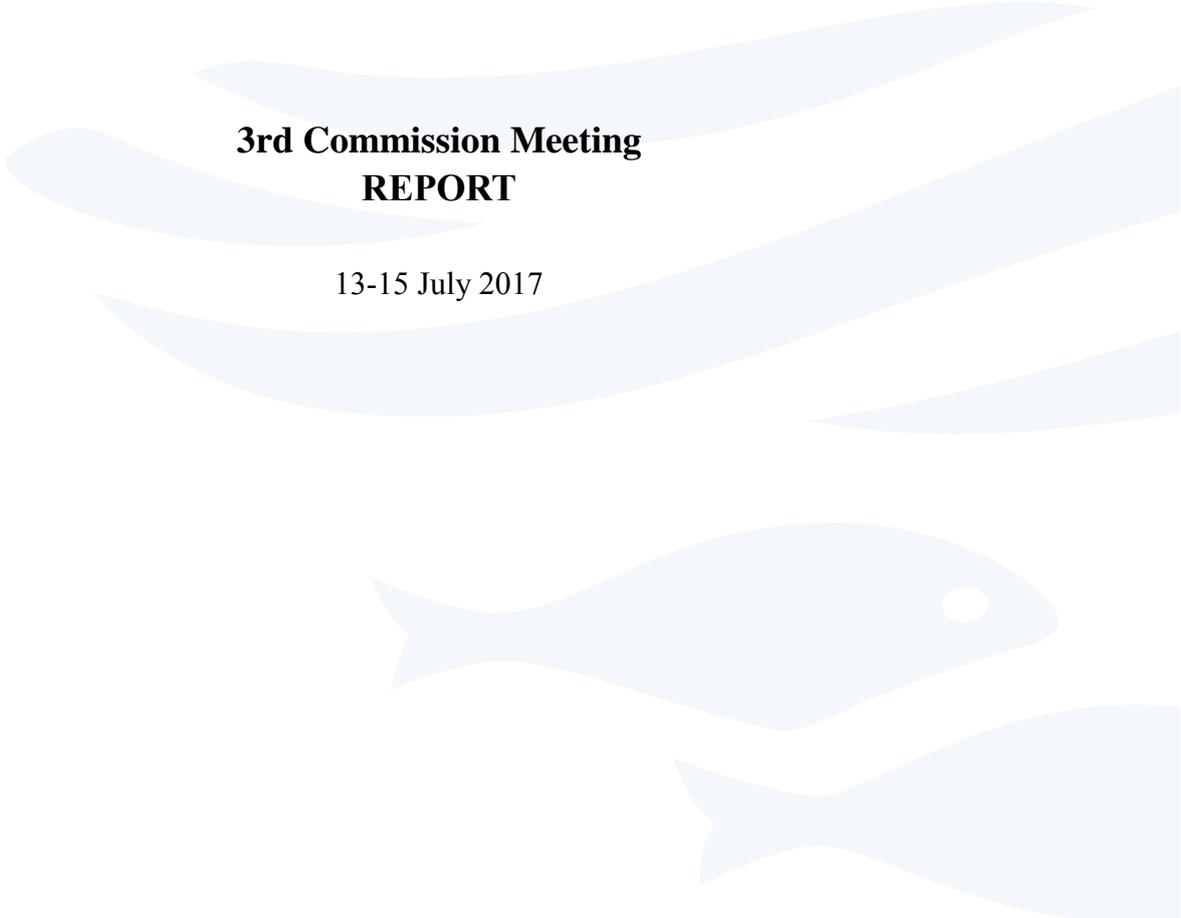




North Pacific Fisheries Commission

NPFC-2017-COM03-Final Report



3rd Commission Meeting REPORT

13-15 July 2017

August 2017

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**North Pacific Fisheries Commission
3rd Commission Meeting**

13-15 July 2017

Sapporo, Japan

REPORT

Agenda Item 1. Opening of Meeting

1. The 3rd Meeting of the North Pacific Fisheries Commission took place in Sapporo, Japan on 13-15 July 2017, and was attended by Members from Canada, China, Japan, the Republic of Korea, the Russian Federation, Chinese Taipei, the United States of America, and the Republic of Vanuatu. Ukraine, the North Pacific Anadromous Fish Commission (NPAFC), the North Pacific Marine Science Organization (PICES), and the Organization for Regional and Inter-regional Studies (ORIS) of Waseda University attended as observers. The meeting was opened by Mr. Kenji Kagawa (Japan), who served as the Commission Chair.

1.1 Welcome Address

2. Mr. Takashi Koya, Director-General, Resources Management Department, Fisheries Agency of Japan, welcomed the participants on behalf of the Government of Japan. Mr. Koya expressed his respect for the achievements of the North Pacific Fisheries Commission (NPFC) to date, including the adoption of several Conservation and Management Measures (CMMs) and the completion of the stock assessment for Pacific saury. Mr. Koya believed that the Members share a common recognition of the importance of fisheries management in the North Pacific Ocean and hoped that the Members will engage in constructive discussions. Finally, he expressed Japan's continued support and cooperation for the activities of the NPFC. (Annex A)
3. The United States expressed its pleasure at becoming a Member of the NPFC and its continued commitment to the goals and activities of the NPFC. The United States also voiced appreciation for Japan's efforts to support the NPFC and for hosting the 3rd meeting of the NPFC.
4. Vanuatu stated that it is an honor and privilege to become a Member of the NPFC and offered its continued support for upholding the objectives and principles of the NPFC.

Vanuatu also expressed its respect to Japan for hosting various meetings of the NPFC and its subsidiary bodies, including the 3rd meeting of the NPFC, as well as for hosting the NPFC Secretariat.

1.2 Adoption of Agenda

5. The agenda was adopted without revision (Annex B).

1.3 Meeting Arrangement

6. The Secretariat outlined the procedural matters for the holding of the meeting.

1.4 Appointment of Rapporteur

7. Mr. Alexander Meyer was appointed as the Rapporteur.

Agenda Item 2. Membership of the Commission

8. The Republic of Korea, as the Depositary of the NPFC, provided an update on the status of the Convention. Since the previous NPFC meeting, the United States of America and the Republic of Vanuatu have ratified the Convention, bringing the total number of Members to eight.

Agenda Item 3. Report from the Secretariat

9. The Secretariat presented an annual report on the Commission's activities for the intersessional period between the second Commission Meeting of August 2016 and this current Commission meeting, which was highlighted by activities to facilitate the implementation of the CMMs adopted by the Commission at its 2nd meeting (NPFC-2017-AR).
10. Japan reported that the Japanese Diet has approved the Headquarter Agreement recognizing the special status of the NPFC, and it became effective on 2 June 2017.

Agenda Item 4. Report of the 2nd Scientific Committee Meeting

11. The Chair of the Scientific Committee (SC), Dr. Joji Morishita (Japan), summarized the outcomes of the 2nd SC meeting (Annex E) for discussion by the Commission.
12. The Commission agreed to hold further discussions on the future steps for management measures for North Pacific armorhead under Agenda Item 7.
13. Russia requested that the Commission task the SC and the Small Scientific Committee on Pacific Saury (SSC PS) to develop a template for collecting data on Pacific saury bycatch

and discard for the possible inclusion of these data in the stock assessment.

14. The Commission agreed to hold further discussions on the future steps for management measures for Pacific saury under Agenda Item 7.
15. The Commission determined that the recommendation that the Commission bear the travel costs for 1 or 2 participants from each Member to attend the TWG PSSA (paragraph 28, subparagraph k) does not comply with the Convention (Article 12, paragraph 1), as discussed at the Finance and Administration Committee's 1st meeting and thus these financial commitments must be withdrawn from budget plans for any meetings of Members from the Commission.
16. China noted that, according to the Secretariat's report, currently, only China and Russia have submitted transshipment data to the Commission. China encouraged any other Members conducting transshipment activities to also submit the related data to the Commission.
17. Russia informed the Commission that its crab fishery activity would be a resumption of previous activity, in compliance with CMM 2016-05, and that it will provide the necessary data related to this fishery to the Commission.
18. The Commission adopted the report and the recommendations of the SC, excluding the recommendation in paragraph 28, subparagraph k regarding travel costs for the TWG PSSA.
19. Japan presented the draft TOR for the TWG CM (NPFC-2017-COM03-WP04). Russia suggested to use the draft TOR as the basic working document for the upcoming TWG CM in December 2017. The Commission requested that the TWG CM further refine the draft TOR intersessionally (Annex F) and finalize it at the beginning of the next TWG CM meeting.
20. The Secretariat presented the draft TOR for the Joint NPFC-PICES Group on Scientific Cooperation in the North Pacific Ocean (NPFC-2017-COM03-WP07). The Commission reviewed and adopted the draft TOR (Annex G).
21. Japan presented an information paper for the adaptive management of the stock of North Pacific armorhead in the southern Emperor Seamounts (NPFC-2017-COM03-IP01).

Agenda Item 5. Report of the 2nd Technical and Compliance Committee Meeting

22. The Chair of the Technical and Compliance Committee (TCC), Dr. Robert Day (Canada), summarized the outcomes of the 2nd TCC meeting (NPFC-2017-TCC02 Final Report) for discussion by the Commission.
23. Regarding the priority species for the TCC work plan, the Commission discussed priority species. The Commission noted that a list of priority species was prepared by the SC, and that this list of priority species is included in the TCC Framework, both of which were adopted at the 2nd meeting of the Commission. Japan noted that there is a need for a clear understanding of how to reflect the priority species in the TCC work plan.
24. The Commission adopted the report and the recommendations of the TCC (Annex H).
25. Japan reported on vessels sighted in the Convention Area by Japan's fisheries inspection vessels. The total number of the vessels observed increased from 192 in 2015 to 288 in 2016, which includes 67 suspected IUU vessels.

Agenda Item 6. Report of the 1st Finance and Administration Committee Meeting

26. The Chair of the Finance and Administration Committee (FAC), Mr. Kenji Kagawa (Japan), summarized the outcomes of the 1st FAC meeting (NPFC-2017-FAC01 Final Report) for discussion by the Commission.
27. The Members discussed the funding mechanism for the Special Projects Fund. The Members agreed to establish the Special Projects Fund through a transfer of funds from the Working Capital Fund as necessary for identified special projects, utilizing paragraph 24 of the NPFC financial regulations.
28. The Commission adopted the report and the recommendations of the FAC (Annex I).

Agenda Item 7. Conservation and Management Measures

7.1 Review of the CMMs and the recommendations by the Committees

29. Based on a review of the CMMs and the recommendations by the SC and TCC, the Commission adopted the revised CMM 2016-02 to Establish a List of Vessels Presumed to Have Carried out IUU Activities in the NPFC Convention Area (Annex J), the revised CMM 2016-05 for Bottom Fisheries and Protection of VMEs in the Northwestern Pacific Ocean (Annex K), the revised CMM 2016-06 for Bottom Fisheries and Protection of VMEs in the Northeastern Pacific Ocean (Annex L), and the NPFC IUU Vessel List (Annex M). The Commission also provisionally adopted the new CMM 2017-09 on High Seas Boarding and Inspection Procedures (Annex N), noting the reservation of Russia.

The measure will be adopted if no objection is made during the approval of the record per Rule 8.2 of the NPFC Rules of Procedure.

30. Reiterating the commitment expressed at TCC02, the Members agreed to strengthen cooperation, jointly and/or bilaterally, to terminate IUU issues in the Convention Area.

7.2 Amendments/addition of CMMs

31. Japan proposed a new CMM for Pacific Saury (NPFC-2017-COM03-WP05). Following a Russian proposal, the Members made revisions to the existing CMM. The Members reviewed and revised CMM 15-02 (Annex O).
32. Japan presented its proposed revisions to CMM 2016-07 for Chub Mackerel (NPFC-2017-COM03-WP06). Following a Russian proposal, the Members made revisions to the existing CMM. The Members reviewed and revised the CMM (Annex P). Russia suggested to expedite the process of stock assessment for chub mackerel.
33. Japan noted that the revised CMM on Pacific saury shall be effective for one year, and suggested that the Commission review and discuss the CMM, including the catch limits, at its next meeting. Russia supported the necessity to review and discuss the CMMs at the next Commission meeting.
34. China expressed its views on this matter that catch limits should be based on the advice and recommendations from the SC based on the best available science. China also pointed out that such catch limit measures are not appropriate for pelagic species with short-term life spans and high stock fluctuation, whose stock-recruitment relationship is very difficult to estimate, such as Pacific saury.
35. The United States presented its views on the management of North Pacific armorhead and splendid alfonsino, and a proposal to revise CMM 2016-05 to include a moratorium on fishing for these species within the Convention Area until an adaptive management plan can be implemented (NPFC-2017-COM03-IP04). Some Members supported the proposal while others expressed concern. Russia suggested thorough consideration of the essence of this document intersessionally to be further considered by the Commission's subsidiary bodies.

Agenda Item 8. Adoption of Budget

8.1 Proposed Budget for 2018

36. The Commission adopted the adjusted budget for 2017 and the proposed budget for 2018

as submitted by the Finance and Administration Committee (NPFC-2017-FAC01 Final Report).

8.2 Indicative Budget for 2019 and 2020

37. The Commission considered the indicative budget for the years 2019 and 2020 as submitted by the Finance and Administration Committee (NPFC-2017-FAC01 Final Report).

Agenda Item 9. Data Management and Security

9.1 Progress in development of NPFC data management system

38. Eighty Options reported on the progress in developing the NPFC data management system (NPFC-2017-COM03-WP09). The following activities have been completed: NPFC initial website with basic meeting management and vessel registers, data requirements analysis, database development plan report, vessel register enhancement prototyping, and meeting management enhancement prototyping.
39. The Members requested that, when developing the IUU Vessel List management system, the Secretariat address the concerns discussed at the 2nd TCC meeting relating to the process for including vessels presumed to be conducting IUU fisheries on the draft IUU Vessel List.
40. The Members noted that under the new vessel register system, Members will be able to update the register directly, at any time. The Members requested that the Secretariat establish a process for ensuring that the registration of any vessels on the new system are in compliance with existing CMMs.

9.2 NPFC Information Security Guidelines

41. The United States presented the proposed Interim Guidance for Management of Scientific Data Used in Stock Assessments (NPFC-2017-COM03-WP10). The Members revised and adopted the proposal (Annex Q).
42. Canada suggested that it will work with the United States on the Information Security Guidelines with a view of circulating them for further development by Members during the intersessional period.

Agenda Item 10. Cooperation with Other Organizations

43. The Secretariat presented suggestions regarding cooperation with other organizations (NPFC-2017-COM3-WP01) for discussion by the Commission. The Members agreed to enhance cooperation with other organizations and noted that such cooperation should

complement the objectives and activities of the NPFC.

44. Russia suggested that the Members consider the participation of the NPFC in the NPAFC multinational survey plans with the purpose of facilitating the North Pacific armorhead recruitment assessment.
45. The Secretariat presented a request from PICES for the NPFC to co-sponsor an international symposium on Pacific transitional areas (NPFC-2017-COM03-OP01). The Members supported the request, and agreed to have the Secretariat attend and NPFC be a co-sponsor to the amount of 500,000 JPY.
46. The Members agreed that the Secretariat invite PICES to co-sponsor the NPFC/FAO VME workshop.

Agenda Item 11. Other Matters

11.1 Observer status (Rules of Procedure 9)

47. The Secretariat presented a proposal on the status of observers for discussion by the Commission (NPFC-2017-COM03-WP02). The Members adopted the proposal and agreed not to apply a fee to observers.

11.2 Cooperating Non-Contracting Parties (CNCPs)

48. The Secretariat presented a proposal on the status of Cooperating Non-Contracting Parties (CNCPs) as revised by the Finance and Administration Committee (NPFC-2017-COM03-WP03 (Rev. 2)). The Members adopted the proposal.

11.3 Others

49. Ukraine informed the Commission of its intention to conduct fishing activities, in particular crab, squid and finfish fisheries, in the Convention Area and proposed its commitment to cooperate with the NPFC as a CNCP. The Commission requested that the Secretariat coordinate with Ukraine to assist their engagement with the NPFC.
50. The Secretariat presented the proposed policy for NPFC meetings (NPFC-2017-COM03-WP08). The Members considered the proposal and requested the Secretariat to further refine it intersessionally, in consultation with Members.
51. In accordance with the final reports of SC02 and TCC02, the Commission recognized the Russian crab fishery in the Convention Area as a resumption of previous activity.

Agenda Item 12. Next Meeting

12.1 Selection of next Chair and Vice-Chair

52. The Commission elected Mr. Kenji Kagawa (Japan) to continue to serve as the Chair of the Commission and Mr. Aleksei Baitaliuk (Russia) to continue to serve as the Vice-Chair of the Commission.

12.2 Date and place of the next meeting

53. The following schedule and venues were recommended:
- a. TCC: In Japan, from 28 to 30 June 2018;
 - b. FAC and Commission: In Japan, from 2-5 July 2018; and
 - c. SC and SSCs: In Japan, from 9 to 20 April 2018.

Agenda Item 13. Adoption of the Report

54. The report was adopted by consensus.

Agenda Item 14. Close of the Meeting

55. The Commission meeting closed at 18:13 on 15 July 2017.

Annexes

Annex A – Opening Remarks

Annex B – Agenda

Annex C – List of Documents

Annex D – List of Participants

Annex E – Report of the 2nd Scientific Committee Meeting

Annex F – Draft of Terms of Reference for the Technical Working Group on the Chub Mackerel Stock Assessment (TWG CM), draft 2017-2021 Work Plan and draft Data List for stock assessments

Annex G – Terms of Reference for the Joint NPFC-PICES Group on Scientific Cooperation in the North Pacific Ocean

Annex H – Report of the 2nd Technical and Compliance Committee meeting

Annex I – Report of the 1st Finance and Administration Committee meeting

(including attached tables of NPFC expenses and Members contributions in the fiscal years 2017 and 2018)

Annex J – CMM 2017-02 to Establish a List of Vessels Presumed to Have Carried out IUU Fishing Activities in the Convention Area

Annex K – CMM 2017-05 for Bottom Fisheries and Protection of VMEs in the Northwestern Pacific Ocean

Annex L – CMM 2017-06 for Bottom Fisheries and Protection of VMEs in the Northeastern Pacific

Ocean

Annex M – NPFC IUU Vessel List

Annex N – CMM 2017-09 for High Seas Boarding and Inspection Procedures

Annex O – CMM 2017-08 for Pacific Saury

Annex P – CMM 2017-07 for Chub Mackerel

Annex Q – Interim Guidance for Management of Scientific Data Used in Stock Assessments

Annex A



FISHERIES AGENCY

MINISTRY OF AGRICULTURE, FORESTRY AND FISHERIES, GOVERNMENT OF JAPAN

2-1, 1-Chome, Kasumigaseki, Chiyoda-ku, Tokyo 100-8907 Japan TEL: +81-3-3502-8111 EXT: 6747

NPFC 3rd Commission Meeting
Sapporo, Japan
13-15 July 2017

OPENING REMARKS

BY

TAKASHI KOYA

DIRECTOR-GENERAL, RESOURCES MANAGEMENT DEPARTMENT

Good Morning. I am Takashi Koya, Director-General, Resources Management Department of the Fisheries Agency of Japan. I am pleased to welcome you all in Japan, following the 2nd Commission Meeting last year. Representing the host country, I would like to send you my warmest welcome to the 3rd Commission Meeting of the NPFC.

It is of great importance that the NPFC meeting is held here in Hokkaido, the most major area of fishing, which targets fish species including Pacific saury, and Japanese flying squid. I hope you will enjoy the delicious seafood of Hokkaido during your stay here.

While the NPFC was established in 2015 and is one of the newest RFMOs, it has made significant progress, as a responsible RFMO, as it adopted at the last year's meeting the Conservation and Management Measure on chub mackerel and the IUU vessel list.

I would like to express my sincere appreciation to Members' efforts and achievements.

As for Pacific saury, which is one of the major target species here in Hokkaido, the stock assessment has been completed due to tremendous efforts by the Scientific Committee and the Small Scientific Committee on Pacific saury. I would like to reiterate that all Members confirmed last year that they will not substantially increase the number of vessels which target Pacific saury.

Pacific saury is one of the most important fish species in Japan that has been incorporated into the food culture, and has been properly managed under the Japanese TAC scheme for more than twenty years.

However, catch amounts by the Japanese vessels have been declining in recent years, and the NPFC

increasingly draws attention not only from Japanese fishermen but also from consumers and media.

In this Commission Meeting, NPFC is asked to take appropriate measures following the stock assessment by the SC. Japan has submitted a proposed Conservation and Management Measure for Pacific saury, which proposes to introduce catch limits and to refrain from expansion of the number of fishing vessels.

In addition to Pacific saury, most Members expressed their strong concern at the last year's meeting that a rapid increase in chub mackerel catch would have adverse impact on the recovery of its stock.

Life cycle of chub mackerel including migration and spawning is almost completed within Japanese coastal waters, and part of the migration could extend to the high seas area and Russian coastal waters. Chub mackerel, as well as Pacific saury, has been strictly managed under the Japanese TAC scheme for more than twenty years.

At the last year's meeting, the NPFC adopted the Conservation and Management Measure to complete the stock assessment as soon as practicable and to encourage to refrain from expansion of the number of fishing vessels. Nevertheless, the catch of chub mackerel in the Convention Area has been expanding.

Japan has submitted a proposal to amend the current Conservation and Management Measure for chub mackerel that the Members refrain from expansion of the number of fishing vessels because Japan is of the view that the Members should not expand fishing effort on chub mackerel without prior assessment.

As Japan reported at the last year's meeting, there exists a number of suspected IUU vessels in the Convention Area, and these vessels significantly undermine the Members' effort towards sustainable use of fisheries resources.

Following the adoption of the Conservation and Management Measure to establish IUU vessel list last year, Japan has submitted a list of presumed IUU vessels based on sighting information by our fishery inspection vessels during last year with an aim to adopt the NPFC's IUU vessel list. Since combating IUU fishing is recognized as a priority issue by the international community, whether the NPFC can take an effective action against IUU vessels will attract global attention.

Eliminating IUU fishing has become recognized as a necessary step to achieve sustainable use of fish stocks by the international community. Japan continues to strengthen its commitment to counter IUU fishing measures, including the ratification of FAO Port State Measures Agreement this year.

This meeting is the best opportunity for the NPFC to show its strong will to take strict actions against IUU fishing which is our common enemy.

Japan's proposals reflect our strong concerns over the fisheries resources management in the North Pacific Ocean. I believe all of the Members share this concern. Japan strongly hopes that the Members commit to constructive discussion throughout the meeting so that the NPFC is able to make meaningful progress in Hokkaido where a number of fishermen watch over the discussion.

Japan hosted a number of NPFC meetings, including the 1st and 2nd meeting of the Commission. Japan also has substantially contributed to the NPFC work, including conducting scientific research using research vessels.

Japan will provide further supports as a Member of the Commission and the host country of the Secretariat, for timely and effective fisheries resources management by the NPFC.

I would like to conclude my remarks by wishing Members work together to solve difficulties we may face, and to achieve a significant progress at this meeting.

Thank you.

Annex B

**North Pacific Fisheries Commission
3rd Commission Meeting
13-15 July 2017
Sapporo, Japan**

Agenda

Agenda Item 1. Opening of Meeting

1.1 Welcome Address

1.2 Adoption of Agenda

1.3 Meeting Arrangement

1.4 Appointment of Rapporteur

Agenda Item 2. Membership of the Commission

Agenda Item 3. Report from the Secretariat

Agenda Item 4. Report of the 2nd Scientific Committee Meeting

Agenda Item 5. Report of the 2nd Technical and Compliance Committee Meeting

Agenda Item 6. Report of the 1st Finance and Administration Committee Meeting

Agenda Item 7. Conservation and Management Measures

7.1 Review of the CMMs and the Recommendations by the Committees

7.2 Amendments/Addition of CMMs

Agenda Item 8. Adoption of Budget

8.1 Proposed Budget for 2018

8.2 Indicative Budget for 2019 and 2020

Agenda Item 9. Data Management and Security

9.1 Progress in Development of NPFC Data Management System

9.2 NPFC Information Security Guidelines

Agenda Item 10. Cooperation with other Organizations

Agenda Item 11. Other Matters

11.1 Observer Status (Rules of Procedure 9)

11.2 Cooperating Non-Contracting Parties (CNCs)

11.3 Others

Agenda Item 12. Next Meeting

12.1 Selection of Next Chair and Vice-Chair

12.2 Date and Place of the Next Meeting

Agenda Item 13. Adoption of the Report

Agenda Item 14. Close of the Meeting

Annex C

**North Pacific Fisheries Commission
3rd Commission Meeting
13-15 July 2017, Sapporo, Japan**

List of Documents

MEETING INFORMATION PAPERS

Symbol	Title
NPFC-2017-MIP01	Meeting notice and information
NPFC-2017-COM03-MIP02 (Rev.1)	Provisional agenda
NPFC-2017- COM03-MIP03	Provisional annotated agenda
NPFC-2017- COM03-MIP04 (Rev. 5)	Indicative schedule
NPFC-2017- COM03-MIP05 (Rev.1)	Provisional List of Documents

REFERENCE DOCUMENTS - NPFC Website

Symbol	Title
	Convention on the Conservation and Management of High Seas Fisheries Resources in the North Pacific Ocean
	NPFC Rules of Procedure
	Compendium of Active Conservation and Management Measures for the NPFC

WORKING PAPERS

Symbol	Title
NPFC-2017-AR	Secretariat Annual Report
NPFC-2017-SC02	Final Report
NPFC-2017-TCC02	Final Report
NPFC-2017-FAC01	Final Report
NPFC-2017-COM03-WP01	Cooperation with Other Organizations
NPFC-2017-COM03-WP02	Observers to Commission Meetings
NPFC-2017-COM03-WP03 (Rev.2)	Cooperating Non-Contracting Parties
NPFC-2017-COM03-WP04	Terms of Reference Stock Assessment for Chub Mackerel

NPFC-2017-COM03-WP05 (Rev. 5)	CMM for Pacific Saury
NPFC-2017-COM03-WP06 (Rev. 5)	CMM for Chub Mackerel
NPFC-2017-COM03-WP07	Terms of Reference for Joint NPFC-PICES Group
NPFC-2017-COM03-WP08	Policy for NPFC Meetings
NPFC-2017-COM03-WP09	NPFC Data Management System Development
NPFC-2017-COM03-WP10 (Rev. 1)	Interim Guidance for Management of Scientific Data Used in Stock Assessments

INFORMATION PAPERS (IP)

Symbol	Title
NPFC-2017-COM03-IP01	Adaptive Management - NPA
NPFC-2017-COM03-IP02	Meeting Management
NPFC-2017-COM03-IP03	Other RFMO Meetings
NPFC-2017-COM03-IP04	Views of the United States on the Management of North Pacific Armorhead and Splendid Alfonsino

VESSEL REGISTRATIONS (VR) – NPFC Website

Symbol	Title
NPFC-2017-TCC02-VR	CANADA
NPFC-2017-TCC02-VR	PEOPLE’S REPUBLIC OF CHINA
NPFC-2017-TCC02-VR	JAPAN
NPFC-2017-TCC02-VR	REPUBLIC OF KOREA
NPFC-2017-TCC02-VR	RUSSIAN FEDERATION
NPFC-2017-TCC02-VR	CHINESE TAIPEI
NPFC-2017-TCC02-VR	VANUATU

ANNUAL REPORTS (AR) - NPFC Website

Symbol	Title
NPFC-2017-AR Canada	Annual Report of Canada to the North Pacific Fisheries Commission
NPFC-2017-AR China	China’s Annual Report for 2016 to the Secretariat of the North Pacific Fisheries Commission
NPFC-2017-AR Japan (Rev. 1)	Japan’s Annual Report for 2016 to the North

	Pacific Fisheries Commission
NPFC-2017-AR Korea	Republic of Korea Annual Report for 2016 to the North Pacific Fisheries Commission
NPFC-2017-AR Russia	Russia Annual Report for 2016 to the North Pacific Fisheries Commission
NPFC-2017-AR Chinese Taipei	Chinese Taipei's Annual Report for 2016 to the North Pacific Fisheries Commission
NPFC-2017-AR USA	2016 Annual Report of the United States of America to the North Pacific Fisheries Commission
NPFC-2017-AR-Annual Summary Footprint - Bottom Fisheries	2016 – Annual Summary Footprint For Bottom Fisheries In The North Pacific Fisheries Commission Area Of Competence
NPFC-2017-AR-Annual Summary Table - Pacific Saury	2016 – Annual Summary Footprint For Pacific Saury In The North Pacific Fisheries Commission Area Of Competence
NPFC-2017-AR-Annual Summary Table - Squid	2016 – Annual Summary Footprint For Squids In The North Pacific Fisheries Commission Area Of Competence

NGO and Others

Symbol	Organization & Title
NPFC-2017-COM03-OP01	Request to support a PICES symposium on Pacific Transitional Areas

Annex D

**NPFC 3rd Commission Meeting
List of Participants**

CHAIR

Kenji KAGAWA
NPFC Secretariat
+81-3-5225-1161
kagawa@kaiseiken.or.jp

CANADA

Robert DAY
Head of Delegation
Fisheries and Oceans Canada
+1-613-993-7979
robert.day@dfo-mpo.gc.ca

Judy DWYER
Alternate Representative
Fisheries and Oceans Canada
+1-613-993-3371
judy.dwyer@dfo-mpo.gc.ca

Mike CARLSON
Adviser
Fisheries and Oceans Canada
+1-604-666-0604
mike.carlson@dfo-mpo.gc.ca

Seth REINHART
Adviser
Fisheries and Oceans Canada
+1-613-993-7968
seth.reinhart@dfo-mpo.gc.ca

CHINA

Liling ZHAO
Head of Delegation
Ministry of Agriculture
+86-10-59192966
bofdwf@agri.gov.cn

Xiaoning YANG
Alternate Representative
Ministry of Foreign Affairs
+86-10-65963292
yang_xiaoning@mfa.gov.cn

Siquan TIAN
Alternate Representative
Shanghai Ocean University
+86-15692165377
sqtian@shou.edu.cn

Guanbao CHENG
Adviser
China Coast Guard
xuqiang19861002@126.com

Lianyong FANG
Adviser
China Oversea Fisheries Association
+86-10-65853488
tomfang71@hotmail.com

Dingjun GUO
Adviser
Fujian Wanton Overseas Fisheries Co., LTD
tomfang71@hotmail.com

Chuanxiang HUA
Adviser
Shanghai Ocean University
cxhua@shou.edu.cn

Jian WANG
Adviser
Ministry of Foreign Affairs
+86-10-65963724
wangjiantom@yahoo.com

Qiang XU
Adviser
China Coast Guard
xuqiang19861002@126.com

Wenquan ZHOU
Adviser
Jinxin Overseas Fisheries Co., LTD
admin1@tuna.org.cn

JAPAN

Takashi KOYA
Head of Delegation
Resources Management Department
Fisheries Agency
+81-3-3591-1086
takashi_koya180@maff.go.jp

Kazunari TANAKA
Alternate Representative
Fishery Division, Economic Affairs Bureau,
Ministry of Foreign Affairs
+81-3-5501-8338
kazunari.tanaka@mofa.go.jp

Kengo TANAKA
Alternate Representative
Resources Management Department
Fisheries Agency
+81-3-3591-1086
kengo_tanaka880@maff.go.jp

Yujiro AKATSUKA
Adviser
Resources Management Division
Fisheries Agency
+81-3-3502-8437
yujiro_akatsuka530@maff.go.jp

Naohiko AKIMOTO
Adviser
Japan Overseas Fishing Association
+81-3-3291-8508
naohiko@sol.dti.ne.jp

Hisashi ENDO
Adviser
Japan Fisheries Research and Education
Agency
+81-45-227-2602
hisashiendo@affrc.go.jp

Toyoaki IRIE
Adviser
Fishery Division, Economic Affairs Bureau,
Ministry of Foreign Affairs
+81-3-5501-8338
toyoaki.irie@mofa.go.jp

Koichi ISHIZUKA
Adviser
Hokkaido Fisheries Management Office
Fisheries Agency
+81-11-709-2382
koichi_ishizuka820@maff.go.jp

Toshihide IWASAKI
Adviser
Fisheries Management Department, Tohoku
National Fisheries Research Institute, Japan
Fisheries Research and Education Agency
+81-178-33-1500
tiwasaki@affrc.go.jp

Kiichiro KAZAWA
Adviser
National saury stick-held-dipnet fishery co-
operation
+81-3-3583-4008
zen@samma.jp

Toshiya KISHIRO
Adviser
Research management department, Japan
Fisheries Research and Education Agency
+81-45-227-2698
kishiro@affrc.go.jp

Masashi KIYOTA
Adviser
Oceanic Ecosystem Group, National Research
Institute of Far Seas Fisheries, Japan Fisheries
Research and Education Agency
+81-45-788-7505
kiyo@affrc.go.jp

Ryuji KOMURA
Adviser
Fisheries Management Division of
Department of Fisheries and Forestry
Hokkaido Government
komura.riyuuji@pref.hokkaido.lg.jp

Kazumi KOSUGI
Adviser
National Saury Stick-Held-Dipnet Fishery
Cooperation
+81-3-3583-4008
zen@samma.jp

Koji KUMAGAI
Adviser
Hokkaido Fisheries Management Office
Fisheries Agency
+81-11-709-2382
koji_kumagai150@maff.go.jp

Kazushi MATSUDA
Adviser
Saury Fishery Association of Hokkaido
+81-11-261-4707
yukifox@do-sanma.jp

Joji MORISHITA
SC Chair
Tokyo University of Marine Science and
Technology
+81-3-5463-490
jmoris0@kaiyodai.ac.jp

Masatsugu NAGANO
Adviser
Fisheries Management Division
Fisheries Agency
+81-3-6744-2363
masatsugu_nagano300@maff.go.jp

Hideki NAKAGAWA
Adviser
Hokkaido Fisheries Management Office
Fisheries Agency
+81-11-709-2382
hideki_nakagawa750@maff.go.jp

Shintaro NAKAGAWA
Adviser
Social Treaties Division
Ministry of Foreign Affairs
+81-3-5501-8381
shintaro.nakagawa@mofa.go.jp

Takahide NARUKO
Adviser
Federation Of North Pacific District Purse
Seine Fisheries Cooperative Associations of
Japan
+81-3-3585-7941
hokubu-taiheiyoun@kbe.biglobe.ne.jp

Kota NIIMURA
Adviser
Fisheries Management Division
Fisheries Agency
+81-3-3502-8479

Kohei OHISHI
Adviser
National Saury Stick-Held-Dipnet Fishery
Cooperation
+81-3-3583-4008
zen@samma.jp

Hiroshi OKAMURA
Adviser
Research Center for Fisheries Management,
National Research Institute of Fisheries
Science, Japan Fisheries Research and
Education Agency
+81-45-788-7645
okamura@affrc.go.jp

Naohito OKAZOE
Adviser
International Affairs Division
Fisheries Agency
+81-3-3591-1086
naohito_okazoe980@maff.go.jp

Yoshinobu OSAWA
Adviser
Fisheries Management Division
Fisheries Agency
+81-3-6744-2393
yoshinobu_osawa740@maff.go.jp

Hiroaki SAITO
Adviser
Hokkaido Fisheries Management Office,
Fisheries Agency
+81-11-709-2382
hiroaki_saito010@maff.go.jp

Nobushige SHIMIZU
Adviser
International Affairs Division
Fisheries Agency
+81-3-3591-1086
nobushige_shimizu640@maff.go.jp

Kotaro TANAKA
Adviser
Federation Of North Pacific District Purse
Seine Fisheries Cooperative Associations of
Japan
+81-3-3585-7941
hokubu-taiheiyoun@kbe.biglobe.ne.jp

Yoshiro WAKASA
Adviser
Hokkaido Fisheries Management Office
Fisheries Agency
+81-11-709-2382
yoshiro_wakasa270@maff.go.jp

Tanji WATANABE
Adviser
National Saury Stick-Held-Dipnet Fishery
Cooperation
+81-3-3583-4008
zen@samma.jp

Kazuhiro YAGITA
Adviser
National Saury Stick-Held-Dipnet Fishery
Cooperation
+81-3-3583-4008
zen@samma.jp

Akiko YOSHIOKA
Adviser
Japan Overseas Fishing Association
+81-3-3291-8508
yoshioka@jdsta.or.jp

Hiromu ZENITANI
Adviser
National Research Institute of Fisheries
Science, Japan Fisheries Research and
Education Agency
+81-45-788-7632
zenitani@affrc.go.jp

KOREA

Chan Soo PARK
Head of Delegation
Ministry of Oceans and Fisheries
parkchansoo@korea.kr

Gyeongsam CHOI
Adviser
Korea Overseas Fisheries Association
+82-1032600072
gschoi@kosfa.org

Junghee CHOI
Adviser
Korea Overseas Fisheries Cooperation Center
+82-10-9303-4448
hellojunghee@kofci.org

Illsub HONG
Adviser
Korea Overseas Fisheries Association
+82-104554-9526
syfisher@hanmail.net

Eunjung KIM
Adviser
National Institute of Fisheries Science
eunjungkim@korea.kr

Hyung Kyun LEE
Adviser
Korea Overseas Fisheries Association
+82-010-2729-2481
squidlee@hanmail.net

RUSSIA

Aleksei BAITALIUK
Head of Delegation
TINRO-Center
aleksei.baitaliuk@tinro-center.ru

Dmitry KREMENYUK
Alternate Representative
Federal Agency for Fisheries
d.kremenyuk@fishcom.ru

Pavel AFANASYEV
Adviser
FSBSI "VNIRO"
afanasiev@vniro.ru

Oleg KATUGIN
Adviser
TINRO-Center
oleg.katugin@tinro-center.ru

Vladimir KULIK
Adviser
TINRO-Center
vladimir.kulik@tinro-center.ru

Alexey SAFRONOV
Adviser
Russia Coast Guard
gmips@fsb.ru

Yana ZHADAN
Adviser
Russia Coast Guard
gmips@fsb.ru

CHINESE TAIPEI

Hong-Yen HUANG
Head of Delegation
Fisheries Agency, Council of Agriculture
hangyen@msl.f.a.gov.tw

Ming-Fen WU
Alternate Representative
Deep Sea Fisheries Division, Fisheries
Agency, Council of Agriculture
mingfen@ms1.f.gov.tw

Wei-Hsuan CHANG
Adviser
Department of International Organizations
whchang@mofa.gov.tw

Wan-Tze CHEN
Adviser
Department of International Organizations
wtgchen@mofa.gov.tw

Huang-Chih CHIANG
Adviser
National Taiwan University
hcchiang@ntu.edu.tw

Kun-Hsueh CHOU
Adviser
Taiwan Squid Fishery
business@squid.org.tw

Wen-Bin HUANG
Adviser
National Dong Hwa University
bruce@mail.ndhu.edu.tw

Chun-Chieh HUNG
Adviser
F.C.F. Fishery Co.,Ltd.
henry@fcf.com.tw

Mei-Chin JUAN
Adviser
Deep sea Fisheries Division, Fisheries Agency,
Council of Agriculture
meichin@ms1.f.gov.tw

Tang-Huei LEE
Adviser
Taiwan Squid Fishery
nancy@squid.org.tw

Po-Hsiang LIAO
Adviser
National Taiwan University
r05a21091@ntu.edu.tw

Shih-Hsun LIN
Adviser
Deep sea Fisheries Division, Fisheries Agency,
Council of Agriculture
shihhsun@ms1.f.gov.tw

Kuo-Ching PU
Adviser
Taipei Representative Office in Republic of
Singapore
kcpu@mofa.gov.tw

Tsung-Yueh TANG
Adviser
Overseas Fisheries Development Council
tangty@ofdc.org.tw

USA

Glenn MERRILL
Head of Delegation
Department of Commerce - NOAA Fisheries
+1-907-586-7775
glenn.merrill@noaa.gov

Charles BRINKMAN
Alternate Representative
U.S. Department of State
+1-202-765-9751
BrinkmanCC@state.gov

Emily CRIGLER
Adviser
NOAA Fisheries
Pacific Islands Regional Office
emily.crigler@noaa.gov

Kari FENSKE
Adviser
National Marine Fisheries Service
+1-907-789-6653
Kari.fenske@noaa.gov

Kent LABORDE
Adviser
NOAA
+1-202-425-2220
kent.laborde@noaa.gov

Brian MCTAGUE
Adviser
National Oceanic and Atmospheric
Administration
+1-907-957-0423
brian.mctague@noaa.gov

Jonathan POLLARD
Adviser
NOAA Office of General Counsel, National
Oceanic and Atmospheric Administration,
U.S. Department of Commerce
+1-907-723-9158
jonathan.pollard@noaa.gov

VANUATU

William NAVITI
Head of Delegation
Department of Fisheries
Government of Vanuatu
wnaviti@vanuatu.gov.vu

Yvon BASILE
Alternate Representative
Department of Foreign Affairs
Government of Vanuatu
ybasil@vanuatu.gov.vu

Chu-Lung CHEN
Adviser
Ming Dar Fishery (Vanuatu) Co., Ltd.
kevin.mdfc@msa.hinet.net

Kevin LIN
Adviser
Ming Dar Fishery (Vanuatu) Co., Ltd.
kevin.mdfc@msa.hinet.net

OBSERVERS

UKRAINE

Pavlo ZABRODA
State Agency of Fisheries of Ukraine
+380-44-486-6243
ogorodnik.89@meta.ua

NPAFC

Mike CARLSON
Fisheries and Oceans Canada
+1-604-666-0604
mike.carlson@dfo-mpo.gc.ca

PICES

Oleg KATUGIN
TINRO-Center
oleg.katugin@tinro-center.ru

ORIS

Mari KOYANO
Hokkaido University
+81-90-3136-8248
koyano@juris.hokudai.ac.jp

NPFC CONTRACTORS

Benoit ALBAGNAC
CLS
balbagnac@cls.fr

Olivier ROUX
CLS
olivier@otolithe.com

Tony MILLER
Eighty Options
+61-413-166-551
tony.miller@eightyoptions.com

NPFC SECRETARIAT

Dae Yeon MOON
Executive Secretary
+81-3-5479-8717
dymoon@npfc.int

Peter FLEWWELLING
Compliance Manager
+81-3-5479-8717
pflewwelling@npfc.int

Aleksandr ZAVOLOKIN
Science Manager
+81-3-5479-8717
azavolokin@npfc.int

Yuko YOSHIMURA-TAKAMIYA
Executive Assistant
+81-3-5479-8717
ytakamiya@npfc.int

Mervin OGAWA
Data Coordinator
+81-3-5479-8717
mogawa@npfc.int

Alexander MEYER

Rapporteur

Urban Connections

+81-3-6432-5691

meyer@urbanconnections.jp

Asaka KURIYAMA

Assistant

Hokkaido University

+81-80-1885-8756

pikapolon126@yahoo.co.jp

Mizuki FUKUI

Assistant

Hokkaido University

+81-90-1302-0350

mizuki.f0209@gmail.com

Annex E

North Pacific Fisheries Commission
2nd Meeting of the Scientific Committee

24-27 April 2017
Shanghai, China

REPORT

Agenda Item 1. Opening of Meeting

1. The 2nd Meeting of the Scientific Committee (SC) took place in Shanghai, China on 24-27 April 2017, and was attended by Members from Canada, China, Japan, the Republic of Korea, the Russian Federation, and Chinese Taipei, and the United States of America had an advisor present. Vanuatu, the Food and Agriculture Organization of the United Nations (FAO), the North Pacific Anadromous Fish Commission (NPAFC), and the North Pacific Marine Science Organization (PICES) attended as observers. The meeting was opened by Dr. Joji Morishita (Japan) who served as the SC Chair.
2. Mr. Xinzhong Liu, Deputy Director-General of the Bureau of Fisheries, Ministry of Agriculture, offered opening remarks on behalf of the host Member. Mr. Liu welcomed the participants to Shanghai and expressed China's great honor to host the NPFC SC meeting. Mr. Liu explained China's efforts to enhance the conservation of marine resources in the North Pacific Ocean. In addition, Mr. Liu stated that scientific assessment was essential for the management and conservation of marine resources in the North Pacific Ocean, and explained that China attached great importance to and made great contribution to their long-term sustainable use. Finally, Mr. Liu congratulated the NPFC on its scientific achievements to date, including completion of its first stock assessment of Pacific saury, and expressed China's commitment and cooperation for the NPFC's future activities.
3. Prof. Jiamin Wu, Communist Party of China Secretary of Shanghai Ocean University, also offered welcome remarks on behalf of the host Member. Prof. Wu explained Shanghai Ocean University's history of contributing to fisheries research in China and internationally, and expressed his honor to contribute to the hosting of the SC meeting. Finally, Prof. Wu expressed his hope for the success of the meeting, and for constructive and fruitful discussions.

4. Vanuatu notified that it had prepared the instruments for ratification of the Convention and submitted the signed documents to the Embassy of the Republic of Korea, and that it looked forward to becoming a Member of the NPFC in the near future.

Agenda Item 2. Adoption of Agenda

5. The SC agreed to discuss Russia's request to conduct an exploratory fishery targeting deep water crab, as well as the structure of the SC, under Agenda Item 10. Other Matters.
6. The SC agreed to add the following sub-items under Agenda Item 9. Cooperation with Other Organizations: a presentation by the FAO with an update on the Areas Beyond National Jurisdiction (ABNJ) Deep Seas Project, a presentation by the NPAFC on its multinational survey in the North Pacific Ocean, and a presentation by PICES.
7. The Secretariat proposed presenting an update on the Biological Diversity Beyond Areas of National Jurisdiction (BBNJ) exercise after the report of the SSC on North Pacific Armorhead (Agenda Item 4.2).
8. The SC agreed to shift Agenda Item 7.2 Observer Program to Agenda Item 6.3
9. The SC agreed to revise the subject of Agenda Item 6.4 (previously Agenda Item 6.3 prior to the revision in the above paragraph) from "Data management policy (Japan)" to "Data management policy."
10. The revised agenda was adopted (Annex A).

Agenda Item 3. Meeting Arrangements

11. The Science Manager Dr. Aleksandr Zavolokin outlined the meeting schedule and Mr. Alexander Meyer was selected as Rapporteur. Document List (Annex B) and Participants List (Annex C) are attached to the report.

Agenda Item 4. Review of Recommendations from the Small Scientific Committees (SSCs) and Chub Mackerel Workshop

4.1 SSC on Vulnerable Marine Ecosystems

12. The Chair of the SSC on Vulnerable Marine Ecosystems (SSC VME), Dr. Loh-Lee Low, summarized the outcomes and recommendations of the 2nd SSC VME meeting (SSC VME02-Final Report).

13. Canada explained that it was also conducting research on VMEs and hoped to publish this research in the near future.
14. Japan raised the issue of procedures for considering additional management measures such as spatial closure for potential VME risk sites. There will be further consideration of this issue following the 2018 VME workshop (Annex F, #1).
15. Korea explained that it was formulating a field VME identification guide and proposed that the Members conduct intersessional work to strive to complete the aforementioned guide in advance of the next SSC VME meeting. The SC agreed to discuss the proposal under Agenda Item 7. Scientific Projects for 2017 and 2018.
16. The FAO clarified that it wished to support the activities of the SSC VME by supporting a workshop, linked to the ABNJ project, whose nature and format are to be determined by the SC.
17. Regarding the holding of the VME workshop, Korea expressed the view that more fine-scale data may be necessary for the workshop.
18. The SC endorses the following recommendations based on the SSC VME02 report and recommends the shaded items to the Commission:
 - a. VME taxa – no change, but continue research on inclusion of other VME indicators in future and produce a common NPFC VME field guide.
 - b. Encounter threshold – no change, but continue research toward identifying more scientifically-valid thresholds.
 - c. Move-on rule – no change.
 - d. Reporting requirements – no change.
 - e. CMM for the Northwestern Pacific Ocean – no change, as adopted by the 2nd Commission meeting (Paragraph 22c.).
 - f. CMM for the Northeastern Pacific Ocean – endorse revised CMM 2016-06 as proposed by Canada.
 - g. Exploratory Fishery Protocol in the North Pacific Ocean – refer to SC for consideration of more detailed technical guidance.
 - h. SAI assessment – propose a workshop to further assess SAI (2017-2018).
 - i. VME data collection standards – no change, but hold a workshop for further discussions.
 - j. Data sharing – refer to SC for development of data sharing policy.
 - k. Spatial management of bottom fisheries and VMEs – Discuss establishing GIS database.

19. Regarding the recommendation under paragraph 18 item f. above, the SC proposed an additional editorial change to CMM 2016-06 in relation to the information to be used for determining the level of a historical average for fishing effort (Annex D).
20. Regarding the recommendations made by the SSC VME requesting further consideration/discussion by the SC, the SC recommends the following:
 - a. CMM for the Northeastern Pacific Ocean – endorse revised CMM 2016-06 as proposed by Canada with correction made by SC (Annex D).
 - b. Exploratory Fishery Protocol in the North Pacific Ocean – Develop terms of reference for the technical guidelines for the Exploratory Fishery Protocol at the next SSC VME meeting (Paragraph 72).
 - c. SAI assessment and VME data collection standards – Hold a joint VME workshop with support from the FAO’s ABNJ project, addressing both VME data and SAI assessment, in March 2018 in Japan, co-chaired by Dr. Masashi Kiyota and Dr. Loh-Lee Low.
 - d. Data sharing – That the SC discuss this further under Agenda Item 6. Progress in Data Collection, Management and Security.
 - e. Spatial management of bottom fisheries and VMEs – That the SC consider the provision of seed money for initial efforts towards developing a GIS database (Annex F, #3).

4.2 SSC on North Pacific Armorhead

21. The Chair of the SSC on North Pacific Armorhead (SSC NPA), Dr. Taro Ichii, summarized the outcomes and recommendations of the 2nd SSC NPA meeting (SSC NPA02-Final Report).
22. The SC endorses the following recommendations based on the SSC NPA02 report and recommends the shaded items to the Commission:
 - a. Broaden the scope of the SSC NPA to encompass bottom fish stocks in the Convention Area, not only NPA.
 - b. Conduct intersessional work to develop templates for data collection and reporting by observers and fishers through a Corresponding Group nominated at the SC meeting.
 - c. Endorse the revised CMM 2016-05 (Annex E), which now includes more precise geographical information.
 - d. No further revision related to NPA is currently needed for CMMs 2016-05 and 2016-06. However, in light of the low levels of NPA catch, additional measures for the NPA stock may be needed in the future.
 - e. Include the suggestions for the 5-year Research Plan (Annex G).
 - f. Discuss establishing a GIS database for the spatial management of bottom fisheries and

VMEs.

- g. Consider the adoption of an Adaptive Management process (plan, act, monitor, evaluate) for NPA through the collaboration of scientists, managers, and fishers.
23. Regarding the recommendation under paragraph 22. item b. above, the SC agreed to hold further discussions under Agenda Item 6. Progress in Data Collection, Management and Security.
24. Regarding the recommendations under paragraph 22. items d. and g. above, the SC requested that Japan prepare more specific plans and management objectives, with the cooperation of other Members.
25. Regarding the recommendation under paragraph 22. item f. above, the SC agreed to consider the provision of seed money for initial efforts towards developing a GIS database (Annex F, #3), as noted in paragraph 20e.
26. The NPFC Compliance Manager provided an update on the BBNJ exercise. The SC reaffirmed the importance of taking actions for the conservation and management of fisheries resources and marine ecosystems in the North Pacific Ocean.

4.3 SSC on Pacific Saury

27. The Chair of the SSC on Pacific Saury (SSC PS), Dr. Toshihide Iwasaki, summarized the outcomes and recommendations of the 2nd SSC PS meeting (SSC PS02-Final Report).
28. The SC endorses the following recommendations based on the SSC PS02 report and recommends the shaded items to the Commission:
 - a. Maintain CMM 15-02 in its current form and do not expand fishing efforts in 2018.
 - b. Collect more data on the impact of IUU fishing, bycatch, and catch discarding on Pacific saury stock in the North Pacific Ocean.
 - c. Conduct further research to better understand the Pacific saury spatial/temporal dynamics in the North Pacific Ocean.
 - d. Modify the proposed data collection templates as necessary to meet the requirements for stock assessment and management.
 - e. Continue to update stock assessments with the provisional base production model.
 - f. Conduct further research on ways to improve the provisional base model, towards conducting benchmark stock assessments.
 - g. Continue the work of the TWG PSSA and endorse the terms of reference for the TWG

PSSA for 2017-2021 (Annex H).

- h. Endorse the new Chair of the TWG PSSA, Dr. Toshihide Kitakado, and identify the place and time of the next meeting.
 - i. Independently peer review the Pacific saury stock assessment at a time and in a format that are to be determined at a future SSC PS meeting.
 - j. Include the suggestions for the areas of work and the 5-year work plan (Annex F of the SC PS02 report) in the Research Plan.
 - k. Consider budget for meeting costs of TWG PSSA and travel cost for 1 or 2 participants from each Member. Rough costs were estimated at 20,000 USD per year to be further adjusted by FAC for further consideration by the Commission (Annex F, #4).
29. In addition to the recommendations in paragraph 28 above, the SC recommends the following:
- a. Regarding management measures for Pacific saury, maintain CMM 15-02 in its current form and do not expand fishing efforts in 2018, or develop a new management measure based on the stock status and MSY mentioned in the SC and SSC reports, with a consideration of the uncertainties.
 - b. Continue to evaluate the quality of Japan's scientific survey data used in the stock assessment to reduce uncertainties associated with the stock assessment.
30. Regarding paragraph 28. item d. above, the SC agreed to hold further discussion under Agenda Item 6. Progress in Data Collection, Management and Security.
31. Regarding paragraph 28. item g. above, the SC endorsed the Terms of Reference in principle, but added the evaluation of the quality of the indices as a task under paragraph 2 and a minor editorial change to paragraph 8 of the Terms of Reference (Annex H).
32. Regarding paragraph 28. item i. above, the SC agreed to hold further discussion under Agenda Item 7. Scientific Projects for 2017 and 2018.
33. Regarding paragraph 28. item j. above, the SC endorsed the suggestions in principle, but added the evaluation of the quality of the data for the stock assessment as a task for 2018 (Annex G).
34. Regarding paragraph 28. item k. above, the SC agreed to further specify the proposal as covering travel costs for 2 participants.

4.4 Chub mackerel workshop

35. The Chair of the Chub mackerel workshop (WS CM), Dr. Hiromu Zenitani, summarized the

outcome of the ad-hoc WS CM meeting (WS CM01-Final Report).

36. The SC reviewed the recommendations in the WS CM01 report and recommends the following:
 - a. Establish a Technical Working Group on Chub Mackerel (TWG CM) for the purpose of stock assessment with a draft work plan and terms of reference to be determined.
 - b. The terms of reference *inter alia* could include the following items: data quantity, data quality, sources of uncertainty.
 - c. The SC was unable to evaluate precautionary approaches for the management of chub mackerel fisheries as CMM 2016-07 only came into effect in January 2017.
37. Japan stated that it intends to prepare a draft work plan for stock assessment, including a draft list of data.
38. China stated that such a draft work plan for stock assessment should be developed by the TWG on chub mackerel.

Agenda Item 5. Progress and Update on Stock Assessment

5.1 Bottom fish

39. In addition to the consideration of the SSC NPA report above, the SC discussed the following progress in the development of stock assessments for bottom fish:
 - a. The SC recognized that the fishing of splendid alfonsino is occurring and encouraged Members engaged in such fishing to conduct a stock assessment of splendid alfonsino.
 - b. The SC recognized the comprehensive work done by the FAO to conduct a global review of alfonsino (NPFC-2017-SC02-IP02).
 - c. The SC recognized that the stock assessment framework for the NPA is developed based on its unique biology.

5.2 Pelagic fish and squids

40. The SC recognized the existence of priority species of the NPFC other than those for which the SC is currently conducting stock assessments. The SC agreed to continue to collect data and monitor the situations related to such species.

Agenda Item 6. Progress in Data Collection, Management and Security

6.1 Data reporting templates (Korea)

41. Korea presented its progress in developing standardized reporting templates as well as the progress of the corresponding group on Pacific saury data collection templates.

42. In order to complete the Pacific saury data collection template within the specific timeline in Annex G, the SC encouraged the Member in disagreement with other Members to actively cooperate with Korea to reach a consensus.
43. The SC agreed to establish a corresponding group for developing data reporting templates for bottom fisheries and also reaffirm the existent corresponding group for pelagic fisheries (Annex I). The SC encouraged Members to provide their data collection elements from each fishery to Korea for an efficient process to develop the data templates.

6.2. *Transshipment data (CMM 2016-03)*

44. The SC discussed data fields to be included in the transshipment summary provided by Members to the Secretariat, referring to NPFC-2017-SC02-IP04. Russia proposed the inclusion of IMO number in the summary.
45. The SC recognized the usefulness of transshipment data for stock assessment activities, mainly for the purpose of validating data. At this stage, other than the requirements described in Information Paper NPFC-2017-SC02-IP04, the SC does not have any additional requirements for the data currently being reported by Members. The SC also recognized that the collection of transshipment data was mainly an issue for the Technical & Compliance Committee (TCC) and the Commission, and that both have expressed interest in the matter. The SC therefore requests that the TCC and the Commission keep the SC informed of discussions and developments related to transshipment data, so that the SC can use the collected data for stock assessment activities.

6.3 *Observer Program*

46. The SC discussed plans to develop the North Pacific Ocean Fisheries Observer Program.
47. The SC recognized the necessity of the North Pacific Ocean Fisheries Observer Program and agreed to establish a corresponding group, headed by the Science Manager, for advancing work towards the development of such an Observer Program. The corresponding group will compile information regarding the existing observer programs of Members and those of other regional fisheries management organizations, to establish a basis for holding further discussions on developing the Observer Program.
48. The SC also recognized the importance of developing a standardized protocol and data collection templates, as well as training and outreach programs, for ensuring the same standard of data collection by all observers.

49. China, supported by some Members, suggested that Members provide technical reports on their existing Observer Programs in the Convention Area of NPFC to the SC for review and evaluation.
50. Japan stated that the Observer Program is one of many tools to collect information necessary to scientific work and dockside sampling is the main tool of collecting such information for pelagic fish in Japan.

6.4 Data management policy

51. The Science Manager presented a draft Information Security Guidelines including four categories of information in relation to risk of its disclosure, types of information, proposed regulations for each type, protection of data ownership and other issues related to data and publication handling by the NPFC (NPFC-2017-SC02-WP03 and NPFC-2017-SC02-IP01).
52. The SC recommends the establishment of a corresponding group that will work intersessionally with the TCC to further develop the draft Information Security Guidelines, based on NPFC-2017-SC02-WP03. The corresponding group will be jointly headed by the Science Manager and the Compliance Manager. The SC suggests that the corresponding group review this document and come to a consensus by the Commission meeting in July 2017.

6.5 NPFC data management system (Secretariat)

53. The IT consultant, Dr. Raymond Wu, presented on the project strategy and architecture of the NPFC data management system, including the business context, the system context, the architecture design, and the future roadmap (NPFC-2017-SC02-WP04 (Rev1)).
54. The SC discussed the proposed plans to establish a GIS database and asked to include spatial extensions into the benchmark process for the NPFC data management system. The IT consultant explained that this was feasible, but that further input from Members regarding specifications was required.
55. The SC discussed the desirability of connecting the NPFC data management system to other oceanographic databases with open data. The IT consultant explained that this was feasible.
56. In further elaborating this issue, Members are requested to direct any further inquiries regarding the NPFC data management system to the Secretariat.

Agenda Item 7. Scientific Projects for 2017 and 2018

7.1 Stock assessments

7.2 Other projects

57. The Science Manager presented the compiled document on scientific projects for 2017 and 2018 that were discussed above and approved by the SC, as well as suggestions submitted to the Secretariat (NPFC-2017-SC02-WP06) regarding a Chub mackerel meeting and consultant for Chub mackerel stock assessment.
58. The SC reviewed the proposed scientific projects for 2017 and 2018 and endorses the revised proposal for consideration by the Commission (Annex F).
59. The SC requests that the Finance and Administration Committee establish a common procedure for the submission, evaluation, and approval of proposals for scientific projects for further consideration by the Commission, as well as establishment of a Special Project Fund filled with unspent scientific funds and other sources.

Agenda Item 8. 2017-2021 Research Plan

60. The SC Chair presented the revised Research Plan (NPFC-2017-SC02-WP01 (Rev. 1)).
61. The SC reviewed and endorses the revised Research Plan (Annex G).

Agenda Item 9. Cooperation with Other Organizations

62. The FAO presented an update on the ABNJ Deep Seas Project, including progress in 2016 and upcoming project activities.
63. The NPAFC reported on the multinational survey it plans to conduct in the North Pacific Ocean in winter 2019 as part of the International Year of the Salmon (IYS) project and invited the NPFC to participate in, and contribute to the IYS project.
64. The SC highly recommended NPFC to take advantage of the multinational survey being conducted by the NPAFC, and to formulate a plan for a cooperative survey.
65. PICES presented an update on its activities and proposals for cooperation between PICES and the NPFC. PICES explained its interest in the effects of climate change/climate variation in the abundance and distribution of stocks in the North Pacific Ocean, and invited the NPFC to mutually cooperate in any of the existing PICES or NPFC projects. In particular, PICES invited the NPFC to serve as a co-sponsor or supporting organization for the 4th International

Symposium on the Effect of Climate Change on the World's Oceans to be held in Washington DC, USA on June 4-8, 2018.

66. The Science Manager reported on his attendance as NPFC representative at the International Symposium on Drivers of Dynamics of Small Pelagic Fish Resources organized by PICES and ICES on March 6-11, 2017, including potentially useful research and output, and major outcomes of interest to the NPFC (NPFC-2017-SC02-IP03). The Science Manager requested the guidance of the SC on potential areas for cooperation between NPFC and PICES to be discussed at the PICES Annual meeting in September 2017.
67. Members agreed to enhance cooperation with PICES as an intergovernmental scientific organization with similar membership, convention area and scientific interests to NPFC and encourage PICES to participate in the NPFC meetings.
68. The SC recommends to establish a joint NPFC-PICES group (Annex I) to identify potential areas of cooperation and work intersessionally to develop the terms of reference for the working group for consideration by the Commission in July 2017.
69. The SC recommends that Members engage in more proactive cooperation with other organizations.

Agenda Item 10. Other Matters

Selection of next Chair and Vice Chair

70. The SC agreed to extend the term of the current Chair, Dr. Joji Morishita, and the current Vice Chair, Dr. Janelle Curtis for a further two years each.

Information on Exploratory fishery targeting deep water crab

71. The SC discussed Russia's request to conduct an exploratory fishery targeting deep water crab, referring to NPFC-2017-SC02-WP02. Some Members expressed the view that Russia's request did not constitute an exploratory fishery as defined under Annex 1 of CMM 2016-05. However, the SC recognized that Russia's request involved the resumption of an existing fishery after several years (CMM 2016-05, Annex 2, Paragraph 5 (7)), and, as the SC is interested in the data from the aforementioned fishery, it requested that Russia collect extensive data in the course of conducting the fishery, assess SAI in accordance with CMM 2016-05 and submit this assessment to future SC meetings. The SC will review the reported assessment and determine whether or not the fishery is having an SAI on VMEs.

72. The SC also recognized that there may be a need to improve the Exploratory Fishery Protocol and forwarded the draft terms of reference for the development of technical guidelines for improvement of the current Exploratory Fishery Protocol (Annex J) for the consideration of the relevant SSCs.

Structure of SC

73. Based on the discussion above, the SC has updated its structure, broadening the scope of SSC NPA to SSC on Bottom Fish and establishing the TWG on Chub mackerel (Annex K).

MCS related issues from SC to TCC

74. Based on the discussion above, the SC identifies the following matters as MCS related issues for consideration by TCC:
- a. Maintain CMM 15-02 or develop a new CMM based on the stock assessment.
 - b. No revisions to CMM 2016-03 regarding transshipment data.
 - c. Endorse the revised CMM 2016-05 (Annex E).
 - d. Endorse the revised CMM 2016-06 (Annex D).
 - e. Nominate participants for the SC/TCC corresponding group on the NPFC Information Security Guidelines to work intersessionally prior to the TCC meeting in 2017.

Agenda Item 11. Advice and Recommendations to the Commission

75. The shaded paragraphs in this report constitute the recommendations by the SC to the Commission.

Agenda Item 12. Next Meeting

76. The SC recommends holding the next TWG PSSA meeting in Vladivostok on 6-8 December 2017.
77. The SC recommends holding the first TWG CM meeting in Vladivostok on 4-5 December 2017, prior to the TWG PSSA.
78. The SC recommends holding the VME workshop in Japan in March 2018.
79. The SC recommends holding the next SC and SSC meetings at a similar timing in 2018. The date and location will be notified by the Secretariat via correspondence.
80. A compilation of all meetings is annexed to this report (Annex L).

