

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA
EIGHTH SESSION (JWG-08)**

Fukuoka, Japan
3-5 July 2023

**CHAIRS' SUMMARY OF THE 8TH JOINT IATTC AND WCPFC-NC
WORKING GROUP MEETING ON THE MANAGEMENT OF PACIFIC BLUEFIN TUNA**

IATTC-NC-JWG08-2023/00

AGENDA ITEM 1 OPENING OF THE MEETING

1. The 8th Session of the Joint IATTC and WCPFC-NC Working Group Meeting on the Management of Pacific Bluefin Tuna (JWG08) was held on 3-5 July 2023. The meeting was opened by co-chairs Mr. Masanori Miyahara (Japan, Northern Committee Chair) and Ms. Dorothy Lowman (USA, IATTC).
2. Japan expressed gratitude for the opportunity to host the meeting, and wished that all participants have fruitful discussions over the following days.
3. A list of participants to the JWG08 is included in **Annex A**.

AGENDA ITEM 2 ADOPTION OF AGENDA AND MEETING PROCEDURES

4. Co-Chair Miyahara welcomed participants and outlined the meeting procedures and the agenda.
5. The provisional agenda was adopted (**Annex B**).
6. Mr. Jacques Chaumont (Japan) was appointed as rapporteur for the meeting.

AGENDA ITEM 3 SCIENTIFIC INFORMATION ON PACIFIC BLUEFIN TUNA

3.1 Updates on the stock status of Pacific bluefin tuna

7. Dr. S. Nakatsuka, the Chair of the ISC Pacific Bluefin tuna WG (PBFWG), made a brief report on the latest stock assessment for PBF, which was conducted in March 2022 and was reported to the JWG last year. As this assessment was a data update assessment, the PBFWG developed the base case model consistent with the 2020 assessment with the most recent two years data (2019-2020 fishing year (FY)).
8. The base-case of 2022 assessment results show that: (1) spawning stock biomass (SSB) fluctuated throughout the assessment period (1952-2020); (2) the SSB steadily declined from 1996 to 2010 but has increased since 2011 resulting in the 2020 SSB being back to the 1996 level, which is higher than the initial rebuilding target of this stock (historical median SSB during 1952-2014); (3) total biomass after 2011 continued to increase with an increase in young fish, creating the 2nd highest biomass peak in the assessed history in 2020; and (4) fishing mortality ($F_{\%SPR}$), which declined to a level producing about 1% of SPR in 2004-2009, returned to a level producing 30.7% of SPR in 2018-2020 while SSB in 2020 was 10.2% of SSB_0 .

9. The projection results from all examined scenarios showed that the second rebuilding target of WCPFC and IATTC, rebuilding to 20% SSB₀ by 2029 FY (10 years after reaching the initial rebuilding target) with at least 60% probability, will be achieved, and the risk of SSB falling below the historical lowest SSB at least once in 10 years is negligible. In 2023, PBFWG reviewed the most recent information, notably spawner and recruitment indices. The spawner index indicated a continuous increasing trend while the recruitment index showed high variability from low to high, indicating no unexpected change in stock status.

10. In response to a question of a delegate of Japan, Dr. Nakatsuka stated that under simulation the conversion factor used from small fish to large fish catch limits were considered not to cause negative repercussion upon the recovery of the stock and that the more conversion is made, generally speaking, the more probability of recovery could be expected.

3.2 Reports from WCPFC-Scientific Committee (SC) and IATTC-Scientific Advisory Committee (SAC)

11. The JWG acknowledged that a report from the 19th WCPFC-SC is not available because the meeting is to be held from 16 – 24 August 2023.

12. The IATTC Secretariat briefly noted the key outcomes from the 14th IATTC-SAC meeting, adding that there were two IATTC scientific staff recommendations which were considered endorsed by the SAC. (1) No changes are needed to the provisions under resolution C-21-05, and (2) increased catches based on the scenarios analyzed are possible under the harvest strategy prepared by this group, and the choice of catch scenario should account for both the desired rebuilding rate and distribution of catch between small and large PBF.

AGENDA ITEM 4 REPORTS ON THE IMPLEMENTATION OF PACIFIC BLUEFIN TUNA MEASURES

13. The JWG reviewed WCPFC and IATTC members' implementation reports on CMM 2021-02 and C-21-05.

14. Japan explained that the reason behind its unused catch limit was due to limitations of the system which facilitates transfers among management units. Japan has observed good migration of PBF, and has dedicated efforts to comply with catch limits, although avoiding PBF catch and releasing them sometimes disrupts fishing operations and causes burden and financial losses to fishermen. Japan prohibits sports fishermen from catching small fish and set a bag-limit for large fish of one per person per day, in addition to the seasonal catch limit. Following the unreported catches detected in 2022, which Japan takes seriously, Japan has corrected its catch reports and is strengthening measures to prevent recurrence, including monitoring and control measures over market transactions.

15. Korea asked Japan for more information on its "Other fisheries" and how it manages recreational fishing, and they agreed to discuss further details.

16. In reviewing Korea's implementation report, Japan asked Korea (i) if Japan was the only country it exported to last year, and (ii) the estimation of discard amount last year. In response to these questions, Korea confirmed the first point and explained that it was unable to estimate the amount of discard last year but determined its unused catch limit would be sufficient to cover its discard amount.

17. In reviewing Chinese Taipei's implementation report, Korea asked Chinese Taipei (i) how any incidental catches of small PBF are handled (e.g. discard, release, etc.) and (ii) if Chinese Taipei's CDS

system is applied to other countries that export PBF to Chinese Taipei, and if it will change its CDS system to be consistent with the WCPFC IATTC CDS system once it is adopted. In response to questions from Korea, Chinese Taipei explained it does not allow catch of small fish and its fishermen are required to report discards or releases of small catch to the government. In addition, Chinese Taipei noted it would amend its CDS for PBF to meet requirements based on the CDS to be developed by WCPFC and IATTC.

18. Chinese Taipei gave details on the countries they imported from and exported to, in response to a question from Japan.

19. Japan asked the US to give further details on how it plans to manage its sports fisheries, as it interpreted the IATTC Resolution. Japan expressed its concerns over the increasing catches by US sports fisheries and raised a question if the US has the intention to manage catches by its sports fisheries by catch limit. The US noted it continues to manage its fleet through bag-limits, and acknowledged that it has observed an increase in the weight of fish caught by its recreational fleet, but noted that the size of fish has increased and the number of fish caught is less than in 2013. Additionally, the US expressed concern that recreational catches and discards by other countries are not well reported.

20. Japan and New Zealand agreed to exchange information about import and export of PBF.

21. The representative from FIDEMAR reported verbally on Mexico's catch information, noting that it has complied with its 6566-ton catch limit for 2021 and 2022, catching 3027 tons and 3194 tons, respectively. In recent years, most catch is made in January and the number of vessels participating in fishing is much lower than in the past, usually four to six compared to 21 in 2010. A significant portion of catch consists of larger tuna, and captured tuna is kept alive in farming pens for a certain time, before being released, caught, and sold. In 2022, Mexico primarily exported to the US, Japan, and small quantities to Canada and Korea, and some exports of 2022 have included fish that were kept in farms for almost three years. The average size of fish changes from year to year and is not stable.

22. The JWG repeated its request to Mexico for submission of a written implementation report to the meeting next year. The Co-Chairs requested IATTC to relay this request to the Mexico authorities.

23. No further discussions were held on the reports submitted by other members.

AGENDA ITEM 5 REVIEW OF CONSERVATION AND MANAGEMENT MEASURES FOR PACIFIC BLUEFIN TUNA

24. Korea presented a proposal to amend CMM 2021-02, a modified version of its proposal last year, which was to address several incidents in which unintended Pacific Bluefin tuna catches were discarded by Korea's set net fisheries in its territorial waters last year.

25. The JWG discussed and revised the proposal from Korea.

26. Japan and the USA expressed concerns regarding the discard issue faced by Korea, and Co-Chair Miyahara requested that Japan, the USA, and Korea discuss in the margins to agree to a potential amendment to the proposal.

