



**NORTHERN COMMITTEE
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Fukuoka, Japan

An Excerpt from the NC and the Commission Summary Report on Pacific Bluefin Tuna

WCPFC-NC9-2013/IP-04

Japan

WCPFC 9, 2-6 December 2012

8.1 Report of the Eighth Regular Session of the Northern Committee

276. Masanori Miyahara, Chair of the Northern Committee, gave a presentation on the recent work of the NC and the issues that concern it. NC8 met in Nagasaki, Japan from 3-6 September 2012 and primarily focused on issues relating to the CMM for Pacific BFT which expires at the end of 2012 (CMM 2010-04). According to this CMM, total fishing effort for 2010 and 2011 should remain below 2002-2004 levels except for artisanal fisheries. All CCMs except for Korea are required to reduce catches of juveniles (age 0-3) below the 2002-2004 levels. The largest fisheries for PBF are Japanese and Japan has implemented catch limits for PBF and completed registration of its artisanal fleet of over 13,000 vessels. It has also prohibited any increase in PBF farming capacity because most of the fry are wild-caught. Korea has deferred management measures until after its ongoing PBF research programme is complete. Chinese Taipei longline fleets catch adult PBF but catches have declined recently. Mexico caught over 6600 t of PBF in 2012 which exceeds its limit under CMM 2010-04 of 5600 t. Although an updated PBF stock assessment is being finalised by ISC, the results are not yet available, and it is proposed to continue the current PBF CMM with the addition of a requirement to monitor the international trade in PBF products (WCPFC-2012-25). NC8 also agreed a proposal to implement the ROP for vessels fishing for fresh fish north of 20oN no later than 31 December 2014 (WCPFC9-2012-26) and announced that all members are prepared to implement VMS in the area north of 20oN and west of 175oE by 31 December 2013 (WCPFC9-2012-18).

277. Some CCMs raised concerns about the implementation date for the ROP and stated that further

delays would not be acceptable.

278. Chinese Taipei explained that it is encountering difficulties placing observers on small longliners due to safety issues and crew conditions. Nevertheless Chinese Taipei will continue to strive to increase observer coverage.

279. Some CCMs noted that the applicability of the observer coverage levels to small longliners remains unclear because of a lack of definitions of key terms under the ROP. It was noted that this issue arises not only in the NC but in the ROP as a whole.

280. The Chair of the NC stated that it was not the role of the NC to discuss definitions in the ROP. Therefore, the proposal for implementation of the ROP in the NC area remains as presented in WCPFC-2012-26.

281. Several CCMs, as well as observers representing WWF, Pew and Greenpeace, emphasizing the importance of reducing fishing mortality on juvenile PBF, looked forward to the results of the PBF stock assessment and to strengthening the CMM next year.

282. WWF, Pew and Greenpeace called for ISC to increase its transparency by re-considering requests for observer status at its meetings.

283. Indonesia noted the importance of artificial propagation of tuna fry and announced it would shortly be sharing results of some research on YFT.

284. Canada highlighted the considerable progress made by the NC and the ISC on North Pacific ALB including improvements in catch and effort reporting, development of precautionary management frameworks, and work programme planning.

285. WCPFC9 endorsed the NC members commitment to implement VMS in the area north of 20oN and west of 175oE by 31 December 2013.

10.1.8 Pacific Bluefin

403. The Chair of the NC referred to his presentation under agenda item 8 and to NC8's recommendation for a revised CMM for PBF (WCPFC9-2012-25).

404. WCPFC9 adopted the NC's recommended CMM for PBF noting that the measure will be reviewed in 2013 pending the results of the soon to be completed ISC stock assessment. (Attachment U, CMM 2012-06)

NC 8, 6-9 September 2011

2.3.1 Pacific bluefin tuna

10. The NC Chair reminded Members, Cooperating non-Members and Participating Territories (CCMs) that the current conservation and management measure (CMM) for Pacific bluefin tuna will expire at the end of 2012 and needs to be renewed. Each CCM was invited to present the status of implementation of CMM 2010-04.

11. Japan introduced meeting paper NC8-DP-01 (which reviewed Japan's implementation of CMM 2010-04), and gave a presentation on Japan's Pacific bluefin tuna fisheries. Japan explained that almost all catches were made in the areas under Japan's jurisdiction and primarily within its territorial and internal waters. Japan highlighted its efforts with respect to each of their Pacific bluefin tuna fisheries. Japan noted that as of 1 July 2012 it has completed registration for its entire fleet of artisanal boats (including troll boats, jig boats and handline operations), including over 13,000 vessels, which are also now subject to mandatory catch reporting requirements. Japan has implemented an annual catch limit of 4,500 mt for its purse-seine fleet which fishes for juvenile Pacific bluefin tuna off the west coast of Japan, and representing a 26% decrease from the 2005–2009 average catch. Japan has also implemented a 2,000 mt catch limit for the purse-seine fishery targeting adult Pacific bluefin tuna in the Sea of Japan. In April 2011, all Pacific bluefin tuna aquaculture operations were required to register and report on their operations, including the number of cages in operation and the source of Pacific bluefin tuna fry being farmed.

12. Korea asked Japan to explain the discrepancies between catches reported to ISC and what Japan presented in NC8-DP-01. Japan explained that differences were due to variances in the timing of the fishing year used by ISC and Japan, but that the data were consistent. Chinese Taipei and Korea also asked Japan whether catch limits would be imposed on the artisanal Pacific bluefin tuna fleet. Japan responded that although they are not opposed to considering some type of management measures for this fleet, implementation of a catch limit for a fleet consisting of 13,000 vessels spread over a wide geographical area is not practical.

13. USA requested that Japan consider submitting more detail about the characteristics of its artisanal fleet — such as vessel size, engine size, number of crew — which would allow for a better understanding of the fishing capacity of this fleet. Japan agreed to provide such information in advance of NC9.

14. Korea introduced meeting paper NC8-DP-04, and explained that its five-year research programme, which started in 2010, is still underway and that Korea is currently in the process of revising portions of their historic catches characterized as juvenile or adult. Korea is also planning to place observers on purse-seine boats to further characterize the fishery and to determine whether Korea's catch of juveniles

can be controlled and subject to regulation. Korea stated that it has not issued any licenses for Pacific bluefin tuna because it does not have any directed fisheries for Pacific bluefin tuna, and that all of the catch comes as bycatch or from mixed species fisheries that typically target mackerel. Once its research program is complete, Korea will be able to consider the possibility of management measures.

