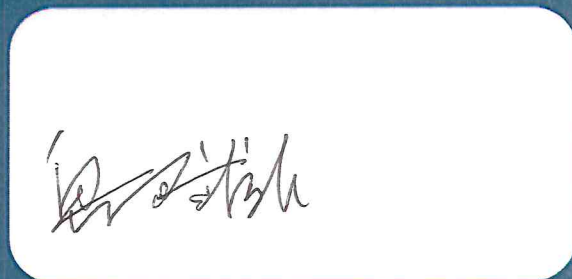




SOUTH EAST ATLANTIC FISHERIES ORGANISATION
REPORT OF THE 20TH ANNUAL MEETING OF THE
SCIENTIFIC COMMITTEE - 2024

18 - 22 November 2024
Alte Brücke Conference Centre, Swakopmund
NAMIBIA



The Secretariat
NatMIRC Bldg, Strand Street No. 1
Swakopmund, Namibia
Phone: + 264 (64) 406-885
Email: info@seafo.org
Url: www.seafo.org

Dr. Takehiro Okuda (Japan)
Chairperson of SEAFO Scientific Committee
Email: okuda_takehiro83@fra.go.jp

1. Opening of meeting by the Chairperson

The 20th Annual Meeting of the SEAFO Scientific Committee (SC) was convened from the 18th to the 22nd of November 2024 at the Alte Brücke Conference Centre in Swakopmund, NAMIBIA.

On the 18th of November, Mr. Erich Maletzky from Namibia consented to act as chairperson due to the late apology and absence of the Chairperson, Mr. Yonela Geja from the Republic of South Africa. Mr. Maletzky, opened the meeting and encouraged all SC members to participate freely in order to find best possible advice to the Commission. Mr. Takehiro Okuda from Japan took the chair from the 19th of November 2024).

The SC recognises the difficulties of the Republic of South Africa (Chair) and Angola (Vice-Chair) that prevent them from chairing the meeting and regrets that this had not been communicated earlier, so that the Executive Secretary (ES) together with other members could find a solution in advance. As a result, the chairing of the meeting had to be improvised at the beginning of the meeting, which is not an ideal situation. The SC also recognises that Namibian delegates have done the work of chairing in the past and that it is not fair that whenever this situation occurs, their delegation is always having to step in. This situation should be avoided in the future, as it is a commitment that Contracting Parties have regarding the SC meeting chairing.

2. Appointment of Rapporteur

Mr. Tobias Endjambi and Mrs. Anja van der Plas were appointed as rapporteurs for the 20th SEAFO SC meeting.

3. Adoption of agenda and meeting arrangements

No amendments were proposed by meeting participants and thus the SC adopted the agenda in its original form (DOC/SC/01/2024/Rev2 (7 Nov 2024)) ([Appendix I](#)).

Members were informed of the practical arrangements for the meeting by the ES.

4. Introduction and Admission of Observers

Three observers joined the meeting – contact details listed under the “Observers” section of [Appendix II](#).

- Dr. Romina Henriques: Senior Lecturer University of Pretoria.
- Dr. Megan Tierney: Vice-convenor of the ACAP Seabird Bycatch Working Group.
- Dr. Tina Kutti: VME expert - leader of the Nansen work for the bottom habitat studies.

5. Introduction of Delegations

The Heads of Delegations introduced their delegations. Eight SC members attended the 20th SEAFO SC meeting (see [Appendix II](#) for list of participants). No members from the

Republic of Korea and the Republic of South Africa attended the meeting. Angola was represented by three delegates to the Commission. The Angolan representatives informed SC that the Angolan scientists could not participate in the 20th SEAFO SC meeting due to their annual research scheduled and stock assessment meetings during this time of the year.

6. Review of submitted SEAFO working documents and any related presentations, allocation to the agenda items.

Twenty-three documents were submitted to the SC for review and were considered during the 20th SEAFO SC meeting (DOC/SC/00/2024/Rev2 (7 Nov 2024)) ([Appendix I](#)).

7. Review of the 2024 work program.

The work program for 2024 was discussed and covered the following areas of work:

7.1 *Orange roughy genetic study Report*

Dr. Romina Henriques from the University of Pretoria, who is leading the genetic analysis, presented the final outcome of the study ([DOC/SC/10/2024](#)). A reduced representation sequencing approach was used for this study. Results suggested that even though there is connectivity across the region, there are different orange roughy populations within the SEAFO CA, Namibia and the Republic of South Africa. These variations are also observed between the five Namibian grounds (Hotspot, Rix, Flats, Three Sisters and Johnies). Dr. Henriques suggested that biological information can also complement this study.

7.2 *South Africa Orange roughy data (catch depths & length frequencies) analysis from EEZ*

The ES indicated that the Republic of South African data were not collated as the Republic of South Africa has been waiting for the results from the genetic study. The SC noted that the genetic study results suggests that there is limited connectivity between the Republic of South Africa and SEAFO orange roughy stocks. The SC noted that this data is still relevant and recommend the Republic of South Africa to provide the catch data.

7.3 *Standardised maps for SC*

Mr. Maletzky, the project lead, requested more time to develop the scripts for the standardised maps. Update to be given by February 2025. The SC encouraged other members to join this work which will speed up the finalisation of the activity.

7.4 Approaches to identify and quantify VME indicator from video and image data

The ES reported another possibility to have a student, or a scientist trained in identifying VMEs from videos as part of a proposed project to map VME's in the Atlantic Ocean. A proposal was submitted in October 2024 for funding by the Coral Research & Development Accelerator Platform (CORDAP). It was proposed to have multiple partners across the Atlantic (The Republic of South Africa, Namibia, Mauritania, Brazil, Uruguay, Argentina, UK, Norway and Portugal) who will all work on their own data but in a standardised way such that the data can be combined to create habitat suitability models at an Atlantic scale. Each partner will own their data and be free to make their own models if they wish for local areas, but they would be required to contribute data to the Atlantic scale model. The ES will keep the SC informed about the development of the proposed project.

