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124th SSC



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

Northern Committee Twelfth Regular Session

**Fukuoka, Japan
29 August – 2 September 2016**

SUMMARY REPORT

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USP Library Cataloguing-in-Publication Data

Commission for the Conservation and Management of Highly
Migratory Fish Stocks in the Western and Central Pacific Ocean.
Northern Committee. Regular Session (12th : 2016 : Fukuoka, Japan).
Twelfth regular session, Fukuoka, Japan, 29 August–2 September 2016 :
Summary Report. -- Pohnpei, Federated States of Micronesia : Western
and Central Pacific Fisheries Commission, 2016.

XX p. ; cm.

ISBN ~~978-982-9103-33-8~~

1. Fishery management, International--Oceania--Congresses.
2. Fishes--Conservation--Oceania--Congresses. 3. Fish stock assessment
--Oceania--Congresses. 4. Tuna fisheries--Oceania--Congresses.
- I. Western and Central Pacific Fisheries Commission.

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**Northern Committee
Twelfth Regular Session**

**Fukuoka, Japan
29 August – 2 September 2016**

SUMMARY REPORT

AGENDA ITEM 1 — OPENING OF MEETING

1. The Twelfth Regular Session of the Northern Committee (NC12) took place in Fukuoka, Japan, from 29 August – 2 September 2016. The meeting was attended by Northern Committee (NC) members from Canada, China, Cook Islands, Fiji, Japan, Republic of Korea, Chinese Taipei and United States of America (USA), Vanuatu; and Observers from European Union, Federated States of Micronesia, Kiribati, Republic of Marshall Islands, Mexico, Nauru, Palau, Papua New Guinea, Solomon Islands, Tuvalu, Center for Blue Economy, Pacific Islands Forum Fisheries Agency (FFA), Greenpeace, Hawaii Longline Association, IATTC, International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC), MSC, Organization for the Promotion of Responsible Tuna Fisheries (OPRT), The Pew Charitable Trusts, and World Wide Fund for Nature Japan (WWF). The list of meeting participants is included as Attachment A.

1.1 Welcome

2. M. Miyahara, Chair of the NC, opened the meeting and welcomed participants to Fukuoka, Japan.

3. R. Moss-Christian, the Commission Chair, addressed the NC regarding her expectation on the work of NC12. She explained that she and the WCPFC Executive Director have been reviewing existing processes and structures of the Commission meeting and considering ways to revise those in a way that would allow for better outcomes on critical issues requiring urgent decisions. Specifically, she alluded to the state of Pacific bluefin tuna and the need for the Commission to take necessary action, in accordance with the Commission's core mandate. In this regard, she emphasized the key role to be played by the NC on the management of Pacific bluefin tuna and her intention to have a full discussion on the management of Pacific bluefin tuna at the Commission meeting, including through making Pacific bluefin tuna conservation and management a single agenda item. This would demonstrate that the Commission is fulfilling its mandate in working to ensure that a stock that is in critical condition is commanding the necessary attention and action of the Commission. This would be along the same lines of how the Commission will hold its discussions on bigeye, which also requires immediate Commission action. In addition, the Chair referenced the Circular she sent out to CCMs in July with her proposal to focus the Commission's time on progressing the harvest strategy framework for tropical tunas and that there might be consideration for including Pacific bluefin tuna into that process.

1.2 Adoption of agenda

4. The provisional agenda was adopted without modification (Attachment B).
5. Documents supporting the meeting were made available on WCPFC's website (<https://www.wcpfc.int/meetings/12th-regular-session-northern-committee>).

1.3 Meeting arrangements

6. Chair informed NC12 that IATTC agreed to hold a joint working group meeting with the NC to discuss the management of Pacific bluefin tuna and his intention is to have such a joint working group meeting during the course of NC12 after the presentation of the results of the new Pacific bluefin tuna stock assessment by ISC and reports from each CCMs regarding their implementation of CMM on Pacific bluefin tuna. Given the nature of the joint working group meeting, Chair noted the meeting would be considered informal and its results will be reported to NC12 and IATTC.
7. Japan, as the host of NC12, briefed meeting participants on social arrangements and the meeting schedule. S. Nakatsuka (Japan) served as the lead rapporteur for this meeting.

AGENDA ITEM 2 — CONSERVATION AND MANAGEMENT MEASURES

2.1 Report from the Sixteenth Meeting of the International Scientific Committee (ISC16)

8. G. DiNardo, ISC chair, presented the highlights of the 16th meeting of the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (NC12-IP-01). The results are contained in the ISC16 meeting report, which can be found on ISC's website at <http://isc.ac.affrc.go.jp>. Highlights of his presentation on the ISC16 Plenary meeting were summarized below:

The 16th ISC Plenary, held in Sapporo, Japan 13-18 July 2016 was attended by members from Canada, Chinese Taipei, Japan, Korea, and the United States as well as the Western and Central Pacific Fisheries Management Commission and the North Pacific Marine Science Organization. The Plenary reviewed results, conclusions, new data, and updated analyses of the Billfish, Albacore, Shark and Pacific Bluefin tuna working groups. The Plenary endorsed the findings that Pacific bluefin tuna is experiencing overfishing and is overfished, and that Pacific blue marlin is not overfished nor experiencing overfishing. It re-iterated that the North Pacific albacore tuna, North Pacific blue shark, and Western Central North Pacific Ocean swordfish stocks are not overfished nor experiencing overfishing, the Eastern Pacific Ocean swordfish stock is not overfished but likely experiencing overfishing, and North Pacific striped marlin is experiencing overfishing and is overfished. The status of close-kin research was reviewed and a special seminar on recruitment dynamics was held. Plenary endorsed the science objectives for ISC and PICES collaborations and discussed formalizing the ISC structure and administration, and agreed to continue researching means of doing both. Over the past year, ISC further conducted a workshop on Management Strategy Evaluation (MSE), and developed an MSE framework for North Pacific albacore. Plenary also noted the strides WGs had made in incorporating best available scientific information (BASI) into stock assessment work, enhanced stock assessment reports and the increased transparency in Working Group efforts. Observers from Pew Charitable Trusts, Monterey Bay Aquarium, World Wide Fund for Nature – Japan, Wild Oceans and Duke University attended. The ISC work plan for 2016-17 includes completing North Pacific blue shark and albacore tuna assessments, improving catch and CPUE time series and advancing

biological information for shark species. The Plenary revised its operating procedures and endorsed an additional one-year term for the standing Albacore Working Group Chair, John Holmes, as well as the standing ISC Chairman, Gerard DiNardo. The next Plenary will be held in the Canada in July 2017.

9. G. DiNardo, ISC chair, presented the 2016 Stock Assessment of Pacific Bluefin Tuna conducted by the ISC Pacific Bluefin Tuna Working Group (PBFWG). The report can be found on ISC's website at <http://isc.ac.affrc.go.jp>. Highlights of his presentation on the 2016 stock assessment are summarized below:

The ISC PBFWG conducted a benchmark assessment (base-case model) using the best available fisheries and biological information. For data considered reliable, the base-case model fits the data well and is internally consistent among most of the other sources of data. The model is a substantially improved from the 2014 assessment. The base-case model indicates: (1) spawning stock biomass (SSB) fluctuated throughout the assessment period (fishing years 1952-2014) and (2) the SSB steadily declined from 1996 to 2010; and (3) the decline appears to have ceased since 2010, although the stock remains near the historic low. The model diagnostics suggest that the estimated biomass trend for the last 30 years is considered robust although SSB prior to the 1980s is uncertain due to data limitations.

Using the base-case model in the 2016 assessment, the 2014 (terminal year) SSB was estimated to be around 17,000 t, which is about 9,000 t below the terminal year estimated in the 2014 assessment (26,000 in 2012). This is because of improvements to the input data and refinements to the assessment model which scaled down the estimated value of SSB, and not because the SSB declined from 2012 to 2014. Recruitment estimates fluctuate widely without an apparent trend. The 2014 recruitment was relatively low, and the average recruitment for the last five years may have been below the historical average level.

Although no limit reference points have been established for the Pacific bluefin tuna stock under the auspices of the WCPFC and IATTC, the F2011-2013 exceeds all calculated biological reference points except for FMED and FLOSS. The ratio of SSB in 2014 relative to the theoretical unfished SSB ($SSB_{2014}/SSB_F=0$, the depletion ratio) is 2.6% and $SSB_{2012}/SSB_F=0$ is 2.1% indicating a slight increase from 2012 to 2014. Note that potential effects on F_s as a result of the measures of the WCPFC and IATTC starting in 2015 or by other voluntary measures are not yet reflected in the data used in this assessment.

Historically, the WPO coastal fisheries group has had the greatest impact on the Pacific bluefin tuna stock, but since about the early 1990s the WPO purse seine fleets, in particular those targeting small fish (age 0-1), have had a greater impact, and the effect of these fleets in 2014 was greater than any of the other fishery groups. The impact of the EPO fishery was large before the mid-1980s, decreasing significantly thereafter. The WPO longline fleet has had a limited effect on the stock throughout the analysis period. This is because the impact of a fishery on a stock depends on both the number and size of the fish caught by each fleet; i.e., 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.

