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

Northern Committee
Sixth Regular Session

Fukuoka, Japan
7–10 September 2010

SUMMARY REPORT

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SUMMARY REPORT

AGENDA ITEM 1 — OPENING OF MEETING

1. The Sixth Regular Session of the Northern Committee (NC6) took place in Fukuoka, Japan, from 7–10 September 2010. The meeting was attended by members from Canada, Cook Islands, Japan, Korea, Philippines, Chinese Taipei, United States of America (USA) and Vanuatu, and observers from the International Scientific Committee (ISC) for Tuna and Tuna-like Species in the North Pacific, Greenpeace, World Wildlife Fund – Japan, American Fisherman's Research Foundation, and the Western and Central Pacific Fisheries Commission (WCPFC) Secretariat. The list of meeting participants is included as Attachment A.

1.1 Welcome

2. Masanori Miyahara, Chair of the Northern Committee (NC), opened the meeting and welcomed participants to Fukuoka, Japan. Participants, members and observers introduced themselves.

1.2 Adoption of agenda

3. Canada requested time to introduce document NC6-DP-02 as a recommended framework for NC, and Korea requested time to introduce its report on the catch of Pacific bluefin tuna (NC6-DP-04). These requests were granted, and the provisional agenda was modified and adopted (Attachment B). The documents that supported the meeting were made available on WCPFC's website at:
http://www.wcpfc.int/meetings/2010/6th-regular-session-northern-committee

1.3 Meeting arrangements

4. Japan, as host of NC6, briefed the meeting of social arrangements and the meeting schedule.

AGENDA ITEM 2 — CONSERVATION AND MANAGEMENT MEASURES

2.1 Report from the 10th International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean

5. G. Sakagawa, the outgoing ISC chair, provided an overview of ISC's results from its 10th meeting, held in Victoria, British Columbia, Canada, from 21–26 July 2010. The results are contained in the ISC meeting report, which is posted on ISC's website at: http://isc.ac.affrc.go.jp. This document was also made available to WCPFC in accordance with the requirements of the ISC-WCPFC memorandum of understanding. G. Sakagawa noted that progress was made on many projects of ISC's work plan as well as on tasks that were requested by NC5. Work is progressing on a full stock assessment of North Pacific albacore and striped marlin stocks in 2011, and Pacific bluefin tuna and blue marlin stocks in 2012. ISC's objective is to conduct a full stock assessment for each species every three years. Progress with administrative matters included: i) dissolving the Bycatch Working Group because other science committees of regional fisheries management organizations (RFMOs) were meeting that need; 2) forming a Shark Working Group to conduct shark stock assessments, initially for blue shark and shortfin mako; iii) employing a full-time data administrator and webmaster by the National Research Institute of Far Seas Fisheries to provide needed services; iv) postponing a planned world blue marlin symposium because of higher priority projects; v) concluding a memorandum of cooperation with the International Commission for the Conservation of Atlantic Tunas (IATTC); and vi) starting the process of clarifying and updating the ISC operations manual. ISC also completed a document (NC6-WP-09 or ISC/10/Plenary/04) in response to NC5's request for advice on candidate biological reference points (BRPs) for an NC workshop.

6. G. Sakagawa completed his presentation by recognizing ISC's new leaders: G. DiNardo newly elected ISC chair for 2011–2013; M. Dreyfus, vice-chair; S.K. Chang, Statistics Working Group (STATWG) chair; J. Holmes, Albacore Working Group (ALBWG) chair; and Y. Takeuchi, Pacific Bluefin Tuna Working Group (PBFWG) chair. Chairs for both the Billfish Working Group (BILLWG) and Shark Working Group are currently vacant. The 11th meeting of ISC will be hosted by the USA in July 2011 at a venue to be announced.

7. J. Holmes, ALBWG chair presented the ISC's results of the albacore stock assessment. He reported that ISC is on schedule for completing a full assessment of the North Pacific albacore stock before the next NC annual meeting. During the year, ISC examined recent fishery data to determine if there was a signal or trend in the spawning stock biomass (SSB), but did not detect a strong upward or downward trend. The estimated catch in 2009 was 78,000 mt, about 9,000 mt higher than in 2008 and near the long-term (i.e. 1971–2000) mean of 77,000 mt. Analysis of longline fishery data did not provide a strong positive or negative signal in the age 6–9+ SSB index to indicate a specific trend in SSB since the last stock assessment. ISC noted, however, that the estimated value of $F_{SSB\text{-}ATHL}$[1] — NC's interim BRP — is 0.75/year for a 25-year projection period using fishery data through 2008. This value is similar to the $F_{2002–2004}$= 0.75/year estimated in the last stock assessment. ISC concluded that its 2009 conservation advice is still valid, and restated it with the following minor clarification:

> Previous scientific advice, based on the 2004 stock assessment, recommended that current fishing mortality rate (F) should not be increased. It was noted that management objectives for the IATTC and WCPFC are based on maintaining population levels which produce maximum sustainable yield. Due to updating and improvements and refinements in data and models used in the 2006 stock assessment, it is now recognized that F (2002–2004; 0.75) is high relative to most of the F reference points [commonly used in fisheries management](see Table 5a in Annex 5) [of the ISC7 Plenary Report].
>
> On the other hand, the same analysis indicates that the current (2005) estimate of the SSB is the second highest in history but that keeping the current F would gradually reduce the SSB to the long-term average by the mid-2010s. Therefore, the recommendation of not

[1] $F_{SSB\text{-}ATHL}$ = spawning stock biomass above the average level of its 10 historically lowest points.

increasing F from current level ($F_{2002–2004}$= 0.75) is still valid. However, with the projection based on the continued current high F, the fishing mortality rate will have to be reduced.