Dr. Tina Kutti provided a presentation elaborating on the quantification of VMEs and the involvement of the EAF-Nansen programme. In addition, Dr. Kutti spoke about the biodiversity and habitat theme focus on bottom environment mapping. She gave an update on the progress of the data analysis from the 2022 Nansen survey in the SEAFO CA. Dr. Kutti further indicated that the EAF-Nansen programme is ready to provide expert support for further analysis of the VME data collected in the SEAFO area in 2015, 2019, and 2022. This will require a capacity building element for which the EAF-Nansen programme is requesting SEAFO to identify one or two local scientists or students to take on the responsibilities to co-lead the work for quantifying VMEs in the SEAFO area together with an expert from the EAF-Nansen scientific team. The expected output of this work is one or two scientific publications. The EAF-Nansen programme is also encouraging participation of other scientists to develop further capacity in this field.

Namibia and Angola have indicated the availability of staff/students for this project (names to be provided) to take a lead in this initiative in the SEAFO area as soon as possible. Other Contracting Parties can also submit names. The ES to forward the names to the EAF-Nansen programme (Dr. Tina Kutti).

7.5 Obtain more information on the location and timing of spawning aggregations for Orange roughy in the SEAFO CA based on historical data

Mr. Tobias Endjambi (Namibia) presented findings on the peak time for orange roughy aggregations in SEAFO and the Namibian EEZ. He indicated that present findings suggest that the best time for orange roughy biomass surveys is likely between July and August based on the observed high CPUE over the years in those months, though the spawning intensity may vary within this period. The Namibian maturity data indicated that the peak spawning is around the second week of July. Therefore, based on these results, it is possible that the survey that was conducted by the RV Dr. Fridtjof Nansen in 2022 (17 June to 10 July) was too early to find significant aggregation of orange roughy.

The SC noted that future orange roughy surveys should be carried out during July to August which were the months with high CPUE.

7.6 Standardize the CPUE series for key SEAFO commercial fish species for use in stock assessment

Mr. John Kathena (Namibia) presented initial results on testing the fit of two Generalized Linear Models (GLM) and three Generalized Additive Models (GAM) to the catch and effort data for Patagonian toothfish in an attempt to standardise the CPUE time series ([DOC/SC/19/2024](#)). Preliminary results indicates that GAM provided the best fit but only explained 7.7% of the variation in the CPUE data. This work is needed to provide input for model assessment (e.g. JABBA) on the Patagonian toothfish stock in the SEAFO CA.

The SC requested the ES to source all available historical catch data (before 2009) for Patagonian toothfish from member states to finalise this project. This work will be continued intersessionally.

7.7 Alignment of the longline Observer data form and Captain logbook with other RFMOs

Mr. Roberto Sarralde (European Union) presented the proposed changes to the Observer data form and the Captain logbook ([DOC/SC/12/2024](#)). The purpose of this exercise was streamlining the data input from Observers and Captains to minimise errors and to avoid duplication in the data collection and misunderstandings mainly due to differences in the reporting forms of the different RFMO's. It was proposed for this exercise to be done for the Longline forms first and after testing it for one year, to do the same for the POT and trawler forms. Mr. Sarralde also proposed for SEAFO sampling requirements/procedures to be aligned to that of CCAMLR and to update the species list.

The major changes were proposed for sheet 3 (set and haul details) which was reformatted to make it easier for data collection and to sheet 8 (Haul VME Taxa Recording) where a column was added for observers to indicate whether sampling was done randomly/trigger or for a whole set.

The SC recommends that the Commission adopts the proposed changes for implementation by the second quarter of 2025 to improve data collection and management efficiency.

7.8 Research objectives for SEAFO CA

A task team (the ES, Mr. Louw, Mr. Maletzky, Mr. Okuda Mr. Sarralde, Angola and the Republic of Korea) was identified to draft research objectives for the Nansen survey during 2024 to be presented to the SC.

Dr. Kutti informed the SC that the RV Dr. Fridtjof Nansen will be operating off South-western Africa at the beginning of 2026 and the end of 2027. Requests for surveys proposal should be submitted by February 2025. This should include

capacity development opportunities as mentioned under agenda point 7.4, for the analysis of the VME indicator data from the 2022 Nansen survey. Namibia and Angola have indicated the availability of staff/students for this project (names to be provided). Other Contracting Parties can also submit names.

The SC noted that this is a good opportunity for research work in the SEAFO CA. The SC Proposed research work to fill the gaps on VMEs on the Discovery Seamount Complex and Meteor Seamount, a resource survey for orange roughy, alfonsino and pelagic armourhead (Mid July to early August 2026 or 2027) and VMEs including the northernmost closed area in sub area A.

A letter was drafted by the SC expressing its desire to continue working with EAF-Nansen Programme. The letter will be sent to EAF-Nansen Programme by the ES. A complete research proposal will be submitted next year if the EAF-Nansen Programme allocate survey time for SEAFO.

7.9 Evaluation of CM 25/12

During the 2023 SC meeting it was noted that the SC should start evaluating CM25/12 – pending approval from the SEAFO Commission. The review of CM25/12 was initiated during the 20th SEAFO SC meeting. Key aspects of the review pertained to:

- The omission of the Trotline fishing gear description in the conservation measure;
- The SEAFO bottle-test requirements (which is more than similar requirements of other international organizations such as CCAMLR);
- Any relevant issues related to CM25/12.

The SC agreed that the issues highlighted for review were relevant (as guided by advice from ACAP) and that the review of the conservation measure would be finalised intersessionally and submitted for Commission approval in 2025.

The SC recommends that the Commission approve the review of CM 25/12 to reconcile with seabird bycatch mitigation measures of other international organisations as guided by the ACAP Best Practice Advice.

8. Report by the Executive Secretary presenting landing tables updated to the end of August 2024.

The ES presented data and related information submitted by Contracting Parties up to the end of August 2024.

Landings data from the Spanish longliner that fished from 12 April -3 June 2024, and the Namibian longliner that fished from 8 May – 15 June 2024 has been validated and added to the landing tables. All retained and discarded catches were presented in the landings tables ([DOC/SC/03/2024\(Rev1 5 Nov\)](#)). Recorded landings of Patagonian toothfish for

the 2024 fishing season up to the end of August 2024 were 152 tonnes of which 145 tonnes in Division D1 and 7 tonnes in Division D0.

