



**Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee
Fifteenth Regular Session**

**Portland, Oregon, USA
3 – 6 September 2019**

SUMMARY REPORT

(This Summary Report will be formally adopted at WCPFC16 in December 2019)

Acknowledgements

The financial, logistical and administrative support provided by the Government of the United States and the Western and Central Pacific Fisheries Commission Secretariat are gratefully acknowledged. Mr. Masanori Miyahara, who chaired the Fifteenth Regular Session of the Northern Committee, and Dr. Kit Dahl, who served as a rapporteur for the meeting, are acknowledged with appreciation.

TABLE OF CONTENTS

AGENDA ITEM 1 — OPENING OF MEETING 4
AGENDA ITEM 2 — CONSERVATION AND MANAGEMENT MEASURES 7
AGENDA ITEM 3 — REGIONAL OBSERVER PROGRAMME 13
AGENDA ITEM 4 — DATA..... 13
AGENDA ITEM 5 — COOPERATION WITH OTHER ORGANIZATIONS..... 13
AGENDA ITEM 6 — FUTURE WORK PROGRAMME..... 14
AGENDA ITEM 7 — OTHER MATTERS 14
AGENDA ITEM 8 — ADOPTION OF THE SUMMARY REPORT OF THE 15TH REGULAR
SESSION OF THE NORTHERN COMMITTEE..... 14
AGENDA ITEM 9 — CLOSE OF MEETING 14

ATTACHMENTS

- Attachment A: List of Participants
- Attachment B: Welcome address from the Commission Chair
- Attachment C: Agenda
- Attachment D: Conservation and Management Measure for Pacific Bluefin Tuna
- Attachment E: Terms of reference for Pacific bluefin tuna management strategy evaluation
- Attachment F: Pacific bluefin tuna candidate reference points
- Attachment G: Conservation and Management Measure for North Pacific Albacore
- Attachment H: Harvest Strategy for North Pacific Swordfish Fisheries
- Attachment I: Work Programme for the Northern Committee
- Attachment J: Chair’s Summary of the Catch Documentation Scheme Technical Meeting

**The Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee
Fifteenth Regular Session**

Portland, Oregon, USA
3 – 6 September 2019

SUMMARY REPORT

AGENDA ITEM 1 — OPENING OF MEETING

1. The Fifteenth Regular Session of the Northern Committee (NC15) took place in Portland Oregon, from 3-6 September 2019. The meeting was attended by Northern Committee (NC) members from Canada, Cook Islands, Japan, Republic of Korea, Chinese Taipei, and United States of America (USA) and observers from the European Union, Mexico, Inter-American Tropical Tuna Commission (IATTC), International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC), Pacific Islands Forum Fisheries Agency (FFA), International Environmental Law Project, International Pole and Line Foundation (IPNLF), Organization for Regional and Inter-regional Studies (ORIS), and The Pew Charitable Trusts. The list of meeting participants is in Attachment A.

1.1 Welcome

2. M. Miyahara, Chair of the NC, opened the meeting and B. Thom, NOAA Fisheries (USA), welcomed participants to Portland, Oregon. The NC Chair read the welcome address from the Commission Chair R. Kim who was unable to attend (Attachment B).

1.2 Adoption of agenda

3. The provisional agenda was adopted without modification (Attachment C).

1.3 Meeting arrangements

4. The Chair explained the meeting schedule for NC15. NC15 would immediately adjourn after the opening for the Joint IATTC and WCPFC-NC Working Group Meeting to convene to complete its business. The results of the Joint Working Group meeting are reported to NC15 when it reconvenes and to the IATTC at its next regular meeting.

5. The Chair noted NC15 lacked a quorum, because China, Fiji, Philippines, and Vanuatu were not present. He expressed his intention to continue discussions without a quorum and convene the NC on the margins of the Sixteenth Regular Session of the Commission with a quorum of members to formally endorse and adopt the outcomes of the current meeting as recorded in this report.

1.4 Report from ISC and SC

1.4.1 Report from ISC

6. J. Holmes, ISC Chair, provided the following summary of the outcomes of the 19th Meeting of the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC19). (Information on ISC19 outcomes related to Pacific bluefin tuna stock status and rebuilding was presented to the Joint Working Group.)

The 19th ISC Plenary was held in Taipei, Taiwan, 10-15 July 2019. The meeting was attended by members from Canada, Chinese Taipei, Japan, Republic of Korea, and the United States, as well as the Western and Central Pacific Fisheries Commission Secretariat. The Plenary reviewed results, conclusions, new data, and updated analyses of the Billfish, Albacore, Shark and Pacific Bluefin tuna working groups. A benchmark stock assessment of Western and Central North Pacific Ocean (WCNPO) striped marlin was presented and reviewed and the Plenary endorsed the findings that the WCNPO striped marlin stock is overfished and that overfishing is occurring and noted that the same advice was provided from the 2015 stock assessment. If the stock continues to experience recruitment consistent with the short-term recruitment scenario (2012-2016), then catches must be reduced to 1,359 t (60% of the WCPFC catch quota from CMM 2010-01) in order to achieve a 60% probability of rebuilding to 20%SSB₀ by 2022 (the rebuilding target specified in CMM 2010-01). No new information or assessments were provided for swordfish, blue marlin, blue shark, shortfin mako shark so the ISC Plenary reviewed and forwarded stock status and conservation information developed by earlier Plenary meetings. Although a new assessment for North Pacific albacore was not conducted, the Albacore Working Group noted an error in the catch data used in the 2017 assessment, which it corrected and re-ran the base case model. The Plenary reviewed these results and concluded that no change in the stock status or conservation information previously provided was warranted. The Pacific Bluefin Tuna Working Group reviewed updated indices with data up to 2017 and conducted projections on additional harvest scenarios as requested by the Joint IATTC-NC Joint Working Group at NC14 and concluded that changes to the stock status and conservation information based on the 2018 update assessment were not warranted by more recent information and that the probabilities of achieving the first and second rebuilding targets of all harvest scenarios tested were between 76% and 95%.

The second Pacific Bluefin Tuna Management Strategy Evaluation (MSE) Workshop was convened in San Diego, USA, in May 2019 to begin discussions on management objectives and performance indicators from eastern Pacific Ocean managers and stakeholders. Governance and management of a Pacific bluefin tuna MSE process will be more challenging than the Albacore MSE because of the diversity of fisheries and interests on both sides of the Pacific Ocean. The fourth MSE workshop for North Pacific albacore was held in Yokohama, Japan to review initial results with managers and stakeholders, compile feedback and plan for the next iteration of the MSE.

The status of the close-kin research project was reviewed and a meeting to discuss the analysis of samples already collected occurred in conjunction with a PBFWG workshop in March 2019 in Jeju, Korea. Although a single institution analyzing DNA samples would be an advantage in proceeding with this project, participants concluded that it was not feasible due to Intellectual Property concerns and varying states of progress on DNA extraction.

The ISC Plenary reconfirmed its support of the science objectives for ISC and PICES collaborations and noted that the last business meeting of the joint WG of the ISC and PICES will occur in October 2019 during the PICES annual meeting.

The peer review of the ISC structure and function focusing on the ISC stock assessment process was delivered with several recommendations to improve stock assessment practices and in response the ISC Plenary is working to implement an independent peer review of benchmark stock

assessments conducted prior to the next Plenary meeting in July 2020. The ISC Plenary also agreed to continue discussions on formalizing the ISC structure and administration, with the USA leading this effort.

Observers from the Monterey Bay Aquarium and the Western Pacific Fisheries Management Council attended the ISC19 Plenary.

The ISC work plan for 2019-20 includes benchmark assessments for North Pacific albacore and Pacific bluefin tuna, data preparations for upcoming blue shark and shortfin mako shark stock assessments, a review of the timing and frequency of benchmark assessments of all species assessed by ISC Working Groups, and potentially a meeting for the North Pacific albacore MSE to begin the second iteration of the process. The next ISC Plenary will be held in the United States in July 2020.

1.4.2 Report from SC

7. SK Soh summarized the key outcomes from the 15th Regular Session of the Scientific Committee (SC15). His presentation is summarized as follows:

- 1) SC15 was held in Pohnpei, Micronesia from 12-20 August 2019. Over 150 were participated in the meeting and Mr. Ueta Faasili (Samoa) chaired the meeting.
- 2) The provisional total tuna catch for 2018 was estimated at 2,716,396 mt, the second highest on record, which is 81% of the total estimated Pacific Ocean catch of 3,373,512mt and 55% of the provisionally estimated global tuna catch of 4,930,621mt in 2018.
- 3) In response to the stock status of the Pacific bluefin tuna stock:
 - a) SC15 noted that the total Pacific bluefin tuna catch by ISC members in 2018 was 10,148 mt, a 31% decrease from 2017 and a 25% decrease from the 2013-2017 average;
 - b) SC15 also noted the management advice of ISC19; and
 - c) SC15 advises the Commission to note the current very low level of SB (3.3% B_0), the current level of overfishing, and that the projections are strongly influenced by the inclusion of a relatively high but uncertain recruitment in 2016.
- 4) SC15 reviewed three full stock assessments conducted in 2019 for skipjack tuna, oceanic whitetip shark and Southwest Pacific striped marlin. Key stock status and management advice includes:
 - a) Skipjack tuna
 - b) SC15 noted the following management quantities:
 - i) median $SB_{\text{recent (2015-2018)}}/SB_{F=0} = 0.44$ with a range of 0.37 to 0.53 (80% probability interval);
 - ii) median $F_{\text{recent (2014-2017)}}/F_{\text{MSY}} = 0.45$, with a range of 0.34 to 0.60 (80% probability interval).
 - c) Therefore, the skipjack stock is not overfished, nor subject to overfishing. At the same time, it was also noted that F is continuously increasing for both adult and juvenile while the SB reached the historical lowest level.
 - d) The trajectory of the median SB depletion has been under the interim TRP ($50\%SB_{F=0}$) since 2009. Therefore, SC15 recommends that the Commission take appropriate management action.
 - e) Oceanic whitetip shark
- 5) SC15 noted the following management quantities:
 - i) median $SB_{\text{recent (2013-2015)}}/SB_0 = 0.04$ with a range of 0.03 to 0.05 (80% probability interval);
 - ii) median $SB_{\text{recent}}/SB_{\text{MSY}} = 0.09$ (range: 0.05–0.17);

- iii) median $F_{\text{recent}}/F_{\text{MSY}} = 3.94$, with a range of 2.67 to 5.89 (80% probability interval), and no model runs were shown for $F_{\text{recent}}/F_{\text{MSY}} < 1$.
 - 6) ii) The key conclusions are that overfishing is occurring and the stock is in an overfished state relative to MSY and depletion-based reference points for tunas.
 - a) Noting that there are existing CMMs directed at oceanic whitetip, SC15 recommended that further efforts to mitigate catch and improve handling and release practices are required to further reduce F and improve stock status.
 - b) Southwest Pacific striped marlin
 - i) SC15 noted the following management quantities:
 - ii) The median ($SB_{\text{recent}}/SB_{F=0}$) = 0.198, with a probable range of 0.093 to 0.464 (80% probable range), and the probability of ($SB_{\text{recent}}/SB_{F=0} < 0.2$) was roughly 50.33%;
 - iii) The median ($SB_{\text{recent}}/SB_{\text{MSY}}$) = 0.737 with a probable range of 0.334 to 1.635 (80% probable range), and the probability of ($SB_{\text{recent}}/SB_{\text{MSY}} < 1$) was roughly 68.66%;
 - iv) The median ($F_{\text{recent}}/F_{\text{MSY}}$) = 0.911 with an 80% probability interval of 0.313 to 1.891, and the probability of ($F_{\text{recent}}/F_{\text{MSY}} > 1$) was roughly 44.3%.
 - v) Based on the adopted uncertainty grid, the southwest Pacific striped marlin assessment results indicate that the stock is likely overfished, and close to undergoing overfishing according to MSY-based reference points.
 - vi) SC15 recommended that WCPFC16 consider measures to reduce the overall catch of this stock, including through the expansion of the geographical scope of CMM 2006-04.
- 7) Administration issues
 - a) SC15 recommended the current SC Chair U. Faasili continue for his second term, and recommended T. Halafihi (Tonga) as SC Vice Chair.
 - b) SC15 recommended to the Commission that SC16 would be held in Apia, Samoa during 11– 20 August, 2020. Tonga offered to host in 2021, and Palau offered to serve as host in 2021 should circumstances prevent Tonga from hosting.

AGENDA ITEM 2 — CONSERVATION AND MANAGEMENT MEASURES

2.1 Pacific bluefin tuna (CMM 2018-02)

- 8. The Committee reviewed the Chair’s Summary of the 4th Joint IATTC and WCPFC-NC Working Group Meeting on the Management of Pacific Bluefin Tuna (IATTC-NC-JWG04-00).
- 9. NC15 recommends that the Commission adopt revised Conservation and Management Measure on Pacific Bluefin Tuna in Attachment D.
- 10. NC15 agreed to request the ISC to conduct projections of the harvest scenarios shown in Table 1 below and the base case (current management regime), based on the 2020 assessment. The outputs should include the probability of reaching the initial and 2nd rebuilding targets by their respective target dates in accordance with paragraph 2.1 of HS 2017-02, the likely date (year) of reaching each of the two targets, the expected fishery impact on spawning stock biomass (SSB) of each of the major eastern Pacific Ocean (EPO) and western and central Pacific Ocean (WCPO) fisheries upon reaching each of the two targets, and any other outputs deemed useful by the ISC.

Table 1. Scenarios for catch increase. (A 250t transfer of catch limit from small fish to large fish by Japan is assumed to continue until 2020 under all scenarios.)

West Pacific		East Pacific
Small fish	Large fish	
0	500t	500t
250t	250t	500t
0	600t	400t
5%	1300t	700t
10%	1300t	700t
5%	1000t	500t
0	1650t	660t
5%		5%
10%		10%
15%		15%
20%		20%
125t	375t	550t

11. NC15 requested that ISC provide fishery impact on the SSB under recent conditions, taking into account the difference in age caught. ISC was also requested to provide a matrix of conversion values across age classes.