Agenda Item 13. Adoption of the Report

81. The report was adopted by consensus.

Agenda Item 14. Close of the Meeting

82. The SC meeting closed at 13:54 on 27 April 2017.

Annexes

[Annex A](#) – Agenda

[Annex B](#) – List of Documents

[Annex C](#) – List of Participants

[Annex D](#) – Revision for CMM 2016-06

[Annex E](#) – Revision for CMM2016-05

[Annex F](#) – Scientific Projects proposed by the Scientific Committee

[Annex G](#) – 2017-2021 Research Plan

[Annex H](#) – Terms of Reference for the Technical Working Group on Pacific Saury Stock Assessment

[Annex I](#) – Focal points for Scientific Committee and its subsidiary bodies

[Annex J](#) – Draft TORs of SSC-VME and SSC-Bottom Fish for the development of technical guidelines that supplement exploratory fishery protocols

[Annex K](#) – North Pacific Fisheries Commission structure for 2017 including proposed revision by the Scientific Committee

[Annex L](#) – NPFC Meetings 2017–2018

North Pacific Fisheries Commission
2nd Scientific Committee Meeting
24-27 April 2017
Shanghai, China

Agenda

Agenda Item 1. Opening of the meeting

Agenda Item 2. Adoption of Agenda

Agenda Item 3. Meeting arrangements

Agenda Item 4. Review of recommendations from the Small Scientific Committees (SSCs)
and Chub mackerel workshop

4.1 SSC on Vulnerable Marine Ecosystems

4.2 SSC on North Pacific Armorhead

4.3 SSC on Pacific Saury

4.4 Chub mackerel workshop

Agenda Item 5. Progress and update on stock assessment

5.1 Bottom fish

5.2 Pelagic fish and squids

Agenda Item 6. Progress in data collection, management and security

6.1 Data reporting templates (Korea)

6.2. Transshipment data (CMM 2016-03)

6.3 Observer Program

6.4 Data management policy

6.5 NPFC data management system (Secretariat)

Agenda Item 7. Scientific projects for 2017 and 2018

7.1 Stock assessments

7.2 Other projects

Agenda Item 8. 2017-2021 Research Plan

Agenda Item 9. Cooperation with other organizations

- ① ABNJ Deep Seas project, FAO
- ② NPAFC
- ③ PICES

Agenda Item 10. Other matters

- Selection of next Chair and Vice Chair
- Information on Exploratory fishery targeting deep water crab (Russia)
- Structure of SC
- MCS related issues from SC to TCC

Agenda Item 11. Advice and recommendations to the Commission

Agenda Item 12. Next meeting

Agenda Item 13. Adoption of the Report

Agenda Item 14. Close of the Meeting

LIST OF DOCUMENTS**MEETING INFORMATION PAPERS**

Symbol	Title
NPFC-2017-SC02-MIP01	Meeting Notice and Information
NPFC-2017-SC02-MIP02	Provisional Agenda
NPFC-2017-SC02-MIP03	Provisional Annotated Agenda
NPFC-2017-SC02-MIP04 (Rev. 2)	Indicative Schedule
NPFC-2017-SC02-MIP05 (Rev. 2)	Provisional List of Documents

REFERENCE DOCUMENTS

Symbol	Title
	Convention on the Conservation and Management of High Seas Fisheries Resources in the North Pacific Ocean
	NPFC Rules of Procedure
CMM 15-02	CMM15-02_ Conservation and Management Measure for Pacific Saury
CMM 2016-01	CMM On Information Requirements For Vessel Registration
CMM 2016-02	CMM To Establish A List Of Vessels Presumed To Have Carried Out IUU Activities In The NPFC CA
CMM 2016-03	CMM On The Interim Transshipment Procedures For The NPFC
CMM 2016-04	CMM On Vessels Without Nationality
CMM 2016-05	CMM For Bottom Fisheries And Protection Of VMEs In The NW Pacific Ocean
CMM 2016-06	CMM For Bottom Fisheries And Protection Of VMEs In The NE Pacific Ocean
CMM 2016-07	CMM For Chub Mackerel

WORKING PAPERS

Symbol	Title
NPFC-2017-SC02-WP01	Draft 2017-2021 Research Plan
NPFC-2017-SC02-WP02	Information On Exploratory Fishery Targeting Deep Water Crabs In The NPFC Convention Area
NPFC-2017-SC02-WP03	Draft NPFC Information Security Guidelines
NPFC-2017-SC02-WP04 (Rev.1)	Data Management System
NPFC-2017-SC02-WP05	Suggestions for the 2017-2021 Research Plan
NPFC-2017-SC02-WP06	Items of “Special Projects Funds” for Scientific Projects

INFORMATION PAPERS

Symbol	Title
NPFC-2017-SC02-IP01	NPFC Information Security and Management System
NPFC-2017-SC02-IP02	Global Review Of Alfonsino (Beryx Spp.), Their Fisheries, Biology And Management
NPFC-2017-SC02-IP03	Small Pelagic Fish Symposium
NPFC-2017-SC02-IP04	Example Of NPFC Transshipment Information

OBSERVER PAPERS

Symbol	Title
NPFC-2017-SSC VME02-OP01	The ABNJ Deep Seas Project UPDATE to the NPFC Scientific Committee
NPFC-2017-SC02-OP01	NPAFC presentation
NPFC-2017-SC02-OP02	PICES presentation

REPORTS FROM WORKING GROUPS AND SSCs

Symbol	Title
NPFC-2017-WS CM01-Final Report	Chub Mackerel Workshop Final Report
NPFC-2017-SSC-VME02- Draft Report	Vulnerable Ecosystems SSC – Draft Report
NPFC-2017-SSC-NPA02- Draft Report	North Pacific Armorhead SSC – Draft Report
NPFC-2017-SSC-PS02- Draft Report	Pacific Saury SSC – Draft Report

ANNUAL REPORTS

Symbol	Title
NPFC-2017-AR Canada	2016 Annual Report of Canada
NPFC-2017-AR China	2016 Annual Report of China
NPFC-2017-AR Japan (Rev 1)	2016 Annual Report of Japan (Rev 1)
NPFC-2017-AR Korea	2016 Annual Report of Republic of Korea
NPFC-2017-AR Chinese Taipei	2016 Annual Report of Chinese Taipei
NPFC-2017-AR Russia	2016 Annual Report of Russian Federation
NPFC-2017-AR United States of America	2016 Annual Report of United States of America
NPFC-2017-AR-Annual Summary Footprint - Bottom Fisheries	Annual Summary Footprint For Bottom Fisheries In The NPFC Area Of Competence
NPFC-2017-AR-Annual Summary Footprint - Pacific Saury	Annual Summary Footprint For Pacific Saury In The NPFC Area Of Competence
NPFC-2017-AR-Annual Summary Footprint - Squids	Annual Summary Footprint For Squids In The NPFC Area Of Competence
NPFC-2017-AR-Annual Summary Footprint – Chub and Spotted Mackerels	Annual Summary Footprint For Chub and Spotted Mackerels In The NPFC Area Of Competence

LIST OF PARTICIPANTS

CHAIR

Joji MORISHITA
Tokyo University of Marine Science and
Technology
Tel: +81-45-788-7630
E-mail: jmoris0@kaiyodai.ac.jp

Lianyong FANG
Alternate Representative
China Overseas Fisheries Association
E-mail: admin1@tuna.org.cn

CANADA

Eddy Kennedy
Adviser
Department of Fisheries and Oceans Canada
Tel: 2507563360
E-mail: Eddy.Kennedy@dfo-mpo.gc.ca

Yong CHEN
Adviser
Shanghai Ocean University
E-mail: chen@shou.edu.cn

CHINA

Siquan TIAN
Head of Delegation
Shanghai Ocean University
Tel: +86-21-61900221
E-mail: sqtian@shou.edu.cn

Xjchen CHEN
Adviser
Shanghai Ocean University
E-mail: xjchen@shou.edu.cn

Chuanxiang HUA
Alternate Representative
Shanghai Ocean University
Tel: +86-18512186362
E-mail: cxhua@shou.edu.cn

Xiaoxue DU
Adviser
Shanghai Ocean University
Tel: +86-15800718516
E-mail: 532054501@qq.com

Bai LI
Alternate Representative
Shanghai Ocean University
E-mail: bai.li@maine.edu

Yangyang CHEN
Adviser
Shanghai Ocean University
Tel: +86-1312236193
E-mail: 601812855@qq.com

Zhou FANG
Adviser
Shanghai Ocean University
Tel: +86-13248263281
E-mail: zfang@shou.edu.cn

Na LI
Adviser
Shanghai Ocean University
Tel: +86-13122412661
E-mail: 694705972@qq.com

Mengying LIU
Adviser
Shanghai Ocean University
Tel: +86-18017872811
E-mail: lmy_spongebob@163.com

Wei YU
Adviser
Shanghai Ocean University
Tel: +86-18817590945
E-mail: wyu@shou.edu.cn

Libin DAI
Adviser
Shanghai Ocean University
Tel: +86-13671730800
E-mail: 644318716@qq.com

Mengyao WU
Adviser
Shanghai Ocean University
Tel: +86-18817772117
E-mail: 971366877@qq.com

Peng CHEN
Adviser
Shanghai Ocean University
Tel: +86-18801771401
E-mail: pengchen@yeah.net

Lyu Ze HUA
Adviser
Shanghai Ocean University
Tel: +86-15121047687
E-mail: zhllw@shou.edu.cn

Tongjia QI
Adviser
Shanghai Ocean University
Tel: +86-18817570524
E-mail: vocal_tongjia@163.com

Leilei ZOU
Interpreter
Shanghai Ocean University
Tel: +86-15692165709
E-mail: llzou@shou.edu.cn

JAPAN

Toshihide IWASAKI
Head of Delegation
Tohoku National Fisheries Research Institute
Tel: +81-178-33-1500
E-mail: tiwasaki@affrc.go.jp

Taro ICHII
Alternate Representative
National Research Institute of Far Seas
Fisheries
Tel: +81-45-788 7500
E-mail: ichii@affrc.go.jp

Masashi KIYOTA
Alternate Representative
National Research Institute of Far Seas
Fisheries

Tel: +81-45-788 7505

E-mail: kiyo@affrc.go.jp

Shiroh YONEZAKI

Adviser

National Research Institute of Far Seas
Fisheries

Tel: +81-45-788 7501

E-mail: yonez@affrc.go.jp

Momoko ICHINOKAWA

Adviser

National Research Institute of Fisheries
Science

E-mail: ichimomo@affrc.go.jp

Kengo TANAKA

Adviser

Fisheries Agency

E-mail: kengo_tanaka880@maff.go.jp

Hideaki KIDOKORO

Adviser

Tohoku National Fisheries Research Institute

E-mail: kidokoro@affrc.go.jp

Kiichiro KAZAWA

Adviser

National saury stick-held-dipnet fishery co-
operation

E-mail: zen@samma.jp

Naohiko AKIMOTO

Adviser

Japan Overseas Fishing Association

E-mail: naohiko@sol.dti.ne.jp

KOREA

Seok-Gwan CHOI

Head of Delegation

National Institute of Fisheries Science

E-mail: sgchoi@korea.kr

Eunjung KIM

Alternate Representative

National Institute of Fisheries Science

E-mail: eunjung.hawaii@gmail.com

Sanggyu SHIN

Adviser

National Institute of Fisheries Science

E-mail: gyuyades82@gmail.com

Sangdeok CHUNG

Adviser

National Institute of Fisheries Science

E-mail: sdchung@korea.kr

RUSSIA

Kirill KOLONCHIN

Head of Delegation

Russian Federal Research Institute of Fisheries
and Oceanography

E-mail: kolonchin@vniro.ru

Igor MELNIKOV

Alternate Representative

Pacific Scientific Research Fisheries Centre

Tel: +7-9147047863

E-mail: igor.melnikov@tinro-center.ru

Pavel AFANASYEV

Adviser

Russian Federal Research Institute of Fisheries
and Oceanography

E-mail: afanasiev@vniro.ru

Vladimir KULIK

Adviser

Pacific Scientific Research Fisheries Centre

E-mail: vladimir.kulik@tinro-center.ru

Dmitrii ANTONENKO

Adviser

Pacific Scientific Research Fisheries Centre

Tel: +7-9146978130

E-mail: dmantonenko@yandex.ru

CHINESE TAIPEI

Shih-Hsun LIN

Head of Delegation

Fisheries Agency

E-mail: shihhsun@ms1.fa.gov.tw

Mei-Chin JUAN

Adviser

Fisheries Agency

E-mail: meichin@ms1.fa.gov.tw

Wen-Bin HUANG

Adviser

National Dong Hwa University

E-mail: bruce@mail.ndhu.edu.tw

Chih-Hao HSIEH

Adviser

National Taiwan University

E-mail: chsieh@ntu.edu.tw

Tang-Huei LEE

Adviser

Taiwan Squid Fishery

E-mail: nancy@squid.org.tw

Chun-Chieh HUNG

Adviser

F.C.F. Fishery Co., Ltd.

E-mail: henry@fcf.com.tw

USA

Loh-Lee LOW

Adviser

NOAA (Retired)

Tel: +1-2063847518

E-mail: LowLohLee@gmail.com

OBSERVERS

VANUATU

Lucy Joy ANDREA

Alternate Representative

Department of Fisheries

Tel: +678-33025

E-mail: ljoy@vanuatu.gov.vu

Kevin LIN

Alternate Representative

Ming Dar Fishery Co., Ltd.

E-mail: kevin.mdfc@msa.hinet.net

FAO

Chris O'BRIEN
ABNJ Deep Seas Project, FAO
E-mail: chris.obrien@fao.org

Aleksandr ZAVOLOKIN
Science Manager
Tel: +81-3-5479-8717
E-mail: azavolokin@npfc.int

NPAFC

Igor MELNIKOV
Pacific Scientific Research Fisheries Centre
Tel: +7-9147047863
E-mail: igor.melnikov@tinro-center.ru

Peter FLEWWELLING
Compliance Manager
Tel: +81-3-5479-8717
E-mail: pflewwelling@npfc.int

PICES

Vladimir KULIK
Pacific Scientific Research Fisheries Centre
E-mail: vladimir.kulik@tinro-center.ru

Yuko YOSHIMURA-TAKAMIYA
Executive Assistant
Tel: +81-3-5479-8717
E-mail: ytakamiya@npfc.int

NPFC SECRETARIAT

Dae-Yeon MOON
Executive Secretary
Tel: +81-3-5479-8717
E-mail: dymoon@npfc.int

Mervin OGAWA
Data Coordinator
Tel: +81-3-5479-8717
E-mail: mogawa@npfc.int

Alexander MEYER
Rapporteur, Urban Connections
Tel: +81-3-6432-5691
E-mail: meyer@urbanconnections.jp

**REVISION FOR CONSERVATION AND MANAGEMENT MEASURE 2016-06
FOR BOTTOM FISHERIES AND PROTECTION OF VULNERABLE MARINE
ECOSYSTEMS IN THE NORTHEASTERN PACIFIC OCEAN**

The North Pacific Fisheries Commission (NPFC):

Seeking to ensure the long term conservation and sustainable use of the fishery resources of the Northeastern Pacific Ocean and, in so doing, protect the vulnerable marine ecosystems that occur there, in accordance with the Sustainable Fisheries Resolutions adopted by the United Nations General Assembly (UNGA) including, in particular, paragraphs 66 to 71 of the UNGA59/25 in 2004, paragraphs 69 to 74 of UNGA60/31 in 2005, paragraphs 69 and 80 to 91 of UNGA61/105 in 2006, and paragraphs 113 to 124 of UNGA64/72 in 2009;

Recalling that paragraph 85 of UNGA 61/105 calls upon participants in negotiations to establish regional fisheries management organizations or arrangements with the competence to regulate bottom fisheries to adopt permanent measures in respect of the area of application of the instruments under negotiation;

Noting that North Pacific Fisheries Commission has previously adopted interim measures for the Northeastern Pacific Ocean;

Conscious of the need to adopt permanent measures for the Northeastern Pacific Ocean to ensure that this area is not left as the only major area of the Pacific Ocean where no such measures are in place;

Hereby adopt the following Conservation and Management Measure (CMM) for bottom fisheries of the Northeastern Pacific Ocean while working to develop and implement other permanent management arrangements to govern these and other fisheries in the North Pacific Ocean.

Scope

1. These Measures are to be applied to all bottom fishing activities throughout the high seas areas of the Northeastern Pacific Ocean, defined, for the purposes of this document, as those occurring in the Convention Area as set out in Article 4 of the Convention text to the east of the line of 175 degrees W longitude (here in after called “the eastern part of the Convention Area”) including all such areas and marine species other than those species already covered by existing international

fisheries management instruments, including bilateral agreements and Regional Fisheries Management Organizations or Arrangements.

For the purpose of these Measures, the term vulnerable marine ecosystems is to be interpreted and applied in a manner consistent with the International Guidelines on the Management of Deep Sea Fisheries on the High Seas adopted by the FAO on 29 August 2008 (see Annex 2 for further details).

2. The implementation of these Measures shall:
 - a. be based on the best scientific information available in accordance with existing international laws and agreements including UNCLOS and other relevant international instruments,
 - b. establish appropriate and effective conservation and management measures,
 - c. be in accordance with the precautionary approach, and
 - d. incorporate an ecosystem approach to fisheries management.

3. Actions by Members of the Commission

Members of the Commission will take the following actions in respect of vessels operating under its Flag or authority in the area covered by these Measures:

- a. Conduct the assessments called for in paragraph 83(a) of UNGA Resolution 61/105, in a manner consistent with the FAO Guidelines and the Standards and Criteria included in Annex 2;
- b. Submit to the SC their assessments conducted pursuant to subparagraph (a) of this paragraph, including all relevant data and information in support of any such assessment, and receive advice and recommendations from the SC, in accordance with the procedures in Annex 3;
- c. Taking into account all advice and recommendations received from the SC, determine whether the fishing activity or operations of the vessel in question are likely to have a significant adverse impact on any vulnerable marine ecosystem;
- d. If it is determined that the fishing activity or operations of the vessel or vessels in question would have a significant adverse impact on vulnerable marine ecosystems, adopt conservation and management measures to prevent such impacts on the basis of advice and recommendations of the SC, which are subject to adoption by the Commission;
- e. Ensure that if any vessels are already engaged in bottom fishing, that such assessments have been carried out in accordance with paragraph 119(a)/UNGA RES 2009, the determination called for in subparagraph (c) of this paragraph has been rendered and, where appropriate, managements measures have been implemented in accordance with the advice and recommendations of the SC, which are subject to adoption by the Commission;
- f. Further ensure that they will only authorize fishing activities on the basis of such assessments and any comments and recommendations from the SC;

- g. Prohibit its vessels from engaging in directed fishing on the following orders: Alcyonacea, Antipatharia, Gorgonacea, and Scleractinia as well as any other indicator species for vulnerable marine ecosystems as may be identified from time to time by the SC and approved by the Commission;
 - h. In respect of areas where vulnerable marine ecosystems are known to occur or are likely to occur, based on the best available scientific information, ensure that bottom fishing activities do not proceed unless conservation and management measures have been established to prevent significant adverse impacts on vulnerable marine ecosystems;
 - i. Limit fishing effort in bottom fisheries on the Eastern part of the Convention Area to the level of a historical average (baseline to be determined through consensus in the SC based on information to be provided by Members) in terms of the number of fishing vessels and other parameters which reflect the level of fishing effort, fishing capacity or potential impacts on marine ecosystems dependent on new SC advice;
 - j. Further, considering accumulated information regarding fishing activities in the Eastern part of the Convention Area, in areas where, in the course of fishing operations, cold water corals or other indicator species as identified by the SC that exceed 50Kg are encountered in one gear retrieval, Members of the Commission shall require vessels flying their flag to cease bottom fishing activities in that location. In such cases, the vessel shall not resume fishing activities until it has relocated a sufficient distance, which shall be no less than 2 nautical miles, so that additional encounters with VMEs are unlikely. All such encounters, including the location and the species in question, shall be reported to the Secretariat, who shall notify the other Members of the Commission so that appropriate measures can be adopted in respect of the relevant site. It is agreed that the cold water corals include: Alcyonacea, Antipatharia, Gorgonacea, and Scleractinia, as well as any other indicator species for vulnerable marine ecosystems as may be identified from time to time by the SC and approved by the Commission.
4. All assessments and determinations by any Member as to whether fishing activity would have significant adverse impacts on vulnerable marine ecosystems, as well as measures adopted in order to prevent such impacts, will be made publicly available through agreed means.

Control of Bottom Fishing Vessels

5. Members will exercise full and effective control over each of their bottom fishing vessels operating in the high seas of the Northeastern Pacific Ocean, including by means of fishing licenses, authorizations or permits, and maintenance of a record of these vessels as outlined in the Convention and applicable CMM.
6. New and exploratory fishing will be subject to the exploratory fishery protocol included as Annex

1.

Scientific Committee (SC)

7. Scientific Committee will provide scientific support for the implementation of these CMMs.

Scientific Information

8. The Members shall provide all available information as required by the Commission for any current or historical fishing activity by their flag vessels, including the number of vessels by gear type, size of vessels (tons), number of fishing days or days on the fishing grounds, total catch by species, areas fished (names or coordinates of seamounts), and information from scientific observer programmes (see Annexes 4 and 5) to the NPFC Secretariat as soon as possible and no later than one month prior to SC meeting. The Secretariat will make such information available to SC.
9. Scientific research activities for stock assessment purposes are to be conducted in accordance with a research plan that has been provided to SC prior to the commencement of such activities.

Annex 1

EXPLORATORY FISHERY PROTOCOL IN THE NORTH PACIFIC OCEAN

1. From 1 January 2009, all bottom fishing activities in new fishing areas and areas where fishing is prohibited in a precautionary manner or with bottom gear not previously used in the existing fishing areas, are to be considered as “exploratory fisheries” and to be conducted in accordance with this protocol.

2. Precautionary conservation and management measures, including catch and effort controls, are essential during the exploratory phase of deep sea fisheries. Implementation of a precautionary approach to sustainable exploitation of deep sea fisheries shall include the following measures:

- i. precautionary effort limits, particularly where reliable assessments of sustainable exploitation rates of target and main by-catch species are not available;
- ii. precautionary measures, including precautionary spatial catch limits where appropriate, to prevent serial depletion of low-productivity stocks;
- iii. regular review of appropriate indices of stock status and revision downwards of the limits listed above when significant declines are detected;
- iv. measures to prevent significant adverse impacts on vulnerable marine ecosystems; and

- v. comprehensive monitoring of all fishing effort, capture of all species and interactions with VMEs.

3. When a member of the Commission would like to conduct exploratory fisheries, it is to follow the following procedure:

(1) Prior to the commencement of fishing, the member of the Commission is to circulate the information and assessment in Appendix 1.1 to the members of the Scientific Committee (SC) for review and to all members of the Commission for information, together with the impact assessment. Such information is to be provided to the other members at least 30 days in advance of the meeting at which the information shall be reviewed.

(2) The assessment in (1) above is to be conducted in accordance with the procedure set forth in “Science-based Standards and Criteria for Identification of VMEs and Assessment of Significant Adverse Impacts on VMEs and Marine Species (Annex 2)”, with the understanding that particular care shall be taken in the evaluation of risks of the significant adverse impact on vulnerable marine ecosystems (VMEs), in line with the precautionary approach.

(3) The SC is to review the information and the assessment submitted in (1) above in accordance with “SC Assessment Review Procedures for Bottom Fishing Activities (Annex 3).”

(4) The exploratory fisheries are to be permitted only where the assessment concludes that they would not have significant adverse impacts (SAIs) on marine species or any VMEs and on the basis of comments and recommendations of SC. Any determinations, by any Member of the Commission or the SC, that the exploratory fishing activities would not have SAIs on marine species or any VMEs, shall be made publicly available through the NPFC website.

4. The member of the Commission is to ensure that all vessels flying its flag conducting exploratory fisheries are equipped with a satellite monitoring device and have an observer on board at all times.

5. Within 3 months of the end of the exploratory fishing activities or within 12 months of the commencement of fishing, whichever occurs first, the member of the Commission is to provide a report of the results of such activities to the members of the SC and all members of the Commission. If the SC meets prior to the end of this 12 month period, the member of the Commission is to provide an interim report 30 days in advance of the SC meeting. The information to be included in the report is specified in Appendix 1.2.

6. The SC is to review the report in 5 above, and decide whether the exploratory fishing activities had SAIs on marine species or any VME. The SC then is to send its recommendations to the Commission on whether the exploratory fisheries can continue and whether additional management measures shall be required if they are to continue. The Commission is to strive to adopt conservation and management measures to prevent SAIs on marine species or any VMEs. If the Commission is not able to reach consensus on any such measures, each fishing member of the Commission is to adopt measures to avoid any SAIs on VMEs.

7. Members of the Commission shall only authorize continuation of exploratory fishing activity, or commencement of commercial fishing activity, under this protocol on the basis of comments and recommendations of the SC.

Annex 1.1

Information to be provided before exploratory fisheries start

1. A harvesting plan
 - Name of vessel
 - Flag member of vessel
 - Description of area to be fished (location and depth)
 - Fishing dates
 - Anticipated effort
 - Target species
 - Bottom fishing gear-type used
 - Area and effort restrictions to ensure that fisheries occur on a gradual basis in a limited geographical area.
2. A mitigation plan
 - Measures to prevent SAIs to VMEs that may be encountered during the fishery
3. A catch monitoring plan
 - Recording/reporting of all species brought onboard to the lowest possible taxonomic level
 - 100% satellite monitoring
 - 100% observer coverage
4. A data collection plan
 - Data is to be collected in accordance with “Type and Format of Scientific Observer Data to be Collected” (Annex 5)

Annex 1.2

Information to be included in the report

- Name of vessel
- Flag member of vessel
- Description of area fished (location and depth)
- Fishing dates
- Total effort
- Bottom fishing gear-type used

- List of VME encountered (the amount of VME indicator species for each encounter specifying the location: longitude and latitude)
- Mitigation measures taken in response to the encounter of VME
- List of all organisms brought onboard
 - List of VMEs indicator species brought onboard by location: longitude and latitude

**SCIENCE-BASED STANDARDS AND CRITERIA FOR IDENTIFICATION OF VMES
AND ASSESSMENT OF SIGNIFICANT ADVERSE IMPACTS ON VMES AND
MARINE SPECIES**

1. Introduction

Members of the Commission have hereby established science-based standards and criteria to guide their implementation of United Nations General Assembly (UNGA) Resolution 61/105 and the measures adopted by the Members in respect of bottom fishing activities in the North Pacific Ocean (NPO). In this regard, these science-based standards and criteria are to be applied to identify vulnerable marine ecosystems (VMEs) and assess significant adverse impacts (SAIs) of bottom fishing activities on such VMEs or marine species and to promote the long-term sustainability of deep sea fisheries in the Convention Area. The science-based standards and criteria are consistent with the FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas, taking into account the work of other RFMOs implementing management of deep-sea bottom fisheries in accordance with UNGA Resolution 61/105. The standards and criteria are to be modified from time to time as more data are collected through research activities and monitoring of fishing operations.

2. Purpose

(1) The purpose of the standards and criteria is to provide guidelines for each member of the Commission in identifying VMEs and assessing SAIs of individual bottom fishing activities¹ on VMEs or marine species in the Convention Area. Each member of the Commission, using the best information available, is to decide which species or areas are to be categorized as VMEs, identify areas where VMEs are known or likely to occur, and assess whether individual bottom fishing activities would have SAIs on such VMEs or marine species. The results of these tasks are to be submitted to and reviewed by the Scientific Committee with a view to reaching a common understanding among the members of the Commission.

(2) For the purpose of applying the standards and criteria, the bottom fisheries are defined as follows:

- (a) The fisheries are conducted in the Convention Area;
- (b) The total catch (everything brought up by the fishing gear) includes species that can only sustain low exploitation rates; and
- (c) The fishing gear is likely to contact the seafloor during the normal course of fishing operations

3. Definition of VMEs

(1) Although Paragraph 83 of UNGA Resolution 61/105 refers to seamounts, hydrothermal vents and cold water corals as examples of VMEs, there is no definitive list of specific species or areas that are to be regarded as VMEs.

(2) Vulnerability is related to the likelihood that a population, community or habitat will experience substantial alteration by fishing activities and how much time will be required for its recovery from such alteration. The most vulnerable ecosystems are those that are both easily disturbed and are very slow to recover, or may never recover. The vulnerabilities of populations, communities and habitats are to be assessed relative to specific threats. Some features, particularly ones that are physically fragile or inherently rare may be vulnerable to most forms of disturbance, but the vulnerability of some populations, communities and habitats may vary greatly depending on the type of fishing gear used or the kind of disturbance experienced. The risks to a marine ecosystem are determined by its vulnerability, the probability of a threat occurring and the mitigation means applied to the threat. Accordingly, the FAO Guidelines only provide examples of potential vulnerable species groups, communities and habitats as well as features that potentially support them (Annex 2.1).

¹ “individual bottom fishing activities” means fishing activities by each fishing gear. For example, if ten fishing vessels operate bottom trawl fishing in a certain area, the impacts of the fishing activities of these vessels on the ecosystem are to be assessed as a whole rather than on a vessel-by-vessel basis. It should be noted that if the total number or capacity of the vessels using the same fishing gear has increased, the impacts of the fishing activities are to be assessed again.

(3) A marine ecosystem is to be classified as vulnerable based on its characteristics. The following list of characteristics is used as criteria in the identification of VMEs.

(a) Uniqueness or rarity - an area or ecosystem that is unique or that contains rare species whose loss could not be compensated for by other similar areas. These include:

- (i) Habitats that contain endemic species;
- (ii) Habitats of rare, threatened or endangered species that occur in discrete areas;
- (iii) Nurseries or discrete feeding, breeding, or spawning areas

(b) Functional significance of the habitat – discrete areas or habitats that are necessary for the survival, function, spawning/reproduction or recovery of fish stocks, particular life-history stages (e.g. nursery grounds or rearing areas), or of rare, threatened or endangered marine species.

(c) Fragility – an ecosystem that is highly susceptible to degradation by anthropogenic activities

(d) Life-history traits of component species that make recovery difficult – ecosystems that are characterized by populations or assemblages of species with one or more of the following characteristics:

- (i) Slow growth rates
- (ii) Late age of maturity
- (iii) Low or unpredictable recruitment
- (iv) Long-lived

(e) Structural complexity – an ecosystem that is characterized by complex physical structures created by significant concentrations of biotic and abiotic features. In these ecosystems, ecological processes are usually highly dependent on these structured systems. Further, such ecosystems often have high diversity, which is dependent on the structuring organisms.

(4) Management response may vary, depending on the size of the ecological unit in the Convention Area. Therefore, the spatial extent of the ecological unit is to be decided first. For example, whether the ecological unit is a group of seamounts, or an individual seamount in the Convention Area, is to be decided using the above criteria.

4. Identification of potential VMEs

(1) Fished seamounts

(a) Identification of fished seamounts

It is reported that two types of fishing gear are currently used by members of the Commission in the NE area, namely long-line hook and long-line trap. The footprint of the bottom fisheries (fished seamounts) is identified based on the available fishing record. The following seamounts have been identified as fished seamounts at some point in the past: Brown Bear, Cobb, Warwick, Eickelberg, Pathfinder, Miller, Murray, Cowie, Surveyor, Pratt, and Durgin. It is important to establish, to the extent practicable, a time series of where and when these gears have been used in order to assess potential long-term effects on any existing VMEs.

Fishing effort may not be evenly distributed on each seamount since fish aggregation may occur only at certain points of the seamount and some parts of the seamount may be physically unsuitable for certain fishing gears. Thus, it is important to know actual fished areas within the same seamount so as to know the gravity of the impact of fishing activities on the entire seamount.

Due consideration is to be given to the protection of commercial confidentiality when identifying actual fishing grounds.

(b) Assessment on whether a specific seamount that has been fished is a VME

After identifying the fished seamounts or fished areas of seamounts, it is necessary to assess whether each fished seamount is a VME or contains VMEs in accordance with the criteria in 3 above, individually or in combination using the best available scientific and technical information as well as Annex 2.1. A variety of data would be required to conduct such assessment, including pictures of seamounts taken by an ROV camera or drop camera, biological samples collected through research activities and observer programs, and detailed bathymetry map. Where site-specific information is lacking, other information that is relevant to inferring the likely presence of VMEs is to be used.

(2) New fishing areas

Any place other than the fished seamounts above is to be regarded as a new fishing area. If a member of the Commission is considering fishing in a new fishing area, such a fishing area is to be subject to, in addition to these standards and criteria, an exploratory fishery protocol (Annex 1).

5. Assessment of SAIs on VMEs or marine species

(1) Significant adverse impacts are those that compromise ecosystem integrity (i.e., ecosystem structure or function) in a manner that: (i) impairs the ability of affected populations to replace themselves; (ii) degrades the long-term natural productivity of habitats; or (iii) causes, on more than a temporary basis, significant loss of species richness, habitat or community types. Impacts are to be evaluated individually, in combination and cumulatively.

(2) When determining the scale and significance of an impact, the following six factors are to be considered:

- (a) The intensity or severity of the impact at the specific site being affected;
- (b) The spatial extent of the impact relative to the availability of the habitat type affected;
- (c) The sensitivity/vulnerability of the ecosystem to the impact;
- (d) The ability of an ecosystem to recover from harm, and the rate of such recovery;
- (e) The extent to which ecosystem functions may be altered by the impact; and
- (f) The timing and duration of the impact relative to the period in which a species needs the habitat during one or more life-history stages.

(3) Temporary impacts are those that are limited in duration and that allow the particular ecosystem to recover over an acceptable timeframe. Such timeframes are to be decided on a case-by-case basis and be on the order of 5-20 years, taking into account the specific features of the populations and ecosystems.

(4) In determining whether an impact is temporary, both the duration and the frequency with which an impact is repeated is to be considered. If the interval between the expected disturbances of a habitat is shorter than the recovery time, the impact is to be considered more than temporary.

(5) Each member of the Commission is to conduct assessments to establish if bottom fishing activities are likely to produce SAIs in a given seamount or other VMEs. Such an impact assessment is to address, *inter alia*:

- (a) Type of fishing conducted or contemplated, including vessel and gear types, fishing areas, target and potential bycatch species, fishing effort levels and duration of fishing;
- (b) Best available scientific and technical information on the current state of fishery resources, and baseline information on the ecosystems, habitats and communities in the fishing area, against which future changes are to be compared;
- (c) Identification, description and mapping of VMEs known or likely to occur in the fishing area;
- (d) The data and methods used to identify, describe and assess the impacts of the activity, identification of gaps in knowledge, and an evaluation of uncertainties in the information presented in the assessment
- (e) Identification, description and evaluation of the occurrence, scale and duration of likely impacts, including cumulative impacts of activities covered by the assessment on VMEs and low-productivity fishery resources in the fishing area;
- (f) Risk assessment of likely impacts by the fishing operations to determine which impacts are likely to be SAIs, particularly impacts on VMEs and low-productivity fishery resources (Risk assessments are to take into account, as appropriate, differing conditions prevailing in areas where fisheries are well established and in areas where fisheries have not taken place or only occur occasionally);
- (g) The proposed mitigation and management measures to be used to prevent SAIs on VMEs and ensure long-term conservation and sustainable utilization of low-productivity fishery resources, and the measures to be used to monitor effects of the fishing operations.

(6) Impact assessments are to consider, as appropriate, the information referred to in these Standards and Criteria, as well as relevant information from similar or related fisheries, species and ecosystems.

(7) Where an assessment concludes that the area does not contain VMEs or that significant adverse impacts on VMEs or marine species are not likely, such assessments are to be repeated when there have been significant changes to the fishery or other activities in the area, or when natural processes are thought to have undergone significant changes.

6. Proposed conservation and management measures to prevent SAIs

As a result of the assessment in 5 above, if it is considered that individual fishing activities are causing or likely to cause SAIs on VMEs or marine species, the member of the Commission is to adopt appropriate conservation and management measures to prevent such SAIs. The member of the Commission is to clearly indicate how such impacts are expected to be prevented or mitigated by the measures.

7. Precautionary approach

If after assessing all available scientific and technical information, the presence of VMEs or the likelihood that individual bottom fishing activities would cause SAIs on VMEs or marine species cannot be adequately determined, members of the Commission are only to authorize individual bottom fishing activities to proceed in accordance with:

- (a) Precautionary, conservation and management measures to prevent SAIs;
- (b) Measures to address unexpected encounters with VMEs in the course of fishing operations;
- (c) Measures, including ongoing scientific research, monitoring and data collection, to reduce the uncertainty; and
- (d) Measures to ensure long-term sustainability of deep sea fisheries.

8. Template for assessment report

Annex 2.2 is a template for individual member of the Commission to formulate reports on identification of VMEs and impact assessment.

ANNEX 2.1

EXAMPLES OF POTENTIAL VULNERABLE SPECIES GROUPS, COMMUNITIES AND HABITATS AS WELL AS FEATURES THAT POTENTIALLY SUPPORT THEM

The following examples of species groups, communities, habitats and features often display characteristics consistent with possible VMEs. Merely detecting the presence of an element itself is not sufficient to identify a VME. That identification is to be made on a case-by-case basis through application of relevant provisions of the Standards and Criteria, particularly Sections 3, 4 and 5.

Examples of species groups, communities and habitat forming species that are documented or considered sensitive and potentially vulnerable to deep-sea fisheries in the high-seas, and which may contribute to forming VMEs:	
a.	certain coldwater corals, e.g., reef builders and coral forest including: stony corals (scleractinia), alcyonaceans and gorgonians (octocorallia), black corals (antipatharia), and hydrocorals (stylasteridae),
b.	Some types of sponge dominated communities,
c.	communities composed of dense emergent fauna where large sessile protozoans (xenophyphores) and invertebrates (e.g., hydroids and bryozoans) form an important structural component of habitat, and
d.	seep and vent communities comprised of invertebrate and microbial species found nowhere else (i.e., endemic).

Examples of topographical, hydrophysical or geological features, including fragile geological structures, that potentially support the species groups or communities, referred to above:	
a.	submerged edges and slopes (e.g., corals and sponges),
b.	summits and flanks of seamounts, guyots, banks, knolls, and hills (e.g., corals, sponges, xenophyphores),
c.	canyons and trenches (e.g., burrowed clay outcrops, corals),
d.	hydrothermal vents (e.g., microbial communities and endemic invertebrates), and
e.	cold seeps (e.g., mud volcanoes, microbes, hard substrates for sessile invertebrates).

TEMPLATE FOR REPORTS ON IDENTIFICATION OF VMES AND ASSESSMENT OF IMPACTS CAUSED BY INDIVIDUAL FISHING ACTIVITIES ON VMES OR MARINE SPECIES

1. Name of the member of the Commission
2. Name of the fishery (e.g., bottom trawl, bottom gillnet, bottom longline, pot)
3. Status of the fishery (existing fishery or exploratory fishery)
4. Target species
5. Bycatch species
6. Recent level of fishing effort (every year at least since 2002)
 - (1) Number of fishing vessels
 - (2) Tonnage of each fishing vessel
 - (3) Number of fishing days or days on the fishing ground
 - (4) Fishing effort (total operating hours for trawl, # of hooks per day for long-line, # of pots per day for pot, total length of net per day for gillnet)
 - (5) Total catch by species
 - (6) Names of seamounts fished or to be fished
7. Fishing period
8. Analysis of status of fishery resources
 - (1) Data and methods used for analysis
 - (2) Results of analysis
 - (3) Identification of uncertainties in data and methods, and measures to overcome such uncertainties
9. Analysis of status of bycatch species resources
 - (1) Data and methods used for analysis
 - (2) Results of analysis
 - (3) Identification of uncertainties in data and methods, and measures to overcome such uncertainties
10. Analysis of existence of VMES in the fishing ground
 - (1) Data and methods used for analysis
 - (2) Results of analysis
 - (3) Identification of uncertainties in data and methods, and measures to overcome such uncertainties
11. Impact assessment of fishing activities on VMES or marine species including cumulative impacts, and identification of SAIs on VMES or marine species, as detailed in Section 5 above, Assessment of SAIs on VMES or marine species
12. Other points to be addressed
13. Conclusion (whether to continue or start fishing with what measures, or stop fishing)

SCIENTIFIC COMMITTEE ASSESSMENT REVIEW PROCEDURES FOR BOTTOM FISHING ACTIVITIES

1. The Scientific Committee (SC) is to review identifications of vulnerable marine ecosystems (VMEs) and assessments of significant adverse impact on VMEs, including proposed management measures intended to prevent such impacts submitted by individual Members.
2. Members of the Commission shall submit their identifications and assessments to members of the SC at least 21 days prior to the SC meeting at which the review is to take place. Such submissions shall include all relevant data and information in support of such determinations.
3. The SC will review the data and information in each assessment in accordance with the Science-based Standards and Criteria for Identification of VMEs and Assessment of Significant Adverse Impacts on VMEs and Marine Species (Annex 2), previous decisions of the Commission, and the FAO Technical Guidelines for the Management of Deep Sea Fisheries in the High Seas, paying special attention to the assessment process and criteria specified in paragraphs 47-49 of the Guidelines.
4. In conducting the review above, the SC will give particular attention to whether the deep-sea bottom fishing activity would have a significant adverse impact on VMEs and marine species and, if so, whether the proposed management measures would prevent such impacts.
5. Based on the above review, the SC will provide advice and recommendations to the submitting Members on the extent to which the assessments and related determinations are consistent with the procedures and criteria established in the documents identified above; and whether additional management measures will be required to prevent SAIs on VMEs.
6. Such recommendations will be reflected in the report of the SC meeting at which the assessments are considered.

FORMAT OF NATIONAL REPORT SECTIONS ON DEVELOPMENT AND IMPLEMENTATION OF SCIENTIFIC OBSERVER PROGRAMMES

Report Components

Annual Observer Programme implementation reports should form a component of annual National Reports submitted by members to the Scientific Committee. These reports should provide a brief overview of observer programmes conducted in the NPFC Convention Area. Observer programme reports should include the following sections:

A. Observer Training

An overview of observer training conducted, including:

- Overview of training programme provided to scientific observers.
- Number of observers trained.

B. Scientific Observer Programme Design and Coverage

Details of the design of the observer programme, including:

- Which fleets, fleet components or fishery components were covered by the programme.
- How vessels were selected to carry observers within the above fleets or components.
- How was observer coverage stratified: by fleets, fisheries components, vessel types, vessel sizes, vessel ages, fishing areas and seasons.

Details of observer coverage of the above fleets, including:

- Components, areas, seasons and proportion of total catches of target species, specifying units used to determine coverage.
- Total number of observer employment days, and number of actual days deployed on observation work.

C. Observer Data Collected

List of observer data collected against the agreed range of data set out in Annex 5, including:

- Effort Data: Amount of effort observed (vessel days, net panels, hooks, etc), by area and season and % observed out of total by area and seasons
- Catch Data: Amount of catch observed of target and by-catch species, by area and season, and % observed out of total estimated catch by species, area and seasons
- Length Frequency Data: Number of fish measured per species, by area and season.
- Biological Data: Type and quantity of other biological data or samples (otoliths, sex, maturity, etc) collected per species.
- The size of length-frequency and biological sub-samples relative to unobserved quantities.

D. Tag Return Monitoring

- Number of tags returns observed, by fish size class and area.

E. Problems Experienced

- Summary of problems encountered by observers and observer managers that could affect the NPFC Observer Programme Standards and/or each member's national observer programme developed under the NPFC standards.

**NPFC BOTTOM FISHERIES
OBSERVER PROGRAMME STANDARDS: SCIENTIFIC COMPONENT**

TYPE AND FORMAT OF SCIENTIFIC OBSERVER DATA TO BE COLLECTED

A. Vessel & Observer Data to be collected for Each Trip

1. Vessel and observer details are to be recorded only once for each observed trip.
2. The following vessel data are to be collected for each observed trip:
 - a) Current vessel flag.
 - b) Name of vessel.
 - c) Name of the Captain.
 - d) Name of the Fishing Master.
 - e) Registration number.
 - f) International radio call sign (if any).
 - g) Lloyd's / IMO number (if allocated).
 - h) Previous Names (if known).
 - i) Port of registry.
 - j) Previous flag (if any).
 - k) Type of vessel.
 - l) Type of fishing method(s).
 - m) Length (m).
 - n) Beam (m).
 - o) Gross register tonnage (international tonnage).
 - p) Power of main engine(s) (kilowatts).
 - q) Hold capacity (cubic metres).
 - r) Record of the equipment on board which may affect fishing power factors (navigational equipment, radar, sonar systems, weather fax or satellite weather receiver, sea-surface temperature image receiver, Doppler current monitor, radio direction finder).
 - s) Total number of crew (all staff, excluding observers).
3. The following observer data are to be collected for each observed trip:
 - a) Observer's name.
 - b) Observer's organisation.
 - c) Date observer embarked (UTC date).
 - d) Port of embarkation.
 - e) Date observer disembarked (UTC date).
 - f) Port of disembarkation.

B. Catch & Effort Data to be collected for Trawl Fishing Activity

1. Data are to be collected on an un-aggregated (tow by tow) basis for all observed trawls.
2. The following data are to be collected for each observed trawl tow:
 - a) Tow start date (UTC).
 - b) Tow start time (UTC).
 - c) Tow end date (UTC).
 - d) Tow end time (UTC).
 - e) Tow start position (Lat/Lon, 1 minute resolution).
 - f) Tow end position (Lat/Lon, 1 minute resolution).
 - g) Type of trawl, bottom or mid-water.
 - h) Type of trawl, single, double or triple.
 - i) Height of net opening (m).

- j) Width of net opening (m).
- k) Mesh size of the cod-end net (stretched mesh, mm) and mesh type (diamond, square, etc).
- l) Gear depth (of footrope) at start of fishing (m).
- m) Bottom (seabed) depth at start of fishing (m).
- n) Gear depth (of footrope) at end of fishing (m).
- o) Bottom (seabed) depth at end of fishing (m).
- p) Status of the trawl operation (no damage, lightly damaged*, heavily damaged*, other (specify)). *Degree may be evaluated by time for repairing (<=1hr or >1hr)
- q) Duration of estimated period of seabed contact (minute)
- r) Intended target species.
- s) Catch of all species retained on board, split by species, in weight (to the nearest kg).
- t) Estimate of the amount (weight or volume) of all living marine resources discarded, split by species.
- u) Record of the numbers by species of all marine mammals, seabirds or reptiles caught.
- v) Record of sensitive benthic species in the trawl catch, particularly vulnerable or habitat-forming species such as sponges, sea-fans or corals.

C. Catch & Effort Data to be collected for Bottom Gillnet Fishing Activity

1. Data are to be collected on an un-aggregated (set by set) basis for all observed bottom gillnet sets.
2. The following data are to be collected for each observed bottom gillnet set:
 - a) Set start date (UTC).
 - b) Set start time (UTC).
 - c) Set end date (UTC).
 - d) Set end time (UTC).
 - e) Set start position (Lat/Lon, 1 minute resolution).
 - f) Set end position (Lat/Lon, 1 minute resolution).
 - g) Net panel ("tan") length (m).
 - h) Net panel ("tan") height (m).
 - i) Net mesh size (stretched mesh, mm) and mesh type (diamond, square, etc)
 - j) Bottom depth at start of setting (m).
 - k) Bottom depth at end of setting (m).
 - l) Number of net panels for the set.
 - m) Number of net panels retrieved.
 - n) Number of net panels actually observed during the haul.
 - o) Actually observed catch of all species retained on board, split by species, in weight (to the nearest kg).
 - p) An estimation of the amount (numbers or weight) of marine resources discarded, split by species, during the actual observation.
 - q) Record of the actually observed numbers by species of all marine mammals, seabirds or reptiles caught.
 - r) Intended target species.
 - s) Catch of all species retained on board, split by species, in weight (to the nearest kg).
 - t) Estimate of the amount (weight or volume) of all marine resources discarded* and dropped-off, split by species. * Including those retained for scientific samples.
 - u) Record of the numbers by species of all marine mammals, seabirds or reptiles caught (including those discarded and dropped-off).

D. Catch & Effort Data to be collected for Bottom Long Line Fishing Activity

1. Data are to be collected on an un-aggregated (set by set) basis for all observed longline sets.
2. The following fields of data are to be collected for each set:
 - a) Set start date (UTC).

- b) Set start time (UTC).
- c) Set end date (UTC).
- d) Set end time (UTC).
- e) Set start position (Lat/Lon, 1 minute resolution).
- f) Set end position (Lat/Lon, 1 minute resolution).
- g) Total length of longline set (m).
- h) Number of hooks for the set.
- i) Bottom (seabed) depth at start of set.
- j) Bottom (seabed) depth at end of set.
- k) Number of hooks actually observed during the haul.
- l) Intended target species.
- m) Actually observed catch of all species retained on board, split by species, in weight (to the nearest kg).
- n) An estimation of the amount (numbers or weight) of marine resources discarded* or dropped-off, split by species, during the actual observation. * Including those retained for scientific samples.
- o) Record of the actually observed numbers by species of all marine mammals, seabirds or reptiles caught (including those discarded and dropped-off).

E. Length-Frequency Data to Be Collected

1. Representative and randomly distributed length-frequency data (to the nearest mm, with record of the type of length measurement taken) are to be collected for representative samples of the target species and other main by-catch species. Total weight of length-frequency samples should be recorded, and observers may be required to also determine sex of measured fish to generate length-frequency data stratified by sex. The length-frequency data may be used as potential indicators of ecosystem changes (for seample, see: Gislason, H. et al. (2000. ICES J Mar Sci 57: 468-475) Yamane et al. (2005. ICES J Mar Sci, 62: 374-379), and Shin, Y-J. et al. (2005. ICES J Mar Sci, 62: 384-396)).
2. The numbers of fish to be measured for each species and distribution of samples across area and month strata should be determined, to ensure that samples are properly representative of species distributions and size ranges.

F. Biological sampling to be conducted (optional for gillnet and long line fisheries)

1. The following biological data are to be collected for representative samples of the main target species and, time permitting, for other main by-catch species contributing to the catch:
 - a) Species
 - b) Length (to the nearest mm), with record of the type of length measurement used.
 - c) Length and depth in case of North Pacific armorhead.
 - d) Sex (male, female, immature, unsexed)
 - e) Maturity stage (immature, mature, ripe, ripe-running, spent)
2. Representative stratified samples of otoliths are to be collected from the main target species and, time permitting, from other main by-catch species regularly occurring in catches. All otoliths to be collected are to be labelled with the information listed in 1 above, as well as the date, vessel name, observer name and catch position.
3. Where specific trophic relationship projects are being conducted, observers may be requested to also collect stomach samples from certain species. Any such samples collected are also to be labelled with the information listed in 1 above, as well as the date, vessel name, observer name and catch position.
4. Observers may also be required to collect tissue samples as part of specific genetic research programmes implemented by the SC.

5. Observers are to be briefed and provided with written length-frequency and biological sampling protocols and priorities for the above sampling specific to each observer trip.

G. Data to be collected on Incidental Captures of Protected Species

1. Flag members operating observer programs are to develop, in cooperation with the SC, lists and identification guides of protected species or species of concern (seabirds, marine mammals or marine reptiles) to be monitored by observers.
2. The following data are to be collected for all protected species caught in fishing operations:
 - a) Species (identified as far as possible, or accompanied by photographs if identification is difficult).
 - b) Count of the number caught per tow or set.
 - c) Life status (vigorous, alive, lethargic, dead) upon release.
 - d) Whole specimens (where possible) for onshore identification. Where this is not possible, observers may be required to collect sub-samples of identifying parts, as specified in biological sampling protocols.

H. Detection of Fishing in Association with Vulnerable Marine Ecosystems

1. The SC is to develop a guideline, species list and identification guide for benthic species (e.g. sponges, sea fans, corals) whose presence in a catch will indicate that fishing occurred in association with a vulnerable marine ecosystem (VME). All observers on vessels are to be provided with copies of this guideline, species list and ID guide.
2. For each observed fishing operation, the following data are to be collected for all species caught, which appear on the list of vulnerable benthic species:
 - a) Species (identified as far as possible, or accompanied by a photograph where identification is difficult).
 - b) An estimate of the quantity (weight (kg) or volume (m³)) of each listed benthic species caught in the fishing operation.
 - c) An overall estimate of the total quantity (weight (kg) or volume (m³)) of all invertebrate benthic species caught in the fishing operation.
 - d) Where possible, and particularly for new or scarce benthic species which do not appear in ID guides, whole samples should be collected and suitable preserved for identification on shore.

I. Data to be collected for all Tag Recoveries

1. The following data are to be collected for all recovered fish, seabird, mammal or reptile tags:
 - a) Observer name.
 - b) Vessel name.
 - c) Vessel call sign.
 - d) Vessel flag.
 - e) Collect, label (with all details below) and store the actual tags for later return to the tagging agency.
 - f) Species from which tag recovered.
 - g) Tag colour and type (spaghetti, archival).
 - h) Tag numbers (The tag number is to be provided for all tags when multiple tags were attached to one fish. If only one tag was recorded, a statement is required that specifies whether or not the other tag was missing)
 - i) Date and time of capture (UTC).
 - j) Location of capture (Lat/Lon, to the nearest 1 minute)
 - k) Animal length / size (to the nearest cm) with description of what measurement was taken (such as total length, fork length, etc).

- l) Sex (F=female, M=male, I=indeterminate, D=not examined)
- m) Whether the tags were found during a period of fishing that was being observed (Y/N)
- n) Reward information (e.g. name and address where to send reward)

(It is recognised that some of the data recorded here duplicates data that already exists in the previous categories of information. This is necessary because tag recovery information may be sent separately to other observer data.)

J. Hierarchies for Observer Data Collection

1. Trip-specific or programme-specific observer task priorities may be developed in response to specific research programme requirements, in which case such priorities should be followed by observers.
2. In the absence of trip- or programme-specific priorities, the following generalised priorities should be followed by observers:
 - a) Fishing Operation Information
 - All vessel and tow / set / effort information.
 - b) Monitoring of Catches
 - Record time, proportion of catch (e.g. proportion of trawl landing) or effort (e.g. number of hooks), and total numbers of each species caught.
 - Record numbers or proportions of each species retained or discarded.
 - c) Biological Sampling
 - Length-frequency data for target species.
 - Length-frequency data for main by-catch species.
 - Identification and counts of protected species.
 - Basic biological data (sex, maturity) for target species.
 - Check for presence of tags.
 - Otoliths (and stomach samples, if being collected) for target species.
 - Basic biological data for by-catch species.
 - Biological samples of by-catch species (if being collected)
 - Photos
3. The monitoring of catches and biological sampling procedures should be prioritised among species groups as follows:

Species	Priority (1 highest)
Primary target species (such as North Pacific armorhead and splendid alfonsin)	1
Other species typically within top 10 in the fishery (such as mirror dory, and oreos)	2
Protected species	3
All other species	4

The allocation of observer effort among these activities will depend on the type of operation and setting. The size of sub-samples relative to unobserved quantities (e.g. number of hooks/panels examined for species composition relative to the number of hooks/panels retrieved) should be explicitly recorded under the guidance of member country observer programmes.

K. Coding Specifications to be used for Recording Observer Data

1. Unless otherwise specified for specific data types, observer data are to be collected in accordance with the same coding specifications as specified in this Annex.
2. Coordinated Universal Time (UTC) is to be used to describe times.
3. Degrees and minutes are to be used to describe locations.
4. The following coding schemes are to be used:
 - a. Species are to be described using the FAO 3 letter species codes.
 - b. Fishing methods are to be described using the International Standard Classification of Fishing Gear (ISSCFG - 29 July 1980) codes.
 - c. Types of fishing vessel are to be described using the International Standard Classification of Fishery Vessels (ISSCFV) codes.
5. Metric units of measure are to be used, specifically:
 - a. Kilograms are to be used to describe catch weight.
 - b. Metres are to be used to describe height, width, depth, beam or length.
 - c. Cubic metres are to be used to describe volume.
 - d. Kilowatts are to be used to describe engine power.

**REVISION OF CMM 2016-05
CONSERVATION AND MANAGEMENT MEASURE
FOR BOTTOM FISHERIES AND PROTECTION OF VULNERABLE MARINE
ECOSYSTEMS IN THE NORTHWESTERN PACIFIC OCEAN**

Abstract:

The description of the area of closure of the southeastern portion of Koko Seamount as a precautionary measure to protect possible VMEs in the area was agreed by the Members that fished on Koko Seamount during the Preparatory Conference in Busan in 2009, however the precise coordinates were not reflected in actual CMM 2016-05 for Bottom Fisheries and Protection of Vulnerable Marine Ecosystems in the Northwestern Pacific Ocean approved by the Commission in 2016.

The purpose of this revision is to include the coordinates of that portion of the southeastern Koko Seamount.

**CONSERVATION AND MANAGEMENT MEASURE
FOR BOTTOM FISHERIES AND PROTECTION OF VULNERABLE MARINE
ECOSYSTEMS IN THE NORTHWESTERN PACIFIC OCEAN**

The North Pacific Fisheries Commission (NPFC),

Strongly supporting protection of vulnerable marine ecosystems (VMEs) and sustainable management of fish stocks based on the best scientific information available;

Recalling the United Nations General Assembly Resolutions (UNGA) on Sustainable Fisheries, particularly paragraphs 66 to 71 of the UNGA59/25 in 2004, paragraphs 69 to 74 of UNGA60/31 in 2005, and paragraphs 69 and 80 to 91 of UNGA61/105 in 2006;

Noting, in particular, paragraphs 66 and 69 of UNGA59/25 that call upon States to take action urgently to address the issue of bottom trawl fisheries on VMEs and to cooperate in the establishment of new regional fisheries management organizations or arrangements;

Recognizing further that fishing activities, including bottom fisheries, are an important contributor to the global food supply and that this must be taken into account when seeking to achieve sustainable fisheries and to protect VMEs;

Recognizing the importance of collecting scientific data to assess the impacts of these fisheries on marine species and VMEs;

Concerned about possible adverse impacts of unregulated expansion of bottom fisheries on marine species and VMEs in the western part of the Convention Area.

Adopts the following Conservation and Management Measure:

1. Scope

A. Coverage

These Measures are to be applied to all bottom fishing activities throughout the high seas areas of the Northwestern Pacific Ocean, defined, for the purposes of this document, as those occurring in the Convention Area as set out in Article 4 of the Convention text to the west of the line of 175 degrees W longitude (here in after called “the western part

of the Convention Area”) including all such areas and marine species other than those species already covered by existing international fisheries management instruments, including bilateral agreements and Regional Fisheries Management Organizations or Arrangements.

B. Management target

Bottom fisheries conducted by vessels operating in the western part of the Convention Area.

2. General purpose

Sustainable management of fish stocks and protection of VMEs in the western part of the Convention Area.

The objective of these Measures is to ensure the long-term conservation and sustainable use of the fisheries resources in the Convention Area while protecting the marine ecosystems of the North Pacific Ocean in which these resources occur. These measures shall set out to prevent significant adverse impacts on VMEs in the Convention Area of the North Pacific Ocean, acknowledging the complex dependency of fishing resources and species belonging to the same ecosystem within VMEs.

The Commission shall re-evaluate, and as appropriate, revise, the definition based on further consideration of the work done through FAO and by NPFC.

3. Principles

The implementation of this CMM shall:

- a. be based on the best scientific information available,
- b. be in accordance with existing international laws and agreements including UNCLOS and other relevant international instruments,
- c. establish appropriate and effective conservation and management measures,
- d. be in accordance with the precautionary approach, and
- e. incorporate an ecosystem approach to fisheries management.

4. Measures

Members of the Commission shall take the following measures in order to achieve sustainable management of fish stocks and protection of VMEs in the western part of the Convention Area:

A. Limit fishing effort in bottom fisheries on the western part of the Convention Area to the level agreed in February 2007 in terms of the number of fishing vessels and other parameters which reflect the level of fishing effort, fishing capacity or potential impacts on marine ecosystems.

B. Not allow bottom fisheries to expand into the western part of the Convention Area where no such fishing is currently occurring, in particular, by limiting such bottom fisheries to seamounts located south of 45 degrees North Latitude and refrain from bottom fisheries in other areas of the western part of the Convention Area covered by these measures and also not allow bottom fisheries to conduct fishing operation in areas deeper than 1,500m.

C. Notwithstanding subparagraphs A and B above, exceptions to these restrictions may be provided in cases where it can be shown that any fishing activity beyond such limits or in any new areas would not have significant adverse impacts (SAIs) on marine species or any VME. Such fishing activity is subject to an exploratory fishery protocol (Annex 1).

D. Any determinations pursuant to subparagraph C that any proposed fishing activity will not have SAIs on marine species or any VME are to be in accordance with the Science-based Standards and Criteria (Annex 2), which are consistent with the FAO International Guidelines for the Management of Deep-sea Fisheries in the High Seas.

E. Any determinations, by any flag state or pursuant to any subsequent arrangement for the management of the bottom fisheries in the areas covered by these measures, that fishing activity would not have SAIs on marine species or any VMEs, shall be made publicly available through agreed means.

F. Prohibit its vessels from engaging in directed fishing on the following orders: Alcyonacea, Antipatharia, Gorgonacea, and Scleractinia as well as any other indicator species for VMEs as may be identified from time to time by the SC and approved by the Commission.

G. Further, considering accumulated information regarding fishing activities in the western part of the Convention Area, in areas where, in the course of fishing operations, cold water corals more than 50Kg are encountered in one gear retrieval, Members of the Commission shall require vessels flying their flag to cease bottom fishing activities in that location. In such cases, the vessel shall not resume fishing activities until it has relocated a sufficient distance, which shall be no less than 2 nautical miles, so that additional encounters with VMEs are unlikely. All such encounters, including the location and the species in question, shall be

reported to the Secretariat, who shall notify the other Members of the Commission so that appropriate measures can be adopted in respect of the relevant site. It is agreed that the cold water corals include: Alcyonacea, Antipatharia, Gorgonacea, and Scleractinia.

H. C-H seamount and Southeastern part of Koko seamount, specifically for the latter seamount, the area South of 34 degrees 57 minutes North, East of the 400m isobaths, East of 171 degrees 54 minutes East, North of 34 degrees 50 minutes North, are closed precautionary for potential VME conservation. Fishing in these areas requires exploratory fishery protocol (Annex 1).

I. Ensure that the distance between the footrope of the gill net and sea floor is greater than 70 cm.

J. Apply a bottom fisheries closure from November to December

K. Limit annual catch of North Pacific armorhead to 15,000 tons for Japan

5. Contingent Action

Members of the Commission shall submit to the SC their assessments of the impacts of fishing activity on marine species or any VMEs, including the proposed management measures to prevent such impact. Such submissions shall include all relevant data and information in support of any such assessment. Procedures for such reviews including procedures for the provision of advice and recommendations from the SC to the submitting Member are attached (Annex 3). Members will only authorize bottom fishing activity pursuant to para 4 (C).

6. Scientific Information

To facilitate the scientific work associated with the implementation of these measures, each Member of the Commission shall undertake:

A. Collection of Information for purposes of defining the footprint

In implementing paragraphs 4A and 4B, the Members of the Commission shall provide for each year, the number of vessels by gear type, size of vessels (tons), number of fishing days or days on the fishing grounds, total catch by species, and areas fished (names of seamounts) to the Secretariat. The Secretariat shall circulate the information received to the other Members consistent with the approved Interim Data Handling and Data Sharing Protocol. To support assessments of the fisheries and refinement of conservation and management measures, Members of the Commission are to provide update information on an annual basis.

B. Collection of Information

(i) Collection of scientific information from each bottom fishing vessel operating in the western part of the Convention Area.

- a. Catch and effort data
- b. Related information such as time, location, depth, temperature, etc.

(ii) As appropriate the collection of information from research vessels operating in the western part of the Convention Area.

- a. Physical, chemical, biological, oceanographic, meteorological, etc.
- b. Ecosystem surveys.

(iii) Collection of Observer Data

Duly designated observers from the flag member shall collect information from bottom fishing vessels operating in the western part of the Convention Area. Observers shall collect data in accordance with Annex 5. Each Member of the Commission shall submit the reports to the Secretariat in accordance with Annex 4. The Secretariat shall compile this information on an annual basis and make it available to the Members of the Commission.

7. Control of bottom fishing vessels

To strengthen its control over bottom fishing vessels flying its flag, each Member of the Commission shall ensure that all such vessels operating in the western part of the Convention Area be equipped with an operational vessel monitoring system.

8. Observers

All vessels authorized to bottom fishing in the western part of the Convention Area shall carry an observer on board.

EXPLORATORY FISHERY PROTOCOL IN THE NORTH PACIFIC OCEAN

1. From 1 January 2009, all bottom fishing activities in new fishing areas and areas where fishing is prohibited in a precautionary manner or with bottom gear not previously used in the existing fishing areas, are to be considered as “exploratory fisheries” and to be conducted in accordance with this protocol.

2. Precautionary conservation and management measures, including catch and effort controls, are essential during the exploratory phase of deep sea fisheries. Implementation of a precautionary approach to sustainable exploitation of deep sea fisheries shall include the following measures:

- i. precautionary effort limits, particularly where reliable assessments of sustainable exploitation rates of target and main by-catch species are not available;
- ii. precautionary measures, including precautionary spatial catch limits where appropriate, to prevent serial depletion of low-productivity stocks;
- iii. regular review of appropriate indices of stock status and revision downwards of the limits listed above when significant declines are detected;
- iv. measures to prevent significant adverse impacts on vulnerable marine ecosystems; and
- v. comprehensive monitoring of all fishing effort, capture of all species and interactions with VMEs.

3. When a member of the Commission would like to conduct exploratory fisheries, it is to follow the following procedure:

(1) Prior to the commencement of fishing, the member of the Commission is to circulate the information and assessment in Appendix 1.1 to the members of the Scientific Committee (SC) for review and to all members of the Commission for information, together with the impact assessment. Such information is to be provided to the other members at least 30 days in advance of the meeting at which the information shall be reviewed.

(2) The assessment in (1) above is to be conducted in accordance with the procedure set forth in “Science-based Standards and Criteria for Identification of VMEs and Assessment of Significant Adverse Impacts on VMEs and Marine Species (Annex 2)”, with the understanding that particular care shall be taken in the evaluation of risks of the significant adverse impact on vulnerable marine ecosystems (VMEs), in line with the precautionary

approach.

(3) The SC is to review the information and the assessment submitted in (1) above in accordance with “SC Assessment Review Procedures for Bottom Fishing Activities (Annex 3).”

(4) The exploratory fisheries are to be permitted only where the assessment concludes that they would not have significant adverse impacts (SAIs) on marine species or any VMEs and on the basis of comments and recommendations of SC. Any determinations, by any Member of the Commission or the SC, that the exploratory fishing activities would not have SAIs on marine species or any VMEs, shall be made publicly available through the NPFC website.

4. The member of the Commission is to ensure that all vessels flying its flag conducting exploratory fisheries are equipped with a satellite monitoring device and have an observer on board at all times.

5. Within 3 months of the end of the exploratory fishing activities or within 12 months of the commencement of fishing, whichever occurs first, the member of the Commission is to provide a report of the results of such activities to the members of the SC and all members of the Commission. If the SC meets prior to the end of this 12 month period, the member of the Commission is to provide an interim report 30 days in advance of the SC meeting. The information to be included in the report is specified in Appendix 1.2.

6. The SC is to review the report in 5 above, and decide whether the exploratory fishing activities had SAIs on marine species or any VME. The SC then is to send its recommendations to the Commission on whether the exploratory fisheries can continue and whether additional management measures shall be required if they are to continue. The Commission is to strive to adopt conservation and management measures to prevent SAIs on marine species or any VMEs. If the Commission is not able to reach consensus on any such measures, each fishing member of the Commission is to adopt measures to avoid any SAIs on VMEs.

7. Members of the Commission shall only authorize continuation of exploratory fishing activity, or commencement of commercial fishing activity, under this protocol on the basis of comments and recommendations of the SC.

Information to be provided before exploratory fisheries start

1. A harvesting plan

- Name of vessel
- Flag member of vessel
- Description of area to be fished (location and depth)
- Fishing dates
- Anticipated effort
- Target species
- Bottom fishing gear-type used
- Area and effort restrictions to ensure that fisheries occur on a gradual basis in a limited geographical area.

2. A mitigation plan

- Measures to prevent SAIs to VMEs that may be encountered during the fishery

3. A catch monitoring plan

- Recording/reporting of all species brought onboard to the lowest possible taxonomic level
- 100% satellite monitoring
- 100% observer coverage

4. A data collection plan

- Data is to be collected in accordance with “Type and Format of Scientific Observer Data to be Collected” (Annex 5)

Information to be included in the report

- Name of vessel
- Flag member of vessel
- Description of area fished (location and depth)
- Fishing dates
- Total effort
- Bottom fishing gear-type used
- List of VME encountered (the amount of VME indicator species for each encounter specifying the location: longitude and latitude)
- Mitigation measures taken in response to the encounter of VME
- List of all organisms brought onboard
 - List of VMEs indicator species brought onboard by location: longitude and latitude

**SCIENCE-BASED STANDARDS AND CRITERIA FOR IDENTIFICATION OF VMES
AND ASSESSMENT OF SIGNIFICANT ADVERSE IMPACTS ON VMES AND
MARINE SPECIES**

1. Introduction

Members of the Commission have hereby established science-based standards and criteria to guide their implementation of United Nations General Assembly (UNGA) Resolution 61/105 and the measures adopted by the Members in respect of bottom fishing activities in the North Pacific Ocean (NPO). In this regard, these science-based standards and criteria are to be applied to identify vulnerable marine ecosystems (VMEs) and assess significant adverse impacts (SAIs) of bottom fishing activities on such VMEs or marine species and to promote the long-term sustainability of deep sea fisheries in the Convention Area. The science-based standards and criteria are consistent with the FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas, taking into account the work of other RFMOs implementing management of deep-sea bottom fisheries in accordance with UNGA Resolution 61/105. The standards and criteria are to be modified from time to time as more data are collected through research activities and monitoring of fishing operations.

