



North Pacific Fisheries Commission

NPFC-2026-SSC NFS03-Final Report

## **3<sup>rd</sup> Meeting of the Small Scientific Committee on Neon Flying Squid REPORT**

4–6 March 2026

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**North Pacific Fisheries Commission**  
**3<sup>rd</sup> Meeting of the Small Scientific Committee on Neon Flying Squid**

**4–6 March 2026**

**Virtual**

**REPORT**

Agenda Item 1. Opening of the Meeting

1. The 3<sup>rd</sup> Meeting of the Small Scientific Committee on Neon Flying Squid (SSC NFS03) took place as a virtual meeting via WebEx, and was attended by Members from Canada, China, Japan, the Republic of Korea, the Russian Federation, Chinese Taipei, and the United States of America. The Pew Charitable Trusts (Pew) attended as an observer. An invited expert, Dr. Rujia Bi, participated in the meeting.
2. The meeting was opened by the SSC NFS Chair, Dr. Luoliang Xu (China), who welcomed the participants.
3. The Science Manager, Dr. Aleksandr Zavolokin, outlined the procedures for the meeting.
4. Mr. Alex Meyer was selected as rapporteur.

Agenda Item 2. Adoption of Agenda

5. The SSC NFS agreed to change the order of agenda items such that “Review and updates of biological information for NFS” becomes agenda item 5 and “Updates on fishery-dependent abundance indices” becomes agenda item 7.
6. The agenda was adopted as revised (Annex A). The List of Documents and List of Participants are attached (Annexes B, C).

Agenda Item 3. Review of intersessional activities and SC/TCC/Commission meeting updates related to NFS

7. The Chair provided an update on intersessional activities of the SSC NFS. Members have submitted updated 1 x 1 degree catch and effort data up to 2024 for joint CPUE standardization work. The invited expert has conducted a joint CPUE standardization and will share the code on the NPFC GitHub in due course. Members have also conducted individual CPUE standardizations and will present their work at this meeting. There is one pending task, which is for Members to share information about their collection of size and age data.

8. The Science Manager presented the outcomes from the 10<sup>th</sup> Scientific Committee meeting (SC10) of relevance to NFS. SC10 discussed taskings for its subsidiary bodies, including the frequency of benchmark and annual stock assessments, fisheries-dependent and fisheries-independent indicators of trend for stocks, incorporation of climate-related tasks into workplans, invited experts' roles and tasks for 2026, addition of a table of activities and timeline to meeting reports, science-based options for operationalizing the precautionary approach, development of a template for data calls and tasking subsidiary bodies to specify requirements and deadlines, and provision of information about Members' sampling programs for transshipped catch. The SC also streamlined its workflow and suggested to separate preparatory work from the formalization of recommendations and scientific advice, in particular by turning data preparatory meetings into informal meetings. The SC also suggested to hold one formal meeting of each SSC and TWG per year for formalizing scientific advice; fund formal meetings including SC's annual session by the NPFC, unless Members volunteer to host and sponsor them; task the Science Manager to draft meeting summaries for data preparatory meetings; task the Science Manager to post agendas, meeting papers and summaries of informal meetings on the website; use the new SC database for the submission and dissemination of data shared for routine/recurring assessments; and shorten the deadline for document submission to meetings of SSCs, TWG and SWGs from one month to two weeks.

#### Agenda Item 4. Updates on Members' fishery status

##### *4.1 Member presentations prepared in advance*

9. China presented its NFS fishery status up to 2025 (NPFC-2026-SSC NFS03-IP03). More than 99% of NFS is caught by squid jigging. The annual catch has remained relatively stable in recent years, with a total of 12,457 MT in 2025. In 2025, most catches (11,987 MT) occurred in the Convention Area east of 170°E. China operated 78 vessels in 2025, a decrease of 42 compared to 2024. They operated for 5,207 fishing days, a decrease of 3,586 compared to 2024. Seasonal catches occur from May to November and tend to show an initial rise followed by a decline. The accumulated catch increased annually between 2022 and 2024, then declined in 2025. The nominal CPUE was 0.59 MT/day west of 170°E and 2.92 MT/day east of 170°E in the Convention Area.
10. Japan presented its NFS fishery status up to 2025 (NPFC-2026-SSC NFS03-IP04). The annual catch in recent years has been relatively stable and total catch in 2025 was 5,746 MT. In general, Japanese fishing vessels mainly operate in the Convention Area east of 170°E from May to July. They also operate in Japanese national waters in January and February in some years. In 2025, most of the catch was taken in the Convention Area east of 170°E. There was almost no catch in national waters because fishing vessels operating in national waters in January and February targeted Japanese flying squid. The number of vessels operating in the