12. NC15 adopted the terms of reference for the Pacific bluefin tuna MSE in Attachment E.

13. NC15 adopted candidate reference points and harvest control rules for Pacific bluefin tuna in Attachment F.

2.2 North Pacific albacore (CMM 2005-03)

2.2.1 Reports from CCMs and Observers

14. Canada, Japan, Korea, and USA briefly discussed and provided context for the levels of fishing effort (number of vessels, vessel days) and catch reported in NC15-WP-01. China, Fiji, the Philippines, and Vanuatu were not present and did not speak to the reported amounts for their fleets. It was noted that the Philippines reports the existence of an artisanal fishery for North Pacific albacore but did not report catch amounts, as required under the CMM. Members also expressed concern that the level of fishing effort by Vanuatu vessels is nearly three times above the 2002-2004 baseline level established to determine compliance. The Chair agreed to correspond with Vanuatu to seek clarification and determine if this represents a compliance issue.

15. Korea expressed concern that it has no vessels “fishing for” North Pacific albacore since 2008 yet NC15-WP-01 reports catch, which would be incidental catch (“bycatch”). This has resulted in the Technical and Compliance Committee finding Korea non-compliant with this obligation. As shown in NC15-WP-01 (Table 2), Korea’s 2002-2004 average fishing effort for North Pacific albacore was 1,072 fishing days and 13 vessels. In 2018, Korea’s fishing effort was 1,345 days but none of its vessels were targeting (“fishing for”) North Pacific albacore; these vessels caught 100 tonnes of North Pacific albacore incidentally, which was less than 1% of the total catch of Korean longliners. In fact, Korea has had no vessels targeting North Pacific albacore since 2008, and no Korean vessels have fished for North Pacific albacore north of 20°N latitude. All of the fishing effort occurred in fisheries catching North Pacific albacore incidentally.

16. In relation to its incidental catch, Korea noted that CMM 2005-03 is applicable to the entire Convention Area north of the equator rather than just the area north of 20° N latitude. In contrast, the area of applicability of measures for SP albacore is south of 20°S latitude.

17. It was explained that CMM 2005-03, from which this reporting obligation derives, requires reporting of all catch (whether in directed fisheries or caught incidentally) but only limits fishing effort for vessels targeting (“fishing for”) North Pacific albacore in relation to the 2002-2004 baseline level. Therefore, the information reported for Korea should not result in it being judged non-compliant.

2.2.2 Interim harvest strategy for North Pacific albacore fishery (HS 2017-01)

18. NC15 reviewed the progress of ISC’s MSE process, including the results and recommendations of the 4th North Pacific Albacore MSE Workshop held in Yokohama, 5-7 March 2019, in line with the adopted HS 2017-01.

19. H. Kiyofuji (ISC ALBWG chair) provided the following report on the results of first round of the North Pacific albacore MSE.

The goal of this MSE is to examine the performance of alternative harvest strategies and associated reference points for North Pacific albacore. Performance was evaluated based on management objectives pre-agreed upon with managers and stakeholders. The results of the MSE analysis was summarized into five main points (NC15-IP-05). In addition, the ALBWG noted several limitations of the current MSE, which were communicated to the managers and stakeholders (NC15-IP-05). The 2019-2020 meeting schedule was also presented, with the ALBWG focusing on the regular stock assessment cycle after NC15. The data preparatory and benchmark assessment meetings are scheduled for November 2019 (Shimizu, Japan) and March 2020 (La Jolla, USA), respectively. The ALBWG, especially the MSE specialist, will continue working on the MSE analysis for the second round of the MSE and the results will be reviewed at 5th ISC MSE workshop scheduled tentatively in late 2020 or early 2021.

20. Canada recommended holding a workshop for managers to review the results of the next round of the MSE in conjunction with NC16. This would facilitate participation by fishery managers. However, given that the ISC ALBWG will be completing a benchmark assessment for ISC20 (July 2020), the next round of MSE modeling cannot be completed by then. It was agreed that the current proposal to hold such a workshop in late 2020 or early 2021 is reasonable. Nonetheless, the importance of ensuring participation by managers, stakeholders, and scientists was emphasized by several members.

21. NC15 did not provide any additional guidance of specific elements to be considered in the next round of the MSE, noting that members may submit proposals for consideration when the NC convenes on the margins of WCPFC16.

2.2.3 Review of the CMM 2005-03

22. The last North Pacific albacore stock assessment was conducted in 2017. In 2018 IATTC adopted a revised Resolution C-18-03 (amending Resolution C-13-03 and supplementing Resolution C-05-02 on North Pacific albacore).

23. Canada introduced its proposal for changes to CMM 2005-03 (NC15-DP-15). The proposal would make changes to the preamble and remove the requirement for reporting every six months but would retain the reporting that is reviewed annually at NC. This would more closely align WCPFC reporting obligations to those of IATTC.

24. USA voiced support for the proposal and suggested that previous NC decisions specifying elements of the CMM be incorporated into the measure by expanding the scope of Canada's proposal. Canada supported expanding its proposal in this regard.

25. Japan, noting the previous discussion about the applicability of the measure, recommended that an expanded proposal also limit its applicability to the area north of 20°N latitude. USA disagreed, because this would be outside the scope of specifications previously agreed to by NC.

26. Canada and USA submitted a revised joint proposal (NC15-DP-15 (Rev. 2)) to amend CMM 2005-03 to incorporate changes to the preamble updating the status of the stock and to incorporate previous decisions of the NC interpreting elements of the measure. Changes to the preamble simply reflect the most recent information on stock status based on the 2017 ISC stock assessment and decisions made by the IATTC. The operative section of the revised proposal includes the specification of "current level" of fishing effort as 2002-2004, memorializes the flexibility for CCMs to implement obligations across the entire North Pacific, and includes in an annex a template for summarizing CCM reporting of fishing effort consistent with obligations in the CMM.

27. Based on an intervention from Japan, language related to the opportunity for CCMs to report for the entire North Pacific was moved to a footnote with the decision as reported in the NC5 report (paragraph 55) quoted.

28. With these and other modest changes, NC15 recommends that the Commission adopt the revised CMM replacing CMM 2005-03 (Attachment G).

2.3 North Pacific swordfish

29. USA emphasized that it is in the interest of the NC that the ISC work with IATTC staff scientists so that the next North Pacific swordfish stock assessment includes both the WCNPO stock and the stock that straddles the EPO and WCPO regions.

2.3.1 Development of a management framework

30. Consistent with the work programme and NC's task in 2019 to "recommend reference points, decision rules, and harvest control rules (HCRs) and develop a draft CMM," USA introduced its proposal on a harvest strategy (NC15-DP-14). The proposal includes the identification of a limit reference point (F_{MSY}).

31. Japan, recalling the discussion at NC14 about the use of fishing mortality (F)-based reference points versus biomass-based reference points, expressed concern about the proposal. Some of its fleets catch swordfish incidentally, which makes operationalizing an F-based reference point difficult.

32. Chinese Taipei expressed concern about using an F-based limit reference point for the same reason – swordfish is caught incidentally by Chinese Taipei longliners.

33. USA noted, first, that there is an implicit exploitation rate limit associated with any biomass-based reference point. Second, exploitation rate based reference points are largely determined by life history parameters, which are well known for North Pacific swordfish, so use of this type seems well suited for this stock. If a biomass based reference point were to be included in the proposal it would be better suited as a target. USA also noted that, as a Level 1 stock under the Commission’s hierarchical approach for setting biological reference points, the appropriate biomass-based reference point would be B_{MSY} , which it views as too precautionary to be used as a limit.

34. Japan noted that fishing at F_{MSY} should result in stock size reaching B_{MSY} over the long term and sought further clarification on the rationale for the use of an F-based limit reference point.

35. After discussion on the margins of the meeting Japan agreed with USA’s proposal to establish F_{MSY} as the limit reference point. USA noted that current fishing mortality is less than half of F_{MSY} ($F/F_{MSY} \approx 45\%$) and current SSB is 87% larger than SSB_{MSY} .

36. Based on further discussion, additional changes were made to section 5 of the Harvest Strategy, decision rules. In particular, a sentence was added recognizing the challenges in implementing effective measures for fleets not targeting swordfish.

37. With these changes NC15 recommends that the Commission adopt the Harvest Strategy for North Pacific Swordfish Fisheries (Attachment H). NC also noted its intent to consider conservation and management measures in 2020 based on the ISC advice.

2.4 Conservation and management measures for other stocks

2.4.1 Bigeye, yellowfin and skipjack tunas (CMM 2018-01)

38. NC15 considered the impacts of CMM 2018-01 (*CMM for bigeye, yellowfin and skipjack tuna in the western and central Pacific Ocean*) adopted at WCPFC15 on tuna fisheries in the North Pacific Ocean north of 20°N latitude. Japan noted that the situation remains unchanged with respect to the continued decline skipjack catches by its coastal fisheries. NC15 agreed to reiterate its previously expressed position on this issue:

39. NC15 expressed its concern regarding the status of tropical tuna stocks, not only because those species are being caught in the northern area, but also that the status of those species could impact the management of other species through target shift in the northern area.

2.4.2 North Pacific striped marlin (CMM 2010-01)

40. H. Ijima, Chair of the ISC BILLWG, presented the following summary of the benchmark assessment for WCNPO striped marlin adopted by ISC20.

The 2019 assessment used a Stock Synthesis model with the best-available catch, abundance index, and length composition data for 1975-2017. The results indicated that biomass (age 1 and older) for the WCNPO striped marlin stock decreased from 17,000 metric tons in 1975 to 6,000 metric tons in 2017. Estimated fishing mortality (F) averaged 0.97 between 1975 and 1994 with a range of 0.60 to 1.59, peaked at $F=1.71$ for average of age-3-12 fish in 2001, and declined sharply to $F=0.64$ for average of age-3-12 fish in the last three years of the assessment time series (2015-

2017). Fishing mortality has fluctuated around F_{MSY} since 2013. Compared to MSY-based reference points, the current spawning biomass (average for 2015-2017) was 76% below SSB_{MSY} and the current fishing mortality (average for ages 3–12 in 2015-2017) was 7% above F_{MSY} . The base case model indicated that under current conditions the WCNPO striped marlin stock was overfished and was subject to overfishing relative to MSY-based reference points.

41. Japan noted that high seas driftnet fisheries were prevalent until the United Nations established a moratorium in 1992 and these fisheries had substantial billfish catch. With this fishing effort removed one would expect a reduced fishery impact on the stock but actually the biomass declined and fishing mortality increased, to which a reasonable explanation should be provided.

42. The BILLWG Chair noted that in the sensitivity runs conducted as part of the assessment high seas drift gillnet catch had little effect. He recognized that this aspect of the assessment merits further discussion.

2.4.2.1 Consultative Draft Proposal for a Rebuilding Plan

43. USA introduced its consultative draft proposal (NC15-DP-13) recognizing that striped marlin is not a northern stock under the purview of the NC, so no proposal emerging from NC15 is expected. USA noted that once a rebuilding plan is adopted by the Commission, a subsequent action would be necessary to implement management measures to achieve a rebuilding plan's target.

44. Speaking to the rebuilding target, USA noted that $20\%SSB_{F=0}$ is a frequently accepted proxy for B_{MSY} for tuna and billfish.

45. Japan, while recognizing concern with stock status, noted that the stock assessment produces divergent results depending on the recruitment scenario used. This case has some similarities with Western Atlantic bluefin tuna where divergent recruitment scenarios confounded the discussion of an appropriate management response. In the case of striped marlin, it is necessary to decide which recruitment scenario to consider when formulating a rebuilding strategy. This would be particularly relevant to determining the rebuilding time period.

46. Chinese Taipei noted that the estimate of B_{MSY} is around $15\%SSB_{F=0}$ and highlighted the lack of success to date in recovering the stock. This suggests that the target in the current proposal will be too difficult to achieve and Chinese Taipei recommended considering a lower target consistent with B_{MSY} .

47. USA welcomed additional comments in writing in advance of WCPFC16 – taking into account the comments made across the floor by Japan and Chinese Taipei – and noting its intent to submit a proposal for consideration at WCPFC16.

48. NC15 requested that the ISC provide advice on which future recruitment scenario is the most likely one over the near term. NC15 also requested the ISC to explain why the striped marlin stock decreased and the fishing mortality increased after a drastic decrease in fishing effort by high seas driftnet fisheries in the early 1990s.

2.4.3 Sharks (CMM 2010-07, CMM 2011-04, CMM 2012-04, CMM 2013-08 and CMM 2014-05)

49. The Commission has been developing a comprehensive CMM for Sharks through Shark-IWG. The Chair of the Shark-IWG described work on a comprehensive shark CMM leading up to and during WCPFC15. A measure was not adopted at that time but the Chair, taking into account the discussion, submitted another draft to the Secretariat after WCPFC15. The EU provided additional comments, which

the Shark-IWG Chair has taken into account. Taking into account further response from the EU he intends to submit a revised proposal to the Technical and Compliance Committee.

2.4.4 Seabirds (CMM 2018-03)

50. USA noted that WCPFC12 (2015) revised the conservation and management measure for seabirds to remove the exemption for small vessels fishing north of 23°N latitude as CMM 2015-03. These requirements have been carried over into the most recently adopted measure, CMM 2018-03. As part of this change to the measure, modified tori-line specifications for vessels less than 24 m in length were agreed to, with the understanding that these modified designs would be reviewed no later than three years from the implementation date, based on scientific data. Given that the measure has now been in effect for close to three years, USA takes the view that members that have implemented the use of streamer-less tori lines by small vessels fishing north of 23°N latitude must demonstrate the efficacy of such mitigation measures.

51. Japan stated that it had submitted the results of its research on the effective design of tori-lines for the Japanese small-scale fleet in the North Pacific at the SC15 (SC15-EB-WP-06) and would provide updates at future meetings of the SC.