27. Korea revised its proposal and presented it to the meeting. The US requested the ISC perform projections on the new conversion amounts and, in the next benchmark assessment, to update their guidance with a new table, ratio calculation and any other guidance based on the most recent information and biological assumptions.

28. The JWG came to an agreement on the proposal attached in **Annex C**. Korea stated that it hopes to revisit the issue of discard in its set-net fisheries next year, although it did not seek to continue the discussion during the meeting this time due to clear lack of agreement among members and for the sake of consensus.

29. Japan gave a presentation on the urgent need to adjust the catch limits for PBF on a scale corresponding to the significantly increased stock level under the conservation requirements. The spawning stock biomass (SSB) of PBF has been increasing rapidly over the past 10 years. According to the latest ISC stock assessment in 2022, the initial rebuilding target in the Harvest Strategy for PBF Fisheries (HS 2021-01) was achieved in 2019, five years earlier than originally targeted, and the second rebuilding target of HS 2021-01 (20%SSB_{F=0}) is projected to be achieved with a probability of 60% in 2023, six years earlier than targeted. With the rapid increase in PBF biomass, Japanese fishermen have been observing more frequent and bigger migrations of PBF in almost all fisheries across Japan. Although WCPFC and IATTC increased the catch limits of large PBF (30 kg or larger) by 15% since 2022, this has not kept pace with the rapid increase of the PBF stock. As a result, Japanese fishermen are increasingly forced to release PBF to comply with the catch limits. When they release PBF, they also have to release other target fish species from their nets, causing operational burdens and economic losses.

30. Korea expressed its general support for Japan's position that catch limits should be adjusted to reflect the rapid recovery of the stock. Korea suggested that current conservation measures have not properly reflected the rights of coastal states. Korea's statement was posted as a meeting document JWG08-DP-18 (**Annex D**).

31. Chinese Taipei appreciated Japan's presentation and supported that catch limits should be adjusted as the PBF stock is on the right track of recovery.

32. The US pointed out that the paper from Japan did not capture the significant increase in small fish catches in the Western Central Pacific Ocean from 1990 to 2000, which impacted the SSB. The US emphasized the importance of managing PBF across its entire range and working together across commissions to ensure success, as well as creating rules in the interim for after the next rebuilding target is achieved.

33. Dr. Maunder, IATTC staff, suggested considering alternative ways to view catch data, such as percentage reduction. Changes in fleet selectivity in the Eastern Pacific should also be considered, which would require recent information on fish sizes caught. Fishery impact is the most appropriate way to assess the influence of different fleets, but requires projecting into the future.

34. The WWF highlighted IUU fishing risks as a consideration in the discussion on increasing catch limits and suggested that further increases be made following implementation of the CDS.

35. The US proposed the scenarios to be examined in the 2024 stock assessment by ISC. The JWG reviewed it and agreed upon the revised version attached in **Annex E**.

AGENDA ITEM 6 CATCH DOCUMENTATION SCHEME

36. Mr. Shingo Ota (Japan), the Chair of the Catch Documentation Scheme (CDS) Working Group, presented the outcomes of the 4th CDS Technical Meeting. A Chair's Summary Report of the meeting is included as **Annex F**.

AGENDA ITEM 7 DEVELOPMENT OF LONG-TERM HARVEST STRATEGY

7.1 Progress and issues related to developing Management Strategy Evaluation

37. The JWG reviewed the progress of MSE development and associated issues to address for further MSE process.

38. Dr S. Nakatsuka, the Chair of the ISC PBFWG presented the current state of work on MSE by the PBFWG. ISC is requested by the JWG to provide technical guidance on PBF MSE. As requested, PBFWG is working under a schedule to provide the final results to JWG in 2025 for the selection of a Management Procedure (MP) for PBF. ISC presented the development of a general framework of PBF MSE and sought input from JWG on some issues to advance MSE. In terms of development, ISC decided to construct an MSE framework based on the base-case model of the upcoming 2024 assessment and has discussed and narrowed down this year what kind of uncertainties should be taken into account in the Operating Models. It is anticipated that the models to be included in Operating Models should have sufficient diagnostic performance.

39. The WG also considered an Estimation model as a part of MP. In order to test many Candidate MPs (CMPs), the WG is developing a simplified model-based MP. Upon review of preliminary performance of CMPS, the WG observed the following. First, among more than 100 CMPs currently proposed, certain CMPs exhibit similar performance. Also, the future impact in WPO/EPO would not change very much unless a rule to substantially change the ratio between WPO and EPO catch is incorporated in an MP. ISC is not capable of conducting a search for a given impact ratio between WPO and EPO, and therefore requested stakeholders to evaluate CMP performance based on output on impact ratio, or to provide a specific candidate MP to address the issue.

40. With those inputs in mind, ISC requested the JWG to (i) refine operational management objectives so that they can be evaluated in MSE, (ii) reduce candidate MPs to a realistic level (preferably less than 10), and (iii) agree to 3-year management cycle to allow time to improve scientific research for PBF.

7.2 Operational management objectives and performance indicators

41. The JWG revisited the *Candidate Operational Management Objectives and Performance Indicators for Pacific Bluefin Tuna*, and discussed the categories of safety, status, stability, and yield.

42. The JWG revised the document and agreed on the operational management objectives and performance indicators described in **Annex G**.

7.3 Review candidate reference points and harvest control rules (HCRs) adopted in 2019 and revise as appropriate

43. The US presented a proposal for refining candidate reference points and HCRs for Pacific bluefin tuna.

44. The JWG reviewed and revised the proposal from the United States and made further revisions. The JWG agreed upon the text in **Annex H**.

7.4 Development of Interim Harvest Strategy

45. The JWG reviewed and finalized the *Pacific Bluefin Tuna Interim Harvest Strategy*.

46. The JWG agreed upon the revised text in **Annex I**.

7.5 Work Plan for Development of a Long-term Harvest Strategy for PBF (including MSE)

47. The JWG reviewed and updated the *Work Plan for Development of a Long-term Harvest Strategy for PBF (including MSE)*. The revised Work Plan is attached in **Annex J**.

AGENDA ITEM 8 NEXT JWG MEETING

48. Japan offered to host the next JWG meeting in early July 2024, at a date to be determined after consultation among members and both RFMO Secretariats, and the ISC. In this regard, the JWG agreed to make a request that ISC consider holding the ISC24 plenary meeting sometime in June 2024. The arrangement of the next meeting will be notified well in advance, taking into consideration other meeting dates. The deadline for the submission of implementation reports will be revised as necessary, according to the meeting dates.

AGENDA ITEM 9 OTHER BUSINESS

49. No other business was raised.

AGENDA ITEM 10 ADOPTION OF REPORT

50. The IATTC-NC JWG08 adopted the report.

AGENDA ITEM 11 CLOSE OF MEETING

51. The meeting was brought to a close at 3:18 pm on 5 July 2023.

ANNEXES

Annex A – List of participants

Annex B – Agenda

Annex C – Proposed Amendments to Conservation and Management Measure for Pacific Bluefin Tuna

Annex D – Korea’s Comments on the Japanese Paper: *Need for timely adjustment of catch limits of Pacific Bluefin Tuna* (JWG08-DP-14)

Annex E – ISC’s Projection Scenarios Requested by the JWG08

Annex F – Chair’s Summary of 4th CDS Technical Meeting

Annex G – Candidate Operational Management Objectives and Performance Indicators for Pacific Bluefin Tuna

Annex H – Candidate Harvest Control Rules and Reference Points to Evaluate in the MSE

Annex I – Pacific Bluefin Tuna Interim Harvest Strategy

Annex J – Work Plan for Development of a Long-term Harvest Strategy for Pacific Bluefin Tuna (including MSE)

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA
EIGHTH SESSION (JWG-08)**

Fukuoka, Japan
3-5 July 2023

LIST OF PARTICIPANTS

CO-CHAIRS**Masanori Miyahara**

Fisheries Agency of Japan
Advisor to the Minister of Agriculture, Forestry
and Fisheries
masamiyafaj1@gmail.com

Dorothy Lowman

Lowman and Associates
consultant
dmlowman01@comcast.net

CDS TECHNICAL MEETING CHAIR**Shingo Ota**

Fisheries Agency of Japan
Councillor, Resources Management Department
shingo_ota810@maff.go.jp

