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

**Northern Committee**
**Sixteenth Regular Session**

**Electronic Meeting**
**8 October 2020**

# SUMMARY REPORT

**Acknowledgements**

The financial, logistical and administrative support provided by the Western and Central Pacific Fisheries Commission Secretariat and all Members of the Northern Committee are gratefully acknowledged. Mr. Masanori Miyahara, who chaired the Sixteenth Regular Session of the Northern Committee, and Mr. Alex Meyer, who served as the rapporteur for the meeting, are acknowledged with appreciation.

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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**
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# SUMMARY REPORT

## AGENDA ITEM 1 — OPENING OF MEETING

1. The Sixteenth Regular Session of the Northern Committee (NC16) took place electronically, on 8 October 2020. The meeting was attended by Northern Committee (NC) members from Canada, China, Cook Islands, Fiji, Japan, Republic of Korea, Philippines, Chinese Taipei, United States of America (USA) and Vanuatu and observers from European Union, Mexico, Birdlife International, Inter-American Tropical Tuna Commission (IATTC), International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC), Marine Stewardship Council, Organization for Regional and Inter-Regional Studies (ORIS), Pacific Islands Forum Fisheries Agency (FFA), Pew Charitable Trust, Seafood Legacy, The Ocean Foundation, and World Wide Fund for Nature (WWF). The list of meeting participants is in **Attachment A**.

### 1.1 Welcome

2. M. Miyahara, Chair of the NC, opened the meeting.

### 1.2 Adoption of agenda

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

### 1.3 Meeting arrangements

4. The WCPFC Science Manager, SK Soh, explained the meeting arrangements.

### 1.4 Report from ISC and SC

#### 1.4.1 Report from ISC

5. J. Holmes, ISC Chair, provided the following summary of the outcomes of the 20th Meeting of the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC20).

> The ISC20 plenary was held virtually on July 15-20, 2020. Two benchmark assessments were conducted for North Pacific Albacore (NPA) and Pacific Bluefin Tuna (PBF).
>
> For NPA, a benchmark assessment was conducted using fishery data from 1994 to 2018. Total biomass (age 1+) has declined from 916,529 t (1995) to 641,391 t in 2018. Total and spawning biomass increased between 2016 and 2018. SSB2018/20%SSBcurrent, F=0 = 2.30. The ISC

concluded that the stock is likely not overfished relative to the limit reference point. Although no F-based reference points have been adopted to evaluate overfishing, current fishing intensity (F2015-2017) is likely at or below seven potential reference points.

Two harvest scenarios were considered: constant F2015-2017 & constant catch. The constant catch scenario was found to impact uncertainty estimates in projections. If a constant fishing intensity is applied to the stock, then median female spawning biomass is expected to increase to 62,873 t and there will be a low probability of falling below 20%SSBcurrent, F=0 LRP by 2028. Furthermore, if a constant average catch (C2013-2017 = 69,354 t) is removed from the stock in the future, then the median female spawning biomass is also expected to increase to 66,313 t and the probability that SSB falls below the LRP by 2028 will be slightly higher than the constant fishing intensity scenario.

A benchmark assessment was conducted for PBF using 1952-2018 fishery data. SSB declined from 62,784 t (1995) to 10,837 t (2010) and has slowly increased to 28,228 t (2018). The estimate of SSB2018 is 3,000 t greater than SSB2016 due to increase in young fish (0-2 years). The below average recruitment 2010-14 was a concern in the 2016 assessment. The 2017 and 2018 recruitment estimates are also below average. There has been a substantial decrease in F for ages 0-2 in 2016-18 relative to previous years.

As for the stock status, no biomass-based reference points have been adopted for PBF. However, the PBF stock is overfished relative to potential biomass-based reference points (SSBMED and 20%SSBF=0) adopted for other tuna species by the IATTC and WCPFC. The recent (2016-2018) F%SPR is estimated to produce 14%SPR. Although no fishing mortality-based limit or target reference points have been adopted for PBF, recent fishing mortality is above the level producing 20%SPR. However, the stock is subject to rebuilding measures including catch limits, which do not compromise the capacity of the stock to rebuild, as shown by the projection results. Under all examined scenarios, rebuilding to SSBMED by 2024 with at least 60% probability, is reached and the risk of SSB falling below historical lowest observed SSB at least once in 10 years is negligible. The projection results assume that the conservation and management measures (CMMs) are fully implemented and are based on certain biological and other assumptions. Given the low SSB, the uncertainty in future recruitment, and the influence recruitment has on stock biomass, monitoring recruitment and SSB should continue so that the recruitment level can be understood in a timely manner.

In response to a request from the IATTC-NC JWG, the PBFWG produced a matrix of conversion values across age classes.

In response to a request from NC15 that the ISC provide advice on which future recruitment scenario is the most likely one over the near term for striped marlin, the ISC found that there is a linearly decreasing trend in estimated recruitment with time. If the long-term recruitment scenario is used for future projections, then the observed long-term recruitment time series requires the assumption that there is no time trend. The ISC concluded that the short-term recruitment scenario is most appropriate for conducting MLS projections

In response to a request from NC15 that the ISC 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, the ISC could not provide a straightforward explanation at present in part because it is difficult to identify explanatory factors due to uncertainties in assessment model. The BILLWG will attempt to address this issue in the next assessment of this stock.

ISC concluded that there is no change to the stock status of striped marlin. As for conservation information, if the stock continues to experience recruitment consistent with the short term recruitment scenario (2012-2016), then catches must be reduced to 60% of the WCPFC catch quota from CMM 2010-01 (3,397 t) to 1,359 t in order to achieve a 60% probability of rebuilding to 20%SSB0=3,610 t by 2022. This change in catch corresponds to a reduction of roughly 37% from the recent average yield of 2,151 t. In addition, retrospective analyses (ISC/19/ANNEX/11) show that the assessment model appears to overestimate spawning potential in recent years, which may mean the projection results are ecologically optimistic.

No new information or assessments were available for Western and Central North Pacific Swordfish, Eastern Pacific Swordfish, Blue Marlin, and North Pacific Shortfin Mako Shark. The ISC20 Plenary reviewed and agreed to forward the stock status and conservation information adopted at ISC19 for these stocks.

Regarding administrative matters, Shui-kai Chang (Chinese Taipei) and Sung Il Lee (Korea) were elected as the Vice-Chairs of the PBFWG and STATWG, respectively, Hidetada Kiyofuji (Japan) and Steve Teo (USA) were reelected as the Chair and Vice-Chair of the ALBWG and John Holmes (Canada) and Shui-kai Chang (Chinese Taipei) were reelected as Chair and Vice-Chair of the ISC.

The next ISC Plenary is scheduled to be hosted by the United States of America in Kona, Hawai'i, July 14-19, 2021.

The ISC work plan for 2020-21 includes completing a blue marlin benchmark assessment, completing a shortfin mako shark indicator analysis, reviewing MSE progress and completing a report of the first round, and holding the 5th ALB MSE workshop and a PBFWG workshop on CPUE index development and other improvements that will be beneficial to MSE.

6. Due to time limitations and the electronic format of the meeting, the NC noted the outcomes of ISC20 and suggested conducting a more thorough review of the outcomes of ISC20 and ISC21 at NC17.

### 1.4.2 Additional Report from SC

7. The NC noted the Outcomes Document (NC16-IP-02) of the 16th Regular Session of the Scientific Committee (NC16-IP-02) and a Brief Summary for NC16 (NC16-IP-02a) as reviewed.