8. In response to the USA's concerns regarding the large time interval between albacore stock assessments, the ALBWG chair noted that it will be discussed in the working groups but that ISC has the general aim of conducting a stock assessment every three years. He also noted that another reason for the delay was the need to control the workload imposed on the scientists who conduct both albacore and bluefin assessments. In response to the NC Chair's question on the level of current fishing mortality, the ALBWG chair noted that F_{2009} might be less than 2002–2004 (F=0.75) based on recent trends in nominal catch and effort or, alternatively, F_{2009} may be as high as 2002–2004 because recruitment after 2005 is not known. The ALBWG had no way to assess these alternatives in the absence of a new stock assessment.

9. Y. Takeuchi, PBFWG chair, reported on the stock status and conservation advice of Pacific bluefin tuna from the ISC10 plenary in July 2010. After NC5, ISC's PBFWG updated the 2008 stock assessment with data through 2007. Results indicated that the assumption of adult natural mortality (M) is particularly influential to the estimate of absolute SSB and F. In contrast, relative measures of these metrics were less sensitive to the assumed M. The estimate of SSB in 2008 (at the end of the 2007 fishing year) declined from 2006 and is estimated to be in the range of the 40–60th percentile of historically observed SSBs. Average fishing mortality during 2004–2006 ($F_{2004–2006}$) increased from $F_{2002-2004}$ by 6% for age-0, approximately 30% for ages 1–4, and 6% for ages 5+ fish in the stock. Future projections predict that at $F_{2004–2006}$ median SSB is likely to decline to levels around the 25th percentile of the historical SSBs, while at $F_{2002–2004}$, median SSB is likely to decline in subsequent years but recover to levels near the median of historically observed SSB levels. The conservation advice from ISC10 was simplified and revised as follows:

> Given the conclusions of the July 2010 PBFWG workshop (Annex 7), the current (2004–2006) level of F relative to potential biological reference points, and the increasing trend of F, it is important that the level of F is decreased below the 2002–2004 levels, particularly on juvenile age classes.

10. In response to questions from Japan about why M was changed and how the new M was derived, Takeuchi responded that i) M was changed because the huge, unfished biomass estimated initially was considered implausible; ii) there were small changes in juvenile M; and iii) M for age-0 was based on tagging data conducted by IATTC in the 1970s and 1980s; M for ages 1–2 was based on tagging data conducted for southern bluefin tuna because fish in these stocks have similar size ranges at this age interval; and M for age-3 and older was based on life history methods that are commonly used to estimate M. In response to Chinese Taipei's question on the impact of uncertainty and improving the quality of assessment, the PBFWG chair answered that the absolute level of biomass is highly uncertain but does not have much impact on conservation advice put forward, and that the working group will hold a workshop to improve the stock assessment model by investigating issues identified in previous workshops (model structure, catch per unit of effort, other fishery data, and biological parameters).

11. Regarding a question from the USA on what would be the most appropriate BRP for Pacific bluefin tuna in view of robustness to sensitive dynamics of the fish to M, the PBFWG chair answered that F_{med}[2] and F_{loss}[3], the less sensitive BRPs, would be more appropriate for managing Pacific bluefin tuna stocks. The reason why many BRPs are highly sensitive to M will be reviewed at a workshop in 2011. Japan noted that a large decline in SSB occurred in the 1960s, and that SSB remained at the lowest level in the time series in both the 1970s and 1980s, and asked the reason for the sharp decline and stable catches during the periods

[2] Fishing mortality rate corresponding to observed 1/SPR
[3] Fishing mortality rate expected to keep biomass at minimum observed stock biomass (or SSB)

when SSB was at its lowest level. The PBFWG chair replied that there was no specific discussion of the decline by the working group, but that F during this period was stable and comparable to other periods, while F at age-0 was somewhat lower. As for the stability of the fishery during that period, it probably was not stable because the catch was reduced to 10,000 mt during these periods. However, while the catch by eastern Pacific Ocean (EPO) purse-seine vessels was small during the 1950s, the catch of juveniles increased after that period and leveled off, and that might be one of the reasons. Regarding Korea's question on the location and season of juvenile catches, the PBFWG chair answered that small-sized fish are taken by a troll fishery in the western part of the Pacific coast of Japan in autumn, and then taken around Tsushima Island in winter. Age-0 fish are taken by purse seine around Tsushima Island, East China Sea and south of the Korean Peninsula. Age-1 fish are taken by purse seine in the EPO in summer and East China Sea. Age-2 fish are caught by purse seine in the EPO and rarely caught in the western Pacific side. In response to a question by the USA about the level of SSB before the 1950s, the PBFWG chair answered that the PBFWG only have nominal catch data prior to World War II, and the quality of these data is low relative to data post-1952. For example, there could be mis-identification of species for EPO catch data, and there were no species identification in Japan prior to 1950; all species were recorded as tuna.

