

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

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.

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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 make 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% B₀), 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 $SB_{recent (2015-2018)}/SB_{F=0} = 0.44$ with a range of 0.37 to 0.53 (80% probability interval);
 - ii) median $F_{recent~(2014-2017)}/F_{MSY}=0.45$, 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:
 - a) median SB_{recent} (2013-2015)/ $SB_0 = 0.04$ with a range of 0.03 to 0.05 (80% probability interval);
 - b) median $SB_{recent}/SB_{MSY} = 0.09$ (range: 0.05–0.17);

- c) median $F_{recent}/F_{MSY} = 3.94$, with a range of 2.67 to 5.89 (80% probability interval), and no model runs were shown for $F_{recent}/F_{MSY} < 1$.
- 6) 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 $(SB_{recent}/SB_{F=0}) = 0.198$, with a probable range of 0.093 to 0.464 (80% probable range), and the probability of $(SB_{recent}/SB_{F=0} < 0.2)$ was roughly 50.33%;
 - iii) The median $(SB_{recent}/SB_{MSY}) = 0.737$ with a probable range of 0.334 to 1.635 (80% probable range), and the probability of $(SB_{recent}/SB_{MSY} < 1)$ was roughly 68.66%;
 - iv) The median $(F_{recent}/F_{MSY}) = 0.911$ with an 80% probability interval of 0.313 to 1.891, and the probability of $(F_{recent}/F_{MSY} > 1)$ 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 (Attachment D).
- 9. NC15 recommends that the Commission adopt revised Conservation and Management Measure on Pacific Bluefin Tuna in Attachment E.
- 10. NC15 recognized that upon expansion of certain WCPO purse seine fisheries targeting juvenile fish starting in the mid-1990's, the fishery impact on the spawning stock biomass (SSB) increased in the WCPO and the resultant fishing mortality by all fisheries caused decline in the size f the spawning stock.
- 11. NC15 noted the U.S. position that future increases in catch will need to contribute to rebalancing the distribution of fishing opportunities between the WCPO and the EPO, such as through a 50-50 split in the allocation of any catch limit increases between WCPFC and IATTC.
- 12. 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 l	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
50	5%	
10%		10%
15	15%	
20%		20%
125t 375t		550t

- 13. 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.
- 14. NC15 adopted the terms of reference for the Pacific bluefin tuna MSE in Attachment F.
- 15. NC15 adopted candidate reference points and harvest control rules for Pacific bluefin tuna in Attachment G.
- 16. NC15 agreed that NC16 meeting will be held early in September 2020 in Japan. Japan announced that it is prepared to host the next IATTC-NC JWG meeting on July 28-31, 2020 in Fukuoka, Japan, and that a 1-day meeting to discuss a Pacific bluefin Catch Documentation Scheme will be held on July 27, 2020 in Fukuoka, Japan.

2.2 North Pacific albacore (CMM 2005-03)

2.2.1 Reports from CCMs and Observers

- 17. 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.
- 18. 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.
- 19. 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.
- 20. 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)

- 21. 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.
- 22. 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.

23. 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.

24. 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

- 25. 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).
- 26. 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.
- 27. 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.
- 28. 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.
- 29. 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.
- 30. 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.
- 31. With these and other modest changes, NC15 recommends that the Commission adopt the revised CMM replacing CMM 2005-03 (Attachment H).

2.3 North Pacific swordfish

32. 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

- 33. 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}).
- 34. 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.
- 35. Chinese Taipei expressed concern about using an F-based limit reference point for the same reason swordfish is caught incidentally by Chinese Taipei longliners.
- 36. 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.
- 37. 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.
- 38. 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}.
- 39. 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.
- 40. With these changes NC15 recommends that the Commission adopt the Harvest Strategy for North Pacific Swordfish Fisheries (Attachment I). 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)
- 41. 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:
- 42. 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)

43. 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.

- 44. 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.
- 45. 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

- 46. 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.
- 47. Speaking to the rebuilding target, USA noted that $20\%SSB_{F=0}$ is a frequently accepted proxy for B_{MSY} for tuna and billfish.
- 48. 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.
- 49. 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} .
- 50. 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.
- 51. 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)

52. 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)

- 53. 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.
- 54. 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.
- 55. 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)

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

AGENDA ITEM 3 — REGIONAL OBSERVER PROGRAMME

57. 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
- 58. 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

59. 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

60. 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

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

AGENDA ITEM 7 — OTHER MATTERS

7.1 Administrative arrangements for the Committee

7.1.1 Secretariat functions and costs

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

7.1.2 Rules of Procedure

- 63. 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.
- 64. This issue may be revisited when the NC convenes on the margins of WCPFC16.

7.2 Next meeting

- 65. Japan offered to host the Sixteenth Regular Session of the NC, at a time to be determined.
- 66. 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

- 67. 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.
- 68. During the Special Session of the NC15 along the margins of WCPFC in Port Moresby, Vanuatu informed the meeting that distribution of fishing efforts by its vessels changed significantly from 2004 2018 such that effort directed at albacore was substantially less than indicated in NC15 WP1. Vanuatu sees use of vessel days a less reliable measure than number of hooks sets. SPC provided data on number of hook

sets over the past 17 years by Vanuatu vessels in area North of equator and efforts then were always lower than 2004 levels. In 2018, effort was 30% less than in 2004. Furthermore, catch statistics showed that NP albacore catch by VU vessels dropped by 37% since 2006 - 2010. Vanuatu on that note supported Canada and USA proposal to amend 2005-03 to remove the 6 months reporting and proposed that Para 4 be amended to clarify effort reporting requirements.

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

69. [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 K.

AGENDA ITEM 9 — CLOSE OF MEETING

70. 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

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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

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- 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 15^{TH} REGULAR SESSION OF THE NORTHERN COMMITTEE

AGENDA ITEM 9 CLOSE OF MEETING

JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE MANAGEMENT OF PACIFIC BLUEFIN TUNA FOURTH SESSION

Portland, Oregon, United States of America 3 – 5 September 2019

CHAIRS' SUMMARY OF THE 4TH JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE MANAGEMENT OF PACIFIC BLUEFIN TUNA

Agenda Item 1: Opening of the meeting

- 1. The 4th Session of the Joint IATTC and WCPFC-NC Working Group Meeting on the Management of Pacific Bluefin Tuna (JWG) was held September 3-6, 2019. The meeting was opened by co-chairs, Mr Masanori Miyahara (Japan, Northern Committee Chair) and Ms. Dorothy Lowman (USA, IATTC).
- 2. A full list of participants to the JWG is included in **Annex A**.

Agenda Item 2: Designation of co-chairs

3. The 4th Joint WG meeting was co-chaired by Mr. Masanori Miyahara (WCPFC-NC) and Ms. Dorothy Lowman (IATTC).

Agenda Item 3: Adoption of agenda

- 4. At the request of the United States, one additional item was added to the agenda to allow for consideration of the meeting report prior to the close of the meeting. The co-chair noted that a more substantive meeting report would be developed this year, to capture the important work of Joint WG. The United States nominated Ms. Emily Crigler (USA) to serve as rapporteur for the meeting.
- 5. The provisional agenda was adopted with one additional agenda item, as suggested by the United States (**Annex B**).
- 6. Documents supporting the meeting were made available on WCPFC's website (https://www.wcpfc.int/meetings/nc15).