## AGENDA ITEM 2 — CONSERVATION AND MANAGEMENT MEASURES

### 2.1 Pacific bluefin tuna (CMM 2019-02)

8. The NC Chair reported on the outcomes of the 5th Joint IATTC and WCPFC-NC Working Group Meeting on the Management of Pacific Bluefin Tuna. Details are in the Chairs' Summary (**Attachment C**).

9. Korea provided a clarification regarding its intervention in paragraph 14 of the report. Korea explained that the wording "the current quota is unable to cover such bycatch" is misleading as it suggests that Korea is not currently complying with its quota. The bycatches in set net fisheries were counted against Korean quotas. Korea wanted to say that the current quota is insufficient to cover PBF bycatch in its set net fisheries.

**10. The NC recommends that the Commission adopt the revised Conservation and Management Measure for Pacific Bluefin Tuna for one-year roll-over in Attachment D.**

## 2.2 North Pacific albacore (CMM 2019-03)

11. The NC reviewed working paper NC16-WP-01, especially the summary table of members' updated information on NPA fishing effort data (**Attachment E**).

12. Vanuatu explained that it has been working with SPC to review its NPA catch and effort data. There have been significant data gaps for prior years, including the 2002-2004 reference period. In some areas the effort reported was for the entire area north of the equator, not north of 20 degrees north where Vanuatu's fleets are targeting NPA. Vanuatu's data has been corrected as follows: effort data, number of vessels and number of fishing days for 2004 has been corrected; the catch and effort data for 2005-2018 has been revised to ensure that effort data only applies to vessels that are specifically targeting albacore, which essentially means the area north of 20 degrees north; 2019 data has been provided. There are still data gaps for 2002 and 2003 that Vanuatu is working with SPC to resolve this issue. In the interim, Vanuatu proposed that any assessment of its compliance with CMM 2019-03 be based on data for 2004, because this is the only year in the reference period for which it is confident that the data are reliable. Vanuatu will advise the Commission as soon as it is able to provide more reliable data for that period.

13. The USA expressed concern that Vanuatu has not correctly reported against CMM 2019-03. Vanuatu appears to have reassessed its limit by recalculating the average for 2002-2004. The limit is the average for 2002-2004, not any single year, and a member cannot unilaterally change that limit. The USA also reminded Vanuatu that it must report effort in all areas north of equator, as long as it is targeting NPA, while recognizing that all of Vanuatu's fishing effort targeting NPA may in fact be north of 20 degrees north. In addition, Vanuatu must report all catch of NPA, including incidental catch, north of the equator. The USA expressed its willingness to work with Vanuatu to ensure that its reporting is accurate, and recognized that it may be necessary to amend CMM 2019-03 to make the reporting requirements clearer. The USA also recognized that paragraph 8 of the CMM includes a provision for small island developing states, but that this does not exempt Vanuatu from the limits in paragraph 2 of said CMM. The USA suggested that members could work together to propose amendments to the CMM or to the baseline for any single member, but that would require the agreement of the NC and be recommended to the Commission for adoption.

14. Vanuatu explained that it is working with SPC to resolve the data gaps and is using SPC's definition for vessels targeting NPA, which is, vessels that catch more albacore than other species. By that definition, of Vanuatu's vessels, only those north of 20 degrees north are targeting NPA. Vanuatu is reporting all catch of NPA, including those caught south of 20 degrees north, is therefore in compliance with CMM 2019-03. With regard to the reference period, Vanuatu pointed out that this was before the Commission was established, and before Vanuatu had a vessel monitor system or other relevant systems in place. It has therefore had to rely on estimates from industry, which it knows are incomplete. In Vanuatu's view, it is not appropriate to take the average of the 2002-2004 data, as it knows that the data for two of those years are very inaccurate. Vanuatu is not proposing a permanent change but rather suggesting that the data for 2004 be used as the best estimate for the average for 2002-2004 until more accurate data for that period are available. In addition, Vanuatu pointed out that it is not assessed against the limit of CMM 2019-03 under the compliance monitoring scheme as it is a small island developing nation that reserves the right to develop its fisheries.

15. The NC noted that this matter warranted further discussion but recognized that due to time limitations and the electronic format of the meeting, it would not be possible to hold sufficient discussions at NC16. **The NC encouraged members to hold intersessional discussions and prepare proposals for amending CMM 2019-03 as appropriate, and agreed to hold further discussions at NC17.**

16. China explained that in past years, it may have misunderstood the scope of the catch and effort data to be reported to the Commission in accordance with CMM 2019-03 as being for stocks. It may have only reported data for areas north of 20 degrees north rather than all areas north of the equator. In light of this, China will review its historic data and make a proposal for its historical data to be changed if necessary.

17. The Philippines pointed out that the section for its data in the table is blank, which suggests that it is not reporting its data. That is incorrect. As the Philippines has consistently reported, it does not target NPA. The Philippines proposed that the table be amended to show zero catch.

## AGENDA ITEM 3 — FUTURE WORK PROGRAMME

### 3.1 Work Programme for 2021-2023

18. The NC reviewed and adopted the 2021-2023 Work Programme for the Northern Committee (**Attachment F**).

19. Pew expressed concern that the NC is falling behind schedule for completing the MSE process for PBF by 2024, while recognizing the constraints imposed by the COVID-19 pandemic. Pew encourages the NC and ISC to advance this work and adopt an MSE and MSE-tested management procedure in 2024. This will also help members who seek to increase the catch limit for PBF. The Chair, M. Miyahara (Japan), acknowledging Pew's comments, reinforced the call for the ISC to develop an MSE for PBF with the goal to complete the first iteration of the MSE by 2024.

20. Japan expressed their continued commitment to developing an MSE for PBF by 2024 and pointed out that Pew's intervention seemed to suggest that until the MSE process is complete, no catch limit increase can be made. Japan stressed that there are currently harvest control rules in place that allow the Commission to consider a catch limit increase without MSE before the stock has reached the interim or secondary rebuilding targets.

## AGENDA ITEM 4 — OTHER MATTERS

### 4.1 Election of Officers

**21. The NC recommends that the terms of the current Chair, M. Miyahara (Japan), and the current vice Chair, M. Tosatto (USA), be extended for two years.**

### 4.2 Next meeting

**22. Japan offered to host the Seventeenth Regular Session of the NC in Japan. Its venue and time will be informed in due course.**

### 4.3 Other business

23. There was no other business.

## AGENDA ITEM 5 — CLOSE OF MEETING

24. The meeting was brought to a close on 8 October.

25. The NC16 Summary Report will be adopted intersessionally.

**Attachment A**

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**Northern Committee**
**Sixteenth Regular Session**
ELECTRONIC MEETING
8 October 2020

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**Attachment B**

**The Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**
**Northern Committee**
**Sixteenth Regular Session**
Electronic Meeting
8 October 2020

**PROVISIONAL AGENDA**

**WCPFC-NC16-2020/02**

**AGENDA ITEM 1 OPENING OF MEETING**

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

**AGENDA ITEM 2 CONSERVATION AND MANAGEMENT MEASURES**

**2.1 Pacific bluefin tuna (CMM 2019-02)**
**2.2 North Pacific albacore (CMM 2019-03)**

**AGENDA ITEM 3 FUTURE WORK PROGRAMME**

**3.1 Work Programme for 2021-2023**

**AGENDA ITEM 4 OTHER MATTERS**

**4.1 Election of Officers**
**4.2 Next meeting**
**4.3 Other business**

**AGENDA ITEM 5 CLOSE OF MEETING**

**Attachment C**

**The Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**
**Northern Committee**
**Sixteenth Regular Session**
Electronic Meeting
8 October 2020

# CHAIRS' SUMMARY OF THE 5TH JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE MANAGEMENT OF PACIFIC BLUEFIN TUNA

## Agenda Item 1: Opening of the meeting

1. The 5th Session of the Joint IATTC and WCPFC-NC Working Group Meeting on the Management of Pacific Bluefin Tuna (JWG05) was held on 6-7 October 2020. The meeting was opened by co-chairs Mr. Masanori Miyahara (Japan, Northern Committee Chair) and Ms. Dorothy Lowman (USA, IATTC).