12. G. DiNardo, BILLWG chair, presented ISC's results on the stock assessment of North Pacific swordfish. He reported that ISC conducted a revised stock assessment for the EPO stock only in 2010. The revision was necessary because additional catches from Spain, which were not included in the 2009 stock assessment, became available, as well as catch data from Japan, Chinese Taipei and Korea. For the revised EPO assessment, the 2009 stock assessment model (Bayesian surplus production model) was used. The results indicated that the exploitation rate in 2006 was 6% and the catch (3,900 mt) at roughly 78% of the estimated MSY level of 5,000 mt. The estimated exploitable biomass in 2006 was 69,000 mt and over 200% above B_{MSY}.[4] ISC concluded that there is no conservation concern for both EPO and western and central Pacific Ocean (WCPO) stocks of swordfish in the North Pacific. The conservation advice put forth by ISC10 was the same as in 2009: "The WCPO and EPO stocks of swordfish are healthy and above the level required to sustain recent catches" (in the North Pacific).

13. Japan asked why the stock synthesis model used for the Pacific bluefin tuna and albacore assessments, was not used for swordfish. The BILLWG chair answered that the Bayesian surplus production model was used because fewer data were available for swordfish than Pacific bluefin tuna and albacore. The working group attempted to use the stock synthesis modeling platform but was unsuccessful. In response to Cook Islands' question about the region for the swordfish stock assessment and data source for the stock assessment, the BILLWG chair answered that assessments were done for the North Pacific, and the time series data were provided by Japan, Korea, Mexico, Taiwan and Spain. In response to Japan's question about estimating MSY-related parameters in the swordfish assessment (although it is reported from ISC working group chairs that MSY-related BRPs are difficult to estimate for Pacific bluefin tuna and albacore), the BILLWG chair answered that MSY is a natural output of the surplus production model for swordfish assessment.

2.2 Report of the Sixth Regular Session of the Scientific Committee

14. N. Miyabe, Chair of WCPFC's Scientific Committee (SC), presented a summary report on the outcomes of SC6, which was held in Nuku'alofa, Tonga. He briefly highlighted the status of fisheries in the WCPO and the results of the 2010 full stock assessments for bigeye and skipjack tunas. He also noted other key issues, including SC's response to recommendations from the joint tuna RFMO workshops, the process for the external review of stock assessments by the Oceanic Fisheries Programme of the Secretariat of the Pacific Community (SPC-OFP), and SC's work programme and budget.

[4] B_{MSY} = biomass that will support the maximum sustainable yield

15. Japan stated that skipjack is an important stock for its coastal fishermen; however, there has recently been poor migration of skipjack, with subsequently low catches, and Japan asked about the reason for this. The SC Chair responded that it is not an easy question to answer, and that other countries, such as Australia and New Zealand, also had similar experiences. Once the spatial ecosystem and population dynamics model (SEAPODYM) is fully developed, it might be used to address this issue. Citing paragraph 314 of the SC6 Summary Report ("…high catches in the equatorial region could result in range contractions of the stock, thus reducing skipjack availability to higher latitudes [e.g. Japan, Australia, New Zealand fisheries."]), and concerning the age composition of the catch, Japan asked about the kinds of effort that will be undertaken to reduce the uncertainty. The SC Chair responded that this is the first year of collaboration between SPC and Japan, and this investigation will identify skipjack migration at the end of the analysis. Regarding the reduction in bigeye F, WCPFC responded that the 29% reduction in F from average levels for 2005–2008 is equivalent to a minimum 31% reduction in F from 2004 levels, and a minimum 20% reduction from average 2001–2004 levels. Regarding a question by the USA on the high catch of South Pacific albacore, the SC Chair responded that it may be due to many fleets operating in the South Pacific's Subtropical Convergence Zone.

2.3 Conservation and management measures for the northern stocks

16. L. Donihee, Canada, introduced delegation paper WCPFC-NC6-DP-02, which explores a potential management framework for stocks under the mandate of NC, based on a precautionary approach. The WCPFC Convention text requires members to determine stock-specific RPs, to take measures to ensure points are not exceeded, and to take action without delay if these reference points are exceeded. WCPFC-NC6-DP-02 also outlines one way to adopt a precautionary approach regime — through the establishment of control rules that identify three stock status zones: healthy, cautious and critical — based on pre-determined RPs. A removal rate is set, and decisions and management actions are decided on in advance, which come into effect as the stock approaches the critical zone. Canada welcomed comments from other delegations and asked that NC members consider the basic concepts contained in this paper as a way forward for WCPFC when considering conservation and management measures and the need to identify appropriate RPs. The workshop on BRPs supported this concept.

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.

2.3.2 North Pacific albacore (CMM-2005-03)

31. Regarding RPs for North Pacific albacore, Japan proposed $F_{SSB\text{-}ATHL}$ with a 10-year projection period as a precautionary RP, and B_{loss} as a LRP. However, the ALBWG chair noted that B_{loss} was not well estimated for this species, and so it would be very risky to actually use. Japan stated that it considers B_{loss} to be a good candidate for RPs, although an absolute number of the RPs can be determined at the next stock assessment. The USA repeated its position that the most appropriate LRP for F is F_{MSY}, but that it is open to considering appropriate proxies for F_{MSY}, particularly some of the points in the family of $F_{\%SPR}$. The US noted that $F_{SSB\text{-}ATHL}$ is, in effect, as an interim RP, but not with a 10-year projection period. The USA was not supportive of any shortening of the projection period used in estimating $F_{SSB\text{-}ATHL}$, and as it emphasized during the Reference Points Workshop, the fact that many subjective decisions are needed to use a simulation-based RP such as $F_{SSB\text{-}ATHL}$, including the projection period, is a big disadvantage of those types of RPs.