CANADA**Dale Marsden**

Deputy Director, International Fisheries Policy
Fisheries and Oceans Canada
Dale.Marsden@dfp-mpo.gc.ca

Robynn-Bella Smith-Laplante

Advisor, International Fisheries Policy
Fisheries and Oceans Canada
Robynn-Bella.Smith-Laplante@dfp-mpo.gc.ca

Sarah Hawkshaw

Biologist, Stock Assessment and Research
Fisheries and Oceans Canada
Sarah.Hawkshaw@dfp-mpo.gc.ca

FIJI**Unaisi Biddy Rabici**

Ministry of Fisheries Fiji
Fisheries Officer
rabici.unaisi1@gmail.com

JAPAN**Takumi Fukuda**

Fisheries Agency of Japan
Resource Management Department
takumi_fukuda720@maff.go.jp

Shingo Fukui

Fisheries Agency of Japan
staff
shingo_fukui970@maff.go.jp

Shinji Hiruma

Fisheries Agency of Japan
International Affairs Division
shinji_hiruma150@maff.go.jp

Katsuki Takita

Fisheries Agency of Japan
International Affairs Division
katsuki_takita760@maff.go.jp

Masahide Kannou

Fisheries Agency of Japan
Staff, International Affairs Division
masahide_kanno210@maff.go.jp

Daichi Baba

Kyushu Fisheries Coordination Office
Officer
daichi_baba660@maff.go.jp

Daisuke Nakamura

Kochi Offshore Tuna Fisheries Association

Advisor

k-nakamura@kogyoren.jf-net.ne.jp

Hidefumi Kawamoto

San-In Purse Seine Fisheries Cooperative
Executive Director

japan_delegation004@yahoo.co.jp

Hiromu Fukuda

Fisheries Research and Education Agency of
Japan, Fisheries Resources Institute
Head, Bluefin Tunas Group, Highly Migratory
Resources Division

fukuda_hiromu57@fra.go.jp

Hiroshi Moriwaki

San-In Purse Seine Fisheries Cooperative
Vice-Union President

japan_delegation003@yahoo.co.jp

Hiroyuki Suetake

Japan Purse Seiner's Association
Manager

hiroyuki-suetake@enmaki.jp

Isao Ishii

Central Japan Sea purse seine fishery council
Executive Managing Director

japan_delegation005@yahoo.co.jp

Kaoru Kawamoto

Fisheries Agency of Japan
Interpreter

dvorjakkawamoto@ybb.ne.jp

Kazushige Hazama

National Offshore Tuna Fisheries Association of
Japan
Manager

hazama@kinkatsukyo.or.jp

Kirara Nishikawa

Fisheries Resources Institute, FRA
Scientist, Bluefin Tunas Group, Highly
Migratory Resource Division

nishikawa_kirara68@fra.go.jp

Tomohiro KONDO

Fisheries Division, Ministry of Foreign Affairs
Deputy Director

Tomohiro.kondo-2@mofa.go.jp

Kyohei Toya

Kyushu Fisheries Coordination Office
Officer

kyohei_toya420@maff.go.jp

Meiko Kawahara

Taiyo A & F Co., Ltd.
Deputy General Manager

m-kawahara@maruha-nichiro.co.jp

Makoto Hotai

JAPAN PURSE SEINER'S ASSOCIATION
General Manager

makoto-hotai@enmaki.jp

Mariko Yamamoto

Japan Purse Seiner's Association
Staff

mariko-yamamoto@enmaki.jp

Masakatsu Irei

National Offshore Tuna Fisheries Association of
Japan

President

zenkinjp@kinkatsukyo.o.jp

Masakazu Shirado

Japan Sea Coastal Purse Seiners Association
Member

imoto@sanmaki.jp

Eihachiro Matsuzawa

Kochi Offshore Tuna Fisheries Association
President

Risa Fujisawa

Kyushu Fisheries Coordination Office
Officer

risa_fujisawa130@maff.go.jp

Saori Kenmochi

Agricultural and Marine Products Office, Trade
control Department, Ministry of Economy, Trade
and Industry

Deputy Director

kenmochi-saori@meti.go.jp

Shingo Fujita

National federation of fisheries co-operative
associations

Assistant to Director
s-fujita@zengyoren.jf-net.ne.jp

Shuto Kawase
Kyushu Fisheries Coordination Office
Officer
shuto_kawase110@maff.go.jp

Shuya Nakatsuka
Fisheries Resources Institute
Deputy Director, Highly Migratory Resources
Division
nakatsuka_shuya49@fra.go.jp

Susumu Oikawa
Taiyo A & F Co., Ltd.
Managing Director
s-oikawa@maruha-nichiro.co.jp

Tadashi Okamoto
Kyushu Fisheries Coordination Office
Resources Management Promotion Officer
tadashi_okamoto020@maff.go.jp

Masahito Takemura
Kochi Offshore Tuna Fisheries Association

Yoshinobu Umazume
Kochi Offshore Tuna Fisheries Association

Mitsunori Yamasaki
Kochi Offshore Tuna Fisheries Association

Daisuke Takemura
Kochi Offshore Tuna Fisheries Association

Katsuko Maeda
Kochi Offshore Tuna Fisheries Association

Yoshiyasu Hidaka
Miyazaki Prefecture Bonito and Tuna
Fishermen's Association
President

Shinji Tawara
Miyazaki Prefecture Bonito and Tuna
Fishermen's Association
Board Member

Shigeo Inada
Miyazaki Prefecture Bonito and Tuna

Fishermen's Association
Board Member

Takemasa Kai
Miyazaki Prefecture Bonito and Tuna
Fishermen's Association
Board Member

Hideki Nakao
Miyazaki Prefecture Bonito and Tuna
Fishermen's Association
Secretariat
h-nakao@mzgyoren.jf-net.ne.jp

Tomoyuki Suzuki
Miyazaki Prefecture Bonito and Tuna
Fishermen's Association
Secretariat
to-suzuki@mzgyoren.jf-net.ne.jp

Shinichi Yamamoto
Kagoshima Offshore Tuna Fisheries Association
Board Member

TAKEMURA Masahito
Kochi Offshore Tuna Fisheries Association
k-nakamura@kogyoren.jf-net.ne.jp

Wakana Omomo
Kyushu Fisheries Coordination Office
Officer
wakana_omomo480@maff.go.jp

Yasunori Ono
Japan Far Seas Purse Seine Fishing Association"
Adviser
y_ono@kaimaki.or.jp

Yoko Yamakage
Fisheries Agency of Japan
Interpreter
yamakageyoyo@gmail.com

Yoshihiro Notomi
National Offshore Tuna Fisheries Association of
Japan
Managing Director
notomi@kinkatsukyo.or.jp

Yuhei Otsu
Fisheries Agency of Japan

Staff, International Affairs Division
yuhei_otsu880@maff.go.jp

Yurie Sawasaki
Fisheries Agency of Japan
Staff
yurie_sawasaki950@maff.go.jp

Masahiko Terada
Saga Prefecture of Japan
Chief
terada-mashaiko@pref.saga.lg.jp

Akihiro Kwasaki
Saga Prefecture of Japan
Staff
kawasaki-akihiro@pref.saga.lg.jp

Chiharu Hagiwara
Saga Prefecture of Japan
Staff
hagiwara-chiharu@pref.saga.lg.jp

Atsushi Sawada
Shimokita Regional Administration Bureau,
Regional Agriculture, Forestry and Fisheries
Department, Shimokita Regional Fisheries Office,
Fisheries Management and Development
Division
Technical Staff
atsushi_sawada@pref.aomori.lg.jp

Jacques Chaumont
Fisheries Agency of Japan
Staff
chaumont@urbanconnections.jp

Kengo Tanaka
All Japan Purse Seine Fisheries Association
Managing director
zenmaki05@atlas.plala.or.jp

Ko Kishinami
Fisheries Research and Education Agency of
Japan, Fisheries Resources Institute
Associate Researcher, Highly Migratory
Resources Division
kishinami_ko76@fra.go.jp

