOMMENDS to the Commission that it:

- Endorse the methods, handling and release guidelines in SC14-DW08; and
- Consider further work on reducing chondrichthyan bycatch in bottom fishing in the SPRFMO Convention Area, including gear selectivity and modifications

Agenda item 9a) Exploratory fishing updates

a) SC14-DW09 Australian exploratory fishing update

Australia presented their 2025 exploratory toothfish update (SC14-DW09) for the Macquarie Ridge Continuation Research Block. The objectives were described along with its regulatory basis, location, and 2025 results of Australia's three-year exploratory fishing programme. The discussion covered catch, bycatch, VME observations, tagging, biological sampling, observer coverage, and the absence of interactions with species of concern. A question was asked on whether Australia would consider move-on provisions linked to high *Antimora* or other bycatch levels and whether areas with low toothfish catch should be avoided. The DWWG Chairperson supported further consideration bycatch limits and indicated that the issue could be covered by the upcoming toothfish workshop.



b) SC14-DW10 EU exploratory fishing update

The EU presented an update on their exploratory fishing (SC14-DW10). In 2025, the EU conducted the second year or its 3-year exploratory fishing campaign for Patagonian toothfish (*Dissostichus eleginoides*) in the SPRFMO area north of CCAMLR 58.1 called the George V Fracture Zone (GVFZ; CMM 14e-2024). Fishing was conducted aboard the Spanish longliner F/V *Tronio* using Spanish-style bottom-set static longlines. Fishing took place from 9 October to 13 November 2025. The GVFZ was split into two research blocks, A and B, where Block A has now had five years of exploratory fishing and Block B now having had two years of exploratory fishing. Two observers collected standard information on catch and effort, length, and maturity of toothfish as well as non-target by-catch, made seabirds and marine mammals interaction observations, collected seabed video capturing species and habitat data, deployed a CTD, and continue with tagging at a rate of 5 fish/tonne.

A total of 128.8 tonnes of toothfish was taken from Block A and 33.8 tonnes from Block B, from 56 and 16 longline sets respectively, achieving the TAC in both blocks. Non-target by-catch was low and dominated by *Macrourus* spp. (1,405kg) and *Antimora rostrata* (417kg), with no elasmobranchs or other species of concern recorded and no seabird mortalities observed. There were very low catches of VME indicator taxa, totalling 2.44kg across all groups. Seabed video indicated low densities of VME indicator taxa as found in previous years, however there are indications that benthic habitats may be different in Block A compared to Block B. A total of 649 fish were tagged in Block A and 171 in Block B, with tagging overlap of 71.5% and 79.3%, respectively. Nine fish previously tagged within the GVFZ were recaptured, together with one fish that had moved between seamounts while at liberty. Four additional recaptures were fish originally tagged in the Macquarie Ridge fishery between 2010 and 2022, providing potentially valuable information on regional connectivity. In terms of stock structure, CPUE and length-frequency data indicate uniformity in abundance and size structure between blocks A and B. Planned work will continue the collection of catch, effort and biological data, continue tagging, undertake otolith ageing and genetic work, and deployment of a benthic camera and CTD. These combined data will contribute to ongoing development of biomass estimation and potential for a sustainable toothfish fishery, and understanding of connectivity within the wider region.

The Chair confirmed that an EU paper on catch-limit calculations (SC14-DW11) would be discussed at the toothfish workshop in Torshávn.

c) SC14-DW13 New Zealand exploratory fishing update

New Zealand presented their 2025 exploratory bottom-longline work under the first year of a three-year programme (SC14-DW12).

The New Zealand toothfish presentation summarised interim results from the 2025 exploratory toothfish season. Thirty-one toothfish were retained – 30 Patagonian and one Antarctic – including 13 fish from NZSWRB1 averaging 10.9kg and 18 larger fish from Research Block A averaging 46.6kg. All retained fish were biologically sampled, and five toothfish – four Patagonian and one Antarctic – were successfully double-tagged and released, with no recaptures recorded.

Bycatch comprised 844 non-target individuals, dominated by blue antimora and basketwork eel. Most were discarded dead, although numerous specimens were retained for research by ESNZ, Te Papa and Auckland Museum.