52. NC15 requested members submit further information to SC16 on tori line designs being implemented for vessels less than 24m in length – including any evidence of efficacy as demonstrated by reductions in bycatch and interaction rates – so that SC16 may weigh in on the potential implications of such designs.

2.4.5 Sea turtles (CMM 2008-03)

53. NC15 did not discuss anything under this agenda item.

AGENDA ITEM 3 — REGIONAL OBSERVER PROGRAMME

54. NC15 did not discuss anything under this agenda item.

AGENDA ITEM 4 — DATA

4.1 Review of the status of data and data gaps for northern stocks

55. The Chair will correspond with China on the need for it to submit required data.

AGENDA ITEM 5 — COOPERATION WITH OTHER ORGANIZATIONS

5.1 ISC

56. As recorded under other agenda item, NC15 made the requests to ISC related to Pacific bluefin tuna (section 2.1) and North Pacific striped marlin (section 2.4.2).

5.2 IATTC

57. NC15 noted its continued cooperation with IATTC, especially in relation to Pacific bluefin tuna and North Pacific albacore management.

AGENDA ITEM 6 — FUTURE WORK PROGRAMME

6.1 Work Programme for 2020-2022

58. NC15 reviewed and adopted the 2020-2022 Work Programme for the Northern Committee (Attachment I).

AGENDA ITEM 7 — OTHER MATTERS

7.1 Administrative arrangements for the Committee

7.1.1 Secretariat functions and costs

59. NC15 did not discuss anything under this agenda item.

7.1.2 Rules of Procedure

60. USA noted the need to address the problem of the NC not achieving a quorum at some of its meetings. In this regard the NC follows the Commission rules of procedure, which may not be suited for a body with smaller membership. USA noted that the NC could consider recommending a change to Annex 1 (Rules of procedure relating to the Northern Committee) of the Commission's Rules of Procedure to establish a different quorum threshold specific to the NC. Japan provided a different view that there was a quorum at NC14 and this issue should be given more serious consideration if NC16 has no quorum.

61. This issue may be revisited when the NC convenes on the margins of WCPFC16.

7.2 Next meeting

62. Japan offered to host the Sixteenth Regular Session of the NC, at a time to be determined.

63. Canada, noting the arrangement to alternate the meeting venue between Japan and another member, expressed its desire to host NC17 in 2021.

7.3 Other business

64. NC15 requested NC Chair to write formal letters to China, Philippines, Fiji, and Vanuatu expressing concern about their lack of attendance and requesting their attendance to future NC meetings and submission of required data including information related to their compliance with the relevant CMMs.

AGENDA ITEM 8 — ADOPTION OF THE SUMMARY REPORT OF THE 15TH REGULAR SESSION OF THE NORTHERN COMMITTEE

65. [NC15 adopted the Summary Report of its 15th Regular Session.] The Chair's Summary of the 2nd Catch Documentation Scheme Technical Meeting is in Attachment J.

AGENDA ITEM 9 — CLOSE OF MEETING

66. The meeting to be resumed on the margins of WCPFC16.

**The Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee
Fifteenth Regular Session**

Portland, Oregon, USA
3 – 6 September 2019

LIST OF PARTICIPANTS

CHAIR

Masanori MIYAHARA

President,
Fisheries Research Agency
Queen's Tower B 15F
2-3-3, Minatomirai, Nishi-ku,
Yokohama City, Kanagawa
masamiya@fra.affrc.go.jp

CANADA

Robert Day

Director, International Fisheries Management
and Bilateral Relations
Fisheries and Oceans Canada
200 Kent Street, Mail Stop 13S021
Ottawa, Ontario K1A 0E6
Canada
+1-613-993-7979
robert.day@dfo-mpo.gc.ca

Dale Marsden

Senior Policy Advisor
Fisheries and Oceans Canada
200 Kent Street, Mail Stop 13S021
Ottawa, Ontario K1A 0E6
Canada
+1-613-949-8599
dale.marsden@dfo-mpo.gc.ca

Roger Wysocki

Manager, Fisheries Science
Federal Department of Fisheries and Oceans
200 Kent St. Ottawa, ON
K1A 0E6

Canada

613-990-0704

roger.wysocki@dfo-mpo.gc.ca

COOK ISLANDS

Marino-O-Te-Au Wichman

Data Manager
Ministry of Marine Resources
PO BOX 85, Rarotonga
Cook Islands
Cook Islands
68228721
m.wichman@mmr.gov.ck

JAPAN

Shingo OTA

Councilor, Resources Management Department
Fisheries Agency of Japan
1-2-1 Kasumigaseki, Chiyoda-ku
Tokyo, Japan 100-8907
Japan
shingo_ota810@maff.go.jp

Hirohide MATSUSHIMA

Assistant Director, International Affairs Division
Fisheries Agency of Japan
Japan
hiro_matsushima500@maff.go.jp

Kento OTSUYAMA

Fisheries and Resources Management Division
Fisheries Agency of Japan
Japan
kento_otsuyama940@maff.go.jp

Ryo OMORI

Assistant Director, International Affairs Division
Fisheries Agency of Japan
Japan
ryo_omori330@maff.go.jp

Takumi FUKUDA

Fisheries Negotiator, International Affairs
Division,
Fisheries Agency of Japan
Japan
takumi_fukuda720@maff.go.jp

Akira BAMBA

International Affairs Division
Fisheries Agency of Japan
1-2-1 Kasumigaseki
Chiyoda-ku, Tokyo
Japan 100-8907
+81 3 3502 8459
akira_bamba180@maff.go.jp

Noriyoshi HIJIKATA

Section Chief, Fisheries and Resources
Management Division
Fisheries Agency of JAPAN
1-2-1 Kasumigaseki, Chiyoda-ku, Tokyo
Japan
noriyoshi_hijikat300@maff.go.jp

Shuya Nakatsuka

Head, Pacific Bluefin Tuna Resources Group
National Research Institute of Far Seas Fisheries
5-7-1 Orido, Shimizu
Shizuoka
Japan
543366035
snakatsuka@affrc.go.jp

Hiroataka Ijima

Researcher
National Research Institute of Far Seas Fisheries
Japan
ijima@affrc.go.jp

Hiromu FUKUDA

Pacific Bluefin Tuna Resources Group
National Research Institute of Far Seas Fisheries
Japan
fukudahiroму@affrc.go.jp

Hidetada KIYOFUJI

Skipjack and Albacore Group, Skipjack and
Tuna Resources Division
National Research Institute of Far Seas Fisheries
Japan
hkiyofuj@affrc.go.jp

Hiroaki Okamoto

Director, Bluefin Tuna Resources Department
National Research Institute of Far Seas Fisheries
5-7-1 Orido, Shimizu-Ku, Shizuoka-Shi,
Shizuoka 4248633, Japan
Japan
+81-54-336-6000
okamoto@affrc.go.jp

Susumu OIKAWA

Head of Ship Owner Department
North Japan Sea Purse Seiners Association
Japan
japan_delegation008@yahoo.co.jp

Isao ISHII

Executive managing director
Central Japan Sea purse seine fishery council
Japan
japan_delegation007@yahoo.co.jp

Kenshi HAMADA

Member
SAN-IN PURSE SEINE FISHERIES
COOPERATIVE
Japan
japan_delegation006@yahoo.co.jp

Satoshi MATSUMOTO

Member
SAN-IN PURSE SEINE FISHERIES
COOPERATIVE
Japan
japan_delegation005@yahoo.co.jp

Hidefumi KAWAMOTO

Executive director
SAN-IN PURSE SEINE FISHERIES
COOPERATIVE
Japan
japan_delegation004@yahoo.co.jp

Hiroshi MORIWAKI

Vice-union president
SAN-IN PURSE SEINE FISHERIES
COOPERATIVE
Japan
japan_delegation003@yahoo.co.jp

Yuji IWATA
Union president
SAN-IN PURSE SEINE FISHERIES
COOPERATIVE
Japan
japan_delegation002@yahoo.co.jp

Makoto HOTAI
Associate Director
Japan Purse Seiner's Association
Japan
makoto-hotai@enmaki.jp

Tetsuya KUNITO
Staff
Federation Of North Pacific District Purse Seine
Fisheries Cooperative associations of Japan
Japan
kunito0804@gmail.com

Takahide NARUKO
President
Federation Of North Pacific District Purse Seine
Fisheries Cooperative associations of Japan
Japan
hokubu-taiheiyou@kbe.biglobe.ne.jp

Kenji AOKI
Director Sales Manager
NITTO SUISAN KABUSHIKIGAISHA
Japan
nitto2784.6@gmail.com

Akihito FUKUYAMA
Executive Secretary
Japan Far Seas Purse Seine Fishing Association
Japan
fukuyama@kaimaki.or.jp

Kosuke HIGAKI
Executive General Manager
National federation of fisheries co-operative
associations
Japan
k-higaki@zengyoren.jf-net.ne.jp

Kazushige HAZAMA
Chief
National Offshore Tuna Fisheries Association of
Japan
Japan
hazama@kinkatsukyo.or.jp

Hiroshi TAKASHIMA
Deputy Director, Agricultural and Marine
Products Office,
Ministry of Economy, Trade and Industry
Japan
takashima-hiroshi@meti.go.jp

Toyoaki IRIE
Assistant Director, Fishery Division, Economic
Affairs Bureau,
Ministry of Foreign Affairs
Japan
toyoaki.irie@mofa.go.jp

Yoshihiro Notomi
Managing Director
National Offshore Tuna Fisheries Association of
Japan
No.3 Tohan-bldg, 1-3-1, Uchikannda, Chiyoda-
ku, Tokyo, Japan
Japan
-6938
notomi@kinkatsukyo.or.jp

Kaoru KAWAMOTO
Interpreter
Fisheries Agency of JAPAN
Japan
japan_delegation@yahoo.co.jp

Ritu SUZUKI
Interpreter
Fisheries Agency of JAPAN
Japan
japan_delegation001@yahoo.co.jp

REPUBLIC OF KOREA

Seung-lyong KIM
Deputy Director
Ministry of Oceans and Fisheries
Republic of Korea
kpoksl5686@korea.kr

Zang Geun KIM

Invited Scientist
National Institute of Fisheries Science
216,Gijanghaean-ro, Gijang-eup, Busan, 46083,
Republic of Korea
Republic of Korea
010-2549-5803
zgkim5676@gmail.com

Won Tae-hoon

Policy Analyst
Korea Overseas Fisheries Cooperation Center
Republic of Korea
4indamorning@kofci.org

CHINESE TAIPEI

Chi-Chao Liu

Senior Specialist
Fisheries Agency, Council of Agriculture
Chinese Taipei
chichao@ms1.f.a.gov.tw

Kuan-Ting Lee

General Secretary
Taiwan Tuna Association
Chinese Taipei
simon@tuna.org.tw

Shui-Kai Chang

Professor
National Sun Yat-Sen University
Chinese Taipei
skchang@faculty.nsysu.edu.tw

Shirley Shih-Ning Liu

Secretary
Overseas Fisheries Development Council
Chinese Taipei
shirley@ofdc.org.tw

Wen-Chi Wang

Specialist
Fisheries Agency, Council of Agriculture
Chinese Taipei
wenchi@ms1.f.a.gov.tw

Lin Yu-Chih

President
Taiwan Tuna Association

Chinese Taipei
ttatonylin@gmail.com

UNITED STATES OF AMERICA

Michael Tosatto

Regional Administrator, Pacific Islands
Regional Office
NOAA Fisheries
United States of America
+1 808-725-5001
michael.tosatto@noaa.gov

Michael Brakke

Foreign Affairs Officer
U.S. Department of State
United States of America
BrakkeMT@state.gov

Tom Graham

Chief, International Fisheries Division
NOAA NMFS
Pacific Islands Regional Office
1845 Wasp Boulevard, Bldg 176
Honolulu, Hawaii 96818
United States of America
+1 808 725 5032
tom.graham@noaa.gov

Celia Barroso

Fishery Policy Analyst
NOAA Fisheries
501 w ocean blvd, Ste 4200
United States of America
celia.barroso@noaa.gov

Jon Brodziak

Senior Stock Assessment Scientist
NOAA Fisheries/Pacific Islands Fisheries
Science Center
Pacific Islands Fisheries Science Center
1845 Wasp Boulevard, Honolulu, HI, 96818
United States of America
8087255617
Jon.Brodziak@noaa.gov

Steve Teo

Fisheries Scientist
NOAA Fisheries
United States of America
steve.teo@noaa.gov

Michelle Sculley
Research Fish Biologist
NOAA NMFS
1845 Wasp Blvd. Bld 176
Honolulu, HI 96818
United States of America
808-725-5705
michelle.sculley@noaa.gov

Barry Thom
Regional Administrator, West Coast Region
NOAA/NMFS
1201 NE Lloyd Blvd,
Suite 1100
United States of America
5032316266
Barry.Thom@noaa.gov

Christopher Dahl
Staff Officer - HMS
Pacific Fishery Management Council
7700 NE Ambassador Pl.
Ste 101
Portland, OR 97220 USA
United States of America
5038202422
kit.dahl@noaa.gov

Kristen C. Koch
Science and Research Director, Southwest
Fisheries Science Center
NOAA/NMFS/Southwest Fisheries Science
Center
8901 La Jolla Shores Drive
La Jolla, CA 92037
United States of America
8585467081
kristen.c.koch@noaa.gov

Ryan Wulff
ARA for Sustainable Fisheries
NOAA
650 Capitol Mall, Ste 5-100, Sacramento, CA
95814
United States of America
916-307-9052
ryan.wulff@noaa.gov

Emily Crigler
Fishery Policy Analyst

NOAA Fisheries
United States of America
+1 808-725-5036
emily.crigler@noaa.gov

Charles A Tracy
Executive Director
Pacific Fishery Management Council
7700 NE Ambassador Place, Ste 101
Portland, OR 97220
United States of America
503-820-2415
Chuck.Tracy@noaa.gov