32. Japan said that SSB for Pacific bluefin tuna has fluctuated greatly and that during the lowest level of SSB in the 1970s and 1980s, catch and recruitment were stable. The USA noted that when an RP is crossed, immediate action should be taken, and that action should be pre-agreed upon. Japan noted that an immediate action is needed before the stock reaches the level of historically the lowest level, so $F_{SSB\text{-}ATHL}$ is necessary.

33. With respect to the interim management objective, the USA and Canada suggested that a specific timeline for action be included in the event that $F_{SSB\text{-}ATHL}$ is exceeded.

34. NC6 confirmed that it will continue to use "the interim management objective for North Pacific albacore" agreed upon at NC4, and agreed to replace Attachment J to the NC4 report by the following in order to establish a clear time line for management actions.

1) The interim management objective for North Pacific albacore is to maintain SSB above the average level of its 10 historically[5] lowest points (hereinafter referred to as "the Level"). The fishing mortality

[5] Here, "historically" means the time series of annual SSB levels from 1966 through 2005, as estimated in the latest formal ISC stock assessment.

rate that would likely[6] cause SSB to fall below the Level is referred to as "interim reference point" (IRP).

2) In the event that ISC finds that the current fishing mortality rate exceeds IRP, NC shall, at its next meeting, formulate conservation and management recommendations that are designed to reduce the fishing mortality rate below IRP within one year of adopting the measures. In formulating such measures, NC shall consider relevant socioeconomic factors and any relevant information from ISC, including its latest conservation advice.

The interim management objective and IRP will be reviewed every three years to develop more permanent objectives and RPs that fulfill the provisions of the Convention, in particular Article 6. Achieving the interim management objective will not preclude NC from formulating and recommending CMMs that would achieve additional objectives, particularly those stipulated in the Convention or otherwise adopted by the Commission.

35. Canada noted that using $F_{SSB\text{-}ATHL}$ as the IRP is a risky way of managing the stock considering current advice from ISC.

36. NC6 discussed how to evaluate the implementation of CMM 2005-03, and agreed that members should report back on the measures they have taken to implement it. NC6 agreed that for the purpose of evaluating the implementation of paragraph 2 of CMM 2005-03, CCMs shall include the following information in their 2011 annual reports, part 2:

a. a list of their specific fisheries or fleets that they have determined to be "fishing for" North Pacific albacore in the Convention Area; and
b. a description of the particular measures, as well as monitoring mechanisms, that they have established to ensure that fishing effort in each of the fisheries or fleets does not increase above 2002–2004 average levels.

37. In relation to the 0–20°N area, the Chair suggested that NC could submit a separate recommendation to WCPFC, recommending that it adopt equivalent measures for the 0–20°N area. Japan urged NC members to take the same measures between 0°N and 20°N.

38. Japan also proposed an amendment to CMM 2005-03, but NC6 agreed not to recommend any changes to the CMM until 2011, when a new stock assessment will be available.

2.3.3 North Pacific swordfish

38. Japan proposed that management action be considered to ensure that fishing effort on swordfish does not move from other fisheries into the North Pacific. Korea commented that fishing effort could be moved from place to place along with the location of fish abundance within the level of total effort. The USA noted that paragraph 3 of CMM 2009-03 states that "CCMs shall not shift their fishing effort for swordfish to the area north of 20°S, as a result of this measure." Although that provision does not cover Japan's concern entirely, it was agreed to rely on that provision for the time being.

2.4 Conservation and management measures for other species

2.4.1 Bigeye and yellowfin tuna (CMM-2008-01)

39. Japan noted that this measure includes no transfer of effort into archipelagic waters and territorial

[6] Here, "likely" means greater than 50% probability.

seas (para 5). In the same manner, Japan requested that NC recommend to the Commission a prohibition on that further transfer of fishing effort from south to north, as was recommended at NC4 and NC5.

2.4.2 Sharks (CMM-2009-04)

40. Japan noted that ISC will conduct stock assessments on shortfin mako and blue shark sometime in the future and NC6 welcomed and supported the initiation of this work on sharks. The USA advised that additional stock assessments of key shark species should not delay the stock assessment of key tuna species, such as North Pacific albacore. In addition, ISC should collaborate with SPC-OFP and other interested parties when conducting stock assessments. Japan expressed its serious concern about poaching activities of one member that is engaged in shark fining operations. Cook Islands also commented that they have noticed changing gear configurations and that catch composition onboard some vessels consists of 70% blue shark.

2.4.3 Seabirds (CMM-2007-04)

41. There was no discussion, but this agenda item will be kept for future NC meetings.

2.4.4. Skipjack tuna

42. Japan recommended that NC should convey a clear message to all Commission members that coastal fishermen in NC member countries, particularly Japan, are suffering from poor catches of skipjack tuna, which should be fully taken into account when the Commission considers skipjack or purse-seine issues. NC6 expressed its concern over the decline of the skipjack migration level to the northern area, and requested that the Commission take full account of this issue.