Japan fished in the SEAFO CA after the end of August 2024 and the data will be added to the landing tables to be presented in 2025.

9. Review spatial and temporal distribution of fishing activity and biological data.

The spatial distribution maps for all fishing activities recorded from September 2023 to the end of August 2024, as well as the biological data tables, were presented to the SC by the ES ([DOC/SC/04/2024](#)).

The SC reviewed the spatial and temporal maps as provided. The ES reported on the tag releases of Patagonian toothfish which were conducted in 2024 by the Spanish and Namibian vessels. Five recaptures were recorded in the SEAFO CA, Division D1 of fish that were tagged in the same area in 2023. Another recapture was from a fish tagged in the same season, eight days earlier in the same area.

10. Review the spatial distribution of reported catches of benthic organisms (corals, sponges etc.).

The SC reviewed the updated data on incidental catches of VME species from the bottom longline fishery (see Tables 24-40 of [DOC/SC/03/2024\(Rev1 5 Nov\)](#)) for data on VME species. The SC reviewed both the quantities and spatial distribution of catches ([DOC/SC/04/2024](#)) and noted that no encounter (according to Article 8 of CM30-15) has been recorded to date.

The SC noted that the new Namibian vessel needs to comply with the VME reporting obligations and allowed fishing areas.

The SC reviewed VME bycatch summary table and the column on kg/1000 hooks should be given to the maximum bycatch segment for sponges and corals rather than for the whole trip.

The SC also noted the need to look at the potential of adding maps to identify hotspots of VMEs bycatch in the stock status report of the Patagonian toothfish.

11. Review Stock Status Reports

Stock status reports for Patagonian toothfish, Orange roughy, Deep-sea red Crab, Pelagic armourhead, and Alfonsino were updated and reviewed by the SC. The SC decided to replace the N/F that indicates “no fishing” with a hyphen (-) in all landing tables so that actual numbers are easier to see. Where no data is available the fields are left blank. The years of no fishing at all should be deleted from the landing tables. These changes need to be applied to the official landing tables ([DOC/SC/03/2024\(Rev1 5 Nov\)](#)).

The SC also noted that historical catch data from adjacent EEZ areas for other species (i.e. crab, alfonsino, Patagonian toothfish) need to be added to the stock status reports as of 2025 as in the orange roughy stock status report for consistency.

11.1 Patagonian toothfish - (DOC/SC/05/2024)

The SC reviewed and approved all changes made to the Stock Status Report during the 20th SEAFO SC meeting. However, the Harvesting Control Rule (HCR) needs to be revised as it is unclear which time period is referred to as “recent five years” when there are gaps in the data – is it the actual fishing years (i.e. five data points) or is it the five most recent calendar years? The SC noted that when the HCR was adopted in 2015, there was only a continuous data time series from Japanese vessels available. From 2024 a four-year data series from the Spanish vessel is available and can be used in the HCR to calculate the TAC.

11.2 Orange roughy - (DOC/SC/06/2024)

The SC decided to keep the Namibian EEZ catches in the orange roughy landings tables despite genetic results indicating that orange roughy in the SEAFO CA and Namibian EEZ are different populations with low connectivity ([DOC/SC/10/2024](#)). The SC regards the Namibian data as relevant to the report as it provides historical information on an area adjacent to the SEAFO CA. The SC also noted that it would be ideal to have the South African data added to the landing tables to have a full picture of the orange roughy dynamics in the Southeast Atlantic Ocean.

The SC reviewed and approved all changes made to the Stock Status Report during the 20th SEAFO SC meeting. The SC decided that the ES should add confidence intervals to the CPUE plot (fig. 3 of [DOC/SC/06/2024](#)).

No fishing was reported since 2005.

11.3 Deep-sea red crab - (DOC/SC/07/2024)

The SC reviewed and approved all changes made to the Stock Status Report during the 20th SEAFO SC meeting. No fishing was reported since 2021.

11.4 Pelagic armourhead / Southern boarfish - (DOC/SC/08/2024)

The SC reviewed and approved all changes made to the Stock Status Report during the 20th SEAFO SC meeting. No fishing was reported during 2024.

11.5 Alfonsino - (DOC/SC/09/2024)

The SC reviewed and approved all changes made to the Stock Status Report during the 20th SEAFO SC meeting. No fishing was reported during 2024.

12. Review research activities in the SEAFO CA from October 2023 to date

The ES indicated that the final Nansen cruise report on the May/June 2022 Nansen survey was submitted to the SEAFO secretariat. In addition, a comparative genetic study for orange roughy in the SEAFO CA, and within Namibian and South African EEZ was carried out and findings were presented during the 20th SEAFO SC meeting under agenda point 7.1.

13. Examine, where appropriate, assessments and research done by neighbouring States and other organisations

No research done by neighbouring states and other organisations were presented at the 20th SEAFO SC meeting. However, the SC noted that a biomass survey for orange roughy took place in July 2024 within the Namibian EEZ.

14. Data Requests and Research Proposals

The FAO Deep-sea Fisheries Project submitted a request for fishing effort data by position and gear for fisheries using bottom contact gears, at 1 latitude by 1 longitude resolution, to develop a global map of spatial bottom fishing effort ([DOC/SC/15/2024](#)).

The SC deliberated on this request and recommended that the Commission authorizes the submission of the data in the requested format.

The SC revisited the 2022 Commission report under section 7.7 (Future SC work) where it was stated that:

“In the finalization of standardized SEAFO SC maps to be made available for the public, the Commission requested that the need for protection of commercial confidentiality should be taken care of by SC.” The SC was not clear on this statement as the stock status reports are available on the public domain (SEAFO website). The SC requests that the Commission clarify on what exactly is referred to as *“protection of commercial confidentiality be taken care of by SC”*.

In that case, the SC advises that, should the Commission feel that these reports contain confidential information, they should be removed from the SEAFO website and only keep the stock status information by removing the maps indicating fishing location, landing tables and other information that the Commission regards as confidential, on the FIRMS link.

15. Review Total Allowable Catches and related management conditions for Patagonian toothfish, Alfonsino, Armourhead, Orange roughy and Deep-sea red crab.