Masaaki Toma
Agricultural and Marine Products Office, Trade

Control Department, Ministry of Economy, Trade
and Industry
Deputy Director
toma-masaaki@meti.go.jp

Norio Takahashi
Highly migratory resources division, Japan
Fisheries Resources Institute
Senior Scientist
takahashi_norio91@fra.go.jp

Tetsuya Kunito
Federation of North Pacific District Purse Seine
Fisheries Cooperative Associations of Japan
Section Manager
tetsuya_kunito920@kitamaki.jp

Yohei Tsukahara
Fisheries Resources Institute, FRA
Scientist, Bluefin Tunas Group, Highly
Migratory Resource Division
tsukahara_yohei35@fra.go.jp

Yuji Uozumi
Japan Tuna Fisheries Co-operative Association
Adviser

REPUBLIC OF KOREA

Ilkang Na
Ministry of Oceans and Fisheries
Policy Officer / Multilateral Fisheries Negotiator
ikna@korea.kr

Jung-re Riley Kim
Ministry of Oceans and Fisheries
Head of Fisheries Negotiation Unit
riley1126@korea.kr

Hee Won Park
National Institute of Fisheries Science (NIFS)
Scientist
heewon81@gmail.com

PHILIPPINES

Alma C. Dickson
Bureau of Fisheries and Aquatic Resources
Development Management Officer IV
alma_dickson@yahoo.com

Benjamin Felipe Jr. Tabios
Department of Agriculture
Office for Special Concerns, Bureau of Fisheries
and Aquatic Resources
benjotabios@gmail.com

Isidro Tanangonan
Bureau of Fisheries and Aquatic Resources
Aquaculturist II
itanangonan@bfar.da.gov.ph

Marlo Demo-os
DA-BFAR
Aquaculturist II
mbdemoos@gmail.com

Severino Escobar Jr
Bureau of Fisheries and Aquatic Resources
Chief, Capture Fisheries Licensing Section-
Fisheries Regulatory and Licensing Division
jojo_escobar@yahoo.com

CHINESE TAIPEI

Chi-Chao Liu
Fisheries Agency, Council of Agriculture,
Executive Yuan
Senior Specialist, Deep Sea Fisheries Division
chichao@msl.f.gov.tw

Joseph Chia-Chi Fu
Overseas Fisheries Development Council
Director
joseph@ofdc.org.tw

Shui-Kai Chang
National Sun Yat-sen University
Professor
skchang@faculty.nsysu.edu.tw

Shao-Wei Lu
Fisheries Agency, Council of Agriculture,
Executive Yuan
Associate Technical Specialist
shaowei0220@msl.f.gov.tw

UNITED STATES OF AMERICA

Kelly Kryc
National Oceanic and Atmospheric
Administration

Deputy Assistant Secretary for International
Fisheries
kelly.kryc@noaa.gov

Ryan Wulff
NOAA
ARA for Sustainable Fisheries
ryan.wulff@noaa.gov

Celia Barroso
NOAA National Marine Fisheries Service
Fishery Policy Analyst
celia.barroso@noaa.gov

Christine Bertz
U.S. Department of State
Foreign Affairs Officer
bertzca@state.gov

Christopher Dahl
Pacific Fishery Management Council
Staff Officer - HMS
kit.dahl@noaa.gov

Emily Reynolds
NOAA Fisheries, Pacific Islands Regional Office
Fishery Policy Analyst
emily.reynolds@noaa.gov

Huihua Lee
Southwest Fisheries Science Center, NMFS
Research Mathematical Statistician
huihua.lee@noaa.gov

Jason Philibotte
NOAA Fisheries
International Fisheries, Division Chief
jason.philibotte@noaa.gov

Josh Madeira
Monterey Bay Aquarium
Director of Fisheries and Aquaculture Policy
jmadeira@mbayaq.org

Stuart Chikami
Western Pacific Fisheries, Inc.
Manager

Valerie Post
NOAA Fisheries
Fishery Policy Analyst

valerie.post@noaa.gov

Elizabeth O'Sullivan
NOAA GCES
Enforcement Attorney
elizabeth.osullivan@noaa.gov

Michael Thompson
US COMMISSIONER / IATTC
REC fisheries rep
thompsonmike148@gmail.com

Theresa Labriola
Wild Oceans
Pacific Program Director
tlabriola@wildoceans.org

INTER-AMERICAN TROPICAL TUNA COMMISSION (IATTC)

Brad Wiley
IATTC
Policy Officer
bwiley@iattc.org

MARINE STEWARDSHIP COUNCIL

Sayuri Ichikawa
Marine Stewardship Council
Fishery Manager, WCPO Tuna Projects
sayuri.ichikawa@msc.org

MEXICO

Michel Jules Dreyfus Leon
FIDEMAR
Researcher
dreyfus@cicese.mx

NEW ZEALAND

Hilary Ayrton
Ministry for Primary Industries
Senior Fisheries Analyst
Hilary.Ayrton@mpi.govt.nz

ORGANIZATION FOR REGIONAL AND INTER-REGIONAL STUDIES (ORIS)

Yasuhiro Sanada
Organization for Regional and Inter-regional

Studies (ORIS)
researcher
y-sanada@aoni.waseda.jp

PACIFIC ISLANDS FORUM FISHERIES AGENCY (FFA)

Lianos Triantafillos
Pacific Islands Forum Fisheries Agency (FFA)
Fisheries Management Advisor
lianos.triantafillos@ffa.int

THE PEW CHARITABLE TRUSTS

Grantly Galland
The Pew Charitable Trusts
Project Director
RFMO Policy, International Fisheries
ggalland@pewtrusts.org

THE OCEAN FOUNDATION

Shana Miller
The Ocean Foundation
Project Director, International Fisheries Conservation
smiller@oceanfdn.org

WORLD WIDE FUND FOR NATURE (WWF)

Shuhei Uematsu
WWF Japan
Manager of Anti-IUU Fishery Project & Manager of Fisheries Resources Management, Oceans and Seafood Group
uematsu@wwf.or.jp

WCPFC SECRETARIAT

Rhea Moss-Christian
Western and Central Pacific Fisheries Commission (WCPFC)
Executive Director
rhea.moss-christian@wcpfc.int

Aaron Nighswander
Western and Central Pacific Fisheries Commission (WCPFC)
Finance and Administration Manager
aaron.nighswander@wcpfc.int

Lara Manarangi-Trott
Western and Central Pacific Fisheries
Commission (WCPFC)
Compliance Manager
Lara.Manarangi-Trott@wcpfc.int

SungKwon Soh
Western and Central Pacific Fisheries
Commission (WCPFC)
Science Manager
sungkwon.soh@wcpfc.int

Tim Jones
Western and Central Pacific Fisheries
Commission (WCPFC)
IT Manager
tim.jones@wcpfc.int

Eidre Sharp
Western and Central Pacific Fisheries
Commission (WCPFC)
Assistant Compliance Manager
Eidre.Sharp@wcpfc.int

Elaine G. Garvilles
Western and Central Pacific Fisheries
Commission (WCPFC)
Assistant Science Manager
Elaine.Garvilles@wcpfc.int

Emma Nelson-Mori
Western and Central Pacific Fisheries
Commission (WCPFC)
Project Management Assistant
emma.mori@wcpfc.int

Lucille Martinez
Western and Central Pacific Fisheries
Commission (WCPFC)
Administrative Officer
lucille.martinez@wcpfc.int

Samuel T. Rikin
Western and Central Pacific Fisheries
Commission (WCPFC)
IT Officer
samuel.rikin@wcpfc.int