2.5 Striped Marlin Working Group

43. G. DiNardo presented a status report on the activities of NC's Striped Marlin Working Group (SMWG), and a proposal for future activities. While SMWG's work plan identifies five research tasks, most of the working group's activities were focused on longline gear modifications. In particular, expected reductions in striped marlin catch relative to the fishing target (bigeye or yellowfin tuna) associated with the removal of the two shallowest hooks. These gear modifications result in significant reductions in striped marlin catches with no significant reductions to bigeye tuna catches and slight reductions in yellowfin tuna catches. These findings are consistent with similar research in other areas. It was reported that the USA will fund gear development aimed at reducing striped marlin catches, but this research is being conducted outside the purview of SMWG. While progress has been made, it continues to be hindered due to the need for broader scientific and technical support to complete the tasks than is currently available within NC, as well as the lack of financial support. It was also noted that the current SMWG chair will be resigning effective immediately, which hampers future progress. Given these concerns, it was proposed that SMWG be abolished and that the research tasks be assigned to the Commission.

44. NC6 agreed to abolish the SMWG but also agreed that it should continue to work on striped marlin. NC7 may prepare a draft CMMs based on the outputs of stock assessment in 2011. The USA reminded meeting participants that striped marlin is on TCC6's agenda, at which time there will be another opportunity to discuss appropriate actions.

AGENDA ITEM 3 — REGIONAL OBSERVER PROGRAMME (CMM-2007-01)

3.1 Implementation of the Regional Observer Programme by fishing vessels fishing for fresh fish in the northern area

45. Based on the requirements in paragraph 9, Annex C of CMM-2007-01, Japan prepared a proposal for the commencement of a Regional Observer Programme (ROP) in the North Pacific (NC6-DP-01).

46. While Chinese Taipei expressed its general support for Japan's proposal, it proposed some amendments for the exemption of vessels less than 70 GRT. Chinese Taipei noted that based on 2009 data, they have 280 small fishing vessels fishing for tuna and tuna-like species, including sharks on the high seas in NC waters, and that about 150 vessels are less than 70 GRT, which is about 55% of the vessels operating in NC waters. In the future, ROP will apply to vessels less than 70 GRT. At the moment, however, it is difficult to send observers onto boats smaller than 70 GRT and there are potential issues relating to the safety of observers on these small boats. Regarding Japan's question on any legal constraints in sending observers to small boats, Chinese Taipei noted that there seemed to be no clear relationship between the size of fishing boats and the number of crew onboard. At present, however, it is rather difficult to force employers to put observers on vessels less than 70 GRT. Other members questioned whether it is appropriate to consider fishing vessels that are 70 GRT to be "small".

47. The Philippines reported that there are no fishing boats catching fresh tuna operating outside of its EEZ in the NC area. Fishing vessels are an average of 30 m (or longer) and carry more than 10 crew members, and there would be enough space for an observer.

48. Cook Islands noted that due to its small population and resource constraints, it is rather difficult and expensive to send observers to boats. Nevertheless, it has committed to 5% coverage of its fishing vessels, irrespective of boat size.

49. The USA noted that it places observers on all of the longline vessels operating off of Hawaii, and that the smallest of these is 15 m. The USA pointed out that it should be possible for other member countries to introduce the same system as the USA, and that domestic law cannot be used as an excuse for not sending observers. There are many difficulties in implementing and operating the ROP, but the USA has overcome such problems so other countries can do so as well. The USA further noted that there should be an alternative way to collect verifiable data onboard vessels, such as a camera monitoring system, because port sampling cannot collect all of the data required by the ROP. A concrete plan should be devised for collecting verifiable data. The USA suggested that the ROP coordinator be consulted for guidance.

50. Japan stated that it is difficult to change domestic law regarding the personnel capacity of vessels because it was not legislated by MAFF, but by the Ministry of Transportation. Japan cannot send observers to vessels that have less than seven crew members.

51. Japan introduced a draft proposal for an ROP that includes an exemption for vessels less than 70 GRT, taking into account Chinese Taipei's situation, but includes language that notes the exception is not permanent. Japan commented that some language will be added, exempting vessels that have less than six crew members. The Chair introduced the revised proposal. After discussion it was agreed that the description of exemptions based on vessel size or crew numbers will be dropped, and instead, CCMs requesting exemptions will submit a request to the WCPFC Executive Director by 31 July 2011, and provide the description of a data collection programme equivalent to the ROP. Cook Islands stated that 5% coverage by the ROP has already been implemented in the southern WCPO area, with the recognition of Article 28 (IV) of the Convention, which states that all vessels fishing beyond its national jurisdictions be prepared to carry an observer. Although the Cook Islands is somewhat uncomfortable with the proposal as drafted, it was willing to go along with the consensus provided that this will not be a precedent for implementing the ROP in the Convention Area south of 20°N. Chinese Taipei requested that its practical difficulties should be taken into consideration. NC6 adopted the recommendation (Attachment D).