Given that the TACs for Patagonian toothfish, Alfonsino, Armourhead, Orange roughy, and Deep-sea red crab are set every second year for the following two years, the SC recommends as follows:

15.1 Orange roughy

Given that no new data were received, the SC recommends a roll-over of the 2024 TAC of 4 tonnes bycatch allowance in Division B1, and 50 tonnes in the remainder of the SEAFO CA (subject to exploratory fishing protocols) for 2025 and 2026.

15.2 Deep-sea red crab

Given that no new data were received, the SC recommends a roll-over of the 2024 TAC of 162 tonnes for Division B1, and 200 tonnes for the remainder of the SEAFO CA for 2025 and 2026.

15.3 Patagonian toothfish

New data were received for the 2024 assessment. The SC acknowledges that the requirements for the HCR are not met because there is no continuous time series of catch in the Japanese data for the last five years. Applying the Exceptional Circumstance Protocols due to data gaps, three approaches were applied for catches recorded on Meteor and Discovery Seamounts:

- TAC estimate of 274 tonnes was calculated considering CPUE slope from the last 5 calendar years with data available only for 2019, 2020, and 2022 from Japanese CPUE.
- TAC estimate of 271 tonnes was calculated considering CPUE slope from the recent 5 fishing years (2016, 2018, 2019, 2020 and 2022) from Japanese CPUE.
- TAC estimate of 274 tonnes was calculated considering CPUE slope from the recent 4 fishing years (2020-2023) from Spanish CPUE.

The SC recommends a TAC of 274 tonnes for 2025 and 2026 in the Sub-Area D calculated from the Japanese CPUE slope from the last 5 calendar years applying the 5% constraint rule as it has been done in the past.

The SC further recommends a zero TAC for the remainder of the SEAFO CA for 2025 and 2026.

The SC also recommends reviewing the HCR including the Exceptional Circumstance Protocols to clarify the “recent five years” and use all available data when setting future TAC.

15.4 Alfonsino

Given that no new data were received, the SC recommends a roll-over of the 2024 TAC of 200 tonnes for the SEAFO CA, of which a maximum of 132 tonnes may be taken in Division B1 for 2025 and 2026.

15.5 Pelagic armourhead / Southern boarfish

Given that no new data were received, the SC recommends a roll-over of the 2024 TAC of 135 tonnes in the SEAFO CA for 2025 and 2026.

16. Any Other matters

16.1. Conservation Status of Albatrosses and Petrels and ACAP – an update

Dr. Megan Tierney, Vice-convenor of the ACAP Seabird Bycatch Working Group, provided an update on the status and trends of the albatross and petrel species whose distribution overlap with the SEAFO Convention Area ([DOC/SC/16/2024](#)). It was noted that a number of these species are still facing serious population declines, and an update was also provided on ACAP Best Practice Advice for reducing seabird bycatch in trawl and longline fishing gear. A summary of other ACAP resources (that could be used to monitor seabird bycatch in fisheries), including guidelines on electronic monitoring and seabird identification was presented.

16.2. Data Exchange agreement SEAFO/CCAMLR

The ES presented to the SC a protocol for sharing cross-boundary toothfish data between SEAFO and CCAMLR for consideration ([DOC/SC/17/2024](#)). The protocol has been developed by the CCAMLR Secretariat in cooperation with the SEAFO Secretariat.

This protocol is consistent with the SEAFO-CCAMLR data exchange arrangement and is based on similar protocols developed between CCAMLR, SIOFA and SPRFMO. Since 2023, SEAFO has tagged 276 toothfish. SEAFO shares all tagging and recapture data with CCAMLR, who load it onto their tagging database and the latter in return inform SEAFO in August annually about any recapture information relating to SEAFO tagged toothfish.

The SC recommends endorsing this agreement for data sharing with CCAMLR.

16.3. Proposal for tagging of Patagonian toothfish – EU ([DOC/SC/18/2024](#)).

The EU recalls that recommendations for tagging protocol in the Patagonian toothfish fishery endorsed by the Commission in 2022 has not been captured in any CM and propose to include the Tagging Protocol for Patagonian toothfish in the CM -TAC – 01 (2024).

The SC recommends to the Commission to include tagging obligations in the CM TAC as follows: “Each long line vessel shall tag and release Patagonian toothfish continuously while fishing, at a rate of 1 fish per tonne of green weight.”

The EU also proposed the increase of the tagging rate from 1 to 3 Patagonian toothfish per tonne of green weight in the SEAFO CA. The tagging rate inform about the movement and connectivity of the Patagonian toothfish population and potential estimation of stock abundance in the context of data poor areas.

The SC recognises the merit of increasing the tagging rate but decided to first evaluate the recapture statistics at the current tagging rate. The SC encourage vessels to increase the tagging rate up to three fish per tonne of green weight when possible.

16.4. EAF-Nansen Programme Update

Dr. Tina Kutti presented the document submitted by the EAF-Nansen Programme ([DOC/SC/21/2024](#)) on the EAF-Nansen programme.

The SC appreciates the support from the EAF-Nansen programme and will submit a proposal for possible areas of collaboration for 2026-2027 as discussed under agenda 7.4 and 7.8.

The SC commits to strengthen capacity development through improved collaboration between SEAFO and EAF-Nansen Programme.

17. Advice and recommendations to the Commission on issues emanating from the 2024 meeting.

Agenda point 7.7

Context: Alignment of the longline observer data form and Captain logbook with other RFMOs.

Advice: The SC recommends that the Commission adopts the proposed changes for implementation by the second quarter of 2025 as the new format improves data collection.

Agenda point 7.9

Context: Evaluation of CM 25/12.

Advice: The SC recommends that the Commission approves the review of CM 25/12 to reconcile with seabird bycatch mitigation measures of other international organisations as guided by the ACAP Best Practice Advice.

Agenda point 14

Context: Data Requests and Research Proposals by FAO Deep-sea Fisheries Project.

Advice: The SC advises that the Commission clarifies on what exactly is referred to as “*protection of commercial confidentiality to be taken care of by SC*” as stated in the 2022 Commission report.

Advice: The SC recommends that the Commission authorizes the submission of the data in the requested format to the DSF Project.

Agenda point 15.1

Context: 2025 and 2026 TAC recommendation for Orange Roughy.