Agenda Item 4: Conservation and Management Measures for Pacific bluefin tuna (WCPFC CMM 2018-02 and IATTC RESOLUTION C-18-01)

4.1 Reports from ISC, IATTC-SAC and WCPFC-SC

7. Dr. Shuya. Nakatsuka (Japan) reported on the activities of ISC Pacific Bluefin Working Group (PBFWG) over the past year (NC15-IP03). The PBFWG held a workshop on 18-22 March 2019 in Jeju, Korea. The provisional PBF catch in 2018 was 10,496 t, which is the lowest since

1991. The PBFWG also developed responses to requests to ISC from IATTC-WCPFC NC Joint Working Group relevant to PBF management; The PBFWG reviewed the latest information and concluded that the Conservation Advice in 2018 should be maintained. In addition, the PBFWG conducted projections based on the 2018 assessment under additional harvest scenarios. The PBFWG also discussed how to prepare for the upcoming benchmark assessment scheduled in 2020.

- 8. The JWG discussed advice coming out of both the PBFWG and ISC19 Plenary relevant to PBF management. It was noted that not all of the advice included in the PBFWG summary report had been reflected in the advice from ISC19. ISC clarified that some of the information included in the PBFWG report was anecdotal and that the advice from ISC was based on the outcomes of the stock assessment and remained the same as advice from the previous year. Members also discussed the need to include the most recent recruitment estimates and to explore additional steepness values in the upcoming 2020 PBF stock assessment.
- 9. Dr. Mark Maunder (IATTC) provided an overview of relevant advice related to Pacific bluefin tuna given during the IATTC Scientific Advisory Committee (SAC) meeting in May, 2019, as well as advice given directly to the Commission at the IATTC annual meeting in July-August, 2019. The IATTC SAC did not provide advice on Pacific bluefin to the Commission at the IATTC annual meeting in 2019; however, the IATTC staff advice on Pacific bluefin was that the current management measures are adequate and that the science suggests increased catch could be taken while still meeting the rebuilding targets. IATTC staff did not provide advice on whether increased catch should or should not be taken, that is a decision for the member countries and depends on how quickly they desire rebuilding targets to be met. It was noted that recent recruitment levels are higher than the low recruitment scenario that was used to determine current management and that is the basis for the potential for increased catch.
- 10. The WCPFC Science Manager, Dr. Sungkwon Soh presented on outcomes of the 15th Regular Session of the WCPFC Scientific Committee and members were invited to discuss outcomes related to Pacific bluefin tuna. The summary of his presentation can be found in the NC15 Summary Report. Regarding the stock status of Pacific bluefin tuna, SC15 recommendations were as follows:
 - a) SC15 noted that the total PBF 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% B₀), the current level of overfishing, and that the projections are strongly influenced by the inclusion of a relatively high but uncertain recruitment in 2016.

4.2 Reports on the implementation of conservation and management measures for Pacific bluefin tuna

11. The Joint WG reviewed WCPFC and IATTC members' implementation reports on conservation and management measures for PBF and discussed members' plans to remedy shortcomings, if any.

- 12. At the beginning of the discussion, the NC Chair explained the history of the implementation reports in NC and stressed the importance of them. Co-chairs requested the IATTC members to submit more detailed implementation reports to the JWG meeting next year.
- 13. Northern Committee Members were asked to present their reports on the implementation of conservation and management measures for Pacific bluefin tuna as required under CMM 2018-02. The co-chair noted that a full compilation of the catch and effort included in these reports is available as NC15-WP-02.
- 14. Canada (NC15-DP-01) reported that they have no fishery that targets Pacific bluefin tuna anywhere in the Pacific Ocean. However, one Pacific bluefin tuna was retained as bycatch in the North Pacific albacore troll fishery in 2018. In 2018 Canada exported no Pacific bluefin and imported 113 tons.
- 15. Cook Islands (NC15-DP-03) reported that they have no vessels operating in the North Pacific and no catch of Pacific bluefin in 2018.
- Japan (NC15-DP-05) gave a brief presentation on its activities related to CMM 2018-02 and the characteristics of various fisheries catching Pacific bluefin tuna. The licenses for artisanal fisheries catching Pacific bluefin tuna in Japan, which include trolling, jigging and handling, were reduced from 24,086 in 2015 to 18,147 in 2018. It was noted that their catch depends on migration of Pacific bluefin tuna, which fluctuates drastically from year to year. Japan explained that there are about 1800 set-nets all over Japan. They are passive fishing gear, waiting for fish to come in, and therefore it can be difficult to control catch. Pacific bluefin tuna catch by set-nets is only 0.2% of total catch in Japan. The Japanese purse seine fishery, which targets jack mackerel and chub mackerel, and catches Pacific bluefin tuna only during its migration season. The Pacific bluefin catch by the Japanese purse seine fishery is 0.4% of the total catch. The juvenile catch limit of the purse seine fishery was reduced by 500t in 2018, 250t of which was converted to the catch limit of large Pacific bluefin tuna and remaining 250t was retained by Japan Fisheries Agency (JFA) as buffer. As a result of dividing allocation into many management units in order to keep the catch within the limit, a large portion of catch limit was not utilized in 2018. Japan noted that the increasing population of Pacific bluefin tuna is causing problems in their coastal fisheries. Fishermen have complained of PBF feeding on squid in the squid jigging fishery or damaging fishing gear in yellowtail longline fishery, and these appear to be worsening year by year. Japan also highlighted the current situation in the set-net fishery, noting that it was particularly serious because the passive fishery cannot select fish coming into the net. To avoid overshooting, set-net fishers in Japan make various efforts such as releasing Pacific bluefin tuna alive, reducing the number of net retrievals, not retrieving nets, or even closing the entrance of set nets. These efforts cause tremendous sacrifice of other species. Because of these issues, JFA is financially supporting projects to develop methods to alleviate the problem of bycatch of Pacific bluefin tuna, such as investigating a new set-net structure that can separate Pacific bluefin tuna from other species, which has resulted in a limited success. Regarding the management of aquaculture in Japan, sites raising Pacific bluefin tuna need to be registered and JFA has instructed farms not to increase the capacity of Pacific bluefin using wildfry. Starting from 2018 additional measures have been put into place to strengthen the management of Pacific bluefin tuna fisheries. A binding TAC was introduced from 2018to any fisheries that catch Pacific bluefin tuna. The reporting system was

improved to ensure more accurate and timely reporting of Pacific bluefin tuna catch. Additionally, JFA secured a larger reserve to deal with catch overage in one area, and there is continued recruitment monitoring and data collection from aquaculture companies.