Convention Area east of 170°E has been stable since 2011 at around 25 vessels. The number of vessels operating in national waters has been decreasing in recent years. In 2019, 2020, 2024 and 2025, many fishing vessels operated in August and September. Nominal CPUE in 2025 was 4.0 MT/day in the Convention Area west of 170°E and national waters, and 3.4 MT/day in the Convention Area east of 170°E, both increasing compared to 2024.

11. The Chair noted that Japan has not shared its older CPUE data dating back to 1995 for joint CPUE analysis. Japan explained that it is still preparing the data from the earlier time period and intends to share these data when the preparation is completed. For now, Japan has shared its CPUE data from 2005 onwards for joint CPUE analysis.
12. Korea presented its NFS fishery status up to 2025 (NPFC-2026-SSC NFS03-IP05). All NFS fishing occurs by stick-held dipnet vessels which have squid jigging licenses, but NFS is not the primary target species. Pacific saury is the primary target species for these vessels. Korea conducted exploratory fishing in the North Pacific Ocean in 2017 (1 vessel), 2021 (1 vessel) and 2022 (2 vessels). In other years, NFS was caught as a bycatch species by hand lines from stick-held dipnet vessels. In 2025, total NFS catch was 28 MT, with 25 MT caught by one exploratory fishing vessel operated from July 15 to August 5. NFS catches east of 170°E have only been recorded during Korean exploratory fishing (2017, 2021, 2022 and 2025). In other years all NFS were caught west of 170°E as fishing activities focused primarily on Pacific saury. The number of stick-held dipnet vessels fishing for squid has gradually decreased from 14 in 2016 to 5 in 2025, with only 4 out of 5 operating vessels reporting catch of NFS. Since the NFS are caught only by hand lines, the annual catch fluctuates significantly. In the years when NFS were caught west of 170°E, fishing occurred in August and November, with the highest catch recorded in August. In 2025, one exploratory fishing vessel caught NFS east of 170°E and it did so only in July.
13. Chinese Taipei presented its NFS fishery status up to 2025 (NPFC-2026-SSC NFS03-IP01 (Rev. 1)). Catch peaked at 9,022 MT in 2004 and was 82 MT in 2025. Catch is mainly from the Convention Area west of 170°E. Only four vessels harvested squid in 2025, down from a peak of 91 in 2019. The four vessels operated from August to September. In 2025, the nominal CPUE was 0.2 MT/day in the western region and 2.7 MT/day in the eastern region. The fishing grounds in 2025 expanded compared to recent years. One fishing vessel operated in the eastern region, the first since 2021. Captains utilize commercial weight categories when reporting daily catch data via an electronic logbook system. The commercial weight categories are classified into the following groups: <300 g; 300–400 g; 400–600 g; >600 g; and miscellaneous.

#### Agenda Item 5. Review and updates of biological information for NFS

14. Chinese Taipei presented an investigation of the relationship between weight category and

mantle length (ML) distribution of NFS caught by its squid jigging fishery and estimates of their mantle length composition (NPFC-2026-SSC NFS03-WP04). A total of 4,449 NFS individuals were measured during 1992–2001, although some samples lacked associated date records. Because body weight (BW) category information was not recorded in the biological data, BW categories were subsequently assigned based on individual BW. The ML distribution for each BW category can be calculated from the biological samples. The monthly catch in weight was converted to catch in number using the average individual BW of each BW category. The monthly ML composition of NFS catch can be calculated from BW category data for 2022–2024. Chinese Taipei suggested that the results may be useful for stock identification of NFS in the North Pacific.