Advice: The SC recommends a roll-over of the 2024 TAC of 4 tonnes bycatch allowance in Division B1, and 50 tonnes in the remainder of the SEAFO CA (subject to exploratory fishing protocols) for 2025 and 2026.

Agenda point 15.2

Context: 2025 and 2026 TAC recommendation for Deep-sea red crab.

Advice: The SC recommends a roll-over of the 2024 TAC of 162 tonnes for Division B1, and 200 tonnes for the remainder of the SEAFO CA for 2025 and 2026.

Agenda point 15.3

Context: 2025 and 2026 TAC recommendation for Patagonian toothfish.

Advice: The SC recommends a TAC of 274 tonnes for Sub-Area D, and a zero TAC for the remainder of the SEAFO CA for 2025 and 2026.

Advice: The SC recommends that the Commission approves the review of the HCR including the exceptional circumstance protocols to clarify the “recent five years” and use all available data when setting future TAC.

Agenda point 15.4

Context: 2025 and 2026 TAC recommendation for Alfonsino.

Advice: The SC recommends a roll-over of the 2024 TAC of 200 tonnes for the SEAFO CA, of which a maximum of 132 tonnes may be taken in Division B1 for 2025 and 2026.

Agenda point 15.5

Context: 2025 and 2026 TAC recommendation for Pelagic armourhead / Southern boarfish.

Advice: The SC recommends a roll-over of the 2024 TAC of 135 tonnes in the SEAFO CA for 2025 and 2026.

Agenda point 16.2

Context: Data Exchange agreement SEAFO/CCAMLR.

Advice: The SC recommends that the Commission endorses this agreement to data sharing with CCAMLR as proposed.

Agenda point 16.3

Context: Proposal for tagging of Patagonian toothfish.

Advice: The SC recommends to include the tagging obligations in the CM TAC: "Each long line vessel shall tag and release Patagonian toothfish continuously while fishing, at a rate of 1 fish per tonne of green weight."

Agenda point 16.4

Context: EAF-Nansen Programme update.

Advice: The SC recommends that the Commission keep working with the EAF-Nansen programme.

18. 2025 Work Program

The SC compiled the work program for 2025 which includes activities pending from previous years. The 2025 SC Work Plan is as follows:

- 18.1 The ES to follow up with the Republic of South Africa to provide catches recorded in the EEZ to get a full picture of the orange roughy historical catches in the SE Atlantic.

Historical catch data from adjacent EEZ areas for other species (i.e. deep-sea Red crab, alfonsino and Patagonian toothfish) also need to be added to the stock status reports as in the orange roughy stock status report for consistency.

- 18.2 Finalization of CPUE standardization for the Patagonian toothfish fishery and possibly carry out model assessment (e.g. JABBA) (Mr. John Kathena et al.).

- 18.3 Finalization of standardised SEAFO SC maps – potential virtual meeting on the status of the R-script development (tentatively February 2025 – Mr. Erich Maletzky).
- 18.4 Approaches to identify and quantify VME indicator species.
Contracting Parties to provide names to the EAF-Nansen programme of potential scientist/students to take on the responsibilities to co-lead the work for quantifying VMEs in the SEAFO area together with an expert from the EAF-Nansen scientific team.
- Submit research proposal to be carried on board RV Dr. Fridtjof Nansen in 2026-2027 before February 2025. ES to submit a letter of intent to continue corroborative research work with EAF-Nansen programme.
- 18.5 Pending approval of agenda point 7.9 by the Commission, review of the conservation measure (CM 25/12) to be finalised intersessionally (Mr. Roberto Sarralde in collaboration with Dr. Megan Tierney- ACAP).
- 18.6 Alignment of Observer data form and Captain logbook for longlines
The ES finalise the Excel forms by adding data validation and revising SEAFO species lists. To be ready for use by April 2025.
- 18.7 The ES to update VME bycatch summary table with the column on kg/1000 hooks to be given to the maximum bycatch segment for sponges and corals rather than for the whole trip.
- 18.8 Look into the potential of adding maps to identify hotspots of VMEs bycatch in the stock status report of the Patagonian toothfish (Mr. Erich Maletzky and Mr. Takehiro Okuda).
- 18.9 ES to add confidence intervals to CPUE for orange roughy in the stock status report (Fig. 3) ([DOC/DC/06/2024](#)).
- 18.10 Pending approval of agenda point 15.3 by Commission, the SC to review the HCR intersessionally (Mr. Roberto Sarralde, Mr. Taro Ichii, Mr. Erich Maletzky, Mr. John Kathena and Mr. Tobias Endjambi).
- 18.11 Review CCAMLR toothfish tagging protocol to implement in the SEAFO CA (Mr. Roberto Sarralde and Mr. Takehiro Okuda).

19. Budget for 2025

The SC recommends that the SCAF approves the transfer of N\$18 081.55 from another vote with money to the SC vote, to cover the travelling cost of Dr. Romina Henriques to present the final results of the orange roughy genetic study ([DOC/SC/10/2024](#)) during the 20th SEAFO SC meeting.

No additional budget is requested for the SC for 2025.

20. Adoption of the report

The 2024 Scientific Committee Report was adopted by the members.

21. Date and place of the next meeting

The 2025 SC meeting shall coincide with the date and place/format of the Commission meeting (preferably 18-21 November 2025).

22. Closure of meeting

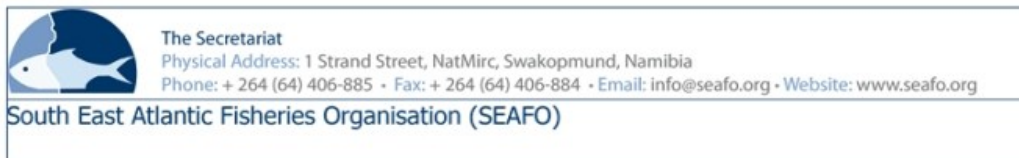
On Friday 22 November 2024 at 17:50, the Chairperson declared the 20th SEAFO Scientific Committee meeting closed.

The Chairperson expressed his satisfaction for the work accomplished and thanked all participants, the Secretariat, and the technician for their valuable contributions. The Contracting Parties also expressed their satisfaction with the way the meeting was organised and conducted and thanked the Secretariat.