Under all examined scenarios the initial goal of WCPFC, rebuilding to SSBMED by 2024 with at least 60% probability, is reached and the risk of SSB falling below SSBLOSS at least once in 10 years was low. The ISC notes that there are technical inconsistencies in the calculation of SSBMED in the assessment and projection. The ISC also notes that the current calculation of SSBMED in the projection incorporates the most recent estimates of SSB and unless a fixed period of years is specified to calculate SSBMED, its calculation (SSBMED) could be influenced by future trends in spawning biomass. The ISC therefore recommends defining SSBMED as the median point estimate for a fixed period of time, either, 1952-2012 or 1952-2014. The projection results assume that the CMMs are fully implemented and are based on certain biological or other

assumptions. In particular, the ISC noted the implementation of size-based management measures need to be monitored carefully. If conditions change, the projection results would be more uncertain. Given the low SSB, the uncertainty in future recruitment, and the influence of recruitment has on stock biomass, monitoring recruitment and SSB should be strengthened so that the recruitment trends can be understood in a timely manner.

10. Chair asked about the level of fishing mortality of Pacific bluefin tuna after 2015, when more stringent management measures were in place. ISC chair noted that the reduction of fishing mortality for age 0 fish for the recent period in the assessment was unexpected. Although it might be the results of recently implemented management measures, the actual reason is unclear at this stage.

11. The USA commended the work by ISC and noted that additional projection scenarios conducted by ISC in addition to those requested by NC11 is useful for the informed discussion at NC12 and appreciated the initiatives taken by ISC. It further noted the usefulness of the information on average yield in the projection for management discussion and hoped to see yield information broken down by fishery in the future. In addition, it was noted that it would be useful to have projection scenarios which assume the increase of catch once the stock status recovers.

12. ISC chair noted that it is always a struggle to find the information that is most useful for managers and welcomed suggestions how to improve the advice.

2.2 Report of the Twelfth Regular Session of the Scientific Committee (SC12)

13. S. Soh presented the results of the eleventh regular session of the Scientific Committee (NC12-IP-07). His presentation is summarized as follows:

- a) SC12 was held in Bali, Indonesia from 3-11 August 2016. Berry Muller (RMI) was selected intersessionally and chaired the meeting.
- b) The provisional total tuna catch for 2015 was estimated at 2,687,840mt, which is 80% of the total estimated Pacific Ocean catch of 3,379,789mt and 56% of the provisionally estimated global tuna catch of 4,799,697mt in 2015.
- c) SC12 recommended that TCC12 and the Commission consider several recommendations in the report related with gaps in longline observer coverage; outcomes from EMandER; definition of public domain data; amendment of the "Scientific data to be provided to the Commission", CCM's voluntary submission of economic data to the Commission, etc.
- e) SC12 reviewed stock assessments of WCPO skipjack tuna, Pacific bluefin tuna, South Pacific blue shark, and Pacific blue marlin conducted in 2016.
- f) It was highlighted that there was no consensus in determining the stock status and trends of skipjack tuna based on 2016 skipjack stock assessment, and both majority and minority views were noted in the report. However, as it is noted that the skipjack stock is currently moderately exploited and fishing mortality level is sustainable, SC12 recommended that the Commission take action to keep the spawning biomass near the target reference point (TRP). In addition, in order to maintain the quality of stock assessments, SC12 recommended that regular large scale tagging cruises and complementary tagging work continue to be undertaken.
- g) SC12 noted that ISC provided conclusions on the stock status of Pacific bluefin tuna and conservation advice; and supported the upcoming IATTC-WCPFC NC Joint Working Group Meeting.
- h) Starting SC12, the Management Issues Theme session took over the development of a WCPFC harvest strategy framework and reviewed the progress of six elements along with the agreed work plan under the CMM 2014-06.

- i) SC12 reviewed various bycatch mitigation issues and approaches related with sharks, seabirds and sea turtles, including choices of longline mitigation approaches; review of fin-to-carass ratio research; guidelines for the shark management plan; progress of shark research plan; and the extension of northern limits of seabird distribution to areas north of 30°S;
- j) SC12 nominated Ms Berry Muller as the SC Chair for the coming two years. For the coming SC meeting place, Cook Islands will host SC13 in 2017 and Korea will host SC14 in 2018.

14. The USA noted the importance and sensitivity of the treatment of confidential commercial information which could be affected as a result of proposed change of the treatment of public domain data and reminded NC members that the matter will be further discussed at TCC12.

15. Japan drew the attention of NC members to the conclusion of the skipjack stock assessment, which did not reach a consensus on its stock status and majority as well as minority views were presented instead. Japan noted that its scientists took the minority view for legitimate reasons. Japanese scientists had many questions on the assessment model, some of which were outstanding since the last assessment but remained unaddressed. In addition, some of the model configurations presented very pessimistic results and Scientific Services Provider noted that all the models were equally plausible. However, their reference case model presented a very optimistic stock status while Japanese coastal fishermen are suffering poor migration for many years, possibly due to a range contraction. Therefore, Japanese scientists did not support the reference case to be the base case. With regard to the issue of the definition of public domain data, it needs to be noted that the data confidentiality rule of Japan applies generally to all sectors and cannot be changed for fisheries sector only. Japan stated that it will continue its efforts to make confidential data available for stock assessment without compromising data confidentiality and such arrangements are now being discussed with Scientific Services Provider.

2.3 Conservation and management measure for northern stocks

2.3.1 Pacific bluefin tuna

2.3.1.1 Review of CCM reports

16. Canada reported that they have no fisheries targeting Pacific bluefin tuna to report. There have been occasional catches of Pacific bluefin tuna accounting for about 50kg.

17. China reported that there are no fisheries targeting Pacific bluefin tuna in China. In terms of trade of Pacific bluefin tuna, China reported that, although import verification is required for Pacific bluefin tuna due to the measures taken by other RFMOs, the custom code of Pacific bluefin tuna has been changed recently by the international organization and that makes it difficult for the government to collect import information of Pacific bluefin tuna. China reported that 110.4t was imported from Japan in 2015, which are farmed Pacific bluefin tuna and were consumed domestically.

18. Cook Islands reported that they have no fishing efforts targeting Pacific bluefin tuna nor the intention to increase such effort.

19. Fiji reported that there are no fisheries targeting Pacific bluefin tuna in the country and there is no trade of Pacific bluefin tuna. He further explained that the Fijian government is intending to upgrade the regulation on any opportunistic catch of Pacific bluefin tuna.

20. Korea reported its implementation of the CMM 2015-04. Korea's Ministerial Directive on the Conservation and Management of Pacific Bluefin Tuna, which was introduced in May 2011 amended in December 2014, provides a legal basis for the domestic implementation of CMM 2015-04. In accordance

with the CMM and the Directive, the relevant provisions of CMM 2015-04 have been complied with as follows: First, regarding effort control-- In 2015, twenty-four large-scale purse seiners caught Pacific bluefin tuna, and this number is below the level of 2002-2004 annual average of 30 vessels. On Juvenile Pacific bluefin tuna catch reduction, the Pacific bluefin tuna catches in 2015 were 677 tonnes in total, among which 676 tonnes were less than 30kg and 1 tonne was larger than 30kg. The Pacific bluefin tuna larger than 30kg (1 tonne) were either caught by set nets or large-scale purse seiners as bycatch during their operation. The Korean government has been taking various measures to keep the juvenile catches below the established limit (50% of Korea's 2002-2004 annual average). For example, when 80-90 percent of the allowed level of juvenile catch has been exhausted, the government immediately prohibits any sales of Pacific bluefin tuna in both domestic and international markets through the closure of designated consignment markets for Pacific bluefin tuna and statistical documents. As a case in point, when 84% (660 tonnes) of Korea's Pacific bluefin tuna catch limits were reached on March 31, 2015, the government issued an injunction prohibiting the sales of juvenile Pacific bluefin tuna on April 1, 2015 as a precautionary measure to comply with the relevant provision of the CMM. On non-juvenile catch management, the government informed the industry stakeholders of the results of the regular session of the Northern Committee (NC10, 2014) and the annual meeting of the WCPFC (WCPFC 11, 2014) regarding the catches of Pacific bluefin tuna larger than 30kg. Korea's domestic regulations require that any Pacific bluefin tuna catch and relevant information be reported to the NFRDI within 24 hours of the catch, and all Pacific bluefin tuna be traded only in designated consignment markets to collect accurate catch data and to prevent any illegal trade of Pacific bluefin tuna. Despite these efforts, however, 460 tonnes of unexpected large Pacific bluefin tuna catches were made by Korean purse seiners just in a couple of days in March 2016, presumably due to recent changes in the migration routes of large Pacific bluefin tuna. The government has taken an immediate action including an injunction for the catches and export. However, as it is highly likely that large Pacific bluefin tuna keep migrating through Korean waters and get caught in mackerel purse seine nets in the area, the government is exploring various options to address this inevitable situation. Although the current CMM does not require any compensatory measure for the catch limit overrun for large Pacific bluefin tuna, Korea is working on a payback scheme to demonstrate its commitment to the conservation and management of Pacific bluefin tuna as a responsible fishing nation. Next, on juvenile small Pacific bluefin tuna monitoring, Korea has been working on the sampling of juvenile Pacific bluefin tuna to monitor Pacific bluefin tuna recruitments since 2010. The monitoring was not carried out in 2015, but a week-long monitoring survey was resumed in 2016 during the period of June 20- 27 in waters around Jeju island. An analysis on the collected data is currently underway, and the result will be presented at the regular session of the ISC in 2017.