AGENDA ITEM 4 — DATA

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

52. S.K. Chang, ISC's STATWG chair, presented data status and gaps on northern stocks. ISC addressed three aspects of improvement to the ISC database in 2010 through i) convening a metadata workshop to collect metadata from each member country and unify the extent and contents of the database; ii) beginning work to complete the ISC data inventory; and iii) revising the data reporting protocol to allow for greater transparency of ISC data. The importance of a permanent ISC Data Administrator in the above improvements was highlighted.

53. Regarding data gaps, incomplete or outdated estimates of biological and life history parameters used in the stock assessment models was continuously indicated and stressed as a major uncertainty in many assessments of northern stocks. Financial investment to updating and upgrading the estimates through a multilateral Biological Sampling Plan is highly encouraged to address the concern. Progress was made in obtaining missing fishery statistics from non-ISC members for some species, although continuous efforts to obtain catch, effort and size data from them are still needed. Not all ISC members have submitted their data on a timely basis for an up-to-date annual review of fishery performance and for up-to-date stock assessments. Support from NC managers is necessary to address the data submission issue. Preliminary comparison of data holdings by ISC and WCPFC was conducted at SC6. In general, for large-scale fisheries, WCPFC has more data than ISC and, for small-scale fisheries, ISC has more data than WCPFC. The results emphasize the usefulness of the comparison work in determining data gaps for both organizations, as well as in providing the basis for each organization to work with its members to resolve data gaps.

54. Japan encouraged further efforts on the part of NC members to resolve data gaps reported by ISC. In relation to this topic, Japan introduced NC6-WP-08, which proposed the plan of NC voluntary funds and encouraged NC members to contribute to the WCPFC Secretariat, noting which project the contribution supports. Japan announced that at least some part of the NC voluntary fund will be covered by Japan. Accordingly, NC6 agreed that NC should request members to make a voluntary contribution to this proposal. Japan may contribute some money to a special project. Korea stated that it will report on the need for ISC funding support to its government.

AGENDA ITEM 5 — WORK PROGRAMME

5.1 Work programme for 2011–2014

55. Japan explained the contents of NC6-WP-07, which is based on the recommendation of Kobe II in Barcelona, Spain in 2010. Cost for the peer review of ISC stock assessments should be covered by NC members, or can be requested from WCPFC. The albacore stock assessment will start in October 2010. For this meeting, NC members should bear the cost of the reviewer. Japan noted that the actual stock assessment will begin next March, so NC could start sending reviewers next March.

56. The ISC plenary chair supported the idea of independent reviews of the albacore stock assessment, but the timing of the review is a concern. Because independence is important, SPC-OFP is not an appropriate reviewer. It would be better to look to other tuna RFMOs for assistance. The process requires substantial funding, for example, the cost of a reviewer could be as high as USD 1,000 per day. A less costly possibility may be available but would require further investigation.

57. Japan asked for a rough estimate of minimum costs for a full-scale peer review process, and was

advised that it cost around USD 60,000 for 3 reviewers for 20 days (this would be quick). Korea noted that a peer review process is important and its cost should be supported by the Commission. NC6 agreed to consider this issue further at the Commission meeting in December.

58. The work plan in Attachment E is a revised proposal of the existing work programme.

AGENDA ITEM 6 — COOPERATION WITH OTHER ORGANIZATIONS

6.1 ISC

59. The current MOU between WCPFC and ISC will not be changed.

6.2 IATTC

60. The NC Chair attended a consultation meeting with IATTC to introduce the work of NC and the management of Pacific bluefin tuna in late August. All participants agreed to work with NC to achieve the same goal. The USA expressed appreciation for Japan's initiative in cooperation between WCPFC and IATTC. Canada informed the meeting that it became a full member of IATTC this year and that it will promote cooperation between IATTC and WCPFC on issues pertaining to Pacific bluefin tuna and albacore. The WCPFC Secretariat informed the meeting about cooperation with IATTC on fishing operations in the overlapping area. Cook Islands noted that they had stated their concerns on the movement of fishing vessels from one area to another and seek a harmonized measure between WCPFC and IATTC.

6.3 Review of interim arrangements for scientific structure and function

61. The Secretariat informed NC6 that SC6 finalized the review of issues arising from the Independent Review.

AGENDA ITEM 7 — OTHER MATTERS

7.1 Administrative arrangements for the Northern Committee

7.1.1 Secretariat functions and costs

62. No discussion was held on this topic.

7.1.2 Rules of procedure

63. NC6 deferred further consideration of this agenda item to a future session of NC.

7.2 Next meeting

64. Japan proposed that it will host NC7 somewhere in Japan. Some NC members preferred that it be held somewhere cooler in Japan. The meeting period is tentatively set for 6–9 September 2011.

7.3 Other business

65. No other business was raised. The Chair requested members to provide rapporteurs to the next meeting, especially from countries where English is the native language. The USA suggested that NC7 discuss VMS issues in the northern area. NC6 agreed to add this item to the NC7 agenda.