The SC encourages all Contracting Parties to be committed and participate in future SC meetings as this greatly improves the work of the SC and the Commission.

APPENDIX I – List of Documents, Agenda and Annotated Agenda of the 20th Scientific Committee Meeting

DOC/SC/00/2024_Rev2 (7 Nov 24)



LIST OF DOCUMENTS FOR THE 20TH SCIENTIFIC COMMITTEE MEETING (SC) – 2024

CHAIRPERSON: Mr. Yonela GEJA (Rep. SA 2023 - 2025)

VENUE: Alte Brücke Conference Centre, Swakopmund, NAMIBIA

VICE-CHAIR: (ANGOLA)

DATE: 18-22 November 2024

Document Ref. Number	Agenda Item	Document Title	Provider	Availability of Document
DOC/SC/00/2024_Rev2 (7 Nov 24)	All	List of documents	Secretariat	Available before meeting
DOC/SC/01/2024_Rev2 (7 Nov 24)	All	Provisional agenda of the 20 th Meeting of the Scientific Committee	Secretariat	Available before meeting
DOC/SC/02/2024_Rev2 (7 Nov 24)	All	Provisional annotated agenda of the 20 th Meeting of the Scientific Committee	Secretariat	Available before meeting
DOC/SC/10/2024	7.1	Report on Orange roughy genetic study	Romina Hendriques (University Pretoria)	Available before meeting
DOC/SC/20/2024	7.4	VME Quantification work – Nansen project	Tina Kutti – IMR Norway	Pending
DOC/SC/11/2024	7.5	Orange roughy spawning and aggregation study from historic data	Tobias Endjambi	Available before meeting
DOC/SC/19/2024	7.6	Standardization of CPUE of key fish species	SC team	Available before meeting
DOC/SC/12/2024	7.7	Alignment of longline Observer report and Captain logbook	Roberto Sarralde & ES	Available before meeting
DOC/SC/13/2024	7.7	DRAFT Revised SEAFO Observer Report (Excel)	Roberto Sarralde & ES	Available before meeting
DOC/SC/14/2024	7.7	DRAFT Revised SEAFO Captain logbook (Excel)	Roberto Sarralde & ES	Available before meeting
DOC/SC/03/2024_Rev1 (5 Nov 24)	8/9/10	Landing tables 2024	Secretariat	Available before meeting
DOC/SC/04/2024	9/10	Report on spatial and temporal distribution of fishing activity	Secretariat	Available before meeting

DOC/SC/00/2024_Rev2 (7 Nov 24)

DOC/SC/05/2024	11	Stock Status Report – Patagonian toothfish	SC Members	Available during meeting
DOC/SC/06/2024	11	Stock Status Report – Orange roughy	SC Members	Available during meeting
DOC/SC/07/2024	11	Stock Status Report – Deep-sea crab	SC Members	Available during meeting
DOC/SC/08/2024	11	Stock Status Report – Pelagic armourhead/Southern boarfish	SC Members	Available during meeting
DOC/SC/09/2024	11	Stock Status Report – Alfonsino	SC Members	Available during meeting
DOC/SC/22/2024	12	Nansen Survey Report May/June 2022	EAF Nansen project	Available before meeting
DOC/SC/15/2024	14	FAO DSF Project Data Request	FAO DSF Project	Available before meeting
DOC/SC/16/2024	16.1	ACAP activities update	Megan Tierney	Available before meeting
DOC/SC/17/2024	16.2	Data Exchange agreement with CCAMLR	CCAMLR & Secretariat	Available before meeting
DOC/SC/18/2024	16.3	Proposal for Patagonian toothfish tagging	EU	Available before meeting
DOC/SC/21/2024	16.4	EAF NANSEN Update	EAF Nansen project	Available before meeting

DOC/SC/01/2024_Rev2 (7 Nov 24)

	<p>The Secretariat Physical Address: 1 Strand Street, NatMirc, Swakopmund, Namibia Phone: + 264 (64) 406-885 • Fax: + 264 (64) 406-884 • Email: info@seafo.org • Website: www.seafo.org</p>
	<p>South East Atlantic Fisheries Organisation (SEAFO)</p>

**PROVISIONAL AGENDA FOR THE 20TH MEETING OF THE SCIENTIFIC
 COMMITTEE (SC) - 2024**

CHAIRPERSON: Mr. Yonela GEJA (Rep. SA 2023 - 2025)**VENUE:** Alte Brücke Conference Centre, Swakopmund, NAMIBIA**VICE-CHAIR:** (ANGOLA)**DATE:** 18-22 November 2024

Item	Agenda Item	Working Document
1	Opening of meeting by Chairperson	
2	Appointment of Rapporteur	
3	Adoption of agenda and meeting arrangements	DOC/SC/01/2024 Rev2 (7 Nov 24) DOC/SC/02/2024 Rev2 (7 Nov 24)
4	Introduction & admission of Observers	
5	Introduction of Delegations	
6	Review of submitted SEAFO working documents and any related presentations, allocations to the agenda items	DOC/SC/00/2024 Rev2 (7 Nov 24)
7	Review of the 2024 work program 7.1 Orange roughy genetic study report 7.2 South Africa Orange roughy data analysis from EEZ 7.3 Standardised maps for SC 7.4 Approaches to identify and quantify VME indicator species 7.5 Timing of spawning aggregations of Orange roughy from historic data 7.6 Standardisation of CPUE series for key commercial species 7.7 Alignment of Observer data form and Captain logbook for longlines with other RFMO's 7.8 Research objectives for SEAFO CA 7.9 Evaluation of CM 25/12	DOC/SC/10/2024 DOC/SC/20/2024 DOC/SC/11/2024 DOC/SC/19/2024 DOC/SC/12/2024 DOC/SC/13/2024 DOC/SC/14/2024
8	Report by the Executive Secretary presenting landing tables updated to the end of August 2024	DOC/SC/03/2024 Rev1 (5 Nov 24)
9	Review spatial and temporal distribution of fishing activity and biological data	DOC/SC/04/2024
10	Review the spatial distribution of reported catches of benthic organisms	DOC/SC/04/2024