2. Purpose

(1) The purpose of the standards and criteria is to provide guidelines for each member of the Commission in identifying VMEs and assessing SAIs of individual bottom fishing activities² on VMEs or marine species in the Convention Area. Each member of the Commission, using the best information available, is to decide which species or areas are to be categorized as VMEs, identify areas where VMEs are known or likely to occur, and assess whether individual bottom fishing activities would have SAIs on such VMEs or marine species. The results of these tasks are to be submitted to and reviewed by the Scientific Committee with a view to reaching a common understanding among the members of the Commission.

(2) For the purpose of applying the standards and criteria, the bottom fisheries are defined as follows:

- (a) The fisheries are conducted in the Convention Area;
- (b) The total catch (everything brought up by the fishing gear) includes species that can only sustain low exploitation rates; and
- (c) The fishing gear is likely to contact the seafloor during the normal course of fishing operations

² “individual bottom fishing activities” means fishing activities by each fishing gear. For example, if ten fishing vessels operate bottom trawl fishing in a certain area, the impacts of the fishing activities of these vessels on the ecosystem are to be assessed as a whole rather than on a vessel-by-vessel basis. It should be noted that if the total number or capacity of the vessels using the same fishing gear has increased, the impacts of the fishing activities are to be assessed again.

3. Definition of VMEs

(1) Although Paragraph 83 of UNGA Resolution 61/105 refers to seamounts, hydrothermal vents and cold water corals as examples of VMEs, there is no definitive list of specific species or areas that are to be regarded as VMEs.

(2) Vulnerability is related to the likelihood that a population, community or habitat will experience substantial alteration by fishing activities and how much time will be required for its recovery from such alteration. The most vulnerable ecosystems are those that are both easily disturbed and are very slow to recover, or may never recover. The vulnerabilities of populations, communities and habitats are to be assessed relative to specific threats. Some features, particularly ones that are physically fragile or inherently rare may be vulnerable to most forms of disturbance, but the vulnerability of some populations, communities and habitats may vary greatly depending on the type of fishing gear used or the kind of disturbance experienced. The risks to a marine ecosystem are determined by its vulnerability, the probability of a threat occurring and the mitigation means applied to the threat. Accordingly, the FAO Guidelines only provide examples of potential vulnerable species groups, communities and habitats as well as features that potentially support them (Annex 2.1).

(3) A marine ecosystem is to be classified as vulnerable based on its characteristics. The following list of characteristics is used as criteria in the identification of VMEs.

(a) Uniqueness or rarity - an area or ecosystem that is unique or that contains rare species whose loss could not be compensated for by other similar areas. These include:

- (i) Habitats that contain endemic species;
- (ii) Habitats of rare, threatened or endangered species that occur in discrete areas;
- (iii) Nurseries or discrete feeding, breeding, or spawning areas

(b) Functional significance of the habitat – discrete areas or habitats that are necessary for the survival, function, spawning/reproduction or recovery of fish stocks, particular life-history stages (e.g. nursery grounds or rearing areas), or of rare, threatened or endangered marine species.

(c) Fragility – an ecosystem that is highly susceptible to degradation by anthropogenic activities

(d) Life-history traits of component species that make recovery difficult – ecosystems that are characterized by populations or assemblages of species with one or more of the following characteristics:

- (i) Slow growth rates
- (ii) Late age of maturity
- (iii) Low or unpredictable recruitment
- (iv) Long-lived

(e) Structural complexity – an ecosystem that is characterized by complex physical structures created by significant concentrations of biotic and abiotic features. In these ecosystems, ecological processes are

usually highly dependent on these structured systems. Further, such ecosystems often have high diversity, which is dependent on the structuring organisms.

(4) Management response may vary, depending on the size of the ecological unit in the Convention Area. Therefore, the spatial extent of the ecological unit is to be decided first. That is, whether the ecological unit is the entire Area, or the current fishing ground, namely, the Emperor Seamount and Northern Hawaiian Ridge area (hereinafter called “the ES-NHR area”), or a group of the seamounts within the ES-NHR area, or each seamount in the ES-NHR area, is to be decided using the above criteria.

4. Identification of potential VMEs

(1) Fished seamounts

(a) Identification of fished seamounts

It is reported that four types of fishing gear are currently used by the members of the Commission in the ES-NHR area, namely, bottom trawl, bottom gillnet, bottom longline and pot. A fifth type of fishing gear (coral drag) was used in the ES-NHR area from the mid-1960s to the late 1980s and is possibly still used by non-members of the Commission. These types of fishing gear are usually used on the top or slope of seamounts, which could be considered VMEs. It is therefore necessary to identify the footprint of the bottom fisheries (fished seamounts) based on the available fishing record. The following seamounts have been identified as fished seamounts: Suiko, Showa, Youmei, Nintoku, Jingu, Ojin, Northern Koko, Koko, Kinmei, Yuryaku, Kammu, Colahan, and C-H. Since the use of most of these gears in the ES-NHR area dates back to the late 1960s and 1970s, it is important to establish, to the extent practicable, a time series of where and when these gears have been used in order to assess potential long-term effects on any existing VMEs.

Fishing effort may not be evenly distributed on each seamount since fish aggregation may occur only at certain points of the seamount and some parts of the seamount may be physically unsuitable for certain fishing gears. Thus, it is important to know actual fished areas within the same seamount so as to know the gravity of the impact of fishing activities on the entire seamount.

Due consideration is to be given to the protection of commercial confidentiality when identifying actual fishing grounds.

(b) Assessment on whether a specific seamount that has been fished is a VME

After identifying the fished seamounts or fished areas of seamounts, it is necessary to assess whether each fished seamount is a VME or contains VMEs in accordance with the criteria in 3 above, individually or in combination using the best available scientific and technical information as well as Annex 2.1. A variety of data would be required to conduct such assessment, including pictures of seamounts taken by an ROV camera or drop camera, biological samples collected through research activities and observer

programs, and detailed bathymetry map. Where site-specific information is lacking, other information that is relevant to inferring the likely presence of VMEs is to be used.

(2) New fishing areas

Any place other than the fished seamounts above is to be regarded as a new fishing area. If a member of the Commission is considering fishing in a new fishing area, such a fishing area is to be subject to, in addition to these standards and criteria, an exploratory fishery protocol (Annex 1).

5. Assessment of SAIs on VMEs or marine species

(1) Significant adverse impacts are those that compromise ecosystem integrity (i.e., ecosystem structure or function) in a manner that: (i) impairs the ability of affected populations to replace themselves; (ii) degrades the long-term natural productivity of habitats; or (iii) causes, on more than a temporary basis, significant loss of species richness, habitat or community types. Impacts are to be evaluated individually, in combination and cumulatively.

(2) When determining the scale and significance of an impact, the following six factors are to be considered:

- (a) The intensity or severity of the impact at the specific site being affected;
- (b) The spatial extent of the impact relative to the availability of the habitat type affected;
- (c) The sensitivity/vulnerability of the ecosystem to the impact;
- (d) The ability of an ecosystem to recover from harm, and the rate of such recovery;
- (e) The extent to which ecosystem functions may be altered by the impact; and
- (f) The timing and duration of the impact relative to the period in which a species needs the habitat during one or more life-history stages.

(3) Temporary impacts are those that are limited in duration and that allow the particular ecosystem to recover over an acceptable timeframe. Such timeframes are to be decided on a case-by-case basis and be on the order of 5-20 years, taking into account the specific features of the populations and ecosystems.

(4) In determining whether an impact is temporary, both the duration and the frequency with which an impact is repeated is to be considered. If the interval between the expected disturbances of a habitat is shorter than the recovery time, the impact is to be considered more than temporary.

(5) Each member of the Commission is to conduct assessments to establish if bottom fishing activities are likely to produce SAIs in a given seamount or other VMEs. Such an impact assessment is to address, *inter alia*:

- (a) Type of fishing conducted or contemplated, including vessel and gear types, fishing areas, target and potential bycatch species, fishing effort levels and duration of fishing;
- (b) Best available scientific and technical information on the current state of fishery resources, and baseline

information on the ecosystems, habitats and communities in the fishing area, against which future changes are to be compared;

- (c) Identification, description and mapping of VMEs known or likely to occur in the fishing area;
- (d) The data and methods used to identify, describe and assess the impacts of the activity, identification of gaps in knowledge, and an evaluation of uncertainties in the information presented in the assessment;
- (e) Identification, description and evaluation of the occurrence, scale and duration of likely impacts, including cumulative impacts of activities covered by the assessment on VMEs and low-productivity fishery resources in the fishing area;
- (f) Risk assessment of likely impacts by the fishing operations to determine which impacts are likely to be SAIs, particularly impacts on VMEs and low-productivity fishery resources (Risk assessments are to take into account, as appropriate, differing conditions prevailing in areas where fisheries are well established and in areas where fisheries have not taken place or only occur occasionally);
- (g) The proposed mitigation and management measures to be used to prevent SAIs on VMEs and ensure long-term conservation and sustainable utilization of low-productivity fishery resources, and the measures to be used to monitor effects of the fishing operations.

(6) Impact assessments are to consider, as appropriate, the information referred to in these Standards and Criteria, as well as relevant information from similar or related fisheries, species and ecosystems.

(7) Where an assessment concludes that the area does not contain VMEs or that significant adverse impacts on VMEs or marine species are not likely, such assessments are to be repeated when there have been significant changes to the fishery or other activities in the area, or when natural processes are thought to have undergone significant changes.

6. Proposed conservation and management measures to prevent SAIs

As a result of the assessment in 5 above, if it is considered that individual fishing activities are causing or likely to cause SAIs on VMEs or marine species, the member of the Commission is to adopt appropriate conservation and management measures to prevent such SAIs. The member of the Commission is to clearly indicate how such impacts are expected to be prevented or mitigated by the measures.

7. Precautionary approach

If after assessing all available scientific and technical information, the presence of VMEs or the likelihood that individual bottom fishing activities would cause SAIs on VMEs or marine species cannot be adequately determined, members of the Commission are only to authorize individual bottom fishing activities to proceed in accordance with:

- (a) Precautionary, conservation and management measures to prevent SAIs;
- (b) Measures to address unexpected encounters with VMEs in the course of fishing operations;
- (c) Measures, including ongoing scientific research, monitoring and data collection, to reduce the uncertainty; and

(d) Measures to ensure long-term sustainability of deep sea fisheries.

8. Template for assessment report

Annex 2.2 is a template for individual member of the Commission to formulate reports on identification of VMEs and impact assessment.

ANNEX 2.1

EXAMPLES OF POTENTIAL VULNERABLE SPECIES GROUPS, COMMUNITIES AND HABITATS AS WELL AS FEATURES THAT POTENTIALLY SUPPORT THEM

The following examples of species groups, communities, habitats and features often display characteristics consistent with possible VMEs. Merely detecting the presence of an element itself is not sufficient to identify a VME. That identification is to be made on a case-by-case basis through application of relevant provisions of the Standards and Criteria, particularly Sections 3, 4 and 5.

Examples of species groups, communities and habitat forming species that are documented or considered sensitive and potentially vulnerable to deep-sea fisheries in the high-seas, and which may contribute to forming VMEs:

a.	certain coldwater corals, e.g., reef builders and coral forest including: stony corals (scleractinia), alcyonaceans and gorgonians (octocorallia), black corals (antipatharia), and hydrocorals (stylasteridae),
b.	Some types of sponge dominated communities,
c.	communities composed of dense emergent fauna where large sessile protozoans (xenophyphores) and invertebrates (e.g., hydroids and bryozoans) form an important structural component of habitat, and
d.	seep and vent communities comprised of invertebrate and microbial species found nowhere else (i.e., endemic).

Examples of topographical, hydrophysical or geological features, including fragile geological structures, that potentially support the species groups or communities, referred to above:

a.	submerged edges and slopes (e.g., corals and sponges),
b.	summits and flanks of seamounts, guyots, banks, knolls, and hills (e.g., corals, sponges, xenophyphores),
c.	canyons and trenches (e.g., burrowed clay outcrops, corals),
d.	hydrothermal vents (e.g., microbial communities and endemic invertebrates), and
e.	cold seeps (e.g., mud volcanoes, microbes, hard substrates for sessile invertebrates).

TEMPLATE FOR REPORTS ON IDENTIFICATION OF VMES AND ASSESSMENT OF IMPACTS CAUSED BY INDIVIDUAL FISHING ACTIVITIES ON VMES OR MARINE SPECIES

1. Name of the member of the Commission
2. Name of the fishery (e.g., bottom trawl, bottom gillnet, bottom longline, pot)
3. Status of the fishery (existing fishery or exploratory fishery)
4. Target species
5. Bycatch species
6. Recent level of fishing effort (every year at least since 2002)
 - (1) Number of fishing vessels
 - (2) Tonnage of each fishing vessel
 - (3) Number of fishing days or days on the fishing ground
 - (4) Fishing effort (total operating hours for trawl, # of hooks per day for long-line, # of pots per day for pot, total length of net per day for gillnet)
 - (5) Total catch by species
 - (6) Names of seamounts fished or to be fished
7. Fishing period
8. Analysis of status of fishery resources
 - (1) Data and methods used for analysis
 - (2) Results of analysis
 - (3) Identification of uncertainties in data and methods, and measures to overcome such uncertainties
9. Analysis of status of bycatch species resources
 - (1) Data and methods used for analysis
 - (2) Results of analysis
 - (3) Identification of uncertainties in data and methods, and measures to overcome such uncertainties
10. Analysis of existence of VMES in the fishing ground
 - (1) Data and methods used for analysis
 - (2) Results of analysis
 - (3) Identification of uncertainties in data and methods, and measures to overcome such uncertainties
11. Impact assessment of fishing activities on VMES or marine species including cumulative impacts, and identification of SAIs on VMES or marine species, as detailed in Section 5 above, Assessment of SAIs on VMES or marine species
12. Other points to be addressed
13. Conclusion (whether to continue or start fishing with what measures, or stop fishing)

SCIENTIFIC COMMITTEE ASSESSMENT REVIEW PROCEDURES FOR BOTTOM FISHING ACTIVITIES

1. The Scientific Committee (SC) is to review identifications of vulnerable marine ecosystems (VMEs) and assessments of significant adverse impact on VMEs, including proposed management measures intended to prevent such impacts submitted by individual Members.
2. Members of the Commission shall submit their identifications and assessments to members of the SC at least 21 days prior to the SC meeting at which the review is to take place. Such submissions shall include all relevant data and information in support of such determinations.
3. The SC will review the data and information in each assessment in accordance with the Science-based Standards and Criteria for Identification of VMEs and Assessment of Significant Adverse Impacts on VMEs and Marine Species (Annex 2), previous decisions of the Commission, and the FAO Technical Guidelines for the Management of Deep Sea Fisheries in the High Seas, paying special attention to the assessment process and criteria specified in paragraphs 47-49 of the Guidelines.
4. In conducting the review above, the SC will give particular attention to whether the deep-sea bottom fishing activity would have a significant adverse impact on VMEs and marine species and, if so, whether the proposed management measures would prevent such impacts.
5. Based on the above review, the SC will provide advice and recommendations to the submitting Members on the extent to which the assessments and related determinations are consistent with the procedures and criteria established in the documents identified above; and whether additional management measures will be required to prevent SAIs on VMEs.
6. Such recommendations will be reflected in the report of the SC meeting at which the assessments are considered.

FORMAT OF NATIONAL REPORT SECTIONS ON DEVELOPMENT AND IMPLEMENTATION OF SCIENTIFIC OBSERVER PROGRAMMES

Report Components

Annual Observer Programme implementation reports should form a component of annual National Reports submitted by members to the Scientific Committee. These reports should provide a brief overview of observer programmes conducted in the NPFC Convention Area. Observer programme reports should include the following sections:

A. Observer Training

An overview of observer training conducted, including:

- Overview of training programme provided to scientific observers.
- Number of observers trained.

B. Scientific Observer Programme Design and Coverage

Details of the design of the observer programme, including:

- Which fleets, fleet components or fishery components were covered by the programme.
- How vessels were selected to carry observers within the above fleets or components.
- How was observer coverage stratified: by fleets, fisheries components, vessel types, vessel sizes, vessel ages, fishing areas and seasons.

Details of observer coverage of the above fleets, including:

- Components, areas, seasons and proportion of total catches of target species, specifying units used to determine coverage.
- Total number of observer employment days, and number of actual days deployed on observation work.

C. Observer Data Collected

List of observer data collected against the agreed range of data set out in Annex 5, including:

- Effort Data: Amount of effort observed (vessel days, net panels, hooks, etc), by area and season and % observed out of total by area and seasons
- Catch Data: Amount of catch observed of target and by-catch species, by area and season, and % observed out of total estimated catch by species, area and seasons
- Length Frequency Data: Number of fish measured per species, by area and season.
- Biological Data: Type and quantity of other biological data or samples (otoliths, sex, maturity, etc) collected per species.
- The size of length-frequency and biological sub-samples relative to unobserved quantities.

D. Tag Return Monitoring

- Number of tags returns observed, by fish size class and area.

E. Problems Experienced

- Summary of problems encountered by observers and observer managers that could affect the NPFC Observer Programme Standards and/or each member's national observer programme developed under the NPFC standards.

**NPFC BOTTOM FISHERIES
OBSERVER PROGRAMME STANDARDS: SCIENTIFIC COMPONENT**

TYPE AND FORMAT OF SCIENTIFIC OBSERVER DATA TO BE COLLECTED

A. Vessel & Observer Data to be collected for Each Trip

1. Vessel and observer details are to be recorded only once for each observed trip.
2. The following vessel data are to be collected for each observed trip:
 - a) Current vessel flag.
 - b) Name of vessel.
 - c) Name of the Captain.
 - d) Name of the Fishing Master.
 - e) Registration number.
 - f) International radio call sign (if any).
 - g) Lloyd's / IMO number (if allocated).
 - h) Previous Names (if known).
 - i) Port of registry.
 - j) Previous flag (if any).
 - k) Type of vessel.
 - l) Type of fishing method(s).
 - m) Length (m).
 - n) Beam (m).
 - o) Gross register tonnage (international tonnage).
 - p) Power of main engine(s) (kilowatts).
 - q) Hold capacity (cubic metres).
 - r) Record of the equipment on board which may affect fishing power factors (navigational equipment, radar, sonar systems, weather fax or satellite weather receiver, sea-surface temperature image receiver, Doppler current monitor, radio direction finder).
 - s) Total number of crew (all staff, excluding observers).
3. The following observer data are to be collected for each observed trip:
 - a) Observer's name.
 - b) Observer's organisation.
 - c) Date observer embarked (UTC date).
 - d) Port of embarkation.
 - e) Date observer disembarked (UTC date).
 - f) Port of disembarkation.

B. Catch & Effort Data to be collected for Trawl Fishing Activity

1. Data are to be collected on an un-aggregated (tow by tow) basis for all observed trawls.
2. The following data are to be collected for each observed trawl tow:
 - a) Tow start date (UTC).

- b) Tow start time (UTC).
- c) Tow end date (UTC).
- d) Tow end time (UTC).
- e) Tow start position (Lat/Lon, 1 minute resolution).
- f) Tow end position (Lat/Lon, 1 minute resolution).
- g) Type of trawl, bottom or mid-water.
- h) Type of trawl, single, double or triple.
- i) Height of net opening (m).
- j) Width of net opening (m).
- k) Mesh size of the cod-end net (stretched mesh, mm) and mesh type (diamond, square, etc).
- l) Gear depth (of footrope) at start of fishing (m).
- m) Bottom (seabed) depth at start of fishing (m).
- n) Gear depth (of footrope) at end of fishing (m).
- o) Bottom (seabed) depth at end of fishing (m).
- p) Status of the trawl operation (no damage, lightly damaged*, heavily damaged*, other (specify)). *Degree may be evaluated by time for repairing (<=1hr or >1hr)
- q) Duration of estimated period of seabed contact (minute)
- r) Intended target species.
- s) Catch of all species retained on board, split by species, in weight (to the nearest kg).
- t) Estimate of the amount (weight or volume) of all living marine resources discarded, split by species.
- u) Record of the numbers by species of all marine mammals, seabirds or reptiles caught.
- v) Record of sensitive benthic species in the trawl catch, particularly vulnerable or habitat-forming species such as sponges, sea-fans or corals.

C. Catch & Effort Data to be collected for Bottom Gillnet Fishing Activity

1. Data are to be collected on an un-aggregated (set by set) basis for all observed bottom gillnet sets.
2. The following data are to be collected for each observed bottom gillnet set:
 - a) Set start date (UTC).
 - b) Set start time (UTC).
 - c) Set end date (UTC).
 - d) Set end time (UTC).
 - e) Set start position (Lat/Lon, 1 minute resolution).
 - f) Set end position (Lat/Lon, 1 minute resolution).
 - g) Net panel ("tan") length (m).
 - h) Net panel ("tan") height (m).
 - i) Net mesh size (stretched mesh, mm) and mesh type (diamond, square, etc)
 - j) Bottom depth at start of setting (m).
 - k) Bottom depth at end of setting (m).
 - l) Number of net panels for the set.
 - m) Number of net panels retrieved.
 - n) Number of net panels actually observed during the haul.
 - o) Actually observed catch of all species retained on board, split by species, in weight (to the nearest kg).
 - p) An estimation of the amount (numbers or weight) of marine resources discarded, split by species, during the actual observation.

- q) Record of the actually observed numbers by species of all marine mammals, seabirds or reptiles caught.
- r) Intended target species.
- s) Catch of all species retained on board, split by species, in weight (to the nearest kg).
- t) Estimate of the amount (weight or volume) of all marine resources discarded* and dropped-off, split by species. * Including those retained for scientific samples.
- u) Record of the numbers by species of all marine mammals, seabirds or reptiles caught (including those discarded and dropped-off).

D. Catch & Effort Data to be collected for Bottom Long Line Fishing Activity

1. Data are to be collected on an un-aggregated (set by set) basis for all observed longline sets.
2. The following fields of data are to be collected for each set:
 - a) Set start date (UTC).
 - b) Set start time (UTC).
 - c) Set end date (UTC).
 - d) Set end time (UTC).
 - e) Set start position (Lat/Lon, 1 minute resolution).
 - f) Set end position (Lat/Lon, 1 minute resolution).
 - g) Total length of longline set (m).
 - h) Number of hooks for the set.
 - i) Bottom (seabed) depth at start of set.
 - j) Bottom (seabed) depth at end of set.
 - k) Number of hooks actually observed during the haul.
 - l) Intended target species.
 - m) Actually observed catch of all species retained on board, split by species, in weight (to the nearest kg).
 - n) An estimation of the amount (numbers or weight) of marine resources discarded* or dropped-off, split by species, during the actual observation. * Including those retained for scientific samples.
 - o) Record of the actually observed numbers by species of all marine mammals, seabirds or reptiles caught (including those discarded and dropped-off).

E. Length-Frequency Data to Be Collected

1. Representative and randomly distributed length-frequency data (to the nearest mm, with record of the type of length measurement taken) are to be collected for representative samples of the target species and other main by-catch species. Total weight of length-frequency samples should be recorded, and observers may be required to also determine sex of measured fish to generate length-frequency data stratified by sex. The length-frequency data may be used as potential indicators of ecosystem changes (for seample, see: Gislason, H. et al. (2000. ICES J Mar Sci 57: 468-475) Yamane et al. (2005. ICES J Mar Sci, 62: 374-379), and Shin, Y-J. et al. (2005. ICES J Mar Sci, 62: 384-396)).
2. The numbers of fish to be measured for each species and distribution of samples across area and month strata should be determined, to ensure that samples are properly representative of species distributions and size ranges.

F. Biological sampling to be conducted (optional for gillnet and long line fisheries)

1. The following biological data are to be collected for representative samples of the main target species and, time permitting, for other main by-catch species contributing to the catch:
 - a) Species
 - b) Length (to the nearest mm), with record of the type of length measurement used.
 - c) Length and depth in case of North Pacific armorhead.
 - d) Sex (male, female, immature, unsexed)
 - e) Maturity stage (immature, mature, ripe, ripe-running, spent)
2. Representative stratified samples of otoliths are to be collected from the main target species and, time permitting, from other main by-catch species regularly occurring in catches. All otoliths to be collected are to be labelled with the information listed in 1 above, as well as the date, vessel name, observer name and catch position.
3. Where specific trophic relationship projects are being conducted, observers may be requested to also collect stomach samples from certain species. Any such samples collected are also to be labelled with the information listed in 1 above, as well as the date, vessel name, observer name and catch position.
4. Observers may also be required to collect tissue samples as part of specific genetic research programmes implemented by the SC.
5. Observers are to be briefed and provided with written length-frequency and biological sampling protocols and priorities for the above sampling specific to each observer trip.

G. Data to be collected on Incidental Captures of Protected Species

1. Flag members operating observer programs are to develop, in cooperation with the SC, lists and identification guides of protected species or species of concern (seabirds, marine mammals or marine reptiles) to be monitored by observers.
2. The following data are to be collected for all protected species caught in fishing operations:
 - a) Species (identified as far as possible, or accompanied by photographs if identification is difficult).
 - b) Count of the number caught per tow or set.
 - c) Life status (vigorous, alive, lethargic, dead) upon release.
 - d) Whole specimens (where possible) for onshore identification. Where this is not possible, observers may be required to collect sub-samples of identifying parts, as specified in biological sampling protocols.

H. Detection of Fishing in Association with Vulnerable Marine Ecosystems

1. The SC is to develop a guideline, species list and identification guide for benthic species (e.g. sponges, sea fans, corals) whose presence in a catch will indicate that fishing occurred in association with a vulnerable marine ecosystem (VME). All observers on vessels are to be provided with copies of this guideline, species list and ID guide.

2. For each observed fishing operation, the following data are to be collected for all species caught, which appear on the list of vulnerable benthic species:
 - a) Species (identified as far as possible, or accompanied by a photograph where identification is difficult).
 - b) An estimate of the quantity (weight (kg) or volume (m³)) of each listed benthic species caught in the fishing operation.
 - c) An overall estimate of the total quantity (weight (kg) or volume (m³)) of all invertebrate benthic species caught in the fishing operation.
 - d) Where possible, and particularly for new or scarce benthic species which do not appear in ID guides, whole samples should be collected and suitable preserved for identification on shore.

I. Data to be collected for all Tag Recoveries

1. The following data are to be collected for all recovered fish, seabird, mammal or reptile tags:
 - a) Observer name.
 - b) Vessel name.
 - c) Vessel call sign.
 - d) Vessel flag.
 - e) Collect, label (with all details below) and store the actual tags for later return to the tagging agency.
 - f) Species from which tag recovered.
 - g) Tag colour and type (spaghetti, archival).
 - h) Tag numbers (The tag number is to be provided for all tags when multiple tags were attached to one fish. If only one tag was recorded, a statement is required that specifies whether or not the other tag was missing)
 - i) Date and time of capture (UTC).
 - j) Location of capture (Lat/Lon, to the nearest 1 minute)
 - k) Animal length / size (to the nearest cm) with description of what measurement was taken (such as total length, fork length, etc).
 - l) Sex (F=female, M=male, I=indeterminate, D=not examined)
 - m) Whether the tags were found during a period of fishing that was being observed (Y/N)
 - n) Reward information (e.g. name and address where to send reward)

(It is recognised that some of the data recorded here duplicates data that already exists in the previous categories of information. This is necessary because tag recovery information may be sent separately to other observer data.)

J. Hierarchies for Observer Data Collection

1. Trip-specific or programme-specific observer task priorities may be developed in response to specific research programme requirements, in which case such priorities should be followed by observers.
2. In the absence of trip- or programme-specific priorities, the following generalised priorities should be followed by observers:
 - a) Fishing Operation Information
 - All vessel and tow / set / effort information.

b) Monitoring of Catches

- Record time, proportion of catch (e.g. proportion of trawl landing) or effort (e.g. number of hooks), and total numbers of each species caught.
- Record numbers or proportions of each species retained or discarded.

c) Biological Sampling

- Length-frequency data for target species.
- Length-frequency data for main by-catch species.
- Identification and counts of protected species.
- Basic biological data (sex, maturity) for target species.
- Check for presence of tags.
- Otoliths (and stomach samples, if being collected) for target species.
- Basic biological data for by-catch species.
- Biological samples of by-catch species (if being collected)
- Photos

3. The monitoring of catches and biological sampling procedures should be prioritised among species groups as follows:

Species	Priority (1 highest)
Primary target species (such as North Pacific armorhead and splendid alfonsin)	1
Other species typically within top 10 in the fishery (such as mirror dory, and oreos)	2
Protected species	3
All other species	4

The allocation of observer effort among these activities will depend on the type of operation and setting. The size of sub-samples relative to unobserved quantities (e.g. number of hooks/panels examined for species composition relative to the number of hooks/panels retrieved) should be explicitly recorded under the guidance of member country observer programmes.

K. Coding Specifications to be used for Recording Observer Data

1. Unless otherwise specified for specific data types, observer data are to be collected in accordance with the same coding specifications as specified in this Annex.
2. Coordinated Universal Time (UTC) is to be used to describe times.
3. Degrees and minutes are to be used to describe locations.

4. The following coding schemes are to be used:
 - a) Species are to be described using the FAO 3 letter species codes.
 - b) Fishing methods are to be described using the International Standard Classification of Fishing Gear (ISSCFG - 29 July 1980) codes.
 - c) Types of fishing vessel are to be described using the International Standard Classification of Fishery Vessels (ISSCFV) codes.

5. Metric units of measure are to be used, specifically:
 - a) Kilograms are to be used to describe catch weight.
 - b) Metres are to be used to describe height, width, depth, beam or length.
 - c) Cubic metres are to be used to describe volume.
 - d) Kilowatts are to be used to describe engine power.

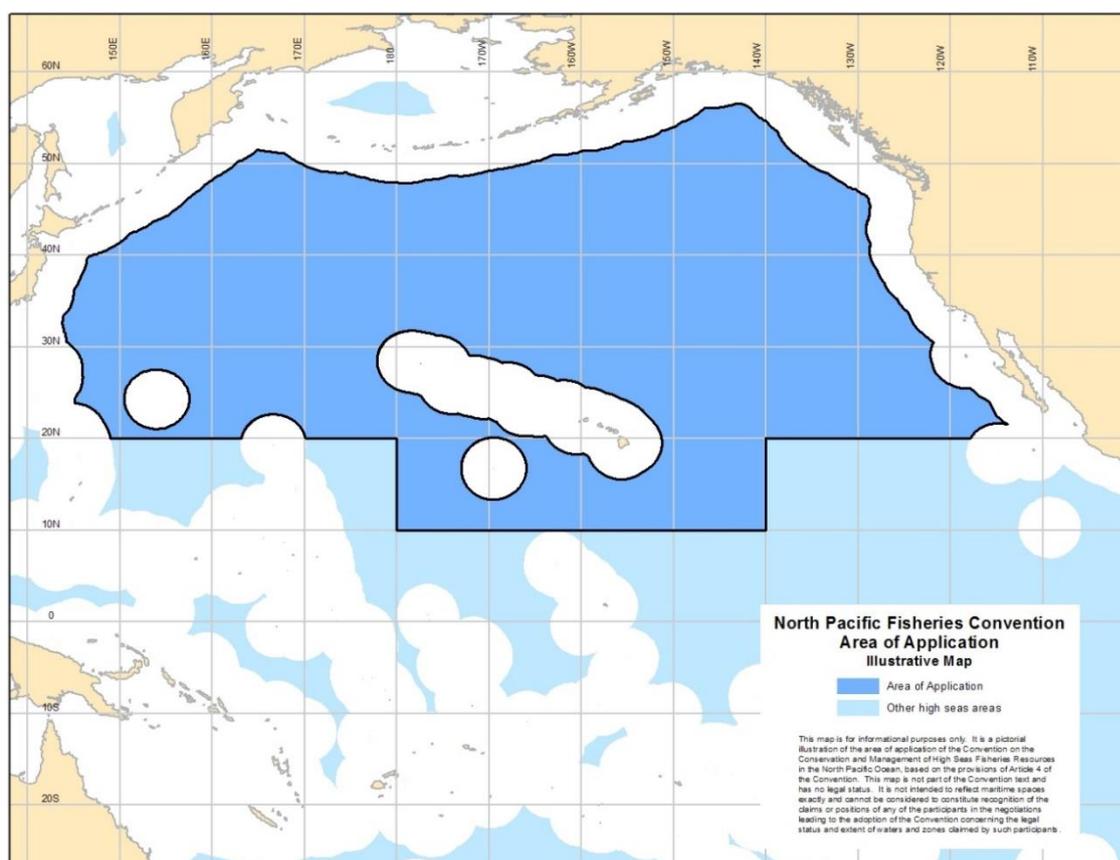
Scientific Projects proposed by the Scientific Committee

#	Project	Time	Rough estimation of required funds
1	VME workshop (SAI + data)	2018	1,240,000 JPY (about 10,000 USD) and also supported by ABNJ project, FAO
2	VME identification guide (printing and travel costs of key developers)	2017	1,180,000 JPY (about 9,500 USD)
3	GIS database/module as a part of NPFC database management system for spatial management of bottom fisheries and VMEs	?2018-2019	For ArcGIS: 5,470,000 JPY – about 44 thousand USD (first year: license fee+ spatial analysis) and 1,120,000 JPY – about 9 thousand USD (subsequent year: maintenance fee per year). <u>Solutions other than ArcGIS should be considered.</u>
4	TWG PSSA meeting (meeting costs and travel cost for 2 participants of each Member)	Every year from 2017-2021	2,490,000 JPY (about 20,000 USD)
5	Expert to review Pacific saury stock assessment (probably consultant fee and travel cost)	TBD later	TBD
6	Observer Program		TBD
7	Chub mackerel meeting (meeting costs and travel cost for 2 participants of each Member)	Every year, TBD by the Commission	2,490,000 JPY (about 20,000 USD)
8	MSE workshop	TBD	TBD
9	Special Science Project Fund		All unspent scientific funds to use for future projects identified above for 2018 and subsequent years.

North Pacific Fisheries Commission Scientific Committee

2017-2021 Research Plan

1.0 CONTEXT



Illustrative Map of the North Pacific Fisheries Commission Convention Area

Article 10, Section 4(a) of the *Convention on the Conservation and Management of High Seas Fisheries Resources in the North Pacific Ocean* states that the Scientific Committee (SC) will “recommend to the Commission a research plan including specific issues and items to be addressed by the scientific experts or by other organizations or individuals, as appropriate, and identify data needs and coordinate activities that meet those needs.”

An initial draft of this work plan was presented for review during the 4th Preparatory Conference and a subsequent discussion was held by a small working group to establish science priorities for the NPFC. This plan draws on those discussions and was updated by the SC Chair based on the progress made by NPFC since that Conference.

The development of multi-year science research or work plans is common across regional fisheries management organizations as well as domestic fisheries science agencies. This draft plan draws on such examples, and has been developed for consideration by the SC before it may be adopted by the Commission.

2.0 OBJECTIVES

The research plan is intended to guide the work of the Scientific Committee by identifying key research priorities and associated areas of work to be undertaken or maintained. The plan should also serve to: ensure efficient utilization of scarce resources within the Commission; inform Parties' domestic research planning as a means to complementing the Commission's science activities; and, help the Commission identify potential sources of external funding.

It is not intended as an exhaustive plan describing all research activities that may be carried out by Parties, nor is it intended to preclude work already taking place. The plan should support the Commission's primary objective (*Article 2* in the Convention), which is to "ensure the long-term conservation and sustainable use of the fisheries resources in the Convention Area while protecting the marine ecosystems of the North Pacific Ocean in which these resources occur". The plan should also help the Scientific Committee fulfill its functions as specified in the Convention.

3.0 PRIORITY RESEARCH AREAS

In addition to discussions held during the Preparatory Conference (referenced above) followed by the Commission and Scientific Committee after their establishment, the identification of priority research areas draws largely from the Commission's Convention, which outlines specific functions for the Scientific Committee in *Article 10, Section 4*. These priority research areas are subject to the approval of the Commission, and may be revisited and/or revised as deemed appropriate by the Commission. Proposed five-year work plans for each priority area are available in the attached Annex I.

The proposed priority research areas are:

1. Stock assessments for target fisheries and bycatch species

2. Ecosystem approach to fisheries
3. Vulnerable Marine Ecosystems
4. Data collection, management and security

3.1 Stock Assessments

Rationale

Accurate stock assessments are critical in helping to ensure the long-term conservation and sustainable use of fisheries resources in the Convention Area. One of primary functions of the Commission is setting total allowable catch or total allowable level of fishing effort, and as per *Article 7-1(b)*, this is to be in “accordance with the advice and recommendations of the Scientific Committee”.

Consistent with this, *Article 10-4(b)* states that one of the functions of the Scientific Committee is to “regularly plan, conduct and review the scientific assessments of the status of fisheries resources in the Convention Area, identify actions required for their conservation and management, and provide advice and recommendations to the Commission”.

Finally, *Article 10-4(i)* states that the Committee shall also “develop rules and standards, for adoption by the Commission, for the collection, verification, reporting, and the security of, exchange of, access to and dissemination of data on fisheries resources, species belonging to the same ecosystem, or dependent upon or associated with the target stocks and fishing activities in the Convention Area”.

The Scientific Committee should endeavour to understand the current status and trends in production of populations of priority species as agreed by the 2nd Commission meeting in 2016, as well as factors that may affect future trends.

Areas of work

- **Development of baseline assessment of the status of priority stocks**
- **Review of existing data standards in relation to stock assessments (e.g. Annual Report template, future vessel monitoring system)**
- Stock delineation of important commercial species for the purpose of providing advice for the determination of management units

- For each commercial species, determination of data requirement, including data availability and data gaps; identification, where possible, of strategies to fill the data gaps, including for bycatch
- Development of a standardized method to provide advice to the Commission
- Development of assessment models by species and research as required to determine various assessment parameters

3.1.1. Pelagic fish stock assessment

Rationale

Pelagic fish and squids are primary fisheries resources for NPFC Members. They comprised more than 99% of total catch of species covered by the Convention. Many of them are migratory species with wide geographical distributions which include both EEZs of the North Pacific Rim countries and High Seas. Management of such stocks requires close cooperation among Members concerned to ensure sustainable use and conservation of fisheries resources.

Four fish species and two squid species were recognized by the Scientific Committee as priority species: Pacific saury *Cololabis saira*, Chub mackerel *Scomber japonicus*, Spotted mackerel *Scomber australasicus*, Japanese sardine *Sardinops melanostictus*, Neon flying squid *Ommastrephes bartramii*, Japanese flying squid *Todarodes pacificus*.

Areas of work

- Completion of stock assessment for Pacific saury and development of the framework and timeline for its regular improvement and update
- Conducting stock assessment for Chub mackerel and other priority species considering their top-down prioritization (Spotted mackerel - Japanese sardine - Neon flying squid - Japanese flying squid) and available funds and capacity
- Identification of data gaps, determination of activities to address those gaps and development of standards and mechanisms for data collection and verification

3.1.2. Bottom fish stock assessment

Rationale

Data used for traditional stock assessment are sparse for bottom fish, and it is unlikely that traditional methods will be applicable for most deepwater species in the Convention Area. In

addition, some bottom species have unique life cycles, sporadic recruitment patterns and irregular spawning-recruitment relationships that also makes difficult accurate stock assessment. All these require specific approaches for management and sustainable use of bottom fisheries resources. More than ten bottom species have been exploited by fisheries in the Convention Area last decade. Two fish are recognized as priority species: North Pacific armorhead (NPA) *Pentaceros wheeleri*, Splendid alfonsino *Beryx splendens*.

Areas of work

- Review of approaches applicable for stock assessment of target bottom species and investigate various management strategies
- Further development of the Adaptive Management approach for NPA and mechanism for its implementation
- Identification of data needs and establishment of activities to fill data gaps

3.2 Ecosystem Approach to Fisheries

Rationale

Article 3 (c) in the Convention states that: “In giving effect to the objective of this Convention, the following actions shall be taken individually or collectively as appropriate:

(c) adopting and implementing measures in accordance with the precautionary approach and an ecosystem approach to fisheries, and in accordance with the relevant rules of international law, in particular as reflected in the 1982 Convention, the 1995 Agreement and other relevant international instruments”.

Article 7-1 (c,d) in the Convention states that the Commission shall: “adopt, where necessary, conservation and management measures for species belonging to the same ecosystem or dependent upon or associated with the target stocks”; and, “adopt, where necessary, management strategies for any fisheries resources and for species belonging to the same ecosystem or dependent upon or associated with the target stocks, as may be necessary to achieve the objective of this Convention.”

Article 10-4 (d) states that the Scientific Committee shall “assess the impacts of fishing activities on fisheries resources and species belonging to the same ecosystem or dependent upon or associated with the target stocks.”

Areas of work

- Formulation of a research plan on how to implement the ecosystem approach to fisheries in the Convention Area
- Vulnerable Marine Ecosystems
- Understand ecological interactions among species
- Ecosystem modelling
- Evaluate impacts of fishing on fisheries resources and their ecosystem components, including bycatch species
- Other issues related to marine ecosystem including marine debris and pollution

3.2.1 Vulnerable Marine Ecosystems

Rationale

The identification of vulnerable marine ecosystems is a necessary precursor to implementing measures to protect these ecosystems, and such measures are explicitly called for in the Convention (e.g. *Article 7-1(e)*).

Article 10-4 (e) states that the Scientific Committee shall “develop a process to identify vulnerable marine ecosystems, including relevant criteria for doing so, and identify, based on the best scientific information available, areas or features where these ecosystems are known to occur, or are likely to occur, and the location of bottom fisheries in relation to these areas or features, taking due account of the need to protect confidential information.”

Article 7-1 (e) states that the Commission shall “adopt conservation and management measures to prevent significant adverse impacts on vulnerable marine ecosystems in the Convention Area, including but not limited to: measures for conducting and reviewing impact assessments to determine if fishing activities would produce such impacts on such ecosystems in a given area; measures to address unexpected encounters with vulnerable marine ecosystems in the course of normal bottom fishing activities; and as appropriate, measures that specify locations in which fishing activities shall not occur.”

To date, Japan, Russia, Korea, the US and Canada have completed a report on identification of VMEs and an assessment of impacts caused by bottom fishing activities on VMEs and marine species. The Scientific Committee may build on these reports, which will be kept up to date by respective Parties.

Areas of work

- **Review existing NPFC standards on VME data collection, including guidelines set forth in the CMMs for bottom fisheries and protection of vulnerable marine ecosystems in the northwestern and northeastern Pacific Ocean (CMM 2016-05 and CMM 2016-06), and determine if any modifications to these standards are needed in the short-term and/or longer term**
- **Review of Encounter Protocol for bottom fisheries on Vulnerable Marine Ecosystems**
- Determination of data requirements and identification of what data may be collected through commercial fishing operations
- Develop consensus on criteria used to identify VMEs and how this might be applied in the NPFC (note that guidelines from the FAO are already referenced in Annex 2 of the CMM 2016-05 and CMM 2016-06)
- Analysis of known or suspected VMEs in the Convention Area
- Surveys of VMEs for data collection
- Development of a framework to conduct assessments of Impacts of Bottom Fishing Activities on Vulnerable Marine Ecosystems

3.2.1.1 Review of Encounter Protocol for bottom fisheries on Vulnerable Marine Ecosystems

Rationale

The purposes of VME encounter protocols in NPFC Convention Area include:

- Ensuring early detection and protection of potential VMEs within an existing fishing area;
- Ensuring early detection and protection of potential VME within an unfished area;
- Documenting information on known occurrences of VME indicators within the Convention Area.

Development of the Encounter Protocol progressed through the Science Working Group and Scientific Committee meetings as well as intersessional activities. VME encounter protocols are incorporated in the CMMs for bottom fisheries and protection of vulnerable marine ecosystems in the northwestern and northeastern Pacific Ocean, CMM 2016-05 and CMM 2016-06, specifically in Para 4(g) and 3(j), respectively.

Areas of Work

Consideration of the following subjects of research and analyses are recommended to further refine encounter protocols in the Convention Area (as notified in Appendix C, NPFC01-2016-SSC-

VME01- Final Report):

- Other taxa, topographical, geographical and geological features that may indicate the presence of VMEs;
- Taxon-specific encounter thresholds and reporting;
- Framework for evaluating the effectiveness of encounter protocols;
- Tiered approach with different encounter protocols associated with different thresholds;
- Gear-specific thresholds to reflect differences in catchability;
- Gear-specific move-on distances to reflect type of gear;
- Different reporting requirements for different catches;
- Tiered approach to reporting bycatch of VME indicator taxa;
- Different encounter protocols for existing and new fishing areas

3.3 Data collection, management and security

Rationale

Many issues related to data collection, management and security are incorporated into the previous categories in Section 3 above. Nevertheless, the Commission has been still setting up and most policies, rules and standards have not been developed yet. Consequently, the Scientific Committee shall pay much attention to these issues at this early stage of its development.

Article 10, paragraph 4 (i) in the Convention states that the functions of the Scientific Committee shall be to: “develop rules and standards, for adoption by the Commission, for the collection, verification, reporting, and the security of, exchange of, access to and dissemination of data on fisheries resources, species belonging to the same ecosystem, or dependent upon or associated with the target stocks and fishing activities in the Convention Area”.

Areas of work

- Review of data standards related to stock assessments and other relevant data, including VME data collection and vessel monitoring systems
- Identify data sources to meet data needs for priority areas of work above and develop programs for data collection
- Develop data security policy including data handling and sharing protocol, information confidentiality classification and access control security guideline

4.0 IMPLEMENTATION AND REVIEW

Monitoring the implementation of this Research Plan will be the responsibility of the Chair of the Scientific Committee in collaboration with the Chairs of the Small Scientific Committees and Executive Secretary. Members of the Commission and the Secretariat will share responsibility for implementation of the Plan.

Full implementation of the Research Plan will likely be beyond the means of the Commission's core budget. Extra-budgetary funds from voluntary contributions of Members and other sources will be required and actively sought by the Commission. Nevertheless, adoption of the Plan by the Scientific Committee and subsequent strong support from the Commission is a prerequisite to securing the necessary extra-budgetary funds.

[An independent external review of the Plan may periodically be requested by the SC. The Scientific Committee will be responsible for preparing the terms of reference for the review. The Scientific Committee will present the report of the review to the next regular session of the Commission.]

5.0 SCIENTIFIC COLLABORATION WITH OTHER ORGANIZATIONS

While not included as a priority, *Article 21* of the Convention addresses cooperation with other organizations or arrangements. It calls on the Commission to cooperate, as appropriate, on matters of mutual interest with FAO, other specialized agencies of the FAO and relevant RFMOs. Further, the Commission is called on to develop cooperative working relationships, including potential agreements, with intergovernmental organizations that can contribute to its work.

Article 10 also speaks to this issue in clauses five and six, stating that the Scientific Committee may exchange information on matters of mutual interest with other relevant scientific organizations or arrangements, and that the Committee shall not duplicate the activities of other scientific organizations and arrangements that cover the Convention Area.

The impetus to collaborate is made stronger by the prospect of limited research funding in the Commission, at least in the short-term, but it is also in the best interests of the Commission to seek synergies with other organizations with mutual interests and similar membership (e.g. North Pacific Marine Science Organization and North Pacific Anadromous Fish Commission).

Activities could include:

- Evaluate reports of International Organizations that may be relevant to the functioning of the Scientific Committee
- Identify other organizations with relevant mandates and activities
- Formalize relationships with these organizations (e.g. MOUs, standing invitations to meetings)
- Identify potential funding opportunities

Five-Year Work Plan for each Priority Area

1. Stock assessments for target fisheries and bycatch species

	2017	2018	2019	2020	2021
Pacific saury	Completed stock assessment (provisional) through TWG PSSA meeting	Evaluate the quality of the data for stock assessment; Update stock assessment and recommendations to Commission to improve conservation and management of Pacific saury	Update/ benchmark stock assessment and recommendations to Commission to improve conservation and management of Pacific saury	Update/ benchmark stock assessment and recommendations to Commission to improve conservation and management of Pacific saury	Update/ benchmark stock assessment and recommendations to Commission to improve conservation and management of Pacific saury
Chub mackerel	Review of Members' national research on stock status and fisheries through CM workshop; Establish TWG for Chub mackerel				
Spotted mackerel		Collect data and monitor situation for further analyses			
Japanese sardine		Collect data and monitor situation			

		for further analyses			
Neon flying squid		Collect data and monitor situation for further analyses			
Japanese flying squid		Collect data and monitor situation for further analyses			
North Pacific armorhead	<ol style="list-style-type: none"> 1. Adopt Adaptive Management process 2. Develop work plan to implement the Adaptive Management process 3. Assess and monitor the status of the stock 4. Conduct affiliated research 	<ol style="list-style-type: none"> 1. Develop harvest control rules to conserve stock 2. Assess and monitor the status of the stock 3. Conduct affiliated research 	<ol style="list-style-type: none"> 1. Implement harvest control rules 2. Assess and monitor the status of the stock 3. Conduct affiliated research 	<ol style="list-style-type: none"> 1. Review monitoring and survey designs 2. Assess and monitor the status of the stock 3. Conduct affiliated research 	<ol style="list-style-type: none"> 1. Evaluate Adaptive Management process and refine harvest control rules 2. Assess and monitor the status of the stock 3. Conduct affiliated research
Splendid alfonsino		<ol style="list-style-type: none"> 1. Review monitoring and assessment of the stock 2. Conduct affiliated research 	<ol style="list-style-type: none"> 1. Conduct comprehensive stock assessment 	<ol style="list-style-type: none"> 1. Develop harvest control rules and management advice 	<ol style="list-style-type: none"> 1. Assess and monitor the status of the stock 2. Conduct affiliated research

2. Ecosystem approach to fisheries

	2017	2018	2019	2020	2021
1. Review existing NPFC standards on VME data collection		VME workshop			
2. VME encounter protocols	Identification of fished and unfished areas; Analysis of fishery bycatch in the fished areas	VME workshop	Refinement of encounter protocols for fished areas	Development of encounter protocols for exploratory fishing in unfished areas	
3. Determination of data requirements	Development and validation of the data templates	VME workshop	Review and revise data templates		
4. Develop consensus on criteria used to identify VMEs		VME workshop	Revision of the VME indicator taxa and identification criteria		
5. Analysis of known or suspected VMEs in the CA	Screening out potential VME sites on fished seamounts	VME workshop	Establishment of the conservation framework for known VMEs		
6. Surveys of VMEs for data collection	Data collection through scientific surveys and	Data collection through scientific surveys and	Data collection through scientific surveys and	Data collection through scientific surveys and	Data collection through scientific surveys and

	observers	observers	observers	observers	observers
7. Development of a framework to conduct assessments of Impacts of Bottom Fishing Activities on VMEs	Exploration of the SAI assessment methods for VMEs in the western CA	VME workshop Assessment of the bottom fishery impacts on VMEs	Refinement of the VME conservation measures for the existing fishing grounds	Reinforcement of the experimental fishing protocols for unfished areas	

3. Data collection, management and security

	2017	2018	2019	2020	2021
Data standards	Finalize data collection templates Pacific saury and continue development for bottom fisheries (trawl, gillnet, longline)	Develop data collection templates for chub mackerel, squid and crab fisheries	Revision of data collection templates if necessary	Revision of data collection templates if necessary	Revision of data collection templates if necessary
Data collection	Identifying data needs and data gaps	Identifying data needs and data gaps; enhancement of data collection: fisheries, surveys, Observer program	Identifying data needs and data gaps; enhancement of data collection: fisheries, surveys, Observer program	Identifying data needs and data gaps; enhancement of data collection: fisheries, surveys, Observer program	Identifying data needs and data gaps; enhancement of data collection: fisheries, surveys, Observer program

Data security	Information Security Guidelines	Prioritization of areas of the Information Security and Management System and development of Information Security and Management regulations	Development of Information Security and Management regulations	Development of Information Security and Management regulations	Development of Information Security and Management regulations
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4. Other*

	2017	2018	2019	2020	2021
Management Strategy Evaluation					
Data review					

* under development

Terms of Reference for the Technical Working Group on Pacific Saury Stock Assessment (TWG PSSA) for 2017-2021

1. To review fishery data
 - Catch series
 - Age/size composition data
 - Others
2. To review fishery-dependent and fishery-independent indices
 - Review/update the existing protocol
 - Review/update the indices
 - Evaluate the quality of the indices
 - Recommendation of future works
3. To review and update biological information/data
 - Stock structure
 - Growth
 - Reproduction and maturity schedule
 - Natural mortality
 - Migration pattern
 - Others
4. To update the stock assessment using “provisional base models” (i.e. Bayesian state-space production models)
 - Review existing protocol
 - Simple update (including projection and evaluation of reference points as well as diagnosis)
 - Consideration of scenarios (for base and sensitivity)
 - Assessment of uncertainty and its implication of management
 - Evaluation/improvement (if necessary) the models
 - Recommendation of the research for future works
5. To explore stock assessment models other than existing “provisional base models”
 - Data invention/availability (including the identification of potential covariates)
 - Initial (and continued) discussion on age-/size/stage-structure models
 - Identification of lack of information/data and limits
 - Recommendation of the research for future works
6. To facilitate data- and code- sharing processes
7. To review/improve presentation of stock assessment results (including stock status summary report in a format to be determined by the Working Group)
8. To explore the design of Management Strategy Evaluation framework

Focal points for Scientific Committee and its subsidiary bodies

	Canada	China	Japan	Korea	Russia	Chinese Taipei	USA	Secretariat
Scientific Committee	Eddy Kennedy Eddy.Kennedy@dfm-mpo.gc.ca	Siquan Tian sqtian@shou.edu.cn	Joji Morishita jmoris0@kaiyodai.ac.jp	Seok-Gwan Choi sgchoi@korea.kr	Aleksei Baitaliuk aleksei.baitaliuk@tinro-center.ru Pavel Afanasiev afanasiev@vniro.ru	Wen-Bin Huang bruce@mail.ndhu.edu.tw		Aleksandr Zavolokin azavolokin@npfcenter.int
SSC on Vulnerable Marine Ecosystems	Eddy Kennedy Eddy.Kennedy@dfm-mpo.gc.ca	Bai Li bai.li@maine.edu	Masashi Kiyota kiyo@affrc.go.jp	Seok-Gwan Choi sgchoi@korea.kr Eunjung Kim eunjungkim@korea.kr	Vladimir Kulik vladimir.kulik@tinro-center.ru Oleg Katugin oleg.katugin@tinro-center.ru	Wen-Bin Huang bruce@mail.ndhu.edu.tw		Aleksandr Zavolokin azavolokin@npfcenter.int

SSC on Bottom Fish	Eddy Kennedy Eddy.Kennedy@dfm-mpo.gc.ca	Siquan Tian sqtian@shou.edu.cn	Taro Ichii ichii@affrc.go.jp	Seok-Gwan Choi sgchoi@korea.kr Eunjung Kim eunjungkim@korea.kr	Dmitrii Antonenko dmantonenko@yandex.ru Oleg Katugin oleg.katugin@tinro-center.ru	Wen-Bin Huang bruce@mail.ndhu.edu.tw	Aleksandr Zavolokin azavolokin@npf.int
SSC on Pacific Saury		Siquan Tian sqtian@shou.edu.cn	Toshihide Iwasaki tiwasaki@affrc.go.jp	Seok-Gwan Choi sgchoi@korea.kr Eunjung Kim eunjungkim@korea.kr	Vladimir Kulik vladimir.kulik@tinro-center.ru Pavel Afanasiev afanasiev@vniro.ru	Wen-Bin Huang bruce@mail.ndhu.edu.tw	Aleksandr Zavolokin azavolokin@npf.int
TWG on Pacific Saury Stock Assessment		Siquan Tian sqtian@shou.edu.cn	Toshihide Kitakado kitakado@kaiyodai.ac.jp	Jaebong Lee leejb@korea.kr Eunjung Kim eunjungkim@korea.kr	Vladimir Kulik vladimir.kulik@tinro-center.ru Pavel Afanasiev afanasiev@vniro.ru	Wen-Bin Huang bruce@mail.ndhu.edu.tw	Aleksandr Zavolokin azavolokin@npf.int

<p>TWG on Chub Mackerel</p>		<p>Siquan Tian sqtian@shou.edu.cn</p>	<p>Momoko Ichinokawa ichimomo@affrc.go.jp</p>	<p>Jaebong Lee leejb@korea.kr</p> <p>Eunjung Kim eunjungkim@korea.kr</p>	<p>Vladimir Kulik vladimir.kulik@tinro-center.ru</p> <p>Pavel Afanasiev afanasiev@vniro.ru</p>	<p>Wen-Bin Huang bruce@mail.ndhu.edu.tw</p>		<p>Aleksandr Zavolokin azavolokin@npf.int</p>
<p>Corresponding Group on DCT for Bottom Fish</p>	<p>Eddy Kennedy Eddy.Kennedy@dfm-mpo.gc.ca</p>	<p>Chuanxiang Hua cxhua@shou.edu.cn</p>	<p>Kota Sawada kotasawada@affrc.go.jp</p> <p>Masashi Kiyota kiyo@affrc.go.jp</p>	<p>Eunjung Kim eunjungkim@korea.kr</p>	<p>Vladimir Kulik vladimir.kulik@tinro-center.ru</p>	<p>Wen-Bin Huang bruce@mail.ndhu.edu.tw</p>		<p>Aleksandr Zavolokin azavolokin@npf.int</p>
<p>Corresponding Group on DCT for Pacific saury</p>		<p>Chuanxiang Hua cxhua@shou.edu.cn</p>	<p>Satoshi Suyama suyama@affrc.go.jp</p>	<p>Eunjung Kim eunjungkim@korea.kr</p>	<p>Dmitrii Antonenko dmantonenko@yandex.ru</p>	<p>Wen-Bin Huang bruce@mail.ndhu.edu.tw</p>		<p>Aleksandr Zavolokin azavolokin@npf.int</p>

Corresponding Group on Data Security Guidelines	Eddy Kennedy Eddy.Kennedy@dfo-mpo.gc.ca	Chuanxiang Hua cxhua@shou.edu.cn	Toshihide Iwasaki tiwasaki@affrc.go.jp	Seok-Gwan Choi sgchoi@korea.kr Eunjung Kim eunjungkim@korea.kr	Dmitrii Kremenuk d.kremenyuk@fishcom.ru Pavel Afanasyev afanasiev@vniro.ru	Mei-Chin Juan meichin@msl.fagov.tw	Peter Flewwelling pflewwelling@npfc.int Aleksandr Zavolokin azavolokin@npfc.int
Corresponding Group on Observer Program	Eddy Kennedy Eddy.Kennedy@dfo-mpo.gc.ca	Siquan Tian sqtian@shou.edu.cn	Toshihide Iwasaki tiwasaki@affrc.go.jp	Seok-Gwan Choi sgchoi@korea.kr Jaebong Lee leejb@korea.kr	Dmitrii Kremenuk d.kremenyuk@fishcom.ru Igor Melnikov igor.melnikov@tinro-center.ru	Mei-Chin Juan meichin@msl.fagov.tw	Aleksandr Zavolokin azavolokin@npfc.int Peter Flewwelling pflewwelling@npfc.int
Joint NPFC-PICES group	Eddy Kennedy Eddy.Kennedy@dfo-mpo.gc.ca	Yong Chen cheny@shou.edu.cn Wei Yu wyu@shou.edu.cn	Toshihide Iwasaki tiwasaki@affrc.go.jp	Seok-Gwan Choi sgchoi@korea.kr Eunjung Kim eunjungkim@korea.kr	Vladimir Kulik vladimir.kulik@tinro-center.ru	Chih-Hao Hsieh chsieh@ntu.edu.tw	Aleksandr Zavolokin azavolokin@npfc.int

SSC – small scientific committee
 TWG – Technical Working Group
 DCT – data collection templates
 Chair/Leader **in bold**.

Draft TORs of SSC-VME and SSC-Bottom Fish for the Development of Technical Guidelines That Supplement Exploratory Fishery Protocols

a. Develop technical guidelines for preparation and submission of notifications of exploratory fisheries that qualify the information required by Appendix 1.1/Annex 1/ CMM2016-05 and 06

To specify the contents of notification for each gear type.

b. Develop templates for submitting preliminary assessments of the potential for proposed bottom fishing activities to have significant adverse impacts on VMEs

To specify the pre-fishing assessment procedure and requisite information

c. Specify data collection plan and reporting requirement during the course of and after the completion of the proposed exploratory fisheries

- Data requirement for gear type unspecified by current CMMs (e.g. crab pot)

- Necessity of in/out reports, start/end fishing reports

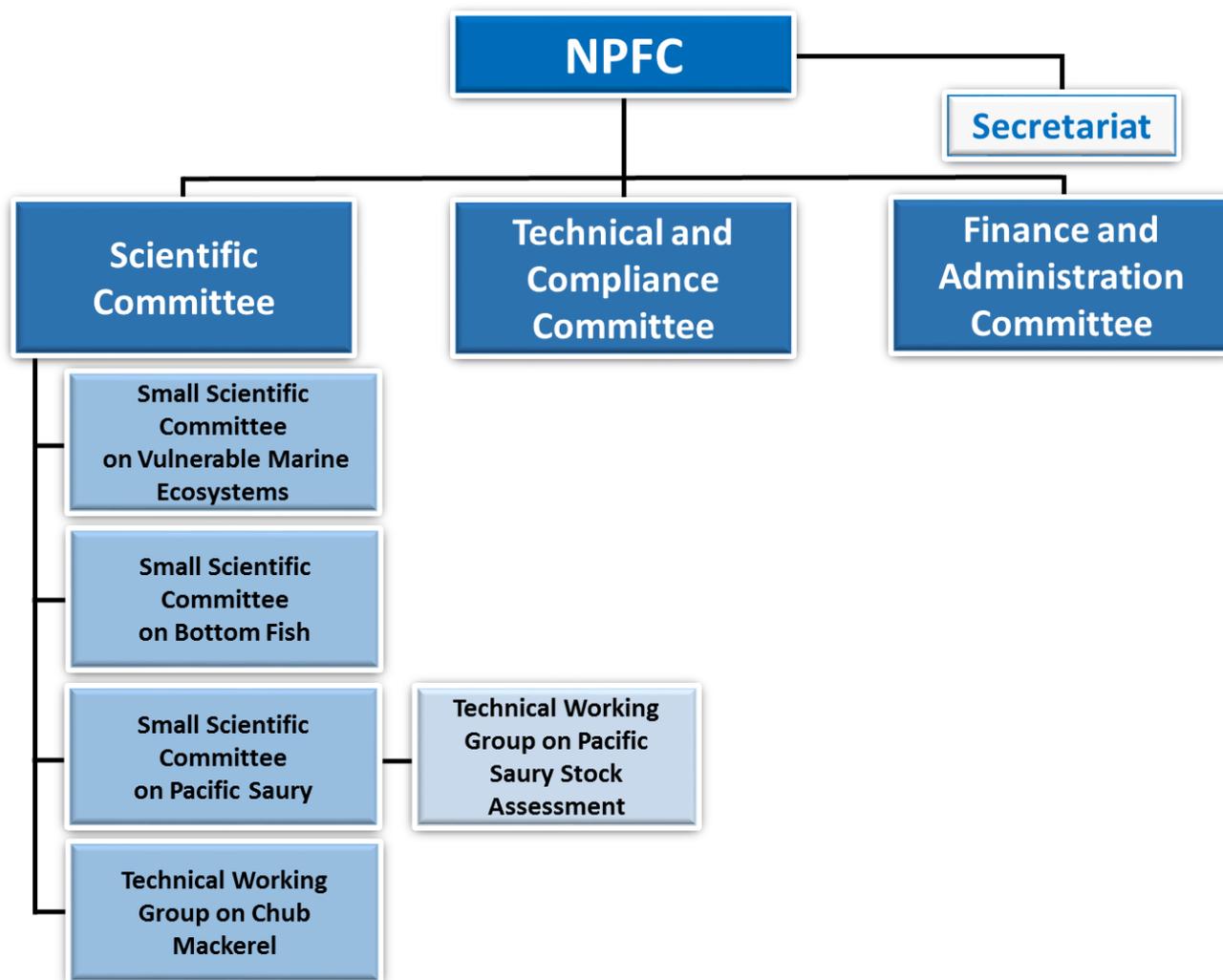
- Necessity of daily/5-day/monthly reports

- Requirement for information relevant to bottom fish stocks and bycatch species

d. Consider procedures to evaluate the impacts of exploratory fishing operations on VMEs (and fish stocks) based on the post-fishing reports.

- To improve reporting requirements (Appendix 1.2) if it is necessary

North Pacific Fisheries Commission Structure for 2017 Including Proposed Revision by the Scientific Committee



NPFC Meetings, 2017 – 2018

Meeting	Date	Place	Chair
TCC	10-12 July 2017	Sapporo, Japan	R. Day
FAC	12 July 2017	Sapporo, Japan	?
Commission	13-15 July 2017	Sapporo, Japan	K. Kagawa
TWG CM	4-5 December 2017	Vladivostok, Russia	?
TWG PSSA	6-8 December 2017	Vladivostok, Russia	T. Kitakado
VME Workshop	March 2018	Japan	Co-Chairs L. Low and M. Kiyota
SSCs	April 2018?	?	B. Li/T. Ichii/T. Iwasaki
SC	April 2018?	?	J. Morishita

Annex F

Draft of Terms of Reference for the Technical Working Group on the Chub Mackerel Stock Assessment (TWG CM), draft 2017-2021 Work Plan and draft Data List for stock assessments

(Submitted by Japan)

Explanatory note:

Japan proposes the draft of Terms of Reference for the TWG CM, the draft 2017-2021 Work Plan and the draft Data List for Stock Assessments for Chub Mackerel for consideration by the Commission, following the recommendation from the SC in 2017 (Para 36a, Report of SC in 2017).