VME indicator taxa material totalled only 0.41kg, no encounter thresholds were reached, and there were no seabird captures or gear interactions; no marine mammals or turtles were observed.

The presentation recommended continuing the programme in 2026–2027, including further tagging, biological sampling, bathymetric mapping, environmental observations and monitoring of bycatch, VME indicators and protected species, while balancing its scientific value against substantial operating costs.



d) SC14-DW18 Korean exploratory fishing update

The Chair deferred the presentation and discussion on the Korean exploratory fishing report to SC14.

e) SC14-DW19 Cook Islands exploratory fishing update

The Cook Islands presented a summary of their 2025 fishing trip targeting hapuka (*Polyprius oxygeneios*) in a dropline and jig fishery and golden deep-sea crabs (*Chaceon* sp.) in a trap fishery (SC14-DW19). This is the eighth trip conducted under the Cook Islands exploratory fishery program, but the first completed under CMM 14g-2024 using dropline and jigging

In the hapuka fishery, hapuka dominated the catch, comprising 97.2% of total retained weight (13,996.5kg) and 91.7% of total fish numbers (986 fish). Total hapuka catch was within the FOP trip and seamount limits of 15 tonnes. Dropline sets (n=25) produced the highest CPUE at 37.44 fish/set and 536.56kg/set, dropline-B sets (n=3) achieved 16.33 fish/set and 193 kg/set, and a single jig set caught one hapuka (3.6kg).

Bycatch species in the hapuka fishery included trumpeter (*Latris lineata*); spiny dogfish (*Squalus* sp.); tarakihi (*Nemadactylus macropterus*); bluenose (*Hyperoglyphe antarctica*); porae (*Nemadactylus douglasii*); and blackbelly rosefish (*Helicolenus dactylopterus*). No VME interactions were recorded in the dropline or jig fishery.

A total of 954 hapuka were biologically sampled, with length, weight, maturity, sex, otolith, genetic tissue, and stomach content data collected. Genetic samples were obtained from 101 fish. Stomach contents were analysed for 238 fish, with fish and cephalopods as the dominant prey items.

In the trap fishery, catch and biological sampling of *Chaceon* crabs during trip 8 indicates a stable population with no evidence of decline in size structure across the exploratory fishery to date. The majority of crabs landed were in the 12–14cm carapace width range, with most individuals exceeding the estimated 50% maturity threshold of approximately 10cm. Reproductive data suggests a winter spawning period, supported by both berry state and shell state observations, though a sampling gap from July to October, coinciding with the lobster fishery closure, limits the completeness of seasonal biological information.

Fishing effort directed at crabs with only minor bycatch including prawns, gastropods, teleosts, and a small number of VME indicator taxa, predominantly octocorals.

Crab CPUE was low but consistent with previous trips and slightly elevated in trip 8, likely reflecting the targeted nature of this trip's fishing strategy rather than a change in population abundance. Trap fullness data indicates that saturation was not a significant factor, and the overall consistency of CPUE across trips suggests that current fishing effort levels are not producing a detectable stock response.

Orange roughy stock structure (SC14-DW19)

New Zealand presented their work on orange roughy stock structure (SC14-DW15).

The Scientific Committee Multi-Annual Work Plan 2026–2028 (SC13-Doc05) identified a priority task to investigate the stock structure of orange roughy on Westpac Bank and within the adjacent New Zealand Exclusive Economic Zone (EEZ). To date, only one peer-reviewed study has specifically examined stock structure in the eastern Tasman Sea. Smith et al. (2002) evaluated orange roughy stock structure using five complementary approaches: life-history characteristics, population length-frequency analysis, otolith shape analysis, genetic markers, and comparisons of spawning locations.



To place the findings of Smith et al. (2002) into a broader context, New Zealand undertook a comprehensive review of the available literature, including studies published since 2002, that have investigated orange roughy stock structure using a range of methodologies and analytical techniques. This review synthesizes evidence from fisheries, biological, genetic, chemical, and ecological studies to evaluate current knowledge of stock structure in orange roughy. A description of the orange roughy fisheries in the eastern Tasman Sea is also provided to support interpretation of the available stock identification evidence.