AGENDA ITEM 8 — REPORT TO THE COMMISSION

8.1 Adoption of the Summary Report of the Sixth Regular Session of the Northern Committee and recommendations to the Commission

66. NC6 adopted the Summary Report of its Sixth Regular Session.

AGENDA ITEM 9 — CLOSE OF MEETING

9.1 Close of meeting

67. The meeting was closed on 10 September 2010.

Attachment A

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

Northern Committee
Sixth Regular Session

Fukuoka, Japan
7–10 September 2010

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Attachment B

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

Northern Committee
Sixth Regular Session

Fukuoka, Japan
7–10 September 2010

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 10th ISC
2.2 Report of the Sixth Regular Session of the Scientific Committee (SC6)
2.3 Conservation and management measures for the northern stocks
  2.3.1 Northern Pacific bluefin (CMM-2009-07)
  2.3.2 North Pacific albacore (CCM-2005-03)
  2.3.3 North Pacific swordfish (CMM-2009-03)
2.4 Conservation and management measures for other species
  2.4.1 Bigeye and yellowfin tuna (CMM-2008-01)
  2.4.2 Sharks (CMM-2009-04)
  2.4.3 Seabirds (CMM- 2007-04)
  2.4.4. Skipjack tuna
2.5 Working Group on Striped Marlin

AGENDA ITEM 3. REGIONAL OBSERVER PROGRAMME (CMM-2007-01)

3.1 Implementation of the ROP by fishing vessels fishing for fresh fish in the Northern Area

AGENDA ITEM 4. DATA

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

AGENDA ITEM 5. WORK PROGRAMME

5.1 Work Programme for 2010
5.2 Work Programme for 2011-2014

AGENDA ITEM 6. COOPERATION WITH OTHER ORGANIZATIONS

6.1 ISC
6.2 IATTC
6.3 Review of interim arrangements for scientific structure and function

AGENDA ITEM 7. OTHER MATTERS

7.1 Administrative arrangements for the Committee
  7.1.1 Secretariat functions and costs
  7.1.2 Rules of Procedure
7.2 Next meeting
7.3 Other business

AGENDA ITEM 8. REPORT TO THE COMMISSION

8.1 Adoption of the Summary Report of the Sixth Regular Session of the Northern Committee and recommendations to the Commission

AGENDA ITEM 9. CLOSE OF MEETING

9.1 Closing of the meeting

Attachment C

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

Northern Committee
Sixth Regular Session

Fukuoka, Japan
7–10 September 2010

DRAFT CONSERVATION AND MANAGEMENT MEASURE FOR PACIFIC BLUEFIN TUNA

The Western and Central Pacific Fisheries Commission (WCPFC),

Recognizing that WCPFC6 adopted Conservation and Management Measure for Pacific bluefin tuna (CMM2009-07);

Recalling that the WCPFC6 requested the Northern Committee to develop a new draft CMM applying to the Korean EEZ for consideration at the WCPFC7;

Taking account of the conservation advice from the 10th meeting of the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC) on this stock, which highlighted the importance that the level of F is decreased below the 2002-2004 levels, particularly on juvenile age classes;

Also recognizing that the trend of spawning stock biomass has been influenced substantially by the annual level of recruitment and that collecting of fisheries data in an accurate and timely manner is critically important for the proper management of this stock, 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:

1. The interim management objective for Pacific bluefin tuna is to ensure that the current level of fishing mortality rate is not increased in the Convention Area. Initially, control over fishing effort will be used to achieve this objective as follows:

2. The Commission Members, Cooperating Non-Members and participating Territories (hereinafter referred to as CCMs) shall take measures necessary to ensure that total fishing effort by their vessels fishing for Pacific bluefin tuna in the area north of the 20 degrees north shall stay below the 2002-2004 levels for 2011 and 2012, except for artisanal fisheries. Such measures shall include those to reduce catches of juveniles (age 0-3) below the 2002-2004 levels.

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

4. CCMs shall report to Executive Director by 31 July 2011 and 2012 measures they used to implement paragraphs 2, 3, 6 and 7 of this CMM. The Northern Committee shall annually review reports CCMs submit pursuant to this paragraph;

5. The Northern Committee at its Regular session in 2012 shall review this CMM based on the new ISC stock assessment for Pacific bluefin tuna scheduled in 2012 and take appropriate actions;

6. 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 paragraphs 2 and 3 above;

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

8. The provisions of paragraph 2 shall not prejudice the legitimate rights and obligations under international law of those small island developing State Members and participating territories in the Convention Area whose current fishing activity for 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.

9. The provisions of paragraph 8 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.

Attachment D

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

Northern Committee
Sixth Regular Session

Fukuoka, Japan
7–10 September 2010

RECOMMMENDATION ON IMPLEMENTATION OF THE ROP BY VESSELS FISHING FOR FRESH FISH IN THE AREA NORTH OF 20 DEGREES NORTH

Conservation and Management Measure 2010-XX

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

Recalling Article 28(1) of the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPF Convention), which requires the Commission to develop a Regional Observer Programme to, among other things, collect verified catch data, and to monitor the implementation of the conservation and management measures adopted by the Commission;

Further recalling Article 28(7) of the WCPF Convention, which requires the Commission to develop procedures and guidelines for the operation of the Regional Observer Programme (ROP);

Cognizant of Conservation and Management Measure (CMM) 2007-01 , which established the procedures to develop the ROP, in particular paragraph 9 of Annex C of CMM2007-01, which gives considerations on special circumstances for fishing vessels used exclusively to fish for fresh fish in the area north of 20 degrees north;

Adopts, in accordance with Article 10 of the WCPFC Convention, the following Conservation and Management Measure for the Establishment of the Implementation of the ROP by vessels fishing for fresh fish in the area north of 20 degrees north.