15. Japan presented size composition data for NFS caught by its squid jigging vessels in waters east of 170°E in 2025 and a preliminary estimation of catch by cohort (NPFC-2026-SSC NFS03-WP05). Japan investigated the relationship between size-box categories and ML for NFS caught by its squid jigging vessels in these waters. On-board ML measurements of squid were conducted from May to September in 2025, covering five size-box categories. In total, ML was measured for 3,023 individuals. Based on these measurement results and measurement data from previous studies in 2012–2013, the proportions of the winter-spring cohort were calculated for each size-box category. By applying these proportions to the catch by size-box categories, the catch proportion of the winter-spring cohort in the total catch in waters east of 170°E was preliminarily estimated to be an average of 4.1% for the period from May to September in 2010–2025.
16. China presented ML composition data and length-weight relationships for NFS caught by its squid jigging vessels between 2011 and 2025 (NPFC-2026-SSC NFS03-WP09). China analyzed the biological data of 10,061 NFS specimens collected by its jigging vessels in the North Pacific Ocean from 2011 to 2025, focusing on ML composition and length-weight (ML-BW) relationships to discern differences between regional cohorts and their long-term growth trajectories. China suggested that these biological data could provide complementary information for a future NFS stock assessment.
17. The SSC NFS agreed to tentatively use 170°E as the dividing line for separating the winter-spring and autumn cohorts. The SSC NFS agreed to also continue to collect and study cohort-specific size composition data and to continually reevaluate the appropriateness of this cohort-separation method.

#### Agenda Item 6. Updates on fishery-independent abundance indices

##### *6.1 Presentation about survey prepared by Members (e.g., Japan, China) in advance*

18. Japan presented a study on interannual trends in the abundance, biomass, and abundance-based CPUE of the autumn and winter-spring cohorts (NPFC-2026-SSC NFS03-WP06).

Japan conducted the study using Japanese driftnet survey data and explored two methods for separating the cohorts: separating them by the 170°E line and separating them by size. Similar trends in abundance, biomass, and abundance-based CPUE were observed for the winter-spring cohort using the two methods. However, for the autumn cohort, there were large differences in abundance and abundance-based CPUE between the two separating methods in some years due mainly to the high abundance of smaller squid (<30 cm) sampled in the area east of the 170°E line. While the overall interannual trends in the biomass were similar for both cohorts between the two methods, information on the size of squid caught by the commercial jigging fishery should be confirmed for cohort-specific stock assessments because size selectivity may differ between gear types.

19. The Chair noted that this study also seemed to support the appropriateness of using the 170°E line to separate the two cohorts.

#### Agenda Item 7. Updates on fishery-dependent abundance indices

##### *7.1 Presentation about CPUE standardization analysis prepared by each Member in advance*

20. China presented a standardized CPUE for NFS caught by the Chinese squid jigging fishery up to 2024 in the Northwest Pacific Ocean (NPFC-2026-SSC NFS03-WP08 (Rev. 1)). China explored three approaches, generalized additive model (GAM), Random Forest (RF), and Gradient Boosting Machine (GBM) to standardize the CPUE for the winter-spring cohort, the autumn cohort, and the combined stock during 2005–2024 from Chinese squid jigging fishery data. All models incorporated spatial, temporal, and environmental variables. Model performance metrics and residual diagnostics indicated acceptable fits for all models. The resulting standardized CPUE showed highly consistent interannual trends among the three methods for each cohort, as evidenced by high pairwise correlations ( $r > 0.94$ ). Specifically, the standardized CPUE for the winter-spring cohort peaked during 2005–2007, declined thereafter, and has since remained at relatively low levels. In contrast, the index for the autumn cohort showed an increasing trend from 2012 onwards, reached its highest point around 2019–2020, and has exhibited a recent declining trend. China suggested that these standardized CPUE indices, validated through multi-model comparison, could serve as abundance indices to support future stock assessment and management of this species.
21. The SSC NFS suggested that China could explore the use of a Tweedie distribution or a delta approach to explicitly handle the zeros in the raw data without having to add a constant.
22. Japan presented a preliminary standardized CPUE for the autumn cohort of NFS caught by Japanese squid jigging fishery from 2007 to 2025 in the North Pacific (NPFC-2026-SSC NFS03-WP07). The cohort was defined as individuals caught in areas east of the 170°E line. Japan used GAM to standardize the nominal CPUE, incorporating temporal (year and month) and spatial (longitude and latitude) variables. The model with the lowest Akaike information