DOC/SC/01/2024_Rev2 (7 Nov 24)

11	Review Stock Status Report 11.1 Patagonian toothfish 11.2 Orange roughy 11.3 Deep-sea Red crab 11.4 Pelagic armourhead / Southern boarfish 11.5 Alfonsino	DOC/SC/05/2024 DOC/SC/06/2024 DOC/SC/07/2024 DOC/SC/08/2024 DOC/SC/09/2024
12	Review research activities in the SEAFO CA since October 2023	DOC/SC/22/2024
13	Examine, where appropriate, assessments and research done by neighboring States and other organizations	
14	Data Request & Research Proposals 14.1 Request for fishing effort data from the FAO Deep-sea Fisheries Project	DOC/SC/15/2024
15	Review Total Allowable Catches and related management conditions for Patagonian toothfish, Alfonsino, Amourhead, Orange roughy and Deep-sea Red Crab	
16	Any other matters 16.1 ACAP update to SEAFO 16.2 Data exchange agreement with CCAMLR 16.3 Proposal for tagging of Patagonian toothfish – EU 16.4 EAF Nansen Programme Update	DOC/SC/16/2024 DOC/SC/17/2024 DOC/SC/18/2024 DOC/SC/21/2024
17	Collate advice and recommendations to the Commission on issues emanating from the 2024 meeting	
18	2025 Work Program	
19	Budget for 2025	
20	Adoption of the report	
21	Date and place of the next meeting	
22	Closure of meeting	

DOC/SC/02/2024_Rev2 (7 Nov 24)

	The Secretariat Physical Address: 1 Strand Street, NatMirc, Swakopmund, Namibia Phone: + 264 (64) 406-885 • Fax: + 264 (64) 406-884 • Email: info@seafo.org • Website: www.seafo.org
	South East Atlantic Fisheries Organisation (SEAFO)

PROVISIONAL ANNOTATED AGENDA FOR THE 20TH MEETING OF THE SCIENTIFIC COMMITTEE (SC) - 2024

CHAIRPERSON: Mr. Yonela GEJA (Rep. SA 2023 - 2025)

VENUE: Alte Brücke
Conference Centre,
Swakopmund, NAMIBIA

VICE-CHAIR: (ANGOLA)

DATE: 18-22 November 2024

NR	AGENDA ITEM	DESCRIPTION
1	Opening of Meeting by the Chairperson	The Chairperson will open the meeting and welcome delegates
2	Appointment of Rapporteur	The Chairperson will facilitate the appointment of the rapporteur of the Scientific Committee meeting
3	Adoption of Agenda and Meeting Arrangements	Members will review and adopt the Provisional Agenda. Delegates will be informed of any practical arrangements for the meeting by the Executive Secretary
DOC/SC/01/2024 Rev2 (7 Nov 24); DOC/SC/02/2024 Rev2 (7 Nov 24)		
4	Introduction and Admission of Observers	The Chairperson will announce observers present as indicated by the Executive Secretary
5	Introduction of Delegations	The Chairperson will allow Heads of Delegations to introduce the members of their delegations
6	Review of submitted SEAFO Working Documents and any related Presentations, Allocation to the Agenda Items	Members will review research/working documents and presentations submitted
DOC/SC/00/2024 Rev2 (7 Nov 24)		

DOC/SC/02/2024_Rev2 (7 Nov 24)

7	Review 2024 Work Program	<p>7.1 Finalization of Orange roughy genetic analysis and report by Romina Henriques DOC/SC/10/2024</p> <p>7.2 South Africa to continue with the Orange roughy data (catch depths & length frequencies) analysis for catches recorded in the EEZ</p> <p>7.3 Finalization of standardised SEAFO SC maps – potential virtual meeting on the status of the R script development (tentatively February 2024 – Erich Maletzky)</p> <p>7.4 Continue the investigation on the different approaches for identifying and quantifying VME indicator species abundance from video and image data for drafting guidelines for the SEAFO CA. The ES will liaise with Dr. Thompson regarding this matter and the possibility of financing the training of a prospective university student from SEAFO CPs. The ES will give feedback to SC during the course of 2024. Tina Kutti will share information on this topic from the EAF Nansen programme DOC/SC/20/2024</p> <p>7.5 Obtain more information on the location and timing of spawning aggregations for Orange roughy in the SEAFO CA based on historical data (ES & Mr. Endjambi) DOC/SC/11/2024</p> <p>7.6 Standardize the CPUE series for key SEAFO commercial fish species for use in stock assessment (Maletzky, Kathena, Sarralde, et. al.) DOC/SC/19/2024</p> <p>7.7 Virtual workshop on the alignment of the Observer logbooks (tentatively April 2024 – Roberto Sarralde) DOC/SC/12/2024, DOC/SC/13/2024, DOC/SC/14/2024</p> <p>7.8 Task Team to draft a list of prioritized research objectives within the SEAFO CA for consideration at the 2024 SC meeting (tentatively April 2024). Task Team to comprise one representative from each Contracting Party (Dr. Voges, Mr. Louw, Mr. Maletzky, rep. from Japan, Mr. Sarralde, Mr. Antonio, rep. from Rep. of Korea). The Nansen programme request in Agenda point 16.4 is linked to this item.</p>
---	---------------------------------	--

DOC/SC/02/2024_Rev2 (7 Nov 24)