New Zealand indicated that given the findings of the review additional analysis was unlikely to provide further insight into the stock structure between the Westpac Bank and New Zealand EEZ. Another member did not share this view and highlighted the request from the Commission to undertake further analysis and not just review existing research.

There was no consensus on the recommendations associated with this paper and it was suggested that the issue would be better resolved in person. The Cook Islands, New Zealand and DWWG Chair will meet before the SC plenary commences to develop recommendations for SC to consider.

Observer papers

a) SC14-Obs01 DSF project overview

The FAO introduced SC14- Obs01 providing an update on the activities of the Common Oceans Deep Sea Fisheries Project (DSF Project) that is working with RFMOs, including SPRFMO, on a range of topics related to deep-sea fisheries in Areas Beyond National Jurisdiction. The FAO acknowledged the important role of SPRFMO as a project partner and encouraged the continued engagement of SPRFMO scientists and the Secretariat with the DSF Project and highlighted areas of greatest relevance to the SC, including:

- (i) The development of RFMO-specific guidance to improve catch reporting of deepwater sharks, including the most appropriate use of FAO 3-alpha codes. The DSF Project is undertaking consultations with RFMO representatives, deepwater shark experts and the deep-sea fishing industry to ensure that the guidance is useful, practical and fit-for-purpose for individual RFMOs. SPRFMO experts are encouraged to engage in this work to support the development of SPRFMO-specific catch reporting guidance.
- (ii) An online workshop, organised by the DSF Project, on data and knowledge sharing in toothfish longline fisheries that was held on 4 and 6 August 2026. The workshop brought together relevant experts and stakeholders engaged in toothfish fisheries SEAFO, SIOFA, SPRFMO and CCAMLR and provided a forum for a shared understanding of different toothfish fisheries and their management. The outcomes of the DSF Project workshop will be presented to the SPRFMO Exploratory Toothfish Fisheries Workshop preceding SC14.

The SC welcomed the update in SC14-Obs01 and thanked the FAO for the valuable work undertaken in the DSF Project across a range of topics. The SC also encouraged the continued engagement of Members and the SPRFMO Secretariat with the FAO DSF Project.



b) SC14- Obs03 DSCC deepwater fisheries paper

DSCC and Eco presented their paper SC14-Obs03 which called for the implementation of paragraph 49 of CMM 03-2025, including the development of a standard for identifying VMEs for inclusion in Annex 9 and the consequent exclusion of those areas from areas open to bottom fishing. They reported on international developments on calls for protection of seamounts at the Convention on Migratory Species and at the IUCN - the World Conservation Union General Assembly and noted the UN Bottom Fishing Review workshop. The paper suggested that the information provided by Greenpeace on Lord Howe and Northwest Challenger could be used to start populating Annex 9.

c) SC14-Obs05 Northwest Challenger trip report

Greenpeace presented ([SC14-Obs05](#)) on their Seamount Expedition findings from the Northwest Challenger Plateau, from six transect dives across four seamount sites using a published, standardised protocol to identify VMEs from imagery (Baco et al., 2023). The results confirm that all surveyed seamounts within and outside the Northwest Challenger BTMA meet at least two or more FAO VME criteria, including Criterion 3 (fragility), Criterion 4 (life-history traits), and Criterion 5 (structural complexity), and some sites likely meet Criterion 1 (uniqueness or rarity), and Criterion 2 (functional significance). These findings were intended to provide the SC with the best available scientific evidence of identified VMEs that SC can recommend for listing on Annex 9 (CMM 03-2025, para. 49). Both SC14-Obs04 and SC14-Obs05 papers provided a case study applying the expert framework of Baco et al. (2023), which operationalises the five FAO VME criteria through a structured decision tree which the SC could endorse as the first part of the SPRFMO VME identification standard (Code 2.4.4) implementing CMM 03-2025 in line with UNGA resolutions. Greenpeace stated their findings highlight the limitations of the current VME indicator taxa modelling, for example showcasing extremely high densities of Actinaria fly trap anemones in an area the modelling did not predict it would be, demonstrating the additional value of the Greenpeace data to validate and improve the modelling under Code 2.5.2.