21. With regard to the catch of Pacific bluefin tuna larger than 30kg in 2016, for which Korea does not have the historic catch during 2002-2004, Japan appreciated the intention of Korea to consider payback scheme while it is not required under the current CMM. However, Japan asked Korea what kind of measures had actually been taken when the CMM requires CCMs to take "every possible measure not to increase catches of Pacific bluefin tuna 30kg or larger".

22. In response, Korea reminded NC12 of the nature of the Korean Pacific bluefin tuna catch, which is bycatch of mackerel fishery, and thus it is difficult to predict. Korea should have taken more concrete measures in the wake of this year's event but it had educated fishermen not to catch adult Pacific bluefin tuna and believed that that is sufficient given that the catch of adult Pacific bluefin tuna by Korean purse seiners is unprecedented.

23. Japan requested Korea's further efforts to improve communication with fishermen and asked what happened to the reported 1t catch by set net and large-scale purse seiner. Korea responded that the 1t by set net and large-scale purse seiner was sold in the market.

24. Japan made the following statement with regard to the report by Korea on the implementation of CMM on Pacific bluefin tuna; Sea of Japan is the one and only internationally established and recognized name for the sea area concerned. Most international organizations, such as the UN, and most countries use only the name “Sea of Japan”. Thus, Japan never accepts the name “East Sea”. The ROK should use the one and only internationally established name, “Sea of Japan”. We request that the ROK correct the name “East Sea” to “Sea of Japan” and the correction be recorded in the summary report.

25. In response to the Japanese statement, Korea stated that it is of the position that there is no officially established name for this particular body of water. Also, Korea maintains that this name “East Sea” in its national report, which is not an official document agreed by the Commission. Since this is a very sensitive diplomatic issue, the NC is not an appropriate forum to discuss this matter. Korea would like to deliver a statement to be recorded in the meeting record. Korea does not intend to correct the sea area’s name in its national report (see Attachment C for the official statement of Korea).

26. In response, Japan made the following statement; It is regrettable that the ROK does not accept our legitimate request. We will not repeat our views on the use of the name “Sea of Japan”, which we already explained. WCPFC is the Commission to discuss the long-term conservation and sustainable use of highly migratory fish stock in the western and central Pacific Ocean, and it is not appropriate to discuss the name “Sea of Japan” in WCPFC. Therefore, without further continuing the discussion on this issue, we request that our remark, that is, the name “East Sea” is not appropriate and “Sea of Japan” should be used, be recorded in the summary report. Also, the disclaimer that is “The geological name used in documents submitted by each member does not reflect official position of WCPFC” should be inserted in the summary report. Japan stated that it reserves the right to add Japanese position paper at the time of the adoption of NC12 report at WCPFC13.

27. Mexico requested the detailed operational information in relation to the over catch of adult Pacific bluefin tuna. In response, Korea clarified that 460t of adult Pacific bluefin tuna were caught within 3 days by 16 vessels, which was unexpected and unthinkable.

28. Chinese Taipei also expressed concern over the high catch of large Pacific bluefin tuna by Korea and asked the size of the large Pacific bluefin tuna. Korea clarified that the average size of Pacific bluefin tuna larger than 30kg was around 50kg and about 140cm, with the largest one of 260kg. However, the average weight of 80% of the total 460t of adult Pacific bluefin tuna (i.e., when largest 20% is excluded) fell within the range of just above 30kg (e.g. 34kg) and 115cm.

29. The USA noted that Korea suggests that the oceanographic change might affect the distribution of Pacific bluefin tuna and encouraged Korea to explore the issue further and to report the results to ISC. Korea confirmed that it will share the information with the ISC.

30. Japan made a presentation on its implementation of CMM 2015-04. There are three fishing grounds for purse seiners and the size of the catch differs by the area. The purse seiners are managed under a licensing system and they target Pacific bluefin tuna only in migration seasons. Catch limits are set for small as well as large Pacific bluefin tuna for purse seiners. About 24,000 artisanal vessels are licensed, majority of which are trolling vessels that spread throughout Japan traditionally, particularly in the remote areas and they mainly operate in the territorial waters. Those vessels frequently change fishing gear as well as target species by season and Pacific bluefin tuna season is rather short. There are about 1,800 set nets existing around the coasts of Japan. Set net is a passive fishing gear and the catch configuration cannot be predicted. Pacific bluefin tuna catch consists about only 0.49% of total set net catch thus making the management of PFB catch in this fishery a challenge. Pacific bluefin tuna are often caught as a small amount together with dominant species such as squid or yellowtail. Currently, the Pacific bluefin tuna catch by set net is under the domestically allocated limit but it could become a real

challenge to control it once the Pacific bluefin tuna stock recovers and they start entering set nets in a large amount. The 2015 WCPFC catch limits as a whole were complied with by Japan without exception. Purse seine catch limits were allocated to fisheries associations and catch limits for coastal fisheries were separated into 6 geographical areas. The government ensures frequent communication with fishermen and if catch approaches the limit, the government will issue warnings. For aquaculture, registration is required and currently there are 160 sites registered. In addition, the government is instructing the farming industry not to increase the farming capacity which is using wild seeds. For the monitoring of recruitment abundance, in addition to the calculation of recruitment index by troll CPUE in Nagasaki prefecture that has been used in the assessment, Japan initiated troll monitoring survey since 2011. It is conducted by 61 troll vessels in 6 monitoring sites, equipped with data loggers. The trade of Pacific bluefin tuna is monitored; Japan imported about 6,000t of Pacific bluefin tuna in 2015, 91% of which was from Mexico and the rest from Korea, and small amount was exported to China and the USA. Importers are required to report each transaction of Pacific bluefin tuna. This year, 300t of large Pacific bluefin tuna was imported from Korea and the government requested the industry to refrain from importing such Pacific bluefin tuna from Korea. The data of Pacific bluefin tuna catch is collected through the fishery association sales slips in the case of purse seiners and cooperative association and local government in the case of coastal fisheries.

31. Mexico commended the efforts made by Japan to register and license a large number of small scale vessels and asked if the set net catch is incorporated in the assessment. In response, Japan noted that all the catch including by set net is reported to ISC and incorporated in the assessment.

32. The USA noted that the purse seine catch in 2015 was about the half of the limit and asked for the possible cause. In addition, the USA asked if any change in fish size was observed in Japanese purse seiners this year as in the case of Korean purse seiners. The USA noted an apparent discrepancy between the amount exported from Japan to China and Chinese report on the import from Japan.

33. Japan noted that various reasons for the low catch by purse seine in 2015 can be considered but some of them are a strict voluntary limit by purse seiners and changing the target to larger fish. Japan stated that it will report the fish sizes of purse seiner this year and trade discrepancy later.

34. With regard to the discrepancy of trade data, China responded that such a thing can happen. It further noted that the international custom code for Pacific bluefin tuna has been changed recently, which makes it difficult to Chinese authority to require CDS for Pacific bluefin tuna and emphasized the importance of prompt establishment of CDS specifically for Pacific bluefin tuna.

35. Chinese Taipei noted that it is important to have fishery independent recruitment monitoring and asked Japan if the Japanese troll survey is fishery independent. It further noted a substantial Pacific bluefin tuna import from one CCM in Japan's import data while that CCM has not submitted any information of Pacific bluefin tuna catch as requested by the CMM 2015-04. Japan responded that, in addition to the troll survey, Japan conducts sampling of Pacific bluefin tuna larvae and continues to strengthen such researches.

36. Korea asked Japan several questions: What is the size of catch by purse seiners in the East China Sea? How the alarm system for consumers would work? What kind of information is required from farmers when caging Pacific bluefin tuna? What is the average size of farming facilities? Japan responded that the Fisheries Agency will make a press release to provide information of Pacific bluefin tuna catch level to general consumers. The size of Pacific bluefin tuna caught by purse seiners in west Kyushu area is 45-60cm with average weight is about 2kg. There are about 120 farming sites using wild seeds. Chair also noted that Pacific bluefin tuna farming in Japan is different from elsewhere; the seeds are mainly provided by trolling vessels and sold one by one by number of fish rather than weight. Also, recently

purse seiners started providing farming seeds which are also sold one by one. In addition, there are artificial seeds, which tend to be smaller fish.