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA
EIGHTH SESSION (JWG-08)**

Fukuoka, Japan
3 – 5 July 2023

AGENDA

- 1. Opening of the meeting**
- 2. Adoption of Agenda and Meeting Procedures**
- 3. Scientific Information on Pacific Bluefin Tuna**
 - 3.1 Updates on the stock status of Pacific bluefin tuna
 - 3.2 Reports from WCPFC-Scientific Committee (SC) and IATTC-Scientific Advisory Committee (SAC)
- 4. Reports on the implementation of Pacific bluefin tuna measures**
- 5. Review of Conservation and Management Measures for Pacific Bluefin Tuna**
- 6. Catch Documentation Scheme**
- 7. Development of Long-Term Harvest Strategy**
 - 7.1 Progress and issues related to developing Management Strategy Evaluation
 - 7.2 Operational management objectives and performance indicators
 - 7.3 Review candidate reference points and harvest control rules (HCRs) adopted in 2019 and revise as appropriate
 - 7.4 Development of Interim Harvest Strategy
 - 7.5 Work Plan for Development of a Long-term Harvest Strategy for PBF (including MSE)
- 8. Next JWG meeting**
- 9. Other business**
- 10. Adoption of Report**
- 11. Close of meeting**

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA
EIGHTH SESSION (JWG-08)**

Fukuoka, Japan
3 – 5 July 2023

**PROPOSED AMENDMENTS TO
CONSERVATION AND MANAGEMENT MEASURE FOR PACIFIC BLUEFIN TUNA**

I. Explanatory Note

As some Members of JWG may recall, Korea had several incidents of discard by set net of unintended Pacific Bluefin tuna catches in its territorial waters last year as explained in the document WCPFC-NC18-2022/IP-04. Against this backdrop, Korea submitted a proposal to NC18 meeting, which was not discussed fully due to procedural concerns as the proposal had not gone through the JWG considerations. Therefore, Korea submits this proposal once again for the deliberation of the JWG and then subsequently NC19. The proposed changes in this proposal seek to continue to address the issue in consultation with interested Members of JWG.

The first change relates to the application of the conversion factor in footnote 2. While ISC came up with the conversion factor of 0.68, there was no specific scientific advice on the optimum percentage of the catch limit for the small PBF that could be utilized to catch large PBF using the conversion factor. The current rule, 10% for CCMs other than Korea and 25% for Korea, was set on a trial basis through negotiation, and we believe it has performed well in the context of the stock rebuilding process. In light of this and the recent upward trend in the stock, we would like to explore the possibility of increasing those figures from 10% to 20% and from 25% to 35% respectively, taking into account of the good pace of PBF stock rebuilding that has been observed in recent years. This still follows the scientific advice that the catches of large fish have less impact than the catches of small fish, and does not change the catch limits of the individual CCMs.

The second change, new footnote 4, suggests that the discards in certain fisheries which do not target PBF should not be required to be counted against the catch limit. The main purpose of this proposed change is to improve the data collection on discards, which would in turn contribute to the reduction of uncertainties in the stock assessment.

II. Consideration of CMM 2013-06

a. Who is required to implement the proposal?

The Republic of Korea is required to implement the proposal.

b. Which CCMs would this proposal impact and in what ways and what proportion?

This proposal may have some impact on the CCMs who have substantial interest in Pacific Bluefin tuna fisheries in the Pacific area but it is unlikely that it would impact SIDS. Nevertheless, we will have necessary consultations with SIDS before the Commission meeting if this proposal is to be submitted to the Commission meeting for discussion.

c. Are there linkages with other proposals or instruments in other Regional Fisheries Management Organizations or international organizations that reduce the burden of

implementation?

No, there aren't.

d. Does the proposal affect development opportunities of SIDS?

No, this proposal does not affect development opportunities of SIDS.

e. Does the proposal affect SIDS domestic access to resources and development aspirations?

No, this proposal does not affect SIDS domestic access to resources or development aspirations.

f. What sources, including financial and human capacity, are needed by SIDS to implement the proposal?

No resources are required for SIDS to implement this CMM.

g. What mitigation measures are included in the proposal?

No mitigation measures are included.

h. What assistant mechanisms and associated timeframe, including training and financial support, are included in the proposal to avoid a disproportionate burden on SIDS?

This proposal does not place a disproportionate burden on SIDS.



**COMMISSION
EIGHTEENTH REGULAR SESSION**
Electronic Meeting
1 – 7 December 2021

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

Conservation and Management Measure ~~20231-XX02~~

The Western and Central Pacific Fisheries Commission (WCPFC):

Recognizing that WCPFC6 adopted Conservation and Management Measure for Pacific bluefin tuna (CMM 2009-07) and the measure was revised ten times since then (CMM 2010-04, CMM 2012-06, CMM 2013-09, CMM 2014-04, CMM 2015-04, CMM 2016-04, CMM2017-08, CMM 2018-02, CMM 2019-02 and CMM 2020-02) based on the conservation advice from the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC) on this stock;

Noting the latest stock assessment provided by ISC Plenary Meeting in July 2020, indicating the following:

- (1) spawning stock biomass (SSB) fluctuated throughout the assessment period (fishing years 1952-2018), (2) the SSB steadily declined from 1996 to 2010, (3) the slow increase in the stock biomass has been continuing since 2011, (4) total biomass in 2018 exceeded the historical median with an increase in immature fish; and (5) fishing mortality (F%SPR) declined from a level producing about 1% of SPR in 2004-2009 to a level producing 14% of SPR in 2016-2018;
- A substantial decrease in estimated F has been observed in ages 0-2 in 2016-2018 relative to the previous years;
- Since the early 1990s, the WCPO purse seine fisheries, in particular those targeting small fish (age 0-1) have had an increasing impact on the spawning stock biomass, and in 2016 had a greater impact than any other fishery group;
- Harvesting small fish has a greater impact on future spawning stock biomass than harvesting large fish of the same amount;
- The projection results indicate that, under all the examined scenarios, the initial goal of rebuilding the stock to SSBMED by 2024 with at least 60% probability, is reached with 99% or 100% probability, and that the risk of SSB falling below SSBloss is negligible; and
- The projection results also indicate that, under all the examined scenarios, the estimated probability of achieving the second biomass rebuilding target (20% of SSBF=0) 10 years after the achievement of the initial rebuilding target or by 2034, whichever is earlier, is greater than 90%.

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

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

General Provision

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

Management measures

2. CCMs shall take measures necessary to ensure that total fishing effort by their vessel fishing for Pacific bluefin tuna in the area north of the 20° N shall stay below the 2002–2004 annual average levels.

3. Japan, Korea and Chinese Taipei shall, respectively, take measures necessary to ensure that its catches of Pacific bluefin tuna less than 30 kg and Pacific bluefin tuna 30 kg or larger shall not exceed the annual catch limits in the tables below. The basis for the limits is as follows; annual catch limits for Pacific bluefin tuna less than 30 kg are 50% of the 2002-2004 average annual levels and annual catch limits for Pacific bluefin tuna 30 kg or larger are 115% of the 2002-2004 average annual levels or 30 metric tons for a CCM who does not have an initial catch limit for Pacific bluefin tuna 30 kg or larger before 2022.

Pacific Bluefin tuna less than 30kg

	2002-2004 average annual level	Annual initial catch limit
Japan	8,015 metric tons	4,007 metric tons
Korea	1,435 metric tons	718 metric tons

Pacific Bluefin tuna 30kg or larger

	2002-2004 average annual level	Annual initial catch limit
Japan	4,882 metric tons	5,614 metric tons
Korea	0 metric tons	30 metric tons
Chinese Taipei	1,709 metric tons	1,965 metric tons

4. CCMs, not described in paragraph 3, may increase their catch of Pacific bluefin tuna 30kg or larger by 15% above their 2002-2004 annual average levels. CCMs with a base line catch of 10 tons or less of Pacific bluefin tuna 30 kg or larger may increase their catch as long as it does not exceed 10 metric tons per year.

5. Any overage or underage of the catch limit shall be deducted from or may be added to the catch limit for the following year. The maximum underage that a CCM may carry over in any given year shall not exceed 5% of its annual initial catch limit¹.

6. CCMs described in paragraph 3 may use part of the catch limit for Pacific bluefin tuna smaller than 30 kg stipulated in paragraph 3 above to catch Pacific bluefin tuna 30 kg or larger in the same year. In this case, the amount of catch 30 kg or larger shall be counted against the catch limit for Pacific bluefin tuna smaller than 30 kg². CCMs shall not use the catch limit for Pacific bluefin tuna 30 kg or larger to catch Pacific bluefin tuna smaller than 30 kg.