15. Japan presented meeting paper NC8-IP-05, characterizing Japanese imports of Pacific bluefin tuna from Korea. Japan's report showed an increasing trend in Korean-caught Pacific bluefin tuna in 2012. In addition, the report stated that roughly 50% of Korea's Pacific bluefin tuna catch was from 5 of 26 purse-seine vessels, suggesting that these vessels were likely targeting Pacific bluefin tuna. Korea noted that its catches of mackerel from this fishery were about 300 times that of the catch of Pacific bluefin tuna, indicative that Pacific bluefin tuna were a bycatch species in this fishery. Japan asked about the definition of "bycatch" used in Korea's report. Japan pointed out that, according to the Korean explanation in previous NC meetings, there was no definition of bycatch in Korea's regulations, but that Korea established the Ministerial Directive in 2011 that used the word "bycatch". Korea responded that the word "bycatch" means Pacific bluefin tuna that are mixed with other species in the catch.

16. Chinese Taipei asked Korea whether it is planning to introduce a catch limit for Pacific bluefin tuna on its purse-seine fishery like Japan has done. Korea responded that it does not have any specific plan at this stage. Japan stated that although CMM-2010-04 exempted the Korean purse-seine fishery from implementing reductions in catches of juveniles, Korea was still required to regulate this fishery in accordance with paragraph 2, and that its failure to do so represented an instance of non-compliance.

17 While appreciating Korea's intention to control Pacific bluefin tuna catches by purse-seine vessels in the near future, the Chair noted that no significant progress had been made since 2010 with regard to the management of Korea's Pacific bluefin tuna fishery. NC8 expressed concern about Korea's delay in implementing CMM 2010-04, and urged Korea to take further action to improve compliance with this CMM.

18. Chinese Taipei presented meeting paper NC8-DP-07. Chinese Taipei reported that it has around 250 longline vessels catching Pacific bluefin tuna, and that it implemented a catch documentation programme in 2010 for Pacific bluefin tuna on a voluntary basis. Chinese Taipei has also implemented a port sampling scheme that samples 100% of its landed Pacific bluefin tuna catch, and collects data on size and weight. In 2012, Chinese Taipei's catch was approximately 200 mt, which is in contrast to its average catch during 2002–2004 of 1,743 mt. Chinese Taipei also urged NC members to improve the Pacific bluefin tuna CMM by introducing measures such as catch limits and catch documentation schemes.

19. USA presented meeting paper NC8-DP-08. USA reported that it does not have any vessels that fish for Pacific bluefin tuna in the WCPFC Convention Area, but noted that its vessels do catch Pacific

bluefin tuna incidentally in the WCPFC Convention Area and incidentally and opportunistically in the IATTC Convention Area. USA is in the process of implementing the CMM adopted by the IATTC in July 2012. This purse-seine fishery caught 99 mt in 2011, and typically catches juveniles that are 1–3 years of age.

20. The Philippines presented meeting paper NC8-DP-05, and reported that it is still implementing and its improving data collection efforts, but currently has no catches of Pacific bluefin tuna to report.

21. Japan presented meeting paper NC8-DP-09 on imports of Pacific bluefin tuna from Mexico, noting that it does not expect Mexican catch statistics to match up well with import numbers because Pacific bluefin tuna that are harvested by Mexico are typically fattened in pens for 6–12 months before export to Japan.

22. The Chair noted the absence of Mexico from NC8, and expressed his hope that Mexico would arrive later in the week. He also noted that Mexico had been encouraged to attend NC meetings and had made a commitment to attend NC8 in recognition of Mexico's important role in managing and conserving Pacific bluefin tuna.

23. Japan presented a draft CMM for Pacific bluefin tuna (meeting paper NC8-DP-03) for consideration by NC8. After reviewing this proposal, NC8 agreed to submit a recommendation (Attachment C) to the Commission for the Pacific bluefin tuna CMM for 2013. The Chair announced his intention to call a special meeting of NC during the December Commission meeting in case the stock assessment results turn out to be very negative and does not allow a one-year delay of introduction of a new CMM.

24. NC8 considered that it is desirable to avoid ambiguities as much as possible when it works for a new CMM at NC9. Those ambiguities include interpretation of: reference year, juvenile, bycatch and artisanal fishery.

25. Korea proposed a format to describe catches and efforts of CCMs (meeting paper NC8-DP-10). NC8 decided to consider this proposal at NC9. The Chair encouraged Korea to consult with other members to improve the proposal prior to NC9.

WCPFC 8, 26-30 March 2012

7.1.1 Northern Committee Science Recommendations and Management Advice

170. Masanori Miyahara (Japan), Chairman of the Northern Committee, presented the report of the Northern Committee (WCPFC8-2011/16). The two major themes of the meeting were a review of the

implementation of existing measures, and making recommendations on the implementation of the observer programme for vessels fishing for fresh fish in the area north of 20 degrees north.

171. Regarding the implementation of existing measures, CMM 2010-04 for Pacific Bluefin tuna requires members, to ensure that the total fishing effort by their vessels shall stay below the 2002-04 level for 2011 and 2012 except for artisanal fisheries. Such measures shall include those to reduce juvenile mortality to 2002-2004 levels except for Korea. Japan has implemented a purse seine catch limit for juveniles, a voluntary purse seine catch limit for adults, limits on set net licenses, and registration and reporting requirements for artisanal vessels and aquaculture sites. Korea is implementing a prohibition on juvenile catch with several exemptions but is required to maintain total fishing effort at 2002-2004 levels. Chinese Taipei has implemented a limit on the number of longline vessels and stated that its fisheries do not catch juveniles.

172. With regard to the CMM for North Pacific albacore (CMM 2005-05), the Chair of the NC noted that the NC is progressing toward a revised management framework for this species based on the precautionary approach (see WCPFC8-2011/16, Attachment C).

173. The Chair of the NC noted that the NC6's proposal to WCPFC7 regarding observers for fresh fish vessels was not accepted, and a new proposal is from NC7 is provided to WCPFC8 as WCPFC8-2011/32. This proposal implements the ROP for vessels fishing for fresh fish in the area north of 20 degrees north with a coverage of 5% to be achieved by the end of December 2014.