2. A list of participants to the JWG05 is included in **Annex A**.

## Agenda Item 2: Adoption of Agenda and Meeting Procedures

3. Ms. Lowman welcomed participants and outlined the meeting procedures and the agenda.

4. The provisional agenda was adopted (**Annex B**).

## Agenda Item 3: Scientific Information on Pacific Bluefin Tuna

### 3.1 ISC report on New Benchmark Stock Assessment

5. The ISC report on the new benchmark stock assessment for Pacific bluefin tuna (PBF) (NC16-Present-01) was reviewed.

### 3.2 Reports from WCPFC-SC and IATTC-SAC

6. The report of the 16th WCPFC-SC meeting (NC16-IP-02) was noted as reviewed.

7. The report of the 11th IATTC-SAC meeting was unavailable because it has not yet convened.

## Agenda Item 4: Reports on the implementation of conservation and management measures (CMMs) and resolutions for Pacific bluefin tuna

8. The Joint WG reviewed WCPFC and IATTC members' implementation reports on conservation and management measures for PBF.

9. Japan provided information to supplement its report. Japan operates artisanal fisheries, consisting of mostly troll fisheries; set net fisheries; and purse seine fisheries. Catch depends on the migration of PBF, which fluctuates drastically. 2019 catch was 2,943 mt (78% of the limit) for small fish and 4,603 mt (90% of limit) for large fish. Japan is unable to fully utilize its catch limits because limits are divided into small units, migration patterns change annually, and fishers tend to save their allocations for the winter when PBF

prices are higher but PBF may not necessarily migrate to their regions. The increasing PBF migration in coastal areas is also causing challenges for Japanese coastal fisheries, including interference with squid jigging and yellowtail longline fisheries, and the need for tuna longliners and set net fishers to sacrifice catches of other species to release PBF bycatch. In addition, Japan has been conducting a study on the potential impact of PBF management on the recruitment index. Japan found that fishing patterns have drastically changed since 2017 and plans to examine the potential impact of such changes as well as strict regulations on the recruitment index.

10. The JWG identified discrepancies among the import/export data of some members and the relevant members agreed to cross-verify these data.

**Agenda Item 5: PBFT Conservation and Management Measures**

11. Japan presented a proposal to amend CMM 2019-02 for Pacific Bluefin Tuna (**Annex C**).

12. The United States noted the priority to maintain the rebuilding of the stock towards the initial and second rebuilding targets and at next year's discussion, it will be important to continue the shift towards harvesting large fish and consider a pair of revised measures that result in a more equitable balance between the EPO and WCPO.

13. The JWG discussed the proposed amendments but was unable to reach a consensus and agreed to defer this proposal to discussions at next year's JWG meeting.

14. Korea requested that during next year's discussions, consideration be given to additional quotas for PBF bycatch in its set net fisheries, explaining that the current quota is unable to cover such bycatch.

15. To achieve a one-year roll-over of the existing conservation and management measures, the JWG discussed a draft CMM to amend CMM 2019-02 for Pacific Bluefin Tuna (**Annex D**) and draft measures to amend C-18-01 Measures for the Conservation and Management of Pacific Bluefin Tuna in the Eastern Pacific Ocean (**Annex E**), and recommends their adoption by the Northern Committee and the IATTC, respectively.

**Agenda Item 6: Review of progress of CDS Working Group**

16. Mr. Shingo Ota (Japan), Chair of the CDS Working Group, provided a progress report. In accordance with the CDS Working Group's work plan, Japan has circulated the first and second drafts of a CMM. According to the work plan, the third draft was to be submitted to this year's CDS Technical Meeting but the meeting has been postponed. Nonetheless, Japan intends to incorporate members' comments on the second draft and circulate a third draft in due course.

17. Mr. Ota pointed out that the scope of the electronic catch documentation system i.e. a consolidated system to cover all tunas or one for Pacific bluefin tuna remains a fundamental issue that the Commission must give advice on.

**Agenda Item 7: Future (2021) JWG meeting**

18. Japan offered to host the next JWG meeting at a date to be determined to precede both NC and IATTC meetings, subject to the state of the COVID-19 pandemic.

19. The JWG recommends extending the terms of the co-chairs Mr. Miyahara and Ms. Lowman by one year.

**Agenda Item 8: Other business**

20. There was no other business.

**Agenda Item 9: Adoption of Report**

21. The IATTC-NC JWG05 adopted the report.

**Agenda Item 10: Close of meeting**

22. The meeting was brought to a close on 7 October 2020.

**Annex A**

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

Virtual Meeting
6-7 October 2020, 7am-10am Japan Standard Time

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**Annex B**

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

Virtual Meeting
6-7 October 2020, 7am-10am Japan Standard Time

**AGENDA**

1. **Opening of the meeting**
2. **Adoption of Agenda and Meeting Procedures**
3. **Scientific Information on Pacific Bluefin Tuna**
   - 3.1 ISC report on New Benchmark Stock Assessment
   - 3.2 Reports from WCPFC-SC and IATIC-SAC
4. **Reports on the implementation of conservation and management measures (CMMs) and resolutions for Pacific bluefin tuna**
5. **PBFT Conservation and Management Measures**
6. **Review of progress of CDS Working Group**
7. **Future (2021) JWG meeting**
8. **Other business**
9. **Adoption of Report**
10. **Close of meeting**

**Annex C**

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

Virtual Meeting
6-7 October 2020, 7am-10am Japan Standard Time

**Proposed amendment to the current CMM 2019-02 for Pacific Bluefin Tuna**

**WCPFC-NC16-2020/DP-11**

**Explanatory note**

1. In accordance with paragraph 5 (b) of the Harvest Strategy for Pacific Bluefin Tuna Fisheries (Harvest Strategy 2017-02) and based on information from ISC, Japan submits a proposal to amend the current CMM 2019-02 for PBF to increase the catch limits.
2. Our specific proposal on increases to the catch limits is as follows:
   - Both of catch limits for PBF less than 30kg and those for PBF 30kg or larger are increased by 20% in accordance with the Scenario # 6 presented in the ISC report[1]; and,
   - Based on the overall catch limits, a catch limit for each relevant CCM is specified in the CMM for PBF less than 30kg and PBF 30kg or larger, respectively, which will be discussed at the NC16 (new paragraph 3).
3. In addition to increases to the catch limits, a conversion factor to use the catch limit for PBF smaller than 30kg to catch PBF 30kg or larger is newly introduced (new paragraph 6). The catch of age 2 PBF, the largest cohort in PBF smaller than 30kg, is estimated to have 1.46 times (1.9/1.3 = 1.46) larger impact on biomass than that of age 3 PBF, the smallest cohort in PBF 30kg or larger[2]. If the impact of the catch of age 0 PBF is compared with that of age 3 PBF, a proportion would be larger than 1.46. Based on these scientific evidences, a conversion factor of 0.68 (= 1/1.46), as the most conservative figure, is applied in counting the actual catch of PBF 30kg or larger against the catch limit for PBF smaller than 30kg.