37. Mexico reported that its Pacific bluefin tuna catch was 3,085t in 2015. It implemented voluntarily reduced quota of 2,750t in 2016 and required fishermen to release the catch above the level. This was reported to IATTC Commission during the last annual meeting. Pacific bluefin tuna are caught only by purse seiners who have 100% observers onboard. When the catch is transferred to the ranching facilities, the catch is also monitored by underwater cameras.

38. Japan asked the visibility in waters in the farming areas and if observers have access to the recorded video. Mexico responded that skipper is responsible for reporting the catch and it is checked by 100% observer and information from divers and underwater stereoscopic cameras. The catch estimate should be accurate. Chair asked if the size of Pacific bluefin tuna this year is larger than usual and Mexico responded that he will check it with the country.

39. Chinese Taipei reported that there were 483 longline vessels fishing for Pacific bluefin tuna in 2015, against 660 vessels of 2002-2004 level, and the total catch was 618t. All the catch was monitored through CDS and consumed domestically. There were 6.9t of import.

40. Mexico asked if there are any discard of Pacific bluefin tuna smaller than 30kg, which is prohibited to be retained under Chinese Taipei's regulation. Chinese Taipei responded that the average weight of catch by longliners in Chinese Taipei is about 260kg and there is no record of Pacific bluefin tuna catch less than 30kg. Also, fishermen are requested to release the fish if they catch Pacific bluefin tuna less than 30kg.

41. Korea asked at which point the tag is attached and through what channel CDS information is reported. Chinese Taipei responded that the catch is reported via fishery radio station and verified at the landing ports by port inspectors.

42. Chair informed that the Philippines reported no fishing for Pacific bluefin tuna in 2015.

43. The USA reported that it has no directed fishery for Pacific bluefin tuna in the CA and longliners had a small bycatch of Pacific bluefin tuna in 2015; about 6t of Pacific bluefin tuna larger than 30kg. The USA imported about 300t and exported about 150mt of Pacific bluefin tuna in 2015. The USA also noted that it would be more convenient if implementation reports by each member are compiled and noted that CMM 2015-04 provides for the Executive Director to do so.

44. Vanuatu reported that it does not target Pacific bluefin tuna and there is no import of Pacific bluefin tuna.

45. It was noted that the geological name used in documents submitted by each member does not reflect official position of WCPFC.

2.3.1.2 Report of a joint meeting between NC and IATTC on Pacific bluefin tuna conservation management

46. NC12 received the report of the joint working group meeting between NC and IATTC that was co-chaired by D. Lowman and M. Miyahara (Attachment D).

2.3.1.3 Adoption of results of a joint meeting between NC and IATTC on Pacific bluefin tuna conservation management

47. **NC12 endorsed the following conclusions of the joint working group meeting;**

1) Consideration and development of management objectives, limit and target reference points, Harvest Control Rules as part of long-term management framework

Rebuilding strategy

- Participants supported the following as part of an ocean-wide rebuilding strategy for Pacific bluefin tuna: “Recognizing that the management objectives of WCPFC and IATTC are to maintain or restore fish stocks at levels capable of producing MSY, to rebuild the Pacific bluefin tuna stock by adopting and achieving step-wise rebuilding targets.”
- Participants considered that it would be appropriate for IATTC to adopt an initial rebuilding target in a similar manner with WCPFC.
- To help formulate the Pacific bluefin tuna rebuilding strategy, participants supported a request to the ISC to evaluate the performance of various harvest scenarios (Annex 2 of Attachment D).
- Participants supported a plan for the WCPFC and IATTC to agree in 2017 on a second rebuilding target, to be reached in 2030, and to revisit their management measures as needed (Annex 2 of Attachment D).
- Participants supported the ISC’s intent to hold a Pacific bluefin tuna stakeholders’ meeting (Annex 3 of Attachment D).

Precautionary management framework

- Participants did not agree upon a limit reference point for Pacific bluefin tuna or other elements of a precautionary management framework for the stock. Several options for a limit reference point were discussed, and participants agreed to make progress next year on a precautionary management framework for Pacific bluefin tuna, including specific recommendation for a limit reference point.

2) Review of current management measures in both IATTC and WCPFC including initial rebuilding target in CMM 015-04

- Participants supported the revised CMM 2015-04 (Attachment E) to be forwarded to NC12 for further discussion. Participants also supported the continuation of the current IATTC Resolution C-14-06 for 2 years as recommended by the IATTC Secretariat.
- Participants noted that any voluntary measures in addition to those specified by the RFMOs, such as voluntary restriction of catch level from the allocated catch limit implemented by Mexico in 2016, would contribute to the recovery of the Pacific bluefin tuna stock and encouraged any Pacific bluefin tuna harvesting countries to consider such initiatives.

3) Recruitment-based emergency rule

- Participants did not agree upon an emergency rule as proposed by Japan, and participants agreed to work for the establishment of emergency rule next year.

4) Catch document scheme

- Participants supported to advance the work on 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.
- In order to do so, participants welcomed the offer by Japan to submit a draft document describing objectives, the basic elements and work plan of CDS to the next joint working group meeting.

5) Next meeting

- Participants supported to continue the joint IATTC-WCPFC NC working group meeting process and to hold the next meeting in September 2017 in conjunction with NC13, noting a general preference of holding the meeting in a reciprocal manner between the two RFMOs.

48. **NC12 recommended a draft CMM for the management of Pacific bluefin tuna (Attachment E) to WCPFC13 for its adoption.**

49. Upon the adoption of the draft CMM, Japan sought for the clarification of the plan of Korea for the payback of the catch of large fish in 2016. In response, Korea reaffirmed the commitment of its government to develop an appropriate payback scheme although such a payback is not required under the current CMM. Korea informed that the detail of the payback scheme is still under the discussion and will be notified to members when finalized.

2.3.2. North Pacific albacore

2.3.2.1 Review of CCM Reports

50. Summary of CCMs' reports on North Pacific albacore fisheries in accordance with CMM 2005-03, prepared by the Secretariat, (NC12-WP02) was presented.

51. Canada reported that there was no operation of Canadian vessels in 2015 in WCPO targeting North Pacific albacore. It also expressed concern over the increase in capacity in some members and lack of a clear definition of effort targeting North Pacific albacore. Canada emphasized the importance to understand how each CCMs exercises effort limitation but stated that not enough information is provided. It also highlighted the importance of taking consistent management approach between WCPFC and IATTC and in EEZs as proposed for Pacific bluefin tuna.

52. Cook Islands reported that there was no operation targeting North Pacific albacore in the north Pacific Ocean.

53. In response to a question, Chinese Taipei noted that the current CMM 2005-03 does not specify how to measure the effort. Given that it chose to control effort by number of vessels, it had not reported the fishing days in 2002-2004. Chair requested Chinese Taipei to report fishing days in 2002-2004 even though it is not used as the threshold and Chinese Taipei agreed to see if that is possible.

54. Vanuatu clarified that their vessels operating both sides of the Pacific Ocean.

55. With regard to the question if NC12 should express its concern over the increase of efforts by some CCMs, China reaffirmed that the current CMM does not specify how the effort should be controlled and noted that it controls the number of vessels targeting North Pacific albacore. Therefore, it is the view of China that there is no general concern on the increase of fishing effort for North Pacific albacore.

56. In response, Canada underscored its longstanding concern over the lack of clear definition of effort targeting for North Pacific albacore within the CMM and called for the decision of such a definition.

57. The USA noted that the current CMM allows the CCMs latitude how to exercise effort limitation, but that CCMs must report fishing effort in terms of fishing days, at a minimum, and the CCMs must also report how they are implementing their fishing effort limits. It also noted that current summary of CCMs reports can be improved by including the information on how each CCM control fishing effort. The Secretariat agreed to endeavor to do so.

58. **NC12 agreed that it is not necessary to modify the CMM 2005-03 this year.** It also noted that ISC is scheduled to conduct a stock assessment of North Pacific albacore in 2017 and agreed to review the CMM based on the information to be provided by ISC.

2.3.2.2 Precautionary management framework of North Pacific albacore

59. J. Holmes (ISC-ALBWG Chair) reported on the North Pacific albacore MSE-related activities and progress in 2015-16. The 2nd ISC MSE workshop was held 24-25 May 2016 in Yokohama, Japan, and was attended by approximately 24 managers, scientists, and stakeholders. Workshop participants and the ALBWG developed a set of six management objectives for the initial MSE evaluations. Performance indicators were developed for each objective by the ALBWG at the request of workshop participants. The performance indicators are configured so that higher values are indicative of better performance and lower values are indicative of poorer performance. It was agreed that a simulation period of 30 years (two generations of albacore) would be used to evaluate management objectives. An ongoing workshop is needed to educate managers, stakeholders and scientists on the MSE and obtain input to the process. It is recommended that the next workshop focus on acceptable risk and how it is used in the evaluation of management objectives. An MSE analyst is expected to be in place by fall 2016 (supported by the USA) and will take over leading the North Pacific albacore MSE process in conjunction with the ALBWG Chair. The MSE analyst will develop a workplan to further engage members of the NC in obtaining input needed to conduct the MSE process. Finally, it was noted that the proposed set of management objectives are expected to be revised/changed as information from simulation testing is evaluated; this is a normal part of MSE process.