174. The Chair of the NC stated that VMS issues for northern fisheries will be discussed at NC8.

175. The USA drew WCPFC8's attention to WCPFC8-2011-DP/12 on consolidation of proposed observer coverage levels based on CMM 2008-01 and the proposal from the NC (WCPFC8-2011/32). The paper presents a proposal for a new CMM which would replace CMM 2007-01.

176. Chinese Taipei expressed support for the proposal made by the Northern Committee and also supported USA proposal for consolidation of observer requirements.

177. Further discussion of the issue of observers for the northern fresh fish vessels was deferred to Agenda Item 9.2.3.

178. FFA members expressed appreciation for the opportunity to participate in the NC. These CCMs noted that the North Pacific striped marlin assessment was not completed as planned and looked forward to assessment results being provided next year. The need for stronger measures for Pacific Bluefin tuna was highlighted and clarification on the timeframe of Korea's exemptions for management of juvenile mortality was requested.

179. Korea explained that it is not implementing the measures because it does not have any fisheries targeting Pacific Bluefin tuna. A research project has been launched and once sufficient information is gathered Korea would like to participate in international management measures for this species.

180. Mexico questioned the need and timeframe for the exemptions for the Japanese artisanal fleet and the Korean fleets.

181. The Chair of the NC explained that Japan's artisanal fleet is comprised of a large number of small vessels with one or two fishermen on board. The total catch of this sector has been stable for the past three to four decades. With reference to Korean fleets, the exemption was requested to give Korea more time to understand how their fishery interacts with this species. The Chair of the NC noted that Mexico has been asked to implement the CMM but no response has been received.

182. Mexico stated that its catches of Pacific Bluefin tuna in the Eastern Pacific Ocean have also been stable for 20-30 years.

NC 7, 6-9 September 2011

2.3.1 Pacific bluefin tuna (CMM-2010-04)

9. NC7 reviewed CCMs' implementation of CMM 2010-04, which requires members to report on their implementation of this CMM.

10. The Philippines recalled that past research had indicated catches of Pacific bluefin tuna in Philippine waters, but better data collection is needed to confirm whether any catches are currently occurring. It plans to implement measures to prevent catches of juvenile Pacific bluefin tuna.

11. Canada stated that it did not submit a report because it had no recorded catch of Pacific bluefin tuna in 2010.

12. Japan introduced NC7-DP-02, which reviewed Japan's implementation of CMM 2010-04. Japan highlighted that it had introduced: i) a catch limit for juvenile Pacific bluefin tuna and a voluntary catch limit for adult Pacific bluefin by the purse-seine fishery; ii) an administrative guidance not to increase the number of licenses of setnets for Pacific bluefin tuna; iii) a vessel registration system and mandatory reporting for the artisanal fishery operating in the Sea of Japan and the East China Sea; and iv) a registration system and mandatory reporting of all Pacific bluefin tuna aquaculture sites. Japan explained that more than 5,000 artisanal vessels were registered (almost the same number of active vessels in WCPFC vessel registration) and this registration is scheduled to expand to include vessels operating on the Pacific coast next year. Japan also explained the enhanced data collection of Pacific bluefin tuna imported from Korea and Mexico. Further, Japan reported on the cooperation with IATTC members, noting that IATTC failed to agree to a measure at this year's annual meeting.

13. Korea presented NC7-DP-03, which introduced the enacted Ministerial Directive that aims to initiate,

as a first step, monitoring and management of Pacific bluefin tuna fisheries in Korean waters, including prohibition of commercial catches of juvenile Pacific bluefin that are less than 20 kg. Korea explained that the directive has been established through a series of domestic processes and has been effective since 26 May 2011. Regarding NC7-DP-01, Korea appreciated Japan's effort to provide the statistics and analysis on Korea's Pacific bluefin tuna catch, and expressed its different view on the use of the term "disguised exportation" in NC7-DP-01 in reference to Pacific bluefin tuna exported to Japan labeled as "skipjack." Korea explained that it might be the result of misidentification by fishermen and the fishery cooperative that handled the landed fish.

14. Japan presented NC7-DP-01 (Preliminary analysis of Pacific bluefin tuna imported from Korea in 2011), and concluded that the Pacific bluefin tuna catch by Korea is not substantially lower than last year, although the new Korean directive came into force only in late May. Japan also stated that a different term could be used than "disguised exportation" in response to Korea's concern. However, Japan noted that even if fishermen were unable to identify the fish correctly, the exporter should be able to distinguish between the two species. This leads Japan to wonder whether this was merely a matter of misidentification.

15. In response to a question, Korea confirmed that they considered Pacific bluefin tuna that weigh less than 20 kg as juveniles. The NC7 Chair consulted with the chair of the ISC Pacific bluefin tuna working group who stated that Pacific bluefin tuna weigh 25–30 kg around May or June of the third year (age-3). This indicates that fish weighing less than 30 kg should be considered to be juveniles.

16. Korea further noted that the prohibition on the catch of juvenile Pacific bluefin tuna has the following exemptions: i) catch under scientific research; ii) catch for the purpose of stock enhancement; iii) catch for fry for aquaculture; and iv) incidental catch by other than large purse-seine vessels. Korea also noted that catches under research can be used commercially after the study has been completed. The study includes the collection of Pacific bluefin tuna catch data reported from licensed vessels by weight and number for fish greater than 20 kg/fish, and by box for fixed weight for fish less than 20 kg/fish.

17. Chinese Taipei asked if Korean vessels also catch Pacific bluefin tuna outside of their exclusive economic zone (EEZ). Korea explained that the Ministerial Directive only applies to fisheries inside the EEZ.

18. The USA presented NC7-DP-04, which states that the USA does not have any vessels fishing for Pacific bluefin tuna. The NC Chair asked about Pacific bluefin tuna caught in Hawaiian waters, which are within the WCPFC Convention Area. The USA reported that small quantities are caught incidentally by the Hawaiian longline fishery.

19. Chinese Taipei reviewed its report (NC7-DP-06), which explained that Chinese Taipei had set the limit for the number of longline vessels fishing for Pacific bluefin tuna and that it introduced a catch documentation scheme for the species.