- 17. It was suggested that it would be helpful if the Japanese presentation could be made available to members on the NC website. Members requested further clarification on the recent decrease in the number of licenses issued in the Japanese artisanal fisheries. Japan explained that licenses were no longer being issued to vessels with no recent record of PBF catch. Japan also noted recent efforts to encourage catch of relatively larger fish to be sent to farms instead of small juvenile. Further information was requested from Japan on the management periods used for their various PBF fisheries. Japan explained the complexities of managing various fisheries across Japan, particularly given the variation in migration patterns. Japan recognized the complications associated with differing management periods, but expressed the need to continue to do so for the time being.
- 18. Korea (NC15-DP-06) reported on their implementation of CMM 2018-02. In 2018, Korea's catch limit for PBF was 598.856 tons. 535 tons of PBF were caught in total in 2018, comprising of 510.5 tons of small PBF and 24.5 tons of large PBF. To avoid overshooting, the Korean government issued an order to prohibit the capture of any PBF conservatively as from 26 March 2018. Although Korea does not have a large fish catch limit, according to paragraph 3 of CMM 2018-02, Korea used part of the catch limit for small fish to catch the large fish in 2018. So there was no overage of the catch limit in 2018. Regarding international trade, Korea requested that Japan double check their trade amounts. Korea reported importing 34 tons of frozen PBF from Japan in 2018, but Japan did not report export of frozen PBF to Korea. Korea requested further investigation. It was noted that there was no explanation of farming operations included in Korea's report. Korea explained that there are 2 PBF farms currently operating in Korea with juvenile fish in their cages and that further information on farming operations could be included in future reports.
- 19. Chinese Taipei (NC15-DP-08) reported on the measures taken to manage catch and effort limits, data collection and international trade of Pacific bluefin. Chinese Taipei reported 480 longline vessels fishing for PBF in 2018, which was below the baseline level of 660 vessels. Chinese Taipei reported 381mt of PBF caught in 2018, which was also below the 2002-2004 annual average levels. Chinese Taipei reported on the implementation of a CDS for PBF, and noted that the scheme can be used to monitor and collect data for PBF. In 2018, Chinese Taipei exported 1.6 metric tons of PBF and imported 11.9 mt.
- 20. The United States (NC15-DP-09) reported on its implementation of PBF measures in 2018. The United States explained that it does not have any vessels fishing for PBF in the WCPFC Area North of 20N, so it does not need to limit fishing effort. The catches of PBF 30kg or larger are typically in the range of 1-4 mt per year, and in 2018 were 1 mt. The United States monitors imports and exports of PBF, and in 2018 about 1,164 mt of bluefin tuna caught in the Pacific Ocean were imported to the U.S., with about 1,047 mt coming from Mexico, 118 mt from Japan, and less than 1 mt from New Zealand. About 4 mt of bluefin tuna caught in the Pacific Ocean were exported from the United States in 2018.

- 21. A number of additional inconsistencies were noted with regard to trade related information included in Member reports. Japan noted a discrepancy between Japanese reported exports of PBF to China and Chinese reported imports of PBF from Japan. Japan recorded 320 t of PBF exported to China in 2018 but according to China, they only imported Atlantic bluefin tuna in 2018. A similar discrepancy was also reported last year for 2017. Additionally, Japan reported 0.4 t of imported PBF from the Cook Islands in 2018 while the Cook Islands reported no catch of, PBF in 2018, Cook Islands agreed to include exports in its annual reporting. Japan also reported ~15 t of PBF imported from New Zealand in 2018. According to CMM 2018-02, CCMs which have a baseline catch of 10t or less of PBF may increase its catch as long as it does not exceed 10 t. Japan noted that further information should be requested from New Zealand on their catch and export of PBF in 2018.
- 22. It was noted that China, Fiji, the Philippines and Vanuatu were not present during the JWG meeting to report back on their implementation of CMM 2018-02. Additionally Members expressed concern that no reports had been received from Fiji, the Philippines or Vanuatu, and it was highlighted that the submission of these reports is critical for ensuring the appropriate management of PBF in the WCPFC.
- 23. China was not present to report on its implementation of CMM 2018-02 (NC15-DP-02). However, it was noted that China may not be compliant with the obligations of the PBF measure. It was highlighted that China has consistently reported they have no vessels targeting PBF but they do not report catch of PBF. It was suggested that if China has longline fisheries operating in the North Pacific, even if they are not targeting PBF, it would be realistic to assume that China's vessels are taking at least some PBF. It was noted that in the Secretariat's compiled report on PBF information, it states that the reporting obligation is not applicable to China; however, it was suggested that the measure is both applicable to China and that China is required to report any catch of PBF, even bycatch, in line with the CMM. Noting these concerns, the NC Chair agreed to consult with China on this matter.
- 24. Noting concerns expressed by a number of Members, the NC Chair agreed to formally send letters to Fiji, the Philippines, and Vanuatu to request submission of required reports and to express concern over their lack of attendance during NC15. The NC Chair will also send a letter to China requesting more information on their bycatch as well as expressing the same concern about their lack of attendance.
- 25. Mexico and the United States reported on their implementation of Pacific bluefin management under the IATTC.
- 26. The United States (IATTC-NC-JWG04-04) reported on implementation of conservation and management measures in the Eastern Pacific Ocean. There are two U.S. gear types that target Pacific bluefin tuna commercially in the EPO, purse seine and hook and line, and they both occur within the U.S. EEZ. Other gear types catch bluefin incidentally. All U.S. vessels that harvest bluefin and land on the U.S. West Coast are required to have a Highly Migratory Species Permit and all Purse seine vessels must be listed on the IATTC's Active Purse Seine Regional Vessel Register. Regarding implementation of management measures in the EPO under IATTC, as a reminder, the US has a 600 mt biennial limit for our commercial fisheries and an annual cap within

that of 425 mt. The US exceeded that annual cap in 2017, and then imposed a very restrictive 2-mt trip limit applicable to our commercial vessels in 2018 so as not to exceed the biennial limit. This was to allow harvest of PBF in small quantities, whether caught incidentally or targeted, consequently preventing regulatory discards. Because of this small trip limit, the United States ended up with an overall under-harvest from the 2017-2018 catch limit. For 2019-202, there is a 630 mt biennial limit for the United States in 2019-2020, which incorporates a 30 mt addition to the catch limit as a result of that previous under-harvest. For this year and next, the United States will continue with very conservative trip limits to ensure no catch overage occurs: a 15 mt trip limit until catch is within 50 mt of the annual limit, at which time a 2 mt trip limit will be in effect.