criterion (AIC) value was selected as the best performing model. Japan found that the annual standardized CPUE derived from the best GAM showed a similar trend to the nominal CPUE. While noting that the winter-spring cohort may be included in the catch from the area east of 170°E and that there is room for further improvement in cohort separation methods, Japan suggested that this standardized CPUE could serve as a fishery-dependent abundance index of the autumn cohort in future NFS stock assessments.

23. Chinese Taipei presented a standardized CPUE for NFS caught by Chinese Taipei's squid jigging fishery up to 2024 (NPFC-2026-SSC NFS03-WP03). Catch and effort data for the Chinese Taipei NFS fishery in the Northwest Pacific were collected from 2001 to 2024. However, the fishery was temporarily halted in 2010 and during 2012–2015. The CPUE standardization was conducted using a generalized linear model (GLM) incorporating temporal, spatial, environmental, and vessel-related factors during 2016–2024. Most main explanatory variables and interaction terms included in the models were statistically significant. The standardized CPUE decreased from 2016 to 2018 and exhibited relatively limited interannual variation during 2019–2024.
24. The Chair informed the SSC NFS that, as was agreed at SSC NFS02, he had prepared a template for presenting standardized CPUEs of NFS (NPFC-2026-SSC NFS03-WP11). He requested Members to review the template intersessionally and share any feedback with him in advance of SSC NFS04.
25. The invited expert, Dr. Rujia Bi, presented a joint spatiotemporal CPUE standardization for NFS using Template Model Builder (TMB; NPFC-2026-SSC NFS03-IP06). Joint standardization is useful when multiple fleets observe the same stock with uneven overlap in space and time. The key modeling idea is to let fleets share a latent population surface while allowing fishery-specific catchability adjustments. For NFS, the approach is attractive because fleet coverage, seasonality, and spatial sampling are heterogeneous. The final assessment should focus not only on the index itself, but also on diagnostics, model stability, and biological plausibility. No environmental covariates were considered in the current analyses, but this functionality could be added to the package by allowing users to specify which covariates affect population density and which affect catchability.
26. The SSC NFS requested the invited expert to continue to develop the joint spatiotemporal CPUE standardization work and encouraged Members to continue to communicate with her on how best to utilize their data.

## Agenda Item 8. Fisheries stock assessment

### *8.1 Review of progress on the surplus production models*

27. China provided an updated preliminary stock assessment using Just Another Bayesian Biomass Assessment (JABBA) for two seasonal cohorts (winter-spring and autumn) and the stock-wide population through 2024 (NPFC-2026-SSC NFS03-WP10 (Rev. 1)). Abundance indices were derived from the Chinese squid-jigging fishery, including nominal CPUE, GAM-standardized CPUE, and RF-standardized CPUE. Annual catch data were obtained from the 2025 NPFC Annual Summary Footprint, aggregating reported catches from all Members. A total of nine assessment scenarios were conducted, covering three stock units  $\times$  three abundance indices. The scenario based on RF-standardized CPUE for the stock-wide population was designated as the base case. All models converged successfully, and residual diagnostics confirmed satisfactory model fit. Retrospective analysis showed negligible bias (Mohn's  $\rho < 0.1$ ). The results consistently indicated that in 2024, none of the stock units were overfished ( $B/B_{MSY} > 1$ ) and overfishing was not occurring ( $F/F_{MSY} \leq 1$ ). Short-term projections further confirmed the stock's resilience to catch levels within the recent historical range. China suggested that these findings provide a scientific basis for considering the current exploitation of NFS to be sustainable under the NPFC management framework.
  
