Annex 2: Terms of Reference for the Peer Review

External Independent Peer Review under the Western Pacific Stock Assessment Review framework: 2023 Benchmark Stock Assessment for the American Samoa Bottomfish

For questions 1-10 and their subcomponents, reviewers shall provide a "yes" or "no" answer and will not provide an answer of "maybe". Only if necessary, caveats may be provided to these yes or no answers, but when provided they must be as specific as possible to provide direction and clarification to NMFS.

- 1. Of the data considered for inclusion in the assessment, were final decisions on inclusion/exclusion of particular data appropriate, justified, and well-documented?
- 2. Is the CPUE standardization properly applied and appropriate for this species, fishery, and available data?
- 3. Are the assessment models used reliable, properly applied, adequate, and appropriate for the species, fishery, and available data?
- 4. Are decision points and input parameters reasonably chosen?
- 5. Are primary sources of uncertainty documented and presented?
- 6. Are model assumptions reasonably satisfied?
- 7. Are the final results scientifically sound, including but not limited to estimated stock status in relation to the estimated overfishing and overfished status determination criteria (SDC)?
- 8. Are the methods used to project future population state adequate, including the characterization of uncertainty, and appropriately applied for implementation of overfishing limits (OFL)?
- 9. If applied, is the choice of indicator species to evaluate more poorly known species that are in a stock complex appropriate?
- 10. Can the results be used to address management goals stated in the relevant FEP or other documents provided to the review panel? If any results of these models should not be applied for management purposes with or without minor short-term further analyses (in other words, if any responses to any parts of questions 1-9 are "no"), indicate which alternative option should be used to inform setting stock status and fishery catch limits between 1) using the previous assessment, 2) using an indicator species, or 3) designing the stock status as "unknown".
- 11. As needed, suggest recommendations for future improvements and research priorities. Indicate whether each recommendation should be addressed in the short/immediate term (for this assessment), mid-term (next assessment) and long-term (5-10 years). Also

- indicate whether each recommendation is high priority (likely most affecting results and/or interpretation), mid priority, or low priority.
- 12. Draft a report (individual reports from each of the panel members and an additional Summary Report from Chair) addressing the above TOR questions.