**CMM 2013-06 Criteria**

In accordance with CMM2013-06 (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?*

The current CMM (CMM 2019-02) are addressed to all CCMs to implement it, although Pacific bluefin tuna catches reported by SIDS CCMs are very small according to the report by the Secretariat (WCPFC16-2019-IP10). For possible extension of fisheries for SIDS in the future, the current CMM states in its paragraph 14 that "The provisions of paragraph 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".

[1] Table S-4 of "Stock Assessment of Pacific Bluefin Tuna in the Pacific Ocean in 2020" (SC16-SA-WP-06)
[2] Table 1 of "REPORT OF THE PACIFIC BLUEFIN TUNA WORKING GROUP INTERSESSIONAL WORKSHOP"

Japan's proposal does not change the above-mentioned nature of the current CMM, as is provided in the new paragraph 16 of the proposal.

*b. Which CCMs would this proposal impact and in what way(s) and what proportion?*
*c. Are there linkages with other proposals or instruments in other regional fisheries management organizations or international organizations that reduce the burden of implementation?*
*d. Does the proposal affect development opportunities for SIDS?*
*e. Does the proposal affect SIDS domestic access to resources and development aspirations?*
*f. What resources, including financial and human capacity, are needed by SIDS to implement the proposal?*
*g. What mitigation measures are included in the proposal?*
*h. What assistance mechanisms and associated timeframe, including training and financial support, are included in the proposal to avoid a disproportionate burden on SIDS?*

As described in a. above, Japan's proposal does not impact fisheries by SIDS, so no special consideration for SIDS is required.

**CONSERVATION AND MANAGEMENT MEASURE FOR PACIFIC BLUEFIN TUNA**

**Conservation and Management Measure 2020-XX~~2019-02~~**

*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 ~~eight~~nine times since then (CMM 2010- 04, CMM 2012-06, CMM 2013-09, CMM 2014-04, CMM 2015-04, CMM 2016-04, CMM2017-08, ~~and~~ CMM 2018-02 and CMM 2019-02) 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 20~~18~~20, indicating the following:

- ~~(1) SSB fluctuated throughout the assessment period (1952–2016), (2) SSB steadily declined from 1996 to 2010, and (3) the slow increase of the stock continues since 2011 including the most recent two years (2015-2016)~~ (1) spawning stock biomass (SSB) fluctuated throughout the assessment period (fishing years 1952-2018), (2) the SSB steadily declined from 1996 to 2010, (3) the slow increase of the stock biomass continues since 2011, (4) total biomass in 2018 exceeded the historical median with an increase in immature fish; and (5) fishing mortality (F%SPR) declined from a level producing about 1% of SPR in 2004-2009 to a level producing 14% of SPR in 2016-2018;
- ~~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~~Historical recruitment estimates have fluctuated since 1952 without an apparent trend. The 2015 recruitment estimate is lower than the historical average while the 2016 recruitment estimate (about 17 million fish) is higher than the historical average. The recruitment estimates for 2017 and 2018, which are based on fewer observations and more uncertain, are below the historical average;
- ~~The fishery exploitation rate in 2015-2016 exceeded all biological reference points evaluated by the ISC except FMED and FLOS~~. A substantial decrease in estimated F is observed in ages 0-2 in 2016-2018 relative to the previous years.
- Since about the early 1990s, the W~~C~~PO purse seine fisher~~ies~~y group~~, in particular those~~ targeting small fish (age 0-1) ha~~ves~~ had a~~n increasing~~greater impact ~~on the spawning stock biomass~~, and the effect of this group in 201~~6~~8 ~~had a~~was greater ~~impact~~ than any of the other fishery group~~s~~.;
- 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 mature fish;
- The projection results indicate that~~: the current management measures by the WCPFC (CMM 2018-02) and IATTC Resolution (C-18-01) under the low recruitment scenario resulted in an estimated 97% probability of achieving the initial biomass rebuilding target (6.7% of SSBF=0) by 2024~~, under all examined scenarios, the initial goal of WCPFC and IATTC, rebuilding to $SSB_{MED}$ by 2024 with at least 60% probability, is reached with 99% or 100% probability, and that the risk of SSB falling below $SSB_{loss}$ at least once in 10 years is negligible.;
- The projection results also indicate that, under all examined scenarios, ~~T~~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 greater than 960%; 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, however, that* the probabilities shown in the projection indicate that reduction of juveniles would have less positive impact than those shown in the 2018 projections in terms of achieving the rebuilding targets;

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

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

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

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

**General Provision**

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

**Management measures**

2 CCMs shall take measures necessary to ensure that~~:(1) T~~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.

3

~~(2)~~ Japan, Korea and Chinese Taipei shall, respectively, take measures necessary to ensure that its~~All~~ catches of Pacific bluefin tuna less than 30 kg and Pacific bluefin tuna 30 kg or larger shall~~ be reduced to 50% of the 2002 - 2004 annual average levels~~ not exceed the following 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.~~[3]

[3] Notwithstanding paragraph ~~2 and 3~~5, a CCM may carry over up to 17% of its initial 20~~19~~20 catch limits, which remain uncaught, to 202~~0~~1.

[Pacific bluefin tuna less than 30kg]

| | 2021 |
|---|---|
| Japan | X metric ton |
| Korea | Y metric ton |

[Pacific bluefin tuna 30kg or larger]

| | 2021 |
|---|---|
| Japan | X metric ton |
| Korea | Y metric ton |
| Chinese Taipei | Z metric ton |

4 CCMs, not described in paragraph 3, may increase its catch of Pacific bluefin tuna as long as it does not exceed 10 metric tons.

~~3~~5

~~4 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[4,5].~~Any overage or underage of the catch limit described in paragraph 3 shall be deducted from or may be added to the catch limit for the following year. The maximum underage that a CCM may carry over in any given year shall not exceed 5% of its annual initial catch limit[1].

~~5~~

6 ~~However, in 2018, 2019, and 2020~~ CCMs described in paragraph 3 may use part of the catch limit for Pacific bluefin tuna smaller than 30 kg stipulated in paragraph ~~2 (2)~~3 above to catch Pacific bluefin tuna 30 kg or larger in the same year. In this case, the catch amount adjusted with the conversion factor 0.68~~of~~ (actual catch 30 kg or larger x 0.68) shall be counted against the catch limit for Pacific bluefin tuna smaller than 30 kg. CCMs shall not use the catch limit for Pacific bluefin tuna 30 kg or larger to catch Pacific bluefin tuna smaller than 30 kg. ~~The ISC is requested to review, in its work referred to in Section 5 of Harvest Strategy, the implications of this special provision in terms of PBF mortality and stock rebuilding probabilities in 2020. Based on that review, in 2020 the Northern Committee will determine whether it should be continued past 2020, and if so, recommend changes to the CMM as appropriate.~~

7 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 year[2~~6~~].

b. In its annual reports for PBF, for each category described in a.1 and a.2 above, complete the

~~[4] CCMs with a base line catch of 10 t or less may increase its catch as long as it does not exceed 10 t.~~
~~[5] 300 tons of the catch limit of Pacific bluefin tuna 30kg or larger of Chinese Taipei may 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.~~
~~[6]~~ 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).

required reporting template for both the management year and calendar year clearly identifying fisheries for each management year.