20. The NC Chair asked what measures had been implemented to control catches of juvenile Pacific bluefin. Chinese Taipei responded that its fisheries do not catch juveniles so they have not yet implemented management measures. The NC Chair then asked how incidental catches are handled under the limited entry system. Chinese Taipei said a longline vessel that catches Pacific bluefin tuna without proper authorization would be sanctioned.

21. The Philippines presented NC7-DP-05. The NC Chair asked about the location of the closed area established on Tubbataha Reef and its effect on tuna conservation. The Philippines explained the reef's location and noted that it is an important spawning and rearing area for a variety of tuna species,

although more research is needed to determine whether it is an area important to Pacific bluefin.

Discussion

22. The USA complimented Japan and Korea on their efforts to implement CMM 2010-04 domestically, and suggested that in a future measure, NC should remove exemptions for artisanal fisheries and for Korea.
23. Japan stated that the artisanal fishery exemption should, at some point, be reviewed, but stressed that there are a very large number of artisanal vessels — likely in excess of 10,000 — whose actual catch is very small. This presents logistical difficulties in removing the exemption at this stage.
24. Vanuatu noted that it has not recorded any Pacific bluefin tuna catch but that its fisheries are monitored, and it will report any catches. In this regard, Vanuatu requested other countries to inform it if they record imports of Pacific bluefin from Vanuatu.
25. Korea responded to Japan's question by noting that purse-seine catches of juvenile Pacific bluefin (< 20 kg) are exempted under the research programme, and that even though it is research catch, it may still be exported. Regarding Japan's concern, Korea stated that it is easier to identify Pacific bluefin in the market, especially in the Japanese auction market, than in local market places. Korea also noted that there are various circumstances, including difficulties in species identification of juvenile tunas and quick processes of the trade on fresh fish that may lead to misidentification of Pacific bluefin, and suggested the need for more cooperation between exporting and importing countries.
26. The NC Chair asked for further explanation of Korea's regulations for high seas catches of Pacific bluefin. Korea responded that currently there is no information on purse-seine catches outside of Korea's EEZ.
27. The NC Chair asked Korea about the types of activities that are considered "research" under the Ministerial Directive. Korea responded that before the directive was established there was no regulation of Pacific bluefin tuna fishing. After the directive came into force, anyone wishing to catch Pacific bluefin tuna must have permission, and the permission and reporting of the catch is under the auspices of Korea's research programme, which collects data relevant to Pacific bluefin management. All fishermen, including those from large purse-seine vessels, are allowed to participate in the research programme.
28. The NC Chair sought confirmation that under the research programme, fishermen only have to report catches and are then exempted from any further limits on catches. Korea confirmed this. Japan asked if it is correct that after the introduction of the directive, purse-seine activity had not actually changed but rather had been renamed from a commercial operation to a research activity. Korea said that it is an accurate characterization of their management programme, and further stated that this is a remarkable turning point towards the monitoring and managing Pacific bluefin fisheries in Korea where there has not been any regulations.
29. Korea and Japan expressed their intention to strengthen cooperation on monitoring Pacific bluefin imports and exports. Japan asked Korea to establish more effective methods for regulating Pacific bluefin fisheries by 2012 when CMM 2010-04 will be revised.
30. Korea said that it is their intention to comply with CMM 2010-04 and once the research programme has been completed they will be in full compliance with the measure. Japan noted that Korea described a five-year research programme while the CMM is due to be revised next year. Korea responded that even

before completion of the five-year research programme it could accept the obligation at the same level as other members under the current CMM when sufficient data and information are secured, hopefully next year. Korea added that 2011 is the second year of five-year programme.

WCPFC 7, 6-10 December 2010

9.3.5 Pacific Bluefin Tuna

378. Japan, on behalf of the NC, introduced WCPFC7-2010-35, proposing a new CMM to replace the existing one, seeking to ensure that the level of Pacific bluefin tuna fishing mortality does not increase above 2002–2004 levels.

379. CCMs discussed WCPFC7-2010-35. One CCM with domestic fisheries for the stock expressed difficulty to withdraw its reservation made in the NC meeting in September. Concern was expressed that failure to adopt a new CMM could result in CITES listing of Pacific bluefin, as was proposed for Atlantic bluefin in 2010. FFA members noted their desire to see the stock assessment of Pacific bluefin reviewed in full by the SC. FFA members also indicated that in the event that the proposed CMM failed to meet the objective of reducing fishing mortality to 2002–2004 levels, the need for stringent alternative measures — such as direct control of catches, particularly of juvenile fish — be noted when the measure is reviewed in 2012. Northern Committee meetings were held twice at the margin of the Commission meeting and finally reached consensus on measures as WCPFC-2010-35 (Rev1).

380. WCPFC7 adopted WCPFC7-2010-35 (Rev. 1) as a CMM (CMM 2010-04) (Attachment BB).

381. Japan noted that Mexico was a CNM and also fishes for Pacific bluefin tuna. It indicated that the NC intends to establish a joint working group or hold a meeting with IATTC on Pacific bluefin tuna, prior to NC7, to pursue development of a management measure for the eastern Pacific.

NC 6, 7-10 September 2010

2.3.1 Pacific bluefin tuna (CMM-2009-07)

17. Japan presented its work on implementing CMM 2009-07 — the WCPFC conservation and management measure (CMM) on Pacific bluefin tuna — which comprises: i) a control on the number of vessels fishing for Pacific bluefin tuna under a licensing system; ii) administrative instructions to the purse-seine industry to not catch or land small Pacific bluefin tuna less than 2 kg and to ensure that the total catch in the Northern Kyushu area will not exceed the average catch of 2000–2004; and iii) administrative instructions to local governments to not increase the number of licenses of set nets for Pacific bluefin tuna and to pay due consideration to not increasing bluefin tuna catches in other set nets.

Japan also highlighted that its Ministry of Agriculture, Forestry and Fisheries (MAFF) announced on 11 May 2010 that it is now preparing for comprehensive management directions for its Pacific bluefin tuna fisheries (composed of offshore fisheries, coastal fisheries and aquaculture) by establishing a —Resource Recovery Plan together with the introduction of an income assurance system. Japan is now preparing for the implementation.