28. The SSC NFS provided suggestions for potential technical improvements and encouraged China to continue developing its JABBA model. Members pointed out and discussed some technical improvements including parameter setting, prior and posterior distributions, relationships between  $r$  and  $K$  and  $q$ , autocorrelation of indices and residuals, hyperstability, and potential structure of JABBA. Members noticed some bimodal posterior distributions in some parameters, which may suggest lack of convergence of the MCMC samples. Members suggested running common JABBA diagnostics, for example the Gelman-Rubin diagnostic.

### *8.2 Discussion of frequency of benchmark and annual stock assessments*

29. The SSC NFS suggested that a three-to-five-year cycle for conducting benchmark stock assessments, as recommended by the SC, is likely to be appropriate. The SSC NFS agreed to reevaluate the appropriate frequency of benchmark stock assessments after conducting its first NFS stock assessment. The SSC NFS agreed to conduct the operational (data-updating) stock assessment once every year.

### *8.3 Discussion of fisheries-dependent and fisheries-independent indicators of trend for stocks*

30. The SSC NFS agreed that the indicators suggested by the SC are valuable and that they could be used to identify potential stock trends before an NFS stock assessment has been developed and conducted. The SSC NFS noted that some indicators, including standardized CPUE and total catch, have been regularly provided by Members.

31. The SSC NFS noted that mean size at catch should be cohort-specific.

#### *8.4 Recommendations for future work*

32. Pew provided an overview of a project on the development of management strategy evaluation (MSE) tools for short-lived species such as squid (NPFC-2026-SSC NFS03-OP01). The project is funded by Pew and led by Blue Matter Science. It aims to develop globally applicable MSE tools for squid and other short-lived species, develop some archetype management procedures (MPs) that could be effectively applied to fisheries for such species, provide strategic MSE analyses for regional fisheries management organization (RFMO) squid fisheries, integrate/test climate and environmental robustness testing methods, and provide feedback opportunities and capacity-building on the new MSE tools through RFMO trainings/workshops. Pew invited engagement and collaboration from NPFC scientists, emphasizing that RFMO scientists' inputs will be crucial for shaping the project's direction and relevance.
33. As future work, the SSC NFS agreed to:
- (a) continue analyses of Members' individual CPUE standardizations and the joint CPUE standardization and to explore areas where potential improvements could be made, such as in model assumption validation.
  - (b) further develop and evaluate surplus production models, including JABBA and SPiCT, for potential use in an NFS stock assessment.
  - (c) continue to conduct any other relevant work, including the determination of the input data, to prepare for the conducting of the first NFS benchmark stock assessment.
  - (d) complete data preparation and discuss model settings and specifications at the SSC NFS04 meeting in July 2026 and subsequently finalize the first stock assessment using updated input data at the 2027 meeting(s) to minimize the time lag between the terminal data year and the 2028 management year.
  - (e) explore the potential use of MSE methods and tools.

#### Agenda Item 9. Review of the SSC NFS Work Plan

##### *9.1 Review and update of the SSC NFS Work Plan*

34. The SSC NFS reviewed and updated the SSC NFS Work Plan (NPFC-2026-SSC NFS03-WP01 (Rev1)).

#### Agenda Item 10. Other matters

##### *10.1 Species summary for neon flying squid*

35. The Chair presented a species summary for NFS (NPFC-2026-SSC NFS03-WP02). It will be further updated to include 2025 catch and effort and other relevant information.

### *10.2 Invited expert*

36. The SSC NFS recommended that the SC continue to hire an invited expert in the 2026 operational year to support the SSC NFS during its meetings and to conduct other work to support the SSC NFS as appropriate. The SSC NFS identified the invited expert's roles and tasks to support the work of the SSC NFS in the 2026 operational year (Annex D).

### *10.3 Table of activities and timeline*

37. The SSC NFS reviewed and updated the table of intersessional activities and timelines for the 2026 operational year (Annex E).