8 CCMs shall 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.

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

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

11 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.

12 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.

13 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;

14 CCMs shall report to Executive Director by 31 July annually measures they used to implement paragraphs 2, 3, 4, ~~5,~~ 7, 8, 10, 11, ~~and~~ 13 and 16 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.

15 The WCPFC Executive Director shall communicate this CMM 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.

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

17 The provisions of paragraphs 2 ~~and~~, 3 and 4 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.

18 The provisions of paragraph ~~14~~17 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.

19 This CMM replaces CMM 2018~~9~~-02~~.~~ and shall be replaced by a new CMM to be adopted in 2021, taking into consideration the outcomes of the Joint IATTC-WCPFC NC Working Group on Pacific bluefin tuna ~~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.~~

**Attachment**

## Development of a Catch Document Scheme for Pacific Bluefin Tuna

### Background

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

### 1. Objective of the Catch Document Scheme

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

### 2. Use of electronic scheme

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

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

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

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

## 4. **Work plan**

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

| | |
|---|---|
| 2017 | The joint working group will submit this concept paper to the NC and IATTC for endorsement. NC will send the WCPFC annual meeting the recommendation to endorse the paper. |
| 2018 | The joint working group will hold a technical meeting, preferably around its meeting, to materialize the concept paper into a draft CMM. The joint working group will report the progress to the WCPFC via NC and the IATTC, respectively. |
| 2019 | The joint working group will hold a second technical meeting to improve the draft CMM. The joint working group will report the progress to the WCPFC via NC and the IATTC, respectively. |
| 20XX ~~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. |

**Annex D**

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

Virtual Meeting
6-7 October 2020, 7am-10am Japan Standard Time

**CONSERVATION AND MANAGEMENT MEASURE FOR PACIFIC BLUEFIN TUNA**

**Conservation and Management Measure 20~~19~~20-~~02~~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 ~~eight~~nine times since then (CMM 2010- 04, CMM 2012-06, CMM 2013-09, CMM 2014-04, CMM 2015-04, CMM 2016-04, CMM2017-08, ~~and~~ CMM 2018-02 and CMM 2019-02) 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 2018, indicating the following:

- (1) SSB fluctuated throughout the assessment period (1952–2016), (2) SSB steadily declined from 1996 to 2010, and (3) the slow increase of the stock continues since 2011 including the most recent two years (2015-2016);
- 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 2015-2016 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 2016 had a greater impact than any other fishery group.
- The projection results indicate that: the current management measures by the WCPFC (CMM 2018-02) and IATTC Resolution (C-18-01) under the low recruitment scenario resulted in an estimated 97% probability of achieving the initial biomass rebuilding target (6.7% of SSBF=0) by 2024;
- 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;

*Recognizing* that due to the pandemic caused by COVID-19, it is not possible to hold a physical meeting of the Northern Committee in 2020, which makes it difficult for the members of the Northern Committee to engage in substantive discussion to change the existing CMM on Pacific bluefin tuna;

*Further recognizing* that under such circumstances, a simple roll-over of the 2020-specific measures for one year could be a realistic approach;

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

**General Provision**

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

**Management measures**

2 CCMs shall take measures necessary to ensure that:

(1) Total fishing effort by their vessel fishing for Pacific bluefin tuna in the area north of the 20° N shall stay below the 2002–2004 annual average levels.

(2) All catches of Pacific bluefin tuna less than 30 kg shall be reduced to 50% of the 2002– 2004 annual average levels. Any overage or underage of the catch limit shall be deducted from or may be added to the catch limit for the following year. The maximum underage that a CCM may carry over in any given year shall not exceed 5% of its annual initial catch limit.[7]

3 CCMs shall take measures necessary to ensure that all catches of Pacific Bluefin tuna 30kg or larger shall not be increased from the 2002-2004 annual average levels[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

[7] Notwithstanding paragraph 2 and 3, a CCM may carry over up to 17% of its initial 20~~19~~20 catch limits, which remain uncaught, to 202~~0~~1.
[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 may 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.~~

initial catch limit[1]. However, in ~~2018, 2019, and 2020~~2021 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 amount of catch 30 kg or larger shall be counted against the catch limit for Pacific bluefin tuna smaller than 30 kg. CCMs shall not use the catch limit for Pacific bluefin tuna 30 kg or larger to catch Pacific bluefin tuna smaller than 30 kg. The ISC is requested to review, in its work referred to in Section 5 of Harvest Strategy, the implications of this special provision in terms of PBF mortality and stock rebuilding probabilities in 202~~0~~1. Based on that review, in 202~~0~~1 the Northern Committee will determine whether it should be continued past 202~~0~~1, 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 year[~~10~~3].

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.

5. CCMs shall 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.

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

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

8. 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.

9. 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.

10. 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;

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[~~10~~3] 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).

11. CCMs shall report to Executive Director by 31 July annually measures they used to implement paragraphs 2, 3, 4, 5, 7, 8, 10 and 13 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.

12. The WCPFC Executive Director shall communicate this CMM 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.

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

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

15. The provisions of paragraph 14 shall not provide a basis for an increase in fishing effort by fishing vessels owned or operated by interests outside such developing coastal State, particularly Small Island Developing State Members or participating territories, unless such fishing is conducted in support of efforts by such Members and territories to develop their own domestic fisheries.

16. This CMM replaces CMM 2018~~89~~-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 in 2021.

**Attachment**

## Development of a Catch Document Scheme for Pacific Bluefin Tuna

### Background

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

### 1. Objective of the Catch Document Scheme

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

### 2. Use of electronic scheme

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

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

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

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

## 4. Work plan

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

| | |
|---|---|
| 2017 | The joint working group will submit this concept paper to the NC and IATTC for endorsement. NC will send the WCPFC annual meeting the recommendation to endorse the paper. |
| 2018 | The joint working group will hold a technical meeting, preferably around its meeting, to materialize the concept paper into a draft CMM. The joint working group will report the progress to the WCPFC via NC and the IATTC, respectively. |
| 2019 | The joint working group will hold a second technical meeting to improve the draft CMM. The joint working group will report the progress to the WCPFC via NC and the IATTC, respectively. |
| 20~~20~~ XX | 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. |

**Annex E**

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

Virtual Meeting
6-7 October 2020, 7am-10am Japan Standard Time

# INTER-AMERICAN TROPICAL TUNA COMMISSION

## ~~93RD MEETING~~

## RESOLUTION C-~~18-01~~20-XX

### MEASURES FOR THE CONSERVATION AND MANAGEMENT OF PACIFIC BLUEFIN TUNA IN THE EASTERN PACIFIC OCEAN, ~~2019 AND 2020~~2021

[*Explanatory note: The changes tracked here show a change from the current resolution (Resolution C-18-01)].*

*Resolves as follows*:

1. The Commission shall implement this Resolution in accordance with the long-term management objectives of Pacific bluefin tuna in paragraph 1 of Resolution C-18-02 [Amendment to Resolution C-16-08].
2. Each CPC shall report sport fishery catches of Pacific bluefin tuna semi-annually to the Director. Each CPC shall continue to ensure that catches of Pacific bluefin tuna by sportfishing vessels operating under its jurisdiction are reduced in a manner commensurate with reductions in commercial catches.
3. During ~~2019 and 2020~~2021, in the IATTC Convention Area, combined total commercial catches of Pacific bluefin tuna by all CPCs shall not exceed the catch limit of ~~6,200~~3,925 metric tons[11]. ~~No CPC shall exceed 3,500 metric tons in 2019.~~
4. ~~Any CPC other than Mexico with historical commercial catches of Pacific bluefin tuna in the Convention Area may catch 600 metric tons of Pacific bluefin tuna in commercial fisheries in 2019 and 2020, combined, but not exceeding 425 metric tons in any year. The 600 metric ton catch limit for each CPC under this paragraph will be subtracted and reserved from the total catch limit in paragraph 3 for the exclusive use of that CPC~~Noting that the United States could catch up to ~~[~~425~~]~~ metric tons in any year within the biennial limit under Resolution C-18-01, the United States may catch up to ~~[~~425~~]~~ metric tons in 2021, and any catches that exceed 300 metric tons[12] shall be subtracted from the catch limit to be adopted for 2022. The catch limit