- 27. Japan requested additional information on U.S. efforts to manage and track recreational catch of PBF. The United States explained that bag limits have been in place since 2015. Additionally, the IATTC measure calls for a commensurate 40% reduction in recreational fishery catch and the U.S. recreational catch is within that 40% reduction, consistent with the IATTC measure. The co-chair asked whether the United States has a catch survey system for Pacific recreational fisheries similar to the system on the Atlantic coast. The United States responded that logbook reporting is implemented on the Pacific coast instead.
- 28. Mexico (IATTC-NC-JWG04-05) reported on implementation of conservation and management measures in the Eastern Pacific Ocean. Mexico's catch of PBF has been regulated since the start of the fishery by national regulations and by IATTC resolutions since 2012. In that year, resolution IATTC C12-09 established a 10,000 metric catch limit valid for 2012-2013. After that period, catch limits were reduced based on stock assessment results. Resolutions C14-06, C16-08 and C18-01 established for Mexico a biannual limit of 6000 metric tons starting 2015 until 2020. In 2016, Mexico voluntarily released 195 tons from farming pens, aiming to promote stronger conservation measures in the WCPFC to improve PBF situation. In 2018 the amount of catch was higher than the adopted catch limit, so an adjustment was made and imposed by the Mexican authority. In 2019, because the Mexican authorities closed the fishery to avoid a possible catch overage, catch was well below (20%) the adjusted limits for 2019-2020. Mexican authorities are developing a process to avoid further catch overages in the future. This year, although the catch limit was adjusted, Mexican authorities ordered the release of 245 tons of live PBF from the 2018 catch, as part of an internal process to address the accountable of the over catch.
- 29. Mexico was requested to include further information on fishing gear, measures taken to collect catch and effort data, and import and export data for PBF in future reports. The co-chair also noted that IATTC members do not have the same obligation to report to the Northern Committee, so thanked both Mexico and the United States for voluntarily reporting out on these measures in the Eastern Pacific Ocean.

Agenda Item 5: Harvest strategy and Long-term Management Framework for Pacific bluefin tuna fisheries (WCPFC HS 2017-02 and IATTC RESOLUTION C-18-02 – Amendment to C-16-08)

5.1 Review of conservation and management measures for PBF

30. Japan introduced NC15-DP-11, proposed amendments to CMM 2018-02 for Pacific

Bluefin Tuna. Japan noted that proposed increases were not agreed to last year, but ISC was requested to review additional stock indices and to conduct additional stock projections and scenarios. ISC concluded that there was no need to change the scientific advice from the previous year and that the probabilities of achieving the first and second rebuilding targets exceeded 75% in all of the catch increase scenario projections requested by the JWG. Based on the updates from ISC, Japan has submitted a new proposal this year to increase catch limits based on scenario number 3 from the ISC report - a 10% increase for small fish and a 1300mt increase for large fish. This new proposal takes into account the concern of other members on the catch of juvenile PBF in the Northwest Pacific area. The proposal also includes a conversion factor which would be used in the transfer of small fish catch limit to large fish catch limit, to further incentivize catch of large fish instead of juveniles, as well as a new provision for the management of fishing years. Japan noted that the stock is increasing and that fishermen need to be compensated for their continued efforts and sacrifices which have contributed to the rebuilding of the stock.

- 31. Korea introduced NC15-DP-12, proposed amendments to CMM 2018-02 for Pacific Bluefin Tuna. Korea explained two proposed modifications to the current measure: 1) increase catch limits for large fish based on scenario number 5 from the ISC report; and 2) special considerations for small-scale set-net fisheries in Korea's territorial waters. Korea noted that ISC's advice that increases could be possible and that more PBF has been occurring recently in Korea's waters. Korea also explained that their current catch limit is only for small fish, but that large fish catch limits are needed. Additionally Korea's limited catch is from small-scale set nets which take place in their territorial waters a passive gear which only catches PBF incidentally. Korea stated the current limits create a disproportionate burden on small scale fisherman, and these proposed modifications would reduce this burden.
- 32. The United States acknowledged that strides have been made toward the common objective to rebuild the PBF stock and that some challenges have been identified while managing the diverse fisheries. The United States remains precautious but open to continue discussions and will offer ideas to solve operational challenges. Additional work will be required to ensure that the timing of recommendations would allow both RFMOs to share the benefits and burdens fairly. The United States also noted that more work is needed to better address the relative fishing impacts between the West and the East.
- 33. Mexico noted concern for the stock but explained that they may be willing to consider some increase, potentially for large fish only as long as there continues to be a very high probability of reaching the rebuilding target. Japan explained that they are also cautious about the impact of any increase on the stock, which is why they chose scenario 3 and an 81% probability of achieving the target within the timeframe.
- 34. Pew and WWF strongly urged the JWG to reject the two proposals to increase the catch of Pacific bluefin tuna. It was suggested instead that the working group use the meeting to advance the PBF harvest strategy process by agreeing to candidate reference (both limits and targets) and harvest control rules. Pew and WWF reiterated that the stock is at 3.3% unfished biomass, is overfished, continues to experience overfishing, and based on the best available science from the ISC, the state of the stock is not better than last year, when the NC agreed not to increase catch limits. The most recent stock projections assume recruitment will increase and then stay at the so-

called average level after the first rebuilding target is met. However, this level has not been seen consistently in more than two decades and there is no guarantee that level will be consistently reached in the future. Raising quotas now would be very risky in light of this large uncertainty. Pew and WWF suggested that the working group should agree to continue current measures until the full benchmark stock assessment takes place next year.

- 35. Japan reminded members that last year the JWG agreed to look at additional stock indices such as recruitment indices and that the preliminary indication is that the stock recruitment remains above the 2016 low recruitment, giving more comfort for members to consider catch limit increase.
- 36. A small working group was held to further progress discussions on the proposed revisions to the conservation and management measure for PBF. The co-chair noted that during the small working group, one party expressed the view that no catch limit increases could be agreed to for 2020. Members worked to develop a modified proposal that provided some flexibility. The United States also developed a document outlining a number of outcomes and additional requests for the ISC.
- 37. Japan introduced NC15-DP11_Rev 1, a revised proposal to amend 2018-02 for Pacific Bluefin Tuna. Japan noted that two years ago the NC agreed to a harvest strategy including harvest control rules. Japan considered that all the components contained in the harvest strategy should be respected, and if the harvest control rules continue to be ignored, Japan will not pay respect to the other parts of the strategy. Japan expressed great disappointment that catch increases will not be achieved again this year as the expectation among Japanese stakeholders to see such increase became high after a similar proposal was rejected last year. The intention of the new proposal is to alleviate difficulties of Japan to some extent without increasing the catch limits. The revised proposal includes a 17% carry-over provision for 2020 only, a transfer of 300mt of large fish catch limit from Chinese Taipei to Japan for 2020 only, and a specific provision for the management of PBF fisheries by a management year other than calendar year. The proposed CMM would be reviewed and amended as needed in 2020 following the benchmark stock assessment for PBF and any recommendation from the next joint WG meeting.
- 38. The Cook Islands noted that the NC must continue to apply the precautionary approach in implementing its management decisions, considering the concerns some members, including the Cook Islands, have expressed over the low status of the stock. The Cook Islands noted the range of uncertainties in the most recent projections, and looks forward to the results of the benchmark assessment in 2020. The Cook Islands expressed sympathy to the Japanese position with regard to their domestic fisheries and acknowledged that the principles of the Harvest Strategy approach do allow for the possibility of a catch increase. Cook Islands agreed that the recommended text changes to the CMM are an acceptable compromise.
- 39. The JWG recommended that the WCPFC NC recommend NC15-DP11_Rev 2 to amend 2018-02 for Pacific Bluefin Tuna (**Annex C**).
- 40. Pew expressed concern that the changes agreed to will allow catch to increase next year by hundreds of tons over the previously agreed to limits for both small and large fish. Adding multiple exemptions to measures is not a transparent or effective way to manage a fishery. Pew

noted that there has been no scientific analysis of these changes, but it is expected that they will further increase overfishing and only harm the chances of rebuilding the stock. Pew urged members to reconsider the recommendations and instead agree to maintain the current measure when they reconvene with a quorum in December.