Conclusion and next steps

The following next steps were agreed:

- FAO will provide the relevant FAO species codes to Australia for addition to the species table; Australia will then share an updated version of the guidelines.
- Cook Islands, New Zealand and DWWG Chair to meet in the margins of SC to revise recommendations on orange roughy stock structure.
- Members will provide the Chair with short text summarizing their presentations and statements for inclusion in the meeting summary.
- The Chair will circulate the report, with the SC14 recommendations, within 48 hours of the meeting.



19. Jack Mackerel Working Group Final SC14 paper sign off – 28 August 2026

Summary

The Jack Mackerel Working Group met online to coordinate the final assessment data update and prepare the management strategy evaluation (MSE) discussion for SC14. The meeting established a data-verification deadline and a provisional assessment starting point, while identifying several analyses and policy questions that remain open.

- Members will provide best-estimate 2026 projected catches and reconcile 2025 catch records across national submissions, assessment templates, and the Secretariat record by Wednesday, 2 September 2026.
- The assessment update will begin from model 0.16 and add confirmed data incrementally. This was a starting configuration; new observations will be presented and reviewed in the usual step-wise fashion.
- The group discussed how to treat unusual 2026 fishery and acoustic indices. Retaining the observations as currently specified, excluding the 2026 acoustic observation, and applying an explicitly justified catchability change were identified for potential comparisons.
- Two-stock operating models will remain robustness tests for the present SC14 process. The group recognized that the current design provides evaluations of a global CMPs rather than parallel management procedures for the Peruvian and wider SPRFMO areas.
- The group discussed how different presentations for evaluating CMPs should be considered. This included scorecards, quilt plots, matched simulation trajectories, and trade-off plots. Selection of a subset to present to the Commission will be done by SC14 and final selection will be done by the Commission.
- Further work is needed on how to best communicate results under the two-stock hypothesis and also to develop rules for when exceptional-circumstances occur.

Stock assessment

Catch totals and projections. Participants identified discrepancies among the Secretariat's 2025 catch table, assessment-template submissions, and national reports. Members were asked to check values by participant and fleet, explain discrepancies to Bernard, and provide best-estimate 2026 catch projections. The discussion emphasized avoiding repeated reruns caused by late single-value changes.

Weight-at-age data. The issue centred on fleet three and the separate Peruvian weight-at-age file used in recent years. Josymar Torrejón Magallanes agreed to verify the Peruvian values and provide the separate file. Ignacio Paya agreed to recheck Chile's templates, the fleet-one/fleet-two split, and acoustic weight-at-age information.

Peruvian CPUE and model configuration. The group noted that Peru's domestic assessment still uses the previous standardized CPUE, while the benchmark/MSE work uses adopted use of artisanal and industrial indices. Peru will consider that transition during its December assessment process. For the SC14 update, participants provisionally retained model 0.16 as the starting point and supported continued intersessional work on updated Peruvian CPUE standardization.

Treatment of 2026 indices. Chile reported exceptionally low catches and effort from March through early July, followed by improved catches and CPUE in July and August, together with unusual acoustic and environmental conditions. Participants agreed that the 2026 fishery and acoustic information should be examined explicitly rather than assumed to be comparable with prior years.



The treatments identified for comparison were: retaining the 2026 observations under the benchmark configuration as a reference treatment; excluding the 2026 acoustic observation as a sensitivity; and applying a catchability change or other variance treatment only with a written mechanism linking environmental conditions and fleet behaviour to observation availability or precision. Written rationales and comparisons of treatments are prerequisites for interpreting the update.

MSE presentations

Documentation and reproducibility. Jim reviewed the guide, workshop report, external review, response, benchmark report, and supporting presentation. The external review was described as generally favourable but identified disjointed documentation, inconsistent file references, and the risk of loading outdated model runs. Iago reported that repository cleanup was nearly complete and would yield a runnable version.