### *10.4 Other*

38. The SSC NFS reviewed the template for SC data calls and provided input on potential data requirements and deadlines (NPFC-2026-SC11-IP01 (Rev. 1)). The updated data call is available on the website (<https://www.npfc.int/sc-data-call>).
39. The Data Coordinator, Mr. Sungkuk Kang, reported on the ongoing development of an NFS Map for NFS catch and effort data. The structure of the map is designed to be similar to the Pacific Saury map, with additional functionality to filter data by Member and to display actual catch and effort information under the "Members Only" domain. Development is nearly complete and the Secretariat is in the final stages of display refinement and data validation.
40. The Science Manager explained that the NFS map currently shows two isotherms of 8°C and 18°C, which is based on the optimal temperature range for Pacific saury, and requested Members to provide any advice they may have on a more appropriate temperature range for NFS.
41. The Data Coordinator informed the SSC NFS that once the remaining work is complete, the Secretariat will share a link to a trial version of the map with Members so that they can test the trial version and share any feedback with the Secretariat.

### Agenda Item 11. Adoption of Report

42. The SSC NFS03 Report was adopted by consensus.

### Agenda Item 12. Close of the Meeting

43. The Chair thanked the participants for their active engagement and constructive discussions, the rapporteur for producing a professional record of the meeting, and the Secretariat for organizing and supporting the meeting.
44. The meeting closed at 09:30 on 6 March 2026, Tokyo time.

## **LIST OF ANNEXES**

Annex A – Agenda

Annex B – List of Documents

Annex C – List of Participants

Annex D – Invited expert’s roles and tasks to support the work of the SSC NFS in 2026

Annex E – SSC NFS intersessional activities and timelines for the 2026 operational year

**Annex A:**  
**Agenda**

Agenda Item 1. Opening of the Meeting

Agenda Item 2. Adoption of Agenda

Agenda Item 3. Review of intersessional activities and SC/TCC/Commission meeting updates related to NFS

Agenda Item 4. Updates on Members' fishery status

4.1 Member presentations prepared in advance

Agenda Item 5. Review and updates of biological information for NFS

Agenda Item 6. Updates on fishery-independent abundance indices

6.1 Presentation about survey prepared by Members (e.g., Japan, China) in advance

Agenda Item 7. Updates on fishery-dependent abundance indices

7.1 Presentation about CPUE standardization analysis prepared by each Member in advance

Agenda Item 8. Fisheries stock assessment

8.1 Review of progress on the surplus production models

8.2 Discussion of frequency of benchmark and annual stock assessments

8.3 Discussion of fisheries-dependent and fisheries-independent indicators of trend for stocks

8.4 Recommendations for future work

Agenda Item 9. Review of the SSC NFS Work Plan

9.1 Review and update of the SSC NFS Work Plan

Agenda Item 10. Other matters

10.1 Species summary for neon flying squid

10.2 Invited expert

10.3 Table of activities and timeline

10.4 Other

Agenda Item 11. Adoption of Report

Agenda Item 12. Close of the Meeting

**Annex B:**  
**List of Documents**

**MEETING INFORMATION PAPERS**

Number	Title
NPFC-2026-SSC NFS03-MIP01	Meeting Information
NPFC-2026-SSC NFS03-MIP02 (Rev. 1)	Provisional Agenda
NPFC-2026-SSC NFS03-MIP03 (Rev. 1)	Annotated Indicative Schedule

**WORKING PAPERS**

Number	Title
NPFC-2026-SSC NFS03-WP01 (Rev. 1)	Five-Year Work Plan of the SSC NFS
NPFC-2026-SSC NFS03-WP02	Species summary for neon flying squid
NPFC-2026-SSC NFS03-WP03	CPUE standardization of neon flying squid caught by Chinese Taipei's squid jigging fishery up to 2024
NPFC-2026-SSC NFS03-WP04	Estimation of mantle length composition of neon flying squid caught by Chinese Taipei's squid jigging fishery
NPFC-2026-SSC NFS03-WP05 (Rev. 1)	Size composition of neon flying squid caught by Japanese squid jigging vessels in waters east of 170°E in 2025 and a preliminary estimation of catch by cohort
NPFC-2026-SSC NFS03-WP06	Interannual trends in the abundance and biomass of the autumn and winter-spring cohorts defined by two cohort separating methods using Japanese driftnet survey data
NPFC-2026-SSC NFS03-WP07	Preliminary standardized CPUE for the autumn cohort of neon flying squid caught by Japanese squid jigging fishery from 2007 to 2025 in the North Pacific
NPFC-2026-SSC NFS03-WP08 (Rev. 1)	CPUE standardization of Neon flying squid caught by the Chinese squid jigging fishery up to 2024 in the Northwest Pacific Ocean
NPFC-2026-SSC NFS03-WP09	Mantle length composition and length-weight relationships of neon flying squid by Chinese squid jigging vessels between 2011 and 2025
NPFC-2026-SSC NFS03-WP10 (Rev. 1)	Stock assessment of Neon flying squid in the Northwest Pacific using JABBA model up to 2024
NPFC-2026-SSC NFS03-WP11	Document template for presenting standardized CPUE of NFS