60. Japan clarified the relationship between the MSE related work conducted by ISC and the existing WCPFC precautionary management framework of North Pacific albacore, in particular in regard to the fact that the framework calls for MSE to consider a TRP of North Pacific albacore, and the relationship between management objective stipulated in the framework and the list of management objectives discussed in the MSE workshop.

61. J. Holmes clarified that a purpose of the North Pacific albacore MSE is to advise NC on TRP of North Pacific albacore and commented that the management objective currently included in the management framework might better be called as its policy goal and the candidate management objectives proposed by the workshop is intended to break down such a policy goal into operational objectives whose performance can be evaluated. He emphasized that those objectives are not fixed and would be revisited in the MSE process.

62. Canada considered the MSE process important and noted the results would not directly influence management actions but inform the discussion. It further noted the importance of making progress on risk tolerance and candidate harvest control rules (HCRs) to further the development of MSE and offered to host the third ISC MSE workshop possibly in Vancouver.

63. ISC Chair shared the history of MSE related work in ISC and emphasized that it is not only a modeling exercise but also an educational process and that ISC considered it appropriate to start from North Pacific albacore. As a US scientist, he further informed NC12 that MSE is now a priority for NOAA and each Science Center are to hire one personnel dedicated to MSE. The Southwest Fisheries Science Center, which has the lead with respect to North Pacific albacore, succeeded to secure such a personnel and she is expected to start working in November, in collaboration with IATTC.

64. The USA pleased with the progress on MSE related work so far. It further appreciated the offer from Canada to host another MSE workshop and noted that discussion on risk and candidate HCRs would be useful.

65. Japan concurred with the importance of educational process because MSE process is difficult to understand for many of stakeholders. It noted that benefit of MSE process should be demonstrated to stakeholders to achieve their support to the process.

66. NC12 appreciated the work related to MSE conducted by ISC ALBWG and encouraged to continue. It looks forward to seeing further progress on this important topic including receiving the results of the third ISC MSE workshop to be held in Vancouver. NC12 was also reminded that the next stock assessment for North Pacific albacore is scheduled for 2017.

2.3.3 North Pacific swordfish

67. The USA reminded NC12 that it had presented a draft management framework of NP swordfish last year and noted that the proposal is still current. It emphasized that it is a priority issue.

68. Japan also noted that it had provided its comment on the US proposal last year. It concurred with the USA that it is a priority issue and looked forward to further discussion.

2.4 Conservation and management measures for other species

2.4.1 Bigeye, yellowfin and skipjack tunas (CMM 2013-01)

69. Japan stated that NC needs to continue to express its concern that the high catch by purse seiners in the tropical area, in particular those on FADs, could negatively affect the fishing operations in the north Pacific Ocean. Further it may cause a target shift in fisheries in the north Pacific, creating pressure on other new stocks.

70. China shared the concern of Japan over the status of tropical tunas and supported to send a clear message that purse seine in tropical area may have effects in high latitude area.

71. NC12 once again expressed its strong concern regarding the plight of tropical tuna stocks not only because those species are being caught in the northern area but also the status of those species could impact management of other species through target shift.

2.4.2 North Pacific striped marlin

72. Chair noted that no new management measure was agreed at the last year's Commission.

73. Fiji expressed a concern that the species has been in a depleted status since the 1970's but no action has been taken. It further stated that the NC should work on a rebuilding plan for the species like Pacific bluefin tuna.

74. **NC12 expressed concern over the status of NP striped marlin and urged the Commission to develop a rebuilding plan for the stock as a matter of priority.**

2.4.3 Sharks

75. It was noted that NC members need to take initiative in research on the distribution of NP blue shark if the NC hopes to designate it as a northern species. The Secretariat reminded NC12 that there is no specific criteria of a northern species except that the Rules of Procedure specifies it to be to mostly occur in north of 20° N. He further noted that firstly the criteria should be developed and then research should be conducted to see if the criteria are met.

76. Chair noted that it is his view that it would be counterproductive to try to agree on a numerical criteria of a northern stock. Rather, he would recommend to propose to WCPFC13 to designate NP blue shark based on the information from the ISC, noting that most of its catch is made in the area north of 20° N. It would be important and necessary since the stock is scheduled to be assessed by ISC in 2017. China and Chinese Taipei supported the suggestion by Chair.

77. The Secretariat noted that it is important to remember that NP striped marlin was not successful to be designated as a northern stock despite that the information provided by ISC clearly indicated that more than 80% of the stock occurs in the area north of 20° N. Scientific Services Provider does not have information on NP blue shark and ISC is hesitant to engage in the discussion given the experience of NP striped marlin. ISC Chair acknowledged that ISC is reluctant to be involved with the definition issue within WCPFC. However, he suggested to include the topic as part of shark research plan, while noting that the required research for the designation as a northern stock could be costly since it would involve tagging as well as genetic research.

78. Cook Islands expressed reticence to support a proposal to devolve authority from the Commission given that northern FFA members are not fully represented in the NC.

79. Japan supported the suggestion by Chair.

80. **NC12 recommends WCPFC13 decide if NP blue shark should be designated as a northern stock based on the available information from ISC, SPC and SC.**

2.4.4 Seabirds

81. The USA noted that the CMM for the seabird mitigation measures was revised last year to include the measures for small longline vessels in the area north of 23° N and emphasized that it is important for the Commission and NC to ensure that those measures are effective. The USA encouraged NC members to conduct research in this regard.

82. Japan pointed out that the new mitigation measure for small longline vessels will commence in 2017 and informed NC12 that it is conducting the evaluation of those measures and the results were presented to SC12. It assured that it will continue such research but reminded the different characteristics of “small vessels” among CCMs and emphasized the importance of the safety of fishermen.

83. NC12 encouraged its member to submit information regarding the implementation of new seabird mitigation measure for small scale vessels to NC13.

2.4.5 Sea turtles

84. The USA informed the NC that TCC will review the effectiveness of various bycatch mitigation measures and the sea turtle mitigation measure may need to be revised as a result of such review.

AGENDA ITEM 3 — REGIONAL OBSERVER PROGRAMME

85. There were no discussions on this item but it was agreed to keep the item for future meetings.

AGENDA ITEM 4 — VESSEL MONITORING SYSTEM

86. There were no discussions on this item but it was agreed to keep the item for future meetings.

AGENDA ITEM 5 — DATA

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

87. No problematic data gap was identified and NC members were encouraged to continue to provide data to ISC.

AGENDA ITEM 6 — COOPERATION WITH OTHER ORGANIZATIONS

6.1 ISC

88. NC12 reaffirmed the importance of cooperation with ISC.

6.2 IATTC

89. NC12 underscored the usefulness of the joint working group meeting between IATTC and WCPFC NC on the management of Pacific bluefin tuna and reaffirmed the importance of the cooperation between the two RFMOs to have effective management framework for the northern stocks in general.

AGENDA ITEM 7 — FUTURE WORK PROGRAMME

7.1 Work programme for 2017–2019

90. NC12 revised and adopted its future work programme (Attachment F).

AGENDA ITEM 8 — OTHER MATTERS

8.1 Administrative arrangements for the Northern Committee

8.1.1 Secretariat functions and costs

91. There were no discussions on this item but it was agreed to keep the item for future meetings.

8.1.2 Rules of procedure

92. Korea expressed its desire to clarify the Rules of Procedure of NC with regard to the election of chair and hosting arrangement, for example to hold NC in Japan every 2 years and in other countries in between.

93. It was pointed out that there are no specific Rules of Procedure for NC and establishment of specific Rules of Procedure for NC will require adoption by the Commission. NC12 agreed that there is not currently a need to establish Rules of Procedure specific to NC at this meeting but that NC could adopt informal rules. NC12 agreed to continue to discuss the matter to further improve the operation of NC.

8.2 Election of officers of the Northern Committee

94. M. Miyahara (Japan) and M. Tosatto (USA) were nominated as a candidate Chair and a candidate vice Chair of the NC through NC14 respectively for the Commission's approval.

8.3 Next meeting

95. Korea offered to host NC13 in 2017 most likely in Busan. NC12 welcomed the offer by Korea and agreed in principle to hold the meeting in the last week of August (preferably from August 28) for 5 days.

96. USA supported the idea to hold the NC meetings in Japan in every two years and in other countries in years in between. NC12 supported the idea of rotation of NC meeting venues and tentatively agreed to hold NC14 (2018) in Japan, and NC15 (2019) in another country, possibly in the USA in Honolulu.