18. Japan reported on its artisanal fishery, described characteristics of the Japanese coast, and provided various statistics regarding the islands, underlining that more than 20,000 artisanal vessels operate and seasonally catch Pacific bluefin tuna. The Pacific bluefin tuna fishery in Japan uses various kinds of fishing methods, is small-scale and operated by family-owned businesses, and has landing ports scattered across the country. Trolling is one of the main fishing methods for Pacific bluefin tuna. Japan launched an artisanal fisheries management directive in May 2010. The announcement by MAFF on actions toward the effective conservation and management of Pacific bluefin tuna included a vessel registration system and mandatory catch reporting system.

19. Regarding the USA's question on the level of Pacific bluefin tuna caught by Japan's artisanal fisheries, Japan responded that while the artisanal catch ranges from 2,000–3,000 mt, the level of catch data is not accurate enough to be used in scientific analysis, which is why Japan is introducing a registration system with a mandatory reporting system, including total catch by vessel, volume of catch, and size of fish. Regarding Chinese Taipei's question on the implementation of the new management system, Japan responded that by the end of March 2011, Japan will establish the Pacific Bluefin Tuna Resource Recovery Plan and that under this plan, Japan will implement specific management measures beginning in April 2011. Regarding Chinese Taipei's question on other fisheries catching Pacific bluefin tuna, Japan responded that they include jigging, handlining, and a hybrid type of jigging and trolling. Data collection from most other fisheries, including all artisanal fisheries, will be covered by the new system. Regarding Korea's question on data collection from artisanal fisheries, Japan responded that it currently estimates artisanal catches using sales slips from fish markets.

20. Korea introduced document NC6-DP-04 regarding Korea's Pacific bluefin tuna catch. The catch of Pacific bluefin tuna started in 1982 as a non-target species, mostly by large-scale purse-seine vessels (>50 gross registered tonnage, GRT) that target mackerel, and also by small-scale purse-seine vessels, set nets, small-scale compound gear and other gear types used in artisanal fisheries. No scientific research on Pacific bluefin tuna had been conducted until 1999, due to the lack of interest in Pacific bluefin tuna among fishermen. However, the recent increase in Korean catch and fishermen's interest in the species has resulted in policy-makers providing funding to support biological and ecological research on Pacific bluefin tuna, in addition to supporting the strengthening of the data collection system. Domestic statistics indicate that the Pacific bluefin tuna catch increased steadily to a maximum of over 2,100 mt in 2003, although interannual variability is high. As Korea's fisheries monitoring and management body, the Ministry for Food, Agriculture, Forestry and Fisheries (MIFAFF) has requested

the National Fisheries Research and Development Institute (NFRDI) to conduct more systematic research on various aspects of the Pacific bluefin tuna stock. The research is aimed at preparing a tuna fishery management plan, including the establishment of domestic management measures to be imposed on fishermen. The research will continue over five years beginning in 2010, and progress will be reported to ISC.

21. In response to the NC Chair's question on the progress of Korea's management plan, Korea responded that it will begin preparing a management plan along with a progress report on research. Japan stated that Korea failed to answer several matters, including the improvement of catch data quality and submission of target or bycatch issue. Korea responded that its Pacific bluefin tuna statistics in the past depended on figures from Korea's exports and Japan's imports, and that recently, Korea started collecting purse seiners' cooperative auction data from fish markets. In addition, NFRDI initiated a pilot project in 2008 to collect data from smaller fisheries such as set net and small compound gear in Busan, but has not fully completed this work. The target species of large purse-seine vessels operating in Korean waters is mackerel, which are caught during the nighttime. However, sometimes Pacific bluefin tuna are caught during daytime sets if the fish is migrating up to the fishing grounds. Recently, Pacific bluefin tuna has become a very important species to Korean fishermen. Japan asked again about the timeline for Korea to produce some reliable catch estimates of Pacific bluefin tuna from purse seine and other gear types, noting that the fishery types between Korea and Japan are very similar. Japan will be producing all catch data, including artisanal data from early next year. Japan noted that regarding the bycatch issue, if Pacific bluefin tuna are caught during the daytime, then it can be considered to be a target fishery. Korea clarified that Pacific bluefin tuna catches include target catches because they target it during daytime, and confirmed that the interest of Pacific bluefin tuna catch among fishermen is increasing. The NC Chair noted that if it is a target catch, then the catch is manageable. Regarding Chinese Taipei's question on the contents of research and a detailed description of catch sources, Korea responded that the research includes a study on spawning area and period, development of a monitoring system of catch information, and validation of such catch information with research results conducted by NFRDI or any intermediate outputs during the process of the research, if necessary. The purpose of the research is to establish a management plan for the Pacific bluefin tuna fishery. Korea will prepare a management plan that will include fishing controls, input/output controls, fishing gear restrictions, creation of appropriate fishing gear, time/area closures, and identification of Pacific bluefin tuna fishing ground(s). Korea has had three workshops to educate fishermen and to introduce international management concerns and efforts on this species. Korea explained that it would be a time-consuming process to improve fishermen's awareness so that they could cooperate with international efforts for fisheries management. Korea expects to provide more reliable data in the near future. Chinese Taipei expressed its concern about the targeting of Pacific bluefin tuna, especially the targeting of juvenile Pacific bluefin tuna. Regarding Korea's request for more time, Japan noted that since 2007, Korea has repeatedly requested more time, and that Korea seems to want another five years until their research project is complete, which will be too late.

22. Japan presented a preliminary analysis of Pacific bluefin tuna imports from Korea. In 2009, WCPFC adopted CMM2009-07 for Pacific bluefin tuna, but the measure was not applicable to Korea's exclusive economic zone (EEZ), and Korea did not adopt the measure because of uncertainty concerning Pacific bluefin tuna catches in Korean waters. In order to reduce this uncertainty and help Korea adopt the measure, Japan started collecting trade information on imports from Korea in 2010. From 1 January–30 June 2010, 24 Korean purse-seine vessels caught 1,283.9 mt of Pacific bluefin tuna in Korea's EEZ, and 911.5 mt were exported to Japan. About 885 mt (about 69%) were caught by five purse-seine vessels. Over 50% of these tuna (457.0 mt) were imported in March, followed by 171.5 mt in April and 159.8 mt in June. Regarding size composition, 430 mt (47%) were in the 3–5 kg category and 428.4 mt (47%) were in the 5–50 kg category. On average, it takes 2.5 days for catches to reach Japanese fish markets. Busan is the major landing port for Korean purse-seine vessels and the port of shipment of Korean tunas. Fukuoka is the port where more than 95% of the Pacific bluefin tuna imported from Korea are auctioned. About 90% of exports were handled by four major exporters in Korea, and 86% of imports were handled by four major importers in Japan.