**INFORMATION PAPERS**

<b>Number</b>	<b>Title</b>
NPFC-2026-SSC NFS03-IP01 (Rev. 1)	Fishery status for NFS up to 2025 - Chinese Taipei
NPFC-2026-SSC NFS03-IP02 (Rev. 1)	Draft table of intersessional activities and timelines for the 2026 operational year
NPFC-2026-SSC NFS03-IP03 (Rev. 1)	Neon flying squid fishing conditions in China in 2025
NPFC-2026-SSC NFS03-IP04	Neon flying squid fishing condition in Japan in 2025
NPFC-2026-SSC NFS03-IP05	Korean Neon Flying Squid Fishery Status up to 2025
NPFC-2026-SSC NFS03-IP06	Joint CPUE Standardization for Neon Flying Squid

**OBSERVER PAPER**

<b>Number</b>	<b>Title</b>
NPFC-2026-SSC NFS03-OP01	Project: MSE Tools for Short-Lived Species

**Annex C:**  
**List of Participants**

**CHAIR**

Luoliang XU  
lxu287@wisc.edu

**CANADA**

Chris ROOPER  
chris.rooper@dfo-mpo.gc.ca

Mackenzie MAZUR  
mackenzie.mazur@dfo-mpo.gc.ca

**CHINA**

Libin DAI  
libin.dai@qq.com

Jintao WANG  
jtwang@shou.edu.cn

Jie CAO  
jcao22@ncsu.edu

Qiuyun MA  
qyma@shou.edu.cn

Junjie HE  
szhjj0421@163.com

Xingwang ZHANG  
17779504663@163.com

Mingyan SONG  
song5270@qq.com

**JAPAN**

Kazuhiro OSHIMA  
oshima\_kazuhiro28@fra.go.jp

Bungo NISHIZAWA  
nishizawa\_bungo05@fra.go.jp

Hajime MATSUI  
matsui\_hajime90@fra.go.jp

Osamu SAKAI  
sakai\_osamu65@fra.go.jp

**KOREA**

Hyejin SONG  
hyejinsong@korea.kr

**RUSSIA**

Vladimir KULIK  
vladimir.kulik@tinro.vniro.ru

**CHINESE TAIPEI**

Tung-Hsieh CHIANG  
chiangdon@ofdc.org.tw

Chih-Shin CHEN  
cschen@mail.ntou.edu.tw

**UNITED STATES**

Jon BRODZIAK  
jon.brodziak@noaa.gov

**OBSERVERS**

**The Pew Charitable Trusts**

Ashley WILSON  
awilson@pewtrusts.org

Thomas CARRUTHERS  
tom@bluematterscience.com

**Invited Expert**

Rujia BI  
bikayla5@gmail.com

**RAPPORTEUR**

Alex MEYER  
meyer@urbanconnections.jp

**NPFC SECRETARIAT**

Robert DAY  
rday@npfc.int

Alex ZAVOLOKIN  
azavolokin@npfc.int

Sungkuk KANG  
skang@npfc.int

Jumpei HINATA  
jhinata@npfc.int

## **Annex D:**

### **Invited expert's roles and tasks to support the work of the SSC NFS in 2026**

1. Participate in the SSC NFS04 meeting, 28-30 July 2026 (2.5 days) and SSC NFS05 meetings (dates TBD).
2. Participate in SSC NFS intersessional virtual meetings.
3. Continue to develop the joint spatiotemporal CPUE standardization work and communicate with Members on how best to utilize their data.
4. Provide constructive scientific feedback during SSC NFS meetings, including advice on data, indices, model assumptions, analytical methods and interpretation of results.
5. Actively intervene during SSC NFS meetings when technical clarification is needed.
6. Maintain active intersessional communication with the Chair and Members, as appropriate, to support ongoing technical work and follow-up actions agreed during meetings.