97. **NC12 supported to continue the joint IATTC-WCPFC NC working group meeting process and to hold the next meeting in August 2017 in conjunction with NC13. NC12 further agreed to request Chair to contact IATTC Secretariat to arrange the joint working group meeting.**

8.4 Other matters

98. There were no discussions on this item.

AGENDA ITEM 9 — ADOPTION OF THE SUMMARY REPORT OF THE TWELFTH REGULAR SESSION OF THE NORTHERN COMMITTEE

99. NC12 adopted the Summary Report of its Twelfth Regular Session.

AGENDA ITEM 10 — CLOSE OF MEETING

100. Twelfth regular session of NC was closed on 2 September 2016.

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

**Northern Committee
Twelfth Regular Session**

August 29 – September 2, 2016
Fukuoka, Japan

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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
Twelfth Regular Session**

August 29 – September 2, 2016
Fukuoka, Japan

Agenda

AGENDA ITEM 1 OPENING OF MEETING

- 1.1 Welcome**
- 1.2 Adoption of agenda**
- 1.3 Meeting arrangements**

AGENDA ITEM 2 CONSERVATION AND MANAGEMENT MEASURES

- 2.1 Report from the Sixteenth Meeting of the International Scientific Committee**
- 2.2 Report of the Twelfth Regular Session of the Scientific Committee**
- 2.3 Conservation and management measures for the northern stocks**
 - 2.3.1 Pacific bluefin tuna (CMM 2015-04)**
 - 2.3.1.1 Review of CCM report
 - 2.3.1.2 Report of a joint meeting between NC and IATTC on Pacific bluefin tuna conservation management
 - 2.3.1.3 Adoption of results of a joint meeting between NC and IATTC on Pacific bluefin tuna conservation management
 - 2.3.2 North Pacific albacore (CMM 2005-03)**
 - 2.3.2.1 Review of CCM report
 - 2.3.2.2 Precautionary management framework
 - 2.3.3 North Pacific swordfish**
- 2.4 Conservation and management measures for other stocks**
 - 2.4.1 Bigeye, yellowfin and skipjack tunas (CMM 2015-01)**
 - 2.4.2 North Pacific striped marlin (CMM 2010-01)**
 - 2.4.3 Sharks (CMM 2010-07, CMM 2011-04, CMM 2012-04, CMM 2013-08 and CMM 2014-05)**
 - 2.4.4 Seabirds (CMM 2015-03)**
 - 2.4.5 Sea turtles (CMM 2008-03)**

AGENDA ITEM 3 REGIONAL OBSERVER PROGRAMME

AGENDA ITEM 4 VESSEL MONITORING SYSTEM

AGENDA ITEM 5 DATA

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

AGENDA ITEM 6 COOPERATION WITH OTHER ORGANIZATIONS

- 6.1 ISC**
- 6.2 IATTC**

AGENDA ITEM 7 FUTURE WORK PROGRAMME

- 7.1 Work Programme for 2017-2019**

AGENDA ITEM 8 OTHER MATTERS

- 8.1 Administrative arrangements for the Committee**
 - 8.1.1 Secretariat functions and costs**
 - 8.1.2 Rules of Procedure**
- 8.2 Election of officers of the Northern Committee**
- 8.3 Next meeting**
- 8.4 Other business**

**AGENDA ITEM 9 ADOPTION OF THE SUMMARY REPORT OF THE TWELFTH
REGULAR SESSION OF THE NORTHERN COMMITTEE AND
RECOMMENDATIONS TO THE COMMISSION**

AGENDA ITEM 10 CLOSE OF MEETING

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**Korea's statement on "East Sea" mentioned in its national report on the
implementation of CMM 2015-04**

Korea has been referring and currently refers the relevant body of water as "East Sea," which holds the longest history as a name for this particular body of water. In this regard, Korea maintains the referencing of the East Sea in its national report.

Unlike the claim made by the Japanese delegation, the international community has not ever agreed on the common name of this particular body of water. Rather, the UNCSCN and the IHO recommend that when countries sharing a given geographical feature fail to agree on a common name, competing names should be concurrently used. The Korean delegation is also of the view that the NC is not an appropriate forum to discuss this matter and registers that neither Korea's nor Japan's position on this matter does not reflect the WCPFC's official position.

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**Results of Joint IATTC-WCPFC NC working group meeting on the
management of Pacific bluefin tuna**

The first joint IATTC-WCPFC NC working group meeting on the management of PBF was held in Fukuoka, Japan from August 29 - September 1, 2016 as an informal meeting. WCPFC NC members, some IATTC members and staff, and observers participated in the meeting. The main results and conclusions of the meeting are as follows. Participants supported this report to be forwarded to NC12 and IATTC for further discussion.

1) Adoption of agenda

- Adopted agenda is attached (Annex 1).

2) Discussion of potential goals for the meeting

- Participants reaffirmed that IATTC and WCPFC have the shared responsibility for the management of PBF and have to work together in that regard. The joint IATTC-WCPFC NC working group meeting should aim at fostering the common understanding between the two RFMOs about management objectives and responsibilities.
- Participants also agreed that the joint meeting should discuss the future management framework of PBF.

3) Consideration and development of management objectives, limit and target reference points, Harvest Control Rules as part of long-term management framework

Rebuilding strategy

- Participants supported the following as part of an ocean-wide rebuilding strategy for PBF: “Recognizing that the management objectives of WCPFC and IATTC are to maintain or restore fish stocks at levels capable of producing MSY, ~~to~~ rebuild the PBF stock by adopting and achieving step-wise rebuilding targets.”
- Participants considered that it would be appropriate for IATTC to adopt an initial rebuilding target in a similar manner with WCPFC.
- To help formulate the PBF rebuilding strategy, participants supported a request to the ISC to evaluate the performance of various harvest scenarios (Annex 2).
- Participants supported a plan for the WCPFC and IATTC to agree in 2017 on a second rebuilding target, to be reached in 2030, and to revisit their management measures as needed (Annex 2).
- Participants supported the ISC’s intent to hold a PBF stakeholders’ meeting (Annex 3).

Precautionary management framework

- Participants did not agree upon a limit reference point for Pacific bluefin tuna or other elements of a precautionary management framework for the stock. Several options for a limit reference point were discussed, and participants agreed to make progress next year on a precautionary management framework for Pacific bluefin tuna, including specific recommendation for a limit reference point.

4) Review of current management measures in both IATTC and WCPFC including initial rebuilding target in CMM 2015-04

- Participants supported the revised CMM2015-04 (Annex 4) to be forwarded to NC12 for further discussion. Participants also supported the continuation of the current IATTC Resolution C-14-06 for 2 years as recommended by the IATTC [Staff Secretariat](#).
- Participants noted that any voluntary measures in addition to those specified by the RFMOs, such as voluntary restriction of catch level from the allocated catch limit implemented by Mexico in 2016, would contribute to the recovery of the PBF stock and encouraged any PBF harvesting countries to consider such initiatives.

5) Recruitment-based emergency rule

- Participants did not agree upon an emergency rule as proposed by Japan, and participants agreed to work for the establishment of emergency rule next year.

6) Catch document scheme

- Participants supported to advance the work on CDS in the next joint meeting, in line with the development of overarching CDS framework by WCPFC and taking into account of the existing CDS by other RFMOs.
- In order to do so, participants welcomed the offer by Japan to submit a draft document describing objectives, the basic elements and work plan of CDS to the next joint meeting.

7) Next meeting

- Participants supported to continue the joint IATTC-WCPFC NC working group meeting process and to hold the next meeting in September 2017 in conjunction with NC13, noting a general preference of holding the meeting in a reciprocal manner between two RFMOs.

Joint Meeting between NC and IATTC on Pacific bluefin Tuna Conservation Management

Agenda

1. Opening of the Meeting
2. Designation of Co-chair
3. Adoption of Agenda
4. Discussion of potential goals for the meeting and IATTC- SAC7 Recommendations
5. Consideration and development of management objectives, limit and target reference points, harvest control rules as part of long-term management framework
6. Review of current management measures in both IATTC and WCPFC including initial rebuilding target in CMM 2015-04
7. Definition of roles and responsibilities of the ISC, SAC and the IATTC scientific staff
8. Recruitment-based emergency rule
9. Catch document scheme
10. Next steps for outcomes of meeting, including recommendations for consideration of each Commission
11. Next meeting
12. Other business