Draft of Terms of Reference for the Technical Working Group on the Chub Mackerel Stock Assessment (TWG CM)

1. To review fishery data
 - Catch series
 - Age/size composition data
 - Evaluation of data quantity, data quality, sources of uncertainty (including IUU fishery)
 - Others
 - Recommendation of future works
2. To review fishery-dependent and fishery-independent indices
 - Evaluation of the quality of the indices
 - Review/update the existing protocol
 - Review/update the indices
 - Recommendation of future works
3. To review and update biological information/data
 - Stock structure
 - Growth
 - Reproduction and maturity schedule
 - Natural mortality
 - Migration pattern
 - Others
 - Recommendation of future works

4. To conduct the stock assessment
 - Review existing stock assessment methods
 - Application of candidates of stock assessment models and comparison of the results (if needed)
 - Determine the single stock assessment model for the chub mackerel stock assessment
 - Conduct stock assessment (including diagnostics, sensitivity analysis, future projection and evaluation of reference points)
 - Create the scientific advice on management based on the results of the stock assessment
 - Recommendation of future works
5. To facilitate data- and code- sharing processes
6. To review/improve presentation of stock assessment results (including stock status summary report in a format to be determined by the Working Group)
7. To discuss the design of Management Strategy Evaluation framework

Draft 2017-2021 Work Plan

Stock Assessments

Areas of work

- Conducting stock assessment for Chub mackerel
- Identification of data gaps, determination of activities to address those gaps and development of standards and mechanisms for data collection and verification

Five-Year Work Plan for stock assessments for Chub Mackerel

	2017	2018	2019	2020	2021
Chub mackerel	Review of Members' national research on stock status and fisheries through CM workshop Establishment of TWG CM. Proposal of work plan and data list for scientific stock assessment	Data preparation for scientific stock assessment	Preliminary stock assessment and provision of advice and recommendations to the Commission	Update/Improvement of the preliminary stock assessment and provision of advice and recommendation to the Commission	Update/Improvement of the assessment and provision of advice and recommendations to the Commission

Draft Data list for stock assessments for Chub Mackerel

- Catch data for mackerel.

Calendar Year Month Ten-days	Fishing Gear	Statistical Area	Effort			Catch Amount (Metric Tons)
			Numbers of fishing vessels	Fishing days	Others	

- Age/size composition data

Calendar Year Month Ten-days	Fishing Gear	Statistical Area	Sample size	Size composition
201x/xx/xx	xx	CA	xx	% or ind Length category yy xx yy xx yy xx yy xx

- Length-Weight Relationship

Calendar Year Month Ten-days	Statistical Area	Unit		Sample size	Length-Weight Relationship
		Length	Weight		
201x/xx/xx	CA	mm	g	xx	WW=a L ^b

- Age-length key

Calendar Year Month Ten-days	Statistical Area	Scale or Otolith	Sample size	Age-length key (%)

201x/xx/xx	CA	Scale or Otolith	xx	Age
				0 1 2 3 4 5....
				Length yy xx xx xx xx xx
				xx yy xx xx xx xx xx
				yy xx xx xx xx xx yy
				xx xx xx xx xx yy xx
xx xx xx xx yy xx xx				
xx xx xx xx				

• Catch at age data

.Calendar Year Month	Fishing Gear	Statistical Area	Sample size	Age composition
201x/xx/xx	xx	CA	Xx	% or ind Age 0 xx 1 xx 2 xx 3 xx

• Identification materials for age determination (ie. making age-length key)

.Sampling Year Month Days	Statistical Area	Length (mm)	Scale or Otolith	Age				
				Members identification				
				China	Chinese Taipei	Japan	Korea	Russia
201x/xx/xx	CA	xx	Scale or Otolith	xx	xx	xx	xx	xx

Annex G

Terms of Reference
for the Joint NPFC-PICES Group on Scientific Cooperation in the North Pacific Ocean

At its meeting in Shanghai in April 2017, the Scientific Committee (SC) agreed to enhance cooperation with PICES as an intergovernmental scientific organization with similar membership, convention area and scientific interests to NPFC. The SC recommended to establish a joint NPFC-PICES group to identify potential areas of cooperation and work intersessionally to develop the terms of reference for the working group for consideration by the Commission in July 2017.

The following draft terms of reference were developed by the NPFC members of the Joint NPFC-PICES group in consultation with PICES Secretariat for consideration by the Commission.

Terms of Reference:

1. Review areas of scientific interests and objectives for each organization
2. Identify potential areas and specific topics for scientific cooperation
3. Identify potential collaborative methods such as representation at each other's meetings, holding the joint workshops or symposia, possibility to construct the Memorandum of Understanding (MOU) between organizations or other formal agreements, establishment of the joint working groups etc.
4. Clarify practical steps to advance the cooperative activities identified above
5. Make a specific proposal to each organization for further consideration.

Annex H

**North Pacific Fisheries Commission
2nd Meeting of the Technical and Compliance Committee**

10-12 July 2017

Sapporo, Japan

REPORT

Agenda Item 1. Opening of Meeting

1. The 2nd Meeting of the Technical and Compliance Committee (TCC) took place in Sapporo, Japan on 10-12 July 2017, and was attended by Members from Canada, China, Japan, the Republic of Korea, the Russian Federation, Chinese Taipei, the United States of America, and Vanuatu. The meeting was opened by Dr. Robert Day (Canada) who served as the TCC Chair.

Agenda Item 2. Appointment of Rapporteur

2. Mr. Alexander Meyer was appointed as the Rapporteur.

Agenda Item 3. Admission of Observers

3. The Chair listed approved observers present. The North Pacific Anadromous Fish Commission attended the meeting from July 10. The Organization for Regional and Inter-regional Studies of Waseda University attended the meeting from July 11. The observers were admitted without objection.
4. The Chair explained that contractors Collecte Localisation Satellites (CLS) and Eighty Options were attending as consultant guests of the Secretariat.

Agenda Item 4. Adoption of Agenda

5. The Chair explained that he would give an introductory presentation on the key issues for consideration in the formulation of the TCC work plan at the beginning of Agenda Item 5.
6. The revised agenda was adopted (Annex A).

Agenda Item 5. Progress Report from the Secretariat

7. The Chair gave an introductory presentation on the key issues for consideration in the formulation of the TCC work plan (NPFC-2017-TCC02-WP08 (Rev. 1)) with discussion to occur under Agenda Item 8.

5.1 Overview of North Pacific Fisheries

8. The Secretariat presented an overview of the North Pacific fisheries addressing each fishery (NPFC-2017-TCC02-IP01). The concern of the Scientific Committee (SC) was noted over the current state of the North Pacific Armorhead stocks, which is placing additional pressure on the splendid alfonsino stocks which might also be stressed. The SC noted that new adaptive measures and possible stronger management measures must be developed very quickly for these bottom fisheries. The Pacific saury stock appears not to be overfished nor is overfishing occurring at this time. There is concern over the rapid increase in effort on the mackerel stocks, which has resulted in a CMM to limit effort until a stock assessment can be carried out. The squid stocks appear relatively stable at current levels of fishing effort.

5.2 Secretariat and Chair Review of TCC Activities 2016-2017

5.2.1 VMS Study Tender and Status

9. The Secretariat explained that it had commissioned a study of current vessel monitoring systems (VMS) already in use by NPFC Members and whether it would be possible to merge them into a regional VMS in a cost-effective manner, and that CLS had won the tender to conduct the study.
10. CLS provided an update on the progress of the ongoing VMS study (NPFC-2017-TCC02-WP01). Most Members already collected required data and can transmit them to the North Pacific Fisheries Commission (NPFC). All Members' VMS tools can thus be linked to a future NPFC Regional VMS. Most of the costs associated with such a Regional VMS would be related to the installation and operation of the NPFC Regional Fisheries Monitoring Center (FMC).
11. Some Members emphasized that in principle flag States are responsible for managing their vessels and their VMS data. Some Members also noted that the establishment of Regional VMS is not necessarily a prerequisite to implement Article 7 of the Convention, and there could be flexibility in the way VMS data is used depending on issues identified. The TCC held preliminary discussions on the cost of establishing the NPFC Regional FMC, the merits of doing so, and the personnel required to operate it. The TCC agreed to hold further discussions under Agenda Item 8 on the level of priority to give the NPFC Regional FMC in the TCC work plan.

5.2.2 TCC WEBEX Preparatory Meeting

12. The Chair provided a report of the TCC WEBEX Preparatory Meeting and the work conducted in relation to revising CMM 2016-06, high seas boarding and inspection, and the TCC work plan and priorities (NPFC-2017-TCC02-WP02).

Agenda Item 6. Review of MCS-related Issues from SC

6.1 Data Management and Information Security

13. The Secretariat provided an update on the work of the SC and the intersessional corresponding group to formulate draft Information Security Guidelines, underscoring that the SC recognizes there is an urgent need to formulate such Information Security Guidelines in order to facilitate the sharing of data for stock assessment and other scientific information among Members (NPFC-2017-TCC01-WP05).

14. The TCC also acknowledged the necessity of further developing the Information Security Guidelines for compliance purposes. The United States informed the TCC that it had prepared draft Interim Guidance for Management of Scientific Data Used in Stock Assessments, based on CMM 15-01 and guidelines used by other regional fisheries management organizations (NPFC-2017-COM03-WP10) that will be presented at the Commission meeting.

Recommendation: The TCC acknowledged the immediate necessity of the Information Security Guidelines for scientific data and recommended that the Commission consider these as a priority.

Recommendation: The TCC acknowledged that more work is needed to establish information security guidelines for compliance data and recommended that this work continue.

6.2 Other Issues from SC

15. The Secretariat informed the TCC about other issues from the SC related to CMMs 15-02, 2016-03, 2016-05 and 2016-06, as well as an Observer Program.

16. The Secretariat provided an update on the revision of CMM 2016-05 for Bottom Fisheries and Protection of Vulnerable Marine Ecosystems (VMEs) in the Northwestern (NW) Pacific Ocean (NPFC-2017-TCC02-WP06).

Recommendation: The TCC reviewed the editorial changes made to CMM 2016-05 and endorsed it as edited.

17. The Secretariat provided an update on the revision of CMM 2016-06 for Bottom Fisheries and Protection of VMEs in the Northeastern (NE) Pacific Ocean (NPFC-2017-TCC02-WP04).

Recommendation: The TCC reviewed the editorial changes made to CMM 2016-06 and endorsed it as edited.

18. The Secretariat informed the TCC that the SC recognized the necessity of developing a North Pacific Ocean Fisheries Observer Program and had established a corresponding group for advancing work towards the development of such an Observer Program.

Agenda Item 7. Review of Current MCS-related CMMs

7.1 CMM 2016-01 – Vessel Registry

19. The Secretariat provided an update on plans to improve the NPFC's vessel registry system. Under the new system, the register would be updated, including bulk updates, by Members as needed rather than annually. The data would be validated on entry. The existing values would be pre-populated. Members would not be able to update another Member's authorized vessel until it is deleted from the register. A unique NPFC Vessel ID would be introduced and maintained throughout the history of each vessel (NPFC-2017-TCC02-IP03).

Recommendation: The TCC recommended that Members test a pilot version of the new system, clarify issues such as the minimum information requirements for registering a vessel, and revise CMM 2016-01 as necessary for TCC03.

7.2 CMM 2016-02 –IUU

20. The Secretariat reported on the work to compile the draft Illegal, Unreported and Unregulated (IUU) Vessel List (NPFC-2017-TCC02-WP07).

21. Japan reported on vessels sighted in the Convention Area by Japan's fisheries inspection vessels (NPFC-2017-TCC02-IP05). Japan reported 288 vessels sighted in 2016 in the Convention Area. This compared to 194 in 2015. Of the 288 vessels, 68 were suspected to be IUU vessels. Of these, Japan noted presumed instances of IUU where vessels had changed their names and cases of multiple vessels having the same name and number.

22. China expressed its concern that such information should be carefully clarified before being submitted to the Secretariat.

23. The TCC acknowledged the responses of the Members concerned to the information provided by Japan. The TCC undertook a review of the proposals and developed a refined list. All Members agreed to do their utmost to prevent and combat IUU activity.

24. The United States highlighted the interpretation of paragraph 7 of CMM 2016-02 regarding to whom the draft IUU Vessel List should be transmitted.

Recommendation: The TCC shared the common understanding that "all Members/CNCPs, as well as to non-Contracting Parties with vessels on the list" means all Members/CNCPs regardless of whether or not they have vessels on the list, in addition to all non-Contracting Parties that have vessels on the list.

25. The TCC revised CMM 2016-02 to include a paragraph encouraging Members/CNCPs that have information that a vessel is presumed to be carrying out IUU activities, to inform the Member/CNCP or non-Contracting Party whose vessel is presumed to be carrying out IUU activities, for clarification.

Recommendation: The TCC recommended that the Commission endorse the revised CMM 2016-02 (Annex D).

26. The TCC reviewed and revised the draft IUU Vessel List. The TCC noted that there are seven cases of two vessels with the same name and number. China will re-register the seven authorized vessels under new names and numbers, upon which the seven illegal vessels will automatically be included on the draft IUU Vessel List. The TCC adopted the Provisional IUU Vessel List (16 of 68 vessels) (Annex E) and recommended the automatic inclusion of the seven illegal vessels once the seven authorized vessels have been re-registered under new names and numbers.

Recommendation: The TCC recommended that the Commission adopt the Provisional IUU Vessel List (Annex E).

Recommendation: The TCC noted that there are seven cases of two vessels with the same name and number, and recommended the automatic inclusion of the seven illegal vessels once the authorized vessels have been re-registered under new names and numbers.

7.3 CMM 2016-03 – Interim Transshipment Procedures

27. The Secretariat presented a proposal on the NPFC transshipment data format for discussion (NPFC-2017-TCC02-WP03).

28. Japan informed that the International Maritime Organization (IMO) is considering expanding the scope of vessels eligible to obtain an IMO number and noted that, in accordance with CMM 2016-01, all eligible Member vessels are required to obtain an IMO number. Japan explained that there could be difficulties in obtaining IMO numbers for newly eligible vessels, especially small vessels, due to problems including language. The TCC acknowledged the need for flexibility in the evolution of NPFC measures.

29. The TCC reviewed and revised the proposal (NPFC-2017-TCC02-WP03).

Recommendation: The TCC endorsed the revised proposal on the NPFC transshipment data format (Annex F).

30. Japan noted that currently CMM 2016-03 on transshipment only addresses bottom fisheries as an initial step (paragraph 1 of CMM 2016-03) and requested that Members initiate

discussions towards the revision of the CMM so that it applies to other fisheries, especially chub mackerel and Pacific saury.

Recommendation: The TCC agreed to hold further discussions, as part of the development of the TCC work plan.

7.4 CMM 2016-04 – Vessels with No Nationality

Recommendation: The TCC reviewed CMM 2016-04 and agreed to maintain it without revision.

7.5 CMM 2016-05 – Bottom Fisheries and VME Protection NW Pacific Ocean

31. Russia informed the TCC that the crab fishery activity would be a resumption of previous activity, in compliance with CMM 2016-05. The information on Russia's crab fishery is found in NPFC-2017-SC02-Final Report.

32. Japan expressed concern over the potential gear conflicts from the renewal of the Russian crab fishery. It was recognized that discussion is necessary among Members concerned to find a way of avoiding such conflicts. Russia noted that it expected all gear that was formerly authorized would remain so, and that any future gear issues would be addressed by Members accordingly. There was no disagreement with respect to renewal of the Russian crab fishery.

33. Japan expressed concern over the activity of Korean sea trawlers in the C-H Seamount as reported in NPFC-2017-SSC VME02-WP06. Japan recognized that this activity was prior to the Commission coming into force, but further noted that it did contravene the interim measures agreed by participants. Korea explained that it was an isolated and unintended incident in 2013, that Korea took appropriate action in relation to the incident pursuant to Korea's domestic law, and that it will ensure that similar incidents do not occur in future.

7.6 CMM 2016-06 – Bottom Fisheries and VME Protection NE Pacific Ocean

34. No issues were discussed.

7.7 CMM 2016-07 – Chub Mackerel

35. The TCC recognized the need to improve the precision of the assessment of compliance with CMM 2016-07.

Recommendation: The TCC agreed to conduct intersessional work to improve the precision of the assessment of compliance with CMM 2016-07 to allow for discussion at TCC03.

36. Japan asked the Secretariat for more information on numbers of vessels registered to fish chub mackerel and Pacific saury. The Secretariat explained that it would be difficult to

provide the requested information at this time. Japan withdrew its request and suggested that the TCC hold further discussions on compliance monitoring under Agenda Item 8.

7.8 CMM 15-02 – Pacific Saury

37. The TCC recognized the need to improve the precision of the assessment of compliance with CMM 15-02.

Recommendation: The TCC agreed to conduct intersessional work to improve the precision of the assessment of compliance with CMM 15-02 to allow for discussion at TCC03.

Agenda Item 8. Compliance Work Plan and Priorities

8.1 Review of TCC Framework, Key Management Issues and Discussion on Key Management Issues from Agenda Items 6 and 7; 8.2 Recommendation on TCC Work Plan Priorities; 8.3 Procedures to Advance TCC work plan

38. It was agreed that Agenda Items 8.1-8.3 would be discussed together.

39. The TCC discussed and revised the TCC Draft Compliance Work Plan proposed by Canada (NPFC-2017-TCC02-WP11). It was recognized that the work plan will be modified and updated as work progresses and new priorities appear. Japan emphasized the importance of determining procedures for assessing compliance (as noted in agenda items 7.7 and 7.8) with tools such as a “compliance table,” which is included in the TCC work plan as Item 2.2.

Recommendation: The TCC endorsed the revised proposal (Annex G) recognizing that the TCC Draft Compliance Work Plan will be modified and updated as work progresses and new priorities appear.

Recommendation: As noted in the TCC Terms of Reference, TCC recommended that each Member nominate a focal point contact.

40. The TCC also discussed priority species. There was a suggestion that this issue is best addressed by the Commission, after which time the TCC can address compliance considerations related to priority species at the request of the Commission.

Recommendation: The TCC requested that the Commission identify priority species for the work plan.

Agenda Item 9. Ongoing and New MCS-related CMMs and Issues

9.1 High Seas Boarding and Inspection Procedures

41. The TCC held discussions on finalizing a new CMM on High Seas Boarding and Inspection Procedures. The TCC endorsed, in principle, a new CMM on High Seas Boarding and Inspection Procedures (Annex H), noting the reservations expressed by Russia, who is awaiting final approval from their capital. The United States and Canada expressed some

concern about the limited use of force, but supported the CMM. The TCC also agreed to monitor compliance with inspection requests (i.e., should inspectors be obstructed in their work).

Recommendation: The TCC recommended that the Commission, recognizing the reservations of Russia, consider endorsing the CMM on High Seas Boarding and Inspection Procedures (Annex H).

Recommendation: The TCC agreed to hold further discussions on the establishment of a mechanism for addressing cases in which inspections are obstructed, as part of future discussions on the TCC work plan.

9.2 Other MCS Issues

42. No other MCS issues were discussed.

9.3 Annual Reporting Format (Science vs. Compliance Data)

43. The Secretariat proposed the separation of science and compliance data in Members' annual reporting format to allow for easier publication of non-confidential data.

Recommendation: The TCC recommended that the Commission consider endorsing the proposal to separate the science and compliance data into two parts.

Agenda Item 10. Other Matters

10.1 Selection of Next Chair and Vice-Chair

Recommendation: The TCC recommended that Dr. Robert Day continue to serve as the TCC Chair and Mr. Chan Soo Park (Korea) to serve as the TCC Vice-Chair.

10.2 Cooperating Non-Contracting Parties (CNCs)

44. The TCC discussed matters related to the paper on CNCP from the Final Report of the Commission Meeting in 2016 (NPFC-2016-SWG-Fin & Admin01-WP08).

Recommendation: The TCC recommended deferring consideration to the Finance and Administration Committee.

10.3 Observer Program

45. The Secretariat provided an update on the SC development of an Observer Program. The TCC Members agreed that it would be useful for the TCC to jointly participate with SC in considering the Observer Program.

Recommendation: The TCC recommended that the Commission consider TCC participating in the Observer Program jointly with SC.

Agenda Item 11. Recommendations to the Commission.

46. The TCC recommended the following to the Commission:

(Agenda Item 6)

- a. The TCC acknowledged the immediate necessity of the Information Security Guidelines for scientific data and recommended that the Commission consider these as a priority.
- b. The TCC acknowledged that more work is needed to establish information security guidelines for compliance data and recommended that this work continue.
- c. The TCC reviewed the editorial changes made to CMM 2016-05 and endorsed it as edited.
- d. The TCC reviewed the editorial changes made to CMM 2016-06 and endorsed it as edited.

(Agenda Item 7)

- e. The TCC recommended that Members test a pilot version of the new vessel registry system, clarify issues such as the minimum information requirements for registering a vessel, and revise CMM 2016-01 as necessary for TCC03.
- f. The TCC shared the common understanding that in paragraph 7 of CMM 2016-02, “all Members/CNCPs, as well as to non-Contracting Parties with vessels on the list” means all Members/CNCPs regardless of whether or not they have vessels on the list, in addition to all non-Contracting Parties that have vessels on the list.
- g. The TCC recommended that the Commission endorse the revised CMM 2016-02 (Annex D).
- h. The TCC recommended that the Commission adopt the Provisional IUU Vessel List (Annex E).
- i. The TCC noted that there are seven cases of two vessels with the same name and number, and recommended the automatic inclusion of the seven illegal vessels once the authorized vessels have been re-registered under new names and numbers.
- j. The TCC endorsed the revised proposal on the NPFC transshipment data format (Annex F).
- k. The TCC agreed to hold further discussions on CMM 2016-03 on transshipment and its application to other fisheries, as part of the development of the TCC work plan.
- l. The TCC agreed to maintain CMM 2016-04 without revision.
- m. The TCC agreed to conduct intersessional work to improve the precision of the assessment of compliance with CMM 2016-07 to allow for discussion at TCC03.
- n. The TCC agreed to conduct intersessional work to improve the precision of the assessment of compliance with CMM 15-02 to allow for discussion at TCC03.

(Agenda Item 8)

- o. The TCC endorsed the revised TCC Work Plan (Annex G), recognizing that the TCC Work Plan will be modified and updated as work progresses and new priorities appear.
- p. The TCC recommended that each Member nominate a focal point contact.
- q. The TCC requested that the Commission identify priority species for the work plan.

(Agenda Item 9)

- r. The TCC recommended that the Commission, recognizing the reservations of Russia, consider endorsing the CMM on High Seas Boarding and Inspection Procedures (Annex H).

- s. The TCC agreed to hold further discussions on the establishment of a mechanism for addressing cases in which inspections are obstructed, as part of future discussions on the TCC work plan.
- t. The TCC recommended that the Commission consider endorsing the proposal to separate the science and compliance data into two parts.

(Agenda Item 10)

- u. The TCC recommended that Dr. Robert Day continue to serve as the TCC Chair and that Mr. Chan Soo Park serve as the TCC Vice-Chair.
- v. The TCC recommended deferring consideration to the Finance and Administration Committee regarding matters related to the paper on CNCP from the Final Report of the Commission Meeting in 2016.
- w. The TCC recommended that the Commission consider TCC participating in the Observer Program jointly with SC.

(Agenda Item 12)

- x. The TCC requested the guidance of the Commission in determining the date and location of the next TCC meeting.

Agenda Item 12. Next Meeting

- 47. The TCC noted the importance of ensuring adequate time for the TCC to discuss compliance matters, recognizing that there will likely be a growing need to conduct more complete and in-depth assessment of compliance going forward.

Recommendation: The TCC requested the guidance of the Commission in determining the date and location of the next TCC meeting.

Agenda Item 13. Adoption of the Report

- 48. The report was adopted by consensus.

Agenda Item 14. Close of the Meeting

- 49. The TCC meeting closed at 11:44 on 12 July 2017.

Annexes

Annex A – Agenda

Annex B – List of Documents

Annex C – List of Participants

Annex D – Revision to CMM 2016-02

Annex E – Provisional IUU Vessel List

Annex F – Transshipment Data Format

Annex G – TCC Work Plan

Annex H – High Seas Boarding and Inspection Procedures

**North Pacific Fisheries Commission
2nd Meeting of the Technical and Compliance Committee
10-12 (noon) July 2017
Sapporo, Japan**

Agenda

Agenda Item 1. Opening of the Meeting

Agenda Item 2. Appointment of Rapporteur

Agenda Item 3. Admission of Observers

Agenda Item 4. Adoption of Agenda

Agenda Item 5. Progress Report from the Secretariat

Chair's Presentation on key issues for consideration in the formulation of the TCC Work Plan

5.1 Overview of North Pacific Fisheries

5.2 Secretariat and Chair Review of TCC Activities 2016-2017

5.2.1 VMS Study Tender and Status

5.2.2 TCC WEBEX Preparatory Meeting

a. CMM 2016-06 revision

b. High Seas Boarding and Inspection

c. Compliance Work Plan and Priorities

Agenda Item 6. Review of MCS related issues from SC

6.1 Data Management and Information Security

6.2 Other Issues from SC

Agenda Item 7. Review of Current MCS-related CMMs

Japan's presentation on monitoring the compliance of all CMMs

7.1 CMM 2016-01 - Vessel Registry

7.2 CMM 2016-02 – IUU

a) Draft IUU Vessel List

7.3 CMM 2016-03 – Interim Transshipment Procedures

7.4 CMM 2016-04 – Vessels with No Nationality

7.5 CMM 2016-05 – Bottom Fisheries and VME Protection NW Pacific Ocean

a) Review of the proposal of crab fishery (NPFC-2017-SC02-WP02) in light of the paragraph 4A of CMM 2016-05

7.6 CMM 2016-06 – Bottom Fisheries and VME Protection NE Pacific Ocean

a) CMM 2016-06 SC Revision

7.7 CMM 2016-07 – Chub Mackerel

Japan's request for state of Member's compliance with this CMM

7.8 CMM 15-02 - Pacific Saury

Japan's request for state of Member's compliance with this CMM

Agenda Item 8. Compliance Work Plan and Priorities

8.1 Review of TCC Framework, key management issues and discussion on key management pressures from Agenda Items 6 and 7

8.2 Recommendation on TCC Work Plan Priorities

8.3 Procedures to advance TCC Work Plan

Agenda Item 9. Ongoing and new MCS-related CMMs and Issues

9.1 High Seas Boarding and Inspection Procedures

9.2 Other MCS Issues

9.3 Annual Reporting Format (Science vs. Compliance data)

Agenda Item 10. Other Matters

10.1 Selection of next Chair and Vice-Chair

10.2 Cooperating Non-Contracting Parties (CNCs)

10.3 Observer Program

Agenda Item 11. Recommendations to the Commission

Agenda Item 12. Next Meeting

Agenda Item 13. Adoption of the Report

Agenda Item 14. Close of the Meeting

**North Pacific Fisheries Commission
2nd Meeting of the Technical and Compliance Committee
10-12 July 2017 (noon)
Sapporo, Japan**

LIST OF DOCUMENTS

MEETING INFORMATION PAPERS

Symbol	Title
NPFC-2017-MIP01	Meeting notice and information
NPFC-2017-TCC02-MIP02 (Rev. 2)	Provisional agenda
NPFC-2017-TCC02-MIP03	Provisional annotated agenda
NPFC-2017-TCC02-MIP04 (Rev. 6)	Indicative schedule
NPFC-2017-TCC02-MIP05 (Rev. 3)	Provisional List of Documents

REFERENCE DOCUMENTS - NPFC Website

Symbol	Title
	Convention on the Conservation and Management of High Seas Fisheries Resources in the North Pacific Ocean
	NPFC Rules of Procedure
	Compendium of Active Conservation and Management Measures for the NPFC

WORKING PAPERS

Symbol	Title
NPFC-2017-TCC02-WP01	CLS VMS Study Interim Report
NPFC-2017-TCC02-WP02	WEBEX Report
NPFC-2017-TCC02-WP03 (Rev. 2)	Draft Transshipment Summary Data Format
NPFC-2017-TCC02-WP04	Revision CMM 2016-06
NPFC-2017-TCC02-WP05	Information Security Guidelines
NPFC-2017-TCC02-WP06	Revision CMM 2016-05
NPFC-2017-TCC02-WP07	Draft IUU Vessel List
NPFC-2017-TCC02-WP08 (Rev. 1)	TCC Compliance Work Plan Discussion Overview
NPFC-2017-TCC02-WP09	China's Response to Draft IUU Vessel List

NPFC-2017-TCC02-WP10	Russian Federation's Response to Draft IUU Vessel List
NPFC-2017-TCC02-WP11 (Rev. 1)	TCC Compliance Work Plan 2017
NPFC-2017-TCC02-WP12 (Rev. 1)	Provisional IUU Vessel List
NPFC-2017-TCC02-WP13 (Rev. 1)	CMM 2017-02 To a List of Vessels Presumed to Have Carried Out IUU Activities in the NPFC CA
NPFC-2017-TCC02-WP14	CMM 2017-09 High Seas Boarding and Inspection
NPFC-2017-TCC02 (Rev. 1)	Draft Report

INFORMATION PAPERS (IP)

Symbol	Title
NPFC-2017-TCC02-IP01	Fisheries Overview
NPFC-2017-TCC02-IP02	Introduction to CLS
NPFC-2017-TCC02-IP03	NPFC Vessel Registry Plan
NPFC-2017-TCC02-IP04	Compliance Monitoring 2016
NPFC-2017-TCC02-IP05	Vessels sighted in the Convention Area by Japan

VESSEL REGISTRATIONS (VR) – NPFC Website

Symbol	Title
NPFC-2017-TCC02-VR	CANADA
NPFC-2017-TCC02-VR	PEOPLE'S REPUBLIC OF CHINA
NPFC-2017-TCC02-VR	JAPAN
NPFC-2017-TCC02-VR	REPUBLIC OF KOREA
NPFC-2017-TCC02-VR	RUSSIAN FEDERATION
NPFC-2017-TCC02-VR	CHINESE TAIPEI
NPFC-2017-TCC02-VR	VANUATU

ANNUAL REPORTS (AR) - NPFC Website

Symbol	Title
NPFC-2017-AR Canada	Annual Report of Canada to the North Pacific Fisheries Commission
NPFC-2017-AR China	China's Annual Report for 2016 to the Secretariat of the North Pacific Fisheries Commission

NPFC-2017-AR Japan (Rev. 1)	Japan's Annual Report for 2016 to the North Pacific Fisheries Commission
NPFC-2017-AR Korea	Republic of Korea Annual Report for 2016 to the North Pacific Fisheries Commission
NPFC-2017-AR Russia	Russia Annual Report for 2016 to the North Pacific Fisheries Commission
NPFC-2017-AR Chinese Taipei	Chinese Taipei's Annual Report for 2016 to the North Pacific Fisheries Commission
NPFC-2017-AR USA	2016 Annual Report of the United States of America to the North Pacific Fisheries Commission
NPFC-2017-AR Vanuatu	2016 Annual Report of the Republic of Vanuatu to the North Pacific Fisheries Commission
NPFC-2017-AR-Annual Summary Footprint - Bottom Fisheries	2016 – Annual Summary Footprint For Bottom Fisheries In The North Pacific Fisheries Commission Area Of Competence
NPFC-2017-AR-Annual Summary Table - Pacific Saury	2016 – Annual Summary Footprint For Pacific Saury In The North Pacific Fisheries Commission Area Of Competence
NPFC-2017-AR-Annual Summary Table - Squid	2016 – Annual Summary Footprint For Squids In The North Pacific Fisheries Commission Area Of Competence
NPFC-2017-AR-Annual Summary Table - Mackerels	2016 – Annual Summary Footprint For Chub Mackerel and Spotted Mackerel In The North Pacific Fisheries Commission Area Of Competence

NGO and Others

Symbol	Organization & Title

**Technical and Compliance Committee
LIST OF PARTICIPANTS**

CHAIR

Robert DAY
Fisheries and Oceans Canada
+1-613-993-7979
robert.day@dfo-mpo.gc.ca

Siquan TIAN
Alternate Representative
Shanghai Ocean University
+86-15692165377
sqtian@shou.edu.cn

CANADA

Judy DWYER
Head of Delegation
Fisheries and Oceans Canada
+1-613-993-3371
judy.dwyer@dfo-mpo.gc.ca

Mike CARLSON
Adviser
Fisheries and Oceans Canada
+1-604-666-0604
mike.carlson@dfo-mpo.gc.ca

Seth REINHART
Adviser
Fisheries and Oceans Canada
+1-613-993-7968
seth.reinhart@dfo-mpo.gc.ca

CHINA

Liling ZHAO
Head of Delegation
Ministry of Agriculture
+86-10-59192966
bofdwf@agri.gov.cn

Xiaoning YANG
Alternate Representative
Ministry of Foreign Affairs
+86-10-65963292
yang_xiaoning@mfa.gov.cn

Guanbao CHENG
Advisor
China Coast Guard
xuqiang19861002@126.com

Lianyong FANG
Advisor
China Oversea Fisheries Association
+86-10-65853488
tomfang71@hotmail.com

Dingjun GUO
Advisor
Fujian Wanton Overseas Fisheries Co., LTD
tomfang71@hotmail.com

Chuanxiang HUA
Advisor
Shanghai Ocean University
cxhua@shou.edu.cn

Jian WANG
Advisor
Ministry of Foreign Affairs
+86-10-65963724
wangjiantom@yahoo.com

Qiang XU
Advisor
China Coast Guard
xuqiang19861002@126.com

Wenquan ZHOU
Advisor
Jinxin Overseas Fisheries Co., LTD
admin1@tuna.org.cn

JAPAN

Kengo TANAKA
Head of Delegation
Resources Management Department,
Fisheries Agency
+81-3-3591-1086
kengo_tanaka880@maff.go.jp

Naohiko AKIMOTO
Adviser
Japan Overseas Fishing Association
+81-3-3291-8508
naohiko@sol.dti.ne.jp

Toyoaki IRIE
Adviser
Fishery Division, Economic Affairs Bureau,
Ministry of Foreign Affairs
+81-3-5501-8338
toyoaki.irie@mofa.go.jp

Koichi ISHIZUKA
Adviser
Hokkaido Fisheries Management Office,
Fisheries Agency
+81-11-709-2382
koichi_ishizuka820@maff.go.jp

Toshihide IWASAKI
Adviser
Fisheries Management Department, Tohoku
National Fisheries Research Institute, Japan
Fisheries Research and Education Agency
+81-178-33-1500
tiwasaki@affrc.go.jp

Yoichiro KIMURA
Adviser
Resource Management Division, Fisheries
Agency
+81-3-3502-0167
yoichiro_kimura680@maff.go.jp

Ryuji KOMURA
Adviser
Fisheries Management Division of
Department of Fisheries and Forestry,
Hokkaido Government
komura.riyuuji@pref.hokkaido.lg.jp

Koji KUMAGAI
Adviser
Hokkaido Fisheries Management Office,
Fisheries Agency
+81-11-709-2382
koji_kumagai150@maff.go.jp

Akira MIZUMASU
Adviser
Hokkaido Fisheries Management Office,
Fisheries Agency
+81-11-709-2382
akira_mizumasu490@maff.go.jp

Naohito OKAZOE
Adviser
International Affairs Division, Fisheries Agency
+81-3-3591-1086
naohito_okazoe980@maff.go.jp

Nobushige SHIMIZU
Adviser
International Affairs Division, Fisheries Agency
+81-3-3591-1086
nobushige_shimizu640@maff.go.jp

Hidefumi YATOMI
Adviser
Cubic-i Ltd.
+81-3-3779-5506
yatomi@cubic-i.co.jp

KOREA

Chan Soo PARK
Head of Delegation
Ministry of Oceans and Fisheries
parkchansoo@korea.kr

Junghee CHOI
Adviser
Korea Overseas Fisheries Cooperation Center
+82-10-9303-4448
hellojunghee@kofci.org

Eunjung KIM
Adviser
National Institute of Fisheries Science
eunjungkim@korea.kr

RUSSIA

Aleksei BAITALIUK
Head of Delegation
TINRO-Center
aleksei.baitaliuk@tinro-center.ru

Dmitry KREMENYUK
Alternate Representative
Federal Agency for Fisheries
d.kremenyuk@fishcom.ru

Pavel AFANASYEV
Adviser
FSBSI "VNIRO"
afanasiev@vniro.ru

Oleg KATUGIN
Adviser
TINRO-Center
oleg.katugin@tinro-center.ru

Vladimir KULIK
Adviser
TINRO-Center
vladimir.kulik@tinro-center.ru

Alexey SAFRONOV
Adviser
Russia Coast Guard
gmips@fsb.ru

Yana ZHADAN
Adviser
Russia Coast Guard
gmips@fsb.ru

CHINESE TAIPEI

Ming-Fen WU
Head of Delegation
Deep Sea Fisheries Division, Fisheries
Agency, Council of Agriculture
mingfen@msl.f.a.gov.tw

Wei-Hsuan CHANG
Adviser
Department of International Organizations
whchang@mofa.gov.tw

Wan-Tze CHEN
Adviser
Department of International Organizations
wtgchen@mofa.gov.tw

Kun-Hsueh CHOU
Adviser
Taiwan Squid Fishery
business@squid.org.tw

Mei-Chin JUAN
Adviser
Deep sea Fisheries Division, Fisheries
Agency, Council of Agriculture
meichin@msl.f.a.gov.tw

Shih-Hsun LIN
Adviser
Deep sea Fisheries Division, Fisheries
Agency, Council of Agriculture
shihhsun@msl.f.a.gov.tw

Kuo-Ching PU
Adviser
Taipei Representative Office in Republic of
Singapore
kcpu@mofa.gov.tw

Tsung-Yueh TANG
Adviser
Overseas Fisheries Development Council
tangty@ofdc.org.tw

USA

Glenn MERRILL
Head of Delegation
Department of Commerce - NOAA Fisheries
+1-9075867775
glenn.merrill@noaa.gov

Charles BRINKMAN
Alternate Representative
U.S. Department of State
+1-202-765-9751
BrinkmanCC@state.gov

Emily CRIGLER
Adviser
NOAA Fisheries, Pacific Islands Regional
Office
emily.crigler@noaa.gov

Kari FENSKE
Adviser
National Marine Fisheries Service
+1-907-789-6653
Kari.fenske@noaa.gov

Howard HULL
Adviser
North Pacific Fishery Management Council
+1-907-632-8862
danhullak@gmail.com

Kent LABORDE
Adviser
NOAA
+1-202-425-2220
kent.laborde@noaa.gov

Nathan LAGERWEY
Adviser
NOAA Office of Law Enforcement
+1-907-271-3031
nathan.lagerwey@noaa.gov

Brian MCTAGUE
Adviser
National Oceanic and Atmospheric
Administration
+1-907-957-0423
brian.mctague@noaa.gov

Jonathan POLLARD
Adviser
NOAA Office of General Counsel, National
Oceanic and Atmospheric Administration,
U.S. Department of Commerce
+1-907-723-9158
jonathan.pollard@noaa.gov

VANUATU

William NAVITI
Head of Delegation
Department of Fisheries, Government of
Vanuatu
wnaviti@vanuatu.gov.vu

Chu-Lung CHEN
Adviser
Ming Dar Fishery (Vanuatu) Co., Ltd.
kevin.mdfc@msa.hinet.net

Kevin LIN
Adviser
Ming Dar Fishery (Vanuatu) Co., Ltd.
kevin.mdfc@msa.hinet.net

OBSERVERS

NPAFC
Mike CARLSON
Fisheries and Oceans Canada
+1-604-666-0604
mike.carlson@dfo-mpo.gc.ca

PICES
Oleg KATUGIN
TINRO-Center
oleg.katugin@tinro-center.ru

ORIS
Mari KOYANO
Hokkaido University
+81-90-3136-8248
koyano@juris.hokudai.ac.jp

NPFC CONTRACTORS

Benoit ALBAGNAC
CLS
balbagnac@cls.fr

Olivier ROUX
CLS
olivier@otolithe.com

Tony MILLER
Eighty Options
+61-413-166-551
tony.miller@eightyoptions.com

NPFC SECRETARIAT

Dae Yeon MOON
Executive Secretary
+81-3-5479-8717
dymoon@npfc.int

Peter FLEWWELLING
Compliance Manager
+81-3-5479-8717
pflewwelling@npfc.int

Aleksandr ZAVOLOKIN
Science Manager
+81-3-5479-8717
azavolokin@npfc.int

Yuko YOSHIMURA-TAKAMIYA
Executive Assistant
+81-3-5479-8717
ytakamiya@npfc.int

Mervin OGAWA
Data Coordinator
+81-3-5479-8717
mogawa@npfc.int

Alexander MEYER
Rapporteur
Urban Connections
+81-3-6432-5691
meyer@urbanconnections.jp

Mizuki FUKUI
Assistant
Hokkaido University
+81-90-1302-0350
mizuki.f0209@gmail.com

Asaka KURIYAMA
Assistant
Hokkaido University
+81-80-1885-8756
pikapolon126@yahoo.co.jp

**CONSERVATION AND MANAGEMENT MEASURE TO ESTABLISH A
LIST OF VESSELS PRESUMED TO HAVE CARRIED OUT ILLEGAL,
UNREPORTED AND UNREGULATED FISHING ACTIVITIES IN THE
CONVENTION AREA OF THE NORTH PACIFIC FISHERIES
COMMISSION**

The North Pacific Fisheries Commission (NPFC):

Recalling that the FAO Council adopted on 23 June 2001 an International Plan of Action to prevent, deter and eliminate illegal, unreported and unregulated fishing (IPOA-IUU). This plan stipulates that the identification of the vessels carrying out illegal, unreported and unregulated (IUU) fishing activities should follow agreed procedures and be applied in an equitable, transparent and non-discriminatory way;

Concerned that IUU fishing activities in the Convention Area undermine the effectiveness of the conservation measures adopted by the NPFC;

Further concerned that there is a possibility that vessel owners engaged in such fishing activities may have re-flagged their vessels to avoid compliance with NPFC measures;

Determined to address the challenge of an increase in IUU fishing activities by way of measures to be applied in respect to vessels, without prejudice to further measures adopted in respect of Members, Cooperating Non-Contracting Parties (CNCs) and non-Contracting Parties under the relevant NPFC instruments;

Considering the action undertaken in other regional fisheries organizations to address this issue;

Conscious of the need to address, as a matter of priority, the issue of vessels conducting IUU fishing activities;

Noting that efforts to prevent, deter and eliminate IUU fishing must be addressed in the light of all relevant international fisheries instruments and in accordance with other international obligations, including the rights and obligations established under the World Trade Organization (WTO) Agreement; and

Recalling Articles 13, 14, 15 and 17 of the Convention on the Conservation and Management of High Seas Fisheries Resources in the North Pacific Ocean (hereinafter called the “Convention”) regarding the flag State duties, port State duties, duties of fishing entities and provisions for compliance and enforcement;

Adopts the following conservation and management measure in accordance with Article 7 of the Convention:

Identification of IUU activities

1. At each meeting, the Commission will identify those vessels which have engaged in fishing activities for species covered by the Convention within the Convention Area in a manner which has undermined the effectiveness of the Convention and the NPFC measures in force, and shall establish, and, as necessary, amend in subsequently, a list of such vessels (the IUU Vessel List), in accordance with the procedures and criteria set out in this conservation measure.
2. This identification shall be suitably documented, *inter alia*, on reports from Members/CNCPs relating to NPFC Conservation measures in force, trade information obtained on the basis of relevant trade statistics such as Food and Agriculture Organization of the United Nations (FAO) data, statistical documents and other national or international verifiable statistics, as well as any other information obtained from port States and/or gathered from the fishing grounds that is suitably documented. Information from Members/CNCPs should be provided in the format approved by the Commission.
3. For the purposes of this conservation measure, vessels fishing for species covered by the Convention are presumed to have carried out IUU fishing activities, as described in the IPOA on IUU fishing, in the Convention Area when a Member/CNCP presents suitably documented information that such vessels, *inter alia*:
 - a. Harvest species covered by the Convention in the Convention Area and are not on the NPFC record of authorized vessels or
 - b. Engage in fishing for fishery resources when the Member or CNCP, under whose flag the vessel is sailing, has exhausted or has no quotas, catch limit or effort allocation, including, if applicable, those received from another Member/CNCP under relevant NPFC conservation measures, or
 - c. Do not record or report their catches made in the Convention Area consistent with NPFC measures, or make false reports, or
 - d. Take and land undersized fish in contravention of relevant NPFC conservation measures, or
 - e. Fish in a closed area or during a closed season in contravention of relevant NPFC conservation measures, or
 - f. Use prohibited fishing gear in contravention of relevant NPFC conservation measures, or
 - g. Transship with, participate in joint fishing operations with, support or re-supply vessels included in the IUU Vessel List, or
 - h. Are without nationality and harvest species covered by the Convention in the Convention Area, or
 - i. Engage in any other fishing activities that undermine the provisions of the Convention or any other NPFC conservation measures.
4. If a Member/CNCP has not taken such measures as may be necessary so that fishing vessels entitled to fly its flag avoid conducting unauthorized fishing activities within areas under national jurisdiction of another State adjacent to the Convention Area in accordance with Article 13, the Member/CNCP, within whose areas under national jurisdiction the unauthorized fishing activities were conducted, may submit a proposal for listing the vessels on the draft IUU List if consultation with the Member/CNCP has not resolved the matter. Relevant procedures set out in paragraph 6 below shall apply for proposals under this paragraph.

5. If a Member/CNCP has information that a vessel is presumed to be carrying out IUU activities in the Convention Area during the years from the previous meeting to the current year, the Member/CNCP with such information is encouraged to provide that information as soon as possible to, and consult with, any Member/CNCP or non-Contracting Party that may have a vessel presumed to be carrying out IUU activities for clarification before providing that information to the Executive Secretary under the provisions of paragraph 6.

Information on alleged IUU fishing activities

6. At least 70 days before the meeting of the Technical and Compliance Committee (TCC), Members/CNCPs shall transmit to the Executive Secretary their list of vessels presumed to be carrying out IUU activities in the Convention Area during the years from the previous meeting to the current year, accompanied by suitably documented information, as provided in para 2, concerning the presumption of this IUU activity.
7. Before or at the same time as transmitting a list of presumed IUU vessels to the Executive Secretary, the Member/CNCP shall notify, either directly or through the Executive Secretary, the relevant Member/CNCP/Non-Contracting Party of a vessel's inclusion on this list and provide a copy of the pertinent suitably documented information. The Member/CNCP/Non-Contracting Party shall promptly acknowledge receipt of the notification. If no acknowledgement is received within 10 days of the date of transmittal, the Executive Secretary, Member/CNCP shall retransmit the notification through an alternative means of communication.

Draft IUU Vessel List

8. The Executive Secretary shall draw up a draft IUU Vessel List incorporating the lists of vessels and suitably documented information received pursuant to para 6, and any other suitably documented information at his disposal, and shall transmit it, together with all the supporting information provided, to all Members/CNCPs, as well as to non-Contracting Parties with vessels on the list, at least 55 days before the TCC's meeting except otherwise decided by the TCC.
9. The Executive Secretary shall request each Member/CNCP/non-Contracting Party with vessels on the draft IUU Vessel List to notify the owner of the vessels of their inclusion in that list, and of the consequences of their inclusion being confirmed in the IUU Vessel List.
10. Upon receipt of the draft IUU Vessel List, Members/CNCPs shall closely monitor the vessels included in that list in order to follow their activities and possible changes of name, flag or registered owner.
11. As appropriate, Members/CNCPs/non-Contracting Parties with vessels on the list should transmit, at least 10 days before the TCC's meeting, their comments to the Executive Secretary, including suitably documented information, showing that the vessels have fished in a manner consistent with NPFC conservation measures or have fished exclusively for species not covered by the Convention.

12. The Executive Secretary shall re-circulate the draft IUU Vessel List, 7 days in advance of the TCC's meeting, to the Members/CNCPs/non-Contracting Parties concerned, together with all the suitably documented information provided pursuant to paras 6 and 11 above.
13. Members/CNCPs/non-Contracting Parties may at any time submit to the Executive Secretary any additional suitably documented information regarding any vessels on the draft IUU Vessel List. The Executive Secretary shall circulate this additional information to all Members/CNCPs and to the non-Contracting Parties concerned immediately upon receipt of such information.

Provisional and current IUU Vessel List

14. The NPFC's IUU Vessel List adopted at the previous meeting of the Commission, as well as any new suitably documented information regarding this list, including intersessional amendments, shall be transmitted to Members/CNCPs and the non-Contracting Parties concerned in conjunction with the draft IUU Vessel List and materials outlined in para 8.
15. Members/CNCPs/non-Contracting Parties with vessels on the current NPFC IUU Vessel List should transmit at least 30 days before the meeting of the TCC, but may submit at any time, to the Executive Secretary suitably documented information regarding any of the vessels on the current NPFC IUU Vessel List, including, where appropriate, suitably documented information as provided for in paragraph 29. The Executive Secretary shall re-circulate the current NPFC IUU Vessel List two weeks in advance of the meeting of the TCC to the Members/CNCPs and non-Contracting Parties concerned, together with all the information provided pursuant to paragraph 14 and this paragraph.
16. At its meeting, the TCC shall:
 - a. following consideration of the draft IUU Vessel List and the suitably documented information circulated under paras 8, 12 and 13, adopt a Provisional IUU Vessel List; and
 - b. following consideration of the current NPFC IUU Vessel List and the suitably documented information circulated under paras 14 and 15, recommend to the Commission which, if any, vessels should be removed from the current NPFC IUU Vessel List.
17. The TCC shall not include a vessel on the Provisional IUU Vessel List if the Member/CNCP/non-Contracting Party, under whose flag the vessel is sailing, demonstrates that:
 - a. The vessel fished in a manner consistent with the Convention and NPFC Conservation Measures or have fished exclusively for species not covered by the NPFC Convention, or
 - b. Effective action has been taken in response to the IUU fishing activities in question, such as, *inter alia*, prosecution or the imposition of sanctions of adequate severity.
18. The TCC shall not include a vessel on the Provisional IUU Vessel List if the notifying Member/CNCP did not follow the provisions of para 7.
19. The TCC shall recommend removal of a vessel from the current NPFC IUU Vessel List only if the Member/CNCP/Non-Contracting Party, under whose flag the vessel is sailing, submits to the Executive Secretary the information provided in para 29 of this measure.

20. Following the examination referred to in para 16, the TCC shall submit the Provisional IUU Vessel List to the Commission for its consideration, and as appropriate, recommend any proposed changes to the current NPFC IUU Vessel List.
21. The draft IUU Vessel List, Provisional IUU Vessel List, and the NPFC IUU Vessel List shall contain the following details for each vessel:
 - a. name and previous names, if any;
 - b. flag and previous flags, if any;
 - c. owner and previous owners, including beneficial owners, if any;
 - d. operator and previous operators, if any;
 - e. call sign and previous call signs, if any;
 - f. Lloyds/IMO number, if any;
 - g. photographs, where available;
 - h. date first included on the IUU Vessel List;
 - i. summary of activities which justify inclusion of the vessel on the list, together with references to all relevant documents informing of and evidencing those activities; and
 - j. the date(s) and subsequent sightings of the vessels, if any, and any other related activities.

NPFC IUU Vessel List

22. At its meeting, the Commission shall review the Provisional IUU Vessel List, taking into account any new suitably documented information related to vessels on the Provisional IUU Vessel List, and any recommendations to amend the current NPFC IUU Vessel List made pursuant to paragraph 20 above, and adopt a new NPFC IUU Vessel List. To the maximum extent possible Members/CNCPs/non-Contracting Parties concerned shall provide any new suitably documented information at least two weeks before the meeting of the Commission.
23. Upon adopting the new NPFC IUU Vessel List, the Commission shall request Members/CNCPs/non-Contracting Parties with vessels on the NPFC IUU Vessel List to:
 - a. notify the owner of the vessels of its inclusion on the NPFC IUU Vessel List and the consequences that result from being included in the list, and
 - b. take all the necessary measures to eliminate these IUU fishing activities, including, if necessary, the withdrawal of the registration or the fishing licenses of these vessels, and to inform the Commission of the measures taken in this respect.
24. Members/CNCPs shall take all necessary non-discriminatory measures under their applicable legislation, international law and each Members/CNCPs' international obligations, and pursuant to paras 56 and 66 of the IPOA-IUU to:
 - a. remove or withdraw vessels on the NPFC IUU Vessel List from the NPFC Vessel Registry;
 - b. ensure that fishing vessels, support vessels, mother ships or cargo vessels flying their flag do not participate in any transshipment or joint fishing operations with, support or re-supply vessels on the NPFC IUU Vessel List;
 - c. prohibit the entry into their ports of vessels included on the NPFC IUU Vessel List, except in the case of investigation or *force majeure*;
 - d. prohibit the chartering of a vessel on the NPFC IUU Vessel List;
 - e. refuse to grant their flag to vessels on the NPFC IUU Vessel List, unless the ownership of the vessel has subsequently changed and the new owner has provided sufficient evidence demonstrating that the previous owner or operator has no legal, beneficial or financial

interest in, or control of the vessels, or the Member concerned is satisfied that, having taken into account all relevant facts, the vessel is no longer engaged in or associated with IUU fishing activities;

- f. prohibit commercial transactions, imports, landings and/or transshipment of species covered by the Convention from vessels on the IUU Vessel List;
 - g. encourage traders, importers, transporters and others involved, to refrain from transactions in, and transshipment of, species covered by the Convention caught by vessels on the NPFC IUU Vessel List;
 - h. collect, and exchange with other Members/CNCPs, any appropriate information with the aim of searching for, controlling and preventing false import/export certificates for species covered by the Convention from vessels on the NPFC IUU Vessel List.
25. Members/CNCPs should cooperate with each other and other flag States to strengthen their legal, operational and institutional capacity to take action against their flagged vessels that have engaged in IUU fishing in the Area, including the imposition of adequate sanctions, as an alternative to de-flagging such vessels, thereby rendering such vessels without nationality.
26. The Executive Secretary shall take any measure necessary to ensure publicity of the NPFC IUU Vessel List, in a manner consistent with any applicable confidentiality requirements, including placing it on the NPFC website. Furthermore, the Executive Secretary shall transmit the NPFC IUU Vessel List to the FAO and to other regional fisheries organizations for the purposes of enhancing cooperation between the NPFC and these organizations aimed at preventing, deterring and eliminating IUU fishing.
27. Upon receipt of the final IUU vessel list established by another Regional Fisheries Management Organization (RFMO) and any other information regarding the list including its modification, the Executive Secretary shall circulate it to Members/CNCPs and shall place it on the NPFC website.
28. Without prejudice to the rights of Members/CNCPs and coastal states to take proper action, consistent with international law, including applicable WTO obligations, the Members/CNCPs shall not take any unilateral trade measures or other sanctions against vessels on the draft or Provisional IUU Vessel Lists, pursuant to paras 8 or 16, or that have been removed from the NPFC IUU Vessel List, pursuant to paras 19 and 22, on the grounds that such vessels are involved in IUU fishing activities.

Modification of the NPFC IUU Vessel List

29. Member/CNCPs/non-Contracting Parties with a vessel on the NPFC IUU Vessel List may request the removal of the vessel from the list at any time during the intersessional period by submitting to the Executive Secretary suitably documented information demonstrating that:
- a. it has adopted measures that will seek to ensure that the vessel complies with all NPFC measures; and
 - b. it will be able to assume effectively its duties with regards to the monitoring and control of the vessel's fishing activities in the Convention Area; and
 - c. it has taken effective action in response to the IUU fishing activities that resulted in the vessel's inclusion in the NPFC IUU Vessel List, including prosecution or the imposition of sanctions of adequate severity; or

- d. the vessel has changed ownership and that the new owner can establish that the previous owner no longer has any legal, financial or real interests in the vessel or exercises control over it, and that the new owner has not participated in IUU fishing activities.
30. The Executive Secretary will transmit the removal request, with all the supporting information, to the Members/CNCPs within 15 days following the receipt of the removal request. Members/CNCPs shall promptly acknowledge receipt of the removal request. If no acknowledgement is received within 10 days of the date of transmittal, the Executive Secretary shall retransmit the removal request and shall use additional means available to ensure the request has been received.
31. Each Commission Member shall examine the removal request and notify the Executive Secretary in writing of its decision, and the rationale therefore, regarding the removal of the vessel within 30 days following the notification by the Executive Secretary. Decisions on the request to remove the vessel shall be made in accordance with Rule 2 of the Rules of Procedure.
32. If Commission Members agree to the removal of the vessel from the NPFC IUU Vessel List within the period stipulated in para 31, the Executive Secretary will inform Members/CNCPs, and non-Contracting Parties concerned, FAO and other regional fisheries management organizations, and will remove the vessel from the NPFC IUU Vessel List, as published on the NPFC website.
33. If Commission Members disagree with the request for the removal of the vessel from the IUU Vessel List, the vessel will be maintained on the NPFC IUU Vessel List and the Executive Secretary will inform the Members/CNCPs/non-Contracting Parties that made the removal request.
34. A Member/CNCP with information indicating a change of name and/or an International Radio Call Sign (IRCS) of a vessel appearing on the NPFC IUU Vessel List shall, as soon as practicable, transmit such information to the Executive Secretary. The Executive Secretary shall communicate such information to all Members/CNCPs and, after verification*, update the current NPFC IUU Vessel List on the NPFC website to reflect such information.

* If the Secretariat, after reasonable efforts, is unable to verify the information submitted by the Member/CNCP the vessel name or identifying number will not be updated.

Review

35. This Conservation and Management Measure shall be subject to review and, as appropriate, revision by the TCC and acceptance by the Commission.

NPFC Reporting Form for Illegal Activity

Recalling NPFC CMM 2016 - 02 on *Establishing a list of vessels presumed to have carried out illegal, unreported and unregulated fishing activities in the Convention Area of North Pacific Fisheries Commission*, attached are details of illegal activity recorded in

Details of Vessel

- a. Name of vessel and previous names, if any;
- b. Flag of vessel and previous flags, if any;
- c. Owner and previous owner, including beneficial owners, if any;
- d. Operator of vessel and previous operators, if any;
- e. Call sign of vessel and previous call sign, if any;
- f. Lloyds/IMO number, if any;
- g. Photographs of the vessel, where available;
- h. Date vessel was first included on the IUU List;
- i. Summary of activities which justify inclusion of the vessel on the list, together with references to all relevant documents informing of and evidencing those activities (more detail in section 2)

Details of elements contravened

(Indicate with an "X" the individual elements of CMM contravened, and provide relevant details including date, location, source of information. Additional information can be provided in an attachment, if necessary, and listed under section 3).

Item	Definition	Indicate
a	Harvest species covered by the Convention in the Convention Area and are not on the NPFC record of authorized vessels	
b	Engage in fishing for fishery resources, when the Member or CNCP, under whose flag the vessel is sailing, has exhausted or has no quotas, catch limit or effort allocation, including, if applicable, those received from another Member/CNCP, under relevant NPFC conservation	
c	Do not record or report their catches made in the Convention Area consistent with NPFC Measures, or make false reports	
d	Take and land undersized fish in contravention of relevant NPFC conservation measures	

e	Fish in a closed area or during a closed season in contravention of relevant NPFC conservation measures	
f	Use prohibited fishing gear in contravention of relevant NPFC conservation measures	
g	Transship with, participate in joint fishing operations with, support or re-supply vessels included in the IUU vessels list	
h	Are without nationality and harvest species covered by the Convention in the Convention Area	
i	Engage in any other fishing activities that is in contravention of relevant NPFC conservation measures	
j	Are related to paragraph 4 of this conservation and management measures	

Associated documents

(List here the associated documents that are appended e.g. boarding reports, court proceedings, photographs).

Recommended actions

Item	Recommended actions	Indicate
A	Notification to NPFC Executive Secretary only. No further action is recommended	
B	Notification of illegal activity to NPFC Executive Secretary. Recommend notification of activity to flag Member/CNCP/non-Contracting Party	
C	Recommended for inclusion on NPFC IUU Vessel List	

**Information to be included in all NPFC IUU Vessel
Lists (Draft, Provisional and Final)**

The Draft IUU Vessel List, as well as the Provisional and Final IUU Vessel Lists shall contain the following details, where available:

- a. Name of vessel and previous names, if any;
- b. Flag of vessel and previous flags, if any;
- c. Owner and previous owners, including beneficial owners, if any;
- d. Operator of vessel and previous operators, if any;
- e. Call sign of vessel and previous call signs, if any;
- f. Lloyds/IMO number, if any;
- g. Photographs of the vessel, where available;
- h. Date vessel was first included on the IUU Vessel List;
- i. Summary of activities which justify inclusion of the vessel on the List, together with references to all relevant documents informing of and evidencing those activities.

PROVISIONAL IUU VESSEL LIST

No	1. Details of Vessel								
	a. Name of vessel (previous names)	b. Flag of vessel (previous flags)	c. Owner (previous owners)	d. Operator of vessel (previous operators)	e. Call sign of vessel (previous call signs)	f. Lloyds/ILO number	g. Photographs	h. Date first included on NPFC IUU List	i. Summary of activities
1	LIAO YUAN YU 071	unknown	Not known	Not known	Not known	Not known	Appendix 1		It was seen at 42°15.4'N, 153°22.8'E on 23 Aug 2016. When the Japanese patrol vessel approached, a vessel crew tried to hide the vessel name. Communication between the Japanese patrol vessel and LIAO YUAN YU 071 indicated that they hid the vessel name because they didn't want to be caught. (Port displayed on the vessel: Shidao; Vessel type; Lighted lift net vessel; Tonnage: 800t)
2	LIAO YUAN YU 072	unknown	Not known	Not known	Not known	Not known	Appendix 2		It was seen at 42°18.7'N, 153°27.9'E on 23 Aug and at 42°9.2'N, 151°16.4'E on 11 Oct 2016. Vessel name was hidden by paint. (Port displayed on the vessel: Shidao; Vessel type; Lighted lift net vessel; Tonnage: 800t)

3	LIAO YUAN YU 9	unknown	Not known	Not known	Not known	Not known	Appendix 3	It was seen at 42°3.0'N, 153°0.8'E on 23 Aug and at 42°10.0'N, 151°16.8'E on 11 Oct 2016. Vessel name was hidden by paint. (Port displayed on the vessel: Shidao; Vessel type; Lighted lift net vessel; Tonnage: 800t)
4	ZHOU YU 651	unknown	Not known	Not known	Not known	Not known	Appendix 4	It was seen at 42°30'2N, 152°05'4E on 29 Sep 2016. (Port displayed on the vessel: Fungcheng; Vessel type; Lighted lift net vessel; Tonnage: 850t)
5	ZHOU YU 652	unknown	Not known	Not known	Not known	Not known	Appendix 5	It was seen at 42°48.9'N, 152°48.2'E on 7 Sep 2016. Port of registry was hidden by paint. (Vessel type; Lighted lift net vessel; Tonnage: 820t)
6	ZHOU YU 653	unknown	Not known	Not known	Not known	Not known	Appendix 6	It was seen with LU RONG YU YUN 56219 and ZHOU YU 656 at 42°11.9'N, 151°14.6'E on 30 Sep 2016. (Port displayed on the vessel: Fungcheng; Vessel type; Lighted lift net vessel; Tonnage: 850t) Communication between Japanese patrol vessel and LU RONG YU YUN 56219 indicated ZHOU YU 653 were transshipping 1500t of mackereltogether with ZHOU YU 656.

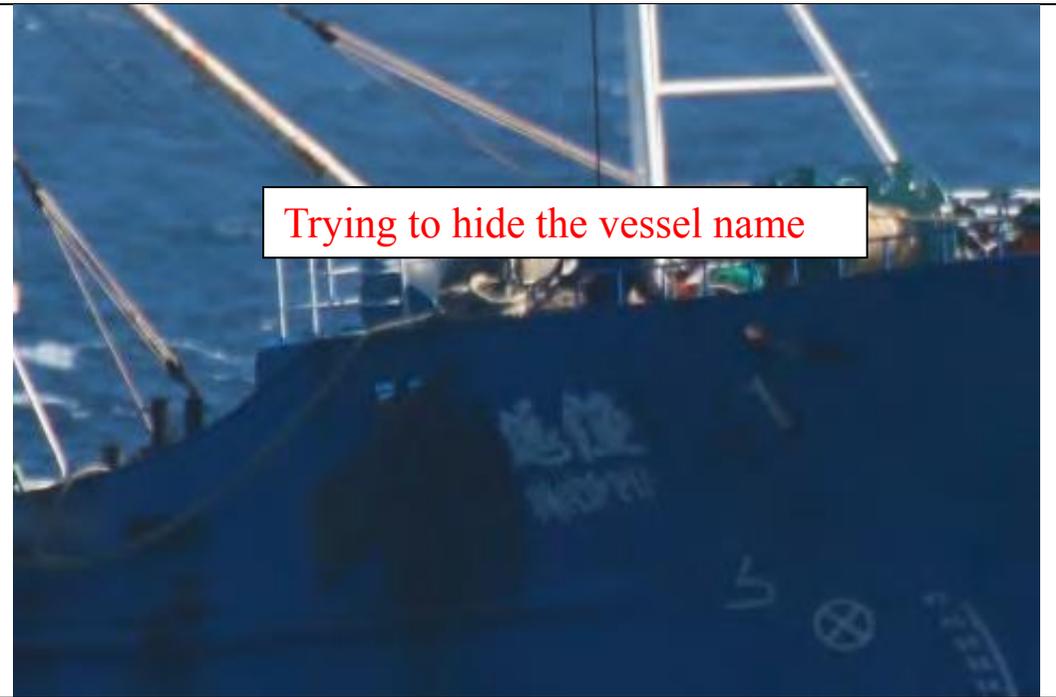
7	ZHOU YU 656	unknown	Not known	Not known	Not known	Not known	Appendix 7 (No pictures available)	<p>It was seen with LU RONG YU YUN 56219 and ZHOU YU 656 at 42°11.9'N, 151°14.6'E on 30 Sep 2016. (Port displayed on the vessel: Fungcheng; Vessel type; Lighted lift net vessel; Tonnage: 850t)</p> <p>Note that the same vessel name with the different port of registry (Zhoushan) (600t) has been seen in the similar area.</p> <p>Communication between Japanese patrol vessel and LU RONG YU YUN 56219 indicated ZHOU YU 656 were transshipping 1500t of mackerel together with ZHOU YU 656.</p>
8	ZHOU YU 657	unknown	Not known	Not known	Not known	Not known	Appendix 8	<p>It was seen at 42°35.5'N, 152°6.7'E on 12 Sep 2016. (Port displayed on the vessel: Zhoushan; Vessel type; Lighted lift net vessel; Tonnage: 600t)</p>
9	ZHOU YU 658	unknown	Not known	Not known	Not known	Not known	Appendix 9	<p>It was seen at 40°12.3'N, 148°40.5'E on 29 May 2016 and at 42°46.7'N, 152°41.2'E on 7 Sep 2016. (Port displayed on the vessel: Zhoushan; Vessel type; Lighted lift net vessel; Tonnage: 600t)</p>
10	ZHOU YU 659	unknown	Not known	Not known	Not known	Not known	Appendix 10	<p>It was seen in the NPFC area on 2, 4, 13, 17 Jun and 7 Sep 2016. On 4 Jun the vessel name on the right side was hidden by paint. (Port displayed on the vessel: Zhoushan; Vessel type: Lighted lift net vessel; Tonnage: 600t)</p>

11	ZHOU YU 660	unknown	Not known	Not known	Not known	Not known	Appendix 11	<p>It was seen in the Japanese EEZ on 10 May 2016 and in NPFC area multiple times from May to Sep 2016. On 10 May the vessel showed Korean flag but changed the Korean to Japanese flag when the Japanese patrol vessel approached.</p> <p>Vessel name changed between 15 May and 12 Sep 2016 (see the photos). The vessel is not permitted in Japan nor registered in NPFC. (Port displayed on the vessel: Basuo-not apparent; Vessel type: Lightedlift net vessel; Tonnage: 600t)</p>
12	ZHOU YU 661	unknown	Not known	Not known	Not known	Not known	Appendix 12	<p>It was seen in the Japanese EEZ on 10 and 13 May 2016 and in NPFC area on 15, 29 May and 7 Sep 2016. The vessel names on the left and right side changed frequently (see the photos). The vessel showed Japanese flag in May. But the vessel is not permitted in Japan nor registered in NPFC. (Port displayed on the vessel: Shidao; Vessel type: Lighted lift net vessel; Tonnage: 600t)</p>
13	HAI DA 705	unknown	Not known	Not known	Not known	Not known	Appendix 13	<p>Communications between Japanese Patrol vessel and HAI DA705 at 43°10.4'N, 153°38.6'E on 11 Sep 2016 indicated they caught squid with drift net in the high sea. (Port displayed on the vessel: 沈家们; Vessel type: Drift net vessel; Tonnage: 290t)</p>

14	LU RONG YU 1189	unknown	Not known	Not known	Not known	Not known	Appendix 14		It was seen at 41°24.9'N, 140°32.7'E (Japan EEZ) on 14 Jun 2016. (Port displayed on the vessel: Shidao; Vessel type: Carrier vessel; Tonnage: 100t)
15	ZHE LING YU LENG 90055	unknown	Not known	Not known	Not known	Not known	Appendix 15		It was seen at 40°25.3'N, 149°13.2'E on 29 May 2016. (Port displayed on the vessel: Wenling; Vessel type: Carrier vessel; Tonnage: 600t)
16	ZHE LING YU LENG 905	unknown	Not known	Not known	Not known	Not known	Appendix 16 (No Pictures Available)		It was seen at 42°45.6'N, 152°45.8'E on 24 Aug 2016. (Port displayed on the vessel: Wenling; Vessel type: Carrier vessel; Tonnage: 1000t)

Appendix 1

LIAO YUAN YU 071



Appendix 2

LIAO YUAN YU 072





Appendix 3

LIAO YUAN YU 9





Appendix 4

ZHOU YU 651



Appendix 5

ZHOU YU 652



Appendix 6

ZHOU YU 653



Appendix 7

ZHOU YU 656 (No Pictures Available)

Appendix 8

ZHOU YU 657



Appendix 9

ZHOU YU 658





Appendix 10

ZHOU YU 659



Appendix 11

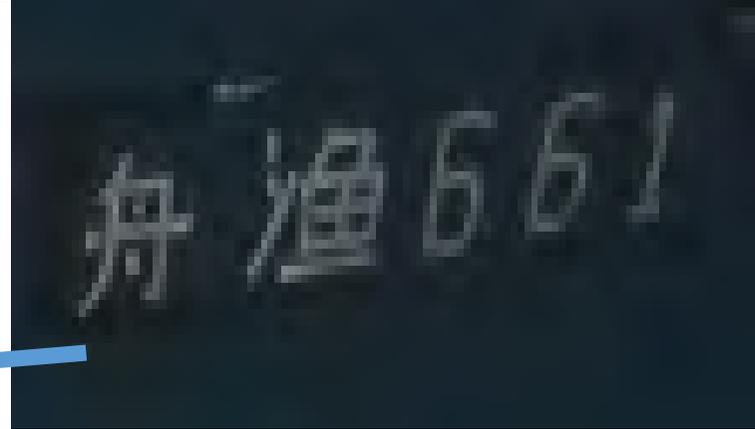
ZHOU YU 660





Appendix 12

ZHOU YU 661









Appendix 13

HAI DA 705



Drift net



Appendix 14

LU RONG YU 1189



Appendix 15

ZHE LING YU LENG 90055



Appendix 16

ZHE LING YU LENG 905 (No Pictures Available)

NPFC TRANSSHIPMENT DATA FORMAT

ABSTRACT:

Paragraph 4 of CMM 2016-03 on the Interim Transshipment Measures stated that the SC and TCC “will recommend the specific data fields required to be in the summary [of transshipments]. The summary will be provided as an attachment to the Annual Report.” Currently only China and the Russian Federation provide such summaries.