Reference: [Policy for the selection and extension of invited experts for supporting the Scientific Committee and its subsidiary groups](#)

**Annex E:**  
**SSC NFS intersessional activities and timelines for the 2026 operational year**

Activity/Task	Deadline	Responsibility and Reference/Comment
<b>Members</b>		
Data sharing	See <a href="#">Data call</a>	<ul style="list-style-type: none"> <li>• Members operating NFS fisheries and/or conducting research surveys</li> <li>• SC database</li> </ul>
Updates of biological information for NFS	<b>July 14</b> (two weeks before SSC NFS04)	<ul style="list-style-type: none"> <li>• If available</li> <li>• WP or IP</li> </ul>
Common sampling protocol for collecting NFS age and size data	Same as above	<ul style="list-style-type: none"> <li>• If available</li> <li>• WP</li> </ul>
Standardized fishery-dependent and fishery-independent abundance indices up to 2025	Same as above	<ul style="list-style-type: none"> <li>• Members operating NFS fisheries</li> <li>• WP</li> <li>• See <a href="#">CPUE Standardization Protocol</a> for NFS</li> </ul>
Stock assessment modelling results	Same as above	<ul style="list-style-type: none"> <li>• If available</li> <li>• WP</li> <li>• See <a href="#">Stock Assessment Protocol</a> for NFS</li> </ul>
Research on climate change impacts on NFS	Same as above	<ul style="list-style-type: none"> <li>• If available</li> <li>• WP or IP</li> </ul>
Members' sampling programs for transshipped catch	Same as above	<ul style="list-style-type: none"> <li>• Members operating NFS fisheries</li> <li>• WP or IP</li> </ul>
Fisheries-dependent indicators: a. Standardized CPUE (see above) b. Cohort-specific mean size at catch, if available c. Total catch (eAR)	Same as above	<ul style="list-style-type: none"> <li>• Members operating NFS fisheries</li> <li>• WP</li> </ul>
Fisheries-independent indicators: a. Abundance index from surveys conducted by China and Japan up to 2025 b. Size composition from surveys conducted by China and Japan up to 2025	Same as above	<ul style="list-style-type: none"> <li>• China, Japan</li> <li>• WP</li> </ul>

Updates on Members' fishery status and research activities up to 2026	<b>TBD</b> (two weeks before SSC NFS05)	<ul style="list-style-type: none"> <li>• Members operating NFS fisheries and/or conducting research surveys</li> <li>• IP (ppt slides)</li> <li>• See <a href="#">template</a> for fisheries status information for NFS</li> </ul>
<b>Chair/Secretariat/Invited expert</b>		
Data call	<b>Mar</b>	Secretariat/Chair Distribute to SSC NFS, post on the website <a href="https://www.npfc.int/sc-data-call">https://www.npfc.int/sc-data-call</a>
Invited expert's roles and tasks for the 2026 operational year (annexed to SSC NFS03 report)	<b>End Apr</b>	Secretariat/Chair Deliver to invited expert, draft a consultancy agreement
Annotated Indicative Schedule	<b>July 14</b> (two weeks before SSC NFS04)	Secretariat
Work Plan of the SSC NFS	Same as above	Chair/Secretariat Update up to 2030; including climate change issues
Species summary for neon flying squid update	Same as above	Chair/Secretariat Include 2025 data
Updated joint CPUE standardization	Same as above	Invited expert
Science-based options for operationalizing precautionary approach	Same as above	Chair/Secretariat in consultation with SC Chair and Members