Two-stock hypotheses. These were designated as robustness tests due to the challenges of having separate stock-specific MPs. Under all cases, Peruvian jack mackerel was assumed to be managed separately. The Scientific Committee will evaluate how the status of the northern stock, including its probability of being in Kobe green, can be treated within a SPRFMO-area wide MSE CMM.

CMP families and trade-offs. The discussion contrasted hockey-stick and power-ramp CMP families. Hockey-stick variants generally showed lower interannual catch variability, while some power-ramp variants provided higher catch and favourable conservation performance. Matched simulation trajectories illustrated how a more responsive catch increase could later contribute to collapse when the procedure reduced catch too slowly. Participants stressed that these examples reveal trade-offs rather than establish a winner.

Scorecards and performance metrics. The scorecard was presented as an exploratory decision-support tool. Highly correlated biomass and fishing-mortality metrics provide overlapping rather than independent evidence. Relative-to-best scores can show whether colour rankings represent substantial or negligible differences, but their interpretation still depends on selected CMPs, metrics, and weights. A potential additional statistic would count years in which the fishery is effectively closed.

Robustness. The proposed evaluation sequence is to examine CMPs first under the reference operating model, shortlist plausible candidates, and then test them across untuned robustness operating models. Robustness cases include alternative selectivity, recruitment, assessment, and stock-structure assumptions. Slick files were reported as updated and working, although participants noted that scenario selection and report generation remain cumbersome.

Banking and borrowing. The simulations assume that all fisheries use the full 10% allowance uniformly, either banking or borrowing. This intentionally strong case differs from the Commission's previous simple carry-forward decision and from likely heterogeneous implementation. The report therefore needs explicit assumptions, and the group may consider a supplementary evaluation outside the MSE.

Exceptional circumstances. The group supported placing development of an exceptional-circumstances protocol in the work plan. Loss of an input series, an observation process outside the simulated range, or other material departures from tested conditions were discussed as possible triggers. A trigger would prompt evaluation and communication while leaving the management procedure in place pending review. Ignacio Paya suggested that the 2026 information could qualify because it falls outside the conditions tested under the current operating models, but the group deferred a final determination.

Action items

- **All members** - Provide best-estimate 2026 projected catches and reconcile 2025 values with templates, national reports, and Secretariat records; notify Bernard of corrections or explanations. Due Wednesday, 2 September 2026.



- **Josymar / Peru** - Verify fleet-three weighted ages and provide the separate Peruvian weighted-age file. Due with the confirmed data package.
- **Ignacio / Chile** - Recheck Chilean template submissions, fleet-one/fleet-two allocation, and acoustic weighted-age information; prepare the written rationale for alternative treatments of the 2026 fishery and acoustic indices before sensitivity runs are interpreted.
- **Lee Qi** - Start from model 0.16, incorporate confirmed data incrementally
- **Jim** - complete and distribute the MSE presentation; consider adding a statistic for years with fishery closure.
- **Iago** - Complete repository cleanup and provide a runnable current MSE version.
- **Working Group / Jim** - Draft text on two-stock robustness limitations and banking-and-borrowing assumptions; develop the exceptional-circumstances work item, identify adaptable frameworks, and prepare a short contextual working paper if feasible.
- **Peru - December 2026** - Review the transition from the previous standardized CPUE to the newer artisanal and industrial indices during the domestic assessment process.
- **Jose Zenteno** - Continue finalizing Sopesca's interest and feedback on MSE performance and decision needs.

Issues for SC14 and beyond

- Select and justify the treatment of 2026 fishery and acoustic information after reviewing sensitivity results.
- Determine whether any CMP reformulation is warranted; no such change was agreed in this meeting.
- Define the performance metrics and weighting process to be used in CMP comparison, avoiding double-counting of correlated measures.
- Agree how robustness results will be communicated and used to eliminate or retain shortlisted CMPs.
- Clarify the intended banking-and-borrowing implementation before interpreting the current extreme-case simulations.
- Define exceptional-circumstances indicators, thresholds, governance, and the process for returning to routine CMP operation.
- Decide whether the northern-stock Kobe-green probability should be a stronger management objective, a monitored indicator, or both.