¹ Notwithstanding paragraph 5, a CCM may carry over up to 17% of its initial catch limits in 2021, 2022 and 2023, which remain uncaught, to 2022, 2023 and 2024, respectively.

² In 2022, 2023 and 2024, a CCM may count the amount of catch 30 kg or larger adjusted with the conversion factor 0.68 (catch 30 kg or larger multiplied by 0.68) against the catch limit for Pacific bluefin tuna smaller than 30 kg up to ~~30+0%~~ of its initial catch limit for Pacific bluefin tuna smaller than 30 kg. Notwithstanding the first sentence of this footnote, a CCM who does not have an initial catch limit for Pacific bluefin tuna 30kg or larger before 2022 may apply the conversion factor 0.68 up to ~~30+0%~~ instead of ~~30+0%~~ of its initial catch limit for Pacific bluefin tuna less than 30kg for the same period.

7. All CCMs except Japan shall implement the limits in paragraph 3 on a calendar-year basis. Japan shall implement the limits using a management year other than the calendar year for some of its fisheries and have its implementation assessed with respect to its management year. To facilitate the assessment, Japan shall:
- a. Use the following management years:
 - 1) For its fisheries licensed by the Ministry of Agriculture, Forestry and Fisheries, use the calendar year as the management year.
 - 2) For its other fisheries, use 1 April – 31 March as the management year³.
 - b. In its annual reports for PBF, for each category described in a.1 and a.2 above, complete the required reporting template for both the management year and calendar year clearly identifying fisheries for each management year.
8. CCMs shall report to the Executive Director by 31 July each year their fishing effort and <30 kg and ≥30 kg catch levels, by fishery, for the previous 3 year, accounting for all catches, including discards. CCMs shall report their annual catch limits and their annual catches of PBF, with adequate computation details, to present their implementation for paragraph 5 and 6, if the measures and arrangements in the said paragraphs and relevant footnotes applied. The Executive Director will compile this information each year into an appropriate format for the use of the Northern Committee.
9. CCMs shall intensify cooperation for effective implementation of this CMM, including juvenile catch reduction.
10. 10. CCMs, in particular those catching juvenile Pacific bluefin tuna, shall take measures to monitor and obtain prompt results of recruitment of juveniles each year.
11. Consistent with their rights and obligations under international law, and in accordance with domestic laws and regulations, CCMs shall, to the extent possible, take measures necessary to prevent commercial transaction of Pacific bluefin tuna and its products that undermine the effectiveness of this CMM, especially measures prescribed in the paragraph 3 above. CCMs shall cooperate for this purpose.
12. CCMs shall cooperate to establish a catch documentation scheme (CDS) to be applied to Pacific bluefin tuna in accordance with the **Attachment** of this CMM.
13. CCMs shall also take measures necessary to strengthen monitoring and data collecting system for Pacific bluefin tuna fisheries and farming in order to improve the data quality and timeliness of all the data reporting.
14. CCMs shall report to Executive Director by 31 July annually measures they used to implement paragraphs 2, 3, 4, 7, 8, 10, 11 13 and 16 of this CMM. CCMs shall also monitor the international trade of the products derived from Pacific bluefin tuna and report the results to Executive Director by 31 July annually. The Northern Committee shall annually review those reports CCMs submit pursuant to this paragraph and if necessary, advise a CCM to take an action for enhancing its compliance with this CMM.
15. The WCPFC Executive Director shall communicate this CMM to the IATTC Secretariat and its contracting parties whose fishing vessels engage in fishing for Pacific bluefin tuna in EPO and request them to take equivalent measures in conformity with this CMM.

³ For the category described a.2 of paragraph 7, the TCC shall assess in year 20XX its implementation during the management year that starts 1 April 20XX-1 (e.g., in the 2020 compliance review, the TCC will assess Japan's implementation for its fisheries licensed by the Ministry of Agriculture, Forestry and Fisheries during calendar-year 2019 and for its other fisheries during 1 April 2019 through 31 March 2020).

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

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

18. The provisions of paragraph 17 shall not provide a basis for an increase in fishing effort by fishing vessels owned or operated by interests outside such developing coastal State, particularly Small Island Developing State Members or participating territories, unless such fishing is conducted in support of efforts by such Members and territories to develop their own domestic fisheries.

19. This CMM replaces CMM 2021-02. On the basis of stock assessment conducted by ISC in 2024, and other pertinent information, this CMM shall be reviewed and may be amended as appropriate in 2024.

Development of a Catch Document Scheme for Pacific Bluefin Tuna

Background

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

1. Objective of the Catch Document Scheme

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

2. Use of electronic scheme

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

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

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

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

4. Work plan

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

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

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA
EIGHTH SESSION (JWG-08)**

Fukuoka, Japan
3-5 July 2023

**KOREA’S COMMENTS ON THE JAPANESE PAPER “NEED FOR TIMELY ADJUSTMENT
OF CATCH LIMITS OF PACIFIC BLUEFIN TUNA (JWG08-DP-14)”**

Korea shares most of the views expressed in this paper and would like to thank Japan for presenting the relevant information and analysis in such a very clear and logical way. Among others, we feel great sympathy for the Japanese set net fishermen as we have the same problem.

While we believe that there will be more in-depth discussions on the catch limits next year based on the new stock assessment and taking into account of the analyses and views contained in this paper, we would like to provide our initial comments as follows:

- The rapid increase in Pacific Bluefin Tuna biomass suggests that the stock is recovering faster than expected, and this should be taken into account when setting catch limits. Korea agrees that the current catch limits are too conservative and do not reflect the current state of the stock.
- Korea is experiencing the similar situation to Japan, where bigger and a larger number of PBF tuna are migrating into the Korean sea areas, especially to its territorial waters.
- Although being the smallest harvester in the WCPFC Area with great margins of difference from large catchers, Korea has been implementing measures in earnest to ensure the sustainable management of Pacific Bluefin Tuna, such as limiting the numbers of vessels and implementing catch limits.
- At the outset, Korea’s catch limits were set solely based on the historical catch which came from the period when things have significantly different, when the catches were mostly bycatch—this means Korea did not even contribute to the near collapse of the PBF resources in the first place.
- Korea could have argued for an exemption as a bycatching nation, but joined the management scheme and agreed to cut its already significantly small catch into half to contribute to the rebuilding of the stocks.
- Korea could have argued for an increase to level the playing field, but withheld its interest to put the rebuilding and conservation needs first.
- However, now that the stocks are showing evident signs of recovery, Korea would like to take this opportunity to make its case.
- In recent years, Korea has had a lot of issues with controlling the significant inflow of large PBF into set nets of subsistence fishers, which we strongly believe calls for a reasonable

increase of Korea's catch limits as the current level has inherent limitations to effective management and data collection.

- As a coastal state, Korea has a legitimate interest in the management of Pacific Bluefin Tuna, and it is important to ensure that the rights of coastal states are respected in the management of shared fish stocks, particularly taking into account the changes in the migratory patterns of the fish. As far as the management of Pacific Bluefin tuna is concerned, we are under the impression that the historical and current CMM on PBF have not been so successful in keeping the right balance between the rights of coastal states and their duties to cooperate internationally to conserve the fish stock. Having a nearly zero initial catch limit for large Pacific Bluefin tuna just because there is no historical catch record does not make any sense when considering the rights of coastal states.

Having said so, we look forward to having more substantial discussions on catch limit next year in light of this paper from Japan and the result of next stock assessment.

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA
EIGHTH SESSION (JWG-08)**

Fukuoka, Japan
3 – 5 July 2023

ISC'S PROJECTION SCENARIOS REQUESTED BY THE JWG08

JWG8 requests the ISC perform projections on the following scenarios in the 2024 assessment:

1. Maintaining the current CMM
2. Maintaining the current CMM assuming maximum transfers utilizing the conversion factor
3. No fishing allowed
4. Four scenarios as described below that result in the stock maintained above 20%SSB₀ with a probability of 60%.
 - A scenario where increases are proportional between WCPO small/large fish catch limit and EPO catch limits
 - A scenario where increases are proportional between WCPO large fish catch limit and EPO catch limit
 - Scenarios of WCPO small fish catch limit increase by 20% and 30% respectively, while maintaining the proportion between WCPO total (small/large) catch limit and EPO catch limit
5. At least two scenarios that will result in each of 70:30 and 80:20 WCPO:EPO fishery impact by 2034 that maintain the stock above the second rebuilding target. The exact % increase can be determined by the ISC to meet the each of 70:30 and 80:20 fishery impact.
 - A scenario where increases are proportional for WCPO large and small fish
 - A scenario where increases are higher for WCPO large fish as compared to small fish.