- 41. The Chair of the ISC PBF WG clarified that in the projections conducted by ISC, the estimated catch for Chinese Taipei in 2019 in the projections was more than 900 t as the fishing mortality for all fisheries were increased in order to utilize the catch limit to the greatest extent possible. In reality the recent catch by Chinese Taipei is around 400 t, meaning that the projection assumed about 500 t more catch than actually being taken.
- 42. The United States introduced a paper entitled Outcomes of the 4th Joint IATTC-WCPFC NC Working Group Meeting on the Management of Pacific Bluefin Tuna which was intended to capture some key points for the IATTC and WCPFC NC to consider incorporating when developing future management actions for Pacific bluefin tuna. The JWG outcomes document included a number of requests to the ISC, including a number of projections based on the 2020 benchmark assessment and fishery impact on SSB under recent conditions taking into account the difference in age caught. The JWG outcomes document is included as **Annex D**.

5.2 Emergency rule

43. There were no discussions on this matter - but it will remain on the agenda next year.

5.3 Guidelines for the development of MSE

5.3.1 Report from the MSE Workshop

- 44. Dr. Shuya Nakatsuka (Japan) briefly presented the results of 2nd PBF MSE Workshop. ISC held its 2nd Workshop on PBF MSE, as requested by WCPFC HS2017-02, in May 2019 in San Diego, USA. The purpose of the Workshop was to promote understanding of MSE among stakeholders, particularly in the EPO and to continue discussions on elements of MSE for PBF, following up the results of 1st workshop. Participants did not wish to make specific decisions at the ISC workshop, so the JWG needs to consider the path forward for PBF MSE. Dr. John Holmes, Chair of ISC, followed up with the discussion took place at ISC19. To continue the MSE, ISC19 requested the NC-IATTC Joint Working Group on PBF identify 1) management objectives, 2) purpose of MSE, 3) terms of reference, and 4) candidate reference points and harvest control rules to evaluate. It was also noted that additional human resources are needed to accommodate the MSE workload.
- 45. IATTC staff noted that there are currently two rebuilding targets and an HCR in place, and that the PBF stock assessment provides a good understanding of the stock, so the task may not be as difficult as the albacore MSE. Japan noted that before the next workshop is held, the purpose and objectives of the workshop should be clearly defined.

5.3.2 Development of MSE

- 46. The United States introduced IATTC-NC-JWG04-03, Terms of Reference (TOR) for the Pacific Bluefin Tuna Management Strategy Evaluation, noting that the proposal speaks to a number of outstanding issues previously highlighted by the ISC Chair. The proposed TOR aims to provide some structure and purpose for the next PBF MSE workshop. The objective included in the proposed TOR focuses on the long term management of the stock, however, the United States noted that the current rebuilding target could be taken into consideration as well. The remainder of the proposal attempts to clarify the roles of the ISC, IATTC, NC and the JWG in the MSE process.
- 47. The United States also introduced IATTC-NC-JWG04-04, Candidate Reference Points and Harvest Control Rules for Pacific Bluefin Tuna. The proposal responds directly to the PBF harvest strategy currently in place, which states that the JWG should discuss and finalize guidelines for the MSE including long term candidate limit reference points, target reference points and harvest control rules to be provided to the ISC. The proposal includes three harvest control rules two (HCR1 and HCR2) where the exploitation rate responds to the spawning stock biomass and a third (HCR3) which includes separate HCRs for large fish and small fish. The proposal also includes a number of candidate reference points which cover a series of possibilities for limit, threshold, and target reference points.
- 48. Japan noted that according to the outcomes from the 2nd JWG, the current harvest control rules will be applicable until the stock reaches the interim rebuilding target at which point further harvest control rules should be considered. Japan pointed out that any harvest strategy produced through the MSE process will be applied to management of the stock after it reaches the second rebuilding target. Japan preferred HCR3 to others as this could theoretically address problems of coastal fisheries although there remain technical challenges for implementation. With regard to reference points, Japan would prefer a limit reference point of SSB at 30,000 mt above which there could be no relationship between the spawning stock biomass and recruitment. With regard to target reference points, Japan reminded members that the second rebuilding target could be reviewed based on scientific and socioeconomic factors, and given the current challenges faced by Japanese coastal fishermen, Japan could not imagine what would happen in coastal areas when the stock reaches the second rebuilding target, let alone these candidate target reference points.. Japan would prefer to include a probability of breaching the limit reference point, but to avoid candidate target reference points at this stage.
- 49. Based on additional input from members, the United States introduced IATTC-NC-JWG04-03_Rev 1, a slightly revised proposal for Terms of Reference (TOR) for the Pacific Bluefin Tuna Management Strategy Evaluation. The new proposal reflected modifications to the purpose of the MSE and to the roles of the various parties involved (i.e. IATTC, WCPFC NC, ISC and the JWG). There were a number of questions regarding the application of the current MSE process to the second rebuilding targets. It was also noted that funding for the workshop would need to be secured given that the JWG was not a formal organization.
- 50. The JWG recommended that the WCPFC NC and the IATTC adopt the draft Terms of Reference (TOR) for the Pacific Bluefin Tuna Management Strategy Evaluation (**Annex E**).
- 51. The United States also introduced IATTC-NC-JWG04-04_Rev 1, a revised proposal for

Candidate Reference Points and Harvest Control Rules for Pacific Bluefin Tuna. The revised proposal included one additional candidate limit reference point, two additional target reference points, and two new Fmin reference points. ISC noted that the number of harvest control rules and potential scenarios will require and enormous amount of work - and suggested that consideration should be given to reducing the number of requested scenarios. Members concurred that the number of scenarios could be reduced. After reviewing the outcomes of the albacore MSE, further consideration will be given to the workload associated with the harvest control rule scenarios.

52. The JWG recommended that the WCPFC NC and the IATTC adopt the draft Candidate Reference Points and Harvest Control Rules for Pacific Bluefin Tuna (**Annex F**).

5.4 Administrative matters

53. The JWG discussed potential funding for the MSE and the need to identify and fund technical experts to contribute to the MSE work. The co-chair noted that without funding and additional staff, the MSE work cannot be done. The United States concurred with the need to find additional technical experts to contribute to the process. The United States also expressed the intention to seek funding to support the MSE workshop - and requested that other members do the same. The co-chair reminded members that the MSE workshop should include the participation of scientists, managers and stakeholders.

Agenda Item 6: Catch document scheme (CDS)

- 54. Mr. Shingo Ota (Japan) the Chair of the CDS Working Group presented on the outcomes of the 2nd Catch Document Scheme Technical Meeting. A Chair's Summary Report of the meeting is included as **Annex G**. Participants discussed elements included in an information paper submitted by Japan (IATTC-NC-CDS02-2019/02) on the continued development of a draft CMM for a PBF CDS. The meeting made good progress but there are still several outstanding issues that require further consideration. Participants supported continuing work on the development of a draft CMM/Resolution for a PBF CDS through a virtual working group. The next CDS technical meeting will take place 1 day in advance of the next JWG meeting.
- 55. The Chair noted one item for consideration by the JWG. Participants of the CDS technical meeting expressed the need for further analysis of some of the elements to consider in the development of a PBF CDS. It was requested that the issue be raised at WCPFC16 and the next IATTC annual meeting. Participants suggested that there was a need for expert analysis on a number of budgetary and administrative aspects of different options for establishing an ePBCD system, including the possibility of 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. Participants concluded 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.