[11] ~~The catch limit for 2019-2020 is subject to final data on commercial catches of Pacific bluefin tuna in 2018 and does not prejudice the outcome of relevant domestic legal issues in affected CPCs, the consideration of which does not create a precedent for compliance with catch limits in this or future resolutions. Pursuant to Paragraph 10, the Director will notify the possible change to the catch limit for approval by the Commission subject to the Commission's rules for intersessional decision-making (Rules of Procedure, Section VIII). The catch limit for 2019–2020 shall not exceed 6,600 metric tons, consistent with IATTC Scientific Staff recommendation~~

[12] 300 metric tons shall be adjusted to add carry-over of under-harvest in accordance with Paragraph 7 of this Resolution.

for the United States will be subtracted and reserved from the total catch limit in paragraph 3 for the exclusive use of the United States.

~~4.~~5. Noting that Mexico could catch up to ~~[~~3,500~~]~~ metric tons in any year within the biennial limit under Resolution C-18-01, Mexico may catch up to ~~[~~3,500~~]~~ metric tons in 2021, and any catches that exceed 3,000 metric tons[13] shall be subtracted from the catch limit to be adopted for 2022. The catch limit for Mexico will be subtracted and reserved from the total catch limit in paragraph 3 for the exclusive use of Mexico.

~~5.~~6. Any over-harvest shall be deducted from catch limit in the following year in accordance with Paragraph 3 of Resolution C-18-02 [Amendment to Resolution C-16-08]. Over-harvest of the biennial catch limits established in Resolution ~~C-16-08~~C-18-01 shall be deducted from catch limits applicable to this Resolution.

~~6.~~7. Under-harvest of biennial catch limits established in Resolution ~~C-16-08~~C-18-01 shall be added to catch limits applicable to this Resolution in accordance with Paragraph 4 of Resolution C-18-02.

~~7.~~8. CPCs should endeavor to manage catches by vessels under their respective national jurisdictions in such a manner and through such mechanisms as might be applied, with the objective of reducing the proportion of fish of less than 30 kg in the catch toward 50% of total catch, taking into consideration the scientific advice of the ISC and the IATTC staff. At the annual meeting of the IATTC in 2021~~9~~, the Scientific Staff shall present the results of the 2020~~19~~ fishing season in this regard for the Commission's review. CPCs shall take the necessary measures to ensure that the catch limits specified in paragraphs 3, 4 and 5~~4~~ are not exceeded in 2021.

~~8.~~9. In ~~2019 and 2020~~2021, each CPC shall report its catches to the Director weekly after 50% of its annual catch limit in each year is reached.

~~9.~~10. The Director will send out notices to all CPCs when 75% and 90% of the limits in Paragraphs 3, 4, or 5 ~~or 4~~ have been reached. The Director will send out a notice to all CPCs when the limits in Paragraphs 3, 4 or 5~~4~~ have been reached. CPCs shall take the necessary internal measures to avoid exceeding the limits established in Paragraphs 3, 4 or 5~~4~~.

~~10.~~11. By January 31, ~~in 2019 and 2020~~2021, the Director shall notify all CPCs of the catch limit for ~~2019 and 2020~~2021 ~~in accordance with~~established Paragraphs 3, 4, and 5 ~~and 4~~ of this resolution ~~and~~ that ~~considering~~ considers any over-harvest or under-harvest in accordance with Paragraphs 6 and 7 of this Resolution and Paragraphs 3 and 4 of Resolution C-18-02 [Amendment to Resolution C-16-08].

~~11.~~12. In ~~2019 and 2020~~2021, the IATTC Scientific Staff shall present an assessment to the Scientific Advisory Committee of the effectiveness of this resolution also taking into consideration the results of the ISC's latest Pacific bluefin tuna stock assessment, harvest scenario projections performed by the ISC, and conservation and management measures for Pacific bluefin tuna adopted by the WCPFC. The Commission shall consider new management measures to apply beyond ~~2020~~ 2021 based on the best available information, including the latest assessment, recruitment information, projections or other relevant information~~results of the assessment~~.

~~12.~~13. Taking into consideration the outcomes of the Joint IATTC-WCPFC NC Working Group on Pacific bluefin tuna and meetings of the WCPFC, the Commission shall review this Resolution and consider revising the catch limits established in this resolution, taking into account the need for an equitable distribution of catch, during the 2021~~19~~ Annual Meeting of the IATTC.

[13] 3000 metric tons shall be adjusted to add carry-over of under-harvest in accordance with Paragraph 7 of this Resolution.

**Attachment D**

**The Commission for the Conservation and Management of**
**Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**
**Northern Committee**
**Sixteenth Regular Session**
Electronic Meeting
8 October 2020

# CONSERVATION AND MANAGEMENT MEASURE FOR PACIFIC BLUEFIN TUNA

**Conservation and Management Measure 20~~19~~20-~~02~~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 ~~eight~~nine times since then (CMM 2010- 04, CMM 2012-06, CMM 2013-09, CMM 2014-04, CMM 2015-04, CMM 2016-04, CMM2017-08, ~~and~~ CMM 2018-02 and CMM 2019-02) 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 2018, indicating the following:

- (1) SSB fluctuated throughout the assessment period (1952–2016), (2) SSB steadily declined from 1996 to 2010, and (3) the slow increase of the stock continues since 2011 including the most recent two years (2015-2016);
- 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 2015-2016 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 2016 had a greater impact than any other fishery group.
- The projection results indicate that: the current management measures by the WCPFC (CMM 2018-02) and IATTC Resolution (C-18-01) under the low recruitment scenario resulted in an estimated 97% probability of achieving the initial biomass rebuilding target (6.7% of SSBF=0) by 2024;
- 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;

*Recognizing* that due to the pandemic caused by COVID-19, it is not possible to hold a physical meeting of the Northern Committee in 2020, which makes it difficult for the members of the Northern Committee to engage in substantive discussion to change the existing CMM on Pacific bluefin tuna;

*Further recognizing* that under such circumstances, a simple roll-over of the 2020-specific measures for one year could be a realistic approach;

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

**General Provision**

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

**Management measures**

2 CCMs shall take measures necessary to ensure that:

(1) Total fishing effort by their vessel fishing for Pacific bluefin tuna in the area north of the 20° N shall stay below the 2002–2004 annual average levels.