In an effort to standardize the format for such reports, the attached draft document has been developed by the Secretariat for discussion at TCC.

NPFC Transshipment Information

Participant's name:

Calendar Year	Information on Catching/Unloading Vessel				Information on Carrier/Receiving Vessel					Information on transshipment				Information on Species		
	Name	IMO number (where applicable)	Flag	Authorization NO.	Name	IMO number (where applicable)	Flag	Register	Observer (Yes/No)	Date	CA	NCA	Ports	Name (FAO code)	Product Form (FAO code)	Weight (MT)

**North Pacific Fisheries Commission
Technical and Compliance Committee Work Plan**

Background

Recognizing the overall objective of the NPFC is to ensure the long-term conservation and sustainable use of the fisheries resources in the Convention Area while protecting the marine ecosystems of the North Pacific Ocean in which these resources occur;

Recognizing the Convention sets forth the requirement for the Commission to implement various compliance and enforcement measures, and the work of the Technical and Compliance Committee (TCC) to date in establishing an overview and framework to guide these efforts as referenced by Annexes D and E from Circular 030-2017 TCC Preparatory WebEx meeting;

Acknowledging concerns shared by members to date with respect to managing and conserving priority species, identifying and reducing potential IUU activities, and the need to implement monitoring, control and surveillance measures to support the overall objectives of the Commission;

Assessing that these concerns pose risks within the TCC framework's three pillars³; and,

Determining the need to prioritize the implementation of compliance and enforcement measures, as informed by evidence brought forth by members and associated risks that can undermine Commission objectives, TCC proposes the following as TCC priorities over the period 2017-2020:

1. Targeting the conservation and management of Pacific Saury and Chub Mackerel

Rationale: Under Pillar 1, there is a need to reinforce the conservation and management measures related to Pacific Saury (CMM 15-02) and Chub Mackerel (CMM 2016-07), identified as key species of interest over the time period.

Proposed Actions: Confirm priority of species with Members. Determine rules⁴ and consequences of non-compliance.

Tools: Determine the tools that are needed to enforce these CMMs (e.g. VMS, catch reporting, effort)

2. Developing a CMS

To reinforce all pillars of the framework, and overall member accountability, there is a need to develop an overall Compliance Monitoring System (CMS). At the outset, this includes clarifying the rules and respective sanctions of breaking them, and the ability to validate non-compliance. These components of the CMS are outlined below.

¹ TCC Framework Pillars:

- i) CMMs for Priority Species;
- ii) CMMs for Vulnerable Marine Ecosystems (VMEs) or other ecosystem elements; and,
- iii) CMMs for Science and Monitoring, Control and Surveillance (MCS) measures.

² Note: Japan has put forth two proposals for Commission consideration at its Annual meeting regarding Pacific Saury and Chub Mackerel.

i) Assessing Compliance

Rationale: Without clear rules and consequences of breaking them, incentives to comply are minimized.

Proposed Actions: Determine the consequences of breaking the rules and the related procedures for determining non-compliance, updating CMMs as required with priority focus on Pacific Saury and Chub Mackerel, vessel identification and over the planning horizon. Compiling all rules and sanctions into a compendium structured under the pillars of the TCC framework is also recommended.

Tools: Compendium of rules, procedures and respective consequences of non-compliance, structured in a single, accessible document.

ii) Developing vessel marking and identification standards

Rationale: Under pillar 3 of the framework, there is a need for vessel marking and identification standards. Ensuring that all member vessels adhere to these standards, this will address risks associated with ambiguously marked vessel sightings in the Convention Area. This, in turn, will support answering questions related to what activities they may be engaged in vis-à-vis pillars 1 and 2.

Proposed Action: Changes to the rules could be reflected in updates to CMM 2016-01 (Vessel Registration Requirements) or in a new CMM.

Tools: Update online vessel registry to accommodate new marking and standards. Update online registry to minimize work load, data entry requirements and have authorized users who can update the data.

iii) Developing a VMS

Rationale: Further to being able to accurately identify vessels through a standardized marking and identification scheme, there is a need for a Vessel Monitoring System (VMS). This will enable the NPFC to track and report movements of registered vessels. This is vital to supporting all pillars of the TCC framework.

Proposed Actions: Continue to advance work initiated on the VMS. Determine what data needs to be collected and at what intervals (i.e. to support target species such as Chub Mackerel and Pacific Saury), ensuring system can grow over time. Update Information Security Guidelines in conjunction with the types of data required. Members to confirm their vessels are equipped with compatible VMS transmitters that will communicate with an eventual NPFC VMS.

Tools: To be developed in conjunction with VMS work initiated.

iv) Finalizing a High Seas Boarding and Inspection (HSBI) Scheme

Rationale: A HSBI scheme is critical to being able to validate and enforce compliance.

Proposed Actions: Finalize NPFC HSBI scheme before July 19, 2018.

Draft Timeline

#	Action	Description	Start Date	End Date	Resources	Budget	Lead	Notes	Time (Quarter/Calendar Year)														
									2017				2018				2019				2020		
Developing a Compliance Monitoring System (CMS)										Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	Target Species for Conservation and Management								August 2017 - September 2017														
1.1	Confirm priority species	Confirm Pacific Saury (CMM 15-02 ³) and Chub Mackerel (CMM 2016-07) as priority species and define related conservation and management risks Questions: Is this a TCC or Commission decision? Are bottom fisheries a priority? Are Pacific armourhead and Splendid alfonsino priorities?	08.2017	09.2017	Secretariat support		TBD, Members	Collaboration with SC required to confirm priority species	→														
2	Assessing Compliance								September 2017 – March 2018														
2.1	Determine rules and consequences of non-compliance	Determine specific rules and related consequences of non-compliance related to priority species and their CMMs (including a review of member compliance with priority CMMs)	09.2017	11.2017	Secretariat support		TBD, Members		→														
2.2		Determine procedures for assessing compliance	09.2017	12.2017	Secretariat support		TBD, Members		→														
2.3		Compile all rules and sanctions into a compendium ⁴ (structured according to TCC Framework, focusing initially on target species)	08.2017	12.2017	Member review		Secretariat		→														
2.4	Determine tools	Determine tools required to enforce rules determined in 2	12.2017	03.2018			TBD, Secretariat, Members		→														

³ Reflecting updated CMM after July 2017

⁴ Compendium to be updated on an ongoing basis, when and as required

#	Action	Description	Start Date	End Date	Resources	Budget	Lead	Notes	Time (Quarter/Calendar Year)															
									2017				2018				2019				2020			
									Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Developing a Compliance Monitoring System (CMS)																								
3	Develop Vessel Marking and Identification Standards								August 2017 – March 2018															
3.1	Confirm risks	Define and confirm risks of not having a standardized identification and vessel marking scheme (including a discussion on the limitations of such a scheme)	08.2017	08.2017					→															
3.2	Review existing vessel marking schemes	Review existing schemes in other RFMOs, including international guidelines and standards	08.2017	09.2017	Potential Third-party support	TBD	TBD, Members		→															
3.3		Determine vessel marking and identification standards for NPFC Convention Area	09.2017	11.2017		TBD	TBD, Members		→															
3.4		Determine consequences of non-compliance with established vessel marking scheme	11.2017	12.2017		TBD	TBD, Members		→															
3.5		Update rules in CMM 2016-01 (Vessel Registration Requirements) as required	12.2017	01.2018		TBD	TBD, Members		→															
3.6	Update tools	Update online vessel registry to accommodate new marking and standards	12.2017	03.2018	Third-party support	TBD	Secretariat		→															
4	Develop a VMS								August 2017 – January 2019															
4.1	Phase II of VMS Study	Determine what data needs to be collected from members to support priority species (e.g. Pacific Saury and Chub Mackerel, bottom fisheries)	08.2017	11.2017	Third-party support	TBD	Secretariat, Members	Collaboration with SC required to determine science data needs	→															
4.2		Determine scale, scope, timeline and budget for Phase II building upon overview of VMS systems established in Phase I	02.2018	05.2018	Third-party support	TBD	Secretariat, Members	Scale and scope to be determined for priority species as well as a system to enable modular compatible add-ons to the VMS over time.	→															
4.3	Determine VMS needs and design	Phase II of VMS study (to determine recommended VMS system)	05.2018	08.2018	Third-party support	TBD	Secretariat, Members		→															
4.4	Develop and test VMS	Phase III of VMS work – Design, develop and test VMS	08.2018	12.2018	Third-party support	TBD	Secretariat, Members		→															
	Implement VMS	Implement VMS system, monitor, assess vis-à-vis priority species	01.2019	-	All Members	TBD	Secretariat and Members		→															
4.5		Update Information Security Guidelines (note: to be updated on an ongoing basis)	11.2017	12.2017	TBD (e.g. SC/TCC Corresponding Group)		Members		→															
5	Finalize a High Seas Boarding and Inspection Scheme																							
5.1	Finalize HSBI scheme	Determine HSBI scheme for the NPFC	-	07.2018					→															
5.2	Develop implementation plan	Develop an implementation plan for the HSBI scheme to come into force	11.2017	06.2018					→															
5.3	Implementation	Implement HSBI as per procedures in force	07.2018	-					→															

**CONSERVATION AND MANAGEMENT MEASURE ON
HIGH SEAS BOARDING AND INSPECTION PROCEDURES FOR THE
NORTH PACIFIC FISHERIES COMMISSION (NPFC)**

1. The following procedures are established by the North Pacific Fisheries Commission, in accordance with Article 7, paragraph 2-c of its Convention, to govern high seas boarding and inspection of fishing vessels in the Convention Area.

Definitions

2. For the purposes of interpreting and implementing these procedures, the following definitions shall apply:
- a. “Convention” means the Convention on the Conservation and Management of High Seas Fisheries resources in the North Pacific Ocean;
 - b. “Commission” means the North Pacific Fisheries Commission (NPFC) established under Article 5 of the Convention;
 - c. “Authorities of the Inspection Vessel” means the authorities of the Contracting Party under whose jurisdiction the inspection vessel is operating;
 - d. “Authorities of the Fishing Vessel” means the authorities of the Member of the Commission under whose jurisdiction the fishing vessel is operating;
 - e. “Authorized inspection vessel” means any vessel included in the Commission’s register of vessels as authorized to engage in boarding and inspection activities pursuant to these procedures;
 - f. “Authorized inspector” means inspectors employed by the authorities responsible for boarding and inspection included in the Commission register and authorized to conduct boarding and inspection activities pursuant to these procedures;
 - g. “Fishing activity” means the activities established under Article 1 (i) of the Convention;
 - h. “Fishing vessels” means any vessel described under Article 1 (j) of the Convention.

PURPOSE

3. Boarding and inspection and related activities conducted pursuant to these procedures shall be for the purpose of ensuring compliance with the provisions of the Convention and conservation and management measures adopted by the Commission and in force.

AREA OF APPLICATION

4. These procedures shall apply throughout the Convention Area, which consists of the high seas areas of the North Pacific Ocean as specified in Article 4 of the Convention.

GENERAL RIGHTS AND OBLIGATIONS

5. Each Contracting Party may, subject to the provisions of these procedures, carry out boarding and inspection on the high seas of fishing vessels engaged in or reported to have engaged in a fishery regulated pursuant to the Convention.

6. These procedures shall also apply in their entirety as between a Contracting Party and a Fishing Entity, subject to a notification to that effect to the Commission from the parties concerned.

7. Each Member of the Commission shall ensure that vessels flying its flag accept boarding and inspection by authorized inspectors in accordance with these procedures. Such authorized inspectors shall comply with these procedures in the conduct of any such activities.

GENERAL PRINCIPLES

8. These procedures are intended to implement and give effect to, and are to be read consistently with, Article 7.2.c and Article 17.6 of the Convention.

9. These procedures shall be implemented in a transparent and non-discriminatory manner, taking into account, *inter alia*:

- a. such factors as the presence of observers on board a vessel and the frequency and results of past inspections; and
- b. the full range of measures to monitor compliance with the provisions of the Convention and agreed conservation and management measures, including inspection activities carried out by the authorities of Members of the Commission in respect of their own flag vessels.

10. While not limiting efforts to ensure compliance by all vessels, priority for boarding and inspection efforts pursuant to these procedures may be given to:

- a. fishing vessels that are not on the NPFC Record of Fishing Vessels and are flagged to Members of the Commission;
- b. fishing vessels reasonably believed to engage or to have been engaged in any activity in contravention of the Convention or any conservation and management measure adopted thereunder;
- c. fishing vessels that are entitled to fly the flag of a Member of the Commission that does not dispatch patrol vessels to the area of application to monitor its own fishing vessels;

- d. fishing vessels without observers on board if so required by the Convention, Article 7.2b;
 - e. fishing vessels with a known history of violating conservation and management measures adopted by international agreement or any domestic laws and regulations.
11. The Commission shall keep the implementation of these procedures under review.
12. The interpretation of these procedures shall rest with the Commission.

PARTICIPATION

13. The Commission shall maintain a register of all authorized inspection vessels and authorities or inspectors. Only vessels and authorities or inspectors listed on the Commission's register are authorized under these procedures to board and inspect fishing vessels of Commission Members and Cooperating Non-Contracting Parties on the high seas within the Convention Area.

14. Each Contracting Party that intends to carry out boarding and inspection activities pursuant to these procedures shall so notify the Commission, through the Executive Secretary, and shall provide the following:

a. with respect to each inspection vessel it assigns to boarding and inspection activities under these procedures:

- i) details of the vessel (name, description, photograph, registration number, port of registry (and, if different from the port of registry, port marked on the vessel hull), international radio call sign and communication capability);
- ii) An example of the credentials issued to the inspectors by its authorities;
- iii) notification that the inspection vessel is clearly marked and identifiable as being on government service;
- iv) notification that the crew has received and completed training in carrying out boarding and inspection activities at sea in accordance with any standards and procedures as may be adopted by the Commission.

b. with respect to inspectors it assigns pursuant to these procedures:

- i) the names of the authorities responsible for boarding and inspection;
- ii) notification that such authorities' inspectors are fully familiar with the fishing activities to be inspected and the provisions of the Convention and conservation and management measures in force; and

- iii) notification that such authorities' inspectors have received and completed training in carrying out boarding and inspection activities at sea in accordance with any standards and procedures as may be adopted by the Commission.

15. Where military vessels are used as a platform for the conduct of boarding and inspection, the authorities of the inspection vessel shall ensure that the boarding and inspection is carried out by inspectors fully trained in fisheries enforcement procedures and duly authorized for this purpose under national laws, and that boardings from such military vessels and inspectors conform to the procedures contained within these Boarding and Inspection Procedures.

16. Authorized inspection vessels and inspectors notified by Contracting Parties pursuant to paragraph 14 shall be included on the Commission register once the Executive Secretary confirms that they meet the requirements of that paragraph.

17. To enhance the effectiveness of the Commission's boarding and inspection procedures, and to maximize the use of trained inspectors, Contracting Parties may identify opportunities to place authorized inspectors on inspection vessels of another Contracting Party. Where appropriate, Contracting Parties should seek to conclude bilateral arrangements to this end or otherwise facilitate communication and coordination between them for the purpose of implementing these procedures.

18. The Executive Secretary shall ensure that the register of authorized inspection vessels and authorities or inspectors is at all times available to all Members of the Commission and shall immediately circulate any changes therein. Updated lists shall be posted on the Commission website. Each Member of the Commission shall take necessary measures to ensure that these lists are circulated in a timely manner to each of its fishing vessels operating in the Convention Area.

PROCEDURES

19. The Commission shall develop an NPFC inspection flag, which shall be flown by authorized inspection vessels, in clearly visible fashion.

20. Authorized inspectors shall carry an approved identity card identifying the inspector as authorized to carry out boarding and inspection procedures under the auspices of the Commission and in accordance with these procedures.

21. An authorized inspection vessel that intends to board and inspect a fishing vessel on the high seas that is engaged in or reported to have engaged in a fishery regulated pursuant to the Convention shall, prior to initiating the boarding and inspection:

- a. make best efforts to establish contact with the fishing vessel by radio, by the appropriate International Code of Signals or by other accepted means of alerting the vessel;

- b. provide the information to identify itself as an authorized inspection vessel - name, registration number, international radio call sign and contact frequency;
- c. communicate to the master of the vessel its intention to board and inspect the vessel under the authority of the Commission and pursuant to these procedures; and
- d. initiate notice through the authorities of the inspection vessel of the boarding and inspection to the authorities of the fishing vessel.

22. In carrying out boarding and inspection pursuant to these procedures, the authorized inspection vessel and authorized inspectors shall make their best efforts to communicate with the master of the fishing vessels in a language that the master can understand. In order to facilitate communications between the inspectors and the master of the vessel, the Commission shall develop a standardized multi-language questionnaire, which shall be circulated to all Contracting Parties with authorized inspection vessels.

23. Authorized inspectors shall have the authority to inspect the vessel, its license, gear, equipment, records, facilities, fish and fish products and any relevant documents necessary to verify compliance with the conservation and management measures in force pursuant to the Convention.

24. Boarding and inspection pursuant to these procedures shall:

- a. be carried out in accordance with internationally accepted principles of good seamanship so as to avoid risks to the safety of fishing vessels and crews;
- b. be conducted as much as possible in a manner so as not to interfere unduly with the lawful operation of the fishing vessel;
- c. take reasonable care to avoid action that would adversely affect the quality of the catch; and
- d. not be conducted in such manner as to constitute harassment of a fishing vessel, its officers or crew.

25. In the conduct of a boarding and inspection, the authorized inspectors shall:

- a. present their identity card to the master of the vessel and a copy of the text of the relevant measures in force pursuant to the Convention in the relevant area of the high seas;
- b. not interfere with the master's ability to communicate with the authorities of the fishing vessel;
- c. complete the inspection of the vessel within 4 (four) hours unless evidence of a serious violation is found;

- d. collect and clearly document any evidence they believe indicates a violation of measures in force pursuant to the Convention;
 - e. provide to the master prior to leaving the vessel a copy of an interim report on the boarding and inspection including any objection or statement which the master wishes to include in the report;
 - f. promptly leave the vessel following completion of the inspection if they find no evidence of a serious violation; and
 - g. provide a full report on the boarding and inspection to the authorities of the fishing vessel, pursuant to paragraph 31, which shall also include any master's statement.
26. During the conduct of a boarding and inspection, the master of the fishing vessel shall:
- a. follow internationally accepted principles of good seamanship so as to avoid risks to the safety of authorized inspection vessels and inspectors;
 - b. accept and facilitate prompt and safe boarding by the authorized inspectors;
 - c. cooperate with and assist in the inspection of the vessel pursuant to these procedures;
 - d. not assault, resist, intimidate, interfere with, or unduly obstruct or delay the inspectors in the performance of their duties;
 - e. allow the inspectors to communicate with the crew of the inspection vessel, the authorities of the inspection vessel, any embarked observers, as well as with the authorities of the fishing vessel being inspected;
 - f. provide the inspectors onboard with reasonable facilities, including, where appropriate, food and accommodation; and
 - g. facilitate safe disembarkation by the inspectors.
27. If the master of a fishing vessel refuses to allow an authorized inspector to carry out a boarding and inspection in accordance with these procedures, such master shall offer an explanation of the reason for such refusal. The authorities of the inspection vessel shall immediately notify the authorities of the fishing vessel, as well as the Commission, of the master's refusal and any explanation.
28. The authorities of the fishing vessel, unless generally accepted international regulations, procedures and practices relating to safety at sea make it necessary to delay the boarding and inspection, shall direct the master to accept the boarding and inspection. If the master does not comply with such direction, the Member shall suspend the vessel's authorization to fish and order the vessel to return immediately to port. The Member shall immediately notify the authorities of the inspection vessel and the Commission of the action it has taken in these circumstances.

USE OF FORCE

29. The use of force shall be prohibited except when and to the degree necessary to ensure the safety of the inspectors during the conduct of their boarding and inspection activities. The degree of force used shall not exceed that reasonably required in the circumstances.

30. Any incident involving the use of force shall be immediately reported to the authorities of the fishing vessel, as well as to the Executive Secretary for distribution to the Commission.

INSPECTION REPORTS

31. Authorized inspectors shall prepare a full report on each boarding and inspection they carry out pursuant to these procedures in accordance with a format specified by the Commission. The authorities of the inspection vessel from which the boarding and inspection was carried out shall transmit a copy of the boarding and inspection report to the authorities of the fishing vessel being inspected, as well as the Commission, within 3 (three) full working days of the completion of the boarding and inspection. Where it is not possible for the authorities of the inspection vessel to provide such report to the authorities of the fishing vessel within this timeframe, the authorities of the inspection vessel shall inform the authorities of the fishing vessel and shall specify the time period within which the report will be provided.

32. Such report shall include the names and authority of the inspectors and clearly identify any observed activity or condition that the authorized inspectors believe to be a violation of the Convention or conservation and management measures in force and indicate the nature of specific factual evidence of such violation.

SERIOUS VIOLATIONS

33. In the case of any boarding and inspection of a fishing vessel during which the authorized inspectors observe an activity or condition that would constitute a serious violation, as defined in paragraph 38, the authorities of the inspection vessels shall immediately notify the authorities of the fishing vessel, directly as well as through the Commission.

34. Upon receipt of a notification under paragraph 33, the authorities of the fishing vessels shall without delay:

- a. assume their obligation to investigate and, if the evidence warrants, take enforcement action against the fishing vessel in question and so notify the authorities of the inspection vessel, as well as the Commission; or

- b. authorize the authorities of the inspection vessel to complete investigation of the possible violation and so notify the Commission.

35. In the case of 34(a) above, the authorities of the inspection vessel shall provide, as soon as practicable, the specific evidence collected by the authorized inspectors to the authorities of the fishing vessel.

36. In the case of 34(b) above, the authorities of the inspection vessel shall provide the specific evidence collected by the authorized inspectors, along with the results of their investigation, to the authorities of the fishing vessel immediately upon completion of the investigation.

37. Upon receipt of a notification pursuant to paragraph 33, the authorities of the fishing vessel shall make best effort to respond without delay and in any case no later than within 3 (three) full working days.

38. For the purposes of these procedures, a serious violation means the following violations of the provisions of the Convention or conservation and management measures adopted by the Commission:

- a. fishing without a valid license, permit or authorization issued by the Member whose flag the fishing vessel is entitled to fly, in accordance with Article 13 of the Convention;
- b. significant failure to maintain records of catch and catch-related data in accordance with the Commission's reporting requirements or significant misreporting of such catch and/or catch-related data;
- c. fishing in a closed area;
- d. fishing during a closed season;
- e. intentional taking or retention of species in contravention of any applicable conservation and management measure adopted by the Commission;
- f. significant violation of catch limits or quotas in force pursuant to the Convention;
- g. using prohibited fishing gear;
- h. falsifying or intentionally concealing the markings, identity or registration of a fishing vessel;
- i. concealing, tampering with or disposing of evidence relating to investigation of a violation;
- j. multiple violations which taken together constitute a serious disregard of measures in force pursuant to the Commission;
- k. refusal to accept a boarding and inspection, other than as provided in paragraphs 27 and 28;

- l. assault, resist, intimidate, sexually harass, interfere with, or unduly obstruct or delay an authorized inspector; and
- m. intentionally tampering with or disabling the vessel monitoring system;
- n. such other violations as may be determined by the Commission, once these are included and circulated in a revised version of these procedures.

ENFORCEMENT

39. Any evidence obtained as a result of a boarding and inspection pursuant to these procedures with respect to violation by a fishing vessel of the Convention or conservation and management measures adopted by the Commission and in force shall be referred to the authorities of the fishing vessel for action in accordance with Article 17 of the Convention.

40. For the purposes of these procedures, the authorities of the fishing vessels shall regard interference by their fishing vessels, captains or crew with an authorized inspector or an authorized inspection vessel in the same manner as any such interference occurring within its exclusive jurisdiction.

ANNUAL REPORTS

41. Contracting Parties that authorize inspection vessels to operate under these procedures shall report annually to the Commission on the boarding and inspections carried out by its authorized inspection vessels, as well as upon possible violations observed.

42. Contracting Parties shall include in their annual statement of compliance within their Annual Report to the Commission under Article 16 of the Convention action that they have taken in response to boarding and inspections of their fishing vessels that resulted in observation of alleged violations, including any proceedings instituted and sanctions applied.

OTHER PROVISIONS

43. Authorized inspection vessels, while carrying out activities to implement these procedures, shall engage in surveillance aimed at identifying fishing vessels of non-Members undertaking fishing activities on the high seas in the Convention area. Any such vessels identified shall be immediately reported to the Executive Secretary for distribution to the Commission.

44. The authorized inspection vessel shall attempt to inform any fishing vessel identified pursuant to paragraph 43 that has been sighted or identified as engaging in fishing activities that are undermining the effectiveness of Convention and that this information will be sent to the Executive

Secretary for distribution to the Members of the Commission and the non-Member whose flag the fishing vessel is entitled to fly of the vessel in question.

45. If warranted, the authorized inspectors may request permission from the fishing vessel and/or the non-Member whose flag the vessel is entitled to fly to board a vessel identified pursuant to paragraph 43. If the vessel master or the vessel's non-Member whose flag the vessel is entitled to fly consents to a boarding, the findings of any subsequent inspection shall be transmitted to the Executive Secretary. The Executive Secretary shall distribute this information to all Commission Members as well as to the non-Member whose flag the vessel is entitled to fly.

46. Contracting Parties shall be liable for damage or loss attributable to their action in implementing these procedures when such action is unlawful or exceeds that reasonably required in the light of available information.

COMMISSION COORDINATION AND OVERSIGHT

47. Authorized inspection vessels in the same operational area should seek to establish regular contact for the purpose of sharing information on areas in which they are patrolling, on sightings and on boarding and inspections they have carried out, as well as other operational information relevant to carrying out their responsibilities under these procedures.

48. The Commission shall keep under continuous review the implementation and operation of these procedures, including review of annual reports relating to these procedures provided by Members. In applying these procedures, Contracting Parties may seek to promote optimum use of the authorized inspection vessels and authorized inspectors by:

- a. identifying priorities by area and/or by fishery for boarding and inspections pursuant to these procedures;
- b. ensuring that boarding and inspection on the high seas is fully integrated with the other monitoring, compliance and surveillance tools available pursuant to the Convention;
- c. ensuring non-discriminatory distribution of boarding and inspections on the high seas among fishing vessels of Members of the Commission without compromising the opportunity of Contracting Parties to investigate possible serious violations; and
- d. taking into account high seas enforcement resources assigned by Members of the Commission to monitor and ensure compliance by their own fishing vessels, particularly for small boat fisheries whose operations extend onto the high seas in areas adjacent to waters under their jurisdiction.

SETTLEMENT OF DISAGREEMENTS

49. In the event of a disagreement concerning the application or implementation of these procedures, the parties concerned shall consult in an attempt to resolve the disagreement.

50. If the disagreement remains unresolved following the consultations, the Executive Secretary of the Commission shall, at the request of the parties concerned, and with the consent of the Commission, refer the disagreement to the Technical and Compliance Committee (TCC). The TCC shall establish a panel of five representatives, acceptable to the parties to the disagreement, to consider the matter.

51. A report on the disagreement shall be drawn up by the panel and forwarded through the TCC Chair to the Executive Secretary for distribution to the Commission within two months of the TCC meeting at which the case is reviewed.

52. Upon receipt of such report, the Commission may provide appropriate advice with respect to any such disagreement for the consideration of the Members concerned.

53. Application of these provisions for the settlement of disagreements shall be non-binding. These provisions shall not prejudice the rights of any Member to use the dispute settlement procedures provided in the Convention.

Annex I

North Pacific Fisheries Commission
1st Meeting of the Finance and Administration Committee

12 July 2017
Sapporo, Japan

REPORT

Agenda Item 1. Opening of Meeting

1. The 1st Meeting of the Finance and Administration Committee (FAC) took place in Sapporo, Japan on 12 July 2017, and was attended by Members from Canada, China, Japan, the Republic of Korea, the Russian Federation, Chinese Taipei, the United States of America, and the Republic of Vanuatu. The meeting was opened by Executive Secretary Dae-Yeon Moon.

Agenda Item 2. Selection of Chair, Vice-Chair and Nomination of Rapporteur

2. The FAC elected Mr. Kenji Kagawa (Japan) to serve as Chair of the FAC, and Dr. Siquan Tian (China) to serve as Vice-Chair. Mr. Alexander Meyer was appointed as Rapporteur.

Agenda Item 3. Adoption of Agenda

3. The agenda was adopted without revision (Annex A).

Agenda Item 4. Financial Statement

4.1 Financial Statement from 2016 and 2017 to Date

4.2 Contributions Outstanding and New Member Contribution

4.3 Working Capital Fund

4. The Secretariat reported on the financial statement from 2016 and 2017 to date, contributions outstanding and new Member contribution, and the Working Capital Fund (NPFC-2017-FAC01-WP01 (Rev. 1); NPFC-2017-FAC01-IP02).
5. The FAC requested that the Secretariat make a number of improvements to the invoice format.
6. The United States explained that it was in the process of securing the necessary budget to

pay its contribution to the NPFC, and that it will complete its payment within 2017.

4.4 Establishment of a Special Project Fund

7. The Secretariat presented a proposal to establish a Special Project Fund (NPFC-2017-FAC01-WP02). The FAC reviewed the proposal and revised it to clarify the funding mechanisms and purpose of the Special Project Fund, and the membership of the SWG Special Projects.

Recommendation: The FAC endorsed the revised proposal (Annex D).

Agenda Item 5. Secretariat's Work Plan 2017; Budget Estimates for 2018-2020

8. The Secretariat presented its work plan for 2017 (NPFC-2017-FAC01-WP03 (Rev 1)). The FAC reviewed and revised the Secretariat work plan for 2017. In particular, the FAC noted that requests for the Commission to cover travel costs associated with meeting attendance were inappropriate as they did not comply with the stipulations of the Convention (Article 12, Paragraph 1).

Recommendation: The FAC endorsed the revised work plan (Annex E).

9. The FAC noted that because the TCC and FAC meetings are held in conjunction, it is currently not possible to incorporate the TCC work plan in the Secretariat's work plan. To address this, the FAC requested that the TCC develop a rolling two-year work plan.

Recommendation: The FAC requested that the TCC develop a rolling two-year work plan.

10. The Secretariat presented the budget estimates for 2018-2020 (NPFC-2017-FAC01-WP01 (Rev. 1)) for the review of the FAC. The FAC revised and endorsed the budgets for 2017 and 2018, and considered the budget for 2019 and 2020.

Recommendation: The FAC endorsed the revised contributions and budgets for 2017 and 2018 (Annex F).

Agenda Item 6. Issues Arising from 2016

6.1 Fixed Yen-Based Staff Salary

11. The Secretariat presented options for fixed yen-based salaries for Commission staff (NPFC-2017-FAC01-WP04). The FAC discussed the options for fixed-yen based salaries for Commission staff and agreed on a fixed rate of 124.36 JPY=1 US\$, which is the exchange rate used in the initial budget and contributions plan.

Recommendation: The FAC recommended that the Commission set fixed yen-based salaries for Commission staff at a rate of 124.36 JPY=1 US\$.

6.2 Revision to Staff Regulations

12. The Secretariat proposed the addition of two new paragraphs (5.9 and 5.10) to the Staff Regulations, as outlined in NPFC-2017-FAC01-IP01, to incorporate the accommodation allowance and education allowance for professional staff of the Commission that were approved at the 2nd Commission Meeting. The FAC reviewed and endorsed the proposal.

Recommendation: The FAC endorsed the revised NPFC Staff Regulations (Annex G).

Agenda Item 7. Other Matters

7.1 Procedures for submission, review and approval of projects proposed by Members/NPFC subsidiary bodies

13. The Secretariat presented the proposed Guidelines Outlining the Process for Submission, Review, Approval and Implementation of Projects to Finalize the Commission Work Program and Budget (NPFC-2017-FAC01-WP05).

Recommendation: The FAC endorsed the Guidelines (Annex H).

7.2 Others

14. The Secretariat presented the proposed NPFC Media Access Policy (NPFC-2017-FAC01-WP06). The FAC reviewed and revised the proposal. In particular, the FAC discussed the importance of Members maintaining the confidentiality of conference proceedings when interacting with members of the media.

Recommendation: The FAC endorsed the revised NPFC Media Access Policy (Annex I).

15. The Secretariat presented the proposed NPFC Policy on Support to Specialist Experts to the Secretariat or Commission (NPFC-2017-FAC01-WP07).

Recommendation: The FAC endorsed the Policy (Annex J).

16. The Secretariat presented the NPFC Document Rules (NPFC-2017-FAC01-WP08). The FAC reviewed and revised the proposal, clarifying the rules for the submission of Information Papers and Observer Papers. It was also noted that the Secretariat should continue to explore ways to promote the use of electronic documents.

Recommendation: The FAC endorsed the revised NPFC Document Rules (Annex K).

17. The FAC discussed matters related to the paper on cooperating non-contracting parties (CNCs) from the Final Report of the Commission Meeting in 2016 (NPFC-2017-COM03-WP03). The FAC determined that CNCs should be encouraged to make contributions to the Commission, rather than being mandated to do so, referring to the practices of other

regional fisheries management organizations.

Recommendation: The FAC recommended that contributions to the Commission by CNCPs should be voluntary and endorsed the revised document (Annex L).

18. The Secretariat proposed the re-appointment of Tokoro Accounting Ltd. as the auditor of the Commission (NPFC-2017-FAC01-WP09).

Recommendation: The FAC endorsed the proposal.

19. **Recommendation:** The FAC recommended that each Member nominate a focal point contact for FAC-related matters.

Agenda Item 8. Recommendations to the Commission

20. The FAC recommended the following to the Commission:

(Agenda Item 4)

a. The FAC endorsed the revised proposal to establish a Special Project Fund (Annex D).

(Agenda Item 5)

b. The FAC endorsed the revised Secretariat work plan for 2017 (Annex E).

c. The FAC requested that the TCC develop a rolling two-year work plan.

d. The FAC endorsed the revised budgets for 2017 and 2018 (Annex F).

(Agenda Item 6)

e. The FAC recommended that the Commission set fixed yen-based salaries for Commission staff at a rate of 124.36 JPY=1 US\$.

f. The FAC endorsed the revised NPFC Staff Regulations (Annex G).

(Agenda Item 7)

g. The FAC endorsed the Guidelines Outlining the Process for Submission, Review, Approval and Implementation of Projects to Finalize the Commission Work Program and Budget (Annex H).

h. The FAC endorsed the revised NPFC Media Access Policy (Annex I).

i. The FAC endorsed the NPFC Policy on Support to Specialist Experts to the Secretariat or Commission (Annex J).

j. The FAC endorsed the revised NPFC Document Rules (Annex K).

k. The FAC endorsed the revised document on CNCPs (Annex L).

l. The FAC endorsed the re-appointment of Tokoro Accounting Ltd. as the auditor of the Commission.

m. The FAC recommended that each Member nominate a focal point contact for FAC-related matters.

(Agenda Item 9)

- n. The FAC requested the guidance of the Commission in determining the date and location of the next FAC meeting.

Agenda Item 9. Next Meeting

21. **Recommendation:** The FAC requested the guidance of the Commission in determining the date and location of the next FAC meeting.

Agenda Item 10. Adoption of the Report

22. The report was adopted by consensus.

Agenda Item 11. Close of the Meeting

23. The FAC meeting closed at 19:04 on 12 July 2017.

Annexes

[Annex A](#) – Agenda

[Annex B](#) – List of Documents

[Annex C](#) – List of Participants

[Annex D](#) – Establishment of a Special Projects Fund or Use of Article 24 of the NPFC Financial Regulations

[Annex E](#) – Secretariat Work Plan 2017

[Annex F](#) – NPFC expenses in the fiscal years 2017 and 2018

[Annex G](#) – Revised NPFC Staff Regulations

[Annex H](#) – Guidelines Outlining the Process for Submission, Review, Approval and Implementation of Projects to Finalize the Commission Work Program and Budget

[Annex I](#) – NPFC Media Access Policy

[Annex J](#) – NPFC Policy on Support to Specialist Experts to the Secretariat or Commission

[Annex K](#) – NPFC Document Rules

[Annex L](#) – Cooperating Non-Contracting Parties

**North Pacific Fisheries Commission
1st Meeting of the Finance and Administration Committee
12 July 2017
Sapporo, Japan**

Agenda

Agenda Item 1. Opening of the Meeting

Agenda Item 2. Selection of Chair, Vice-Chair and Rapporteur.

Agenda Item 3. Adoption of Agenda

Agenda Item 4. Financial Statement

4.1 Financial Statement from 2016 and 2017 to date

4.2 Contributions outstanding and new Member contribution

4.3 Working Capital Fund

4.4 Establishment of a Special Project Fund

Agenda Item 5. Secretariat's Work Plan 2017; Budget Estimates for 2018-2020

Agenda Item 6. Issues arising from 2016

6.1 Fixed yen-based staff salary

6.2 Revision to Staff Regulations

Agenda Item 7. Other matters

7.1 Procedures for submission, review and approval of projects proposed by
Members/NPFC subsidiary bodies

7.2 Others

Agenda Item 8. Recommendations to the Commission

Agenda Item 9. Next meeting

Agenda Item 10. Adoption of the Report

Agenda Item 11. Close of the Meeting

North Pacific Fisheries Commission
1st Meeting of the Finance and Administration Committee
12 July 2017
Sapporo, Japan

List of Documents

MEETING INFORMATION PAPERS

Symbol	Title
NPFC-2017-MIP01	Meeting notice and information
NPFC-2017-FAC01-MIP02 (Rev.1)	Provisional agenda
NPFC-2017- FAC01-MIP03	Provisional annotated agenda
NPFC-2017- FAC01-MIP04	Indicative schedule
NPFC-2017- FAC01-MIP05	Provisional List of Documents

REFERENCE DOCUMENTS - NPFC Website

Symbol	Title
	Convention on the Conservation and Management of High Seas Fisheries Resources in the North Pacific Ocean
	NPFC Rules of Procedure
	Compendium of Active Conservation and Management Measures for the NPFC

WORKING PAPERS

Symbol	Title
NPFC-2017- FAC01-WP01 (Rev. 1)	NPFC Budget 2017-2020
NPFC-2017- FAC01-WP02 (Rev. 1)	Special Projects Fund
NPFC-2017- FAC01-WP03 (Rev. 2)	Secretariat's Work Plan
NPFC-2017- FAC01-WP04	Fixed Base Yen Salaries
NPFC-2017- FAC01-WP05	Guidelines for Projects
NPFC-2017- FAC01-WP06 (Rev. 1)	Media Access
NPFC-2017- FAC01-WP07	Policy for Technical Support
NPFC-2017- FAC01-WP08 (Rev. 2)	NPFC Document Rules
NPFC-2017- FAC01-WP09	Appointment of Auditor

INFORMATION PAPERS (IP)

Symbol	Title
NPFC-2017- FAC01-IP01	Staff Regulations Revision
NPFC-2017- FAC01-IP02	Auditor Report

ANNUAL REPORTS (AR) - NPFC Website

Symbol	Title
NPFC-2017-AR Canada	Annual Report of Canada to the North Pacific Fisheries Commission
NPFC-2017-AR China	China's Annual Report for 2016 to the Secretariat of the North Pacific Fisheries Commission
NPFC-2017-AR Japan (Rev. 1)	Japan's Annual Report for 2016 to the North Pacific Fisheries Commission
NPFC-2017-AR Korea	Republic of Korea Annual Report for 2016 to the North Pacific Fisheries Commission
NPFC-2017-AR Russia	Russia Annual Report for 2016 to the North Pacific Fisheries Commission
NPFC-2017-AR Chinese Taipei	Chinese Taipei's Annual Report for 2016 to the North Pacific Fisheries Commission
NPFC-2017-AR USA	2016 Annual Report of the United States of America to the North Pacific Fisheries Commission
NPFC-2017-AR-Annual Summary Footprint - Bottom Fisheries	2016 – Annual Summary Footprint For Bottom Fisheries In The North Pacific Fisheries Commission Area Of Competence
NPFC-2017-AR-Annual Summary Table - Pacific Saury	2016 – Annual Summary Footprint For Pacific Saury In The North Pacific Fisheries Commission Area Of Competence
NPFC-2017-AR-Annual Summary Table - Squid	2016 – Annual Summary Footprint For Squids In The North Pacific Fisheries Commission Area Of Competence
NPFC-2017-AR-Annual Summary Table - Mackerels	2016 – Annual Summary Footprint For Chub Mackerel and Spotted Mackerel In The North Pacific Fisheries Commission Area Of Competence

NGO and Others

Symbol	Organization & Title

**Finance and Administration Committee
List of Participants**

CHAIR

Kenji KAGAWA
NPFC Secretariat
+81-3-5225-1161
kagawa@kaiseiken.or.jp

CANADA

Robert DAY
Head of Delegation
Fisheries and Oceans Canada
+1-613-993-7979
robert.day@dfo-mpo.gc.ca

Judy DWYER
Alternate Representative
Fisheries and Oceans Canada
+1-613-993-3371
judy.dwyer@dfo-mpo.gc.ca

Seth REINHART
Adviser
Fisheries and Oceans Canada
001-613-993-7968
seth.reinhart@dfo-mpo.gc.ca

Mike CARLSON
Adviser
Fisheries and Oceans Canada
001-604-666-0604
mike.carlson@dfo-mpo.gc.ca

CHINA

Liling ZHAO
Head of Delegation
Ministry of Agriculture
+86-10-59192966
bofdwf@agri.gov.cn

Siquan TIAN
Alternate Representative
Shanghai Ocean University
+86-15692165377
sqtian@shou.edu.cn

Lianyong FANG
Adviser
China Overseas Fisheries Association
+86-10-65853488
tomfang71@hotmail.com

Xiaoning YANG
Alternate Representative
Ministry of Foreign Affairs
+86-10-65963292
yang_xiaoning@mfa.gov.cn

Guanbao CHENG
Adviser
China Coast Guard
xuqiang19861002@126.com

Dingjun GUO
Adviser
Fujian Wanton Overseas Fisheries Co., LTD
tomfang71@hotmail.com

Chuanxiang HUA
Adviser
Shanghai Ocean University
cxhua@shou.edu.cn

Jian WANG
Adviser
Ministry of Foreign Affairs
+86-10-65963724
wangjiantom@yahoo.com

Qiang XU
Adviser
China Coast Guard
xuqiang19861002@126.com

Wenquan ZHOU
Adviser
Jinxin Overseas Fisheries Co., LTD
admin1@tuna.org.cn

JAPAN

Kengo TANAKA
Head of Delegation
Resources Management Department
Fisheries Agency
+81-3-3591-1086
kengo_tanaka880@maff.go.jp

Naohiko AKIMOTO

Adviser
Japan Overseas Fishing Association
+81-3-3291-8508
naohiko@sol.dti.ne.jp

Toyoaki IRIE
Adviser
Fishery Division, Economic Affairs Bureau
Ministry of Foreign Affairs
+81-3-5501-8338
toyoaki.irie@mofa.go.jp

Koichi ISHIZUKA
Adviser
Hokkaido Fisheries Management Office
Fisheries Agency
+81-11-709-2382
koichi_ishizuka820@maff.go.jp

Toshihide IWASAKI
Adviser
Fisheries Management Department, Tohoku
National Fisheries Research Institute, Japan
Fisheries Research and Education Agency
+81-178-33-1500
tiwasaki@affrc.go.jp

Ryuji KOMURA
Adviser
Fisheries Management Division of
Department of Fisheries and Forestry,
Hokkaido Government
komura.riyuuji@pref.hokkaido.lg.jp

Koji KUMAGAI
Adviser

Hokkaido Fisheries Management Office,
Fisheries Agency
+81-11-709-2382
koji_kumagai150@maff.go.jp

Joji MORISHITA
Adviser
Tokyo University of Marine Science and
Technology
+81-3-5463-490
jmoris0@kaiyodai.ac.jp

Naohito OKAZOE
Adviser
International Affairs Division
Fisheries Agency
+81-3-3591-1086
naohito_okazoe980@maff.go.jp

Nobushige SHIMIZU
Adviser
International Affairs Division
Fisheries Agency
+81-3-3591-1086
nobushige_shimizu640@maff.go.jp

Hiromu ZENITANI
Adviser
National Research Institute of Fisheries
Science, Japan Fisheries Research and
Education Agency
+81-45-788-7632
zenitani@affrc.go.jp

KOREA

Chan Soo PARK

Head of Delegation
Ministry of Oceans and Fisheries
parkchansoo@korea.kr

Gyeongsam CHOI
Adviser
Korea Overseas Fisheries Association
82-1032600072
gschoi@kosfa.org

Junghee CHOI
Adviser
Korea Overseas Fisheries Cooperation Center
82-10-9303-4448
hellojunghee@kofci.org

Illsub HONG
Adviser
Korea Overseas Fisheries Association
82-104554-9526
syfisher@hanmail.net

Eunjung KIM
Adviser
National Institute of Fisheries Science
eunjungkim@korea.kr

Hyung Kyun LEE
Adviser
Korea Overseas Fisheries Association
82-010-2729-2481
squidlee@hanmail.net

RUSSIA

Aleksei BAITALIUK
Head of Delegation

TINRO-Center
aleksei.baitaliuk@tinro-center.ru

Dmitry KREMENYUK
Alternate Representative
Federal Agency for Fisheries
d.kremenyuk@fishcom.ru

Pavel AFANASYEV
Adviser
FSBSI "VNIRO"
afanasiev@vniro.ru

Oleg KATUGIN
Adviser
TINRO-Center
oleg.katugin@tinro-center.ru

Vladimir KULIK
Adviser
TINRO-Center
vladimir.kulik@tinro-center.ru

CHINESE TAIPEI

Ming-Fen WU
Head of Delegation
Deep Sea Fisheries Division, Fisheries Agency,
Council of Agriculture
mingfen@ms1.f.gov.tw

Wei-Hsuan CHANG
Adviser
Department of International Organizations
whchang@mofa.gov.tw

Wan-Tze CHEN
Adviser
Department of International Organizations
wtgchen@mofa.gov.tw

Kun-Hsueh CHOU
Adviser
Taiwan Squid Fishery
business@squid.org.tw

Mei-Chin JUAN
Adviser
Deep Sea Fisheries Division, Fisheries Agency,
Council of Agriculture
meichin@ms1.f.gov.tw

Shih-Hsun LIN
Adviser
Deep Sea Fisheries Division, Fisheries Agency,
Council of Agriculture
shihhsun@ms1.f.gov.tw

Kuo-Ching PU
Adviser
Taipei Representative Office in Republic of
Singapore
kcpu@mofa.gov.tw

Tsung-Yueh TANG
Adviser
Overseas Fisheries Development Council
tangty@ofdc.org.tw

USA

Glenn MERRILL
Head of Delegation
Department of Commerce -- NOAA Fisheries

+1-907-586-7775

glenn.merrill@noaa.gov

Charles BRINKMAN

Adviser

U.S. Department of State

+1-202-765-9751

BrinkmanCC@state.gov

Emily CRIGLER

Adviser

NOAA Fisheries, Pacific Islands Regional Office

emily.crigler@noaa.gov

Kari FENSKE

Adviser

National Marine Fisheries Service

1-907-789-6653

Kari.fenske@noaa.gov

Howard HULL

Adviser

North Pacific Fishery Management Council

1-907-632-8862

danhullak@gmail.com

Nathan LAGERWEY

Adviser

NOAA Office of Law Enforcement

+1-907-271-3031

nathan.lagerwey@noaa.gov

Brian MCTAGUE

Adviser

National Oceanic and Atmospheric Administration

+1-907-957-0423

brian.mctague@noaa.gov

VANUATU

Yvon BASILE

Head of Delegation

Department of Foreign Affairs

Government of Vanuatu

ybasil@vanuatu.gov.vu

William NAVITI

Alternate Representative

Department of Fisheries

Government of Vanuatu

wnaviti@vanuatu.gov.vu

Chu-Lung CHEN

Adviser

Ming Dar Fishery (Vanuatu) Co., Ltd.

kevin.mdfc@msa.hinet.net

Kevin LIN

Adviser

Ming Dar Fishery (Vanuatu) Co., Ltd.

kevin.mdfc@msa.hinet.net

OBSERVERS

ORIS

Mari KOYANO

Hokkaido University

+81-90-3136-8248

koyano@juris.hokudai.ac.jp

NPFC SECRETARIAT

Dae Yeon MOON
Executive Secretary
+81-3-5479-8717
dymoon@npfc.int

Peter FLEWWELLING
Compliance Manager
+81-3-5479-8717
pflewwelling@npfc.int

Aleksandr ZAVOLOKIN
Science Manager
+81-3-5479-8717
azavolokin@npfc.int

Yuko YOSHIMURA-TAKAMIYA
Executive Assistant
+81-3-5479-8717
ytakamiya@npfc.int

Mervin OGAWA
Data Coordinator
+81-3-5479-8717
mogawa@npfc.int

Yumiko KOKURYU
Finance Specialist
+81-3-5479-8717
ykokuryu@npfc.int

Alexander MEYER
Rapporteur
Urban Connections
+81-3-6432-5691

meyer@urbanconnections.jp

Mizuki FUKUI
Assistant
Hokkaido University
+81-90-1302-0350
mizuki.f0209@gmail.com

Asaka KURIYAMA
Assistant
Hokkaido University
+81-80-1885-8756
pikapolon126@yahoo.co.jp

Establishment of a Special Projects Fund or Use of Article 24 of the NPFC Financial Regulations

INTRODUCTION:

The Scientific Committee has identified several special projects proposed to move the scientific component forward in its duties for stock assessments, joint scientific ventures with other RFMOs, development of VME identification guides for Members in 2017 and also for stock assessment review and training of at-sea observers in the following years. It is also expected that a similar situation will soon exist in the Technical and Compliance Committee with the development of the NPFC compliance program including for example: at-sea and port observer program, transshipment monitoring, implementation of a regional VMS, special training seminars for implementation of new international legal instruments and others. SC and TCC are looking at appropriate mechanisms to facilitate the implementation of these special projects.

Paragraphs 18,21 and 24 of the NPFC Financial Regulations note the financial set up and flow of funds for the Commission. Contributions and other income received by the Commission shall be placed in the General Fund. Any surplus funds at the end of each fiscal year of the Commission (1 April-31 March of the following year), shall be transferred to the Working Capital Fund, “*or designated for a specific purpose as determined by the Commission*”, (paragraph 18), or alternately *divided into special reserve funds as determined by the Commission (paragraph 21)*. Further, under paragraph 24, ‘The Commission may transfer amounts of the Working Capital Fund to the General Fund from time to time as it deems necessary in order to offset expenditures in any financial year or to finance unforeseen and extraordinary expenses.’

OBJECTIVE: To establish a mechanism to accommodate the *specific purpose* of addressing such special science and compliance initiatives as identified above or will be proposed in future, especially such costly non-recurring projects as the establishment of key tools for science, compliance and management, such as Database Management System or Observer Program.

SOURCE OF THE FUND AND MANAGEMENT

Monies for these special non-recurring initiatives can be addressed by the establishment of a Special Projects Fund under paragraph 18; the establishment of a focused special reserve fund under paragraph 21; or through a transfer of funds from the Working Capital Fund from time to time for identified special projects. The proposal was for the establishment of a Special Projects fund which would be funded from General Funds surplus to expenditures and the cap set for the Working Capital Fund.

Alternatively, the Commission could utilize Paragraph 21 of the financial regulations to establish a special reserve fund for Special Projects under the Working Capital Fund, with access to funds from the mother fund, Working Capital, or as noted above under paragraph 24 through a transfer from the Working Capital Fund on an event-based/individual special project approved by the Commission.

It is proposed that this ‘Special Project Fund’, funding mechanism to be identified by the Commission, would be considered and maintained as distinct financial and accounting entity. Therefore, a separate bank account in the name of the Commission shall be held and different sets of financial statements shall be prepared which are not included in the general account fund statements.

CRITERIA FOR ACCESS TO THE SPECIAL PROJECTS FUND:

1. In general, projects for management, science and compliance are expected to be addressed through the Commission under their sectoral budgets, however there may be required activities/projects that exceed these regular budget levels, in such case, they may be considered for funding from the Special Projects Fund based on the additional criteria noted below.
2. Similar to the *Special Purpose Fund* (paragraph 26), the ‘Special Projects Fund’ would be for non-recurring initiatives or the initial development and set up of key tools for management, science or compliance, such as: database development and set-up; observer program set up and initial training; regional VMS set up.
Note: Normal operational costs of such programs or other recurring programs are expected to be addressed through the regular budget of the Commission.
3. Projects noted in Item 1 for the Special Projects Fund are time limited to a two/three-year period.

SPECIAL PROJECT’S FORMAT:

Project proposal should address, as a minimum the following issues:

Part A. Administrative Summary	Part B. Project Proposal Description
1) Project Title 2) Organization 3) Administrative Contact 4) Project Lead and CV 5) Commencement and Completion Date 6) Project Budget Summary – Salaries, Travel, Operating and Other 7) Expected Outputs/Benefits to the Commission	1) Background and Need (also identify which point on the sectoral work plan [Management, Science, Compliance] the proposal will address) 2) Objectives 3) Expected Project Outputs 5) Risks of project not achieving its objectives 6) Methodology/Steps with milestones 7) Schedule of Milestones 8) Detailed costs against milestones 9) Other Related Projects 10) Project Staff and CV’s

PROJECT SUBMISSION:

Projects for the special projects fund must be submitted by SC, TCC and Management/FAC at least one month prior to the FAC meeting for preliminary assessment and endorsement to the Commission. In the case of TCC and Management/FAC initiatives, these must be addressed intersessionally prior to the annual TCC and FAC meetings to meet the timeline for consideration.

Processes for Sectoral Actions prior to submission to the FAC SWG-Special Projects, and actions post-approval by the Commission are addressed in a separate paper.

METHODOLOGY FOR EVALUATION OF PROPOSALS:

Principles:

1. A Special Working Group (SWG) – Special Projects be formed under the FAC with its purpose being to review, assess and endorse projects for funding from the Special Projects Fund to the Commission on an annual basis.
2. The SWG-Special Projects would be comprised of: Chair of FAC who would be *de facto* Chair of the SWG-Special projects; Executive Secretary; Chair of SC, Chair of TCC, one representative from each Member, and other staff of the Secretariat and Members as requested by the SWG Chair.
3. The SWG-Special Projects would only be permitted to allocate 80% of the total uncommitted funds in the Special Projects Fund each year, thus leaving 20% for future building of the Fund.

Actions of the SWG-Special Projects:

1. Annually, the SWG-Special Projects would set overall Commission priorities from the Secretariat and Sectoral Work Plans and identify the funding available for special projects funding.
2. The SWG-Special Projects would review submitted proposals and identify those that meet the criteria for evaluation.
3. The SWG-Special Projects would establish the projects to be endorsed according to the priorities established under Item 1.
4. The SWG-Special Projects Chair would note the available Special Projects funds and provide the list of endorsed projects by priority to the Commission for approval.

Secretariat Work Plan 2017

ABSTRACT

This paper addresses a work plan for 2017 fiscal year for six key areas based on the Secretariat's Work Plan 2016-2019 presented at the last Commission meeting*;

- a. Coordination of scientific activities of the Commission;
- b. Coordination of compliance activities and operational reporting to the Commission;
- c. Data management;
- d. Development and implementation of guidelines for financial matters to support the Secretariat and Commission in the execution of its duties;
- e. Provision of administrative services to, and representation of the Commission and its subsidiary bodies;
- f. Management of human resources.

* It should be noted that the Secretariat work planning exercise is hampered by the timing of the subsidiary meetings. Only the Scientific Committee has met and endorsed its work plan for 2017. The Finance and Administration Committee has not met so only reports and proposed budgets can be presented at this time. The Technical and Compliance Committee has just met so its work plan for 2017 cannot be detailed and proposals for Compliance are therefore tentative at best, and require further refinement by TCC.

DETAILS:

The function of the NPFC Secretariat is the provision of services to, and representation of the Commission as determined by its Members in accordance with the Convention and relevant rules and regulations. As identified by the Secretariat and shared with Members, six key areas highlighted below provide the Secretariat and the Commission guidance with regard to the second year of the Commission's activities.

I. Coordination of scientific activities of the Commission

The Secretariat coordinates the scientific activities of the Commission including:

- a. Scientific Committee, in cooperation with Small Scientific Committees, drafted Five-Year Work Plan for each Priority Area:
 - Stock assessments for target fisheries and bycatch species
 - An ecosystem and adaptive management approach to fisheries
 - Data collection, management and security (refer to Annex G of the 2nd SC Report for details)
- b. Organizing VME Workshop co-sponsored by FAO-ABNJ project to be held in early 2018 in Japan.
- c. Assisting Members to compile a field VME identification guide including coordination of the meeting to be held in Korea/Japan.
- d. Conducting intersessional work to develop templates for data collection and reporting by observers and fishers through a Corresponding Group nominated at the SC meeting.
- e. Assisting Members to develop a GIS database for the spatial management of bottom fisheries and VMEs.
- f. Forming a corresponding group to develop data reporting templates for bottom fisheries.
- g. Assisting a Technical Working Group on Chub Mackerel (TWG CM) for the purpose of

- stock assessment with a draft work plan and terms of reference to be determined.
- h. Contributing to work of a corresponding group to develop the North Pacific Ocean Fisheries Observer Program, noting that according to the Convention the program shall address both compliance and science data gathering, analyses and results. The first step is to gather current scientific data formats in use by Members to enable the group to then establish a standardized protocol and data collection templates. Subsequent steps for compliance, for training, etc. will also be considered by this group.
 - i. Coordinating scientific projects to be conducted during 2017.

#	Project	Time	Rough estimation of required funds
1	VME identification guide (printing)	2017	1.2 mil JPY (9,500 USD)
2	TWG PSSA meeting (meeting costs)	Every year from 2017-2021	2.5 mil JPY (20,000 USD)
3	Chub mackerel meeting (meeting costs)	Every year TBD by the Commission	2.5 mil JPY (20,000 USD)
4	VME workshop (SAI + data)	2018	1.2 mil JPY (about 10,000 USD) and also supported by ABNJ project, FAO

II. Coordination of compliance activities of the Commission

* Note that compliance priorities have not yet been fully established by TCC consequently the list of Secretariat-intended activities in this sector is only tentative.

The Secretariat coordinates compliance activities of the Commission including:

- a. Development of a new compliance compendium including TORs for the TCC, the Compliance Framework and the CMMs in accordance with the framework as key steps in the development of a compliance monitoring scheme (CMS). Funds for this exercise are to be for a Small Working Group (SWG) of fisheries compliance specialists to develop this compendium;
- b. Update the vessel registration, develop vessel marking and the online registry system. Again, this SWG will assist in developing the standards and funds are required for training on the on-line registry implementation.
- c. When the agreement is reached for development of a regional VMS, TORs for a tender shall be developed, tender let and the results of the initial study will assist the successful service provider. Funds will be required for the development of the TORs for the tender (SWG again), establishment of the NPFC FMC and final training of the new VMS operator at NPFC;
- d. On approval of the high seas boarding and inspection measure, the SWG shall be required to develop standard procedures and reports and funds shall be required for this development as well as support for training of Member's officers designated for NPFC compliance operations.
- e. Review of existing CMMs for revision and consideration of new CMMs, if any, from Members;
- f. Maintain the vessel register and interim non-member carrier vessel register for Members, with the intent to move to *a system for direct entry of vessel data* by Members in 2017.
- g. Coordinate the IUU vessel listing process from data submitted by Members.

III. Data management

The data management system is the core for the storage of data and the analyses of scientific and compliance operations of the Commission, consequently, significant effort is being placed on the initial development and setup of this system.

The intent of the NPFC Database is to: provide a secure, user-friendly, accessible, and reliable database for all scientific and compliance needs of the Commission, one that is fully integrated with other data modules of the Commission so as to continually support Members' efforts to provide appropriate and timely management advice to the Commission.

- a. The Secretariat is conducting a consultancy (March – October 2017) initiated through the official NPFC tender process to establish an NPFC Data Management System;
 - The consultancy intends to develop the business plan for the North Pacific Fisheries Commission; and to develop the supporting database including such modules as: i. the Vessel Registry module; ii. data warehousing business intelligence to aggregate data and create summary reports/analyses for both scientific and compliance purposes; iii. link to VMS; iv. Chart of Accounts for assessment of Member's compliance with conservation and management measures for the Members' reporting requirements; v. scientific information analyses, e.g., dimension analyses, e.g., scope analysis of one Member, fleet, species by set period and area.
- b. Drafted the NPFC Information Security Guidelines to discuss the security guidelines for NPFC data sharing and publication.

IV. Financial matters to support the Secretariat and Commission in the execution of its duties

Securing funds for the Commission's activities and implementation of approved activities through formal and internationally recognized financial mechanisms is one of the areas for the Secretariat to assist Members and the Commission to achieve objectives of the Convention.

Given that the Commission is entering its second year of operation, there is still an urgent need for initial investment by Members for its establishment and to address the challenges commonly faced by RFMOs during development. Following the Secretariat's work plan 2016-2019, the Secretariat highlights the following as major financial activities for 2017:

- a. Development of two options for a four-year budget plan 2017-2020 as requested by the Commission to accommodate the contributions of two new Members, USA and Vanuatu, for approval at the 3rd Commission meeting;
 - Adjustment of the 2017 budget expenditures based on actual expenditures during 2016, and development of a proposed 2018 budget and budget forecast for 2019 and 2020;
- b. Drafting of a Fixed Yen-based Staff salary for Member's consideration at the Commission meeting;
- c. Submission of the external Auditor's report for 2016 Commission's financial affairs;
- d. Proposal to establish a Special Projects Fund for the specific purpose of addressing such special science and compliance initiatives;
- e. Revised Staff Regulations to accommodate the Commission's decision to support professional staff members for their accommodation and education of their dependents.

V. Provision of administrative services to the Commission and its subsidiary bodies

1. Host Commission meetings

The Secretariat assists Members to host Commission meetings, subsidiary body meetings and workshops and working group meetings.

- a. Scientific Meetings (17-27 April 2017, Shanghai, China)
- b. Annual Meetings (10-15 July 2017, Sapporo, Japan)

- 2nd Technical and Compliance Committee (TCC), 10-12 (noon) July 2017
- 1st Finance and Administration Committee (FAC), 12 July 2017 (1300-1800 hrs)
- 3rd Annual Session of the Commission, 13-15 July 2017
- c. Workshops and Technical Working Group meetings
 - Chub mackerel and PSSA Workshops (December 2017, Russia)
 - VME Workshop (March 2018, Japan)
- d. Compliance SWGs/Workshops as noted above.

2. Build and maintain the NPFC Website

The Secretariat opened a new website recently under the npfc.int domain name and it is now up and running – www.npfc.int.

- a. Data from the former website has been downloaded and stored for future reference. The new webpage is interactive with a new vessel registry, interim non-Member carrier vessel registry, IUU vessel listing capacity; key documents listing; online meeting registration, and all meeting documents from past meetings.
- b. There is a public page with only selected information available and a Member's page with complete information.
- c. Official observers are also limited in their access to non-sensitive meeting documents.