Agenda Item 7: Next meeting

56. Japan offered to host the next JWG meeting in conjunction with WCPFC NC at a date to

be determined. The JWG encouraged IATTC to consider convening its next regular session in September 2020 to allow for the JWG to meet in advance of the IATTC and facilitate the timely adoption of any JWG outcomes by both regional fishery management organizations in the same year. If this is not feasible, Japan offered to host the next JWG meeting separately from NC sometime between the ISC plenary and the IATTC meeting.

Agenda Item 8: Other business

Agenda Item 9: Adoption of the report

Agenda Item 10: Close of Meeting

Portland, Oregon, United States of America 3 – 5 September 2019

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Portland, Oregon, United States of America 3 – 5 September 2019

PROVISIONAL ANNOTATED AGENDA

- 1. Opening of the meeting
- 2. Designation of co-chairs
- 3. Adoption of agenda
- 4. Conservation and Management Measures for Pacific bluefin tuna (WCPFC CMM 2018-02 and IATTC RESOLUTION C-18-01)
 - 4.1 Reports from ISC, IATTC-SAC and WCPFC-SC
 - 4.2 Reports on the implementation of conservation and management measures for Pacific bluefin tuna
- 5. Harvest strategy and Long-term Management Framework for Pacific bluefin tuna fisheries (WCPFC HS 2017-02 and IATTC RESOLUTION C-18-02 Amendment to C-16-08)
 - 5.1 Review of conservation and management measures for PBF
 - 5.2 Emergency rule
 - 5.3 Guidelines for the development of MSE
 - 5.3.1 Report from the MSE Workshop
 - 5.3.2 Development of MSE
 - 5.4 Administrative matters
- 6. Catch document scheme
- 7. Next meeting
- 8. Other business
- 9. Adoption of the report
- 10. Close of Meeting

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CONSERVATION AND MANAGEMENT MEASURE FOR PACIFIC BLUEFIN TUNA CONSERVATION AND MANAGEMENT MEASURE 2019-XX

The 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 sixeight 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 20168, indicating the following:

- (1) SSB fluctuated throughout the assessment period (1952–2014<u>6</u>), (2) SSB steadily declined from 1996 to 2010, and (3) the <u>decline appears to have ceased since 2010</u>, 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 averageThe 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 201<u>45</u>-201<u>36</u> 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 20146 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 20158-042)—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

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. \(^{\dagger}
- 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 limit. 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 <u>eatch</u> 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

¹ Notwithstanding paragraph 32 and 43, a CCM may carry over in 2019 up to 17% of its each annual initial 2019 catch limits, whichthat remains 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.

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 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.
- 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.
- <u>89</u> 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

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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).

- 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.
- The WCPFC Executive Director shall communicate this CMMonservation 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.
- 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.
- 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.

- 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.
- 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.
- 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.
- 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.

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OUTCOMES OF THE 4^{TH} JOINT IATTC-WCPFC NC WORKING GROUP MEETING ON THE MANAGEMENT OF PACIFIC BLUEFIN TUNA

The Joint IATTC-WCPFC NC Working Group (JWG) on the Management of Pacific bluefin tuna recommends that the IATTC and WCPFC NC consider incorporating the following actions in their decisions:

General Discussion

The Joint Working Group recognizes that upon expansion of certain WCPO purse seine fisheries targeting juvenile fish starting in the mid-1990s, the fishery impact on the spawning stock biomass (SSB) increased in the WCPO and the resultant fishing mortality by all fisheries caused decline in the size of the spawning stock.

Review of current CMMs

The JWG noted the U.S. position that future increases in catch will need to contribute to rebalancing the distribution of fishing opportunities between the WCPO and EPO, such as through a 50-50 split in the allocation of any catch limit increases between WCPFC and IATTC.

Requests to the ISC

To request ISC to conduct projections of the harvest scenarios shown in Table 1 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 HS2017-02, the likely date (year) of reaching each of the two targets, the expected relative fishery impact on SSB of each of the major EPO and WCPO fisheries upon reaching each of the two targets, and any other outputs deemed useful by the ISC.

Table 1. Scenarios for catch increase

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%
Small fish 125 [mt] Large fish 375		550

^{* 250}t transfer of catch limit from small fish to large fish by Japan is assumed to continue until 2020.

ISC is requested to provide fishery impact on the SSB under recent conditions taking into account the difference in age caught. Provide a matrix of conversion values across age classes.

Catch Documentation Scheme (CDS)

Note the CDS WG Chairman's summary. Schedule another 1-day meeting for CDS in conjunction with the next Joint WG meeting.

Management Strategy Evaluation (MSE)

Adoption of the MSE Terms of Reference and candidate harvest control rules and reference points.

Future meeting

Japan offered to host the next JWG meeting in conjunction with WCPFC NC at a date to be determined. The JWG encouraged IATTC to consider convening its next regular session in September 2020 to allow for the JWG to meet in advance of the IATTC and facilitate the timely adoption of any JWG outcomes by both regional fishery management organizations in the same year.

Portland, Oregon, United States of America 3 – 5 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.

Portland, Oregon, United States of America 3 – 5 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 Ftarget rate applies when the stock is larger than SSBthreshold, while Fmin rate applies when the stock is smaller than SSBlimit, and there is either a linear or sigmoidal transition in F for stock sizes between SSBlimit and SSBthreshold. Fmin would be defined as an F rate that is less than the F rate corresponding to the SSBlimit. Candidate HCR 1a has a linear transition between SSBlimit and SSBthreshold whereas Candidate HCR 1b has a sigmoidal transition between SSBlimit and SSBthreshold and could be viewed as more conservative with respect to uncertainty in underlying biomass/abundance estimates when approaching SSBlimit, as well as avoiding abrupt management breakpoints.

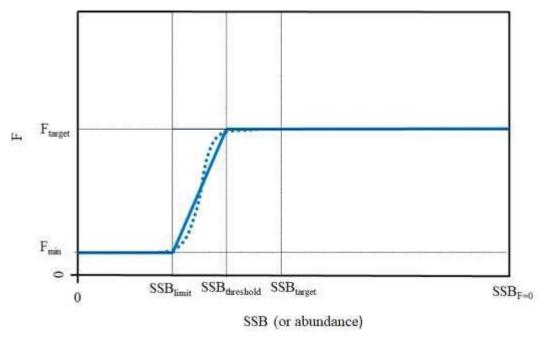


Figure 1. Candidate HCRs 1a (solid line) and 1b (dashed line)

Candidate HCR 2 is illustrated in Figure 2 and is similar to Candidate HCRs 1a and 1b in that F declines once the SSBlimit is breached, but unlike Candidate HCRs 1a and 1b, there is no SSBthreshold between SSBlimit and SSBtarget.