Eric Kingma
Executive Director
Hawaii Longline Association
1131 N Nimitz Hwy Honolulu HI 96718
United States of America
8983892653
Eric.K.Kingma@gmail.com

Michael Conroy
President
West Coast Fisheries Consultants
9212 Rosser St
Bellflower, CA 90706
United States of America
5627617176
Mike@wecofm.com

Josh Madeira
Senior Policy Manager
Monterey Bay Aquarium
886 Cannery Row, Monterey, CA 93940
United States of America
(831) 648-9826
jmadeira@mbayaq.org

Christa Svensson
Fleet Manager
Jessie's Ilwaco Fish Company, Inc/ Alber
Seafoods
117 HOWERTON WAY SE
United States of America
3606423773
christas@ilwacofish.com

Rick Goche
President
American Fishermen's Research Foundation

POB 992723
Redding, CA 96099
United States of America
5419912963
rick@sacredseatuna.com

John McKenzie
International Office
U.S. Coast Guard
17th Coast Guard District
P.O. Box 25517
Juneau, AK 99802
United States of America
907-463-2292
john.s.mckenzie@uscg.mil

Marc Gorelnik
Vice-Chair
Pacific Fishery Management Council
8042 Terrace Dr.
El Cerrito, CA 94530
USA
United States of America
+1 4154099529
marc@gorelniklaw.com

Theresa Labriola
Pacific Program Director
Wild Oceans
United States of America
tlabriola@wildoceans.org

Kitty M. Simonds
Executive Director
Western Pacific Regional Fishery Management
Council
1164 Bishop st, Suite 1400
Honolulu, HI 96813
United States of America
808-522-8220
kitty.simonds@wpcouncil.org

Corey Niles
Coastal Marine Policy Lead/Pacific Fishery
Management Council designee
Washington Department of Fish and Wildlife
Washington Department of Fish and Wildlife
PO Box 43200
Olympia, WA 98504-3200
United States of America
3609022733

corey.niles@dfw.wa.gov

Peter H. Flournoy
General Counsel
American Fishermen's Research Foundation
International Law Offices of San Diego
740 North Harbor Drive
San Diego, CA 92101
United States of America
1-619-203-5349
phf@international-law-offices.com

Elizabeth Hellmers
HMSMT Co-chair/Environmental Scientist
Pacific Fishery Management Council/California
Dept Fish & Wildlife
8901 La Jolla Shores Dr
La Jolla, CA 92037
United States of America
858-334-2813
elizabeth.hellmers@wildlife.ca.gov

Michelle Horeczko
Senior Environmental Scientist Supervisor
Ca Dept of Fish and Wildlife
4665 Lampson Avenue Suite C
Los Alamitos , CA 90720
United States of America
5623427198
michelle.horeczko@Wildlife.ca.gov

Dorothy Lowman
US Commissioner/WCPFC
Lowman and Associates
6507 SW Barnes Road, Portland OR 97225
United States of America
5038044234
dmlowman01@comcast.net

David James Rudie
President
Catalina Offshore Products
2653 Fairfield St
San Diego, California 92110
United States of America
619-572-2738
Rudie.dave@gmail.com

Jessica Watson
Pacific Fishery Management Council Highly
Migratory Species Management Team

Oregon Department of Fish and Wildlife
2040 SE Marine Science Drive
United States of America
5418677701
jessica.l.watson@state.or.us

Michael Thompson
US Commissioner / IATTC
US delegation
26032 Via Del Rey
San Juan Capistrano, CA 92675
United States of America
9495005901
mthompson041@cox.net

Tom Schiff
Sport fisherman
Schiff & Association
6418 Camnito Listo, San Diego
United States of America
8583423839
tschiffsd@aol.com

John D. Hall
Secretary
California Pelagic Fisheries Association
242 Rosa Corte
Walnut Creek, CA 94598
United States of America
925.989.4701
Dex1007@sbcglobal.net

MEXICO

Michel Jules Dreyfus Leon
Researcher
Instituto Nacional de la Pesca
km 97.5 carretera Tijuana Ensenada
Baja California, Mexico
5.26461167084
michel.dreyfus@inapesca.gob.mx
dreyfus@cicese.mx

Jose Carlos Gonzalez
Director
Servax Bleu
Mexico
jgonzalez@grupoaltex.com

Benito Sarmiento
Director General

BAJA AQUA FARMS
Recinto Portuario S/N Parque Industrial
Fondeport
Mexico
6461854163
benito.sarmiento@bajaaquafarms.mx

Samuel Michel
Institutional Relations
BAJA AQUA FARMS
Recinto Portuario S/N Parque Industrial
Fondeport
Mexico
6461854163
samuel.michel@bajaaquafarms.mx

EUROPEAN UNION

Josu Santiago
Head of Tuna Research Area
AZTI
Txatxarramendi irla z/g
Sukarrieta - Basque Country (Spain)
European Union
+34 664303631
jsantiago@azti.es

INTER-AMERICAN TROPICAL TUNA COMMISSION (IATTC)

Mark Maunder
Head of Stock Assessment Program
Inter-American Tropical Tuna Commission
(IATTC)
mmaunder@iattc.org

Brad Wiley
IATTC Secretariat
Policy Adviser/ Field Office Supervisor
8901 La Jolla Shores Dr.
San Diego, CA 92037 USA
+1 858.546.7043
bwiley@iattc.org

INTERNATIONAL SCIENTIFIC COMMITTEE FOR TUNA AND TUNA-LIKE SPECIES IN THE NORTH PACIFIC OCEAN (ISC)

John Holmes
Chair

International Scientific Committee for Tuna and
Tuna-like Species in the North Pacific Ocean
(ISC)
Pacific Biological Station
3190 Hammond Bay Road
Nanaimo, BC, Canada, V9T 6N7
Canada
250-756-7145
john.holmes@dfo-mpo.gc.ca

Charles Farwell
Senior Scientist for Pacific Bluefin Tuna
Research
Monterey Bay Aquarium
886 Cannery Row
Monterey, CA 93940
International Scientific Committee for Tuna and
Tuna-like Species in the North Pacific Ocean
(ISC)
1831-594-7824
Cfarwell@mbayaq.org

***PACIFIC ISLANDS FORUM FISHERIES
AGENCY (FFA)***

Wetjens Dimmlich
Fishery Management Advisor
Pacific Islands Forum Fisheries Agency (FFA)
Honiara, Guadalcanal
Solomon Islands
+61 481 363084
wetjens@ffa.int

Vivian Fernandes
Compliance Policy Adviser
Pacific Islands Forum Fisheries Agency (FFA)
Honiara, Guadalcanal
Solomon Islands
vivian.fernandes@ffa.int

***INTERNATIONAL ENVIRONMENTAL LAW
PROJECT***

Chris Wold
Director
International Environmental Law Project
10015 SW Terwilliger Blvd.
Portland, Oregon 97219
USA
5037686734
wold@lclark.edu

Jocelyn Jane Phares
Student Worker
International Environmental Law Project
Lewis & Clark Law School
10015 S.W. Terwilliger Blvd.
MSC 51
Portland, OR
97219, USA
1-(304)-614-8752
jphares@lclark.edu

***INTERNATIONAL POLE AND LINE
FOUNDATION (IPNLF)***

Andre Boustany
Principal Investigator, Fisheries
Monterey Bay Aquarium
886 Cannery Row
Monterey, CA, USA 93940
8314021364
aboustany@mbayaq.org

***ORGANIZATION FOR REGIONAL AND
INTER-REGIONAL STUDIES (ORIS)***

Yasuhiro Sanada
researcher
Organization for Regional and Inter-regional
Studies (ORIS)
Floor 3, Bldg.No.9
Waseda Campus, Waseda University
1-6-1 Nishi-Waseda, Shinjuku-ku, Tokyo, 162-
8050 JAPAN
y-sanada@aoni.waseda.jp

Isao Sakaguchi
Professor
Gakushuin University, Faculty of Law
1-5-1 Mejiro, Toshimaku, Tokyo 171-8588
Japan
isao.sakaguchi@gakushuin.ac.jp

THE PEW CHARITABLE TRUSTS

James Gibbon
Manager, International Fisheries
The Pew Charitable Trusts
jgibbon@pewtrusts.org

Dave Gershman

Officer, International Fisheries
The Pew Charitable Trusts
901 E Street NW, Washington DC, 20004
Pew Charitable Trust
202-748-6649
dgershman@pewtrusts.org

WCPFC SECRETARIAT

Feleti Teo
Executive Director
WCPFC Secretariat
PO Box 2356, Kolonia, Pohnpei 96941

Federated States of Micronesia
+691-320-1992
feleti.teo@wcpfc.int

[Lara Manarangi-Trott](#)
[Compliance Manager](#)
[WCPFC Secretariat](#)
Lara.Manarangi-Trott@wcpfc.int

SungKwon Soh
Science Manager
WCPFC Secretariat
sungkwon.soh@wcpfc.int

**The Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee
Fifteenth Regular Session**

Portland, Oregon, USA
3 – 6 September 2019

COMMISSION CHAIR'S MESSAGE TO NC MEMBERS

Dear Members of the Northern Committee of the WCPFC,

It is my sincere regret that I am not able to join you this year, and miss the opportunity to follow on-sight discussions during the 15th session of the Northern Committee, and I would like to thank the United States for hosting NC 15 in the beautiful city of Portland that offers great craft beer, chocolate and coffee among others.

I would also like to thank the ISC and relevant Working Groups for your close collaboration with the NC and for your scientific analyses and advice that help the NC to engage in informed discussions on the Northern stocks. I also appreciate the IATTC for your on-going cooperation with the NC.

I understand that NC 16 will continue its import work on the conservation and management of the Northern Stocks, including the rebuilding of North Pacific striped marlin; Harvest Strategy for North Pacific swordfish; amendment to the North Pacific Albacore; and the ongoing work on the rebuilding and Management Strategy Evaluation on Pacific bluefin tuna and relevant development of a PBF CDS. I would like to take this opportunity to thank and congratulate the NC Members for your contribution to the work of the Commission and on your hard work and accomplishments over the years.

I am confident that the Commission is in good hands when it comes to the conservation and management of Northern stocks, and I sincerely hope that the NC Members will have fruitful outcomes during its 15th regular session and the joint NC-IATTC Working Group meeting.

I will also reach out to Members of the Northern Committee in every chance I get, including on the margins of the upcoming TCC meeting in Pohnpei, to follow the progresses that will have been made at NC 15.

I wish each and every one of you all the best.

Best Regards,

Jung-re Riley Kim
Chair
Western and Central Pacific Fisheries Commission

**The Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee
Fifteenth Regular Session**

Portland, Oregon, United States of America
3 – 6 September 2019

AGENDA

AGENDA ITEM 1 OPENING OF MEETING

- 1.1 Welcome**
- 1.2 Adoption of agenda**
- 1.3 Meeting arrangements**
- 1.4 Report from ISC and SC**
 - 1.4.1 Report from ISC
 - 1.4.2 Report from SC

AGENDA ITEM 2 CONSERVATION AND MANAGEMENT MEASURES

- 2.1 Pacific bluefin tuna (CMM 2018-02)**
- 2.2 North Pacific albacore (CMM 2005-03)**
 - 2.2.1 Reports from CCMs and Observers
 - 2.2.2 Interim harvest strategy for North Pacific albacore fishery (HS 2017-01)
 - 2.2.3 Review of the CMM 2005-03
- 2.3 North Pacific swordfish**
 - 2.3.1 Development of a management framework
- 2.4 Conservation and management measures for other stocks**
 - 2.4.1 Bigeye, yellowfin and skipjack tunas (CMM 2018-01)
 - 2.4.2 North Pacific striped marlin (CMM 2010-01)
 - 2.4.3 Sharks (CMM 2010-07, CMM 2011-04, CMM 2012-04, CMM 2013-08 and CMM 2014-05)
 - 2.4.4 Seabirds (CMM 2018-03)
 - 2.4.5 Sea turtles (CMM 2008-03)

AGENDA ITEM 3 REGIONAL OBSERVER PROGRAMME

AGENDA ITEM 4 DATA

- 4.1 Review of the status of data and data gaps for northern stocks**

AGENDA ITEM 5 COOPERATION WITH OTHER ORGANIZATIONS

- 3.1 ISC**
- 3.2 IATTC**

AGENDA ITEM 6 FUTURE WORK PROGRAMME

6.1 Work Programme for 2020-2022

AGENDA ITEM 7 OTHER MATTERS

7.1 Administrative arrangements for the Committee

7.1.1 Secretariat functions and costs

7.1.2 Rules of Procedure

7.2 Next meeting

7.3 Other business

AGENDA ITEM 8 ADOPTION OF THE SUMMARY REPORT OF THE 15TH REGULAR SESSION OF THE NORTHERN COMMITTEE

AGENDA ITEM 9 CLOSE OF MEETING

**The Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee
Fifteenth Regular Session**

Portland, Oregon, United States of America
3 – 6 September 2019

CONSERVATION AND MANAGEMENT MEASURE FOR PACIFIC BLUEFIN TUNA

Conservation and Management Measure 2020-XX

The Western and Central Pacific Fisheries Commission (WCPFC):

Recognizing that WCPFC6 adopted Conservation and Management Measure for Pacific bluefin tuna (CMM 2009-07) and the measure was revised ~~six~~eight times since then (CMM 2010-04, CMM 2012-06, CMM 2013-09, CMM 2014-04, CMM 2015-04, ~~and~~ CMM 2016-04, CMM2017-08 and CMM 2018-02) based on the conservation advice from the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC) on this stock;

Noting with concern the latest stock assessment provided by ISC Plenary Meeting in July 201~~6~~8, indicating the following:

- (1) SSB fluctuated throughout the assessment period (1952–2014~~6~~6), (2) SSB steadily declined from 1996 to 2010, and (3) ~~the decline appears to have ceased since 2010, although the stock remains near the historic low (2.6% of unfished SSB)~~ slow increase of the stock continues since 2011 including the most recent two years (2015-2016);
- ~~The 2014 estimated recruitment was relatively low, and the average recruitment for the last five years may have been below the historical average~~ The 2015 recruitment estimate is low and similar to estimates of previous years while the 2016 recruitment estimate is higher than the historical average, and the uncertainty of the 2016 recruitment estimate is higher than in previous years because it occurs in the terminal year of the assessment model and is mainly informed by one observation from troll age-0 CPUE index;
- The fishery exploitation rate in 2014~~5~~5-2013~~6~~6 exceeded all biological reference points evaluated by the ISC except FMED and FLOSS.
- Since the early 1990s, the WCPO purse seine fisheries, in particular those targeting small fish (age 0-1) have had an increasing impact on the spawning stock biomass, and in 2014~~6~~6 had a greater impact than any other fishery group.
- The projection results indicate that: ~~(1) the probability of SSB recovering to the initial rebuilding target (SSBMED1952-2014) by 2024 is 69% or above the level prescribed in current management measures by the WCPFC (CMM 2015~~8~~8-042) if low recruitment scenario is assumed and WCPFC CMM 2015-04 and IATTC Resolution (C-148-061) continue in force and are fully implemented; and (2) a 10%~~

~~reduction in the catch limit for fish smaller than 30 kg would have a larger effect on recovery than a 10% reduction in the catch limit for fish larger than 30 kg under the low recruitment scenario resulted in an estimated 987% probability of achieving the initial biomass rebuilding target (6.7% of SSBF=0) by 2024; and~~

- The estimated probability of achieving the second biomass rebuilding target (20% of SSBF=0) 10 years after the achievement of the initial rebuilding target or by 2034, whichever is earlier, is 96%; and
- Catching a high number of smaller juvenile fish can have a greater impact on future spawning stock biomass than catching the same weight of larger fish;

Noting also that in its response to requests from IATTC-WCPFC NC Joint Working Group, ISC Plenary Meeting in July 2019:

- Noted that the Japanese troll recruitment index value estimated for 2017 is similar to its historical average (1980-2017), that Japanese recruitment monitoring indices in 2017 and 2018 are higher than the 2016 value and that there is anecdotal evidence that larger fish are becoming more abundant in EPO, although this information needs to be confirmed for the next stock assessment expected in 2020;
- Recommended maintaining the conservation advice from ISC in 2018; and,
- Conducted projections of scenarios for catch increase in the same manner as in the 2018 assessment.

Further recalling that paragraph (4), Article 22 of the WCPFC Convention, which requires cooperation between the Commission and the IATTC to reach agreement to harmonize CMMs for fish stocks such as Pacific bluefin tuna that occur in the convention areas of both organizations;

Adopts, in accordance with Article 10 of the WCPFC Convention that:

General Provision

1 This conservation and management measure has been prepared to implement the Harvest Strategy for Pacific Bluefin Tuna Fisheries ([Harvest Strategy 2017-02](#)), and the Northern Committee shall periodically review and recommend revisions to this measure as needed to implement the Harvest Strategy.

Management measures

2 CCMs shall take measures necessary to ensure that:

- (1) Total fishing effort by their vessel fishing for Pacific bluefin tuna in the area north of the 20° N shall stay below the 2002–2004 annual average levels.
- (2) All catches of Pacific bluefin tuna less than 30 kg shall be reduced to 50% of the 2002– 2004 annual average levels. Any overage or underage of the catch limit shall be deducted from or may be added to the catch limit for the

following year. The maximum underage that a CCM may carry over in any given year shall not exceed 5% of its annual initial catch limit.¹

3 CCMs shall take measures necessary to ensure that all catches of Pacific Bluefin tuna 30kg or larger shall not be increased from the 2002-2004 annual average levels^{2,3}. Any overage or underage of the catch limit shall be deducted from or may be added to the catch limit for the following year. The maximum underage that a CCM may carry over in any given year shall not exceed 5% of its annual initial catch limit¹. However, in 2018, 2019, and 2020 CCMs may use part of the catch limit for Pacific bluefin tuna smaller than 30 kg stipulated in paragraph 2 (2) above to catch Pacific bluefin tuna 30 kg or larger in the same year. In this case, the ~~catch~~ amount of catch 30 kg or larger shall be counted against the catch limit for Pacific bluefin tuna smaller than 30 kg. CCMs shall not use the catch limit for Pacific bluefin tuna 30 kg or larger to catch Pacific bluefin tuna smaller than 30 kg. The ISC is requested to review, in its work referred to in Section 5 of Harvest Strategy, the implications of this special provision in terms of PBF mortality and stock rebuilding probabilities in 2020. Based on that review, in 2020 the Northern Committee will determine whether it should be continued past 2020, and if so, recommend changes to the CMM as appropriate.

4 All CCMs except Japan shall implement the limits in paragraph 2 and 3 on a calendar-year basis. Japan shall implement the limits using a management year other than the calendar year for some of its fisheries and have its implementation assessed with respect to its management year. To facilitate the assessment, Japan shall:

a. Use the following management years:

1. For its fisheries licensed by the Ministry of Agriculture, Forestry and Fisheries, use the calendar year as the management year.
2. For its other fisheries, use 1 April – 31 March as the management year⁴.

b. In its annual reports for PBF, for each category described in a.1 and a.2 above, complete the required reporting template for both the management year and calendar year clearly identifying fisheries for each management year.

~~45 CCMs shall report their 2002–2004 baseline fishing effort and <30 kg and >=30 kg catch levels for 2013 and 2014, by fishery, as referred to in paragraphs 2 and 3, to the Executive Director by 31 July 2015. CCMs shall also report to the Executive Director by 31 July each year their fishing effort and <30 kg and >=30 kg catch levels, by fishery, for the previous 3 year, accounting for all catches, including discards. The Executive Director will compile this~~

¹ Notwithstanding paragraph 2 and 3, a CCM may carry over up to 17% of its initial 2019 catch limits, which remain uncaught, to 2020.

² CCMs with a base line catch of 10 t or less may increase its catch as long as it does not exceed 10 t.

³ 300 tons of the catch limit of Pacific bluefin tuna 30kg or larger of Chinese Taipei will be transferred to Japan in 2020.

⁴ For the category described a.2, the TCC shall assess in year 20XX its implementation during the management year that starts 1 April 20XX-1 (e.g., in the 2020 compliance review, the TCC will assess Japan's implementation for its fisheries licensed by the Ministry of Agriculture, Forestry and Fisheries during calendar-year 2019 and for its other fisheries during 1 April 2019 through 31 March 2020).

information each year into an appropriate format for the use of the Northern Committee.

~~56~~ CCMs shall intensify cooperation for effective implementation of this CMM, including juvenile catch reduction.

~~67~~ CCMs, in particular those catching juvenile Pacific bluefin tuna, shall take measures to monitor and obtain prompt results of recruitment of juveniles each year.

~~78~~ Consistent with their rights and obligations under international law, and in accordance with domestic laws and regulations, CCMs shall, to the extent possible, take measures necessary to prevent commercial transaction of Pacific bluefin tuna and its products that undermine the effectiveness of this CMM, especially measures prescribed in the paragraph 2 and 3 above. CCMs shall cooperate for this purpose.

~~89~~ CCMs shall cooperate to establish a catch documentation scheme (CDS) to be applied to Pacific bluefin tuna in accordance with the Attachment of this CMM.

~~910~~ CCMs shall also take measures necessary to strengthen monitoring and data collecting system for Pacific bluefin tuna fisheries and farming in order to improve the data quality and timeliness of all the data reporting;

~~1011~~ CCMs shall report to Executive Director by 31 July annually measures they used to implement paragraphs 2, 3, 4, ~~5~~, ~~67~~, ~~78~~, ~~910~~ and ~~1213~~ of this CMM. CCMs shall also monitor the international trade of the products derived from Pacific bluefin tuna and report the results to Executive Director by 31 July annually. The Northern Committee shall annually review those reports CCMs submit pursuant to this paragraph and if necessary, advise a CCM to take an action for enhancing its compliance with this CMM.

~~1112~~ The WCPFC Executive Director shall communicate this ~~CMM~~ **Conservation Management Measure** to the IATTC Secretariat and its contracting parties whose fishing vessels engage in fishing for Pacific bluefin tuna in EPO and request them to take equivalent measures in conformity with this CMM.

~~1213~~ To enhance effectiveness of this measure, CCMs are encouraged to communicate with and, if appropriate, work with the concerned IATTC contracting parties bilaterally.

~~1314~~ The provisions of paragraphs 2 and 3 shall not prejudice the legitimate rights and obligations under international law of those small island developing State Members and participating territories in the Convention Area whose current fishing activity for Pacific bluefin tuna is limited, but that have a real interest in fishing for the species, that may wish to develop their own fisheries for Pacific bluefin tuna in the future.

~~15~~ The provisions of paragraph ~~1314~~ shall not provide a basis for an increase in fishing effort by fishing vessels owned or operated by interests outside such developing coastal State, particularly Small Island Developing State Members or participating territories, unless such fishing is conducted in support of efforts by such Members and territories to develop their own

domestic fisheries.

16 This CMM replaces CMM 2018-02. On the basis of stock assessment conducted by ISC and reported to NC in 2020, and other pertinent information, this CMM shall be reviewed and may be amended as appropriate.

Development of a Catch Document Scheme for Pacific Bluefin Tuna

Background

At the 1st joint working group meeting between NC and IATTC, held in Fukuoka, Japan from August 29 to September 1, 2016, participants supported to advance the work on the Catch Documentation Scheme (CDS) in the next joint working group meeting, in line with the development of overarching CDS framework by WCPFC and taking into account of the existing CDS by other RFMOs.

1. Objective of the Catch Document Scheme

The objective of CDS is to combat IUU fishing for Pacific Bluefin Tuna (PBF) by providing a means of preventing PBF and its products identified as caught by or originating from IUU fishing activities from moving through the commodity chain and ultimately entering markets.

2. Use of electronic scheme

Whether CDS will be a paper based scheme, an electronic scheme or a gradual transition from a paper based one to an electronic one should be first decided since the requirement of each scheme would be quite different.

3. Basic elements to be included in the draft conservation and management measure (CMM)

It is considered that at least the following elements should be considered in drafting CMM.

- (1) Objective
- (2) General provision
- (3) Definition of terms
- (4) Validation authorities and validating process of catch documents and re-export certificates
- (5) Verification authorities and verifying process for import and re-import
- (6) How to handle PBF caught by artisanal fisheries
- (7) How to handle PBF caught by recreational or sport fisheries
- (8) Use of tagging as a condition for exemption of validation
- (9) Communication between exporting members and importing members
- (10) Communication between members and the Secretariat
- (11) Role of the Secretariat
- (12) Relationship with non-members
- (13) Relationship with other CDSs and similar programs
- (14) Consideration to developing members
- (15) Schedule for introduction
- (16) Attachment
 - (i) Catch document forms
 - (ii) Re-export certificate forms
 - (iii) Instruction sheets for how to fill out forms
 - (iv) List of data to be extracted and compiled by the Secretariat

4. Work plan

The following schedule may need to be modified, depending on the progress on the WCPFC CDS for tropical tunas.

- 2017 The joint working group will submit this concept paper to the NC and IATTC for endorsement. NC will send the WCPFC annual meeting the recommendation to endorse the paper.
- 2018 The joint working group will hold a technical meeting, preferably around its meeting, to materialize the concept paper into a draft CMM. The joint working group will report the progress to the WCPFC via NC and the IATTC, respectively.
- 2019 The joint working group will hold a second technical meeting to improve the draft CMM. The joint working group will report the progress to the WCPFC via NC and the IATTC, respectively.
- 2020 The joint working group will hold a third technical meeting to finalize the draft CMM. Once it is finalized, the joint working group will submit it to the NC and the IATTC for adoption. The NC will send the WCPFC the recommendation to adopt it.

**The Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee
Fifteenth Regular Session**

Portland, Oregon, United States of America
3 – 6 September 2019

**TERMS OF REFERENCE FOR PACIFIC BLUEFIN TUNA
MANAGEMENT STRATEGY EVALUATION**

The Northern Committee (NC) of the Western and Central Pacific Fisheries Commission (WCPFC) in consultation with the Inter-American Tropical Tuna Commission (IATTC), requested the International Scientific Committee for Tuna and Tuna-Like Species in the North Pacific Ocean (ISC) to begin work on a management strategy evaluation (MSE) for Pacific bluefin tuna (PBF) in 2019 with a goal of completing the first iteration of the MSE by 2024. As requested in the WCPFC harvest strategy for PBF fisheries, the ISC organized two MSE workshops, one in 2018 in Yokohama, Japan, and one in 2019 in San Diego, California, USA, to support the identification of specific management objectives, including level of risks and timelines. These terms of reference will guide the MSE.

Purpose of MSE

To evaluate the expected performance of alternative long-term management strategies for Pacific bluefin tuna fisheries once the second rebuilding target is reached. This does not prevent the earlier use of the MSE if the JWG agrees.

Role of the ISC

To provide technical guidance on and oversee the development, execution and outputs of the model to be used in the PBF MSE.

Role of the IATTC-WCPFC NC Joint Working Group (JWG)

The JWG will provide overall guidance on the MSE. Depending on the availability of necessary funds, the JWG will convene workshops to solicit input from managers, scientists, and stakeholders. In providing guidance on the MSE, the JWG will take into account views expressed in stakeholder workshops. The guidance on the MSE may include, but is not limited to, specification of management objectives, performance indicators, timelines, candidate reference points, and candidate harvest control rules. The JWG will provide progress reports on the MSE to the IATTC and WCPFC NC, as appropriate.