23. The USA noted that it is vitally important to get the best information and produce reliable data very quickly, and encouraged Japan and Korea to accelerate data collection as soon as possible. Korea responded that in principle, Korea would like to join international efforts for conservation and management of Pacific bluefin tuna, and expressed appreciation to Japan for introducing the very elaborate and analytical import data from Korea. However, basically, Korea's catch of Pacific bluefin tuna is very small compared with Japan's catch, but noted that Pacific bluefin tuna data collection is Korea's first priority. It makes every effort to accurately calculate Pacific bluefin tuna catches; and now, statistics and figures are collected based on Korea's catch documentation and data from scientific observers dispatched to Busan Port. The Korean Pacific bluefin tuna catch in 2009 (submitted to ISC10) is provisional and, after review of various data sources, the catch might be updated and reported to ISC11. Japan noted that if the Korean catch is smaller, then there should be no difficulties introducing management measures adopted by WCPFC. Korea commented that because Pacific bluefin tuna was not an important species for its fisheries economy until around 2000, Korea did not pay much attention to managing Pacific bluefin tuna. Pacific bluefin tuna research this year is the first medium-size research project in Korea, which is itself a remarkable step forward for Pacific bluefin tuna fishery management. Korea will try to provide more information about Pacific bluefin tuna in the future. The NC Chair clarified that Korea's various efforts toward Pacific bluefin tuna reporting will be much appreciated; however, the important matter here is the delay of Pacific bluefin tuna management by the Korean government.

24. The Philippines reported on its Pacific bluefin tuna fisheries according to the reporting requirement of CMM 2009-07. It noted that the Philippines has no Pacific bluefin tuna fishery at all, but is ready to apply any measures for tuna management.

25. The USA explained that it has no fisheries targeting Pacific bluefin tuna in the WCPO. The total Pacific bluefin tuna catch across the entire North Pacific by USA fleets is around 500–600 mt a year and almost all are taken outside of the Convention Area; catches in the Convention Area are less than 20 mt a year. Japan asked the USA whether it can implement any measure (as a WCPFC member) specific to Pacific bluefin tuna fisheries in the EPO where currently no Pacific bluefin tuna measure has been adopted by IATTC. The USA answered that it has no plan to increase the catch of Pacific bluefin tuna caught opportunistically from fisheries directed to other species, and at this point, the USA does not envision that the catch will significantly increase beyond the range of the past 10 years.

26. Chinese Taipei reported on actions taken in 2010 for managing its Pacific bluefin tuna fishery. The first action was to control fishing effort. The number of vessels allowed to fish for Pacific bluefin tuna in the North Pacific was set at 660, and only 562 vessels were authorized to fish in 2010. The second action was to implement a catch document scheme (CDS). This scheme requires that fishermen attach specially designed tags to the catch, report information on the catch over radio to a designated fishery radio station, and apply for CDS while entering port for landing. Considering the usefulness of this scheme, members using the same resource were urged to adopt the same measure to protect the fish stock. The third action was to increase the monitoring of fishing locations and catch information through vessel monitoring scheme (VMS) on vessels, and port inspection of the catch. Lastly, every Pacific bluefin tuna landed in Chinese Taipei is now inspected and its length and weight recorded. Using CDS information helps improve the quality of catch statistics. Nearly 100% coverage has been achieved since last year.

27. Regarding Chinese Taipei's Pacific bluefin tuna report, Japan asked about the information collected from CDS and the CDS implementation date. Chinese Taipei responded that a CDS was implemented in March 2010, and that it collects information on fishing location, tag number, weight and length of fish. All information is contained in NC6-WP-03 (Rev. 1). Regarding a study on spawning grounds, Chinese Taipei has collected otoliths and is planning to collect gonads in order to understand the biological parameters of Pacific bluefin tuna. Regarding Japan's question on the compliance with 100% coverage of CDS and vessel size fishing for Pacific bluefin tuna, Chinese Taipei responded that almost all Pacific bluefin tuna are landed in three domestic ports and port officials check whether the catch has come with CDS. Fishermen violating this regulation will receive punishment. Vessels fishing for Pacific bluefin tuna are mostly 20–24 m in length. Regarding Korea's question on fish size, Chinese Taipei noted that the major size composition ranged from 172–260 cm (based on 2009 data)

28. The NC Chair opened the floor for the revision of CMM 2009-07 based on the conservation advice from ISC10. Japan proposed that the revised CMM be targeted for 2011–2012, considering that there will be a new stock assessment in 2012. Korea announced its willingness to remove the exemption for Korea's EEZ from the current measure in force, but stated that it could not accept such an ambiguous term as —stay below in the CMM with respect to the proposed limit on fishing effort. The USA

suggested that a decrease in catches from 2002–2004 levels of 5–10% would satisfy the ISC’s advice that F be reduced below 2002–2004 levels. Japan wanted to follow exactly the ISC’s advice (i.e. that it is important that the —level of F is decreased below 2002–2004 levels), and suggested that the specific level of decrease should be determined by individual members. Chinese Taipei emphasized the importance of reducing fishing mortality of juvenile Pacific bluefin tuna and the need to take some substantive measures. The USA commented that controlling fishing effort may not be effective for controlling F and that consideration should be given to alternative approaches, particularly controlling catch. The USA pointed out that the inclusion of language to —reduce from 2002–2004 levels, if not accompanied by a specific level of reduction, would not be substantively different from the language in the current measure to maintain levels —no greater than 2002–2004 levels. In order to ensure that the measure is effective, the USA recommended that it include sufficiently detailed reporting requirements that would allow implementation of the measure to be adequately evaluated. Chinese Taipei expressed concern about how to control fishing effort, and proposed that the measure be developed to control catch. In response to questions from Japan about Pacific bluefin tuna management actions that the USA has taken in the EPO, and a request that the USA report back to the NC on any such actions, the USA said it would do so, but that it would expect other members to do the same in similar circumstances.