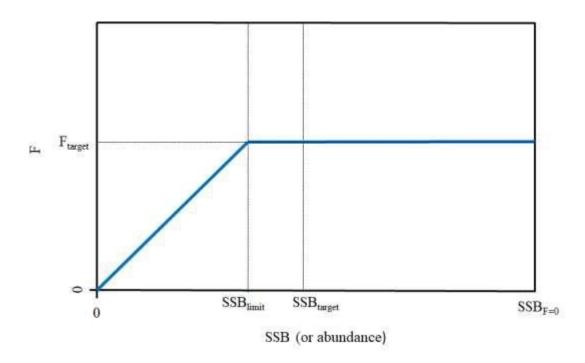


Figure 2. Candidate HCR 2

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 *FX%SPRo* and either *X%SBo* or *X%SBcurrent*, *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 (SSBthreshold) and an Fmin. 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%SSBF=0, 15%SSBF=0, 20%SSBF=0 Candidate Threshold Reference Points (for candidate HCRs 1a and 1b): 15%SSBF=0, 20%SSBF=0, 25%SSBF=0

Candidate Target Reference Points: FSPR10%, FSPR15%, FSPR20%, FSPR30%, FSPR40%

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

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

Portland, Oregon, United States of America 3 – 5 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 *Transhipment* would be added, which would read that "*Transhipment 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 <u>or carrier</u> 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	Japan will circulate a first round of draft CMM/Resolution among the
	working group members
By the end of March 2020	Comments on the first draft are to be submitted to Japan from the
	working group members
By the end of May 2020	Taking into account the comments, Japan will circulate the second
	draft CMM/Resolution among the working group
By the end of June 2020	Comments on the second draft are to be submitted to Japan from the
	working group members
One month before the next CDS	A finalized draft CMM/Resolution will be submitted to the WCPFC
technical meeting	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 10 — Opening of Meeting

- 1.5 Welcome
- 1.6 Selection of rapporteur and adoption of agenda
- 1.7 Meeting arrangements

AGENDA ITEM 11 — 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
 - 2.1.2 Possible cost
 - 2.1.3 A report from the virtual working group
- 2.2 Discussion on the draft CMM

AGENDA ITEM 3 Next Meeting

AGENDA ITEM 4 Other Business

AGENDA ITEM 5 Report to the Joint WG

AGENDA ITEM 6 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 CDS^6

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 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.

⁶ A draft IATTC Resolution for Pacific Bluefin Tuna CDS will be developed in a same format as a WCPFC CMM.

- 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
 Transfer means: 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; 	<iccat> Paragraph 3 of Recommendation 18-02. 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. </iccat>
Caging means: The relocation of live Pacific Bluefin tuna from the transport cage or trap to the farming or fattening cages	<iccat> Paragraph 3 of Recommendation 18-02. The relocation of live bluefin tuna from the transport cage or trap to the farming or fattening cages</iccat>

Farming/fattening means: Caging of Pacific Bluefin tuna in farms and subsequent feeding aiming to fatten and increase their total biomass. Harvest means: The killing of bluefin tuna in	<iccat> Paragraph 3 of Recommendation 18-02 Caging of bluefin tuna in farms and subsequent feeding aiming to fatten and increase their total biomass. <iccat> Paragraph 3 of Recommendation 18-02 The little of the first transition for the first tran</iccat></iccat>
farms.	The killing of bluefin tuna in farms or traps
Export means: 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.	<iccat> Paragraph 2 b) of Recommendation 18-13 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.</iccat>
Import means: 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.	<iccat> Paragraph 2 c) of Recommendation 18-13 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.</iccat>
Re-export means: Any movement of Pacific Bluefin tuna from the territory of a CCM where it has been previously imported.	<iccat> Paragraph 2 d) of Recommendation 18-13 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.</iccat>
Artificial fry means: Fry of Pacific Bluefin tuna raised from fertilized eggs spawned by adult fish that are in an artificially controlled environment.	None

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 sixeight 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 20168, indicating the following:

- (1) SSB fluctuated throughout the assessment period (1952–20146), (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 201<u>45</u>-201<u>36</u> 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 20146 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 20158-042) 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

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.²

- 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^{8,9}. 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. 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 eatch amount of catch 30 kg or larger shall be counted against 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.
- All CCMs except Japan shall implement the limits in paragraph 2 and 3 on a calendaryear 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 $1 \text{ April} 31 \text{ March as the management year}^{10}$.
 - 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 information each year into an appropriate format for the use of the Northern Committee.

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⁷ Notwithstanding paragraph 2 and 3, a CCM may carry over up to 17% of its initial 2019 catch limits, which remain uncaught, to 2020.

⁸ CCMs with a base line catch of 10 t or less may increase its catch as long as it does not exceed 10 t.

⁹ 300 tons of the catch limit of Pacific bluefin tuna 30kg or larger of Chinese Taipei will be transferred to Japan in 2020, subject to a notification by Chinese Taipei to the Secretariat. This transfer may apply for 2020 only. Adoption of this transfer does not confer the allocation of a right, and does not prejudice any future decision of the Commission. ¹⁰ 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).

- 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.
- 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 CMMonservation 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.
- 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.

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
2018	endorse the paper. 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.

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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.

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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 Ftarget rate applies when the stock is larger than SSBthreshold, while Fmin rate applies when the stock is smaller than SSBlimit, and there is either a linear or sigmoidal transition in F for stock sizes between SSBlimit and SSBthreshold. Fmin would be defined as an F rate that is less than the F rate corresponding to the SSBlimit. Candidate HCR 1a has a linear transition between SSBlimit and SSBthreshold whereas Candidate HCR 1b has a sigmoidal transition between SSBlimit and SSBthreshold and could be viewed as more conservative with respect to uncertainty in underlying biomass/abundance estimates when approaching SSBlimit, as well as avoiding abrupt management breakpoints.

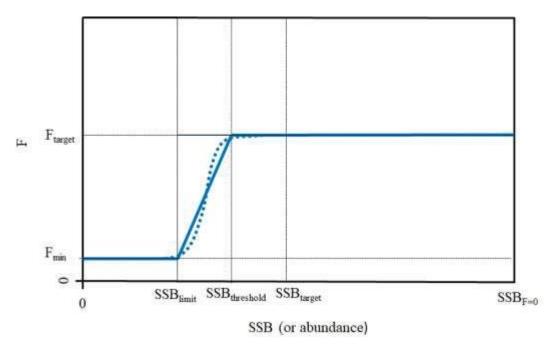


Figure 1. Candidate HCRs 1a (solid line) and 1b (dashed line)

Candidate HCR 2 is illustrated in Figure 2 and is similar to Candidate HCRs 1a and 1b in that F declines once the SSBlimit is breached, but unlike Candidate HCRs 1a and 1b, there is no SSBthreshold between SSBlimit and SSBtarget.