		7.9 SC to start evaluation of CM25/12 – pending approval from Commission
8	Report by the ES presenting Landing Tables updated with data received until 31 August 2024	The Executive Secretary will present all landings, incidental by-catches and discard tables
DOC/SC/03/2024_Rev1 (5 Nov 24)		
9	Review Spatial and Temporal Distribution of Fishing Activity and Biological Data	Members will review the catches and spatial distribution of non-benthic species as reported by the fishing vessels from 1 September 2023 to 31 August 2024 and make recommendations if necessary
DOC/SC/04/2024		
10	Review the Spatial Distribution of Reported Catches of benthic organisms (corals, sponges, etc.)	Members will review the spatial distribution of benthic organisms as reported by the fishing vessels from 1 September 2023 to 31 August 2024 and make recommendations if necessary
DOC/SC/04/2024		
11	Review the Stock Status Report	Members will review the 2024 compiled Stock Status Reports and update where necessary
DOC/SC/05/2024 ; DOC/SC/06/2024 ; DOC/SC/07/2024 ; DOC/SC/08/2024 ; DOC/SC/09/2024		
12	Review Research Activities in the SEAFO CA since October 2023	Members will review research activities conducted between October 2023 and the date of the SC meeting. The Survey Report of the Dr Fridtjof Nansen in 2022 in Sub-Area A is available DOC/SC/22/2024
13	Examine, where appropriate, Assessments and Research done by neighbouring States and other organisations	Members will examine assessments and research done by neighbouring states and other organisations, if applicable and available
14	Data Requests and Research Proposals	Members will consider any data requests and research proposals forwarded to the SC 14.1 Request for fishing effort data from the FAO Deep-sea Fisheries Project DOC/SC/15/2024
15	Review Total Allowable Catches and related management conditions for: Patagonian Toothfish Alfonsino Amourhead Orange Roughy Deep-sea Red Crab	SC will recommend TAC's for Patagonian Toothfish, Alfonsino, Amourhead, Orange Roughy and Deep-sea Red Crab for 2025/2026
16	Any other matters	Any Other Matters will be discussed

DOC/SC/02/2024_Rev2 (7 Nov 24)

		<p>16.1 ACAP update to SEAFO DOC/SC/16/2024 Presentation by Megan Thierney</p> <p>16.2 Data exchange agreement with CCAMLR DOC/SC/17/2024 Presentation by ES of Draft proposal</p> <p>16.3 Proposal for tagging of Patagonian toothfish – EU DOC/SC/18/2024 Presentation by Roberto Sarralde</p> <p>16.4 EAF Nansen Programme Update. Document submitted by the EAF Nansen Programme and presented by ES DOC/SC/21/2024</p>
17	Collate Advice and Recommendations to the Commission on issues emanating from the 2024 meeting.	SC will collate all the recommendations emanating to the Commission meeting for adoption
18	2025 Work Plan	SC to compile a work plan for 2025
19	Budget for 2025	SC will compile a budget for 2025 as needed
20	Adoption of the Report	Members will review the 2024 SC report for adoption
21	Date and Venue of Next Meeting	Members will agree on a proposed date and place for the 2025 SC meeting to be approved by the Commission
22	Closure of the Meeting	The Chairperson will close and adjourn the meeting

APPENDIX II – List of Participants: 2024 Scientific Committee Meeting**CHAIRPERSON**

Takehiro OKUDA (Japan)
Head, Oceanic Resources Group
Fisheries Resources Institute
Japan Fisheries Research and Education
Agency
Japan
Phone: +81-45-788-7502
Email: okuda_takehiro83@fra.go.jp

ANGOLA (Commissioners)

Domingos AZEVEDO (Head of Delegation)
Servico Nacional De Fiscalizacao Pesqueira e
da Aquacultura
Ministerio das Pescas e do Mar
Luanda
Angola
Phone: +24 49 23 340 100
Email: domingosazeved@gmail.com

Paulo CUSSO
Ministerio das Pescas e do Mar
Luanda
Angola
Phone: +24 49 23 340 100
Email: nkuso2015@gmail.com

Pascoal António CARLOS
Fisheries Surveillance Service
Luanda
Angola
Phone: +24 49 23 340 100

EUROPEAN UNION

Roberto SARRALDE (Head of Delegation)
Spanish Institute of Oceanography (IEO)
Centro Oceanográfico de Vigo.
Vigo
Spain
Phone: +34 660696415
Email: roberto.sarralde@ieo.csic.es

JAPAN

Taro ICHII (Head of Delegation)
Advisor
Japan Overseas Fishing Association Overseas
Tokyo
Japan
Email: taroichii11@gmail.com

NAMIBIA

Paulus KAINGE (Head of Delegation)
Chief Fisheries Biologist
National Marine Information & Research
Centre
Ministry of Fisheries and Marine Resources
Swakopmund
Namibia
Phone: +264 64 410 1159
Email: paul.kainge@mfmr.gov.na

Johannes KATHENA
Chief Fisheries Biologist
National Marine Information & Research
Centre
Ministry of Fisheries and Marine Resources
Namibia
Phone: +264 64 410 1159
Email: john.kathena@mfmr.gov.na

Tobias ENDJAMBI
Fisheries Biologist
National Marine Information & Research
Centre
Ministry of Fisheries and Marine Resources
Namibia
Phone: +264 64 410 1159
Email: tobias.endjambi@mfmr.gov.na

Erich MALETZKY
Senior Fisheries Biologist
National Marine Information & Research
Centre
Ministry of Fisheries and Marine Resources
Swakopmund
Namibia
Phone: +264 64 410 1159
Email: erich.maletzky@mfmr.gov.na

Anja VAN DER PLAS
Senior Fisheries Biologist
National Marine Information & Research
Centre
Subdivision Environment
Ministry of Fisheries and Marine Resources
Swakopmund
Namibia
Phone: +264-64-4101111
Email: anja.vanderplas@mfmr.gov.na

OBSERVERS

ACAP

Megan TIERNEY

ACAP Coordinator & South Atlantic Overseas
Territories Adviser
Joint Nature Conservation Committee (JNCC)
Falkland islands
Email: Megan.Tierney@jncc.gov.uk

UNIVERSITY OF PRETORIA

Romina HENRIQUES

Senior Lecturer
Faculty of Natural and Agricultural Sciences
University of Pretoria
Pretoria
South Africa
Email: romina.henriques@up.ac.za

FAO EAF-NANSEN-PROGRAMME

Tina KUTTI

Chief Scientist
VME expert - leader of the Nansen work for
the bottom habitat studies
Institute of Marine Research
Switchboard: (+47) 55 23 85 00
Mobile: (+47) 97 14 49 40
E-mail: tina.kutti@hi.no

SECRETARIAT

Elizabeth VOGES

Executive Secretary
NATMIRC
Swakopmund
Namibia
Phone: +264 64 406885
Email: lvoges@seafo.org

Monika HAMBINGA

Finance & Administration Officer
NATMIRC
Swakopmund
Namibia
Phone: +264 64 406885
Email: admin@seafo.org