29. Korea expressed reservation regarding deleting the exemption of Korea’s EEZ in the draft CCM but said that it would not block the consensus. While appreciating Korea’s effort, other members asked Korea to reconsider and withdraw the reservation by the December 2010 Commission meeting. NC6 adopted the recommendation (Attachment C) by consensus, with Korea’s reservation.

30. In relation to paragraph 4 of this recommendation, the Cook Islands expressed its concern over the possible duplication of reporting with the part 2 report. It was noted that each CCM should avoid such duplication in its reporting to the Commission.

WCPFC 6, 7 - 11 December 2009

5.1 Report of the Fifth Regular Session of the Northern Committee and Issues Arising

81. The Chair of the Northern Committee, Masanori Miyahara (Japan), introduced the outcomes of the Fifth Regular Session of the Northern Committee (NC5) held 7–10 September 2009 in Nagasaki, Japan.

84. With regard to a draft CMM for Pacific bluefin tuna (WCPFC-2009/DP07, discussed further under Agenda 9.4), the NC Chair noted that good progress was made with the exception of obtaining consensus from Korea, which requested more time to study the species in its own waters. A draft CMM providing for total fishing effort for Pacific bluefin tuna not to be increased from 2001–2004 levels and reduced fishing mortality on Pacific bluefin tuna juveniles, with a one-year exemption for the Korean EEZ, was agreed by the NC. The NC Chair expressed his expectation that Korea would join in the

management measures for this species after the one-year exemption expires.

85. Four CCMs, two of whom are also members of the NC, joined the Chair in expressing their concern regarding the exemption for the Korean EEZ and the need to implement the management measures across all fisheries catching Pacific bluefin tuna as of 2011.

86. Korea stated that the catch of Pacific bluefin, most of which occurs around Cheju Island, is mainly bycatch and amounts to less than 1,500 t. Korea is undertaking a research programme costing over US\$ 1 million to understand more about the status and catch of the species in Korean waters.

87. In response to the preceding intervention by Korea, Japan queried the characterization of Korea's Pacific bluefin tuna catch as bycatch based on a comparison with its own records from the area. Korea corrected its statement on bycatch by saying that, in Korean law, there is no concept of bycatch or target species. Fishing licenses are permitted by fishing gear type and purse-seine vessels mainly targeting mackerels take Pacific bluefin tuna, which accounts for less than 1% of total catch by the purse-seine vessels.

88. In response to a separate question regarding catches of juvenile Pacific bluefin tuna by purse-seine vessels, Japan explained that it has implemented a voluntary minimum fish size limit of 2 kg for purse-seine vessels. Japan also explained its intention to introduce a programme to collect information on Pacific bluefin tuna imported from Korea. Comments regarding the importance of Mexico in developing management measures for this species were reiterated (see Section 2.2).

89. The IATTC informed WCPFC that its staff will soon recommend a similar management measure for Pacific bluefin tuna for IATTC adoption. The IATTC holds substantial observer data on Pacific bluefin tuna catches and these data, and IATTC expertise, are being shared with the ISC for scientific purposes.

90. The NC Chair announced that a joint meeting between the NC and IATTC is planned in order to discuss Pacific bluefin tuna management measures across the North Pacific and that CCMs and scientists will be invited to attend.

NC 5, 7 - 10 September 2009

2.3.1 Pacific bluefin tuna

25. NC5 noted that:

WCPFC5 agreed that CCMs [i.e. WCPFC Members, Cooperating Non-members and participating Territories] are requested not to increase the level of fishing mortality on Pacific

bluefin in 2009 on a voluntary basis, and tasked NC5 to work toward developing a draft CMM [conservation and management measure] for Pacific bluefin for consideration at WCPFC6.

26. The WCPFC Chair invited CCMs to report on the voluntary action taken during the last 12 months to not increase the level of fishing effort on Pacific bluefin.

27. Japan reported that it had initiated consultation with a wide range of stakeholders in order to raise awareness about international perceptions concerning responsible fisheries management, and requested industry to constrain effort. A PowerPoint presentation was used to profile fisheries in Japan that are taking Pacific bluefin. Japan reported that purse-seine fishing associations had implemented a voluntary measure to not catch Pacific bluefin tuna that are less than 2 kilograms. Japan acknowledged that this is hard to regulate in mixed schools, but that vessels were encouraged to relocate away from fishing grounds where small tuna were encountered. Informal information suggests that the measure was well implemented and resulted in a substantial reduction in juvenile fish catches.

28. In response to a question from Korea regarding whether or not any domestic regulations have been implemented, and whether or not any juveniles have been taken in set nets, Japan replied that the measure by purse-seine associations to not catch Pacific bluefin tuna is voluntary, and that set net fisheries are regulated under an existing licensing system. The existing data demonstrate that juvenile bluefin are not taken in set nets because set nets take larger fish. Korea also noted that bluefin catches by small Japanese longliners had quadrupled from 2007 to 2008. Japan responded that the catch from these vessels is declining, and that they target adult bluefin. The bluefin tuna's variable migration path poses a challenge to introducing a catch limit; therefore, there is significant variability in catch from one year to another, probably as a result of environmental changes. Japan reported that bluefin catches declined substantially in 2009. Japan is uncertain what level of catch is gauged to be a "normal" year, and stated that it is not possible, as this point, to forecast the 2009 total catch.

29. Korea explained that its bluefin market is small and that it does not currently regulate fisheries on a species-by-species basis. It also noted that there is no concept of bycatch. The government does regulate the number of licenses by gear type, and is conducting a programme to reduce the number of licenses. In addition, a total allowable catch is set for mackerel purse-seine fisheries that also take Pacific bluefin. Korea explained that several types of fisheries take bluefin tuna: purse seine, coastal set net, and troll fisheries, for which the statistics on bluefin are poor. The Busan-based Research Institute currently estimates catches on the basis of market surveys, although enhanced monitoring of port landings is under development. Korea will report on the results of these efforts at the next ISC meeting. In 2008, the total estimated catch for purse seiners was 1,536 mt, an increase from 1,054 mt in 2007. No data are available on catches from other fisheries, which mainly consist of set nets with the possibility of some catch taken by other fishing gear, as reported to ISC.