3. Cooperation with other organizations

The Secretariat currently liaises with other organizations including RFMOs by attending meetings for information sharing and for developing other joint or reciprocal activities of mutual interest. In 2017, the meetings attended and scheduled to be represented by Secretariat staff are as follows:

- a. 25th Annual meeting of the North Pacific Anadromous Fish Commission (16-20 May, Canada)
- b. The Ocean Conference: SDG14 (5-9 June, USA)
- c. Annual Meeting of PICES (22 September – 1 October, Russia)
- d. FAO workshop on potential impacts of climate change on deep-sea ecosystems and the implications for the management of deep sea fisheries (26-27 August 2017, Woods Hole, USA) – travel cost will be covered by FAO.
- e. Further representation will be determined at TCC, FAC and the Commission Meetings

Besides attendance at the meetings, there are areas for cooperation with other organizations, which require further consideration and input from the Commission:

- a. Joint multinational research survey in the North Pacific scheduled during early 2019 under the International Year of Salmon (IYS) project of NPAFC to collect new data on North Pacific Armorhead and other species of NPFC's interests; NPFC's representative will attend the IYS workshop (26-27 May 2018, Khabarovsk, Russia) to discuss possible participation of NPFC in the multinational survey in the North Pacific
- b. Co-sponsorship or supporting organization was requested by PICES for International Symposium on Understanding Changes in Transitional Areas of the Pacific (La Paz, Mexico, 24-26 April 2018) and the 4th International Symposium on the Effect of Climate Change on the World's Oceans (Washington DC, USA June 4-8, 2018)
- c. Establishing a joint NPFC-PICES working group based on the recommendation of the 2nd Scientific Committee to identify potential areas of cooperation between the two organizations and inviting PICES to support NPFC's VME workshop

- d. Cooperation for compliance purposes to be determined by TCC and the Commission, e.g., NPAFC for air surveillance, etc.

4. Enhance public awareness

The Secretariat enhances public awareness through various means;

- a. Update NPFC brochures for display at the Secretariat office for visitors
- b. Maintain and update official website to provide the public information on Commission's activities
- c. Give lectures and seminars relevant to NPFC works upon request from local government or universities
- d. 1st NPFC Yearbook published.

V. Management of human resources

Management of human resources intends to maximize employee performance while considering the best economic use of the resources of the Commission. According to the Secretariat's Work Plan and Commission's decision, the Secretariat coordinated the following:

- a. Recruitment of a Data Coordinator to manage data systems, and ancillary services, e.g., webpage, etc., for a four-year term commencing on 1 April 2017;
- b. Conducted annual performance reviews of the Secretariat staff for 2016 fiscal year: staff performance review by Executive Secretary, a performance review of the Executive Secretary by the Commission. A summary of the performance reviews will be provided to the Commission;
- c. Used contractual services for interim period before hiring regular staff members in urgent areas of tasking such as managing NPFC webpage and data system development and oversight, and finance administration: one IT Specialist and one Finance specialist; and
- d. Is accepting experts and interns from Members for up to a one-year, or six-month period respectively, through advertisement and selection guidelines set by the Commission, after consideration and approval by Commission.

Attachment:

Timeline for Commission's activities and budget estimate in 2017

Activity	2017 fiscal year												Budget (JPY)
	2017 Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2018 Jan	Feb	Mar	
Science													12.8 mil
Compliance													9 mil
Data													
Finance													
meetings	SC			COM						Chub, VME, PSSA			7.5 mil
Website													1.3 mil
Cooperation		NPAFC	UN/SDS			PICES							2 mil+*
Public													1 mil
Human													15.8 mil

* meetings decided by the Commission

NPFC expenses in the fiscal years 2017 and 2018

Items	Year 2017	Year 2018
	Cost (JPY)	Cost (JPY)
1. PERSONNEL COSTS		
1.1-1.6 Staff Remuneration	52,970,117	60,777,221
1.7 Temporary Services	621,800	621,800
1.8 (a) Social Security & Insurance	11,565,480	11,565,480
1.8 (b) Pension Costs		
1.8 (C) Tax Reimbursement	5,500,000	-
1.9 Overtime	621,800	746,160
1.10 (a) Staff Allowances - Home Leave	746,160	300,000
1.10 (b) Staff Allowances – Relocation	-	-
1.10 (C) Staff Allowances – Repatriation	-	-
1.10 (d) Staff Allowances - Accommodation Subsidy	7,461,600	7,461,600
1.11 Professional Development / Training	1,492,320	1,641,552
1.12 Education Fee	4,974,400	5,223,120
1.13 Separation Allowances	-	-
2. OTHER SERVICE COSTS		
2.1 Office Equipment & Furniture	2,487,200	2,487,200
2.2 Office Supplies	2,487,200	2,735,920
2.3 Rentals	-	-
2.4 Communications	2,487,200	2,487,200
2.5 Printing	1,243,600	1,243,600
2.6 Duty Travel	6,218,000	6,839,800
2.7 Auditing	746,160	746,160
2.8 Contractual Services	15,800,000	13,369,000
2.9 Database Management	9,026,000	9,026,000
2.10 MCS Costs		
2.11 Meeting Costs & Workshops	7,461,600	7,461,600
2.12 Science Support	12,787,000	12,787,000
2.13 Staff Recruitment & Hiring	248,720	-
2.14 To / From Special Project Fund	-6,927,678	8,206,782
2.15 Representation Expenses	248,720	248,720
2.16 Miscellaneous	1,294,880	1,295,488
TOTAL - (A)	141,562,279	157,271,403
Working Capital Fund (cumulative)	44,716,124	44,716,124
- Special Project Fund (cumulative)	11,565,050	19,771,832

Table of Member Contributions, revised 2017 (JPY)

Member/Rule	a)	b)	c)	Fixed Contribution	Total	%
Canada	4,948,700	3,122	2,532,413		7,484,236	5
China	4,948,700	23,016,263	477,088		28,442,051	20
Korea	4,948,700	2,221,813	1,583,434		8,753,947	6
Russia	4,948,700	690,323	556,206		6,195,229	4
Chinese Taipei	4,948,700	27,966,480	1,306,118		34,221,299	24
USA	4,948,700	0	3,281,648		8,230,348	6
Vanuatu	4,948,700	537,700	160,493		5,646,892	4
Japan				44,000,000	44,000,000	31
Sub-Total	34,640,901	54,435,701	9,897,400	44,000,000	142,974,002	100
Vanuatu - 9 months:				5,646,892x9/12 :	4,235,169	
Total (including 9-month Vanuatu contribution)					141,562,279	

Table of Member Contributions, 2018 (JPY)

Member/Rule	a)	b)	c)	Fixed Contribution	Total	%
Canada	5,663,570	3,719	2,898,236		8,565,525	5
China	5,663,570	32,139,220	546,007		38,348,797	24
Korea	5,663,570	1,710,896	1,812,171		9,186,637	6
Russia	5,663,570	799,201	636,553		7,099,325	5
Chinese Taipei	5,663,570	26,815,375	1,494,795		33,973,741	22
USA	5,663,570	0	3,755,702		9,419,272	6
Vanuatu	5,663,570	830,860	183,677		6,678,107	4
Japan				44,000,000	44,000,000	28
Total	39,644,991	62,299,272	11,327,140	44,000,000	157,271,403	100

NORTH PACIFIC FISHERIES COMMISSION STAFF REGULATIONS

REGULATION 1

- 1.1 These Staff Regulations establish the fundamental principles of employment, regulate the working relationships and establish the rights and responsibilities of formally appointed employees who render their services in and receive remuneration from the Secretariat of the North Pacific Fisheries Commission (hereinafter called the "Commission"). These regulations do not apply to persons in Regulation 11.2.

REGULATION 2 DUTIES, OBLIGATIONS AND PRIVILEGES

- 2.1 The Executive Secretary and staff members of the Secretariat (hereinafter "staff members") are international civil servants. Upon accepting their appointments, they pledge themselves to discharge their duties faithfully and to conduct themselves in the best interests of the Commission.
- 2.2 For the purposes of these regulations the term "dependent" shall include only:
- (a) the employee's spouse or domestic partner (hereinafter referred to as "spouse");
 - (b) any unsalaried child, who is born of, or adopted by, a staff member, his or her spouse, or their children, who is below the age of eighteen years and who is dependent on a staff member or his or her spouse for main and continuing support;
 - (c) any child fulfilling the conditions laid down in paragraph (a) above, but who is between eighteen and twenty-five years of age and is receiving school or university education or vocational training;
 - (d) any child with a disability who is dependent on a staff member or his or her spouse for main and continuing support;
 - (e) any other child who is given a home by and is dependent on a staff member or his or her spouse for main and continuing support;
 - (f) any person related by blood or marriage for whose main and continuing support a staff member or his or her spouse is legally responsible.
- 2.3 Staff members shall at all times conduct themselves in a manner in keeping with the international nature of the Commission. They shall always exercise the loyalty, discretion and tact imposed on them by their international responsibilities in the performance of their duties. They shall avoid all actions, statements or public activities which might potentially be detrimental to the Commission and its aims.
- 2.4 Staff members shall not be the subject of discrimination on the basis of age, race, color, creed, gender, sexual orientation, disability or national origin.
- 2.5 In the performance of their duties, staff members shall neither seek nor accept instructions from any government or authority other than the Executive Secretary. In the case of the Executive Secretary, he or she shall neither seek nor accept instructions from any government or authority other than the Commission.
- 2.6 Staff members shall observe maximum discretion regarding official matters and shall abstain from making private use of information they possess by reason of their position.

Authorization for the release of information for official purposes shall lie with the Commission or the Executive Secretary, as the case may require.

- 2.7 Staff members shall, in general, have no employment other than with the Commission. In special cases, staff members may accept other employment, provided that it does not interfere or represent a conflict of interest with their duties in the Commission, and that prior authorization by the Executive Secretary has been obtained. The Commission's prior authorization shall be obtained in respect of the Executive Secretary.
- 2.8 No staff member may be associated in the management of a business, industry or other enterprise, or have a financial interest therein if, as a result of the official position held in the Secretariat, he or she may benefit from such association or interest.
- 2.9 Staff members shall enjoy the privileges and immunities to which they are entitled under the AGREEMENT BETWEEN THE GOVERNMENT OF JAPAN AND THE NORTH PACIFIC FISHERIES COMMISSION REGARDING PRIVILEGES AND IMMUNITIES OF THE NORTH PACIFIC FISHERIES COMMISSION, and such other privileges and immunities as may be decided.
- 2.10 The Commission shall sit as a body to hear grievances from staff members regarding human resource related matters, where other less formal attempts at resolution have not met with success. For staff members' grievances, the Commission may instruct the Executive Secretary to undertake other actions where the Commission deems that a grievance hearing is not appropriate. The Commission's decision is final and not subject to appeal.

REGULATION 3 HOURS OF WORK

- 3.1 The normal working day shall be eight hours, Monday through Friday, for a total of forty hours per week.
- 3.2 The Executive Secretary shall establish the working hours and may, in consultation with staff members, alter them for the benefit of the Commission as circumstances may require.

REGULATION 4 CLASSIFICATION OF STAFF

- 4.1 Staff members shall be classified in either of the two following categories:
- (a) Professional Category (Positions of high responsibility of a managerial, professional, or scientific nature)
These posts will be filled by appropriately qualified professionals, preferably with University qualifications or the equivalent. Staff members in this category will be recruited internationally.
- (b) General Services Category (Auxiliary administrative and technical positions. Clerical, secretarial and other office personnel)
Such staff shall be recruited from among citizens of members of the Commission, taking into account potential benefits that may occur from hiring staff locally.
- 4.2 Persons employed under Regulation 11 shall not be classified as staff members.

REGULATION 5
SALARIES AND OTHER REMUNERATION

- 5.1 The scale of salaries for staff members in the professional category shall be established by the Commission, taking into account the scales of salaries which would apply to officials of the United Nations Secretariat employed in Japan as well as the salaries of government officials working in Japan. Such salaries shall be paid in Japanese Yen.
- 5.2 Staff members in the general services category shall, in principle, be paid at rates equivalent to those paid in Japan for staff of equivalent qualifications and experience.
- 5.3 Performance reviews shall be completed for all staff members by the Executive Secretary on an annual basis. A summary of the performance reviews will be provided to the Commission annually. The annual performance review of the Executive Secretary shall be completed by the Commission.
- 5.4 The salaries of staff members shall be reviewed annually by the Commission taking into account the cost of living in the host country and the performance of each staff member concerned, based on an annual performance review.
- 5.5 Staff members of the Commission subject to national income tax shall be eligible for reimbursement of the tax paid on his or her salary. Such arrangements shall be made only on the basis that the direct costs of reimbursement are paid by the staff member's home country.
- 5.6 Staff members in the professional category are not entitled to overtime pay or compensatory leave.
- 5.7 Staff members in the general services category required by the Executive Secretary to work more than 40 hours during one week will be compensated. The method of compensation will be determined by the Executive Secretary in consultation with the staff member and shall include one of the following options:
 - (a) with compensatory leave equivalent to hours of overtime performed; or
 - (b) by remuneration per overtime hour, to be estimated at the rate of time and a half, or if the additional time is worked on a Sunday, or on holidays listed in Regulation 7.14, at the rate of double time.
- 5.8 The Commission shall pay duly justified and authorized representation expenses incurred by the Executive Secretary in the performance of his or her duties within the limits prescribed annually in the Budget.
- 5.9 Professional staff renting an apartment or house are eligible to receive an accommodation allowance. The allowance is based on the actual contracts and set at a maximum of 240,000 JPY per month. The Commission shall reimburse 75% of actual expenses within the cap set above. The accommodation allowance shall be reviewed every three (3) years and adjusted on relative movement in the local rental market.
- 5.10 A professional staff member is eligible to receive an education allowance, based on actual contracts, for each dependent child, determined by Regulation 2.2, b-e, in full-time attendance at school, university or similar higher educational institution in or outside a country of the staff member's duty station. The education allowance shall include costs of registration, tuition, education, boarding and ancillary fees related to student enrollment. The education allowance entitlement for a staff member is a maximum of 2,000,000 JPY

per annum per dependent child. The Commission shall reimburse 75% of actual expenses within the cap set above. The education allowance shall be reviewed every three (3) years. Each employee's entitlement under the education allowance is defined as the sum of the entitlements up to three of the employee's dependent children. Education allowances are not payable:

- a) in respect of children of staff members serving in their home country;
- b) for correspondence courses;
- c) when schooling does not require regular attendance at an education institution;
- d) for secondary dependents defined as parents, cousins, brothers or sisters of the staff member or his spouse;
- e) for attendance at kindergarten or nursery school at the preparatory level;
- f) for private tuition, except tuition in a language of the home country at duty stations where satisfactory school facilities for learning that language are not available;
- g) if education allowance is already covered by benefits of staff member's spouse.

REGULATION 6 RECRUITMENT AND APPOINTMENT

- 6.1 In accordance with Article 5.9 of the Convention on the Conservation and Management of High Seas Fisheries Resources in the North Pacific Ocean (hereinafter called the "Convention"), the Commission shall appoint the Executive Secretary and shall establish his or her remuneration and such other entitlements as it deems appropriate.
- 6.2 In accordance with Rule 6.2 and 6.4 of the Rules of Procedure of the Commission, the Executive Secretary shall appoint, direct, and supervise staff. The paramount consideration in the appointment, transfer or promotion of the staff shall be the necessity for securing the highest standards of efficiency, competence and integrity.
- 6.3 Offers of appointment to the Secretariat may require the persons selected to undergo a medical examination and present a certificate stating that they have no medical condition that might prevent them from performing their duties.
- 6.4 Upon selection, each prospective staff member shall receive an offer of appointment stating:
 - (a) that the appointment is subject to the staff regulations applicable to the category of appointment in question, and to changes which may be duly made in such regulations from time to time;
 - (b) the nature of the appointment;
 - (c) the date on which the staff member is required to commence duty;
 - (d) the period of appointment, the notice required to terminate it and the period of probation;
 - (e) the category, level, commencing rate of salary and the scale of increments and the maximum salary attainable;
 - (f) any special terms and conditions which may be applicable.
- 6.5 Together with the offer of appointment, staff members shall be provided with a copy of these Regulations. Upon acceptance of the offer staff members shall state in writing that they are familiar with and accept the conditions set out in these Regulations.

REGULATION 7 LEAVE

- 7.1 Staff members shall be entitled to annual leave at the rate of two and half workdays for each full month of service. Annual leave is cumulative, but at the end of each calendar year, not more than 30 workdays may be carried over to the following year.
- 7.2 The taking of leave shall not cause undue disruption to normal Secretariat operations. In accordance with this principle, leave dates shall be subject to the needs of the Commission. Leave dates shall be approved by the Executive Secretary who shall, as far as possible, bear in mind the personal circumstances, needs and preferences of staff members.
- 7.3 Annual leave may be taken in one or more periods. The total amount of annual leave taken in any calendar year shall not be longer than 45 days under any circumstances.
- 7.4 Any absence not approved within the terms of these Regulations shall be deducted from annual leave.
- 7.5 Staff members who, upon termination of their appointment, have accumulated annual leave that has not been taken shall receive the cash equivalent estimated on the basis of the last salary received.
- 7.6 Staff members shall be entitled to sick leave at the rate of one and one quarter days for each full month for service. Sick leave is cumulative and may be accrued without limit. Accrued sick leave is not subject to payment upon termination or separation from employment.
- 7.7 Staff members shall not be granted sick leave for a period of more than 3 consecutive days without producing a medical certificate.
- 7.8 Staff members shall be granted certified sick leave not exceeding 12 months in any 4 consecutive years. The first 6 months shall be on full salary and the second 6 months on half salary, except that no more than 4 months on full salary shall normally be granted in any period of 12 consecutive months.
- 7.9 Sick leave may also be used to care for a staff member's spouse, child or parent with a serious health condition.
- 7.10 Staff members shall be entitled up to twelve weeks of family leave per calendar year for (a) the birth of a child and to care for the newborn child within one year of birth; or (b) the placement with the employee of a child for adoption or foster care and to care for the newly placed child within one year of placement. During this period staff members shall receive full pay.
- 7.11 Staff members shall be entitled to bereavement leave of up to five days upon the death of an immediate family member and up to three days for a relative other than an immediate family member. Reasonable travel time to and from destination will not be counted under these limits.
- 7.12 After 18 months of service the Commission shall, in accordance with Regulations 9.3 and 9.4, pay travel expenses to the staff member's home country on annual leave for internationally recruited staff members and their dependents. Following this, home leave shall be granted at two-year intervals provided that:
 - (a) dependents who benefit from this Commission grant have resided in Japan for at least 6 months prior to travel;
 - (b) it is expected that staff members will return to the Secretariat to continue rendering

their services for a minimum additional period of 6 months.

- 7.13 The possibility of combining travel to home country on leave with official travel in Commission service may also be considered, provided the interests of the Commission are duly borne in mind.
- 7.14 Staff members shall be entitled to the statutory holidays in Japan, i.e.: (Annex: List of Holidays), and other holidays that may be designated by the Government of Japan from time to time, such as for national elections and other special circumstances.
- 7.15 If under special circumstances staff members are required to work on one of the aforementioned days the holiday shall be observed on another day to be set by the Executive Secretary, who shall take into account the needs of the Commission.

REGULATION 8 SOCIAL SECURITY

- 8.1 It is a condition of employment that each staff member will contribute to a recognized retirement fund and have adequate medical, hospital, life and disability insurance cover to the satisfaction of the Executive Secretary. Such insurance cover shall include adequate provision for dependents. The Commission shall pay two-thirds of the total contribution to the retirement fund and of the insurance premiums, up to the maximum percentage applying in the United Nations Secretariat from time to time of the total of the staff member's salary. Such payment shall be by way of reimbursement upon the production of receipts, or shall be paid direct together with the employee's contribution.
- 8.2 In the event of death of a staff member following illness or surgery not resulting from an accident covered by the appropriate insurance, the right to salary and other corresponding benefits shall cease on the day on which death occurs, unless the deceased leaves dependents, in which case these shall be entitled to mortality allowances and return travel and removal expenses to country of origin or former residence at the expense of the Commission.
- 8.3 Eligibility of the dependents of a deceased staff member for the payment of return travel and removal expenses shall lapse if the travel is not undertaken within six months of the date of the staff member's death. The Executive Secretary may extend this period in the case of special circumstances: e.g., to allow a dependent child to finish a school term.
- 8.4 The above mortality allowance for death shall be calculated in accordance with the following scale:
- | Years of Service | Months of Net Base Pay Salary Following Death |
|-----------------------------------------|-----------------------------------------------|
| Less than 3 years | 3 months |
| 3 years and more, but less than 7 years | 4 months |
| 7 years and more, but less than 9 years | 5 months |
| 9 years and more | 6 months |
- 8.5 The Commission shall pay for shipment of the staff member's remains and personal effects from the place of death to the place designated by the spouse, next of kin, or other individual(s) designated by the staff member.

REGULATION 9

TRAVEL

- 9.1 All official travel shall be authorized by the Executive Secretary in advance within the limits of the budget, and the itinerary and travelling conditions shall be those best suited for maximum effectiveness in the fulfillment of duties assigned.
- 9.2 With regard to official travel, a travel allowance, generally consistent with United Nations practice, may be paid in advance for fares and daily living expenses. However, charges for hotel accommodations shall be paid based on charges actually incurred.
- 9.3 Official travel should be planned well in advance to avoid incurring higher costs for airfares and other travel related cost.
- 9.4 Whenever feasible, economy class travel shall be used for all travel.
- 9.5 Following completion of a duty journey, staff members shall repay any travel allowances to which, in the event, they were not entitled. Where staff members have incurred expenses above and beyond those for which travel allowances have been paid, they shall be reimbursed, against receipts and vouchers, as long as such expenses were necessarily incurred in pursuit of their official duties.
- 9.6 On taking up an appointment in the Professional Category staff members shall be eligible for:
 - (a) payment of economy class air fares (or equivalent) and travel allowance for themselves, their spouses and dependents from their place of residence to Japan;
 - (b) an Installation Grant calculated on the basis of the prevailing United Nations rate;
 - (c) payment of removal costs, including the shipment of personal effects and household goods from place of residence to Japan, subject to a maximum volume of 30 cubic meters or one international standard shipping container,
 - (d) payment or reimbursement of sundry other expenses related to relocation, including insurance of goods in transit and excess baggage charges subject to the prevailing relevant United Nations rules. Such payments shall be subject to prior approval by the Executive Secretary.
- 9.7 Staff members who, in the course of their duty, are required to use private motor vehicles for official travel purposes shall, with the prior authorization of the Executive Secretary, be entitled to receive a reimbursement of the costs involved in line with that available to members of the Government Service in Japan. The costs associated with normal daily travel to and from place of work shall not be reimbursed.

REGULATION 10 SEPARATION FROM SERVICE

- 10.1 Staff members may resign at any time upon giving three months' notice or such lesser period as may be approved by the Executive Secretary or the Commission, as the case may require.
- 10.2 The Executive Secretary may terminate the appointment of a staff member by giving three (3) months written notice, when that termination is due to restructuring of the Commission

or of any of its constituent bodies, or if the Commission would decide to cease its functions. If at any time the Executive Secretary considers that a staff member does not give satisfactory service or fails to comply with the duties and obligations set out in these Rules, the staff member will receive a formal written warning. If the performance does not improve or the employee continues to fail to comply with the duties and obligations set out in the rules, the staff member will receive a second formal written warning and if necessary, other disciplinary action (e.g. suspension, demotion) may follow. If after the second formal written warning the staff member's performance does not improve to a satisfactory standard, the appointment of the staff member may be terminated upon written notice of one (1) month in advance subject to the prior notification of the Chair of the Commission.

- 10.3 In the event of involuntary separation from service with the Secretariat, staff members shall be compensated at a rate of two weeks base pay for each year of service, beginning the second year, unless the cause of termination has been gross dereliction of duties imposed in Regulation 2.
- 10.4 On separation from service, a staff member shall, subject to Regulation 10.5 below, be entitled to the following:
- (a) payment of economy class air fares (or equivalent) to the staff member's country of origin or former residence, for the staff member and dependent members of his or her family;
 - (b) payment of removal costs, including the shipment of personal effects and household goods from place of residence in Japan to the country of origin or former residence, subject to a maximum volume of 30 cubic meters or one international shipping container;
 - (c) a repatriation allowance generally consistent with United Nations' practice.
- 10.5 At the discretion of the Executive Secretary, the right to the repatriation expenses provided for in Regulation 10.4 may be cancelled or reduced appropriately if:
- (a) the staff member fails to provide the three months advance notice as specified in paragraph 10.1;
 - (b) less than one year has elapsed between the date of taking up the appointment and the date of separation from service;
 - (c) the reason for separation from service was termination of employment due to gross dereliction of duty;
 - (d) more than six months has elapsed between the staff member's separation from service and his or her return to his or her country of origin or former residence;
 - (e) less than six months has elapsed since the staff member last visited his or her country of origin or former residence on home leave at the expense of the Commission; or
 - (f) the staff member has applied for or received status as a permanent resident of Japan.
- 10.6 In the case of serious misconduct by a staff member that threatens the Commission's operations or the reputation of the Commission or its members (for example, a criminal offense such as theft, intentional breach of confidentiality etc.), appointment of the staff member may be terminated without prior warning.

REGULATION 11 TEMPORARY PERSONNEL UNDER CONTRACT

- 11.1 The Executive Secretary may contract temporary personnel necessary to discharge special duties in the service of the Commission. Such personnel shall be classified as additional help and may be paid on an hourly basis.
- 11.2 Persons in this category may include translators, interpreters, typists, and other persons contracted for meetings, as well as those whom the Executive Secretary contracts for a specific task. Whenever possible, persons resident in Japan shall be utilized in such cases.

REGULATION 12
APPLICATION AND AMENDMENT OF REGULATIONS

- 12.1 Any doubts or disputes arising from application or interpretation of these Regulations shall be resolved by the Executive Secretary in consultation with the members of the Commission.
- 12.2 Situations involving the Executive Secretary shall resolved by the Chair in consultation with members of the Commission.
- 12.3 Matters not foreseen in these Staff Regulations that materially affect the operation of the Secretariat or the working conditions of the staff shall be brought to the attention of the Commission by the Executive Secretary.
- 12.4 Subject to the provisions of the Convention, these Regulations may be amended by the Commission in accordance with its Rules of Procedure.

Guidelines Outlining the Process for Submission, Review, Approval and Implementation of Projects to Finalize the Commission Work Program and Budget

The following Guidelines outline the process for submission, review, approval and implementation of projects based on similar guidelines of the WCPFC. It includes five steps: (1) review and prioritization of the submitted projects by an appropriate Committee, (2) endorsement to and approval by the Commission, (3) call for expressions of interest for approved projects and receiving proposals where appropriate, (4) evaluation of proposals and signing of contracts with successful bidders, and (5) monitoring review and reporting on project implementation.

Table 1. Schedule outlining the process for submission, review, approval and implementation of projects to be supported by the NPFC budget

Time	Task/Activity	Responsibility
Committee's meeting (SC in spring, TCC in summer)	<ol style="list-style-type: none"> 1. Update Committee's work program including projects* submitted by Members or subsidiary bodies 2. Review and re-prioritize projects (i.e. High, Medium, Low) 3. Source of funds (Committee's fund or Special Project Fund (SPF)) 	Informal Small Group compiles the projects, prioritize them and makes recommendations to Committee for consideration and adoption
FAC and Commission meetings (summer)	FAC reviews SC and TCC recommendations and prioritize projects suggested to be funded by SPF. Commission reviews and approves FAC recommendations.	FAC Commission
After Commission meeting (summer)	Call for expressions of interest for priority projects posted on NPFC website** Requirements for proposals are listed in Table 3.	Secretariat
October	Deadline for receipt of proposals by Secretariat	Proposer
November	Review and appraisal (and modification, if required) of proposals and identification of projects for funding support using agreed proposal assessment criteria in Table 2	Secretariat and Chair, if appropriate
	Signing project contracts	Secretariat
Committee's meeting (SC in spring, TCC in summer)	Reports on the status of projects approved the previous year(s), and for new projects: <ol style="list-style-type: none"> 1. Update Committee's work program including projects* submitted by Members or subsidiary bodies 2. Review and re-prioritize projects (i.e. High, Medium, Low) 3. Source of funds (Committee's fund or Special Project Fund (SPF)) 	Informal Small Group compiles the projects, prioritize them and makes recommendations to Committee for consideration and adoption
FAC and Commission meetings (summer)	FAC reviews SC and TCC recommendations and prioritize projects suggested to be funded by SPF. Commission reviews and approves FAC recommendations.	FAC Commission

* Project submission shall include Project title, Description, Objective, Tasks/TOR, Expected outputs, Timelines, Rough estimation of costs, History/Background.

** There is the option of posting the recommended projects on the website after completion of the Committee's meeting in order to provide more time for consideration by organizations which may submit a proposal. The approved budget for supporting proposals would not be known until after the Commission meets in summer.

Table 2. Proposal assessment criteria

Assessment Criteria	Score (1-5)	Justification for score
Attractiveness		
Is the proposal aligned with a priority project listed in the Commission’s or Committee’s Work Programs and the budget allocated to it?		
Is the need and are the planned outputs/benefits well-defined and relevant?		
Adoption and uptake. What is the level of impact and likelihood that the project outputs will be adopted? Is the pathway for uptake described?		
Cost effectiveness: Is the project cost effective? Is it using other sources to lever additional funds?		
Is there an appropriate level of collaboration between the applicant and other relevant researchers, fisheries managers and the fishing industry?		
Feasibility		
Are the objectives clearly specified and are they consistent with the planned project outputs/benefits?		
Sound methodology: Is the project design/method well described and is it consistent with the projects objectives?		
Likelihood of success: Are the project objectives likely to be achieved?		
Is there a strategy for managing data arising from the project so that it will be easily accessible by others in the future?		
Applicant’s expertise/experience. Does the research team have the ability, capacity and track record to deliver the outputs?		
Total score		

Scores for assessing proposals: 1 = very low; 2 = low; 3 = medium; 4 = high; 5 = very high

Table 3. Proposals should address, as a minimum, the following issues:

Part A: Administrative Summary	Part B: Project Proposal Description
<ol style="list-style-type: none"> 1) Project Title 2) Organization 3) Administrative Contact 4) Principal Investigator and CV 5) Commencement and Completion Date 6) Project Budget Summary – Salaries, Travel, Operating and Other 	<ol style="list-style-type: none"> 1) Background and Need 2) Objectives 3) Project Outcomes 4) Form of Results 5) Methods 6) Risks of project not achieving Project Objectives 7) Schedule of Milestones 8) Other Related Projects 9) Project Staff and CV's 10) Detailed costs against milestones

NPFC Media Access Policy

Ref: Rules 5 and 9 of the NPFC Rules of Procedure

ABSTRACT:

The intent of the media access policy is to provide the guidelines to the Commission, Secretariat and the Information Services themselves for access and participation of the media at all Commission meetings, including the rules for release of information prior to it being approved for such release. This is to prevent any misunderstanding by all Members, and also clarify the rules for the implementation and compliance with the policy. This policy is brought forward from last meeting of the Commission and includes suggestions and corrections made by the NPFC Members during and after the 2nd Commission meeting.

PURPOSE:

Rule 5 notes that the meetings of the Commission and its subsidiary bodies shall be open to delegates and observers unless the Commission or subsidiary bodies decide that exceptional circumstances require a closed session.

Rule 9 of the Rules of Procedure on observers is silent on the issue of media access to annual sessions or sessions of subsidiary bodies. The intent of this short paper is to establish a NPFC media access policy including rules of procedure for media while permitted to attend sessions of the Commission or subsidiary bodies.

The Commission wishes to provide clear guidelines for media access and participation to the annual Commission and Subsidiary meetings. The North Pacific Fisheries Commission encourages access by approved observers in accordance with its Rules of Procedure, Rule 9. The Commission also further wishes to enhance and extend this same access and transparency as far as possible for accredited media to record highlights of the meeting and report on such to the general public. The following have therefore been developed as guidelines to enable NPFC to provide information on its activities to the public. Media policies of other RFMOs have been consulted in developing this document.

SCOPE: This policy shall apply equally to accredited media for the annual Commission and subsidiary meetings.

Note: Government media who are part of delegations are expected to be under the rules of the head of delegation and expected to conduct themselves in a similar manner as noted below.

DETAILED ACCESS RULES:

1. The guidelines for media participation have been structured to cover two different media scenarios.
 - a) Mainstream media that are interested in covering the event as a current news item for local or international interest; and
 - b) media participation for a documentary, story or some other requirement whereby they wish to access the meeting during the sessions.

A) General Conditions applicable to all media participation

2. Approval of all media access or participation will rest with the Chair of the meeting in consultation with the Executive Secretary (ES), and where appropriate, the Commission Members.
3. All requests for media participation to NPFC meetings or for interviews with the NPFC or Secretariat shall be directed to the Executive Secretary of the NPFC Secretariat and include media accreditation documents (press card and letter of authorization from the media company) and purpose of the participation.
4. Subject to the approval of the ES accredited and approved media will be provided media identification that shall be worn at all times while on the meeting facilities, inside and outside the meeting room.
5. Interviews of members of the Commission, cooperating non-Contracting Members or other participants at the meeting shall not interrupt proceedings, consequently if during the meeting shall they shall be either:
 - a) after sessions or during breaks; or
 - b) outside the conference meeting facilities.
6. Members are reminded of the rules of confidentiality with respect to the release of details of the meeting prior to the end of the Commission meeting.
7. The Commission Chair, and Executive Secretary shall be the only spokespersons for the NPFC and the Secretariat. No other Secretariat Staff shall be permitted to participate in any media events or interviews unless authorized by the Executive Secretary.

B) Guidelines for general mainstream media access for news recording or interviews:

8. Subject to the approval of the ES, all approved media are permitted inside the meeting room for the **opening session** subject to the following rules:
 - a) media must wear their Secretariat-issued media identification card at all times;
 - b) any disruptive behavior during the opening session shall result in the ES requesting the company to immediately leave the meeting venue and the withdrawal of credentials;
 - c) cameras may only be used on the periphery of the meeting and cannot be disruptive to the opening ceremonies;
 - d) interviewing of delegates in the meeting room is not permitted;
 - e) timely departure from the meeting room after the opening session.
9. Media participation during the **closing ceremonies**, if any, is subject to the approval of the Chair, and will be conducted in accordance with the above rules.
10. The Chair may decide to conduct a press conference after the meeting which would be open to all media in attendance.

C) Guidelines for media submitting special requests to film documentaries or special

interest programs:

11. Requests for media participation for access for the filming of special interest programs or documentaries during the meeting proceedings shall be provided to the Executive Secretary of the NPFC Secretariat at least 60 calendar days in advance of the meeting to permit circulation and feedback from the NPFC Members. This is consistent with access requests for NGO observers under the Rules of Procedure Rule 9.

12. The request for such access shall include media credentials, official Press card and letter of authorization from the media company with the intent of the access or description of the project. The Executive Secretary shall circulate the request to the NPFC Members. The Chair or Executive Secretary shall notify the media entity at least ten days prior to the commencement of the meeting of the decision.

13. Approved media participation and access for these special cases shall be subject to the following conditions to prevent any disruption to the meeting:

- a) the approval provides clearance as agreed by all Members and is considered as **‘one time’¹ access for that visit;**
- b) media must wear their Secretariat issued media identification card at all times while on the meeting premises inside and outside the meeting rooms;
- c) any disruptive behavior during meeting discussions or external to the meeting shall result in the ES requesting the company to immediately leave the meeting venue and the withdrawal of credentials.
- d) the use of cameras is permitted inside the conference room for the official opening and only at set times during the meeting as discussed and agreed by the Chair in advance of the meeting. This agreement can be withdrawn anytime during the meeting when a Member conveys its objection to the Chair;
- e) camera close up shots are not permitted during meeting discussions;
- f) interviewing delegates during the formal Commission discussions or in the meeting room is not permitted;
- g) the use of any disruptive personal communications devices by media during discussions by the Commission is not allowed; and
- h) if the ES requests media to leave the meeting room this is to be done immediately.

¹ “One time” means the clearance given is only effective for that particular meeting. Should there be another meeting for the same agenda item, the same should also be cleared and agreed by all Members prior to the meeting.

NPFC Policy on Support to Specialist Experts to the Secretariat or Commission

ABSTRACT:

The intent of this policy is to provide and publish general terms that can be expected from the Secretariat in support of the various categories of specialist technical assistance to the Secretariat or Commission. This policy is brought forward from last meeting of the Commission and includes suggestions and corrections made by the NPFC Members at the 2nd Commission meeting and by Secretariat after the meeting.

POLICY:

It is envisioned that the Secretariat or Commission shall seek assistance of technical specialists to support the activities of the Secretariat to set up the appropriate mechanisms to provide appropriate Secretariat services to the Commission. It is expected that these specialists shall be sought under four different scenarios:

1. Consultancies, on a task-based assignment for which remuneration is expected;
2. No fee Consultancies from like-minded organizations for system advice and set up with cost of only travel, accommodation and per diems;
3. Long term secondment assignments from Members to provide advice, system or mechanism set up;
4. Interns to provide an opportunity for working with an RFMO, join specific projects ongoing in the Commission and build capacity in understanding the operations and functions of the Commission and the role of the Secretariat.

The Secretariat proposes the following levels of support in each circumstance:

Technical Support	Level of Secretariat support			
	Consultancy	No Fee Consultancy	Long term Secondment (> 1 month)	Intern
Air fare	✓	✓	(Special cases ES can approve air fare)	
DSA as UN rate	✓	✓		
Allowance				200,000 JPY/month to assist in accommodation
Consultancy fee	✓ (see Consultant Remuneration Guideline)			

CONSULTANT REMUNERATION GUIDELINE (draft)

1. In accordance with established practice, the following rates are the basis on which to set the remuneration of consultants employed by the NPFC.

(in United States dollars)
(expressed in gross terms)

<u>Level</u>	<u>Monthly rate</u>	<u>Daily rate</u>
A	4,000 - 6,800	200 - 340
B	6,400 - 11,600	320 - 580

2. Executive Secretary will be responsible for determining the level as well as the precise honorarium in accordance with the criteria set out in paragraphs 3 and 4 below.

3. Assigning the level

The primary consideration in establishing the level to be assigned to the consultant shall be the nature of the services to be provided by the consultant, i.e. the complexity, difficulty and extent of the work to be performed and the degree of expertise required to accomplish it.

Level A: This level is typically used for (i) the university graduate with some pertinent experience or (ii) for an administrative or technical specialist with many years' experience of a quasi-professional nature.

Level B: This level is considered to be the normal level at which the vast majority of the Organization's consultants are employed. It is used for the consultant who is highly trained and has long experience in one of the technical/administrative fields of the Organization. His/her recommendations, for example, may form one of several contributions to the accomplishment of a specific project of a comparatively narrow scope.

4. Determining the honorarium

Once the level has been established, the rate within the range for the level will be determined taking into account such factors as:

- (a) the estimated time required for the consultant to undertake the work involved shall be taken into account as well as the current market rate for comparable work for the specialty concerned, if available, as well as the maximum amount budgeted for the purpose;
- (b) the remuneration to be paid shall be the minimum amount necessary to obtain the services required by the Commission. The level of expertise of the consultant must be appropriate to the importance of the services performed;
- (c) the earnings over the past year on similar arrangements;
- (d) the relationship (favourable or unfavourable) of the consultant's home currency to the US dollar;
- (e) hardship conditions at the duty station.

5. Rates above the maxima

Proposals for rates above the maxima for Level B must be referred with appropriate justification to the Chairman of the Commission for approval.

6. The total remuneration payable to a consultant shall be specified in the special service agreement (SSA) in gross terms, i.e. before tax. The remuneration of a consultant shall normally be paid in a lump-sum on satisfactory completion of the services described in the SSA.

NO FEE CONSULTANCY

In case of mutual cooperation with other RFMOs and Agencies and their consent to dispatch their professional staff to assist and advise on specific technical matters, consultancy remuneration shall be zero however the Executive Secretary has the authority to provide travel expenses.

LONG TERM SECONDMENT POLICY

Introduction

NPFC invites citizens from its member Parties to apply for the NPFC secondment. The period of the secondment is from 1 to 12 months. The secondee will work at the NPFC Secretariat in Tokyo, Japan.

Objective

To assist NPFC Secretariat in setting up new systems and mechanisms, and provide advice on operational matters.

Qualifications of Candidates

This individual is a senior technical specialist from a Member Party who can assist the Secretariat in the set-up of key Commission systems, e.g., data, website, intranet, VMS, science projects, and others.

Period of internship: Start on or about (TBA) for a period from 1 (one) to 12 (twelve) months. Deadline for application: (TBA)

Guidelines for application and selection procedure

1. Applicants will apply to the NPFC Secretariat following the procedure described on the NPFC website. Applicants must describe their interests and qualifications in a cover letter, provide a resume delineating their work experience, and submit a reference letter written by Member's Representative.
2. Applications (including cover letter, resume, and reference letter) must be received by the NPFC Secretariat 60 days prior to the NPFC Annual Meeting. The NPFC Executive Secretary will review applications and transmit his/her recommendation(s) to the NPFC Points of Contact 30 days prior to the NPFC Annual Meeting.
3. The Commission will announce the successful secondee at the Annual Meeting. The NPFC Secretariat staff will contact the secondee immediately after the Annual Meeting by email, or by phone, or by regular mail to make arrangements with the secondee to assume the secondment.

Travel expenses

The secondee may or may not be provided air travel at economy rate subject to discussions and approval of the Executive Secretary.

NPFC INTERNSHIP PROGRAM

Introduction

NPFC invites citizens from its member Parties to apply for the NPFC Internship Program. The period of the internship is up to six months. One intern per year will be accepted upon approval of the Commission. The intern will work at the NPFC Secretariat in Tokyo, Japan.

Objectives

The NPFC Internship Program has two goals:

1. to help early-career professionals gain experience and knowledge in operations of the Commission, and
2. to increase the capacity of the NPFC secretariat through the presence of an additional professional bringing his/her experience and knowledge.

Nature of the Internship

The intern works under the supervision of the Executive Secretary and/or his/her designates and may be given a wide variety of tasks:

- fisheries management;
- fisheries science;
- databases;
- administrative, meeting coordination, publications; and
- other NPFC activities delegated by the Executive Secretary.

Period of internship: Start on or about (TBA) for a period up to a maximum of 6 (six) months.
Deadline for application: (TBA)

Qualifications of Candidates

Applicants must be from NPFC Member, have a minimum of a university degree, the ability to read, write, and speak English, the ability to use computers and the internet, and demonstrated personal initiative.

Applicants must currently be a part of the government or academic sector, a recent graduate, or currently enrolled in school for an advanced degree.

Guidelines for application and selection procedure

Applicants will apply to the NPFC Secretariat following the procedure described on the NPFC website. Applicants must describe their interests and qualifications in a cover letter, provide a resume delineating their academic and work experience, and submit two professional reference letters.

Applications (including cover letter, resume, and two reference letters) must be received by the NPFC Secretariat 60 days prior to the NPFC Annual Meeting.

The NPFC Executive Secretary will review applications and transmit his/her recommendation(s) to the NPFC Points of Contact 30 days prior to the NPFC Annual Meeting.

The Commission will announce the successful intern at the Annual Meeting.

The NPFC Secretariat staff will contact the successful intern immediately after the Annual Meeting by email, or by phone, or by regular mail to make arrangements with the intern to assume the internship

Financial Support

NPFC will provide a stipend of 200,000 JPY per month to assist in accommodation and living costs. Travel costs for the intern to and from their place of residence and the location of the Secretariat will be at his/her own expense or by home country support. Travel expenses associated with the Intern's work in the Secretariat will be covered by NPFC. The Intern's medical insurance and benefits are not covered by the NPFC Internship Program.

How to Apply

Procedure for applying for the NPFC Internship Program:

Submit the following to the Secretariat by email (secretariat@npfc.int):

- 1) A cover letter describing applicant's interests and qualifications,
- 2) Resume showing academic and/or work experience
- 3) Two professional letters of reference

Deadline of submission: (TBA)

Starting date of the next Internship: on or about (TBA)

Duration of internship: maximum of six months

NPFC Document Rules

Abstract. This paper is intended to classify documents submitted to or developed by the NPFC and its subsidiaries and establishes rules for each type of document. It describes document requirements, includes examples which *can be used as templates* and provides guidelines for submission of NPFC documents.

The paper was adopted by the Commission at its 2nd Annual Session. The current version is the revision of that paper including new NPFC header and footer (appendices 2-6) and also Secretariat's suggestions in track changes based on its experience in handling NPFC papers past year.

TYPES OF NPFC DOCUMENTS

Working Papers (WP) are documents generated by the Members or the Secretariat for consideration and discussion by the Members.

Information Papers (IP) are submitted by the Members and present information which may be useful for the Commission, does not require discussion, but may provide background for WPs.

Observer Papers (OP) are Information Papers submitted by Observers.

Meeting Info Papers (MIP) provide organizational support to participants, i.e. agenda, schedule, meeting venue etc.

Reference Documents (RD) include key NPFC documents relevant to the meeting (Convention, Rules of Procedure, CMMs etc.)

Meeting Reports (spelled out with the acronym of the meeting before wording, e.g., SSC VME01 Report) summarize results of the meetings of the Commission and its subsidiaries.

Annual Reports (AR) are generated by the Members and describe how the Member of the Commission has implemented the conservation and management measures and monitoring, control and surveillance and enforcement procedures adopted by the Commission. It has a separate part (Part II) that provides confidential information on compliance activities of the Members.

Compliance Reports (CR) are reports from the Secretariat on the assessment of Member's compliance with CMMs (confidential until approved).

Vessel Registration Reports (VR) are the complete lists with all the details required in accordance with CMM 01-2015 for all vessels of a Member authorized by that Member to operate in the NPFC Convention Area.

Workshop Reports (WR) are extended abstracts of presentations given at NPFC workshops.

Other documents are papers issued on an irregular basis and do not meet above descriptions.

REQUIREMENTS FOR NPFC DOCUMENTS

All documents submitted to or developed by the NPFC and its subsidiaries shall include header (NPFC+logo), document number (appendix 1), page numbers, title, and, if appropriate, author(s) and affiliation. Specific requirements to different types of documents are as follows:

Working Paper shall have an abstract. It also *may* have cover page and citation that is strongly recommended for scientific papers which have not yet been published. Citation format: Author(s). Year. Title. Document number. # pp. (number of pages) Available at <http://www.npfc.int>. (appendix 2)

Meeting Report shall have cover page and citation. Citation format: NPFC or its subsidiary. Year. Title. Document number. # pp. (number of pages). Available at <http://www.npfc.int>. (appendix 3)

Annual Report shall have cover page and citation. Citation format: Member. Year. Title. Document number. # pp. (number of pages). Available at <http://www.npfc.int>. (appendix 4 and 5 for Part I and II respectively).

Compliance Report *may* have cover page and citation, if necessary. Citation format: Member. Year. Title. Document number. # pp. (number of pages). Available at <http://www.npfc.int>.

Vessel Registration Report *may* have cover page and citation, if necessary. Citation format: NPFC or its subsidiary. Year. Title. Document number. # pp. (number of pages). Available at <http://www.npfc.int>. (same as appendix 5)

Workshop Report shall have cover page, summary, list of sponsors and organizing committee, table of contents, list of participants, and extended abstracts. Citation format for workshop abstracts: Author(s). Year. Title. NPFC Workshop Report #. P. #. Available at <http://www.npfc.int>. (appendix 6).

Reference Documents/Papers, Meeting Info Papers, Information Papers, Observer Papers and other NPFC documents do not have specific requirements but shall follow common rules for numbering and content for all documents noted above.

GUIDELINES FOR SUBMISSION OF NPFC DOCUMENTS

Submission

NPFC Documents must be prepared in English and submitted to the Secretariat through the Commission's point of contact in each Member.

Submission of all documents must be in electronic form unless there are special circumstances and be sent by electronic mail.

All text, tables, and figures must be embedded in the file.

Document number

The Secretariat will assign a document number to completed documents in the order they are received. If a document is revised, the Secretariat will add "Rev #" in the end of document number.

Citation

In case the document is not citable, insert one or any following sentences under the document number:

NOT TO BE CITED, or NOT TO BE CITED WITHOUT PERMISSION OF THE

ISSUING AGENCY, and/or NOT TO BE DISTRIBUTED WITHOUT AUTHORIZATION OF THE ISSUING AGENCY.

Uploading on the Website

The Secretariat will upload submitted documents to the Meetings page of the NPFC website which will be accessible for Members only. After the adoption of documents at the Annual Meeting, documents will be posted in the public area of the NPFC website. Documents determined to contain sensitive information shall remain on the Members' Area of the webpage.

Deadlines

The Secretariat encourages the Members to follow deadlines for submission of documents as per Rules of Procedure to give others enough time for consideration and, therefore, make the Commission meetings more effective and productive.

Document type	Deadline	Clause of the NPFC Rules of Procedure
<i>Documents from the Members</i>		
Annual report	End of February	8.5
Compliance Report	End of February	Under same guidelines as Annual Report, e.g., AR Part 2
Working Paper	30 days before the opening of the meeting	5.7.2
Working Paper (subsidiary bodies, 45 days ¹)	14 days before the opening of the meeting (except where meetings are coincidental)	5.7.3
<i>Documents from the Secretariat</i>		
Provisional Agenda	90 days before the Meeting	5.1.1
Revised Provisional Agenda	60 days before the Meeting	5.1.2

¹ For documents or proposals that require the input of subsidiary bodies, and the meeting of such subsidiary body concluded within 45 days of the opening of a regular Commission meeting

Meeting Papers	30 days prior to, or at least 14 days prior to the applicable Meeting	5.7.1
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- Members and Observers are encouraged to submit Information and Observer Papers in as much advance notice as possible.

Documents submitted during the meeting will not be discussed at the meeting. They will be labeled as Information Papers for consideration by the Members. Members may, however, decide to reconsider them as Working Papers for full discussion.

DOCUMENTS AVAILABILITY AT THE MEETING

The Secretariat provides participants with the Meeting Info Papers at meeting registration. This document package includes Provisional Agenda, Provisional Annotated Agenda, Indicative Schedule, Provisional List of Documents, and Meeting Information.

Hard copy of other documents will not be available at the meeting site except two copies for each member's Heads of Delegation. Participants must either download the documents from the website to their own devices, or bring their own hard copy to the meeting.

Secretariat considers development of electronic means (e.g. SharePoint) to make documents available during the meetings.

Numbering for NPFC Meeting Documents

The following is proposed for an official numbering scheme for each of the official NPFC meetings. These are based on the numbering scheme of the PrepCon and other RFMOs.

1. Annual Session of the Commission

Reference Documents

Be referred by name only.

Meeting Info Papers

NPFC – year – COM+# mtg – MIP# (rev # if needed) – title e.g., NPFC-2016-MIP01

Working Papers

NPFC – year – COM+# mtg – WP# (rev # if needed)

Information Papers

NPFC – year – COM+# mtg – IP# (rev # if needed) Observer Papers

NPFC – year – COM+# mtg – OP#

Meeting Report

NPFC – year – COM+# mtg – Report (draft/provisional/final)

2. Scientific Committee Meeting

Reference Documents

Be referred by name only.

Meeting Info Papers

NPFC – year-SC+# mtg– MIP# (rev # if needed) Working Papers

NPFC – year-SC+# mtg– WP# (rev # if needed)

Information Papers

NPFC – year – SC+# mtg - IP# (rev # if needed)

Observer Papers

NPFC-year-SC+# mtg– OP#

Meeting Report

NPFC – year – SC+# mtg–Report (draft/provisional/final)

3. Small Scientific Committee Meetings

Reference Documents

Be referred by name only.

Meeting Info Papers

NPFC-year-SSC– Title of SSC+# mtg– MIP# (rev # if needed)

Working Papers

NPFC-year-SSC– Title of SSC+# mtg-WP# (rev # if needed)

Information Papers

NPFC – year – SSC– Title of SSC +# mtg - IP# (rev # if needed)

Observer Papers

NPFC-year-SSC–Title of SSC+# mtg– OP#

Meeting Report

NPFC-year-SSC–Title of SSC+#mtg–Report (draft/provisional/final)

4. Technical and Compliance Committee Meeting

Reference Documents

Be referred by name only.

Meeting Info Papers

NPFC-year-TCC+# mtg– IP# (rev # if needed) Working Papers

NPFC-year-TCC+# mtg– WP# (rev # if needed)

Information Papers

NPFC – year – TCC +# mtg - IP# (rev # if needed)

Observer Papers

NPFC-year-TCC+# mtg–OP#

Reports from TCC Working Groups

NPFC-year-TCC-WG Title (e.g, HSBI)+#mtg– Doc # e.g.,

NPFC-2016-TCC-WG-HSBI01-01

Meeting Report

NPFC-year-TCC+#mtg–Report (draft/provisional/final)

5. Working Groups of the Technical and Compliance Committee (if warranted)

Reference Documents

Be referred by name only.

Meeting Info Papers

NPFC-year-TCC-WG-Title of WG Mtg+# mtg– MIP# (rev # if needed)

Working Papers

NPFC-year-TCC-WG-Title of WG Mtg+# mtg– WP# (rev # if needed)

Information Papers

NPFC-year-TCC-WG-Title of WG Mtg+# mtg– IP# (rev # if needed)

Observer Papers

NPFC-year-TCC-WG-Title of WG Mtg+# mtg– OP#

Meeting Report

NPFC-year-TCC-WG-Title of WG Mtg+#mtg–Report (draft/
provisional/final)

6. Special Sessions of the Commission

Reference Documents

Be referred by name only.

Meeting Info Papers

NPFC-SS – year – IP# (rev # if needed)

Working Papers

NPFC-SS – year – WP# (rev # if needed) Information Papers

NPFC-SS – year – IP# (rev # if needed)

Observer Papers

NPFC-SS – year – OP#

Meeting Report

NPFC-SS – year –Report (draft/provisional/final)

7. Finance and Administration Committee

Reference Documents

Be referred by name only.

Meeting Info Papers

NPFC– year – FAC +# mtg - MIP# (rev # if needed)

Working Papers

NPFC– year – FAC +# mtg - WP# (rev # if needed)

Informational Papers

NPFC– year – FAC +# mtg - IP# (rev # if needed)

Meeting Report

NPFC– year – FAC +# mtg - Report (draft/provisional/final)

*It is proposed that **special subject reports** (Annual Reports; Compliance Reports; Vessel Registration Reports – Authorised and Active) required from all parties would be numbered in the following manner:*

Annual Reports

NPFC-year-AR Canada-(Part I or Part II)

NPFC-year-AR China-(Part I or Part II)

NPFC-year-AR Japan-(Part I or Part II)

NPFC-year- AR Korea-(Part I or Part II)

NPFC-year-AR Russia-(Part I or Part II)

NPFC-year-Chinese Taipei-(Part I or Part II)

Compliance Reports

NPFC-year-CR

Vessel Registration Reports

NPFC-year-VR Canada – Authorised/Active (as appropriate)

NPFC-year-VR China – Authorised/Active (as appropriate)

NPFC-year-VR Japan – Authorised/Active (as appropriate)

NPFC-year-VR Korea – Authorised/Active (as appropriate)

NPFC-year-VR Russia – Authorised/Active (as appropriate)

NPFC-year-VR Chinese Taipei – Authorised/Active (as appropriate)



North Pacific Fisheries Commission

Annex K2

NPFC-2016-SC01-WP01 (Rev 1)

Summary for the stock assessment of chub mackerel (Pacific stock) in 2015

by **Ryuji Yukami**

Stock Assessment Group, National Research Institute of Fisheries Science,
Fisheries Research Agency, Japan

March 2016

This paper may be cited in the following manner:

Yukami R. 2016. Summary for the stock assessment of chub mackerel (Pacific stock) in 2015. NPFC-2016-SC01-WP01 (Rev 1). 6 pp. (Available at www.npfc.int)

1st meeting of the Small Scientific Committee on Pacific Saury Report

April 2016

This paper may be cited in the following manner:

Small Scientific Committee on Pacific Saury. 2016. Meeting Report. NPFC-2016-SSC PS01-Final Report. 21 pp. (Available at www.npfc.int)

Annual Report

Part I

by Canada

April 2016

This paper may be cited in the following manner:

Canada. 2016. Annual Report. NPFC-2016-AR Canada-Part I (Rev 4). 10 pp.

Annual Report

Part II

by

Canada

April 2016

WORKSHOP REPORT

Pacific saury stock assessment

Technical Editors: Aleksandr Zavolokin and Peter Flewwelling

Tokyo, Japan, 2016

COOPERATING NON-CONTRACTING PARTIES

REAFFIRMING the objective of the NPFC Convention is to ensure the long-term conservation and sustainable use of the fisheries resources in the Convention Area while protecting the marine ecosystems of the North Pacific Ocean in which these resources occur.

RECALLING Article 20(3) of the NPFC Convention that provides for members of the Commission to request the non-Contracting Party identified in paragraph 2 to cooperate fully with the Commission either by becoming a Contracting Party or by agreeing to apply the conservation and management measures adopted by the Commission.

NOTING further in Article 20(3) that subject to such terms and conditions as the Commission may establish, such a cooperating non-Contracting Party to this Convention may enjoy benefits from participation in the fisheries commensurate with, *inter alia*, its commitment to comply with and its record of compliance with conservation and management measures in respect of the relevant fisheries resources and any financial contribution it makes to the Commission.

RECALLING that there are Non-Contracting Parties either already fishing in the NPFC Convention Area (CA) or who have expressed an interest to fish in this area and have expressed a willingness to cooperate fully with the Commission and apply the conservation and management measures adopted by the Commission.

RECOGNIZING that there are two key categories of Cooperating Non-Contracting Parties, those that fish and those that do not fish, but that wish to cooperate with the Commission for other purposes either for information sharing or trade-related reasons.

REAFFIRMING from Article 20(4) of the NPFC Convention that each member of the Commission shall take measures consistent with the Convention, the 1982 Convention, the 1995 Agreement and other relevant international law to deter the activities of fishing vessels entitled to fly the flags of non-Contracting Parties to the NPFC Convention that undermine the effectiveness of conservation and management measures adopted by the Commission.

And for GIVING EFFECT to Article 20 of the NPFC Convention:

1. Each year, the Executive Secretary shall contact all non-Contracting Parties whose vessels fish in the Convention Area and, if possible, non-Contracting Parties known to have an

interest in fishing in the Convention Area, to request them to become a Contracting Party to the Convention or to attain the status of Cooperating non-Contracting Party (CNCP).

2. A non-Contracting Party of the Commission, with an interest in the fishery, or whose vessels fish or intend to fish in the Convention Area, may request the Commission for the status of Cooperating non-Contracting Party (CNCP). Any such request and supporting information shall be in English and shall be received by the Executive Secretary at least 60 days in advance of the annual meeting of the Technical and Compliance Committee meeting at which the request will be considered. The Executive Secretary shall notify all members of the Commission of any such request and circulate the full application to all members.
3. A non-Contracting Party seeking the status of CNCP shall include with its request:
 - a. its reason for seeking CNCP status,
 - b. a commitment to cooperate fully in the implementation of conservation and management measures adopted by the Commission and to ensure that fishing vessels flying its flag and fishing in the Convention Area and, to the greatest extent possible, its nationals, comply with the provisions of the Convention and conservation and management measures adopted by the Commission;
 - c. an explicit commitment to accept high seas boarding and inspections in accordance with the Commission's procedures on high seas boarding and inspection;
 - d. full data on its historical fisheries in the Convention Area, including nominal catches, number/type of vessels, name of fishing vessels, fishing effort and fishing areas;
 - e. any further relevant information as determined by the Commission.
4. A non-Contracting Party seeking the status of CNCP is encouraged to make a contribution commensurate with what it would be assessed should it become a Contracting Party, pursuant to the scheme of contributions established by the Commission in accordance with Article 12(3) of the Convention, or an amount as determined by the Commission.
5. The Technical and Compliance Committee (TCC) shall assess applications for CNCP status and provide recommendations and technical advice to the Commission, which shall consider, *inter alia*:
 - a. whether the CNCP application includes all information required under paragraphs 2 and 3;
 - b. in the case of renewal, the record of compliance of the applicant with the provisions of the Convention and the conservation and management measures adopted by the

- Commission, and where appropriate, the fisheries laws and regulations of Members of the Commission;
- c. its record of responding to any IUU activities by vessels flying its flag that have been brought to its attention, in accordance with Article 17 of the NPFC Convention;
 - d. as appropriate, the record of compliance of the applicant with conservation and management measures of other Regional Fisheries Management Organizations (RFMOs); and
 - e. in the case of applications for renewal of CNCP status, whether the applicant is meeting all paragraph 11 requirements for CNCP.
6. The Executive Secretary shall forward a copy of the relevant TCC recommendations and advice to the non-Contracting Party applicant as soon as practicable, including all relevant CMMs to facilitate their compliance.
 7. The non-Contracting Party applicant shall have the opportunity to consider the recommendations and advice of the TCC, and to submit additional information if necessary in advance of the Commission's decision on its application.
 8. The Commission shall, in determining whether a non-Contracting Party is accorded CNCP status, have regard to the criteria outlined in paragraph 3.
 9. The Commission shall also consider information available from other RFMOs relating to non-Contracting Parties seeking CNCP status, as well as data submitted by such non-Contracting Parties to the Commission. Caution shall be used so as not to introduce into the Convention Area excess fishing capacity from other regions or IUU fishing activities in granting CNCP status to such non-Contracting Parties.
 10. *The Commission shall accord CNCP status on a bi-annual basis.* It may renew the CNCP status subject to a review of the CNCP's compliance with the Convention's objectives and requirements.
 11. CNCPs seeking to renew their status as a CNCP shall comply with other requirements the Commission may prescribe to ensure compliance with conservation and management measures adopted by the Commission.

12. CNCPs are entitled to participate at meetings of the Commission and its subsidiary bodies as Observers.
13. CNCPs shall:
 - a. comply with all conservation and management measures adopted by the Commission;
 - b. provide all data that members of the Commission are required to submit, in a timely manner, in accordance with the format and standards adopted by the Commission;
 - c. inform the Commission annually of the measures it takes to ensure compliance by its vessels with the Commission's conservation and management measures;
 - d. respond in a timely manner to alleged violations of conservation and management measures adopted by the Commission and any IUU activities of vessels flying its flag, as requested by a member of the Commission or determined by the appropriate subsidiary bodies of the Commission and communicate to the member making the request and to the Commission, the actions it has taken against the vessels in accordance with the provisions of Article 17 of the Convention;
 - e. accept boarding and inspections in accordance with Commission high seas boarding and inspection procedures.
14. Without prejudice to the sovereign rights of coastal States for the purpose of exploring and exploiting, conserving and managing the fish stocks within areas under national jurisdiction, and following the granting of CNCP status, the Commission shall, where necessary, determine how the participatory rights of CNCPs will be limited by the conservation and management measures adopted by the Commission. In giving effect to this paragraph, the Commission shall take into account *inter alia*:
 - a. the status of the fish stocks under the management mandate of the Commission and the existing level of fishing effort in the fishery;
 - b. the respective interests, fishing patterns and fishing practices of new and existing members or participants;
 - c. the respective contributions of new and existing members or participants to conservation and management of the stocks, to the collection and provision of accurate data and to the conduct of scientific research on the stocks;
15. The limits determined for CNCPs under paragraph 12 may be reviewed by the Commission from time to time in accordance with this measure and other conservation and management measures adopted by the Commission.

16. The Commission shall monitor the activities of nationals and fishing vessels of CNCPs, including their record of compliance with the provisions of the Convention and conservation and management measures adopted by the Commission.
17. CNCPs that fail to comply with any of the conservation and management measures adopted by the Commission shall be deemed to have undermined the effectiveness of the conservation and management measures adopted by the Commission. The Commission shall take appropriate action, which may include revocation of CNCP status and/or sanctions and penalties against such CNCPs, in accordance with the Convention and adopted conservation and management measures.
18. The members of the Commission shall, individually or jointly, request non-Contracting Parties to this Convention whose vessels fish in the Convention Area to cooperate fully in the implementation of the conservation and management measures adopted by the Commission and urge them to apply for the status of a Contracting Party or Cooperating non-Contracting Party.

Annex J

**CONSERVATION AND MANAGEMENT MEASURE TO ESTABLISH A
LIST OF VESSELS PRESUMED TO HAVE CARRIED OUT ILLEGAL,
UNREPORTED AND UNREGULATED FISHING ACTIVITIES IN THE
CONVENTION AREA OF THE NORTH PACIFIC FISHERIES
COMMISSION**

The North Pacific Fisheries Commission (NPFC):

Recalling that the FAO Council adopted on 23 June 2001 an International Plan of Action to prevent, deter and eliminate illegal, unreported and unregulated fishing (IPOA-IUU). This plan stipulates that the identification of the vessels carrying out illegal, unreported and unregulated (IUU) fishing activities should follow agreed procedures and be applied in an equitable, transparent and non-discriminatory way;

Concerned that IUU fishing activities in the Convention Area undermine the effectiveness of the conservation measures adopted by the NPFC;

Further concerned that there is a possibility that vessel owners engaged in such fishing activities may have re-flagged their vessels to avoid compliance with NPFC measures;

Determined to address the challenge of an increase in IUU fishing activities by way of measures to be applied in respect to vessels, without prejudice to further measures adopted in respect of Members, Cooperating Non-Contracting Parties (CNCPS) and non-Contracting Parties under the relevant NPFC instruments;

Considering the action undertaken in other regional fisheries organizations to address this issue;

Conscious of the need to address, as a matter of priority, the issue of vessels conducting IUU fishing activities;

Noting that efforts to prevent, deter and eliminate IUU fishing must be addressed in the light of all relevant international fisheries instruments and in accordance with other international obligations, including the rights and obligations established under the World Trade Organization (WTO) Agreement; and

Recalling Articles 13, 14, 15 and 17 of the Convention on the Conservation and Management of High Seas Fisheries Resources in the North Pacific Ocean (hereinafter called the “Convention”) regarding the flag State duties, port State duties, duties of fishing entities and provisions for compliance and enforcement;

Adopts the following conservation and management measure in accordance with Article 7 of the Convention:

Identification of IUU activities

1. At each meeting, the Commission will identify those vessels which have engaged in fishing activities for species covered by the Convention within the Convention Area in a manner which has undermined the effectiveness of the Convention and the NPFC measures in force, and shall establish, and, as necessary, amend in subsequently, a list of such vessels (the IUU Vessel List), in accordance with the procedures and criteria set out in this conservation measure.
2. This identification shall be suitably documented, *inter alia*, on reports from Members/CNCPs relating to NPFC Conservation measures in force, trade information obtained on the basis of relevant trade statistics such as Food and Agriculture Organization of the United Nations (FAO) data, statistical documents and other national or international verifiable statistics, as well as any other information obtained from port States and/or gathered from the fishing grounds that is suitably documented. Information from Members/CNCPs should be provided in the format approved by the Commission.
3. For the purposes of this conservation measure, vessels fishing for species covered by the Convention are presumed to have carried out IUU fishing activities, as described in the IPOA on IUU fishing, in the Convention Area when a Member/CNCP presents suitably documented information that such vessels, *inter alia*:
 - a. Harvest species covered by the Convention in the Convention Area and are not on the NPFC record of authorized vessels or
 - b. Engage in fishing for fishery resources when the Member or CNCP, under whose flag the vessel is sailing, has exhausted or has no quotas, catch limit or effort allocation, including, if applicable, those received from another Member/CNCP under relevant NPFC conservation measures, or
 - c. Do not record or report their catches made in the Convention Area consistent with NPFC measures, or make false reports, or
 - d. Take and land undersized fish in contravention of relevant NPFC conservation measures, or
 - e. Fish in a closed area or during a closed season in contravention of relevant NPFC conservation measures, or
 - f. Use prohibited fishing gear in contravention of relevant NPFC conservation measures, or
 - g. Transship with, participate in joint fishing operations with, support or re-supply vessels included in the IUU Vessel List, or
 - h. Are without nationality and harvest species covered by the Convention in the Convention Area, or
 - i. Engage in any other fishing activities that undermine the provisions of the Convention or any other NPFC conservation measures.
4. If a Member/CNCP has not taken such measures as may be necessary so that fishing vessels entitled to fly its flag avoid conducting unauthorized fishing activities within areas under national jurisdiction of another State adjacent to the Convention Area in accordance with Article 13, the Member/CNCP, within whose areas under national jurisdiction the unauthorized fishing activities were conducted, may submit a proposal for listing the vessels on the draft IUU List if consultation with the Member/CNCP has not resolved the matter. Relevant procedures set out in paragraph 6 below shall apply for proposals under this paragraph.