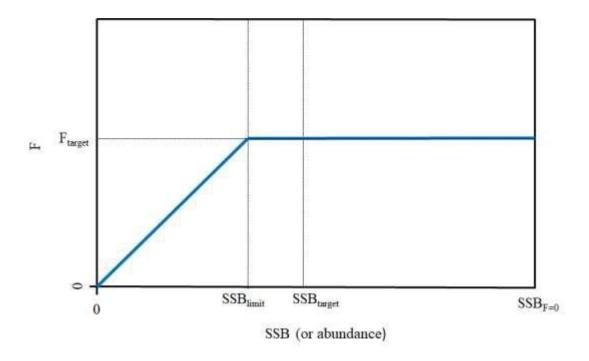


Figure 2. Candidate HCR 2

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 2014¹¹.

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 *FX%SPRo* and either *X%SBo* or *X%SBcurrent*, *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 (SSBthreshold) and an Fmin. 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%SSBF=0, 15%SSBF=0, 20%SSBF=0

Candidate Threshold Reference Points (for candidate HCRs 1a and 1b): 15%SSBF=0, 20%SSBF=0, 25%SSBF=0

Candidate Target Reference Points: FSPR10%, FSPR15%, FSPR20%, FSPR30%, FSPR40%

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

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¹¹ Maunder, Mark. (2014). Management Strategy Evaluation (MSE) Implementation in Stock Synthesis: Application to Pacific Bluefin Tuna. IATTC Stock Assessment Report. 15. 100-117.

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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.



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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 <u>likely</u> not overfished relative to the limit reference point adopted by the Commission (20% SSB current F=0) and overfishing is likely not occurring, either fully exploited, or may be experiencing fishing mortality above levels that are sustainable in the long term, and

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 effort by their vessels fishing for North Pacific albacore in the WCPF Convention Area is not increased beyond 2002-2004 annual average current 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 12 , 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.
- 6.5. The Commission shall consider future actions with respect to North Pacific albacore based on recommendations of the Northern Committee.
- 7.6. 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.
- 8.7. 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.
- 9.8. 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.
- 10.9. The provisions of paragraph 89 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.

11.10. This CMM shall replace the CMM 2005-03.

¹² The first such report shall be due on April 30th, 2006 and shall cover calendar year 2004. Small Island Developing States will make their best efforts to comply with this first reporting deadline.

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

Area	a E:-1	2002-04 Average		Ye	ar	Ye	ar	Ye	ar	Ye	ear	Ye	ar	Ye	ear	
CCM	13	Fishery	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
				_		•						_		_		

¹³ If collective effort limits across the North Pacific Ocean, report Convention Area and North Pacific Ocean separately

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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} .

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, using the best point estimate, 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 the fishing mortality rate below the F-limit as soon as feasible. In considering such recommendations, the difficulties of fleets not targeting 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.

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WORK PROGRAMME FOR THE NORTHERN COMMITTEE

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

	Objectives		annual tasks	
work areas	2020–2022	2020	2021	2022
	Pacific bluefin tuna Tasks (A) Review members' reports on their implementation of CMM on Pacific bluefin tuna.	Review the compiled members' reports and identify and rectify shortcomings.	Review the compiled members' reports and identify and rectify shortcomings.	Review the compiled members' reports and identify and rectify shortcomings.
	(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).	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)). 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.	Obtain work results from ISC and recommend any necessary changes to CMM on Pacific bluefin tuna (Task B(3)). Work in the JWG in MSE development.	Obtain work results from ISC and recommend any necessary changes to CMM on Pacific bluefin tuna. Work in the JWG in MSE development.
	(C) Develop CDS	Explore means of supporting the MSE and its oversight by the JWG, including funding and in-kind support. Develop CDS based on the inputs from members and recommendations of the JWG, including a draft CMM.	Develop CDS based on the inputs from members and recommendations of the JWG, and further develop a draft CMM if needed.	

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

Work areas	Objectives		annual tasks	
work areas	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 Pacific bluefin tuna measure.	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 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.
4. ROP (Paragraph 9, Attachment C of CMM2007-01) 5. Cooperation with		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.
other organizations				

Work areas	Objectives	annual tasks			
work areas	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.	Have consultation to maintain consistent measures for North Pacific albacore and Pacific bluefin tuna. Hold a joint working group meeting on Pacific bluefin tuna management.	Have consultation to maintain consistent measures for North Pacific albacore and Pacific bluefin tuna. Hold a joint working group meeting on Pacific bluefin tuna management.	Have consultation to maintain consistent measures for North Pacific albacore and Pacific bluefin tuna. Hold a joint working group meeting on Pacific bluefin tuna management.	

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

- 1. Opening of Meeting
- 1.1 Welcome
- 3. Mr. Shingo Ota, Chair of the WG, opened the meeting and welcomed the participants.
- 1.2 Selection of rapporteur and adoption of agenda
- 4. 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

- 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:

(9) 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..."

(10) 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.

(11) 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 *Transhipment* would be added, which would read that "*Transhipment 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".

(12) 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.

(13) 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.

(14) 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.

(15) 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.

(16) 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	Japan will circulate a first round of draft CMM/Resolution among the working group members
By the end of March 2020	Comments on the first draft are to be submitted to Japan from the working group members
By the end of May 2020	Taking into account the comments, Japan will circulate the second draft CMM/Resolution among the working group
By the end of June 2020	Comments on the second draft are to be submitted to Japan from the working group members
One month before the next CDS technical meeting	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 CDS¹⁴

5 General Provisions

5.1 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.

5.2 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.

5.3 Definition of term

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

5.4 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.

6 Validation of ePBCDs

6.1 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

¹⁴ 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.

6.2 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.

6.3 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.

7 Relationship with non-members

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

8 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
Transfer means:	<iccat> Paragraph 3 of Recommendation 18-02.</iccat>
- 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 bluefin tuna from the catching vessel's net to the transport cage;
- any transfer of live Pacific Bluefin tuna from the transport cage to another transport cage;	- any transfer of live 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;	- 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.
Caging means: The relocation of live Pacific Bluefin tuna from the transport cage or trap to the farming or fattening cages	<iccat> Paragraph 3 of Recommendation 18-02.</iccat>
the transport cage of trap to the farming of fattening cages	The relocation of live bluefin tuna from the transport cage or trap to the farming or fattening cages
Farming/fattening means: Caging of Pacific Bluefin tuna in farms	<iccat> Paragraph 3 of Recommendation 18-02</iccat>
and subsequent feeding aiming to fatten and increase their total biomass.	Caging of bluefin tuna in farms and subsequent feeding aiming to fatten and increase their total biomass.
Harvest means: The killing of bluefin tuna in farms.	<iccat> Paragraph 3 of Recommendation 18-02</iccat>
	The killing of bluefin tuna in farms or traps

Export means: 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.	<iccat> Paragraph 2 b) of Recommendation 18-13 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.</iccat>
Import means: 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.	<iccat> Paragraph 2 c) of Recommendation 18-13 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.</iccat>
Re-export means: Any movement of Pacific Bluefin tuna from the territory of a CCM where it has been previously imported.	<iccat> Paragraph 2 d) of Recommendation 18-13 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.</iccat>
Artificial fry means: Fry of Pacific Bluefin tuna raised from fertilized eggs spawned by adult fish that are in an artificially controlled environment.	None