Additionally, JWG8 has the following requests for ISC related to projections:

1. Once there is confirmation of meeting the second rebuilding target, the ISC shall recommend and provide information on the appropriate recruitment scenario(s) for use in the above projections.
2. Include in the projections results table a metric that calculates the probability of overfishing compared to candidate target reference points.

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA
EIGHTH SESSION (JWG-08)**

Fukuoka, Japan
3 – 5 July 2023

CHAIR'S SUMMARY OF THE 4TH CDS TECHNICAL MEETING

1. OPENING OF MEETING

1.1 Welcome

1. Mr. Shingo Ota, Chair of the CDS Working Group, opened the meeting and welcomed the participants.

1.2 Selection of rapporteur

2. Mr. Jacques Chaumont of Japan was appointed the rapporteur for the meeting.

1.3 Adoption of the agenda

3. The provisional agenda was adopted without any change (Appendix 1).

1.4 Meeting arrangements

4. The Chair explained the meeting arrangements.

2. DEVELOPMENT OF A CATCH DOCUMENTATION SCHEME FOR PACIFIC BLUEFIN TUNA

2.1 Review of the 3rd CDS Technical Meeting and intersessional work

5. The Chair briefly reviewed the results of the 3rd CDS Technical Meeting and intersessional work.

2.2 Budgetary and administrative consideration

6. Japan presented the options for budgetary and administrative considerations for the development of the ePBCD system as described in the paper IATTC-NC-CDS04-2023/02. Japan also presented screenshots from the CCSBT e-CDS (eSBT) trial system. The meeting participants concluded the following.

(1) Basis of the system development

The participants tentatively agreed on option (b) to use resources from the CCSBT e-CDS as a basis for development, and potentially draw inspiration or elements from the ICCAT eBCD as described in option (a).

- (2) Location of the system

The participants agreed to make use of a cloud-based system.

- (3) Use of an external company in development and maintenance of the system

The participants agreed to pursue option (a) of contracting an external company for the development and maintenance of the ePBCD system with general preference for the one for the CCSBT e-CDS, considering option (b) of hiring a specialist officer within the Secretariat if there is an expansion in the scope of the system (i.e., species coverage) in the future.

- (4) Demarcation of responsibility between the IATTC and WCPFC Secretariats in the operational work for the development and maintenance of the system

The participants agreed to generally support option (a) of having both the IATTC and WCPFC Secretariats take on responsibilities on an equal basis, acknowledging the need for further discussion to materialize demarcations of responsibility such as management of the system based on the area of the catch.

- (5) Cost Sharing between the IATTC and WCPFC and/or among CPCs of each RFMO

The participants agreed to further consider the possible formula to calculate contributions between the WCPFC and IATTC, and members within each RFMO.

7. **The participants also agreed to request both Secretariats to review the discussion and results of this meeting and provide their questions, comments, and concerns to the small working group.**

8. Japan requested that the Chair send a formal letter to the CCSBT about the potential future use of the e-CDS to aid in development of the e-PBCD system, and the Chair agreed to do so.

2.3 Discussion on the draft CMM

9. The meeting participants requested that Korea produce a paper, based on the past document, on elements to be included in the CMM, and submit it to the small working group for further discussion.

3. NEXT MEETING

10. The participants recommended convening a virtual meeting of the small working group, ahead of the next CDS Technical Meeting, which should be held in-person and in conjunction with the next Joint Working Group Meeting.

4. OTHER BUSINESS

11. No other business was raised.

5. REPORT TO THE JOINT WG

12. The Chair will provide his summary of the CDS technical meeting to the Joint IATTC-WCPFC NC Working Group.

6. CLOSE OF THE MEETING

13. The meeting was closed at 11:59 am, Japan Standard Time.

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA
EIGHTH SESSION (JWG-08)**

Fukuoka, Japan
3 – 5 July 2023

**CANDIDATE OPERATIONAL MANAGEMENT OBJECTIVES AND
PERFORMANCE INDICATORS FOR PACIFIC BLUEFIN TUNA**

Category	Operational Management Objective	Performance Indicator
Safety	There should be a less than 20% ⁴ probability of the stock falling below the LRP	<ul style="list-style-type: none"> • Probability that $SSB < LRP$ in any given year of the evaluation period
Status	To maintain fishing mortality at or below F_{Target} with at least 50% probability	<ul style="list-style-type: none"> • Probability that $F \leq F_{Target}$ in any given year of the evaluation period • Probability that SSB is below the equivalent biomass depletion levels associated with the candidates for F_{Target}
Stability	To limit changes in overall catch limits between management periods to no more than 25%, unless the ISC has assessed that the stock is below the LRP ⁵	<ul style="list-style-type: none"> • Percent change upwards in catches between management periods excluding periods when $SSB < LRP$ • Percent change downwards in catches between management periods excluding periods when $SSB < LRP$
Yield	Maintain an equitable balance in proportional fishery impact between the WCPO and EPO	<ul style="list-style-type: none"> • Median fishery impact (in %) on SSB in the terminal year of the evaluation period by fishery and by WCPO fisheries and EPO fisheries
	To maximize yield over the medium (5-10 years) and long (10-30 years) terms, as well as average annual yield from the fishery.	<ul style="list-style-type: none"> • Expected annual yield over years 5-10 of the evaluation period, by fishery. • Expected annual yield over years 10-30 of the evaluation period, by fishery. • Expected annual yield in any given year of the evaluation period, by fishery.
	To increase average annual catch in all fisheries across WCPO and EPO	

⁴ The acceptable levels of risk may vary depending on the LRP selected, but should be no greater than 20%.

⁵ The percent limits to changes in overall catch limits between management periods of this table are solely for the purpose of the MSE evaluation and do not prejudice potential catch limit changes before the long-term harvest strategy is adopted or potential catch limit changes based on the overall fishing intensity established by long-term harvest strategy.

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA
EIGHTH SESSION (JWG-08)**

Fukuoka, Japan
3 – 5 July 2023

CANDIDATE HCRs AND REFERENCE POINTS TO EVALUATE IN THE MSE

Candidate HCRs

The candidate HCR shapes are illustrated in Figures 1 and 2 where fishing mortality is controlled depending on stock status relative to the defined reference points.

For Figure 1, the F_{target} rate applies when the stock is larger or equal to the $SSB_{\text{threshold}}$, while F_{min} rate applies when the stock is at or smaller than SSB_{limit} and there is a linear transition in F for stock sizes between SSB_{limit} and $SSB_{\text{threshold}}$. F_{min} would be defined as an F rate that is less than the F rate corresponding to the F_{target} .

For Figure 2, the F_{target} rate applies when the stock is larger or equal to the $SSB_{\text{threshold}}$. When the stock is lower than the $SSB_{\text{threshold}}$, there is a linear transition in F between $SSB_{\text{threshold}}$ and the origin.

These HCRs shall be tested with a limit that constrains changes in TAC between consecutive management periods of no more than 25%. These HCRs shall also be tested with allocations tuned to reach the WCPO:EPO fishery impact ratio of 70:30 and 80:20.