(2) All catches of Pacific bluefin tuna less than 30 kg shall be reduced to 50% of the 2002– 2004 annual average levels. Any overage or underage of the catch limit shall be deducted from or may be added to the catch limit for the following year. The maximum underage that a CCM may carry over in any given year shall not exceed 5% of its annual initial catch limit.[14]

3 CCMs shall take measures necessary to ensure that all catches of Pacific Bluefin tuna 30kg or larger shall not be increased from the 2002-2004 annual average levels[15,16].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

[14] Notwithstanding paragraph 2 and 3, a CCM may carry over up to 17% of its initial 20~~19~~20 catch limits, which remain uncaught, to 202~~0~~1.
[15] CCMs with a base line catch of 10 t or less may increase its catch as long as it does not exceed 10 t.
[16] ~~300 tons of the catch limit of Pacific bluefin tuna 30kg or larger of Chinese Taipei may 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.~~

initial catch limit[1]. However, in ~~2018, 2019, and 2020~~2021 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 amount of catch 30 kg or larger shall be counted against the catch limit for Pacific bluefin tuna smaller than 30 kg. CCMs shall not use the catch limit for Pacific bluefin tuna 30 kg or larger to catch Pacific bluefin tuna smaller than 30 kg. The ISC is requested to review, in its work referred to in Section 5 of Harvest Strategy, the implications of this special provision in terms of PBF mortality and stock rebuilding probabilities in 202~~0~~1. Based on that review, in 202~~0~~1 the Northern Committee will determine whether it should be continued past 202~~0~~1, 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 year[~~17~~3].

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.

5 CCMs shall 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.

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

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

8. 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.

9. 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.

10. 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;

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[~~17~~3] 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).

11. CCMs shall report to Executive Director by 31 July annually measures they used to implement paragraphs 2, 3, 4, 5, 7, 8, 10 and 13 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.

12. The WCPFC Executive Director shall communicate this CMM 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.

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

14. 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.

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16. This CMM replaces CMM 2018~~89~~-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 in 2021.

**Attachment**

## 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.

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(2) General provision
(3) Definition of terms
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## 4. Work plan

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

| | |
|---|---|
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| 20~~20~~ XX | 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. |

**Attachment E**

**The Commission for the Conservation and Management of**
**Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**
**Northern Committee, Sixteenth Regular Session**
Electronic Meeting, 8 September 2020

## FISHING EFFORT FISHING FOR NORTH PACIFIC ALBACORE (Table 2, Working Paper NC16-WP-01)

| CCM | Area[18] | Fishery[19] | 2002-04 Average | | 2005 | | 2006 | | 2007 | | 2008 | | 2009 | | 2010 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 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 |
| Canada[20] | N Pacific | ALB troll | 215 | 8,898 | 213 | 8,564 | 174 | 6,243 | 207 | 6,902 | 137 | 5,773 | 138 | 6,540 | 161 | 7,294 |
| | CA[21] only | ALB troll | 8 | 256 | 1 | 56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| China | N Pacific | LL | 10 | 1,250 | 10 | 1,230 | 10 | 1150 | 2 | 260 | 2 | 250 | 2 | 280 | 2 | 240 |
| Cook Islands | N Pacific | ALB troll | 4 | 183 | 2 | 240 | 2 | 171 | 1 | 57 | 1 | 0 | 0 | 0 | 0 | 0 |
| | N Pacific | LL | 1 | 2 | 1 | 4 | 0 | 0 | 1 | 37 | 1 | 17 | 0 | 0 | 0 | 0 |
| Fiji | N Pacific | LL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| Japan[22] | CA only | LL Coast | 296 | 40.988 | 289 | 41,197 | 287 | 43,366 | 273 | 43,480 | 276 | 40,030 | 280 | 43,536 | 286 | 45,877 |
| | | LL DW | 633 | 26,851 | 591 | 21,548 | 538 | 21,186 | 494 | 21,712 | 480 | 17,823 | 361 | 12,060 | 342 | 13,084 |
| | | PL DW | 141 | 19,839 | 134 | 20,442 | 125 | 16,059 | 106 | 16,931 | 104 | 15,667 | 104 | 15,248 | 101 | 15,541 |
| Korea[23] | CA only | LL DW | 13 | 1,072 | | | | | 3 | 268 | 3 | 107 | | | | |
| Philippines[24] | N Pacific | Handline | | | | | | | | | | | | | | |
| Chinese Taipei[25] | N Pacific | ALB LL | 25 | | 23 | 2,363 | 24 | 4,156 | 21 | 3,360 | 18 | 2,603 | 13 | 2,082 | 20 | 2,093 |
| USA | N Pacific | ALB troll | | 13,311 | | 11,552 | | 10,892 | | 11,552 | | 11,138 | | 13,339 | | 13,076 |
| | CA only | ALB troll | | 789 | | 371 | | 66 | | 42 | | * | | * | | * |
| Vanuatu[26] | N Pacific | LL | 42 ~~26~~ | 3,868 ~~1,348~~ | 26 ~~37~~ | 1,983 ~~4,394~~ | 32 ~~55~~ | 2,868 ~~3,196~~ | 23 ~~36~~ | 2,133 ~~2,683~~ | 20 ~~41~~ | 1,883 ~~2,385~~ | 14 ~~30~~ | 1.248 ~~1,530~~ | 10 ~~28~~ | 1.053 ~~1,515~~ |
| Belize[27] | | | | | | | | | | | | | 40 | | 49 | |

* Data in the WCPO were confidential

[18] Data pertain to WCPFC Area only or entire N Pacific?
[19] Fisheries "fishing for" NP albacore
[20] For Canada, no fishing inside the CA since 2005
[21] Convention Area
[22] Japanese albacore data indicates the fisheries in north of the equator within CA.
[23] Korea's fishing effort "fishing for" NP albacore occurred in 2007 and 2008, and non-target fishing effort occurred every year in the North Pacific.
[24] Estimates under study
[25] This data just indicates the fishery fishing for NP albacore only
[26] Effort baseline (2002-2004) is based on 2004 effort from logbook data. Data reported is on effort 'directed' to NP albacore which represents vessels fishing in the area North of 20°N
[27] Vessel number and effort was given for all species

| CCM | Area | Fishery | 2002-04 Average | | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 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 |
| Canada | N Pacific | ALB troll | 215 | 8,898 | 161 | 8,556 | 172 | 5,974 | 183 | 6,465 | 160 | 4,747 | 164 | 5,197 | 152 | 5,359 |
| | CA only | ALB troll | 8 | 256 | 1 | 3 | 2 | 2 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| China | N Pacific | LL | 10 | 1,250 | 10 | 1240 | 10 | 1280 | 10 | 1220 | 10 | 1290 | 10 | 900 | 10 | 910 |
| Cook Islands | N Pacific | ALB troll | 4 | 183 | | | | | | | | | | | | |
| | N Pacific | LL | 1 | 2 | | | | | | | | | 2 | 22 | 1 | 68 |
| Fiji | N Pacific | LL | 0 | 0 | 0 | 0 | 9 | 230 | 29 | 920 | 20 | 663 | 10 | 88 | 8 | 170 |
| Japan | CA only | LL Coast | 296 | 40,988 | 273 | 42,996 | 266 | 38,977 | 248 | 37,529 | 246 | 35,362 | 237 | 37.801 | 229 | 37,308 |
| | | LL DW | 633 | 26,851 | 341 | 12,683 | 320 | 13,818 | 321 | 13,406 | 305 | 13,305 | 285 | 11,763 | 256 | 10,419 |
| | | PL DW | 141 | 19,839 | 98 | 13,433 | 95 | 14,646 | 85 | 12,781 | 84 | 12,147 | 84 | 12,743 | 81 | 13,923 |
| Korea | CA only | LL DW | 13 | 1,072 | 59 | 7,407 | | 11,061 | | 1,746 | | 1,224 | | 857 | | 934 |
| Philippines | CA only | Artisanal (non-target) | | | | | | | | | | | | | | |
| Chinese Taipei | N Pacific | ALB LL | 25 | | 21 | 1,839 | 21 | 1,423 | 22 | 2,108 | 22 | 2,348 | 23 | 2,401 | 24 | 2,259 |
| USA | N Pacific | ALB troll | | 13,311 | | 13,983 | | 15,218 | | 13,509 | | 12,199 | | 11,506 | | 12,743 |
| | CA only | ALB troll | | 789 | | 155 | | * | | * | | 7 | | 8 | | 0 |
| Vanuatu | N Pacific | LL | 42 ~~26~~ | 3,868 ~~1.348~~ | 24 ~~42~~ | 1,248 ~~2,338~~ | 21 ~~46~~ | 760 ~~1,189~~ | 27 ~~60~~ | 1,916 ~~3.337~~ | 25 ~~87~~ | 1,904 ~~3,695~~ | 22 ~~88~~ | 1,675 ~~3,702~~ | 16 ~~38~~ | 1,037 ~~2,381~~ |
| Belize | | | | | | | | | | | | | | | | |

