

Proposal to Establish a Formal Peer-Review Process for Stock Assessments

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The Commission (2025) requested the Scientific Committee (SC) to explore the potential benefits of a peer review system. And the 2022 Performance Review Panel give high priority to the recommendation to establish a peer review process.

Recommendation 3.4.1. That the SC develop guidelines for providing advice to the Commission that reflects standards of 'best available science': specifically, whether advice passes defensible tests against identified criteria for 'best available science' (data, statistical rigor, documentation, and peer review).

Recommendation 3.4.2. That the SC pursue independent reviews of scientific advice to a greater extent.

In response to this request and high-priority recommendations, establishing a robust peer review process for stock assessments is imperative to uphold the standards of 'best available science'. Such a system is essential to ensure that the scientific advice provided to the Commission is scientifically defensible, statistically rigorous, and thoroughly documented, thereby enhancing the credibility and effectiveness of the management decisions based upon it.

The review is generally of stock assessment report which provides the knowledge and evidence base for the advice. Reviewers provide objective feedback on the suitability and validity of the data and methods, alternative fit-for-purpose approaches, the appropriate interpretation of results, and further work to address unresolved issues.

To promote the peer review process within NPFC, we have reviewed relevant documents from several other RFMOs and organizations (e.g., ICES, WCPFC, IATTC, IOTC), which serve as useful references. Based on these materials, we have drafted a Terms of Reference (TOR) for the External Peer Review of NPFC Stock Assessments (NPFC-2025-SC10-WPXX).

We strongly recommend that SC10 initiate this process. Fortunately, the new SC projects under Agenda Item 10.2 include an independent review of stock assessments (Agenda Item 10.2.2), which aligns well with this initiative. Accordingly, several procedural aspects need to be discussed, including:

- 1) the finalized TORs;
- 2) the guidelines to define the review scope and process;
- 3) the process for nominating and selecting external experts;
- 4) frequency of peer reviews for each priority species;
- 5) timeline for the stock assessment meeting, potential review meeting, and delivery of the peer review report;
- 6) how to reach consensus on review outcomes and their presentation to SC.