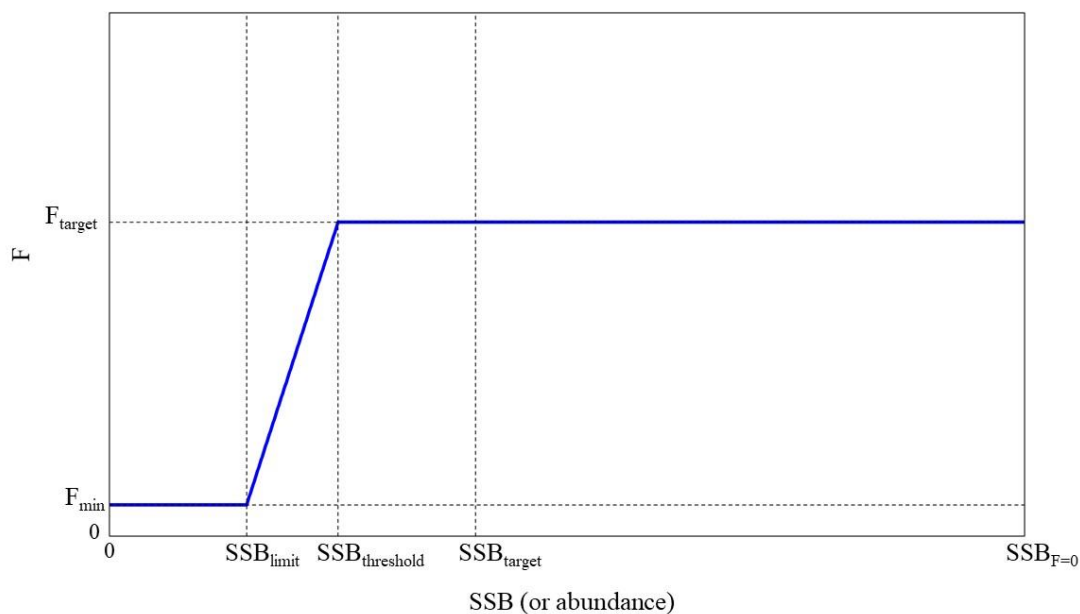


Figure 1. Candidate HCR shape 1

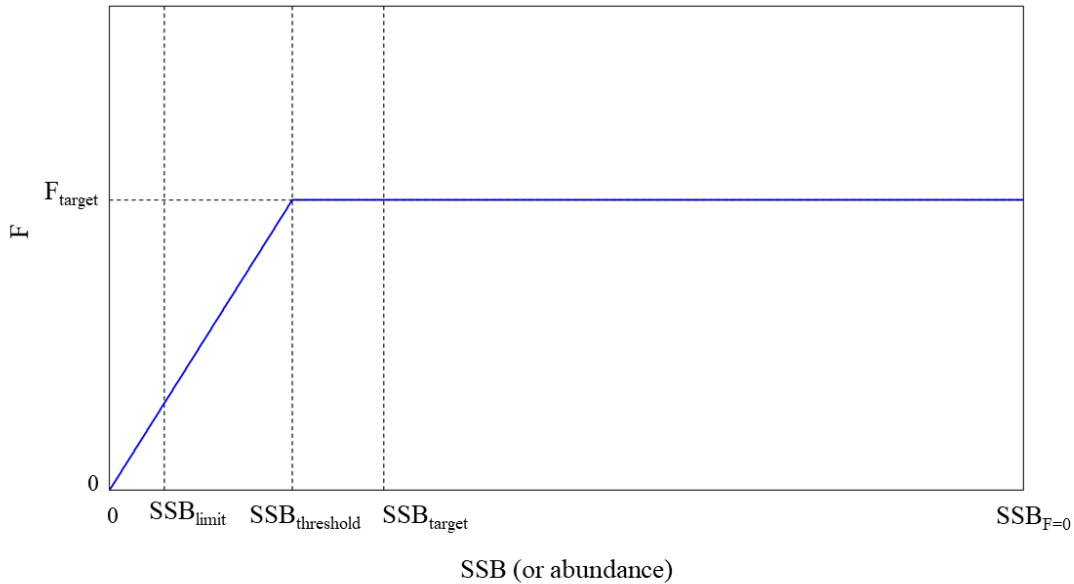


Figure 2. Candidate HCR shape 2.

Candidate HCRs and Reference Points to Evaluate in the MSE

HCR Number	HCR Shape	Fmin	LRP	ThRP	TRP
1	1	$F_{10\%F_{Target}}$	$15\%SSB_{F=0}$	$20\%SSB_{F=0}$	FSPR30%
2	1	$F_{10\%F_{Target}}$	$15\%SSB_{F=0}$	$25\%SSB_{F=0}$	FSPR30%
3	1	$F_{10\%F_{Target}}$	$15\%SSB_{F=0}$	$20\%SSB_{F=0}$	FSPR40%
4	1	$F_{10\%F_{Target}}$	$15\%SSB_{F=0}$	$25\%SSB_{F=0}$	FSPR40%
5	1	$F_{10\%F_{Target}}$	$20\%SSB_{F=0}$	$25\%SSB_{F=0}$	FSPR40%
6	1	FSPR70%	$10\%SSB_{F=0}$	$20\%SSB_{F=0}$	FSPR30%
7	1	FSPR50%	$10\%SSB_{F=0}$	$20\%SSB_{F=0}$	FSPR25%
8	1*	N/A*	Median SSB 1952-2014	$20\%SSB_{F=0}$	FSPR30%
9	2	N/A	Median SSB 1952-2014	$20\%SSB_{F=0}$	FSPR20%
10	2	N/A	Median SSB 1952-2014	$15\%SSB_{F=0}$	FSPR25%
11	1	$F_{5\%F_{Target}}$	$7.7\%SSB_{F=0}$	$15\%SSB_{F=0}$	FSPR30%
12	1	$F_{5\%F_{Target}}$	$7.7\%SSB_{F=0}$	$20\%SSB_{F=0}$	FSPR30%

* In this HCR, when %SSB $F=0$ is lower than ThRP ($20\%SSB_{F=0}$), fishing intensity will be controlled by the management measures that were taken for and succeeded in the recovery of the stock (i.e., WCPFC CMM2020-02 and IATTC Resolution C-18-01).

These new candidate HCRs and reference points replace those from the 2019 recommendation.

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA
EIGHTH SESSION (JWG-08)**

Fukuoka, Japan
3 – 5 July 2023

PACIFIC BLUEFIN TUNA INTERIM HARVEST STRATEGY

The following harvest control rules shall be applied based on the results of stock assessments and SSB projections to be conducted by the ISC during the period from the year in which the stock is projected to achieve the second rebuilding target of 20%SSB₀ to the year a long-term harvest strategy based on an MSE process is implemented.

- a. If the SSB projection indicates that SSB will be below 20%SSB₀ with a probability of 60%, management measures shall be modified to increase the SSB to at least 20%SSB₀ with 60% probability. For this purpose, the ISC is requested to provide information on possible management measures to achieve 60% that the stock is above 20%SSB₀ after 10 years of the latest stock assessment.
- b. If the SSB projection indicates that SSB will be greater than 20%SSB₀ with a probability of 60%, management measures should be adjusted so long as any changes maintain SSB greater than 20%SSB₀ with a probability of 60%. For this purpose, the ISC is requested to provide information on possible management under which the stock is maintained above 20%SSB₀ with a probability of 60%.
- c. Any adjustments to management measures shall be considered in cooperation between the two RFMOs taking into account historical and future projected proportional fishery impacts on SSB between fisheries in the EPO and fisheries in the WCPO. For this purpose, ISC is requested, to provide relevant information, including projected proportional fishery impact of potential management measures changes.
- d. This harvest control rule will be reviewed and modified, as necessary, if depletion estimates across the time-series have been adjusted due to changes in assumptions and/or settings of the stock assessment model.

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA
EIGHTH SESSION (JWG-08)**

Fukuoka, Japan
3 – 5 July 2023

**WORK PLAN FOR DEVELOPMENT OF A LONG-TERM HARVEST STRATEGY
FOR PBF (INCLUDING MSE)**

The following is a proposed work plan for developing a long-term Harvest Strategy (including MSE) for Pacific bluefin tuna:

2024 (JWG9):

- ISC to complete a benchmark assessment for PBF and JWG may expect an update on progress of MSE.
- If additional information is requested by the ISC from the JWG relevant to the MSE, the JWG should task its members to solicit input from its stakeholders and task itself to address this at JWG10 in 2025, as appropriate.
- JWG recommends new management measures based on Interim Harvest Strategy.

2025 (JWG10):

- ISC presents results from the MSE to JWG10 in 2025
- JWG recommends a final HS to the WCPFC and IATTC for adoption.