**The Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee
Fifteenth Regular Session**

Portland, Oregon, United States of America
3 – 6 September 2019

**CANDIDATE REFERENCE POINTS AND HARVEST CONTROL RULES FOR
PACIFIC BLUEFIN TUNA**

The Western and Central Pacific Fisheries Commission (WCPFC) harvest strategy for Pacific bluefin tuna fisheries states that “The Joint WG will start to discuss in 2018, and aim to finalize no later than 2019, guidelines for the MSE, including at least one candidate long-term target reference point (TRP), two candidate limit reference points (LRPs) and candidate harvest control rules (HCRs), which will be provided to the ISC.”

The following candidate HCRs and reference points will be considered in the management strategy evaluation (MSE) for Pacific bluefin tuna fisheries. Additional HCRs and reference points may be submitted and considered.

Harvest Control Rules

Candidate HCRs 1a and **1b** are illustrated in Figure 1 where fishing mortality is controlled depending on stock status relative to the defined reference points. The F_{target} rate applies when the stock is larger than $SSB_{threshold}$, while F_{min} rate applies when the stock is smaller than SSB_{limit} , and there is either a linear or sigmoidal transition in F for stock sizes between SSB_{limit} and $SSB_{threshold}$. F_{min} would be defined as an F rate that is less than the F rate corresponding to the SSB_{limit} . **Candidate HCR 1a** has a linear transition between SSB_{limit} and $SSB_{threshold}$ whereas **Candidate HCR 1b** has a sigmoidal transition between SSB_{limit} and $SSB_{threshold}$ and could be viewed as more conservative with respect to uncertainty in underlying biomass/abundance estimates when approaching SSB_{limit} , as well as avoiding abrupt management breakpoints.

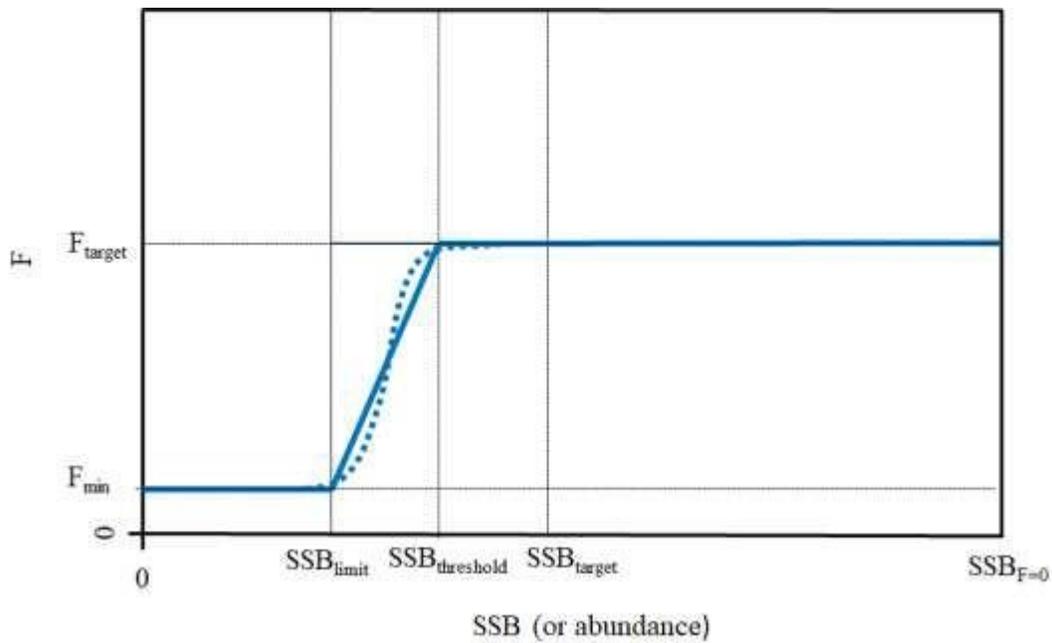


Figure 1. Candidate HCRs 1a (solid line) and 1b (dashed line)

Candidate HCR 2 is illustrated in Figure 2 and is similar to Candidate HCRs 1a and 1b in that F declines once the SSB_{limit} is breached, but unlike Candidate HCRs 1a and 1b, there is no $SSB_{threshold}$ between SSB_{limit} and SSB_{target} .

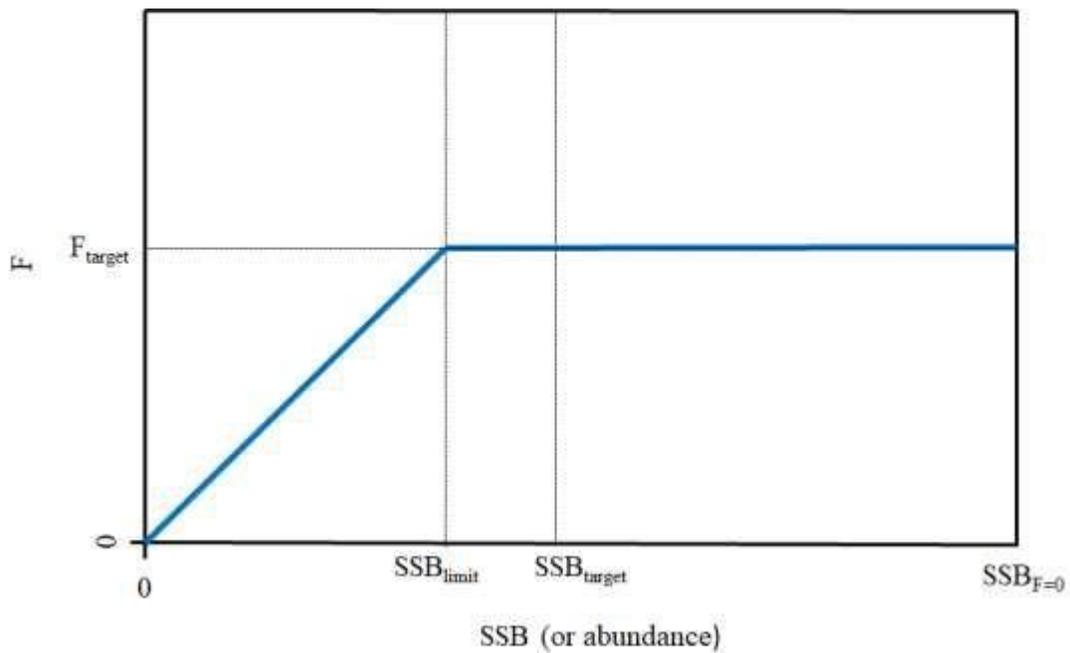


Figure 2. Candidate HCR 2

Candidate HCR 3 specifies two HCRs, one for old-fish fisheries and one for young-fish fisheries. For fisheries that harvest primarily mature Pacific bluefin tuna (e.g., longline fisheries), the HCR could be either Candidate HCRs 1a, 1b or 2 (i.e., fishing mortality is controlled as a function of the size of the spawning stock), and for fisheries harvest primarily immature Pacific bluefin tuna, the HCR would control fishing mortality as a function of recruitment, such as using an index of recruitment based on CPUE in age 0 or 1 fisheries. This approach is similar to that used in Maunder 2014⁵.

All of the above candidate HCRs are general in concept and require further work to address issues such as regional distribution, fishery selectivity and fleet allocation.

Candidate Reference Points

The following candidate reference points for the Pacific bluefin tuna MSE are based in part on the hierarchical approach that the WCPFC adopted for identifying limit reference points for key target species as well as the approach taken by the IATTC in identifying interim LRPs for tropical tunas. Under the hierarchical approach adopted by the WCPFC, and as indicated in the harvest strategy for Pacific bluefin tuna fisheries, Pacific bluefin tuna is a Level 2 stock, as the stock recruitment relationship for Pacific bluefin tuna is not well known, but key biological and fishery variables are reasonably well estimated. LRPs for Level 2 stocks are identified as either $F\%SPR_0$ and either $X\%SB_0$ or $X\%SB_{current, F=0}$. In the IATTC, the interim LRP for tropical tuna stocks is the SSB associated with 50% of the unfished recruitment with assuming a stock-recruitment relationship steepness of 0.75. In addition to an LRP and a TRP, each of Candidate HCRs 1a and 1b require identification of a threshold reference point ($SSB_{threshold}$) and an F_{min} . The combinations of LRPs, threshold reference points and TRPs will depend on which of the Candidate HCRs are evaluated. Further consideration is needed for the reference points associated with the recruitment-based HCR in HCR 3.

Candidate Limit Reference Points: 5% $SSB_{F=0}$, 7.7% $SSB_{F=0}$, 15% $SSB_{F=0}$, 20% $SSB_{F=0}$

Candidate Threshold Reference Points (for candidate HCRs 1a and 1b): 15% $SSB_{F=0}$, 20% $SSB_{F=0}$, 25% $SSB_{F=0}$

Candidate Target Reference Points: $F_{SPR10\%}$, $F_{SPR15\%}$, $F_{SPR20\%}$, $F_{SPR30\%}$, $F_{SPR40\%}$

Candidate F_{min} : 5% F_{target} , 10% F_{target}

⁵ Maunder, Mark. (2014). Management Strategy Evaluation (MSE) Implementation in Stock Synthesis: Application to Pacific Bluefin Tuna. IATTC Stock Assessment Report. 15. 100-117.

**The Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee
Fifteenth Regular Session**

Portland, Oregon, USA
3 – 6 September 2019

CONSERVATION AND MANAGEMENT MEASURE FOR NORTH PACIFIC ALBACORE

Explanatory note

1. This proposal is to remove one reporting requirement in CMM 2005-03: the requirement in paragraph 3 to report catches of North Pacific albacore every six months. This twice-annual reporting provides no additional value with the annual reporting described in paragraph 4, and is effectively redundant.
2. The IATTC made a parallel change to its Resolution on North Pacific albacore (C-05-02) in 2018 with Resolution C-18-03, which eliminated a similar reporting requirement for IATTC CPCs. Thus, the proposed change would better align the conservation and management measures of the two Commissions, which is in keeping with paragraph 8 of the existing CMM.

CMM 2013-06 Criteria

In accordance with CMM 2013-06 Conservation and Management Measure on the criteria for the consideration of Conservation and Management proposals the following assessment has been undertaken.

a. Who is required to implement the proposal?

Only fisheries authorities of CCMs that catch North Pacific albacore are required to implement the proposed change to the CMM.

b. Which CCMs would this proposal impact and in what way(s) and what proportion?

Only CCMs that catch North Pacific albacore are required to implement the proposed change to the CMM. The proposed change somewhat reduces the reporting requirements for these CCMs.

c. Are there linkages with other proposals or instruments in other regional fisheries management organizations or international organizations that reduce the burden of implementation?

The proposed change brings the CMM into better alignment with the IATTC's Resolutions on North

Pacific albacore.

d. Does the proposal affect development opportunities for SIDS?

No. The proposed change reduces reporting requirements.

e. Does the proposal affect SIDS domestic access to resources and development aspirations?

No.

f. What resources, including financial and human capacity, are needed by SIDS to implement the proposal?

None.

g. What mitigation measures are included in the proposal?

None are required.

h. What assistance mechanisms and associated timeframe, including training and financial support, are included in the proposal to avoid a disproportionate burden on SIDS?

None are required.



**NORTHERN COMMITTEE
FIFTEENTH REGULAR SESSION**

Portland, USA
3–6 September 2019

**CONSERVATION AND MANAGEMENT MEASURE FOR
NORTH PACIFIC ALBACORE**

Conservation and Management Measure 2019-XX

The Western and Central Pacific Fisheries Commission (WCPFC),

Observing that the best scientific evidence on North Pacific albacore from the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean indicates that the species is likely not overfished relative to the limit reference point adopted by the Commission (20%SSB current F=0) and overfishing is likely not occurring.

Recalling further Article 22(4) of the WCPFC Convention that provides for cooperation with the IATTC regarding fish stocks that occur in the Convention Areas of both organizations and

Recognizing that the Inter-American Tropical Tuna Commission (IATTC) adopted, at its 73rd meeting, conservation and management measures on North Pacific albacore, and that it adopted supplemental measures at its 85th meeting that were amended at its 93rd meeting;

Adopts, in accordance with the Article 10 of the WCPFC Convention that:

1. The total level of fishing effort for North Pacific albacore in the Convention Area north of the equator shall not be increased beyond current levels.
2. The Members, Cooperating Non-Members and participating Territories (hereinafter referred to as CCMs) shall take necessary measures to ensure that the level of fishing effort⁶ by their vessels fishing

⁶ Paragraph 55 of the NC5 Summary Report says that: “NC members concurred in their understanding that as long as the substantive requirements of IATTC’s resolution on North Pacific albacore and the WCPFC’s CMM on North Pacific albacore are the same, CCMs may chose to implement the requirements of paragraph 2, and their obligations under the IATTC resolution on North Pacific albacore without regard to the boundary between the respective areas of competence of the WCPFC and the IATTC.”

for North Pacific albacore in the WCPF Convention Area is not increased beyond 2002-2004 annual average levels;

~~3. All CCMs shall report all catches of North Pacific albacore to the WCPFC every six months, except for small coastal fisheries which shall be reported on an annual basis. Such data shall be reported to the Commission as soon as possible and no later than one year after the end of the period covered.~~

4.3. All CCMs shall report annually to the WCPFC Commission all catches of albacore north of the equator and all fishing effort north of the equator in fisheries directed at albacore. The reports for both catch and fishing effort shall be made by gear type. Catches shall be reported in terms of weight. Fishing effort shall be reported in terms of the most relevant measures for a given gear type, including at a minimum for all gear types, the number of vessel-days fished, using the template provided in Annex 1.

5.4. The Northern Committee shall, in coordination with International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean and other scientific bodies conducting scientific reviews of this stock, including the WCPFC Scientific Committee, monitor the status of North Pacific albacore and report to the Commission on the status of the stock at each annual meeting, and make such recommendations to the Commission as may be necessary for their effective conservation.

~~6. The Commission shall consider future actions with respect to North Pacific albacore based on recommendations of the Northern Committee.~~

7.5. The CCMs shall work to maintain, and as necessary reduce, the level of fishing effort on North Pacific albacore within the Convention Area commensurate with the long-term sustainability of the stock.