5. If a Member/CNCP has information that a vessel is presumed to be carrying out IUU activities in the Convention Area during the years from the previous meeting to the current year, the Member/CNCP with such information is encouraged to provide that information as soon as possible to, and consult with, any Member/CNCP or non-Contracting Party that may have a vessel presumed to be carrying out IUU activities for clarification before providing that information to the Executive Secretary under the provisions of paragraph 6.

Information on alleged IUU fishing activities

6. At least 70 days before the meeting of the Technical and Compliance Committee (TCC), Members/CNCPs shall transmit to the Executive Secretary their list of vessels presumed to be carrying out IUU activities in the Convention Area during the years from the previous meeting to the current year, accompanied by suitably documented information, as provided in para 2, concerning the presumption of this IUU activity.
7. Before or at the same time as transmitting a list of presumed IUU vessels to the Executive Secretary, the Member/CNCP shall notify, either directly or through the Executive Secretary, the relevant Member/CNCP/Non-Contracting Party of a vessel's inclusion on this list and provide a copy of the pertinent suitably documented information. The Member/CNCP/Non-Contracting Party shall promptly acknowledge receipt of the notification. If no acknowledgement is received within 10 days of the date of transmittal, the Executive Secretary, Member/CNCP shall retransmit the notification through an alternative means of communication.

Draft IUU Vessel List

8. The Executive Secretary shall draw up a draft IUU Vessel List incorporating the lists of vessels and suitably documented information received pursuant to para 6, and any other suitably documented information at his disposal, and shall transmit it, together with all the supporting information provided, to all Members/CNCPs, as well as to non-Contracting Parties with vessels on the list, at least 55 days before the TCC's meeting except otherwise decided by the TCC.
9. The Executive Secretary shall request each Member/CNCP/non-Contracting Party with vessels on the draft IUU Vessel List to notify the owner of the vessels of their inclusion in that list, and of the consequences of their inclusion being confirmed in the IUU Vessel List.
10. Upon receipt of the draft IUU Vessel List, Members/CNCPs shall closely monitor the vessels included in that list in order to follow their activities and possible changes of name, flag or registered owner.
11. As appropriate, Members/CNCPs/non-Contracting Parties with vessels on the list should transmit, at least 10 days before the TCC's meeting, their comments to the Executive Secretary, including suitably documented information, showing that the vessels have fished in a manner consistent with NPFC conservation measures or have fished exclusively for species not covered by the Convention.

12. The Executive Secretary shall re-circulate the draft IUU Vessel List, 7 days in advance of the TCC's meeting, to the Members/CNCPs/non-Contracting Parties concerned, together with all the suitably documented information provided pursuant to paras 6 and 11 above.
13. Members/CNCPs/non-Contracting Parties may at any time submit to the Executive Secretary any additional suitably documented information regarding any vessels on the draft IUU Vessel List. The Executive Secretary shall circulate this additional information to all Members/CNCPs and to the non-Contracting Parties concerned immediately upon receipt of such information.

Provisional and current IUU Vessel List

14. The NPFC's IUU Vessel List adopted at the previous meeting of the Commission, as well as any new suitably documented information regarding this list, including intersessional amendments, shall be transmitted to Members/CNCPs and the non-Contracting Parties concerned in conjunction with the draft IUU Vessel List and materials outlined in para 8.
15. Members/CNCPs/non-Contracting Parties with vessels on the current NPFC IUU Vessel List should transmit at least 30 days before the meeting of the TCC, but may submit at any time, to the Executive Secretary suitably documented information regarding any of the vessels on the current NPFC IUU Vessel List, including, where appropriate, suitably documented information as provided for in paragraph 29. The Executive Secretary shall re-circulate the current NPFC IUU Vessel List two weeks in advance of the meeting of the TCC to the Members/CNCPs and non-Contracting Parties concerned, together with all the information provided pursuant to paragraph 14 and this paragraph.
16. At its meeting, the TCC shall:
 - a. following consideration of the draft IUU Vessel List and the suitably documented information circulated under paras 8, 12 and 13, adopt a Provisional IUU Vessel List; and
 - b. following consideration of the current NPFC IUU Vessel List and the suitably documented information circulated under paras 14 and 15, recommend to the Commission which, if any, vessels should be removed from the current NPFC IUU Vessel List.
17. The TCC shall not include a vessel on the Provisional IUU Vessel List if the Member/CNCP/non-Contracting Party, under whose flag the vessel is sailing, demonstrates that:
 - a. The vessel fished in a manner consistent with the Convention and NPFC Conservation Measures or have fished exclusively for species not covered by the NPFC Convention, or
 - b. Effective action has been taken in response to the IUU fishing activities in question, such as, *inter alia*, prosecution or the imposition of sanctions of adequate severity.
18. The TCC shall not include a vessel on the Provisional IUU Vessel List if the notifying Member/CNCP did not follow the provisions of para 7.
19. The TCC shall recommend removal of a vessel from the current NPFC IUU Vessel List only if the Member/CNCP/Non-Contracting Party, under whose flag the vessel is sailing, submits to the Executive Secretary the information provided in para 29 of this measure.

20. Following the examination referred to in para 16, the TCC shall submit the Provisional IUU Vessel List to the Commission for its consideration, and as appropriate, recommend any proposed changes to the current NPFC IUU Vessel List.
21. The draft IUU Vessel List, Provisional IUU Vessel List, and the NPFC IUU Vessel List shall contain the following details for each vessel:
 - a. name and previous names, if any;
 - b. flag and previous flags, if any;
 - c. owner and previous owners, including beneficial owners, if any;
 - d. operator and previous operators, if any;
 - e. call sign and previous call signs, if any;
 - f. Lloyds/IMO number, if any;
 - g. photographs, where available;
 - h. date first included on the IUU Vessel List;
 - i. summary of activities which justify inclusion of the vessel on the list, together with references to all relevant documents informing of and evidencing those activities; and
 - j. the date(s) and subsequent sightings of the vessels, if any, and any other related activities.

NPFC IUU Vessel List

22. At its meeting, the Commission shall review the Provisional IUU Vessel List, taking into account any new suitably documented information related to vessels on the Provisional IUU Vessel List, and any recommendations to amend the current NPFC IUU Vessel List made pursuant to paragraph 20 above, and adopt a new NPFC IUU Vessel List. To the maximum extent possible Members/CNCPs/non-Contracting Parties concerned shall provide any new suitably documented information at least two weeks before the meeting of the Commission.
23. Upon adopting the new NPFC IUU Vessel List, the Commission shall request Members/CNCPs/non-Contracting Parties with vessels on the NPFC IUU Vessel List to:
 - a. notify the owner of the vessels of its inclusion on the NPFC IUU Vessel List and the consequences that result from being included in the list, and
 - b. take all the necessary measures to eliminate these IUU fishing activities, including, if necessary, the withdrawal of the registration or the fishing licenses of these vessels, and to inform the Commission of the measures taken in this respect.
24. Members/CNCPs shall take all necessary non-discriminatory measures under their applicable legislation, international law and each Members/CNCPs' international obligations, and pursuant to paras 56 and 66 of the IPOA-IUU to:
 - a. remove or withdraw vessels on the NPFC IUU Vessel List from the NPFC Vessel Registry;
 - b. ensure that fishing vessels, support vessels, mother ships or cargo vessels flying their flag do not participate in any transshipment or joint fishing operations with, support or re-supply vessels on the NPFC IUU Vessel List;
 - c. prohibit the entry into their ports of vessels included on the NPFC IUU Vessel List, except in the case of investigation or *force majeure*;
 - d. prohibit the chartering of a vessel on the NPFC IUU Vessel List;
 - e. refuse to grant their flag to vessels on the NPFC IUU Vessel List, unless the ownership of the vessel has subsequently changed and the new owner has provided sufficient evidence

demonstrating that the previous owner or operator has no legal, beneficial or financial interest in, or control of the vessels, or the Member concerned is satisfied that, having taken into account all relevant facts, the vessel is no longer engaged in or associated with IUU fishing activities;

- f. prohibit commercial transactions, imports, landings and/or transshipment of species covered by the Convention from vessels on the IUU Vessel List;
 - g. encourage traders, importers, transporters and others involved, to refrain from transactions in, and transshipment of, species covered by the Convention caught by vessels on the NPFC IUU Vessel List;
 - h. collect, and exchange with other Members/CNCPs, any appropriate information with the aim of searching for, controlling and preventing false import/export certificates for species covered by the Convention from vessels on the NPFC IUU Vessel List.
25. Members/CNCPs should cooperate with each other and other flag States to strengthen their legal, operational and institutional capacity to take action against their flagged vessels that have engaged in IUU fishing in the Area, including the imposition of adequate sanctions, as an alternative to de-flagging such vessels, thereby rendering such vessels without nationality.
26. The Executive Secretary shall take any measure necessary to ensure publicity of the NPFC IUU Vessel List, in a manner consistent with any applicable confidentiality requirements, including placing it on the NPFC website. Furthermore, the Executive Secretary shall transmit the NPFC IUU Vessel List to the FAO and to other regional fisheries organizations for the purposes of enhancing cooperation between the NPFC and these organizations aimed at preventing, deterring and eliminating IUU fishing.
27. Upon receipt of the final IUU vessel list established by another Regional Fisheries Management Organization (RFMO) and any other information regarding the list including its modification, the Executive Secretary shall circulate it to Members/CNCPs and shall place it on the NPFC website.
28. Without prejudice to the rights of Members/CNCPs and coastal states to take proper action, consistent with international law, including applicable WTO obligations, the Members/CNCPs shall not take any unilateral trade measures or other sanctions against vessels on the draft or Provisional IUU Vessel Lists, pursuant to paras 8 or 16, or that have been removed from the NPFC IUU Vessel List, pursuant to paras 19 and 22, on the grounds that such vessels are involved in IUU fishing activities.

Modification of the NPFC IUU Vessel List

29. Member/CNCPs/non-Contracting Parties with a vessel on the NPFC IUU Vessel List may request the removal of the vessel from the list at any time during the intersessional period by submitting to the Executive Secretary suitably documented information demonstrating that:
- a. it has adopted measures that will seek to ensure that the vessel complies with all NPFC measures; and
 - b. it will be able to assume effectively its duties with regards to the monitoring and control of the vessel's fishing activities in the Convention Area; and

- c. it has taken effective action in response to the IUU fishing activities that resulted in the vessel's inclusion in the NPFC IUU Vessel List, including prosecution or the imposition of sanctions of adequate severity; or
 - d. the vessel has changed ownership and that the new owner can establish that the previous owner no longer has any legal, financial or real interests in the vessel or exercises control over it, and that the new owner has not participated in IUU fishing activities.
30. The Executive Secretary will transmit the removal request, with all the supporting information, to the Members/CNCPs within 15 days following the receipt of the removal request. Members/CNCPs shall promptly acknowledge receipt of the removal request. If no acknowledgement is received within 10 days of the date of transmittal, the Executive Secretary shall retransmit the removal request and shall use additional means available to ensure the request has been received.
31. Each Commission Member shall examine the removal request and notify the Executive Secretary in writing of its decision, and the rationale therefore, regarding the removal of the vessel within 30 days following the notification by the Executive Secretary. Decisions on the request to remove the vessel shall be made in accordance with Rule 2 of the Rules of Procedure.
32. If Commission Members agree to the removal of the vessel from the NPFC IUU Vessel List within the period stipulated in para 30, the Executive Secretary will inform Members/CNCPs, and non-Contracting Parties concerned, FAO and other regional fisheries management organizations, and will remove the vessel from the NPFC IUU Vessel List, as published on the NPFC website.
33. If Commission Members disagree with the request for the removal of the vessel from the IUU Vessel List, the vessel will be maintained on the NPFC IUU Vessel List and the Executive Secretary will inform the Members/CNCPs/non-Contracting Parties that made the removal request.
34. A Member/CNCP with information indicating a change of name and/or an International Radio Call Sign (IRCS) of a vessel appearing on the NPFC IUU Vessel List shall, as soon as practicable, transmit such information to the Executive Secretary. The Executive Secretary shall communicate such information to all Members/CNCPs and, after verification*, update the current NPFC IUU Vessel List on the NPFC website to reflect such information.

* If the Secretariat, after reasonable efforts, is unable to verify the information submitted by the Member/CNCP the vessel name or identifying number will not be updated.

Review

35. This Conservation and Management Measure shall be subject to review and, as appropriate, revision by the TCC and acceptance by the Commission.

NPFC Reporting Form for Illegal Activity

Recalling NPFC CMM 2016 - 02 on *Establishing a list of vessels presumed to have carried out illegal, unreported and unregulated fishing activities in the Convention Area of North Pacific Fisheries Commission*, attached are details of illegal activity recorded in

Details of Vessel

- a. Name of vessel and previous names, if any;
- b. Flag of vessel and previous flags, if any;
- c. Owner and previous owner, including beneficial owners, if any;
- d. Operator of vessel and previous operators, if any;
- e. Call sign of vessel and previous call sign, if any;
- f. Lloyds/IMO number, if any;
- g. Photographs of the vessel, where available;
- h. Date vessel was first included on the IUU List;
- i. Summary of activities which justify inclusion of the vessel on the list, together with references to all relevant documents informing of and evidencing those activities (more detail in section 2)

Details of elements contravened

(Indicate with an "X" the individual elements of CMM contravened, and provide relevant details including date, location, source of information. Additional information can be provided in an attachment, if necessary, and listed under section 3).

Item	Definition	Indicate
a	Harvest species covered by the Convention in the Convention Area and are not on the NPFC record of authorized vessels	
b	Engage in fishing for fishery resources, when the Member or CNCP, under whose flag the vessel is sailing, has exhausted or has no quotas, catch limit or effort allocation, including, if applicable, those received from another Member/CNCP, under relevant NPFC conservation	
c	Do not record or report their catches made in the Convention Area consistent with NPFC Measures, or make false reports	
d	Take and land undersized fish in contravention of relevant NPFC conservation measures	

e	Fish in a closed area or during a closed season in contravention of relevant NPFC conservation measures	
f	Use prohibited fishing gear in contravention of relevant NPFC conservation measures	
g	Transship with, participate in joint fishing operations with, support or re-supply vessels included in the IUU vessels list	
h	Are without nationality and harvest species covered by the Convention in the Convention Area	
i	Engage in any other fishing activities that is in contravention of relevant NPFC conservation measures	
j	Are related to paragraph 4 of this conservation and management measures	

Associated documents

(List here the associated documents that are appended e.g. boarding reports, court proceedings, photographs).

Recommended actions

Item	Recommended actions	Indicate
A	Notification to NPFC Executive Secretary only. No further action is recommended	
B	Notification of illegal activity to NPFC Executive Secretary. Recommend notification of activity to flag Member/CNCP/non-Contracting Party	
C	Recommended for inclusion on NPFC IUU Vessel List	

**Information to be included in all NPFC IUU Vessel
Lists (Draft, Provisional and Final)**

The Draft IUU Vessel List, as well as the Provisional and Final IUU Vessel Lists shall contain the following details, where available:

- a. Name of vessel and previous names, if any;
- b. Flag of vessel and previous flags, if any;
- c. Owner and previous owners, including beneficial owners, if any;
- d. Operator of vessel and previous operators, if any;
- e. Call sign of vessel and previous call signs, if any;
- f. Lloyds/IMO number, if any;
- g. Photographs of the vessel, where available;
- h. Date vessel was first included on the IUU Vessel List;
- i. Summary of activities which justify inclusion of the vessel on the List, together with references to all relevant documents informing of and evidencing those activities.

Annex K

**CONSERVATION AND MANAGEMENT MEASURE
FOR BOTTOM FISHERIES AND PROTECTION OF VULNERABLE
MARINE ECOSYSTEMS IN THE NORTHWESTERN PACIFIC OCEAN**

The North Pacific Fisheries Commission (NPFC),

Strongly supporting protection of vulnerable marine ecosystems (VMEs) and sustainable management of fish stocks based on the best scientific information available;

Recalling the United Nations General Assembly Resolutions (UNGA) on Sustainable Fisheries, particularly paragraphs 66 to 71 of the UNGA59/25 in 2004, paragraphs 69 to 74 of UNGA60/31 in 2005, and paragraphs 69 and 80 to 91 of UNGA61/105 in 2006;

Noting, in particular, paragraphs 66 and 69 of UNGA59/25 that call upon States to take action urgently to address the issue of bottom trawl fisheries on VMEs and to cooperate in the establishment of new regional fisheries management organizations or arrangements;

Recognizing further that fishing activities, including bottom fisheries, are an important contributor to the global food supply and that this must be taken into account when seeking to achieve sustainable fisheries and to protect VMEs;

Recognizing the importance of collecting scientific data to assess the impacts of these fisheries on marine species and VMEs;

Concerned about possible adverse impacts of unregulated expansion of bottom fisheries on marine species and VMEs in the western part of the Convention Area.

Adopts the following Conservation and Management Measure:

1. Scope

A. Coverage

These Measures are to be applied to all bottom fishing activities throughout the high seas areas of the Northwestern Pacific Ocean, defined, for the purposes of this document, as those occurring in the Convention Area as set out in Article 4 of the Convention text to the west of the line of 175 degrees W longitude (here in after called “the western part

of the Convention Area”) including all such areas and marine species other than those species already covered by existing international fisheries management instruments, including bilateral agreements and Regional Fisheries Management Organizations or Arrangements.

B. Management target

Bottom fisheries conducted by vessels operating in the western part of the Convention Area.

2. General purpose

Sustainable management of fish stocks and protection of VMEs in the western part of the Convention Area.

The objective of these Measures is to ensure the long-term conservation and sustainable use of the fisheries resources in the Convention Area while protecting the marine ecosystems of the North Pacific Ocean in which these resources occur. These measures shall set out to prevent significant adverse impacts on VMEs in the Convention Area of the North Pacific Ocean, acknowledging the complex dependency of fishing resources and species belonging to the same ecosystem within VMEs.

The Commission shall re-evaluate, and as appropriate, revise, the definition based on further consideration of the work done through FAO and by NPFC.

3. Principles

The implementation of this CMM shall:

- a. be based on the best scientific information available,
- b. be in accordance with existing international laws and agreements including UNCLOS and other relevant international instruments,
- c. establish appropriate and effective conservation and management measures,
- d. be in accordance with the precautionary approach, and
- e. incorporate an ecosystem approach to fisheries management.

4. Measures

Members of the Commission shall take the following measures in order to achieve sustainable management of fish stocks and protection of VMEs in the western part of the Convention Area:

A. Limit fishing effort in bottom fisheries on the western part of the Convention Area to the

level agreed in February 2007 in terms of the number of fishing vessels and other parameters which reflect the level of fishing effort, fishing capacity or potential impacts on marine ecosystems.

B. Not allow bottom fisheries to expand into the western part of the Convention Area where no such fishing is currently occurring, in particular, by limiting such bottom fisheries to seamounts located south of 45 degrees North Latitude and refrain from bottom fisheries in other areas of the western part of the Convention Area covered by these measures and also not allow bottom fisheries to conduct fishing operation in areas deeper than 1,500m.

C. Notwithstanding subparagraphs A and B above, exceptions to these restrictions may be provided in cases where it can be shown that any fishing activity beyond such limits or in any new areas would not have significant adverse impacts (SAIs) on marine species or any VME. Such fishing activity is subject to an exploratory fishery protocol (Annex 1).

D. Any determinations pursuant to subparagraph C that any proposed fishing activity will not have SAIs on marine species or any VME are to be in accordance with the Science-based Standards and Criteria (Annex 2), which are consistent with the FAO International Guidelines for the Management of Deep-sea Fisheries in the High Seas.

E. Any determinations, by any flag state or pursuant to any subsequent arrangement for the management of the bottom fisheries in the areas covered by these measures, that fishing activity would not have SAIs on marine species or any VMEs, shall be made publicly available through agreed means.

F. Prohibit its vessels from engaging in directed fishing on the following orders: Alcyonacea, Antipatharia, Gorgonacea, and Scleractinia as well as any other indicator species for VMEs as may be identified from time to time by the SC and approved by the Commission.

G. Further, considering accumulated information regarding fishing activities in the western part of the Convention Area, in areas where, in the course of fishing operations, cold water corals more than 50Kg are encountered in one gear retrieval, Members of the Commission shall require vessels flying their flag to cease bottom fishing activities in that location. In such cases, the vessel shall not resume fishing activities until it has relocated a sufficient distance, which shall be no less than 2 nautical miles, so that additional encounters with VMEs are unlikely. All such encounters, including the location and the species in question, shall be reported to the Secretariat, who shall notify the other Members of the Commission so that

appropriate measures can be adopted in respect of the relevant site. It is agreed that the cold water corals include: Alcyonacea, Antipatharia, Gorgonacea, and Scleractinia.

H. C-H seamount and Southeastern part of Koko seamount, specifically for the latter seamount, the area South of 34 degrees 57 minutes North, East of the 400m isobaths, East of 171 degrees 54 minutes East, North of 34 degrees 50 minutes North, are closed precautionary for potential VME conservation. Fishing in these areas requires exploratory fishery protocol (Annex 1).

I. Ensure that the distance between the footrope of the gill net and sea floor is greater than 70 cm.

J. Apply a bottom fisheries closure from November to December

K. Limit annual catch of North Pacific armorhead to 15,000 tons for Japan

5. Contingent Action

Members of the Commission shall submit to the SC their assessments of the impacts of fishing activity on marine species or any VMEs, including the proposed management measures to prevent such impact. Such submissions shall include all relevant data and information in support of any such assessment. Procedures for such reviews including procedures for the provision of advice and recommendations from the SC to the submitting Member are attached (Annex 3). Members will only authorize bottom fishing activity pursuant to para 4 (C).

6. Scientific Information

To facilitate the scientific work associated with the implementation of these measures, each Member of the Commission shall undertake:

A. Collection of Information for purposes of defining the footprint

In implementing paragraphs 4A and 4B, the Members of the Commission shall provide for each year, the number of vessels by gear type, size of vessels (tons), number of fishing days or days on the fishing grounds, total catch by species, and areas fished (names of seamounts) to the Secretariat. The Secretariat shall circulate the information received to the other Members consistent with the approved Interim Data Handling and Data Sharing Protocol. To support assessments of the fisheries and refinement of conservation and management measures, Members of the Commission are to provide update information on an annual basis.

B. Collection of Information

(i) Collection of scientific information from each bottom fishing vessel operating in the western part of the Convention Area.

- a. Catch and effort data
- b. Related information such as time, location, depth, temperature, etc.

(ii) As appropriate the collection of information from research vessels operating in the western part of the Convention Area.

- a. Physical, chemical, biological, oceanographic, meteorological, etc.
- b. Ecosystem surveys.

(iii) Collection of Observer Data

Duly designated observers from the flag member shall collect information from bottom fishing vessels operating in the western part of the Convention Area. Observers shall collect data in accordance with Annex 5. Each Member of the Commission shall submit the reports to the Secretariat in accordance with Annex 4. The Secretariat shall compile this information on an annual basis and make it available to the Members of the Commission.

7. Control of bottom fishing vessels

To strengthen its control over bottom fishing vessels flying its flag, each Member of the Commission shall ensure that all such vessels operating in the western part of the Convention Area be equipped with an operational vessel monitoring system.

8. Observers

All vessels authorized to bottom fishing in the western part of the Convention Area shall carry an observer on board.

EXPLORATORY FISHERY PROTOCOL IN THE NORTH PACIFIC OCEAN

1. From 1 January 2009, all bottom fishing activities in new fishing areas and areas where fishing is prohibited in a precautionary manner or with bottom gear not previously used in the existing fishing areas, are to be considered as “exploratory fisheries” and to be conducted in accordance with this protocol.

2. Precautionary conservation and management measures, including catch and effort controls, are essential during the exploratory phase of deep sea fisheries. Implementation of a precautionary approach to sustainable exploitation of deep sea fisheries shall include the following measures:
 - i. precautionary effort limits, particularly where reliable assessments of sustainable exploitation rates of target and main by-catch species are not available;
 - ii. precautionary measures, including precautionary spatial catch limits where appropriate, to prevent serial depletion of low-productivity stocks;
 - iii. regular review of appropriate indices of stock status and revision downwards of the limits listed above when significant declines are detected;
 - iv. measures to prevent significant adverse impacts on vulnerable marine ecosystems; and
 - v. comprehensive monitoring of all fishing effort, capture of all species and interactions with VMEs.

3. When a member of the Commission would like to conduct exploratory fisheries, it is to follow the following procedure:
 - (1) Prior to the commencement of fishing, the member of the Commission is to circulate the information and assessment in Appendix 1.1 to the members of the Scientific Committee (SC) for review and to all members of the Commission for information, together with the impact assessment. Such information is to be provided to the other members at least 30 days in advance of the meeting at which the information shall be reviewed.

 - (2) The assessment in (1) above is to be conducted in accordance with the procedure set forth in “Science-based Standards and Criteria for Identification of VMEs and Assessment of Significant Adverse Impacts on VMEs and Marine Species (Annex 2)”, with the understanding that particular care shall be taken in the evaluation of risks of the significant adverse impact on vulnerable marine ecosystems (VMEs), in line with the precautionary

approach.

(3) The SC is to review the information and the assessment submitted in (1) above in accordance with “SC Assessment Review Procedures for Bottom Fishing Activities (Annex 3).”

(4) The exploratory fisheries are to be permitted only where the assessment concludes that they would not have significant adverse impacts (SAIs) on marine species or any VMEs and on the basis of comments and recommendations of SC. Any determinations, by any Member of the Commission or the SC, that the exploratory fishing activities would not have SAIs on marine species or any VMEs, shall be made publicly available through the NPFC website.

4. The member of the Commission is to ensure that all vessels flying its flag conducting exploratory fisheries are equipped with a satellite monitoring device and have an observer on board at all times.

5. Within 3 months of the end of the exploratory fishing activities or within 12 months of the commencement of fishing, whichever occurs first, the member of the Commission is to provide a report of the results of such activities to the members of the SC and all members of the Commission. If the SC meets prior to the end of this 12 month period, the member of the Commission is to provide an interim report 30 days in advance of the SC meeting. The information to be included in the report is specified in Appendix 1.2.

6. The SC is to review the report in 5 above, and decide whether the exploratory fishing activities had SAIs on marine species or any VME. The SC then is to send its recommendations to the Commission on whether the exploratory fisheries can continue and whether additional management measures shall be required if they are to continue. The Commission is to strive to adopt conservation and management measures to prevent SAIs on marine species or any VMEs. If the Commission is not able to reach consensus on any such measures, each fishing member of the Commission is to adopt measures to avoid any SAIs on VMEs.

7. Members of the Commission shall only authorize continuation of exploratory fishing activity, or commencement of commercial fishing activity, under this protocol on the basis of comments and recommendations of the SC.

Information to be provided before exploratory fisheries start

1. A harvesting plan

- Name of vessel
- Flag member of vessel
- Description of area to be fished (location and depth)
- Fishing dates
- Anticipated effort
- Target species
- Bottom fishing gear-type used
- Area and effort restrictions to ensure that fisheries occur on a gradual basis in a limited geographical area.

2. A mitigation plan

- Measures to prevent SAIs to VMEs that may be encountered during the fishery

3. A catch monitoring plan

- Recording/reporting of all species brought onboard to the lowest possible taxonomic level
- 100% satellite monitoring
- 100% observer coverage

4. A data collection plan

- Data is to be collected in accordance with “Type and Format of Scientific Observer Data to be Collected” (Annex 5)

Information to be included in the report

- Name of vessel
- Flag member of vessel
- Description of area fished (location and depth)
- Fishing dates
- Total effort
- Bottom fishing gear-type used
- List of VME encountered (the amount of VME indicator species for each encounter specifying the location: longitude and latitude)
- Mitigation measures taken in response to the encounter of VME
- List of all organisms brought onboard
- List of VMEs indicator species brought onboard by location: longitude and latitude

**SCIENCE-BASED STANDARDS AND CRITERIA FOR IDENTIFICATION OF VMES
AND ASSESSMENT OF SIGNIFICANT ADVERSE IMPACTS ON VMES AND
MARINE SPECIES**

1. Introduction

Members of the Commission have hereby established science-based standards and criteria to guide their implementation of United Nations General Assembly (UNGA) Resolution 61/105 and the measures adopted by the Members in respect of bottom fishing activities in the North Pacific Ocean (NPO). In this regard, these science-based standards and criteria are to be applied to identify vulnerable marine ecosystems (VMEs) and assess significant adverse impacts (SAIs) of bottom fishing activities on such VMEs or marine species and to promote the long-term sustainability of deep sea fisheries in the Convention Area. The science-based standards and criteria are consistent with the FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas, taking into account the work of other RFMOs implementing management of deep-sea bottom fisheries in accordance with UNGA Resolution 61/105. The standards and criteria are to be modified from time to time as more data are collected through research activities and monitoring of fishing operations.

2. Purpose

(1) The purpose of the standards and criteria is to provide guidelines for each member of the Commission in identifying VMEs and assessing SAIs of individual bottom fishing activities⁷ on VMEs or marine species in the Convention Area. Each member of the Commission, using the best information available, is to decide which species or areas are to be categorized as VMEs, identify areas where VMEs are known or likely to occur, and assess whether individual bottom fishing activities would have SAIs on such VMEs or marine species. The results of these tasks are to be submitted to and reviewed by the Scientific Committee with a view to reaching a common understanding among the members of the Commission.

(2) For the purpose of applying the standards and criteria, the bottom fisheries are defined as follows:

- (a) The fisheries are conducted in the Convention Area;
- (b) The total catch (everything brought up by the fishing gear) includes species that can only sustain low exploitation rates; and
- (c) The fishing gear is likely to contact the seafloor during the normal course of fishing operations

⁷ “individual bottom fishing activities” means fishing activities by each fishing gear. For example, if ten fishing vessels operate bottom trawl fishing in a certain area, the impacts of the fishing activities of these vessels on the ecosystem are to be assessed as a whole rather than on a vessel-by-vessel basis. It should be noted that if the total number or capacity of the vessels using the same fishing gear has increased, the impacts of the fishing activities are to be assessed again.

3. Definition of VMEs

(1) Although Paragraph 83 of UNGA Resolution 61/105 refers to seamounts, hydrothermal vents and cold water corals as examples of VMEs, there is no definitive list of specific species or areas that are to be regarded as VMEs.

(2) Vulnerability is related to the likelihood that a population, community or habitat will experience substantial alteration by fishing activities and how much time will be required for its recovery from such alteration. The most vulnerable ecosystems are those that are both easily disturbed and are very slow to recover, or may never recover. The vulnerabilities of populations, communities and habitats are to be assessed relative to specific threats. Some features, particularly ones that are physically fragile or inherently rare may be vulnerable to most forms of disturbance, but the vulnerability of some populations, communities and habitats may vary greatly depending on the type of fishing gear used or the kind of disturbance experienced. The risks to a marine ecosystem are determined by its vulnerability, the probability of a threat occurring and the mitigation means applied to the threat. Accordingly, the FAO Guidelines only provide examples of potential vulnerable species groups, communities and habitats as well as features that potentially support them (Annex 2.1).

(3) A marine ecosystem is to be classified as vulnerable based on its characteristics. The following list of characteristics is used as criteria in the identification of VMEs.

(a) Uniqueness or rarity - an area or ecosystem that is unique or that contains rare species whose loss could not be compensated for by other similar areas. These include:

- (i) Habitats that contain endemic species;
- (ii) Habitats of rare, threatened or endangered species that occur in discrete areas;
- (iii) Nurseries or discrete feeding, breeding, or spawning areas

(b) Functional significance of the habitat – discrete areas or habitats that are necessary for the survival, function, spawning/reproduction or recovery of fish stocks, particular life-history stages (e.g. nursery grounds or rearing areas), or of rare, threatened or endangered marine species.

(c) Fragility – an ecosystem that is highly susceptible to degradation by anthropogenic activities

(d) Life-history traits of component species that make recovery difficult – ecosystems that are characterized by populations or assemblages of species with one or more of the following characteristics:

- (i) Slow growth rates
- (ii) Late age of maturity
- (iii) Low or unpredictable recruitment
- (iv) Long-lived

(e) Structural complexity – an ecosystem that is characterized by complex physical structures created by significant concentrations of biotic and abiotic features. In these ecosystems, ecological processes are

usually highly dependent on these structured systems. Further, such ecosystems often have high diversity, which is dependent on the structuring organisms.

(4) Management response may vary, depending on the size of the ecological unit in the Convention Area. Therefore, the spatial extent of the ecological unit is to be decided first. That is, whether the ecological unit is the entire Area, or the current fishing ground, namely, the Emperor Seamount and Northern Hawaiian Ridge area (hereinafter called “the ES-NHR area”), or a group of the seamounts within the ES-NHR area, or each seamount in the ES-NHR area, is to be decided using the above criteria.

4. Identification of potential VMEs

(1) Fished seamounts

(a) Identification of fished seamounts

It is reported that four types of fishing gear are currently used by the members of the Commission in the ES-NHR area, namely, bottom trawl, bottom gillnet, bottom longline and pot. A fifth type of fishing gear (coral drag) was used in the ES-NHR area from the mid-1960s to the late 1980s and is possibly still used by non-members of the Commission. These types of fishing gear are usually used on the top or slope of seamounts, which could be considered VMEs. It is therefore necessary to identify the footprint of the bottom fisheries (fished seamounts) based on the available fishing record. The following seamounts have been identified as fished seamounts: Suiko, Showa, Youmei, Nintoku, Jingu, Ojin, Northern Koko, Koko, Kinmei, Yuryaku, Kammu, Colahan, and C-H. Since the use of most of these gears in the ES-NHR area dates back to the late 1960s and 1970s, it is important to establish, to the extent practicable, a time series of where and when these gears have been used in order to assess potential long-term effects on any existing VMEs.

Fishing effort may not be evenly distributed on each seamount since fish aggregation may occur only at certain points of the seamount and some parts of the seamount may be physically unsuitable for certain fishing gears. Thus, it is important to know actual fished areas within the same seamount so as to know the gravity of the impact of fishing activities on the entire seamount.

Due consideration is to be given to the protection of commercial confidentiality when identifying actual fishing grounds.

(b) Assessment on whether a specific seamount that has been fished is a VME

After identifying the fished seamounts or fished areas of seamounts, it is necessary to assess whether each fished seamount is a VME or contains VMEs in accordance with the criteria in 3 above, individually or in combination using the best available scientific and technical information as well as Annex 2.1. A variety of data would be required to conduct such assessment, including pictures of seamounts taken by an ROV camera or drop camera, biological samples collected through research activities and observer

programs, and detailed bathymetry map. Where site-specific information is lacking, other information that is relevant to inferring the likely presence of VMEs is to be used.

(2) New fishing areas

Any place other than the fished seamounts above is to be regarded as a new fishing area. If a member of the Commission is considering fishing in a new fishing area, such a fishing area is to be subject to, in addition to these standards and criteria, an exploratory fishery protocol (Annex 1).

5. Assessment of SAIs on VMEs or marine species

(1) Significant adverse impacts are those that compromise ecosystem integrity (i.e., ecosystem structure or function) in a manner that: (i) impairs the ability of affected populations to replace themselves; (ii) degrades the long-term natural productivity of habitats; or (iii) causes, on more than a temporary basis, significant loss of species richness, habitat or community types. Impacts are to be evaluated individually, in combination and cumulatively.

(2) When determining the scale and significance of an impact, the following six factors are to be considered:

- (a) The intensity or severity of the impact at the specific site being affected;
- (b) The spatial extent of the impact relative to the availability of the habitat type affected;
- (c) The sensitivity/vulnerability of the ecosystem to the impact;
- (d) The ability of an ecosystem to recover from harm, and the rate of such recovery;
- (e) The extent to which ecosystem functions may be altered by the impact; and
- (f) The timing and duration of the impact relative to the period in which a species needs the habitat during one or more life-history stages.

(3) Temporary impacts are those that are limited in duration and that allow the particular ecosystem to recover over an acceptable timeframe. Such timeframes are to be decided on a case-by-case basis and be on the order of 5-20 years, taking into account the specific features of the populations and ecosystems.

(4) In determining whether an impact is temporary, both the duration and the frequency with which an impact is repeated is to be considered. If the interval between the expected disturbances of a habitat is shorter than the recovery time, the impact is to be considered more than temporary.

(5) Each member of the Commission is to conduct assessments to establish if bottom fishing activities are likely to produce SAIs in a given seamount or other VMEs. Such an impact assessment is to address, *inter alia*:

- (a) Type of fishing conducted or contemplated, including vessel and gear types, fishing areas, target and potential bycatch species, fishing effort levels and duration of fishing;
- (b) Best available scientific and technical information on the current state of fishery resources, and baseline

information on the ecosystems, habitats and communities in the fishing area, against which future changes are to be compared;

- (c) Identification, description and mapping of VMEs known or likely to occur in the fishing area;
- (d) The data and methods used to identify, describe and assess the impacts of the activity, identification of gaps in knowledge, and an evaluation of uncertainties in the information presented in the assessment;
- (e) Identification, description and evaluation of the occurrence, scale and duration of likely impacts, including cumulative impacts of activities covered by the assessment on VMEs and low-productivity fishery resources in the fishing area;
- (f) Risk assessment of likely impacts by the fishing operations to determine which impacts are likely to be SAIs, particularly impacts on VMEs and low-productivity fishery resources (Risk assessments are to take into account, as appropriate, differing conditions prevailing in areas where fisheries are well established and in areas where fisheries have not taken place or only occur occasionally);
- (g) The proposed mitigation and management measures to be used to prevent SAIs on VMEs and ensure long-term conservation and sustainable utilization of low-productivity fishery resources, and the measures to be used to monitor effects of the fishing operations.

(6) Impact assessments are to consider, as appropriate, the information referred to in these Standards and Criteria, as well as relevant information from similar or related fisheries, species and ecosystems.

(7) Where an assessment concludes that the area does not contain VMEs or that significant adverse impacts on VMEs or marine species are not likely, such assessments are to be repeated when there have been significant changes to the fishery or other activities in the area, or when natural processes are thought to have undergone significant changes.

6. Proposed conservation and management measures to prevent SAIs

As a result of the assessment in 5 above, if it is considered that individual fishing activities are causing or likely to cause SAIs on VMEs or marine species, the member of the Commission is to adopt appropriate conservation and management measures to prevent such SAIs. The member of the Commission is to clearly indicate how such impacts are expected to be prevented or mitigated by the measures.

7. Precautionary approach

If after assessing all available scientific and technical information, the presence of VMEs or the likelihood that individual bottom fishing activities would cause SAIs on VMEs or marine species cannot be adequately determined, members of the Commission are only to authorize individual bottom fishing activities to proceed in accordance with:

- (a) Precautionary, conservation and management measures to prevent SAIs;
- (b) Measures to address unexpected encounters with VMEs in the course of fishing operations;
- (c) Measures, including ongoing scientific research, monitoring and data collection, to reduce the uncertainty; and

(d) Measures to ensure long-term sustainability of deep sea fisheries.

8. Template for assessment report

Annex 2.2 is a template for individual member of the Commission to formulate reports on identification of VMEs and impact assessment.

ANNEX 2.1

EXAMPLES OF POTENTIAL VULNERABLE SPECIES GROUPS, COMMUNITIES AND HABITATS AS WELL AS FEATURES THAT POTENTIALLY SUPPORT THEM

The following examples of species groups, communities, habitats and features often display characteristics consistent with possible VMEs. Merely detecting the presence of an element itself is not sufficient to identify a VME. That identification is to be made on a case-by-case basis through application of relevant provisions of the Standards and Criteria, particularly Sections 3, 4 and 5.

Examples of species groups, communities and habitat forming species that are documented or considered sensitive and potentially vulnerable to deep-sea fisheries in the high-seas, and which may contribute to forming VMEs:

a.	certain coldwater corals, e.g., reef builders and coral forest including: stony corals (scleractinia), alcyonaceans and gorgonians (octocorallia), black corals (antipatharia), and hydrocorals (stylasteridae),
b.	Some types of sponge dominated communities,
c.	communities composed of dense emergent fauna where large sessile protozoans (xenophyphores) and invertebrates (e.g., hydroids and bryozoans) form an important structural component of habitat, and
d.	seep and vent communities comprised of invertebrate and microbial species found nowhere else (i.e., endemic).

Examples of topographical, hydrophysical or geological features, including fragile geological structures, that potentially support the species groups or communities, referred to above:

a.	submerged edges and slopes (e.g., corals and sponges),
b.	summits and flanks of seamounts, guyots, banks, knolls, and hills (e.g., corals, sponges, xenophyphores),
c.	canyons and trenches (e.g., burrowed clay outcrops, corals),
d.	hydrothermal vents (e.g., microbial communities and endemic invertebrates), and
e.	cold seeps (e.g., mud volcanoes, microbes, hard substrates for sessile invertebrates).

ANNEX 2.2

TEMPLATE FOR REPORTS ON IDENTIFICATION OF VMES AND ASSESSMENT OF IMPACTS

CAUSED BY INDIVIDUAL FISHING ACTIVITIES ON VMES OR MARINE SPECIES

1. Name of the member of the Commission
2. Name of the fishery (e.g., bottom trawl, bottom gillnet, bottom longline, pot)
3. Status of the fishery (existing fishery or exploratory fishery)
4. Target species
5. Bycatch species
6. Recent level of fishing effort (every year at least since 2002)
 - (1) Number of fishing vessels
 - (2) Tonnage of each fishing vessel
 - (3) Number of fishing days or days on the fishing ground
 - (4) Fishing effort (total operating hours for trawl, # of hooks per day for long-line, # of pots per day for pot, total length of net per day for gillnet)
 - (5) Total catch by species
 - (6) Names of seamounts fished or to be fished
7. Fishing period
8. Analysis of status of fishery resources
 - (1) Data and methods used for analysis
 - (2) Results of analysis
 - (3) Identification of uncertainties in data and methods, and measures to overcome such uncertainties
9. Analysis of status of bycatch species resources
 - (1) Data and methods used for analysis
 - (2) Results of analysis
 - (3) Identification of uncertainties in data and methods, and measures to overcome such uncertainties
10. Analysis of existence of VMEs in the fishing ground
 - (1) Data and methods used for analysis
 - (2) Results of analysis
 - (3) Identification of uncertainties in data and methods, and measures to overcome such uncertainties
11. Impact assessment of fishing activities on VMEs or marine species including cumulative impacts, and identification of SAIs on VMEs or marine species, as detailed in Section 5 above, Assessment of SAIs on VMEs or marine species
12. Other points to be addressed
13. Conclusion (whether to continue or start fishing with what measures, or stop fishing)

SCIENTIFIC COMMITTEE ASSESSMENT REVIEW PROCEDURES FOR BOTTOM FISHING ACTIVITIES

1. The Scientific Committee (SC) is to review identifications of vulnerable marine ecosystems (VMEs) and assessments of significant adverse impact on VMEs, including proposed management measures intended to prevent such impacts submitted by individual Members.
2. Members of the Commission shall submit their identifications and assessments to members of the SC at least 21 days prior to the SC meeting at which the review is to take place. Such submissions shall include all relevant data and information in support of such determinations.
3. The SC will review the data and information in each assessment in accordance with the Science-based Standards and Criteria for Identification of VMEs and Assessment of Significant Adverse Impacts on VMEs and Marine Species (Annex 2), previous decisions of the Commission, and the FAO Technical Guidelines for the Management of Deep Sea Fisheries in the High Seas, paying special attention to the assessment process and criteria specified in paragraphs 47-49 of the Guidelines.
4. In conducting the review above, the SC will give particular attention to whether the deep-sea bottom fishing activity would have a significant adverse impact on VMEs and marine species and, if so, whether the proposed management measures would prevent such impacts.
5. Based on the above review, the SC will provide advice and recommendations to the submitting Members on the extent to which the assessments and related determinations are consistent with the procedures and criteria established in the documents identified above; and whether additional management measures will be required to prevent SAIs on VMEs.
6. Such recommendations will be reflected in the report of the SC meeting at which the assessments are considered.

FORMAT OF NATIONAL REPORT SECTIONS ON DEVELOPMENT AND IMPLEMENTATION OF SCIENTIFIC OBSERVER PROGRAMMES

Report Components

Annual Observer Programme implementation reports should form a component of annual National Reports submitted by members to the Scientific Committee. These reports should provide a brief overview of observer programmes conducted in the NPFC Convention Area. Observer programme reports should include the following sections:

A. Observer Training

An overview of observer training conducted, including:

- Overview of training programme provided to scientific observers.
- Number of observers trained.

B. Scientific Observer Programme Design and Coverage

Details of the design of the observer programme, including:

- Which fleets, fleet components or fishery components were covered by the programme.
- How vessels were selected to carry observers within the above fleets or components.
- How was observer coverage stratified: by fleets, fisheries components, vessel types, vessel sizes, vessel ages, fishing areas and seasons.

Details of observer coverage of the above fleets, including:

- Components, areas, seasons and proportion of total catches of target species, specifying units used to determine coverage.
- Total number of observer employment days, and number of actual days deployed on observation work.

C. Observer Data Collected

List of observer data collected against the agreed range of data set out in Annex 5, including:

- Effort Data: Amount of effort observed (vessel days, net panels, hooks, etc), by area and season and % observed out of total by area and seasons
- Catch Data: Amount of catch observed of target and by-catch species, by area and season, and % observed out of total estimated catch by species, area and seasons
- Length Frequency Data: Number of fish measured per species, by area and season.
- Biological Data: Type and quantity of other biological data or samples (otoliths, sex, maturity, etc) collected per species.
- The size of length-frequency and biological sub-samples relative to unobserved quantities.

D. Tag Return Monitoring

- Number of tags returns observed, by fish size class and area.

E. Problems Experienced

- Summary of problems encountered by observers and observer managers that could affect the NPFC Observer Programme Standards and/or each member's national observer programme developed under the NPFC standards.

**NPFC BOTTOM FISHERIES
OBSERVER PROGRAMME STANDARDS: SCIENTIFIC COMPONENT**

TYPE AND FORMAT OF SCIENTIFIC OBSERVER DATA TO BE COLLECTED

A. Vessel & Observer Data to be collected for Each Trip

1. Vessel and observer details are to be recorded only once for each observed trip.
2. The following vessel data are to be collected for each observed trip:
 - a) Current vessel flag.
 - b) Name of vessel.
 - c) Name of the Captain.
 - d) Name of the Fishing Master.
 - e) Registration number.
 - f) International radio call sign (if any).
 - g) Lloyd's / IMO number (if allocated).
 - h) Previous Names (if known).
 - i) Port of registry.
 - j) Previous flag (if any).
 - k) Type of vessel.
 - l) Type of fishing method(s).
 - m) Length (m).
 - n) Beam (m).
 - o) Gross register tonnage (international tonnage).
 - p) Power of main engine(s) (kilowatts).
 - q) Hold capacity (cubic metres).
 - r) Record of the equipment on board which may affect fishing power factors (navigational equipment, radar, sonar systems, weather fax or satellite weather receiver, sea-surface temperature image receiver, Doppler current monitor, radio direction finder).
 - s) Total number of crew (all staff, excluding observers).
3. The following observer data are to be collected for each observed trip:
 - a) Observer's name.
 - b) Observer's organisation.

- c) Date observer embarked (UTC date).
- d) Port of embarkation.
- e) Date observer disembarked (UTC date).
- f) Port of disembarkation.

B. Catch & Effort Data to be collected for Trawl Fishing Activity

1. Data are to be collected on an un-aggregated (tow by tow) basis for all observed trawls.
2. The following data are to be collected for each observed trawl tow:
 - a) Tow start date (UTC).
 - b) Tow start time (UTC).
 - c) Tow end date (UTC).
 - d) Tow end time (UTC).
 - e) Tow start position (Lat/Lon, 1 minute resolution).
 - f) Tow end position (Lat/Lon, 1 minute resolution).
 - g) Type of trawl, bottom or mid-water.
 - h) Type of trawl, single, double or triple.
 - i) Height of net opening (m).
 - j) Width of net opening (m).
 - k) Mesh size of the cod-end net (stretched mesh, mm) and mesh type (diamond, square, etc).
 - l) Gear depth (of footrope) at start of fishing (m).
 - m) Bottom (seabed) depth at start of fishing (m).
 - n) Gear depth (of footrope) at end of fishing (m).
 - o) Bottom (seabed) depth at end of fishing (m).
 - p) Status of the trawl operation (no damage, lightly damaged*, heavily damaged*, other (specify)). *Degree may be evaluated by time for repairing (<=1hr or >1hr)
 - q) Duration of estimated period of seabed contact (minute)
 - r) Intended target species.
 - s) Catch of all species retained on board, split by species, in weight (to the nearest kg).
 - t) Estimate of the amount (weight or volume) of all living marine resources discarded, split by species.
 - u) Record of the numbers by species of all marine mammals, seabirds or reptiles caught.
 - v) Record of sensitive benthic species in the trawl catch, particularly vulnerable or habitat-forming species such as sponges, sea-fans or corals.

C. Catch & Effort Data to be collected for Bottom Gillnet Fishing Activity

1. Data are to be collected on an un-aggregated (set by set) basis for all observed bottom gillnet sets.
2. The following data are to be collected for each observed bottom gillnet set:
 - a) Set start date (UTC).
 - b) Set start time (UTC).
 - c) Set end date (UTC).
 - d) Set end time (UTC).
 - e) Set start position (Lat/Lon, 1 minute resolution).
 - f) Set end position (Lat/Lon, 1 minute resolution).
 - g) Net panel (“tan”) length (m).
 - h) Net panel (“tan”) height (m).
 - i) Net mesh size (stretched mesh, mm) and mesh type (diamond, square, etc)
 - j) Bottom depth at start of setting (m).
 - k) Bottom depth at end of setting (m).
 - l) Number of net panels for the set.
 - m) Number of net panels retrieved.
 - n) Number of net panels actually observed during the haul.
 - o) Actually observed catch of all species retained on board, split by species, in weight (to the nearest kg).
 - p) An estimation of the amount (numbers or weight) of marine resources discarded, split by species, during the actual observation.
 - q) Record of the actually observed numbers by species of all marine mammals, seabirds or reptiles caught.
 - r) Intended target species.
 - s) Catch of all species retained on board, split by species, in weight (to the nearest kg).
 - t) Estimate of the amount (weight or volume) of all marine resources discarded* and dropped-off, split by species. * Including those retained for scientific samples.
 - u) Record of the numbers by species of all marine mammals, seabirds or reptiles caught (including those discarded and dropped-off).

D. Catch & Effort Data to be collected for Bottom Long Line Fishing Activity

1. Data are to be collected on an un-aggregated (set by set) basis for all observed longline sets.
2. The following fields of data are to be collected for each set:
 - a) Set start date (UTC).
 - b) Set start time (UTC).
 - c) Set end date (UTC).
 - d) Set end time (UTC).
 - e) Set start position (Lat/Lon, 1 minute resolution).
 - f) Set end position (Lat/Lon, 1 minute resolution).
 - g) Total length of longline set (m).
 - h) Number of hooks for the set.
 - i) Bottom (seabed) depth at start of set.
 - j) Bottom (seabed) depth at end of set.
 - k) Number of hooks actually observed during the haul.
 - l) Intended target species.
 - m) Actually observed catch of all species retained on board, split by species, in weight (to the nearest kg).
 - n) An estimation of the amount (numbers or weight) of marine resources discarded* or dropped-off, split by species, during the actual observation. * Including those retained for scientific samples.
 - o) Record of the actually observed numbers by species of all marine mammals, seabirds or reptiles caught (including those discarded and dropped-off).

E. Length-Frequency Data to Be Collected

1. Representative and randomly distributed length-frequency data (to the nearest mm, with record of the type of length measurement taken) are to be collected for representative samples of the target species and other main by-catch species. Total weight of length-frequency samples should be recorded, and observers may be required to also determine sex of measured fish to generate length-frequency data stratified by sex. The length-frequency data may be used as potential indicators of ecosystem changes (for seample, see: Gislason, H. et al. (2000. ICES J Mar Sci 57: 468-475) Yamane et al. (2005. ICES J Mar Sci, 62: 374-379), and Shin, Y-J. et al. (2005. ICES J Mar Sci, 62: 384-396)).

2. The numbers of fish to be measured for each species and distribution of samples across area and month strata should be determined, to ensure that samples are properly representative of species distributions and size ranges.

F. Biological sampling to be conducted (optional for gillnet and long line fisheries)

1. The following biological data are to be collected for representative samples of the main target species and, time permitting, for other main by-catch species contributing to the catch:
 - a) Species
 - b) Length (to the nearest mm), with record of the type of length measurement used.
 - c) Length and depth in case of North Pacific armorhead.
 - d) Sex (male, female, immature, unsexed)
 - e) Maturity stage (immature, mature, ripe, ripe-running, spent)
2. Representative stratified samples of otoliths are to be collected from the main target species and, time permitting, from other main by-catch species regularly occurring in catches. All otoliths to be collected are to be labelled with the information listed in 1 above, as well as the date, vessel name, observer name and catch position.
3. Where specific trophic relationship projects are being conducted, observers may be requested to also collect stomach samples from certain species. Any such samples collected are also to be labelled with the information listed in 1 above, as well as the date, vessel name, observer name and catch position.
4. Observers may also be required to collect tissue samples as part of specific genetic research programmes implemented by the SC.
5. Observers are to be briefed and provided with written length-frequency and biological sampling protocols and priorities for the above sampling specific to each observer trip.

G. Data to be collected on Incidental Captures of Protected Species

1. Flag members operating observer programs are to develop, in cooperation with the SC, lists and identification guides of protected species or species of concern (seabirds, marine mammals or marine reptiles) to be monitored by observers.
2. The following data are to be collected for all protected species caught in fishing operations:

- a) Species (identified as far as possible, or accompanied by photographs if identification is difficult).
- b) Count of the number caught per tow or set.
- c) Life status (vigorous, alive, lethargic, dead) upon release.
- d) Whole specimens (where possible) for onshore identification. Where this is not possible, observers may be required to collect sub-samples of identifying parts, as specified in biological sampling protocols.

H. Detection of Fishing in Association with Vulnerable Marine Ecosystems

1. The SC is to develop a guideline, species list and identification guide for benthic species (e.g. sponges, sea fans, corals) whose presence in a catch will indicate that fishing occurred in association with a vulnerable marine ecosystem (VME). All observers on vessels are to be provided with copies of this guideline, species list and ID guide.
2. For each observed fishing operation, the following data are to be collected for all species caught, which appear on the list of vulnerable benthic species:
 - a) Species (identified as far as possible, or accompanied by a photograph where identification is difficult).
 - b) An estimate of the quantity (weight (kg) or volume (m³)) of each listed benthic species caught in the fishing operation.
 - c) An overall estimate of the total quantity (weight (kg) or volume (m³)) of all invertebrate benthic species caught in the fishing operation.
 - d) Where possible, and particularly for new or scarce benthic species which do not appear in ID guides, whole samples should be collected and suitable preserved for identification on shore.

I. Data to be collected for all Tag Recoveries

1. The following data are to be collected for all recovered fish, seabird, mammal or reptile tags:
 - a) Observer name.
 - b) Vessel name.
 - c) Vessel call sign.
 - d) Vessel flag.
 - e) Collect, label (with all details below) and store the actual tags for later return to the tagging agency.
 - f) Species from which tag recovered.

- g) Tag colour and type (spaghetti, archival).
- h) Tag numbers (The tag number is to be provided for all tags when multiple tags were attached to one fish. If only one tag was recorded, a statement is required that specifies whether or not the other tag was missing)
- i) Date and time of capture (UTC).
- j) Location of capture (Lat/Lon, to the nearest 1 minute)
- k) Animal length / size (to the nearest cm) with description of what measurement was taken (such as total length, fork length, etc).
- l) Sex (F=female, M=male, I=indeterminate, D=not examined)
- m) Whether the tags were found during a period of fishing that was being observed (Y/N)
- n) Reward information (e.g. name and address where to send reward)

(It is recognised that some of the data recorded here duplicates data that already exists in the previous categories of information. This is necessary because tag recovery information may be sent separately to other observer data.)

J. Hierarchies for Observer Data Collection

1. Trip-specific or programme-specific observer task priorities may be developed in response to specific research programme requirements, in which case such priorities should be followed by observers.
2. In the absence of trip- or programme-specific priorities, the following generalised priorities should be followed by observers:
 - a) Fishing Operation Information
 - All vessel and tow / set / effort information.
 - b) Monitoring of Catches
 - Record time, proportion of catch (e.g. proportion of trawl landing) or effort (e.g. number of hooks), and total numbers of each species caught.
 - Record numbers or proportions of each species retained or discarded.
 - c) Biological Sampling
 - Length-frequency data for target species.
 - Length-frequency data for main by-catch species.
 - Identification and counts of protected species.

- Basic biological data (sex, maturity) for target species.
- Check for presence of tags.
- Otoliths (and stomach samples, if being collected) for target species.
- Basic biological data for by-catch species.
- Biological samples of by-catch species (if being collected)
- Photos

3. The monitoring of catches and biological sampling procedures should be prioritised among species groups as follows:

Species	Priority (1 highest)
Primary target species (such as North Pacific armorhead and splendid alfonsin)	1
Other species typically within top 10 in the fishery (such as mirror dory, and oreos)	2
Protected species	3
All other species	4

The allocation of observer effort among these activities will depend on the type of operation and setting. The size of sub-samples relative to unobserved quantities (e.g. number of hooks/panels examined for species composition relative to the number of hooks/panels retrieved) should be explicitly recorded under the guidance of member country observer programmes.

K. Coding Specifications to be used for Recording Observer Data

1. Unless otherwise specified for specific data types, observer data are to be collected in accordance with the same coding specifications as specified in this Annex.
2. Coordinated Universal Time (UTC) is to be used to describe times.
3. Degrees and minutes are to be used to describe locations.
4. The following coding schemes are to be used:
 - a) Species are to be described using the FAO 3 letter species codes.
 - b) Fishing methods are to be described using the International Standard Classification of Fishing Gear (ISSCFG - 29 July 1980) codes.
 - c) Types of fishing vessel are to be described using the International Standard Classification of Fishery Vessels (ISSCFV) codes.

5. Metric units of measure are to be used, specifically:
 - a) Kilograms are to be used to describe catch weight.
 - b) Metres are to be used to describe height, width, depth, beam or length.
 - c) Cubic metres are to be used to describe volume.
 - d) Kilowatts are to be used to describe engine power.

Annex L

**CONSERVATION AND MANAGEMENT MEASURE
FOR BOTTOM FISHERIES AND PROTECTION OF VULNERABLE
MARINE ECOSYSTEMS IN THE NORTHEASTERN PACIFIC OCEAN**

The North Pacific Fisheries Commission (NPFC):

Seeking to ensure the long term conservation and sustainable use of the fishery resources of the Northeastern Pacific Ocean and, in so doing, protect the vulnerable marine ecosystems that occur there, in accordance with the Sustainable Fisheries Resolutions adopted by the United Nations General Assembly (UNGA) including, in particular, paragraphs 66 to 71 of the UNGA59/25 in 2004, paragraphs 69 to 74 of UNGA60/31 in 2005, paragraphs 69 and 80 to 91 of UNGA61/105 in 2006, and paragraphs 113 to 124 of UNGA64/72 in 2009;

Recalling that paragraph 85 of UNGA 61/105 calls upon participants in negotiations to establish regional fisheries management organizations or arrangements with the competence to regulate bottom fisheries to adopt permanent measures in respect of the area of application of the instruments under negotiation;

Noting that North Pacific Fisheries Commission has previously adopted interim measures for the Northeastern Pacific Ocean;

Conscious of the need to adopt permanent measures for the Northeastern Pacific Ocean to ensure that this area is not left as the only major area of the Pacific Ocean where no such measures are in place;

Hereby adopt the following Conservation and Management Measure (CMM) for bottom fisheries of the Northeastern Pacific Ocean while working to develop and implement other permanent management arrangements to govern these and other fisheries in the North Pacific Ocean.

Scope

1. These Measures are to be applied to all bottom fishing activities throughout the high seas areas of the Northeastern Pacific Ocean, defined, for the purposes of this document, as those occurring in the Convention Area as set out in Article 4 of the Convention text to the east of the line of 175 degrees W longitude (here in after called “the eastern part of the Convention Area”) including all such areas and marine species other than those species already covered by existing international fisheries management instruments, including bilateral agreements and Regional

Fisheries Management Organizations or Arrangements.

For the purpose of these Measures, the term vulnerable marine ecosystems is to be interpreted and applied in a manner consistent with the International Guidelines on the Management of Deep Sea Fisheries on the High Seas adopted by the FAO on 29 August 2008 (see Annex 2 for further details).

2. The implementation of these Measures shall:
 - a. be based on the best scientific information available in accordance with existing international laws and agreements including UNCLOS and other relevant international instruments,
 - b. establish appropriate and effective conservation and management measures,
 - c. be in accordance with the precautionary approach, and
 - d. incorporate an ecosystem approach to fisheries management.

3. Actions by Members of the Commission

Members of the Commission will take the following actions in respect of vessels operating under its Flag or authority in the area covered by these Measures:

- a. Conduct the assessments called for in paragraph 83(a) of UNGA Resolution 61/105, in a manner consistent with the FAO Guidelines and the Standards and Criteria included in Annex 2;
- b. Submit to the SC their assessments conducted pursuant to subparagraph (a) of this paragraph, including all relevant data and information in support of any such assessment, and receive advice and recommendations from the SC, in accordance with the procedures in Annex 3;
- c. Taking into account all advice and recommendations received from the SC, determine whether the fishing activity or operations of the vessel in question are likely to have a significant adverse impact on any vulnerable marine ecosystem;
- d. If it is determined that the fishing activity or operations of the vessel or vessels in question would have a significant adverse impact on vulnerable marine ecosystems, adopt conservation and management measures to prevent such impacts on the basis of advice and recommendations of the SC, which are subject to adoption by the Commission;
- e. Ensure that if any vessels are already engaged in bottom fishing, that such assessments have been carried out in accordance with paragraph 119(a)/UNGA RES 2009, the determination called for in subparagraph (c) of this paragraph has been rendered and, where appropriate, managements measures have been implemented in accordance with the advice and recommendations of the SC, which are subject to adoption by the Commission;

- f. Further ensure that they will only authorize fishing activities on the basis of such assessments and any comments and recommendations from the SC;
 - g. Prohibit its vessels from engaging in directed fishing on the following orders: Alcyonacea, Antipatharia, Gorgonacea, and Scleractinia as well as any other indicator species for vulnerable marine ecosystems as may be identified from time to time by the SC and approved by the Commission;
 - h. In respect of areas where vulnerable marine ecosystems are known to occur or are likely to occur, based on the best available scientific information, ensure that bottom fishing activities do not proceed unless conservation and management measures have been established to prevent significant adverse impacts on vulnerable marine ecosystems;
 - i. Limit fishing effort in bottom fisheries on the Eastern part of the Convention Area to the level of a historical average (baseline to be determined through consensus in the SC based on information to be provided by Members) in terms of the number of fishing vessels and other parameters which reflect the level of fishing effort, fishing capacity or potential impacts on marine ecosystems dependent on new SC advice;
 - j. Further, considering accumulated information regarding fishing activities in the Eastern part of the Convention Area, in areas where, in the course of fishing operations, cold water corals or other indicator species as identified by the SC that exceed 50Kg are encountered in one gear retrieval, Members of the Commission shall require vessels flying their flag to cease bottom fishing activities in that location. In such cases, the vessel shall not resume fishing activities until it has relocated a sufficient distance, which shall be no less than 2 nautical miles, so that additional encounters with VMEs are unlikely. All such encounters, including the location and the species in question, shall be reported to the Secretariat, who shall notify the other Members of the Commission so that appropriate measures can be adopted in respect of the relevant site. It is agreed that the cold water corals include: Alcyonacea, Antipatharia, Gorgonacea, and Scleractinia, as well as any other indicator species for vulnerable marine ecosystems as may be identified from time to time by the SC and approved by the Commission.
4. All assessments and determinations by any Member as to whether fishing activity would have significant adverse impacts on vulnerable marine ecosystems, as well as measures adopted in order to prevent such impacts, will be made publicly available through agreed means.

Control of Bottom Fishing Vessels

5. Members will exercise full and effective control over each of their bottom fishing vessels operating in the high seas of the Northeastern Pacific Ocean, including by means of fishing licenses, authorizations or permits, and maintenance of a record of these vessels as outlined in

the Convention and applicable CMM.

6. New and exploratory fishing will be subject to the exploratory fishery protocol included as Annex 1.

Scientific Committee (SC)

7. Scientific Committee will provide scientific support for the implementation of these CMMs.

Scientific Information

8. The Members shall provide all available information as required by the Commission for any current or historical fishing activity by their flag vessels, including the number of vessels by gear type, size of vessels (tons), number of fishing days or days on the fishing grounds, total catch by species, areas fished (names or coordinates of seamounts), and information from scientific observer programmes (see Annexes 4 and 5) to the NPFC Secretariat as soon as possible and no later than one month prior to SC meeting. The Secretariat will make such information available to SC.
9. Scientific research activities for stock assessment purposes are to be conducted in accordance with a research plan that has been provided to SC prior to the commencement of such activities.

EXPLORATORY FISHERY PROTOCOL IN THE NORTH PACIFIC OCEAN

1. From 1 January 2009, all bottom fishing activities in new fishing areas and areas where fishing is prohibited in a precautionary manner or with bottom gear not previously used in the existing fishing areas, are to be considered as “exploratory fisheries” and to be conducted in accordance with this protocol.

2. Precautionary conservation and management measures, including catch and effort controls, are essential during the exploratory phase of deep sea fisheries. Implementation of a precautionary approach to sustainable exploitation of deep sea fisheries shall include the following measures:

- i. precautionary effort limits, particularly where reliable assessments of sustainable exploitation rates of target and main by-catch species are not available;
- ii. precautionary measures, including precautionary spatial catch limits where appropriate, to prevent serial depletion of low-productivity stocks;
- iii. regular review of appropriate indices of stock status and revision downwards of the limits listed above when significant declines are detected;
- iv. measures to prevent significant adverse impacts on vulnerable marine ecosystems; and
- v. comprehensive monitoring of all fishing effort, capture of all species and interactions with VMEs.