The ROP for fishing vessels used exclusively to fish for fresh fish in the area north of 20 degrees north shall be implemented in the following manner:

1. No later than 31 December, 2014, CCMs shall commence implementation of observer programmes for fishing vessels used to fish for fresh fish beyond the national jurisdictions in the area north of 20 degrees north (hereinafter referred as "the Northern Convention area").

2. For fishing vessels except for those exempted under paragraph 3 below, CCMs shall achieve at least 5% coverage of the effort of each fishery.

3. CCM may submit request to the NC7 for exemptions from paragraph 2 above with reasons and data collection programmes equivalent to the ROP. The request shall be submitted to the Executive Director by 31 July, 2011. The NC shall consider and decide on those requests at its session in 2011. Such exemptions, if any, shall be terminated on 31 December, 2018.

4. Each year, CCMs whose vessels are granted exemptions in accordance with paragraph 3 shall provide a report on progress to reduce the number of vessels that cannot carry observers.

5. Observers shall be sourced from the WCPFC Regional Observer Programme, including authorized national programs of flag states.

6. Unless expressly set forth in this CMM, procedures in CMM 2007-01 will be applied *mutatus mutandis* to the implementation of this CMM.

Attachment E

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

Northern Committee
Sixth Regular Session

Fukuoka, Japan
7–10 September 2010

Work Programme for the Northern Committee (as revised by the Sixth Regular Session)

Work areas	5-year objectives	1-year tasks				
	2010-2014	2010	2011	2012	2013	2014
Northern stocks					Consider other management options than the existing management measures, if appropriate.	
a. Monitor status; consider management action	Review status and take action as needed for:[7] North Pacific albacore		Obtain and review a full assessment and consider appropriate management action		Review interim management objective in light of ISC advice.	

[7] In the event that the Commission, in accordance with paragraph 5 of Annex I of the Commission Rules of Procedure, adds additional stocks, such as the northern stock of striped marlin, to the list of stocks understood to be "northern stocks", this work programme will be revised to include periodic status reviews and consideration of management action for such stocks.

Work areas	5-year objectives	1-year tasks				
	2010-2014	2010	2011	2012	2013	2014
	Pacific bluefin tuna	Review reports from CCMs as well as report from Korea on their domestic management measures, consider advice of ISC on F and consider management action for 2011 and after	Review reports from CCMs on their domestic management measures and advice of ISC and consider appropriate management action	Obtain and review a full assessment and consider appropriate management action.		
			Consider and set up interim management objective and reference points in light of ISC advice.			
	Swordfish		Consider and set up interim management objective and reference points in light of ISC advice.		Obtain and review a full stock assessment and consider appropriate managemen t action	
	Striped marlin (if agreed by the Scientific Committee and Commission).		Obtain and review a full assessment and consider appropriate management action			
b. Data	Achieve timely submission of complete	CCMs participating in the NC submit complete data on	CCMs participating in the NC submit complete			

Work areas	5-year objectives	1-year tasks				
	2010-2014	2010	2011	2012	2013	2014
	data needed for assessments, formulation of measures, and review of Commission decisions	fisheries for northern stocks to the Commission	data on fisheries for northern stocks to the Commission			
		Encourage timely submission to Commission of PBF, NPALB and NPSM data from all CCMs and make available to ISC	Encourage timely submission to Commission of PBF, NPALB and NPSM data from all CCMs and make available to ISC			
	Consider systems to validate catch data					
c. Scientific support	Provide support for scientific studies		Encourage voluntary contribution for NC's list of priority scientific projects			
2. Non-target, associated, dependent species						
a. Seabirds	Consider appropriate implementation of methods to minimize catch and mortality.		Review implementation of CMM-2007-04 in the northern area			
b. Sea turtles	Consider appropriate implementation of methods to minimize catch and mortality.		Review mitigation research results and consider management action			
c. Sharks	Consider appropriate implementation for		Review implementation for CMM-2009-04in the			

Work areas	5-year objectives	1-year tasks				
	2010-2014	2010	2011	2012	2013	2014
	CMM-2009-04 in the northern area.		northern area. Review scientific advice from ISC, if any, and consider management options on two shark species (blue shark and mako sharks,).	Review scientific advice from ISC, if any, and consider management options on two shark species (blue shark and mako sharks).		
3. Review effectiveness of decisions	Annually review effectiveness of conservation and management measures and resolutions applicable to fisheries for northern stocks		Review effectiveness of NP albacore measure (CMM 2005-03), including members' reports on their interpretation and implementation of fishing effort controls			
			Review effectiveness of Pacific bluefin tuna measure.			

Work areas	5-year objectives	1-year tasks				
	2010-2014	2010	2011	2012	2013	2014
4. ROP (Paragraph 9, Attachment C of CMM 2007-01)			Review ROP and consider specific cases for exemptions			
5. Cooperation with other organizations a. ISC b. IATTC	Following Article 22.4, consult to facilitate consistent management measures throughout the respective ranges of the northern stocks	Consider and establish a mechanism to support ISC Have consultation to maintain and establish consistent measures for NP albacore and northern Pacific bluefin tuna	Consider action to support ISC. Have consultation to maintain and establish consistent measures for NP albacore and northern Pacific bluefin tuna			