Formulation of a Pacific Bluefin Tuna Rebuilding Strategy

1. The ISC is requested to evaluate the expected performance of each of the following harvest scenarios, and to make the results available to the Northern Committee and IATTC by April 2017.
 - **Harvest scenarios** (see summary table attached): The following scenarios should be evaluated under an appropriate range of assumptions regarding future recruitment (e.g., the “low” and “average” recruitment assumptions used in the ISC’s previous set of projections).¹
 1. 2002-04 fishing effort in all WCPO PBF-directed fisheries; 50% of 2002-04 catches of <30kg PBF in all WCPO fisheries; 2002-04 catches of ≥ 30 kg PBF in all WCPO fisheries; and 3,300 mt/yr in EPO commercial PBF fisheries (i.e., current management measures in WCPO and EPO).
 2. 50% of 2010-2012 catches (all fish sizes) in all EPO and WCPO fisheries.
 3. 2002-04 fishing effort in all WCPO PBF-directed fisheries; 50% of 2002-2004 catches of <30kg PBF in all WCPO fisheries; 2002-04 catches of ≥ 30 kg PBF in all WCPO fisheries; and 50% of 2002-04 catches in all EPO fisheries.
 4. 2002-04 fishing effort in all WCPO PBF-directed fisheries; 45% of 2002-04 catches of <30kg PBF in all WCPO fisheries; F of ≥ 30 kg PBF at 2002-04 average level in all WCPO fisheries; and F of PBF in EPO PBF fisheries at 2010-12 average level.
 5. 2002-04 fishing effort in all WCPO PBF-directed fisheries; 45% of 2002-04 catches of <30kg PBF in all WCPO fisheries; F of ≥ 30 kg PBF at 2002-04 average level in all WCPO fisheries; and 3,300 mt/yr in EPO commercial fisheries.
 6. 2002-04 fishing effort in all WCPO PBF-directed fisheries; 45% of 2002-04 catches of <30kg PBF in all WCPO fisheries; 2002-04 catches of ≥ 30 kg PBF in all WCPO fisheries; and 3,300 mt/yr in EPO commercial fisheries.
 7. 2002-04 fishing effort in all WCPO PBF-directed fisheries; 35% of 2002-04 catches of <30kg PBF in all WCPO fisheries; F of ≥ 30 kg PBF at 2002-04 average level in all WCPO fisheries; and F of PBF in EPO PBF fisheries at 2010-12 average level.
 8. 2002-04 fishing effort in all WCPO PBF-directed fisheries; 35% of 2002-04 catches of <30kg PBF in all WCPO fisheries; F of ≥ 30 kg PBF at 2002-04 average level in all WCPO fisheries; and 3,300 mt/yr in EPO commercial fisheries.
 9. 2002-04 fishing effort in all WCPO PBF-directed fisheries; 35% of 2002-04 catches of <30kg PBF in all WCPO fisheries; 2002-04 catches of ≥ 30 kg PBF in all WCPO fisheries; and 3,300 mt/yr in EPO commercial fisheries.
 10. Constant F in all PBF fisheries, set at the level at which, for a given candidate rebuilding target, the target is achieved at the end of the rebuilding period with 60% probability (relative F among fisheries assumed to be unchanged from the most recent 3-year average).
 - **Performance measures:**
 1. Probability of achieving each of the following candidate rebuilding targets:

¹ For the fisheries in which *F* is not explicitly limited under a given scenario, the projections should be run such that *F* in the fishery is not allowed to exceed ten times the 2010-2012 average level in that fishery.

- a. initial rebuilding target ($SSB_{MED1952-2014}$) by 2024
 - b. 150% of initial rebuilding target by 2030
 - c. 200% of initial rebuilding target by 2030
 - d. 20% $SSB_{current, F=0}^2$ by 2030
 2. For all scenarios except 6, the time expected to achieve each of the SSB levels listed above, with 60% probability.
 3. Expected annual yield during projection period, by fishery (defined in terms of flag, gear, and area).
 4. Probability of SSB falling below the historical lowest at any time during the projection period.
 5. Probability of catch falling below the historical lowest at any time during the projection period.
2. Taking into account the objectives of the two Conventions, the results of the evaluations described above, any advice from the IATTC scientific staff and/or Scientific Advisory Committee, and the desire to maintain or enhance fishing opportunities in, and benefits from, PBF-directed fisheries to the extent compatible with the need to rebuild the stock, the WCPFC and IATTC will:
- a. In 2017, agree on a second rebuilding target to be reached by 2030 (not necessarily the ultimate rebuilding target).
 - b. Revise their respective management measures as needed to achieve the initial WCPFC rebuilding target by 2024, as appropriate given progress of rebuilding the stock.
 - c. Revise or adopt conservation and management measures to achieve the second rebuilding target that would become effective after the initial target is met.

Summary of harvest scenarios

	WCPO			EPO	
	F	Catch		F	Catch
		<30kg	≥30kg		
1	2002-04	50% 2002-04	2002-04	unlimited	3,300 mt comm.
2	unlimited	50% 2010-12		unlimited	50% 2010-12
3	2002-04	50% 2002-04	2002-04	unlimited	50% 2002-04
4	2002-04	45% 2002-04	unlimited	2010-12	unlimited
5	2002-04	45% 2002-04	unlimited	unlimited	3,300 mt comm.
6	2002-04	45% 2002-04	2002-04	unlimited	3,300 mt comm.
7	2002-04	35% 2002-04	unlimited	2010-12	unlimited
8	2002-04	35% 2002-04	unlimited	unlimited	3,300 mt comm.
9	2002-04	35% 2002-04	2002-04	unlimited	3,300 mt comm.
10	constant – depend on target	unlimited		constant – depend on target	unlimited

² The time period to be used for 20% $SSB_{current, F=0}$ shall have a length of 10 years and be based on the years $t_1 = y_{last-10}$ to $t_2 = y_{last-1}$ where y_{last} is the last year used in the assessment; and the approach used for calculating the unfished biomass levels shall be based on scaled estimates of recruitment according to the stock recruitment relationship.

Terms of Reference for a Pacific Bluefin Tuna Stakeholders Meeting

1. Purpose

ISC will organize a meeting to inform stakeholders of the results of the evaluation by ISC on the expected performance of the scenarios identified by the Joint IATTC-NC WG meeting on the management of PBF. The meeting is expected to facilitate discussion on selection of the next rebuilding target.

2. Date and venue

April or May 2017 in Japan

3. Participants

Administrators, scientists, fishermen and other stakeholders involved in PBF, including NGOs

4. Agenda

- (1) Presentation by ISC on the results of the evaluation
- (2) Discussion on the next rebuilding target
- (3) Next steps

5. Facilitator

ISC and Japan will jointly facilitate the meeting.

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**CONSERVATION AND MANAGEMENT MEASURE TO ESTABLISH
A MULTI-ANNUAL REBUILDING PLAN FOR PACIFIC BLUEFIN TUNA**

Conservation and Management Measure 2015-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 five times since then (CMM 2010-04, CMM 2012-06, CMM 2013-09, CMM 2014-04 and CMM 2015-04) 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 2016, indicating the following:

- (1) SSB fluctuated throughout the assessment period (1952–2014), (2) SSB steadily declined from 1996 to 2010, and (3) the decline appears to have ceased since 2010, although the stock remains near the historic low (2.6% of unfished SSB);
- The 2014 estimated recruitment was relatively low, and the average recruitment for the last five years may have been below the historical average;
- The fishery exploitation rate in 2011–2013 exceeded all biological reference points evaluated by the ISC except F_{MED} and F_{LOSS} .
- Since the early 1990s, the WCPO purse seine fisheries, in particular those targeting small fish (age 0–1) have had an increasing impact on the spawning stock biomass, and in 2014 had a greater impact than any other fishery group.
- The projection results indicate that: (1) the probability of SSB recovering to the initial rebuilding target ($SSB_{MED,1952-2014}$) by 2024 is 69% or above the level prescribed in the WCPFC CMM 2015-04 if low recruitment scenario is assumed and WCPFC CMM 2015-04 and IATTC Resolution C-14-06 continue in force and are fully implemented; and (2) a 10% reduction in the catch limit for fish smaller than 30 kg would have a larger effect on recovery than a 10% reduction in the catch limit for fish larger than 30 kg; 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;
- ISC recommends defining SSB_{MED} as the median point estimate for a fixed period of time, either, 1952–2012 or 1952–2014, and further stated that SSB_{MED} is estimated to be 41,069 t for the period of 1952–2012 and 40,994 t for 1952–2014.

Recognizing the requirement to adopt reference points for conservation and management of Pacific bluefin tuna; and

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. The Commission Members, Cooperating Non-Members and participating Territories (hereinafter referred to as CCMs) recognize that the management objectives of the WCPFC are to maintain or restore fish stocks at levels capable of producing MSY and shall implement a provisional Multi-Annual Rebuilding Plan for Pacific bluefin tuna to rebuild the stock by adopting and achieving step-wise rebuilding targets.. This stepwise rebuilding approach will be as follows:

- a. Starting in 2015, CCMs agree to rebuild the stock with the initial goal of rebuilding the SSB to the historical median (the median point estimate for 1952-2014) within 10 years with at least 60% probability.
- b. Implementation and progress of this plan shall be reviewed based on the results of stock assessments and SSB projections to be conducted by ISC in 2018 and every two years thereafter. For this purpose, the ISC is requested to update the SSB projections for the harvest scenarios previously recommended by the WCPFC, along with any additional scenarios recommended by the Northern Committee. This CMM shall be amended if necessary upon such review.
- c. In 2017, CCMs shall agree on a second rebuilding target, to be reached by 2030 (not necessarily the ultimate rebuilding target).
- d. CCMs shall revise or adopt conservation and management measures to achieve the second rebuilding target that would become effective after the initial goal is met.