30. Japan recalled that the discussion regarding a CMM for Pacific bluefin began at NC2, appealing to Korea to demonstrate to the international community its commitment to participate in NC efforts to establish sustainable measures for Pacific bluefin. Korea reiterated that, in Korean law there is no concept of bycatch or target species. Current bluefin catch levels are small, accounting for less than 1% of the total catch of Korean purse seiners, and so are considered bycatch. Korea noted that the catch level around the Korean peninsula is increasing, and that Korean fishermen want to pursue opportunities to catch bluefin. Japan noted that in 2003, Korea reported a catch of 2,000 mt, which was 10% of the total bluefin catch. As a result, in Japan's view, Korea has a significant role in conserving and managing the stock. Japan recalled ISC's advice that F should not be increased; therefore, in its view, the Korean government's policy of supporting the development of coastal fisheries for bluefin is not consistent with this advice. Korea recognized its right to develop and manage fisheries within waters under national jurisdiction, and expressed a desire to control bluefin fisheries within Korea's exclusive economic zone (EEZ) by itself. Japan stated that when observing the operational basis of purse seiners, these vessels do target bluefin tuna. Korea advised that it had no available information to confirm the observation that Korean purse seiners target bluefin tuna, but would submit information to NC6 on this matter.

31. NC5 noted: i) the principle of compatibility, ii) the need to implement measures that secure conservation and management of the stock throughout its range within the WCPFC Convention Area, and iii) Convention provisions requiring that measures within EEZs do not undermine the CMMs put in place by WCPFC.

32. Chinese Taipei reported that many small longline fisheries were fishing for Pacific bluefin from March to July, and that there is limited entry control for this fishery. The number of small longliners fishing for Pacific bluefin in 2008 was less than the number in 2002–2004. Size data for over 90% of landings in domestic ports were measured and collected. Catches of Pacific bluefin by larger longliners (>100 gross registered tons) were less than 1 mt last year. Only insignificant amounts of bluefin are taken by other gear types. Chinese Taipei has an ongoing programme of limiting fishing capacity, and all longliners operating on the high seas are installed with a vessel monitoring system for better monitoring purposes.

33. The USA reported that it does not have a target fishery for Pacific bluefin. Following a query from Korea concerning a reduction in recreational Pacific bluefin catches since 2004, the USA responded that the catch reduction could be a result of the fish being intercepted in Mexican waters before they reach the fishing grounds of the USA recreational fleet.

34. NC5 noted that the preliminary 2008 catch estimate for Mexico (as reported to ISC) was 4,400 mt. The Chair noted that an invitation had been extended to Mexico to participate in ISC and NC discussions but Mexico had been unable to attend. It was also reported that recent exports of Mexican farmed bluefin

had received low prices on the Japanese market, and that this might constrain further expansion of bluefin farming enterprises in Mexico.

35. Vanuatu reported no bluefin catches.

36. In considering conservation and management options, NC5 noted that the conservation advice from ISC for Pacific bluefin remained unchanged, and is as follows.

1. If F remains at the current level, and if environmental conditions remain favorable, recruitment should be sufficient to maintain the current yield well into the future.
2. A reduction in F in combination with favorable environmental conditions, should lead to a greater spawning potential ratio.
3. Increases in F above the current level, and/or unfavorable environmental conditions, may result in recruitment levels that are insufficient for sustaining the stock's current productivity.

37. With regard to advice on the current level of F , differing viewpoints were expressed by ISC members. Some members concurred with the findings of the Pacific Bluefin Working Group, which stated that:

4. Given the conclusions of the May–June 2008 stock assessment with regard to the current level of F relative to potential target and limit reference points, and residual uncertainties associated with key model parameters, it is important that the current level of F is not increased.

38. In contrast, other members suggested that the following statement better reflects the current understanding of the stock status relative to the range of reference points considered (Fig. 1 in ISC9 Report).

- 4bis. Given the conclusions of the July 2009 Pacific Bluefin Working Group, the current level of F relative to potential biological reference points, and increasing trend of juvenile F , it is important that the current [sic] level of F is decreased below the 2002–2004 levels on juvenile age classes.

39. NC5 noted that the conservation and management advice points 4 and 4bis are not inconsistent with each other. Both points describe limiting F , with the second option advising on the need to decrease current F on juvenile fish. The USA noted that even with a decrease of F on juveniles the overall F is still greater than any commonly used reference point, including F_{max} . As a result, it is the USA's view that F should not be increased and should probably be reduced.

40. NC5 discussed a draft CMM for North Pacific bluefin tuna proposed by Japan (WCPFC-NC5-2009/DP01). Discussion was supported by a supplementary submission by Japan, which summarized NC discussions since 2006 with regard to Pacific bluefin (WCPFC-NC5-2009/IP07). It was noted that four elements need to be factored into the measure: i) high seas effort, ii) coastal fisheries effort, iii) target fisheries, and iv) fisheries that take bluefin as bycatch. Other factors considered for inclusion

included: i) acceptance of a reference level of fishing effort (2002–2004 was considered to be an appropriate reference level on the basis of previous NC discussions), ii) a commitment that the measure apply throughout the stock's range, iii) the need to provide complete catch and effort data, and iv) identification of stock-specific reference points, v) large range of yearly fluctuations of catches, and vi) the special needs of artisanal fisheries.

41. Korea advised that it is not in a position to endorse Japan's proposal to a commitment not to increase effort. However, Korea undertook to control fishing effort in its own EEZ, and to not increase effort in the high seas. Little or no Pacific bluefin catch has been reported from the high seas fishery. In the meantime, Korean scientists will continue working to assess the stock's status and monitor environmental changes that may be resulting in increased catches.

42. Cook Islands, Vanuatu and Chinese Taipei advocated the need to maintain F at the current (2002–2004) level. The USA expressed concern about the relative lack of substantive measures endorsed by the NC during its four years of operation. While appreciating Japan's proposal, the USA noted that there is a need to address: i) the issue of increasing F on juveniles, and ii) freezing F_{current} (2002–2004) as the reference period for measuring F (for the purpose of monitoring compliance with management measures). The USA recommended that there should be a process to establish stock-specific reference points, consistent with Convention provisions for bluefin tuna. The NC5 Chair agreed that it is a requirement for regional fisheries management organizations to establish stock-specific reference points, and that the NC should consider making a commitment to this.

43. NC5 adopted a measure for 2010 that will not apply to Korea's EEZ or to artisanal fisheries, which will be recommended to the Commission (WCPFC-NC5-2009/DP01 Rev.2; Attachment C).