Italic = preliminary data

* Data in the WCPO were confidential

| CCM | Area | Fishery | 2002-04 Average | | 2017 | | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 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 |
| Canada | N Pacific | ALB troll | 215 | 8,898 | 121 | 4,978 | 121 | 4,196 | 122 | 3,882 | | | | | | |
| | CA only | ALB troll | 8 | 256 | 5 | 100 | 0 | 0 | 0 | 0 | | | | | | |
| China | N Pacific | LL | 10 | 1,250 | 10 | 850 | 10 | 838 | 10 | 929 | | | | | | |
| Cook Islands | N Pacific | ALB troll | 4 | 183 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | |
| | N Pacific | LL | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | |
| Fiji | N Pacific | LL | 2 ~~0~~ | 2 ~~0~~ | 4 ~~7~~ | 114 ~~147~~ | 0 ~~6~~ | 0 ~~180~~ | 4 | 25 | | | | | | |
| Japan | CA only | LL Coast | 296 | 40,988 | 233 | 35,566 ~~35,647~~ | 229 | 34,725 ~~34,011~~ | 225 | 35,237 | | | | | | |
| | | LL DW | 633 | 26,851 | 253 | 10,154 ~~10,171~~ | 248 | 10,126 ~~10,478~~ | 249 | 10,708 | | | | | | |
| | | PL DW | 141 | 19,839 | 82 | 12,659 ~~12,656~~ | 80 | 13,236 ~~12,061~~ | 76 | 10,438 | | | | | | |
| Korea | CA only | LL DW | 13 | 1,072 | | 1,990 | | 1,345 | 0 | 0 | | | | | | |
| | | PS | 0 | 0 | | | | | 0 | 0 | | | | | | |
| Philippines | N Pacific | Handline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | |
| Chinese Taipei | N Pacific | ALB LL | 25 | | 25 | 2,567 | 25 | 2,943 | 25 | 2,338 | | | | | | |
| USA | N Pacific | ALB troll | | 13,311 | | 12,673 | | 11,094 ~~10,916~~ | | 11,013 | | | | | | |
| | CA only | ALB troll | | 789 | | 569 ~~567~~ | | 123 ~~127~~ | | 4 | | | | | | |
| Vanuatu | N Pacific | LL | 42 ~~26~~ | 3,868 ~~1,348~~ | 21 ~~56~~ | 1,482 ~~3,933~~ | 27 ~~54~~ | 2,025 ~~3,967~~ | 21 | 1,315 | | | | | | |
| Belize | | | | | | | | | | | | | | | | |

**Attachment F**

**The Commission for the Conservation and Management of**
**Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**
**Northern Committee**
**Sixteenth Regular Session**
Electronic Meeting
8 September 2020

## WORK PROGRAMME FOR THE NORTHERN COMMITTEE

| Work areas | Objectives | annual tasks | | |
|---|---|---|---|---|
| | 2021–2023 | 2021 | 2022 | 2023 |
| **1. Northern stocks**<br>a. Monitor status; consider management action | Review status and take action as needed for:<br>**<u>North Pacific albacore</u>**<br>Tasks | | | |
| | (A) Review members' reports on their implementation of CMM 2019-03. | 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 Interim Harvest Strategy, including: (1) monitor if LRP is breached; (2) continue to work to establish TRP and other elements of harvest strategies, if appropriate based on MSE; (3) recommend any changes to CMM. | Continue to support ISC MSE work to complete Task (B)(2).<br><br>Review the 2020 stock assessment results and recommend any necessary changes to CMM. (Task (B) (3)). | Continue to support ISC MSE work to complete Task (B)(2).<br><br>Recommend any necessary changes to CMM (Task (B) (3)). | Continue to support ISC MSE work to complete Task (B)(2).<br><br>Obtain the new assessment results from ISC and recommend any necessary changes to CMM. (Task (B) (3)) |
| | **<u>Pacific bluefin tuna</u>**<br>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. |

| Work areas | Objectives | annual tasks | | |
|---|---|---|---|---|
| | 2021–2023 | 2021 | 2022 | 2023 |
| | (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). | Review the 2020 stock assessment results and recommend any necessary changes to CMM. (Task (B) (3)).<br><br>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.<br><br>Explore means of supporting the MSE and its oversight by the JWG, including funding and in-kind support. | 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)).<br><br>Work in the JWG in MSE development. | Obtain work results from ISC and recommend any necessary changes to CMM on Pacific bluefin tuna.<br><br>Work in the JWG in MSE development. |
| | (C) Develop CDS | 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. | |

| Work areas | Objectives | annual tasks | | |
|---|---|---|---|---|
| | 2021–2023 | 2021 | 2022 | 2023 |
| | **<u>Swordfish</u>**<br>Further develop the harvest strategy consistent with CMM 2014-06, 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. | |
| | **<u>Striped marlin</u>** | Review information from ISC | Review information from ISC | Review information from ISC |
| 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 mortality, and improve them as needed. | Review implementation of CMM 2018-03 in the northern area. | Review implementation of CMM 2018-03 in the northern area. | Review implementation of CMM 2018-03 in the northern area. |

| Work areas | Objectives | annual tasks | | |
|---|---|---|---|---|
| | 2021–2023 | 2021 | 2022 | 2023 |
| | | 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 2019-04 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).<br>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).<br>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).<br>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 2019-03), including members' reports on their interpretation and implementation of fishing effort control. | Review effectiveness of North Pacific albacore measure (CMM 2019-03), including members' reports on their interpretation and implementation of fishing effort control. | Review effectiveness of North Pacific albacore measure (CMM 2019-03), including members' reports on their interpretation and implementation of fishing effort control. |
| | | Review effectiveness of Pacific bluefin tuna measure. | Review effectiveness of Pacific bluefin tuna measure. | Review effectiveness of Pacific bluefin tuna measure. |
| **4. ROP (Paragraph 9, Attachment C of CMM2007-01)** | | Review implementation of ROP for fishing vessels operating in north of 20°N. | Review implementation of ROP for fishing vessels operating in north of 20°N. | Review implementation of ROP for fishing vessels operating in north of 20°N. |
| **5. Cooperation with other organizations** | | | | |

| Work areas | Objectives | annual tasks | | |
|---|---|---|---|---|
| | 2021–2023 | 2021 | 2022 | 2023 |
| 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.<br><br>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.<br><br>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.<br><br>Hold a joint working group meeting on Pacific bluefin tuna management. |