8.6. The WCPFC Executive Director shall communicate this resolution to the IATTC and request that the two Commissions engage in consultations with a view to reaching agreement on a consistent set of conservation and management measures for North Pacific albacore, and specifically, to propose that both Commissions adopt as soon as practicable uniform conservation and management measures and any reporting or other measures needed to ensure compliance with agreed measures.

9.7. The provisions of paragraph 2 shall not prejudice the legitimate rights and obligations under international law of those small island developing State Members and participating territories in the Convention Area whose current fishing activity for North Pacific albacore is limited, but that have a real interest in, and history of, fishing for the species, that may wish to develop their own fisheries for North Pacific albacore in the future.

~~10.8.~~ The provisions of paragraph ~~7~~9 shall not provide a basis for an increase in fishing effort by fishing vessels owned or operated by interests outside such small island developing State Members or participating territories, unless such fishing is conducted in support of efforts by such Members and territories to develop their own domestic fisheries.

9. [This CMM shall replace the CMM 2005-03.](#)

Annex I: Average annual fishing effort for 2002-2004 and annual fishing effort for subsequent years for fisheries directed at North Pacific albacore in the North Pacific Ocean

CCM	Area ⁷	Fishery	2002-04 Average		Year											
			No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days

⁷ If collective effort limits across the North Pacific Ocean, report Convention Area and North Pacific Ocean separately

**The Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee
Fifteenth Regular Session**

Portland, Oregon, USA
3 – 6 September 2019

HARVEST STRATEGY FOR NORTH PACIFIC SWORDFISH FISHERIES

Introduction and scope

This harvest strategy applies to swordfish stocks that occur in the Convention Area north of 20° North latitude, and associated fisheries. Although the provisions of this harvest strategy are expressed in terms of a single stock, they may be applied to multiple stocks as appropriate and as determined by the Northern Committee.

1. Management objectives

The management objective is to support thriving swordfish fisheries in the North Pacific while maintaining the stock size at levels capable of producing maximum sustainable yield. The Northern Committee will develop more refined management objectives.

2. Reference points

As a reliable estimate of steepness is available, the stock of north Pacific swordfish is to be treated as a Level 1 stock under the Commission's hierarchical approach for setting biological limit reference points. The limit reference point for the exploitation rate (F-limit) is F_{MSY} .

67.

The Northern Committee will develop more refined management objectives, conduct any necessary further analysis, and specify a target reference point for the stock size (B-target) and/or the exploitation rate (F-target).

3. Acceptable levels of risk

In accordance with Article 6.1(a) of the Convention, the Northern Committee will recommend conservation and management measures as needed to ensure that the risk of the F-limit being exceeded is low.

4. Monitoring strategy

The ISC will periodically evaluate the stock size and exploitation rate with respect to the established reference points and the report will be presented to the Scientific Committee with a target frequency of no lower than once every four years.

5. Decision rules

F-limit rule: In the event that, based on information from the ISC and Scientific Committee, the average exploitation rate for the most recent period has been found, with at least 50 percent probability, to exceed the F-limit, the Northern Committee will, at its next regular session or intersessionally if warranted, formulate conservation and management recommendations that are designed to reduce, with greater than 50 percent probability, the fishing mortality rate below the F-limit as soon as feasible . In considering such recommendations, the difficulties of the fleet that do not target swordfish should be addressed properly.

6. Performance evaluation

If and as more refined management objectives are developed for the stock and/or associated fisheries, the Northern Committee will work with the ISC and Scientific Committee to evaluate the likely performance of candidate target reference points and/or harvest control rules, including, if appropriate, through a rigorous management strategy evaluation.

**The Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee
Fifteenth Regular Session**

Portland, USA
3–6 September 2019

WORK PROGRAMME FOR THE NORTHERN COMMITTEE

Work areas	Objectives	annual tasks		
	2020–2022	2020	2021	2022
<p>1. Northern stocks a. Monitor status; consider management action</p>	<p>Review status and take action as needed for: <u>North Pacific albacore</u> Tasks (A) Review members' reports on their implementation of CMM 2005-03.</p> <p>(B) Implement the Interim Harvest Strategy, including: (1) monitor if LRP is breached; (2) continue to work to establish TRP and other elements of harvest strategies, if appropriate based on MSE; (3) recommend any changes to CMM.</p>	<p>Review the compiled members' reports and identify and rectify shortcomings.</p> <p>Continue to support ISC MSE work to complete Task (B)(2).</p> <p>Obtain the new assessment results from ISC and recommend any necessary changes to CMM. (Task (B) (3))</p>	<p>Review the compiled members' reports and identify and rectify shortcomings.</p> <p>Continue to support ISC MSE work to complete Task (B)(2).</p> <p>Recommend any necessary changes to CMM (Task (B) (3)).</p>	<p>Review the compiled members' reports and identify and rectify shortcomings.</p> <p>Continue to support ISC MSE work to complete Task (B)(2).</p> <p>Recommend any necessary changes to CMM. (Task (B) (3)).</p>

Work areas	Objectives	annual tasks		
	2020–2022	2020	2021	2022
	<p><u>Pacific bluefin tuna</u></p> <p>Tasks</p> <p>(A) Review members’ reports on their implementation of CMM on Pacific bluefin tuna.</p> <p>(B) Implement the Harvest Strategy including: (1) monitor probabilities of initial and second rebuilding targets being achieved on schedule; (2) continue to work to establish LRP, TRP and other elements of harvest strategy, if appropriate based on MSE; (3) recommend any changes to CMM; (4) support MSE development, including stakeholder workshops, considering recommendations of the NC-IATTC Joint Working Group on the Management of Pacific Bluefin Tuna (JWG).</p> <p>(C) Develop CDS</p>	<p>Review the compiled members’ reports and identify and rectify shortcomings.</p> <p>Obtain the results of assessment and other scientific work from ISC and recommend any necessary changes to CMM on Pacific bluefin tuna (Task B(3)).</p> <p>Work in the JWG in its oversight of MSE, including further consideration of candidate LRPs, TRPs, and HCRs, and further development of the objectives and performance criteria to be used in the MSE.</p> <p>Explore means of supporting the MSE and its oversight by the JWG, including funding and in-kind support.</p> <p>Develop CDS based on the inputs from members and recommendations of the JWG, including a draft CMM.</p>	<p>Review the compiled members’ reports and identify and rectify shortcomings.</p> <p>Obtain work results from ISC and recommend any necessary changes to CMM on Pacific bluefin tuna (Task B(3)).</p> <p>Work in the JWG in MSE development.</p> <p>Develop CDS based on the inputs from members and recommendations of the JWG, and further develop a draft CMM if needed.</p>	<p>Review the compiled members’ reports and identify and rectify shortcomings.</p> <p>Obtain work results from ISC and recommend any necessary changes to CMM on Pacific bluefin tuna.</p> <p>Work in the JWG in MSE development.</p>

Work areas	Objectives	annual tasks		
	2020–2022	2020	2021	2022
b. Data	<p>Swordfish Further develop the harvest strategy consistent with CMM2014-06, including consideration of a target reference point and associated harvest control rule.</p> <p>Striped marlin (if agreed on by the Scientific Committee and Commission).</p> <p>Achieve timely submission of complete data needed for assessments, formulation of measures, and review of Commission decisions.</p> <p>Consider systems to validate catch data</p>	<p>Consider and recommend appropriate TRP and associated HCR, and develop a draft CMM.</p> <p>CCMs participating in the NC submit complete data on fisheries for northern stocks to the Commission.</p> <p>Encourage submission to Commission of Pacific bluefin tuna, North Pacific albacore, North Pacific striped marlin, and swordfish data from all CCMs and make available to ISC.</p>	<p>Consider and recommend appropriate TRP and associated HCR, and develop a draft CMM.</p> <p>CCMs participating in the NC submit complete data on fisheries for northern stocks to the Commission.</p> <p>Encourage submission to Commission of Pacific bluefin tuna, North Pacific albacore, North Pacific striped marlin and swordfish data from all CCMs and make available to ISC.</p>	<p>CCMs participating in the NC submit complete data on fisheries for northern stocks to the Commission.</p> <p>Encourage submission to Commission of Pacific bluefin tuna, North Pacific albacore, North Pacific striped marlin and swordfish data from all CCMs and make available to ISC.</p>
	<p>c. Scientific support</p> <p>Provide support for scientific studies.</p> <p>2. Non-target, associated, dependent species</p> <p>a. Seabirds</p> <p>Evaluate effectiveness of current measures to minimize catch and</p>	<p>Encourage voluntary contribution for NC’s list of priority scientific projects, including close-kin analysis.</p> <p>Review implementation of CMM-2017-06 in the northern area.</p>	<p>Review implementation of CMM-2017-06 in the northern area.</p>	<p>Review implementation of CMM-2017-06 in the northern area.</p>

Work areas	Objectives	annual tasks		
	2020–2022	2020	2021	2022
	mortality, and improve them as needed.	With input from the SC, evaluate the design of tori lines for small longline vessels in North Pacific and consider improvements as needed.		
b. Sea turtles	Consider appropriate implementation of methods to minimize catch and mortality.	Review mitigation research results and consider management action.	Review mitigation research results and consider management action.	Review mitigation research results and consider management action.
c. Sharks	Consider appropriate implementation for CMM-2010-07 in the northern area.	Review scientific advice from ISC, if any, and consider management options on two shark species (blue shark and short fin mako shark). Encourage submission of all shark data to ISC.	Review scientific advice from ISC, if any, and consider management options on two shark species (blue shark and short fin mako shark). Encourage submission of all shark data to ISC.	Review scientific advice from ISC, if any, and consider management options on two shark species (blue shark and short fin mako shark). Encourage submission of all shark data to ISC.
3. Review effectiveness of decisions	Annually review effectiveness of conservation and management measures and resolutions applicable to fisheries for northern stocks.	Review effectiveness of North Pacific albacore measure (CMM 2005-03), including members' reports on their interpretation and implementation of fishing effort control.	Review effectiveness of North Pacific albacore measure (CMM 2005-03), including members' reports on their interpretation and implementation of fishing effort control.	Review effectiveness of North Pacific albacore measure (CMM 2005-03), including members' reports on their interpretation and implementation of fishing effort control.
		Review effectiveness of Pacific bluefin tuna measure.	Review effectiveness of Pacific bluefin tuna measure.	Review effectiveness of Pacific bluefin tuna measure.
4. ROP (Paragraph 9, Attachment C of CMM2007-01)		Review implementation of ROP for fishing vessels operating in north of 20°N.	Review implementation of ROP for fishing vessels operating in north of 20°N.	Review implementation of ROP for fishing vessels operating in north of 20°N.
5. Cooperation with other organizations				

Work areas	Objectives	annual tasks		
	2020–2022	2020	2021	2022
a. ISC		Consider action to support ISC.	Consider action to support ISC.	Consider action to support ISC.
b. IATTC	Following Article 22.4, consult to facilitate consistent management measures throughout the respective ranges of the northern stocks.	<p>Have consultation to maintain consistent measures for North Pacific albacore and Pacific bluefin tuna.</p> <p>Hold a joint working group meeting on Pacific bluefin tuna management.</p>	<p>Have consultation to maintain consistent measures for North Pacific albacore and Pacific bluefin tuna.</p> <p>Hold a joint working group meeting on Pacific bluefin tuna management.</p>	<p>Have consultation to maintain consistent measures for North Pacific albacore and Pacific bluefin tuna.</p> <p>Hold a joint working group meeting on Pacific bluefin tuna management.</p>

**The Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee
Fifteenth Regular Session**

Portland, Oregon, USA
3 – 6 September 2019

**CHAIR'S SUMMARY OF THE
2ND CATCH DOCUMENTATION SCHEME (CDS) TECHNICAL MEETING**

1. Opening of Meeting

1.1 Welcome

1. Mr. Shingo Ota, Chair of the WG, opened the meeting and welcomed the participants.

1.2 Selection of rapporteur and adoption of agenda

2. Mr. Hirohide Matsushima of Japan was appointed the rapporteur for the meeting. The provisional agenda was adopted without any change (Appendix 1).

1.3 Meeting arrangements

2. Development of a Catch Documentation Scheme for Pacific Bluefin Tuna

2.1 Review of the 1st CDS Technical Meeting and intersessional work

2.1.1 Review of the 1st CDS Technical Meeting

3. Chair briefly reviewed the results of the 1st WG.

2.1.2 Possible cost

4. Japan provided the participants with information on the cost for establishing the ICCAT eBCD system, which was provided by the ICCAT Secretariat. The development of the ICCAT eBCD system was initiated in 2012, after a one-year feasibility study in 2011 which cost about € 20 thousand. After 4.5 years, the ICCAT eBCD system has been fully implemented since July 2016. A total of about € 1.2 million was spent between 2012 and 2015, so it could be considered a rough estimate of the minimum cost for a system development and preparation for implementation. ICCAT continued to upgrade the eBCD system even after the implementation, and between 2016 and 2018, a total of about €1.1 million was spent.

5. Japan also informed that while the cost was initially financed through three different sources (i.e. Working Capital Fund, voluntary contribution and regular budget), ICCAT agreed last year on an eBCD funding scheme in its regular budget, which was reflected in the Regulation 4 of ICCAT Financial Regulations. This scheme stipulates that a basic fee of US\$ 700 is paid by those members of the Commission that catch and/or trade Atlantic bluefin tuna, while a share of remaining cost is calculated based on the bluefin tuna catch, the total number of transactions (trades) in the eBCD system and the volume

of bluefin tuna import by each Member.

6. Japan was requested to contact the ICCAT Secretariat to investigate on how the catch and/or trade data were applied retrospectively in the eBCD funding scheme.