2. The Northern Committee shall consider and develop reference points and harvest control rules for the long-term management of Pacific bluefin tuna at its meeting in 2017.

Management measures

3. 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 of the catch limit shall be deducted from the catch limit for the following year.

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 levels³. Any overage of the catch limit shall be deducted from the catch limit for the following year. However, in 2017, 2018, 2019, and 2020 CCMs may use part of the catch limit for Pacific bluefin tuna smaller than 30 kg stipulated in paragraph 3 (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 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

³ This may apply to Japan starting from July 1, 2017

determine whether it should be continued past 2020, and if so, recommend changes to the CMM as appropriate.

5. An emergency rule shall be considered in 2017 which stipulates specific rules all CCMs shall comply with when drastic drops in recruitment are detected.

6. CCMs shall report their 2002–2004 baseline fishing effort and <30 kg and ≥30 kg catch levels for 2013 and 2014, by fishery, as referred to in paragraphs 3 and 4, to the Executive Director by 31 July 2015. CCMs shall also report to the Executive Director by 31 July each year their fishing effort and <30 kg and ≥30 kg catch levels, by fishery, for the previous 3 year, accounting for all catches, including discards. The Executive Director will compile this information each year into an appropriate format for the use of the Northern Committee.

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

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

9. 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 3 and 4 above. CCMs shall cooperate for this purpose.

10. CCMs shall cooperate to establish a catch documentation scheme (CDS) to be applied to Pacific bluefin tuna as a matter of priority.

11. 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;

12. CCMs shall report to Executive Director by 31 July annually measures they used to implement paragraphs 3, 4, 6, 8, 9, 11 and 14 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.

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

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

15. The provisions of paragraphs 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.

16. The provisions of paragraph 15 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

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

**Northern Committee
Twelfth Regular Session**

Fukuoka, Japan
29 August–2 September 2016

WORK PROGRAMME FOR THE NORTHERN COMMITTEE

Work areas	Objectives	1-year tasks		
	2017–2019	2017	2018	2019
1. Northern stocks a. Monitor status; consider management action	Review status and take action as needed for: <u>North Pacific albacore</u> Tasks (A) Review members' reports on their implementation of CMM 2005-03. (B) Implement the agreed precautionary approach-based management framework recognizing CMM2014-06, 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 2005-03.	Review the compiled members' reports and identify and rectify shortcomings. Continue to support ISC MSE work to complete Task (B)(2). Obtain the new assessment results from ISC and recommend any necessary changes to CMM2005-03.	Review the compiled members' reports and identify and rectify shortcomings. Continue to support ISC MSE work to complete Task (B)(2). Recommend any necessary changes to CMM 2005-03 (Task(B)(3))	Review the compiled members' reports and identify and rectify shortcomings. Continue to support ISC MSE work to complete Task (B)(2). Recommend any necessary changes to CMM 2005-03 (Task(B)(3)).

Work areas	Objectives	1-year tasks		
	2017–2019	2017	2018	2019
	<p><u>Pacific bluefin tuna</u></p> <p>Tasks</p> <p>(A) Review members’ reports on their implementation of CMM on PBF.</p> <p>(B) Establish a precautionary-approach based management framework recognizing CMM2014-06, including: (1) recommend appropriate reference points; (2) agree in advance to actions that will be taken in the event each of the particular limit reference points is breached (decision rules) and other elements of harvest strategies, if appropriate; (3) adopt step-wise rebuilding targets; (4) recommend any changes to the rebuilding program and CMM.</p> <p><u>Swordfish</u></p> <p>Establish a precautionary-approach based management framework recognizing CMM2014-06, including: (1) recommend appropriate reference points; (2) agreeing in advance to actions that will be taken in the event each of the particular limit reference points</p>	<p>Review the compiled members’ reports and identify and rectify shortcomings.</p> <p>Develop emergency measures in case of recruitment collapse.</p> <p>Develop CDS based on the inputs from members.</p> <p>Develop the management framework including reference points and harvest control rules and recommend any changes to the rebuilding program and CMM (Task (1) – (4)).</p> <p>Consider the outcomes of ISC analysis of performance of harvest scenarios</p> <p>Adopt second rebuilding target to be achieved by 2030</p> <p>Finalize interim management objective and reference points</p>	<p>Review the compiled members’ reports and identify and rectify shortcomings.</p> <p>Obtain the new updated assessment and other work results from ISC and recommend any necessary changes to CMM on PBF.</p> <p>Obtain and review a full assessment and consider appropriate management action.</p>	<p>Review the compiled members’ reports and identify and rectify shortcomings.</p>

Work areas	Objectives	1-year tasks		
	2017–2019	2017	2018	2019
b. Data	<p>is breached (decision rules) and other elements of harvest strategies, if appropriate.</p> <p><u>Striped marlin</u> (if agreed on by the Scientific Committee and Commission).</p> <p>Achieve timely submission of complete data needed for assessments, formulation of measures, and review of Commission decisions.</p> <p>Consider systems to validate catch data</p>	<p>CCMs participating in the NC submit complete data on fisheries for northern stocks to the Commission.</p> <p>Encourage submission to Commission of Pacific bluefin tuna, North Pacific albacore, North Pacific striped marlin, and swordfish data from all CCMs and make available to ISC.</p>	<p>CCMs participating in the NC submit complete data on fisheries for northern stocks to the Commission.</p> <p>Encourage submission to Commission of Pacific bluefin tuna, North Pacific albacore, North Pacific striped marlin and swordfish data from all CCMs and make available to ISC.</p>	<p>CCMs participating in the NC submit complete data on fisheries for northern stocks to the Commission.</p> <p>Encourage submission to Commission of Pacific bluefin tuna, North Pacific albacore, North Pacific striped marlin and swordfish data from all CCMs and make available to ISC.</p>
c. Scientific support 2. Non-target, associated, dependent species a. Seabirds b. Sea turtles c. Sharks	<p>Provide support for scientific studies.</p> <p>Consider appropriate implementation of methods to minimize catch and mortality.</p> <p>Consider appropriate implementation of methods to minimize catch and mortality.</p> <p>Consider appropriate</p>	<p>Encourage voluntary contribution for NC's list of priority scientific projects, including close-kin analysis.</p> <p>Review implementation of CMM-2015-03 in the northern area.</p> <p>Review mitigation research results and consider management action.</p> <p>Review scientific advice from</p>	<p>Review implementation of CMM-2015-03 in the northern area.</p> <p>Review mitigation research results and consider management action.</p> <p>Review scientific advice</p>	<p>Review implementation of CMM-2015-03 in the northern area.</p> <p>Review mitigation research results and consider management action.</p> <p>Review scientific advice</p>

Work areas	Objectives	1-year tasks		
	2017–2019	2017	2018	2019
3. Review effectiveness of decisions 4. ROP (Paragraph 9, Attachment C of CMM2007-01) 5. VMS 6. Cooperation with other organizations a. ISC b. IATTC	implementation for CMM-2010-07 in the northern area. Annually review effectiveness of conservation and management measures and resolutions applicable to fisheries for northern stocks.	ISC, if any, and consider management options on two shark species (blue shark and short fin mako shark). Encourage submission of all shark data to ISC. Review effectiveness of North Pacific albacore measure (CMM 2005-03), including members' reports on their interpretation and implementation of fishing effort control. Review effectiveness of Pacific bluefin tuna measure. Review implementation of ROP for fishing vessels operating in north of 20°N. Review implementation of VMS for fishing vessels operating in north of 20°N. Consider action to support ISC. Have consultation to maintain consistent measures for North Pacific albacore and Pacific bluefin tuna.	from ISC, if any, and consider management options on two shark species (blue shark and short fin mako shark). Encourage submission of all shark data to ISC. Review effectiveness of North Pacific albacore measure (CMM 2005-03), including members' reports on their interpretation and implementation of fishing effort control. Review effectiveness of Pacific bluefin tuna measure. Review implementation of ROP for fishing vessels operating in north of 20°N. Review implementation of VMS for fishing vessels operating in north of 20°N. Consider action to support ISC. Have consultation to maintain consistent measures for North Pacific albacore and Pacific bluefin	from ISC, if any, and consider management options on two shark species (blue shark and short fin mako shark). Encourage submission of all shark data to ISC. Review effectiveness of North Pacific albacore measure (CMM 2005-03), including members' reports on their interpretation and implementation of fishing effort control. Review effectiveness of Pacific bluefin tuna measure. Review implementation of ROP for fishing vessels operating in north of 20°N. Review implementation of VMS for fishing vessels operating in north of 20°N. Consider action to support ISC. Have consultation to maintain consistent measures for North Pacific albacore and Pacific bluefin

Work areas	Objectives	1-year tasks		
	2017–2019	2017	2018	2019
		Hold a joint working group meeting on PBF management.	tuna.	tuna.