3. When a member of the Commission would like to conduct exploratory fisheries, it is to follow the following procedure:

(1) Prior to the commencement of fishing, the member of the Commission is to circulate the information and assessment in Appendix 1.1 to the members of the Scientific Committee (SC) for review and to all members of the Commission for information, together with the impact assessment. Such information is to be provided to the other members at least 30 days in advance of the meeting at which the information shall be reviewed.

(2) The assessment in (1) above is to be conducted in accordance with the procedure set forth in “Science-based Standards and Criteria for Identification of VMEs and Assessment of Significant Adverse Impacts on VMEs and Marine Species (Annex 2)”, with the understanding that particular care shall be taken in the evaluation of risks of the significant adverse impact on vulnerable marine ecosystems (VMEs), in line with the precautionary approach.

(3) The SC is to review the information and the assessment submitted in (1) above in accordance with “SC Assessment Review Procedures for Bottom Fishing Activities (Annex 3).”

(4) The exploratory fisheries are to be permitted only where the assessment concludes that they would not have significant adverse impacts (SAIs) on marine species or any VMEs and on the basis of comments and recommendations of SC. Any determinations, by any Member of the Commission or the SC, that the exploratory fishing activities would not have SAIs on marine species or any VMEs, shall be made publicly available through the NPFC website.

4. The member of the Commission is to ensure that all vessels flying its flag conducting exploratory fisheries are equipped with a satellite monitoring device and have an observer on board at all times.

5. Within 3 months of the end of the exploratory fishing activities or within 12 months of the commencement of fishing, whichever occurs first, the member of the Commission is to provide a report of the results of such activities to the members of the SC and all members of the Commission. If the SC meets prior to the end of this 12 month period, the member of the Commission is to provide an interim report 30 days in advance of the SC meeting. The information to be included in the report is specified in Appendix 1.2.

6. The SC is to review the report in 5 above, and decide whether the exploratory fishing activities had SAIs on marine species or any VME. The SC then is to send its recommendations to the Commission on whether the exploratory fisheries can continue and whether additional management measures shall be required if they are to continue. The Commission is to strive to adopt conservation and management measures to prevent SAIs on marine species or any VMEs. If the Commission is not able to reach consensus on any such measures, each fishing member of the Commission is to adopt measures to avoid any SAIs on VMEs.

7. Members of the Commission shall only authorize continuation of exploratory fishing activity, or commencement of commercial fishing activity, under this protocol on the basis of comments and recommendations of the SC.

Appendix 1.1

Information to be provided before exploratory fisheries start

1. A harvesting plan
 - Name of vessel
 - Flag member of vessel
 - Description of area to be fished (location and depth)
 - Fishing dates
 - Anticipated effort
 - Target species
 - Bottom fishing gear-type used
 - Area and effort restrictions to ensure that fisheries occur on a gradual basis in a limited geographical area.
2. A mitigation plan
 - Measures to prevent SAIs to VMEs that may be encountered during the fishery
3. A catch monitoring plan
 - Recording/reporting of all species brought onboard to the lowest possible taxonomic level
 - 100% satellite monitoring
 - 100% observer coverage
4. A data collection plan
 - Data is to be collected in accordance with “Type and Format of Scientific Observer Data to be Collected” (Annex 5)

Appendix 1.2

Information to be included in the report

- Name of vessel
- Flag member of vessel
- Description of area fished (location and depth)
- Fishing dates
- Total effort
- Bottom fishing gear-type used
- List of VME encountered (the amount of VME indicator species for each encounter specifying the location: longitude and latitude)
- Mitigation measures taken in response to the encounter of VME
- List of all organisms brought onboard
- List of VMEs indicator species brought onboard by location: longitude and latitude

SCIENCE-BASED STANDARDS AND CRITERIA FOR IDENTIFICATION OF VMES AND ASSESSMENT OF SIGNIFICANT ADVERSE IMPACTS ON VMES AND MARINE SPECIES

1. Introduction

Members of the Commission have hereby established science-based standards and criteria to guide their implementation of United Nations General Assembly (UNGA) Resolution 61/105 and the measures adopted by the Members in respect of bottom fishing activities in the North Pacific Ocean (NPO). In this regard, these science-based standards and criteria are to be applied to identify vulnerable marine ecosystems (VMEs) and assess significant adverse impacts (SAIs) of bottom fishing activities on such VMEs or marine species and to promote the long-term sustainability of deep sea fisheries in the Convention Area. The science-based standards and criteria are consistent with the FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas, taking into account the work of other RFMOs implementing management of deep-sea bottom fisheries in accordance with UNGA Resolution 61/105. The standards and criteria are to be modified from time to time as more data are collected through research activities and monitoring of fishing operations.

2. Purpose

(1) The purpose of the standards and criteria is to provide guidelines for each member of the Commission in identifying VMEs and assessing SAIs of individual bottom fishing activities⁸ on VMEs or marine species in the Convention Area. Each member of the Commission, using the best information available, is to decide which species or areas are to be categorized as VMEs, identify areas where VMEs are known or likely to occur, and assess whether individual bottom fishing activities would have SAIs on such VMEs or marine species. The results of these tasks are to be submitted to and reviewed by the Scientific Committee with a view to reaching a common understanding among the members of the Commission.

(2) For the purpose of applying the standards and criteria, the bottom fisheries are defined as follows:

- (a) The fisheries are conducted in the Convention Area;
- (b) The total catch (everything brought up by the fishing gear) includes species that can only sustain low exploitation rates; and
- (c) The fishing gear is likely to contact the seafloor during the normal course of fishing operations

3. Definition of VMEs

(1) Although Paragraph 83 of UNGA Resolution 61/105 refers to seamounts, hydrothermal vents and cold water corals as examples of VMEs, there is no definitive list of specific species or areas that are to be regarded as VMEs.

(2) Vulnerability is related to the likelihood that a population, community or habitat will experience substantial alteration by fishing activities and how much time will be required for its recovery from such alteration. The most vulnerable ecosystems are those that are both easily disturbed and are very slow to recover, or may never recover. The vulnerabilities of populations, communities and habitats are to be assessed relative to specific threats. Some features, particularly ones that are physically fragile or inherently rare may be vulnerable to most forms of disturbance, but the vulnerability of some populations, communities and habitats may vary greatly depending on the type of fishing gear used or the kind of disturbance experienced. The risks to a marine ecosystem are determined by its vulnerability, the probability of a threat occurring and the mitigation means applied to the threat. Accordingly, the FAO Guidelines only provide examples of potential vulnerable species groups, communities and habitats as well as features that potentially support them (Annex 2.1).

⁸ “individual bottom fishing activities” means fishing activities by each fishing gear. For example, if ten fishing vessels operate bottom trawl fishing in a certain area, the impacts of the fishing activities of these vessels on the ecosystem are to be assessed as a whole rather than on a vessel-by-vessel basis. It should be noted that if the total number or capacity of the vessels using the same fishing gear has increased, the impacts of the fishing activities are to be assessed again.

(3) A marine ecosystem is to be classified as vulnerable based on its characteristics. The following list of characteristics is used as criteria in the identification of VMEs.

- (a) Uniqueness or rarity - an area or ecosystem that is unique or that contains rare species whose loss could not be compensated for by other similar areas. These include:
 - (i) Habitats that contain endemic species;
 - (ii) Habitats of rare, threatened or endangered species that occur in discrete areas;
 - (iii) Nurseries or discrete feeding, breeding, or spawning areas
- (b) Functional significance of the habitat – discrete areas or habitats that are necessary for the survival, function, spawning/reproduction or recovery of fish stocks, particular life-history stages (e.g. nursery grounds or rearing areas), or of rare, threatened or endangered marine species.
- (c) Fragility – an ecosystem that is highly susceptible to degradation by anthropogenic activities
- (d) Life-history traits of component species that make recovery difficult – ecosystems that are characterized by populations or assemblages of species with one or more of the following characteristics:
 - (i) Slow growth rates
 - (ii) Late age of maturity
 - (iii) Low or unpredictable recruitment
 - (iv) Long-lived
- (e) Structural complexity – an ecosystem that is characterized by complex physical structures created by significant concentrations of biotic and abiotic features. In these ecosystems, ecological processes are usually highly dependent on these structured systems. Further, such ecosystems often have high diversity, which is dependent on the structuring organisms.

(4) Management response may vary, depending on the size of the ecological unit in the Convention Area. Therefore, the spatial extent of the ecological unit is to be decided first. For example, whether the ecological unit is a group of seamounts, or an individual seamount in the Convention Area, is to be decided using the above criteria.

4. Identification of potential VMEs

(1) Fished seamounts

(a) Identification of fished seamounts

It is reported that two types of fishing gear are currently used by members of the Commission in the NE area, namely long-line hook and long-line trap. The footprint of the bottom fisheries (fished seamounts) is identified based on the available fishing record. The following seamounts have been identified as fished seamounts at some point in the past: Brown Bear, Cobb, Warwick, Eickelberg, Pathfinder, Miller, Murray, Cowie, Surveyor, Pratt, and Durgin. It is important to establish, to the extent practicable, a time series of where and when these gears have been used in order to assess potential long-term effects on any existing VMEs.

Fishing effort may not be evenly distributed on each seamount since fish aggregation may occur only at certain points of the seamount and some parts of the seamount may be physically unsuitable for certain fishing gears. Thus, it is important to know actual fished areas within the same seamount so as to know the gravity of the impact of fishing activities on the entire seamount.

Due consideration is to be given to the protection of commercial confidentiality when identifying actual fishing grounds.

(b) Assessment on whether a specific seamount that has been fished is a VME

After identifying the fished seamounts or fished areas of seamounts, it is necessary to assess whether each fished seamount is a VME or contains VMEs in accordance with the criteria in 3 above, individually or in combination using the best available scientific and technical information as well as Annex 2.1. A variety of data would be required to conduct such assessment, including pictures of seamounts taken by an ROV camera or drop camera, biological samples collected through research activities and observer programs, and detailed bathymetry map. Where site-specific information is lacking, other information that is relevant to inferring the likely presence of VMEs is to be used.

(2) New fishing areas

Any place other than the fished seamounts above is to be regarded as a new fishing area. If a member of the Commission is considering fishing in a new fishing area, such a fishing area is to be subject to, in addition to these standards and criteria, an exploratory fishery protocol (Annex 1).

5. Assessment of SAIs on VMEs or marine species

(1) Significant adverse impacts are those that compromise ecosystem integrity (i.e., ecosystem structure or function) in a manner that: (i) impairs the ability of affected populations to replace themselves; (ii) degrades the long-term natural productivity of habitats; or (iii) causes, on more than a temporary basis, significant loss of species richness, habitat or community types. Impacts are to be evaluated individually, in combination and cumulatively.

(2) When determining the scale and significance of an impact, the following six factors are to be considered:

- (a) The intensity or severity of the impact at the specific site being affected;
- (b) The spatial extent of the impact relative to the availability of the habitat type affected;
- (c) The sensitivity/vulnerability of the ecosystem to the impact;
- (d) The ability of an ecosystem to recover from harm, and the rate of such recovery;
- (e) The extent to which ecosystem functions may be altered by the impact; and
- (f) The timing and duration of the impact relative to the period in which a species needs the habitat during one or more life-history stages.

(3) Temporary impacts are those that are limited in duration and that allow the particular ecosystem to recover over an acceptable timeframe. Such timeframes are to be decided on a case-by-case basis and be on the order of 5-20 years, taking into account the specific features of the populations and ecosystems.

(4) In determining whether an impact is temporary, both the duration and the frequency with which an impact is repeated is to be considered. If the interval between the expected disturbances of a habitat is shorter than the recovery time, the impact is to be considered more than temporary.

(5) Each member of the Commission is to conduct assessments to establish if bottom fishing activities are likely to produce SAIs in a given seamount or other VMEs. Such an impact assessment is to address, *inter alia*:

- (a) Type of fishing conducted or contemplated, including vessel and gear types, fishing areas, target and potential bycatch species, fishing effort levels and duration of fishing;
- (b) Best available scientific and technical information on the current state of fishery resources, and baseline information on the ecosystems, habitats and communities in the fishing area, against which future changes are to be compared;
- (c) Identification, description and mapping of VMEs known or likely to occur in the fishing area;
- (d) The data and methods used to identify, describe and assess the impacts of the activity, identification of gaps in knowledge, and an evaluation of uncertainties in the information presented in the assessment
- (e) Identification, description and evaluation of the occurrence, scale and duration of likely impacts, including cumulative impacts of activities covered by the assessment on VMEs and low-productivity fishery resources in the fishing area;
- (f) Risk assessment of likely impacts by the fishing operations to determine which impacts are likely to be SAIs, particularly impacts on VMEs and low-productivity fishery resources (Risk assessments are to take into account, as appropriate, differing conditions prevailing in areas where fisheries are well established and in areas where fisheries have not taken place or only occur occasionally);
- (g) The proposed mitigation and management measures to be used to prevent SAIs on VMEs and ensure long-term conservation and sustainable utilization of low-productivity fishery resources, and the measures to be used to monitor effects of the fishing operations.

(6) Impact assessments are to consider, as appropriate, the information referred to in these Standards and Criteria, as well as relevant information from similar or related fisheries, species and ecosystems.

(7) Where an assessment concludes that the area does not contain VMEs or that significant adverse impacts on VMEs or marine species are not likely, such assessments are to be repeated when there have been significant changes to the fishery or other activities in the area, or when natural processes are thought to have undergone significant changes.

6. Proposed conservation and management measures to prevent SAIs

As a result of the assessment in 5 above, if it is considered that individual fishing activities are causing or likely to cause SAIs on VMEs or marine species, the member of the Commission is to adopt appropriate conservation and management measures to prevent such SAIs. The member of the Commission is to clearly indicate how such impacts are expected to be prevented or mitigated by the measures.

7. Precautionary approach

If after assessing all available scientific and technical information, the presence of VMEs or the likelihood that individual bottom fishing activities would cause SAIs on VMEs or marine species cannot be adequately determined, members of the Commission are only to authorize individual bottom fishing activities to proceed in accordance with:

- (a) Precautionary, conservation and management measures to prevent SAIs;
- (b) Measures to address unexpected encounters with VMEs in the course of fishing operations;
- (c) Measures, including ongoing scientific research, monitoring and data collection, to reduce the uncertainty; and
- (d) Measures to ensure long-term sustainability of deep sea fisheries.

8. Template for assessment report

Annex 2.2 is a template for individual member of the Commission to formulate reports on identification of VMEs and impact assessment.

ANNEX 2.1

EXAMPLES OF POTENTIAL VULNERABLE SPECIES GROUPS, COMMUNITIES AND HABITATS AS WELL AS FEATURES THAT POTENTIALLY SUPPORT THEM

The following examples of species groups, communities, habitats and features often display characteristics consistent with possible VMEs. Merely detecting the presence of an element itself is not sufficient to identify a VME. That identification is to be made on a case-by-case basis through application of relevant provisions of the Standards and Criteria, particularly Sections 3, 4 and 5.

Examples of species groups, communities and habitat forming species that are documented or considered sensitive and potentially vulnerable to deep-sea fisheries in the high-seas, and which may contribute to forming VMEs:

a.	certain coldwater corals, e.g., reef builders and coral forest including: stony corals (scleractinia), alcyonaceans and gorgonians (octocorallia), black corals (antipatharia), and hydrocorals (stylasteridae),
b.	Some types of sponge dominated communities,
c.	communities composed of dense emergent fauna where large sessile protozoans (xenophyphores) and invertebrates (e.g., hydroids and bryozoans) form an important structural component of habitat, and
d.	seep and vent communities comprised of invertebrate and microbial species found nowhere else (i.e., endemic).

Examples of topographical, hydrophysical or geological features, including fragile geological structures, that potentially support the species groups or communities, referred to above:

a.	submerged edges and slopes (e.g., corals and sponges),
b.	summits and flanks of seamounts, guyots, banks, knolls, and hills (e.g., corals, sponges, xenophyphores),
c.	canyons and trenches (e.g., burrowed clay outcrops, corals),
d.	hydrothermal vents (e.g., microbial communities and endemic invertebrates), and
e.	cold seeps (e.g., mud volcanoes, microbes, hard substrates for sessile invertebrates).

TEMPLATE FOR REPORTS ON IDENTIFICATION OF VMES AND ASSESSMENT OF IMPACTS CAUSED BY INDIVIDUAL FISHING ACTIVITIES ON VMES OR MARINE SPECIES

1. Name of the member of the Commission
2. Name of the fishery (e.g., bottom trawl, bottom gillnet, bottom longline, pot)
3. Status of the fishery (existing fishery or exploratory fishery)
4. Target species
5. Bycatch species
6. Recent level of fishing effort (every year at least since 2002)
 - (1) Number of fishing vessels
 - (2) Tonnage of each fishing vessel
 - (3) Number of fishing days or days on the fishing ground
 - (4) Fishing effort (total operating hours for trawl, # of hooks per day for long-line, # of pots per day for pot, total length of net per day for gillnet)
 - (5) Total catch by species
 - (6) Names of seamounts fished or to be fished
7. Fishing period
8. Analysis of status of fishery resources
 - (1) Data and methods used for analysis
 - (2) Results of analysis
 - (3) Identification of uncertainties in data and methods, and measures to overcome such uncertainties
9. Analysis of status of bycatch species resources
 - (1) Data and methods used for analysis
 - (2) Results of analysis
 - (3) Identification of uncertainties in data and methods, and measures to overcome such uncertainties
10. Analysis of existence of VMES in the fishing ground
 - (1) Data and methods used for analysis
 - (2) Results of analysis
 - (3) Identification of uncertainties in data and methods, and measures to overcome such uncertainties
11. Impact assessment of fishing activities on VMES or marine species including cumulative impacts, and identification of SAIs on VMES or marine species, as detailed in Section 5 above, Assessment of SAIs on VMES or marine species
12. Other points to be addressed
13. Conclusion (whether to continue or start fishing with what measures, or stop fishing)

SCIENTIFIC COMMITTEE ASSESSMENT REVIEW PROCEDURES FOR BOTTOM FISHING ACTIVITIES

1. The Scientific Committee (SC) is to review identifications of vulnerable marine ecosystems (VMEs) and assessments of significant adverse impact on VMEs, including proposed management measures intended to prevent such impacts submitted by individual Members.
2. Members of the Commission shall submit their identifications and assessments to members of the SC at least 21 days prior to the SC meeting at which the review is to take place. Such submissions shall include all relevant data and information in support of such determinations.
3. The SC will review the data and information in each assessment in accordance with the Science-based Standards and Criteria for Identification of VMEs and Assessment of Significant Adverse Impacts on VMEs and Marine Species (Annex 2), previous decisions of the Commission, and the FAO Technical Guidelines for the Management of Deep Sea Fisheries in the High Seas, paying special attention to the assessment process and criteria specified in paragraphs 47-49 of the Guidelines.
4. In conducting the review above, the SC will give particular attention to whether the deep-sea bottom fishing activity would have a significant adverse impact on VMEs and marine species and, if so, whether the proposed management measures would prevent such impacts.
5. Based on the above review, the SC will provide advice and recommendations to the submitting Members on the extent to which the assessments and related determinations are consistent with the procedures and criteria established in the documents identified above; and whether additional management measures will be required to prevent SAIs on VMEs.
6. Such recommendations will be reflected in the report of the SC meeting at which the assessments are considered.

FORMAT OF NATIONAL REPORT SECTIONS ON DEVELOPMENT AND IMPLEMENTATION OF SCIENTIFIC OBSERVER PROGRAMMES

Report Components

Annual Observer Programme implementation reports should form a component of annual National Reports submitted by members to the Scientific Committee. These reports should provide a brief overview of observer programmes conducted in the NPFC Convention Area. Observer programme reports should include the following sections:

A. Observer Training

An overview of observer training conducted, including:

- Overview of training programme provided to scientific observers.
- Number of observers trained.

B. Scientific Observer Programme Design and Coverage

Details of the design of the observer programme, including:

- Which fleets, fleet components or fishery components were covered by the programme.
- How vessels were selected to carry observers within the above fleets or components.
- How was observer coverage stratified: by fleets, fisheries components, vessel types, vessel sizes, vessel ages, fishing areas and seasons.

Details of observer coverage of the above fleets, including:

- Components, areas, seasons and proportion of total catches of target species, specifying units used to determine coverage.
- Total number of observer employment days, and number of actual days deployed on observation work.

C. Observer Data Collected

List of observer data collected against the agreed range of data set out in Annex 5, including:

- Effort Data: Amount of effort observed (vessel days, net panels, hooks, etc), by area and season and % observed out of total by area and seasons
- Catch Data: Amount of catch observed of target and by-catch species, by area and season, and % observed out of total estimated catch by species, area and seasons
- Length Frequency Data: Number of fish measured per species, by area and season.
- Biological Data: Type and quantity of other biological data or samples (otoliths, sex, maturity, etc) collected per species.
- The size of length-frequency and biological sub-samples relative to unobserved quantities.

D. Tag Return Monitoring

- Number of tags returns observed, by fish size class and area.

E. Problems Experienced

- Summary of problems encountered by observers and observer managers that could affect the NPFC Observer Programme Standards and/or each member's national observer programme developed under the NPFC standards.

**NPFC BOTTOM FISHERIES
OBSERVER PROGRAMME STANDARDS: SCIENTIFIC COMPONENT**

TYPE AND FORMAT OF SCIENTIFIC OBSERVER DATA TO BE COLLECTED

A. Vessel & Observer Data to be collected for Each Trip

1. Vessel and observer details are to be recorded only once for each observed trip.
2. The following vessel data are to be collected for each observed trip:
 - a) Current vessel flag.
 - b) Name of vessel.
 - c) Name of the Captain.
 - d) Name of the Fishing Master.
 - e) Registration number.
 - f) International radio call sign (if any).
 - g) Lloyd's / IMO number (if allocated).
 - h) Previous Names (if known).
 - i) Port of registry.
 - j) Previous flag (if any).
 - k) Type of vessel.
 - l) Type of fishing method(s).
 - m) Length (m).
 - n) Beam (m).
 - o) Gross register tonnage (international tonnage).
 - p) Power of main engine(s) (kilowatts).
 - q) Hold capacity (cubic metres).
 - r) Record of the equipment on board which may affect fishing power factors (navigational equipment, radar, sonar systems, weather fax or satellite weather receiver, sea-surface temperature image receiver, Doppler current monitor, radio direction finder).
 - s) Total number of crew (all staff, excluding observers).
3. The following observer data are to be collected for each observed trip:
 - a) Observer's name.
 - b) Observer's organisation.
 - c) Date observer embarked (UTC date).
 - d) Port of embarkation.
 - e) Date observer disembarked (UTC date).
 - f) Port of disembarkation.

B. Catch & Effort Data to be collected for Trawl Fishing Activity

1. Data are to be collected on an un-aggregated (tow by tow) basis for all observed trawls.
2. The following data are to be collected for each observed trawl tow:
 - a) Tow start date (UTC).
 - b) Tow start time (UTC).
 - c) Tow end date (UTC).
 - d) Tow end time (UTC).
 - e) Tow start position (Lat/Lon, 1 minute resolution).
 - f) Tow end position (Lat/Lon, 1 minute resolution).
 - g) Type of trawl, bottom or mid-water.
 - h) Type of trawl, single, double or triple.
 - i) Height of net opening (m).

- j) Width of net opening (m).
- k) Mesh size of the cod-end net (stretched mesh, mm) and mesh type (diamond, square, etc).
- l) Gear depth (of footrope) at start of fishing (m).
- m) Bottom (seabed) depth at start of fishing (m).
- n) Gear depth (of footrope) at end of fishing (m).
- o) Bottom (seabed) depth at end of fishing (m).
- p) Status of the trawl operation (no damage, lightly damaged*, heavily damaged*, other (specify)). *Degree may be evaluated by time for repairing (<=1hr or >1hr)
- q) Duration of estimated period of seabed contact (minute)
- r) Intended target species.
- s) Catch of all species retained on board, split by species, in weight (to the nearest kg).
- t) Estimate of the amount (weight or volume) of all living marine resources discarded, split by species.
- u) Record of the numbers by species of all marine mammals, seabirds or reptiles caught.
- v) Record of sensitive benthic species in the trawl catch, particularly vulnerable or habitat-forming species such as sponges, sea-fans or corals.

C. Catch & Effort Data to be collected for Bottom Gillnet Fishing Activity

1. Data are to be collected on an un-aggregated (set by set) basis for all observed bottom gillnet sets.
2. The following data are to be collected for each observed bottom gillnet set:
 - a) Set start date (UTC).
 - b) Set start time (UTC).
 - c) Set end date (UTC).
 - d) Set end time (UTC).
 - e) Set start position (Lat/Lon, 1 minute resolution).
 - f) Set end position (Lat/Lon, 1 minute resolution).
 - g) Net panel ("tan") length (m).
 - h) Net panel ("tan") height (m).
 - i) Net mesh size (stretched mesh, mm) and mesh type (diamond, square, etc)
 - j) Bottom depth at start of setting (m).
 - k) Bottom depth at end of setting (m).
 - l) Number of net panels for the set.
 - m) Number of net panels retrieved.
 - n) Number of net panels actually observed during the haul.
 - o) Actually observed catch of all species retained on board, split by species, in weight (to the nearest kg).
 - p) An estimation of the amount (numbers or weight) of marine resources discarded, split by species, during the actual observation.
 - q) Record of the actually observed numbers by species of all marine mammals, seabirds or reptiles caught.
 - r) Intended target species.
 - s) Catch of all species retained on board, split by species, in weight (to the nearest kg).
 - t) Estimate of the amount (weight or volume) of all marine resources discarded* and dropped-off, split by species. * Including those retained for scientific samples.
 - u) Record of the numbers by species of all marine mammals, seabirds or reptiles caught (including those discarded and dropped-off).

D. Catch & Effort Data to be collected for Bottom Long Line Fishing Activity

1. Data are to be collected on an un-aggregated (set by set) basis for all observed longline sets.
2. The following fields of data are to be collected for each set:
 - a) Set start date (UTC).

- b) Set start time (UTC).
- c) Set end date (UTC).
- d) Set end time (UTC).
- e) Set start position (Lat/Lon, 1 minute resolution).
- f) Set end position (Lat/Lon, 1 minute resolution).
- g) Total length of longline set (m).
- h) Number of hooks for the set.
- i) Bottom (seabed) depth at start of set.
- j) Bottom (seabed) depth at end of set.
- k) Number of hooks actually observed during the haul.
- l) Intended target species.
- m) Actually observed catch of all species retained on board, split by species, in weight (to the nearest kg).
- n) An estimation of the amount (numbers or weight) of marine resources discarded* or dropped-off, split by species, during the actual observation. * Including those retained for scientific samples.
- o) Record of the actually observed numbers by species of all marine mammals, seabirds or reptiles caught (including those discarded and dropped-off).

E. Length-Frequency Data to Be Collected

1. Representative and randomly distributed length-frequency data (to the nearest mm, with record of the type of length measurement taken) are to be collected for representative samples of the target species and other main by-catch species. Total weight of length-frequency samples should be recorded, and observers may be required to also determine sex of measured fish to generate length-frequency data stratified by sex. The length-frequency data may be used as potential indicators of ecosystem changes (for seample, see: Gislason, H. et al. (2000. ICES J Mar Sci 57: 468-475) Yamane et al. (2005. ICES J Mar Sci, 62: 374-379), and Shin, Y-J. et al. (2005. ICES J Mar Sci, 62: 384-396)).
2. The numbers of fish to be measured for each species and distribution of samples across area and month strata should be determined, to ensure that samples are properly representative of species distributions and size ranges.

F. Biological sampling to be conducted (optional for gillnet and long line fisheries)

1. The following biological data are to be collected for representative samples of the main target species and, time permitting, for other main by-catch species contributing to the catch:
 - a) Species
 - b) Length (to the nearest mm), with record of the type of length measurement used.
 - c) Length and depth in case of North Pacific armorhead.
 - d) Sex (male, female, immature, unsexed)
 - e) Maturity stage (immature, mature, ripe, ripe-running, spent)
2. Representative stratified samples of otoliths are to be collected from the main target species and, time permitting, from other main by-catch species regularly occurring in catches. All otoliths to be collected are to be labelled with the information listed in 1 above, as well as the date, vessel name, observer name and catch position.
3. Where specific trophic relationship projects are being conducted, observers may be requested to also collect stomach samples from certain species. Any such samples collected are also to be labelled with the information listed in 1 above, as well as the date, vessel name, observer name and catch position.
4. Observers may also be required to collect tissue samples as part of specific genetic research programmes implemented by the SC.

5. Observers are to be briefed and provided with written length-frequency and biological sampling protocols and priorities for the above sampling specific to each observer trip.

G. Data to be collected on Incidental Captures of Protected Species

1. Flag members operating observer programs are to develop, in cooperation with the SC, lists and identification guides of protected species or species of concern (seabirds, marine mammals or marine reptiles) to be monitored by observers.
2. The following data are to be collected for all protected species caught in fishing operations:
 - a) Species (identified as far as possible, or accompanied by photographs if identification is difficult).
 - b) Count of the number caught per tow or set.
 - c) Life status (vigorous, alive, lethargic, dead) upon release.
 - d) Whole specimens (where possible) for onshore identification. Where this is not possible, observers may be required to collect sub-samples of identifying parts, as specified in biological sampling protocols.

H. Detection of Fishing in Association with Vulnerable Marine Ecosystems

1. The SC is to develop a guideline, species list and identification guide for benthic species (e.g. sponges, sea fans, corals) whose presence in a catch will indicate that fishing occurred in association with a vulnerable marine ecosystem (VME). All observers on vessels are to be provided with copies of this guideline, species list and ID guide.
2. For each observed fishing operation, the following data are to be collected for all species caught, which appear on the list of vulnerable benthic species:
 - a) Species (identified as far as possible, or accompanied by a photograph where identification is difficult).
 - b) An estimate of the quantity (weight (kg) or volume (m³)) of each listed benthic species caught in the fishing operation.
 - c) An overall estimate of the total quantity (weight (kg) or volume (m³)) of all invertebrate benthic species caught in the fishing operation.
 - d) Where possible, and particularly for new or scarce benthic species which do not appear in ID guides, whole samples should be collected and suitable preserved for identification on shore.

I. Data to be collected for all Tag Recoveries

1. The following data are to be collected for all recovered fish, seabird, mammal or reptile tags:
 - a) Observer name.
 - b) Vessel name.
 - c) Vessel call sign.
 - d) Vessel flag.
 - e) Collect, label (with all details below) and store the actual tags for later return to the tagging agency.
 - f) Species from which tag recovered.
 - g) Tag colour and type (spaghetti, archival).
 - h) Tag numbers (The tag number is to be provided for all tags when multiple tags were attached to one fish. If only one tag was recorded, a statement is required that specifies whether or not the other tag was missing)
 - i) Date and time of capture (UTC).
 - j) Location of capture (Lat/Lon, to the nearest 1 minute)
 - k) Animal length / size (to the nearest cm) with description of what measurement was taken (such as total length, fork length, etc).

- l) Sex (F=female, M=male, I=indeterminate, D=not examined)
- m) Whether the tags were found during a period of fishing that was being observed (Y/N)
- n) Reward information (e.g. name and address where to send reward)

(It is recognised that some of the data recorded here duplicates data that already exists in the previous categories of information. This is necessary because tag recovery information may be sent separately to other observer data.)

J. Hierarchies for Observer Data Collection

1. Trip-specific or programme-specific observer task priorities may be developed in response to specific research programme requirements, in which case such priorities should be followed by observers.
2. In the absence of trip- or programme-specific priorities, the following generalised priorities should be followed by observers:
 - a) Fishing Operation Information
 - All vessel and tow / set / effort information.
 - b) Monitoring of Catches
 - Record time, proportion of catch (e.g. proportion of trawl landing) or effort (e.g. number of hooks), and total numbers of each species caught.
 - Record numbers or proportions of each species retained or discarded.
 - c) Biological Sampling
 - Length-frequency data for target species.
 - Length-frequency data for main by-catch species.
 - Identification and counts of protected species.
 - Basic biological data (sex, maturity) for target species.
 - Check for presence of tags.
 - Otoliths (and stomach samples, if being collected) for target species.
 - Basic biological data for by-catch species.
 - Biological samples of by-catch species (if being collected)
 - Photos
3. The monitoring of catches and biological sampling procedures should be prioritised among species groups as follows:

Species	Priority (1 highest)
Primary target species (such as North Pacific armorhead and splendid alfonsin)	1
Other species typically within top 10 in the fishery (such as mirror dory, and oreos)	2
Protected species	3
All other species	4

The allocation of observer effort among these activities will depend on the type of operation and setting. The size of sub-samples relative to unobserved quantities (e.g. number of hooks/panels examined for species composition relative to the number of hooks/panels retrieved) should be explicitly recorded under the guidance of member country observer programmes.

K. Coding Specifications to be used for Recording Observer Data

1. Unless otherwise specified for specific data types, observer data are to be collected in accordance with the same coding specifications as specified in this Annex.
2. Coordinated Universal Time (UTC) is to be used to describe times.
3. Degrees and minutes are to be used to describe locations.
4. The following coding schemes are to be used:
 - a. Species are to be described using the FAO 3 letter species codes.
 - b. Fishing methods are to be described using the International Standard Classification of Fishing Gear (ISSCFG - 29 July 1980) codes.
 - c. Types of fishing vessel are to be described using the International Standard Classification of Fishery Vessels (ISSCFV) codes.
5. Metric units of measure are to be used, specifically:
 - a. Kilograms are to be used to describe catch weight.
 - b. Metres are to be used to describe height, width, depth, beam or length.
 - c. Cubic metres are to be used to describe volume.
 - d. Kilowatts are to be used to describe engine power.

Annex M

NPFC IUU VESSEL LIST

Commission Members adopted the attached NPFC IUU List at the Third Commission Meeting in July 2017.

No.	a. Name of vessel (previous names)	b. Flag of vessel (previous flags)	c. Owner (previous owners)	d. Operator of vessel (previous operators)	e. Call sign of vessel (previous call signs)	f. Lloyds/IMO number	h. Date first included on NPFC IUU List	i. Summary of activities
1	LIAO YUAN YU 071	unknown	Not known	Not known	Not known	Not known		It was seen at 42°15.4'N, 153°22.8'E on 23 Aug 2016. When the Japanese patrol vessel approached, a vessel crew tried to hide the vessel name. Communication between the Japanese patrol vessel and LIAO YUAN YU 071 indicated that they hid the vessel name because they didn't want to be caught. (Port displayed on the vessel: Shidao; Vessel type; Lighted lift net vessel; Tonnage: 800t)
g. Photographs								
								

2	LIAO YUAN YU 072	unknown	Not known	Not known	Not known	Not known	It was seen at 42°18.7'N, 153°27.9'E on 23 Aug and at 42°9.2'N, 151°16.4'E on 11 Oct 2016. Vessel name was hidden by paint. (Port displayed on the vessel: Shidao; Vessel type; Lighted lift net vessel; Tonnage: 800t)
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g. Photographs



3	LIAO YUAN YU 9	unknown	Not known	Not known	Not known	Not known	It was seen at 42°3.0'N, 153°0.8'E on 23 Aug and at 42°10.0'N, 151°16.8'E on 11 Oct 2016. Vessel name was hidden by paint. (Port displayed on the vessel: Shidao; Vessel type; Lighted lift net vessel; Tonnage: 800t)
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g. Photographs



4	ZHOU YU 651	unknown	Not known	Not known	Not known	Not known	It was seen at 42°30'2N, 152°05'4E on 29 Sep 2016. (Port displayed on the vessel: Fungcheng; Vessel type; Lighted lift net vessel; Tonnage: 850t)
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g. Photographs



5	ZHOU YU 652	unknown	Not known	Not known	Not known	Not known	It was seen at 42°48.9'N, 152°48.2'E on 7 Sep 2016. Port of registry was hidden by paint. (Vessel type; Lighted lift net vessel; Tonnage: 820t)
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g. Photographs



6	ZHOU YU 653	unknown	Not known	Not known	Not known	Not known	<p>It was seen with LU RONG YU YUN 56219 and ZHOU YU 656 at 42°11.9'N, 151°14.6'E on 30 Sep 2016. (Port displayed on the vessel: Fungcheng; Vessel type; Lighted lift net vessel; Tonnage: 850t)</p> <p>Communication between Japanese patrol vessel and LU RONG YU YUN 56219 indicated ZHOU YU 653 were transshipping 1500t of mackerel together with ZHOU YU 656.</p>
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g. Photographs



7	ZHOU YU 656	unknown	Not known	Not known	Not known	Not known	<p>It was seen with LU RONG YU YUN 56219 and ZHOU YU 656 at 42°11.9'N, 151°14.6'E on 30 Sep 2016. (Port displayed on the vessel: Fungcheng; Vessel type; Lighted lift net vessel; Tonnage: 850t)</p> <p>Note that the same vessel name with the different port of registry (Zhoushan) (600t) has been seen in the similar area.</p> <p>Communication between Japanese patrol vessel and LU RONG YU YUN 56219 indicated ZHOU YU 656 were transshipping 1500t of mackerel together with ZHOU YU 653.</p>
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g. Photographs (No Photographs Available)

8	ZHOU YU 657	unknown	Not known	Not known	Not known	Not known	<p>It was seen at 42°35.5'N, 152°6.7'E on 12 Sep 2016. (Port displayed on the vessel: Zhoushan; Vessel type; Lighted lift net vessel; Tonnage: 600t)</p>
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g. Photographs



9	ZHOU YU 658	unknown	Not known	Not known	Not known	Not known	It was seen at 40°12.3'N, 148°40.5'E on 29 May 2016 and at 42°46.7'N, 152°41.2'E on 7 Sep 2016. (Port displayed on the vessel: Zhoushan; Vessel type: Lighted lift net vessel; Tonnage: 600t)
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g. Photographs



10	ZHOU YU 659	unknown	Not known	Not known	Not known	Not known	It was seen in the NPFC area on 2, 4, 13, 17 Jun and 7 Sep 2016. On 4 Jun the vessel name on the right side was hidden by paint. (Port displayed on the vessel: Zhoushan; Vessel type: Lighted lift net vessel; Tonnage: 600t)
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g. Photographs



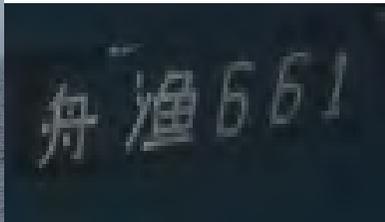
11	ZHOU YU 660	unknown	Not known	Not known	Not known	Not known	<p>It was seen in the Japanese EEZ on 10 May 2016 and in NPFC area multiple times from May to Sep 2016. On 10 May the vessel showed Korean flag but changed the Korean to Japanese flag when the Japanese patrol vessel approached.</p> <p>Vessel name changed between 15 May and 12 Sep 2016 (see the photos). The vessel is not permitted in Japan nor registered in NPFC. (Port displayed on the vessel: Basu-not apparent; Vessel type: Lightedlift net vessel; Tonnage: 600t)</p>
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g. Photographs



12	ZHOU YU 661	unknown	Not known	Not known	Not known	Not known	<p>It was seen in the Japanese EEZ on 10 and 13 May 2016 and in NPFC area on 15, 29 May and 7 Sep 2016. The vessel names on the left and right side changed frequently (see the photos). The vessel showed Japanese flag in May. But the vessel is not permitted in Japan nor registered in NPFC. (Port displayed on the vessel: Shidao; Vessel type: Lighted lift net vessel; Tonnage: 600t)</p>
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g. Photographs



13	HAI DA 705	unknown	Not known	Not known	Not known	Not known	Communications between Japanese Patrol vessel and HAI DA 705 at 43°10.4'N, 153°38.6'E on 11 Sep 2016 indicated they caught squid with drift net in the high sea. (Port displayed on the vessel: 沈家们; Vessel type: Drift net vessel; Tonnage: 290t)
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g. Photographs



14	LU RONG YU 1189	unknown	Not known	Not known	Not known	Not known	It was seen at 41°24.9'N, 140°32.7'E (Japan EEZ) on 14 Jun 2016. (Port displayed on the vessel: Shidao; Vessel type: Carrier vessel; Tonnage: 100t)
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g. Photographs



15	ZHE LING YU LENG 90055	unknown	Not known	It was seen at 40°25.3'N, 149°13.2'E on 29 May 2016. (Port displayed on the vessel: Wenling; Vessel type: Carrier vessel; Tonnage: 600t)				
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g. Photographs



16	ZHE LING YU LENG 905	unknown	Not known	It was seen at 42°45.6'N, 152°45.8'E on 24 Aug 2016. (Port displayed on the vessel: Wenling; Vessel type: Carrier vessel; Tonnage: 1000t)				
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g. Photographs (No Photographs Available)

Annex N

**CONSERVATION AND MANAGEMENT MEASURE FOR
HIGH SEAS BOARDING AND INSPECTION PROCEDURES FOR THE
NORTH PACIFIC FISHERIES COMMISSION (NPFC)**

1. The following procedures are established by the North Pacific Fisheries Commission, in accordance with Article 7, paragraph 2-c of its Convention, to govern high seas boarding and inspection of fishing vessels in the Convention Area.

Definitions

2. For the purposes of interpreting and implementing these procedures, the following definitions shall apply:

- a. “Convention” means the Convention on the Conservation and Management of High Seas Fisheries resources in the North Pacific Ocean;
- b. “Commission” means the North Pacific Fisheries Commission (NPFC) established under Article 5 of the Convention;
- c. “Authorities of the Inspection Vessel” means the authorities of the Contracting Party under whose jurisdiction the inspection vessel is operating;
- d. “Authorities of the Fishing Vessel” means the authorities of the Member of the Commission under whose jurisdiction the fishing vessel is operating;
- e. “Authorized inspection vessel” means any vessel included in the Commission’s register of vessels as authorized to engage in boarding and inspection activities pursuant to these procedures;
- f. “Authorized inspector” means inspectors employed by the authorities responsible for boarding and inspection included in the Commission register and authorized to conduct boarding and inspection activities pursuant to these procedures;
- g. “Fishing activity” means the activities established under Article 1 (i) of the Convention;
- h. “Fishing vessels” means any vessel described under Article 1 (j) of the Convention.

PURPOSE

3. Boarding and inspection and related activities conducted pursuant to these procedures shall be for the purpose of ensuring compliance with the provisions of the Convention and conservation and management measures adopted by the Commission and in force.

AREA OF APPLICATION

4. These procedures shall apply throughout the Convention Area, which consists of the high seas areas of the North Pacific Ocean as specified in Article 4 of the Convention.

GENERAL RIGHTS AND OBLIGATIONS

5. Each Contracting Party may, subject to the provisions of these procedures, carry out boarding and inspection on the high seas of fishing vessels engaged in or reported to have engaged in a fishery regulated pursuant to the Convention.
6. These procedures shall also apply in their entirety as between a Contracting Party and a Fishing Entity, subject to a notification to that effect to the Commission from the parties concerned.
7. Each Member of the Commission shall ensure that vessels flying its flag accept boarding and inspection by authorized inspectors in accordance with these procedures. Such authorized inspectors shall comply with these procedures in the conduct of any such activities.

GENERAL PRINCIPLES

8. These procedures are intended to implement and give effect to, and are to be read consistently with, Article 7.2.c and Article 17.6 of the Convention.
9. These procedures shall be implemented in a transparent and non-discriminatory manner, taking into account, *inter alia*:
 - a. such factors as the presence of observers on board a vessel and the frequency and results of past inspections; and
 - b. the full range of measures to monitor compliance with the provisions of the Convention and agreed conservation and management measures, including inspection activities carried out by the authorities of Members of the Commission in respect of their own flag vessels.
10. While not limiting efforts to ensure compliance by all vessels, priority for boarding and inspection efforts pursuant to these procedures may be given to:
 - a. fishing vessels that are not on the NPFC Record of Fishing Vessels and are flagged to Members of the Commission;
 - b. fishing vessels reasonably believed to engage or to have been engaged in any activity in contravention of the Convention or any conservation and management measure adopted thereunder;
 - c. fishing vessels that are entitled to fly the flag of a Member of the Commission that does not dispatch patrol vessels to the area of application to monitor its own fishing vessels;
 - d. fishing vessels without observers on board if so required by the Convention, Article 7.2b;
 - e. fishing vessels with a known history of violating conservation and management measures adopted by international agreement or any domestic laws and regulations.
11. The Commission shall keep the implementation of these procedures under review.
12. The interpretation of these procedures shall rest with the Commission.

PARTICIPATION

13. The Commission shall maintain a register of all authorized inspection vessels and authorities or inspectors. Only vessels and authorities or inspectors listed on the Commission's register are authorized under these procedures to board and inspect fishing vessels of Commission Members and Cooperating Non-Contracting Parties on the high seas within the Convention Area.

14. Each Contracting Party that intends to carry out boarding and inspection activities pursuant to these procedures shall so notify the Commission, through the Executive Secretary, and shall provide the following:

a. with respect to each inspection vessel it assigns to boarding and inspection activities under these procedures:

- i) details of the vessel (name, description, photograph, registration number, port of registry (and, if different from the port of registry, port marked on the vessel hull), international radio call sign and communication capability);
- ii) An example of the credentials issued to the inspectors by its authorities;
- iii) notification that the inspection vessel is clearly marked and identifiable as being on government service;
- iv) notification that the crew has received and completed training in carrying out boarding and inspection activities at sea in accordance with any standards and procedures as may be adopted by the Commission.

b. with respect to inspectors it assigns pursuant to these procedures:

- i) the names of the authorities responsible for boarding and inspection;
- ii) notification that such authorities' inspectors are fully familiar with the fishing activities to be inspected and the provisions of the Convention and conservation and management measures in force; and
- iii) notification that such authorities' inspectors have received and completed training in carrying out boarding and inspection activities at sea in accordance with any standards and procedures as may be adopted by the Commission.

15. Where military vessels are used as a platform for the conduct of boarding and inspection, the authorities of the inspection vessel shall ensure that the boarding and inspection is carried out by inspectors fully trained in fisheries enforcement procedures and duly authorized for this purpose under national laws, and that boardings from such military vessels and inspectors conform to the procedures contained within these Boarding and Inspection Procedures.

16. Authorized inspection vessels and inspectors notified by Contracting Parties pursuant to paragraph 14 shall be included on the Commission register once the Executive Secretary confirms that they meet the requirements of that paragraph.

17. To enhance the effectiveness of the Commission's boarding and inspection procedures, and to maximize the use of trained inspectors, Contracting Parties may identify opportunities to place authorized inspectors on inspection vessels of another Contracting Party. Where appropriate, Contracting Parties should seek to conclude bilateral arrangements to this end or otherwise facilitate communication and coordination between them for the purpose of implementing these procedures.

18. The Executive Secretary shall ensure that the register of authorized inspection vessels and authorities or inspectors is at all times available to all Members of the Commission and shall immediately circulate any changes therein. Updated lists shall be posted on the Commission website. Each Member of the Commission shall take necessary measures to ensure that these lists are circulated in a timely manner to each of its fishing vessels operating in the Convention Area.

PROCEDURES

19. The Commission shall develop an NPFC inspection flag, which shall be flown by authorized inspection vessels, in clearly visible fashion.

20. Authorized inspectors shall carry an approved identity card identifying the inspector as authorized to carry out boarding and inspection procedures under the auspices of the Commission and in accordance with these procedures.

21. An authorized inspection vessel that intends to board and inspect a fishing vessel on the high seas that is engaged in or reported to have engaged in a fishery regulated pursuant to the Convention shall, prior to initiating the boarding and inspection:

- a. make best efforts to establish contact with the fishing vessel by radio, by the appropriate International Code of Signals or by other accepted means of alerting the vessel;
- b. provide the information to identify itself as an authorized inspection vessel - name, registration number, international radio call sign and contact frequency;
- c. communicate to the master of the vessel its intention to board and inspect the vessel under the authority of the Commission and pursuant to these procedures; and
- d. initiate notice through the authorities of the inspection vessel of the boarding and inspection to the authorities of the fishing vessel.

22. In carrying out boarding and inspection pursuant to these procedures, the authorized inspection vessel and authorized inspectors shall make their best efforts to communicate with the master of the fishing vessels in a language that the master can understand. In order to facilitate communications between the inspectors and the master of the vessel, the Commission shall develop a standardized multi-language questionnaire, which shall be circulated to all Contracting Parties with authorized inspection vessels.

23. Authorized inspectors shall have the authority to inspect the vessel, its license, gear, equipment, records, facilities, fish and fish products and any relevant documents necessary to

verify compliance with the conservation and management measures in force pursuant to the Convention.

24. Boarding and inspection pursuant to these procedures shall:

- a. be carried out in accordance with internationally accepted principles of good seamanship so as to avoid risks to the safety of fishing vessels and crews;
- b. be conducted as much as possible in a manner so as not to interfere unduly with the lawful operation of the fishing vessel;
- c. take reasonable care to avoid action that would adversely affect the quality of the catch; and
- d. not be conducted in such manner as to constitute harassment of a fishing vessel, its officers or crew.

25. In the conduct of a boarding and inspection, the authorized inspectors shall:

- a. present their identity card to the master of the vessel and a copy of the text of the relevant measures in force pursuant to the Convention in the relevant area of the high seas;
- b. not interfere with the master's ability to communicate with the authorities of the fishing vessel;
- c. complete the inspection of the vessel within 4 (four) hours unless evidence of a serious violation is found;
- d. collect and clearly document any evidence they believe indicates a violation of measures in force pursuant to the Convention;
- e. provide to the master prior to leaving the vessel a copy of an interim report on the boarding and inspection including any objection or statement which the master wishes to include in the report;
- f. promptly leave the vessel following completion of the inspection if they find no evidence of a serious violation; and
- g. provide a full report on the boarding and inspection to the authorities of the fishing vessel, pursuant to paragraph 31, which shall also include any master's statement.

26. During the conduct of a boarding and inspection, the master of the fishing vessel shall:

- a. follow internationally accepted principles of good seamanship so as to avoid risks to the safety of authorized inspection vessels and inspectors;
- b. accept and facilitate prompt and safe boarding by the authorized inspectors;
- c. cooperate with and assist in the inspection of the vessel pursuant to these procedures;
- d. not assault, resist, intimidate, interfere with, or unduly obstruct or delay the inspectors in the performance of their duties;
- e. allow the inspectors to communicate with the crew of the inspection vessel, the authorities of the inspection vessel, any embarked observers, as well as with the authorities of the fishing vessel being inspected;

- f. provide the inspectors onboard with reasonable facilities, including, where appropriate, food and accommodation; and
- g. facilitate safe disembarkation by the inspectors.

27. If the master of a fishing vessel refuses to allow an authorized inspector to carry out a boarding and inspection in accordance with these procedures, such master shall offer an explanation of the reason for such refusal. The authorities of the inspection vessel shall immediately notify the authorities of the fishing vessel, as well as the Commission, of the master's refusal and any explanation.

28. The authorities of the fishing vessel, unless generally accepted international regulations, procedures and practices relating to safety at sea make it necessary to delay the boarding and inspection, shall direct the master to accept the boarding and inspection. If the master does not comply with such direction, the Member shall suspend the vessel's authorization to fish and order the vessel to return immediately to port. The Member shall immediately notify the authorities of the inspection vessel and the Commission of the action it has taken in these circumstances.

USE OF FORCE

29. The use of force shall be prohibited except when and to the degree necessary to ensure the safety of the inspectors during the conduct of their boarding and inspection activities. The degree of force used shall not exceed that reasonably required in the circumstances.

30. Any incident involving the use of force shall be immediately reported to the authorities of the fishing vessel, as well as to the Executive Secretary for distribution to the Commission.

INSPECTION REPORTS

31. Authorized inspectors shall prepare a full report on each boarding and inspection they carry out pursuant to these procedures in accordance with a format specified by the Commission. The authorities of the inspection vessel from which the boarding and inspection was carried out shall transmit a copy of the boarding and inspection report to the authorities of the fishing vessel being inspected, as well as the Commission, within 3 (three) full working days of the completion of the boarding and inspection. Where it is not possible for the authorities of the inspection vessel to provide such report to the authorities of the fishing vessel within this timeframe, the authorities of the inspection vessel shall inform the authorities of the fishing vessel and shall specify the time period within which the report will be provided.

32. Such report shall include the names and authority of the inspectors and clearly identify any observed activity or condition that the authorized inspectors believe to be a violation of the Convention or conservation and management measures in force and indicate the nature of specific factual evidence of such violation.

SERIOUS VIOLATIONS

33. In the case of any boarding and inspection of a fishing vessel during which the authorized inspectors observe an activity or condition that would constitute a serious violation, as defined in paragraph 38, the authorities of the inspection vessels shall immediately notify the authorities of the fishing vessel, directly as well as through the Commission.

34. Upon receipt of a notification under paragraph 33, the authorities of the fishing vessels shall without delay:

- a. assume their obligation to investigate and, if the evidence warrants, take enforcement action against the fishing vessel in question and so notify the authorities of the inspection vessel, as well as the Commission; or
- b. authorize the authorities of the inspection vessel to complete investigation of the possible violation and so notify the Commission.

35. In the case of 34(a) above, the authorities of the inspection vessel shall provide, as soon as practicable, the specific evidence collected by the authorized inspectors to the authorities of the fishing vessel.

36. In the case of 34(b) above, the authorities of the inspection vessel shall provide the specific evidence collected by the authorized inspectors, along with the results of their investigation, to the authorities of the fishing vessel immediately upon completion of the investigation.

37. Upon receipt of a notification pursuant to paragraph 33, the authorities of the fishing vessel shall make best effort to respond without delay and in any case no later than within 3 (three) full working days.

38. For the purposes of these procedures, a serious violation means the following violations of the provisions of the Convention or conservation and management measures adopted by the Commission:

- a. fishing without a valid license, permit or authorization issued by the Member whose flag the fishing vessel is entitled to fly, in accordance with Article 13 of the Convention;
- b. significant failure to maintain records of catch and catch-related data in accordance with the Commission's reporting requirements or significant misreporting of such catch and/or catch-related data;
- c. fishing in a closed area;
- d. fishing during a closed season;
- e. intentional taking or retention of species in contravention of any applicable conservation and management measure adopted by the Commission;
- f. significant violation of catch limits or quotas in force pursuant to the Convention;
- g. using prohibited fishing gear;

- h. falsifying or intentionally concealing the markings, identity or registration of a fishing vessel;
- i. concealing, tampering with or disposing of evidence relating to investigation of a violation;
- j. multiple violations which taken together constitute a serious disregard of measures in force pursuant to the Commission;
- k. refusal to accept a boarding and inspection, other than as provided in paragraphs 27 and 28;
- l. assault, resist, intimidate, sexually harass, interfere with, or unduly obstruct or delay an authorized inspector; and
- m. intentionally tampering with or disabling the vessel monitoring system;
- n. such other violations as may be determined by the Commission, once these are included and circulated in a revised version of these procedures.

ENFORCEMENT

39. Any evidence obtained as a result of a boarding and inspection pursuant to these procedures with respect to violation by a fishing vessel of the Convention or conservation and management measures adopted by the Commission and in force shall be referred to the authorities of the fishing vessel for action in accordance with Article 17 of the Convention.

40. For the purposes of these procedures, the authorities of the fishing vessels shall regard interference by their fishing vessels, captains or crew with an authorized inspector or an authorized inspection vessel in the same manner as any such interference occurring within its exclusive jurisdiction.

ANNUAL REPORTS

41. Contracting Parties that authorize inspection vessels to operate under these procedures shall report annually to the Commission on the boarding and inspections carried out by its authorized inspection vessels, as well as upon possible violations observed.

42. Contracting Parties shall include in their annual statement of compliance within their Annual Report to the Commission under Article 16 of the Convention action that they have taken in response to boarding and inspections of their fishing vessels that resulted in observation of alleged violations, including any proceedings instituted and sanctions applied.

OTHER PROVISIONS

43. Authorized inspection vessels, while carrying out activities to implement these procedures, shall engage in surveillance aimed at identifying fishing vessels of non-Members undertaking fishing activities on the high seas in the Convention area. Any such vessels identified shall be immediately reported to the Executive Secretary for distribution to the Commission.

44. The authorized inspection vessel shall attempt to inform any fishing vessel identified pursuant to paragraph 43 that has been sighted or identified as engaging in fishing activities that are undermining the effectiveness of Convention and that this information will be sent to the Executive Secretary for distribution to the Members of the Commission and the non-Member whose flag the fishing vessel is entitled to fly of the vessel in question.

45. If warranted, the authorized inspectors may request permission from the fishing vessel and/or the non-Member whose flag the vessel is entitled to fly to board a vessel identified pursuant to paragraph 43. If the vessel master or the vessel's non-Member whose flag the vessel is entitled to fly consents to a boarding, the findings of any subsequent inspection shall be transmitted to the Executive Secretary. The Executive Secretary shall distribute this information to all Commission Members as well as to the non-Member whose flag the vessel is entitled to fly.

46. Contracting Parties shall be liable for damage or loss attributable to their action in implementing these procedures when such action is unlawful or exceeds that reasonably required in the light of available information.

COMMISSION COORDINATION AND OVERSIGHT

47. Authorized inspection vessels in the same operational area should seek to establish regular contact for the purpose of sharing information on areas in which they are patrolling, on sightings and on boarding and inspections they have carried out, as well as other operational information relevant to carrying out their responsibilities under these procedures.

48. The Commission shall keep under continuous review the implementation and operation of these procedures, including review of annual reports relating to these procedures provided by Members. In applying these procedures, Contracting Parties may seek to promote optimum use of the authorized inspection vessels and authorized inspectors by:

- a. identifying priorities by area and/or by fishery for boarding and inspections pursuant to these procedures;
- b. ensuring that boarding and inspection on the high seas is fully integrated with the other monitoring, compliance and surveillance tools available pursuant to the Convention;
- c. ensuring non-discriminatory distribution of boarding and inspections on the high seas among fishing vessels of Members of the Commission without compromising the opportunity of Contracting Parties to investigate possible serious violations; and
- d. taking into account high seas enforcement resources assigned by Members of the Commission to monitor and ensure compliance by their own fishing vessels, particularly for small boat fisheries whose operations extend onto the high seas in areas adjacent to waters under their jurisdiction.

SETTLEMENT OF DISAGREEMENTS

49. In the event of a disagreement concerning the application or implementation of these procedures, the parties concerned shall consult in an attempt to resolve the disagreement.
50. If the disagreement remains unresolved following the consultations, the Executive Secretary of the Commission shall, at the request of the parties concerned, and with the consent of the Commission, refer the disagreement to the Technical and Compliance Committee (TCC). The TCC shall establish a panel of five representatives, acceptable to the parties to the disagreement, to consider the matter.
51. A report on the disagreement shall be drawn up by the panel and forwarded through the TCC Chair to the Executive Secretary for distribution to the Commission within two months of the TCC meeting at which the case is reviewed.
52. Upon receipt of such report, the Commission may provide appropriate advice with respect to any such disagreement for the consideration of the Members concerned.
53. Application of these provisions for the settlement of disagreements shall be non-binding. These provisions shall not prejudice the rights of any Member to use the dispute settlement procedures provided in the Convention.

Annex O

CONSERVATION AND MANAGEMENT MEASURE FOR PACIFIC SAURY

The North Pacific Fisheries Commission (NPFC),

Recognizing that Small Scientific Committee (SSC) for Pacific saury and the Scientific Committee (SC) completed the provisional stock assessment including Maximum Sustainable Yield (MSY) in accordance with the timeframe specified in CMM 15-02;

Following the recommendation by the SC in 2017 that CMM 15-02 is maintained in its current form and fishing efforts in 2018 will not be expanded, or that the Commission develop a new management measure based on the stock status and MSY mentioned in the SC and SSC reports, with a consideration of the uncertainties, and the recommendation by the TCC in 2017 that there is a need to improve the precision of the assessment of compliance with CMM 15-02, and such work should be done intersessionally to allow discussion at the 3rd TCC meeting;

Reaffirming the General Principles, Article 3 of the Convention, in particular, paragraph (b) stipulating that measures are adopted, based on the best scientific information available, to ensure that fisheries resources are maintained at or restored to levels capable of producing maximum sustainable yield, and paragraph (f) stipulating that preventing or eliminating overfishing and excess fishing capacity and ensuring that levels of fishing effort or harvest levels are based on the best scientific information available and do not exceed those commensurate with the sustainable use of the fisheries resources;

Adopts the following conservation and management measure in accordance with Article 7 of the Convention:

1. Members of the Commission, not described under Paragraph 2, and that are currently fishing for Pacific saury shall refrain from expansion, in the Convention Area, of the number of fishing vessels entitled to fly their flags and authorized to fish for Pacific saury from the historical existing level.
2. Members fishing for Pacific saury in areas of their jurisdiction that are adjacent to the Convention area shall refrain from rapid expansion, in the Convention Area, of the number of fishing vessels entitled to fly their flags and authorized to fish for Pacific saury from the historical existing level.

3. Members of the Commission participating in Pacific saury fisheries in areas under national jurisdiction adjacent to the Convention Area are, in accordance with relevant provisions of Article 3 of the Convention, requested to take compatible measures in paragraph 2.
4. Members of the Commission shall ensure that fishing vessels flying its flag operating in the Convention area to fish Pacific saury be equipped with an operational vessel monitoring system that is activated at all times.
5. The SC and its subsidiary SSC for Pacific saury will continue their work to improve the current stock assessment and other analysis, and provide advice and recommendations to the Commission at the next Commission meeting in 2018 in accordance with Article 10, subparagraph 4(b) of the Convention.
6. This CMM shall not be a precedent to hinder those Members which presently do not engage in Pacific saury fisheries in the Convention Area to develop their own Pacific saury fisheries in the Convention Area.
7. This CMM is an amendment of the NPFC CMM 15-02 and shall be effective for one year, subject to review at the next Commission meeting in 2018.

Annex P

CONSERVATION AND MANAGEMENT MEASURE FOR CHUB MACKEREL

The North Pacific Fisheries Commission (NPFC),

Recognizing that outcomes of the small *ad hoc* workshop for the scientific analysis of chub mackerel stock were presented to the Scientific Committee (SC) in April 2017 and the SC recommended to establish the Technical Working Group (TWG) on chub mackerel stock assessment;

Noting that CMM 2016-07 states the SC will complete the stock assessment of chub mackerel as soon as practicable, even if such assessment is provisional, and provide advice and recommendations to the Commission in accordance with Article 10, paragraph 4(b) of the Convention;

Reaffirming the General Principles provided in Article 3 of the Convention, in particular, paragraph (h) stipulating that any expansion of fishing effort does not proceed without prior assessment of the impacts of those fishing activities on the long-term sustainability of fisheries resources;

Recalling that concern was expressed on an adverse impact on the stock of chub mackerel given the rapid increase in vessels that appear to be fishing for chub mackerel in the Convention Area, as articulated in paragraphs 9 and 10 of Report of the 1st Meeting of the Technical and Compliance Committee;

Adopts the following conservation and management measure in accordance with Article 7 of the Convention:

1. Members of the Commission and Cooperating non-Contracting Parties (CNCP) with substantial harvest of chub mackerel in the Convention Area shall refrain from expansion, in the Convention area, of the number of fishing vessels entitled to fly their flags and authorized to fish for chub mackerel based on the number of vessels from the historical existing level until the stock assessment by the SC has been completed.
2. Members and Cooperating non-Contracting Parties without substantial harvest of chub mackerel in the Convention Area are encouraged to refrain from expansion, in the Convention area, of the number of fishing vessels entitled to fly their flags and authorized to fish for chub mackerel from the historical existing level until the stock assessment by the SC has been completed.

3. Members of the Commission participating in chub mackerel fisheries in areas under national jurisdiction adjacent to the Convention area are requested to take compatible measures in paragraph 1.
4. Members of the Commission and CNCP shall ensure that fishing vessels flying their flag operating in the Convention Area to fish chub mackerel are to be equipped with an operational vessel monitoring system that is activated at all times.
5. Members of the Commission and CNCPs shall provide their data on chub mackerel separated by the Convention Area and the areas under national jurisdiction adjacent to the Convention Area in accordance with the data requirements adopted by the Commission in the Annual Report by the end of February, every year. The Commission shall review such information at the annual meeting of every year.
6. Members of the Commission and CNCPs shall cooperate to take necessary measures including sharing information, in order to accurately understand the situation and eliminate IUU fishing for chub mackerel.
7. The SC and its subsidiary TWG on chub mackerel stock assessment will complete the stock assessment of chub mackerel as soon as possible in accordance with the terms of reference agreed at the TWG CM meeting in December 2017, even if such assessment is provisional, and provide advice and recommendations to the Commission in accordance with Article 10, paragraph 4(b) of the Convention. For the purpose of this, the TWG will meet in December 2017 and in 2018.
8. After chub mackerel stock assessment has been completed, the provisions in Paragraph 1 shall be reviewed by the Commission and those provisions shall not be a precedent to hinder those Members who are not harvesting substantial amounts of chub mackerel in the Convention Area to develop their own chub mackerel fisheries in the Convention Area noting the Commission shall regularly review chub mackerel harvests in the Convention Area by all Members.
9. This management measure shall expire and be replaced by the measure to be adopted by the Commission based on the advice and recommendations from the Scientific Committee.
10. This CMM is an amendment of the NPFC CMM 2016-07.

Annex Q

Interim Guidance for Management of Scientific Data Used in Stock Assessments

This Interim Guidance is intended to apply while the NPFC develops comprehensive rules and procedures governing the security of, exchange of, access to and dissemination of data held by, or accessed by Members of the Commission, its subsidiary bodies, the Secretariat, and by service providers, contractors, or consultants acting on their behalf or others so authorized for access by the Secretariat.

1. Objectives

The objectives of this Interim Guidance are (1) to support stock assessments and accumulation of scientific knowledge of fisheries resources under the Commission's jurisdiction, (2) to encourage cooperation on scientific analyses among Members, and (3) to establish an interim guidance on handling scientific data.

2. Scientific Data included in Members' Annual Reports

Scientific data (e.g., catch amount, number of vessels, number of fishing days and so on) included in Members' Annual Reports should be uploaded to the public section of the NPFC website for public access and use.

3. Other scientific data, not included in Members' Annual Reports, submitted for use in stock assessment

The Secretariat should not disclose Members' scientific data submitted by means other than Members' Annual Reports.

Members may cite and/or use such data when working on matters under consideration by the Scientific Committee/SSCs. If a Member or cooperating non-Member wishes to cite and/or use these data for work that is intended to be conducted or shared outside of the NPFC, such Member or non-Member should consult with the data provider(s) through the Secretariat, stating 1) the data subject to the request, and 2) the purpose for which the data is intended to be used. The Secretariat should immediately notify the data provider(s) of the request. The data provider(s) should inform the Secretariat within 30 calendar days whether to accept or reject the request. If the data provider(s) reject the request, the data provider(s) should state the reason(s) for the rejection. If the data provider(s) accept the request, the data provider(s) may request an agreed-upon credit line in any subsequently-created product. Those who cited/used data shall not distribute the data further nor use it for the purpose not declared.

If the Secretariat proposes to outsource analyses of such scientific data to a contractor, the Secretariat should seek agreement from all the data providers concerned. If all data providers do not agree, the relevant data should not be disclosed to the contractor.