2.1.3 A report from the virtual working group

2.2 Discussion on the draft CMM

7. The meeting participants discussed a paper submitted by Japan (IATTC-NC-CDS02-2019/02) (Appendix 2) and concluded the followings:

(1) Objectives (para 1.1)

Participants supported adding a paragraph specifying a scope of PBCD and clarifying that recreational catches would not be covered. For the time being, assuming that recreational catches are outside the scope, it was suggested the paragraph be revised as follows; “The objective of Pacific Bluefin Tuna Catch Documentation (PBCD) scheme is to identify the origin of ~~any~~ Pacific bluefin tuna in order to support...”

(2) Electronic/paper (para 1.2)

Participants generally supported establishment of an electronic system, and that paper PBCDs should be allowed only in limited circumstances (e.g., malfunctions of electronic system), which would be subject to further discussion. A preparation period should be secured before a full implementation of an electronic system, while the duration of such period would be further considered.

(3) Definition of term (para 1.3)

Participants supported adding a definition of *Catch*, which is “*Catch means*: commercial capture of bluefin tuna resources”, while keeping the definition of *Harvest* as it is.

Regarding the definitions of *Export* and *Import*, the United States and Canada intended to work together to suggest any necessary revisions, as well as to add a new definition of *Landing*. These definitions would be provided for the review of the virtual working group.

The definition of *Transshipment* would be added, which would read that “*Transshipment means* the unloading of all or any of the dead fish on board a fishing vessel to another fishing vessel either at sea or in port”.

(4) Others (para 1.4)

It was clarified that collars were not included in the list of fish parts which would be exempted in the proposed text (i.e. heads, eyes, roes, guts and tails) which means that they are subject to the CDS and the text would be revised to make the point clear.

(5) General provisions (para 2.1)

The first bullet point of the section should be tentatively revised as follows; “(1) The catching or carrier vessel master or trap operator...”, pending further discussion on whether it should be

appropriate for carrier vessel master to fill in an ePBCD.

On the second and third bullet points, the United States and Japan would work together to make more specific on what would be exempted from those provisions.

The fourth bullet point would be further discussed in the virtual working group on whether or not different treatment of small-scale fisheries should be established.

On the fifth bullet point, it was confirmed that Japan would develop detailed requirements of tagging, as was provided in the relevant ICCAT Recommendation.

(6) Validator (para 2.3)

Japan would work with the United States to consider a new provision for the purpose of ensuring that authorized individuals or institutions other than government officials would perform appropriate validation procedures.

(7) Relationship with non-members (para 3)

With regard to the degree of access granted to non-members, Japan would investigate the case of ICCAT to be reported in the virtual working group.

(8) Others (para 4)

The Chair or somebody on his behalf will seek to raise awareness among the participants of Joint IATTC and WCPFC-NC Working Group Meeting on the management of Pacific bluefin tuna as well as WCPFC16 and IATTC next annual meeting about the need of expert analysis on pros and cons from budgetary and administrative aspects of different options for establishing an ePBCD system, such as piggybacking the ICCAT eBCD system, developing an electronic system based on the ICCAT system for WCPFC/IATTC, or developing an original electronic system for WCPFC/IATTC. The Chair would also report to the Joint Working Group that without the results of such an analysis, it would likely not be possible to finalize a draft CMM by 2020 as envisioned in the work plan for the development of a CDS.

Participants supported dividing the total cost of an ePBCD system between WCPFC and IATTC, taking into account PBF catches in each Convention area, which would require further consultations and budgetary decisions in each RFMO.

Participants were generally comfortable pursuing a similar formula as ICCAT, which is mentioned in paragraph 5 above, in calculating a cost sharing of an ePBCD system among members in each organization, while it needs to be further considered with additional information in paragraph 6 above.

Participants noted the need to consider the potential expansion of a CDS to other species in either RFMO, which could have implications for the design of the scheme as well as its financing.

Japan would propose a provision on how to secure confidentiality of information contained in an ePBCD system.

Participants are encouraged to develop separate but compatible drafts for each RFMO and to consider the likely challenges related to coordination and administration of a scheme between both

organizations.

3 Next Meeting

8. Participants recommended convening the next CDS technical meeting as a one-day meeting to be held before the Joint Working Group meeting in 2020.

4 Other Business

9. It was agreed to continue the virtual working group led by Japan (Mr. Hirohide Matsushima) in accordance with the following schedule;

By the end of February 2020	68. Japan will circulate a first round of draft CMM/Resolution among the working group members
By the end of March 2020	69. Comments on the first draft are to be submitted to Japan from the working group members
By the end of May 2020	70. Taking into account the comments, Japan will circulate the second draft CMM/Resolution among the working group
By the end of June 2020	71. Comments on the second draft are to be submitted to Japan from the working group members
One month before the next CDS technical meeting	72. A finalized draft CMM/Resolution will be submitted to the WCPFC Secretariat for circulation among members of the Joint IATTC-WCPFC NC WG

5 Report to the Joint WG

10. The Chair will provide his summary of the CDS technical meeting to the Joint Working Group.

6 Close of the Meeting

11. The meeting was closed at 5 pm.

**JOINT IATTC AND WCPFC-NC WORKING GROUP
CATCH DOCUMENTATION SCHEME (CDS) TECHNICAL MEETING**

2 September 2019
Portland, Oregon, USA

AGENDA

AGENDA ITEM 1 — OPENING OF MEETING

1.1 Welcome

1.2 Selection of rapporteur and adoption of agenda

The rapporteur will be selected, and an agenda will be adopted.

1.3 Meeting arrangements

The Chair will brief background and any logistical arrangements to support the meeting.

**AGENDA ITEM 2 — DEVELOPMENT OF A CATCH DOCUMENTATION SCHEME FOR
PACIFIC BLUEFIN TUNA**

2.1 Review of the 1st CDS Technical Meeting and intersessional work

2.1.1 Review of the 1st CDS Technical Meeting

The Chair will briefly review the discussion last year.

2.1.2 Possible cost

Japan will inform the possible cost of an electronic system.

2.1.3 A report from the virtual working group

Japan will report the results of the work conducted by the virtual working group, particularly definitions of technical terms and a draft CMM.

2.2 Discussion on the draft CMM

Japan will present the draft CMM with comments, if any, from the virtual working group. The Meeting will discuss each element contained in the draft CMM for further refinement.

AGENDA ITEM 3 — NEXT MEETING

The date and place for the 3rd CDS Technical Meeting will be agreed.

AGENDA ITEM 4 — OTHER BUSINESS

The meeting will discuss any other business and/or remaining issues.

AGENDA ITEM 5 — REPORT TO THE JOINT WG

The meeting will develop a brief summary on the progress of the 2nd Technical Meeting for

reporting to the 4th Joint WG.

AGENDA ITEM 1 — CLOSE OF THE MEETING

**JOINT IATTC AND WCPFC-NC WORKING GROUP
CATCH DOCUMENTATION SCHEME (CDS) TECHNICAL MEETING**

2 September 2019
Portland, Oregon, USA

**Proposed outline on major elements to be included in
the draft WCPFC CMM for Pacific bluefin tuna CDS⁸**

1 General Provisions

1.1 Objective

- The objective of Pacific Bluefin Tuna Catch Documentation (PBCD) scheme is to identify the origin of any Pacific bluefin tuna in order to support the implementation of Conservation and Management Measure (CMM) for Pacific bluefin tuna, as well as to prevent the products incompliant with the CMM from entering into a supply chain.

1.2 Electric/paper

- Use of the electronic Pacific Bluefin Tuna Catch Documentation (ePBCD) system is mandatory for all CCMs.
- Paper PBCDs shall not be accepted, except in the limited circumstances specified in XX.
**The schedule of the introduction of ePBCD system will be considered later, taking into account of capacities and resources available of developing countries including Small Islands Developing States (SIDS), as well as of the development of a Catch Documentation scheme for tropical tunas.*

1.3 Definition of term

For the purpose of this CMM, the following definition of terms applies: see the **Attachment 1**.

1.4 Others

- Any landing, transfer into cages, harvest, transshipment, import, export or re-export of Pacific bluefin tuna without a completed and validated ePBCD shall be prohibited.
- Import, export or re-export of fish parts other than the meat (i.e., heads, eyes, roes, guts and tails) shall be exempted from the requirement of this CMM.

2 Validation of ePBCDs

2.1 General provisions

- (1) The catching vessel master or trap operator, (2) its authorized representative, (3) the operator of farms, or (4) the authorized representative of the flag, farm, or trap CCM shall complete the ePBCD by providing the required information in appropriate sections and request validation for the ePBCD for catch landed, transferred to cages, harvested, transhipped or exported on each occasion that it lands, transfers, harvests, transships or

⁸ A draft IATTC Resolution for Pacific Bluefin Tuna CDS will be developed in a same format as a WCPFC CMM.

exports Pacific bluefin tuna.

- Validation shall not be required for transfer of live Pacific bluefin tuna between cages, while such transfer shall be recorded in the ePBCD.
- The ePBCD shall be validated for each landing, transfer to cages, harvest, transshipment or export. When Pacific bluefin tuna is not exported, sections of the ePBCD for transfer to cages and/or harvest can be validated at the end of each fishing season.
- Where the Pacific bluefin tuna quantities caught and landed are less than X metric ton or Y fish, the logbook or the sales note may be used as a temporary PBCD, pending conversion to the ePBCD and the validation within a period of Z working days or prior to export, whichever is first.
- Validation shall not be required in the event that all Pacific bluefin tuna available for sale are tagged by the flag CCM of the catching vessel or the trap CCM that fished the Pacific bluefin tuna.

2.2 Timing of validation

**A timing of validation after landing, transfer to cages, harvest, transshipment or export will be considered later, taking into account of specifications of the ePBCD system.*

2.3 Validator

The ePBCD must be validated by an authorized government official, or other authorized individual or institution, of the flag CCM of the catching vessel, the CCM of the seller/exporter, or the trap or farm CCM that caught, harvested or exported the Pacific bluefin tuna.

3 Relationship with non-members

Access to the ePBCD system shall be granted to WCPFC non-members to facilitate trade of Pacific bluefin tuna.

4 Others

- A cloud-based the ePBCD system shall be set up in the WCPFC/IATTC Secretariat. The WCPFC/IATTC Secretariat shall allocate necessary staff and resources to support, maintain and develop functions of the ePBCD system.
- A cost associated with support, maintenance and functionality development of the ePBCD system, which is calculated by dividing its total cost between WCPFC and IATTC in proportion to a Pacific bluefin tuna catch in each Convention area, shall be financed by additional annual contributions made by those CCMs that catch and/or trade Pacific bluefin tuna.

Attachment 1

Draft definition of terms	Reference
<p><i>Transfer means:</i></p> <ul style="list-style-type: none"> - any transfer of live Pacific Bluefin tuna from the fishing vessel, its net, or the trap to the transport cage or other fishing vessels; - any transfer of live Pacific Bluefin tuna from the transport cage to another transport cage; - any transfer of live Pacific Bluefin tuna from one farm to another, or between different cages in the same farm; 	<p><ICCAT> Paragraph 3 of Recommendation 18-02.</p> <ul style="list-style-type: none"> - any transfer of live bluefin tuna from the catching vessel's net to the transport cage; - any transfer of live bluefin tuna from the transport cage to another transport cage; - any transfer of the cage with live bluefin tuna from a towing vessel to another towing vessel; - any transfer of live bluefin tuna from one farm to another, or between different cages in the same farm; - any transfer of live bluefin tuna from the trap to the transport cage independently of the presence of a towing vessel.
<p><i>Caging means:</i> The relocation of live Pacific Bluefin tuna from the transport cage or trap to the farming or fattening cages</p>	<p><ICCAT> Paragraph 3 of Recommendation 18-02.</p> <p>The relocation of live bluefin tuna from the transport cage or trap to the farming or fattening cages</p>
<p><i>Farming/fattening means:</i> Caging of Pacific Bluefin tuna in farms and subsequent feeding aiming to fatten and increase their total biomass.</p>	<p><ICCAT> Paragraph 3 of Recommendation 18-02</p> <p>Caging of bluefin tuna in farms and subsequent feeding aiming to fatten and increase their total biomass.</p>
<p><i>Harvest means:</i> The killing of bluefin tuna in farms.</p>	<p><ICCAT> Paragraph 3 of Recommendation 18-02</p> <p>The killing of bluefin tuna in farms or traps</p>

<p><i>Export means:</i> Any movement of Pacific Bluefin tuna from the territory of the CCM where the fishing vessel is flagged or where the trap or farm is established to the territory of another CCM or non-member of the Commission, or from the fishing grounds to the territory of a CCM which is not the flag CCM of the fishing vessel or to the territory of a non-member of the Commission.</p>	<p><ICCAT> Paragraph 2 b) of Recommendation 18-13</p> <p>Any movement of bluefin tuna in its harvested or processed form (including farmed) from the territory of the CPC where the fishing vessel is flagged or where the trap or farm is established to the territory of another CPC or non-Contracting Party, or from the fishing grounds to the territory of a CPC which is not the flag CPC of the fishing vessel or to the territory of a non- Contracting Party.</p>
<p><i>Import means:</i> Any introduction of Pacific Bluefin tuna into the territory of a CCM, which is not the CCM where the fishing vessel is flagged or where the trap or the farm is established.</p>	<p><ICCAT> Paragraph 2 c) of Recommendation 18-13</p> <p>Any introduction of bluefin tuna in its harvested or processed form (including farmed) into the territory of a CPC, which is not the CPC where the fishing vessel is flagged or where the trap or the farm is established.</p>
<p><i>Re-export means:</i> Any movement of Pacific Bluefin tuna from the territory of a CCM where it has been previously imported.</p>	<p><ICCAT> Paragraph 2 d) of Recommendation 18-13</p> <p>Any movement of bluefin tuna in its harvested or processed form (including farmed) from the territory of a CPC where it has been previously imported.</p>
<p><i>Artificial fry means:</i> Fry of Pacific Bluefin tuna raised from fertilized eggs spawned by adult fish that are in an artificially controlled environment.</p>	<p>None</p>