



**SEDAR 101 HMS Sandbar Shark
Desk Review Terms of Reference**
24 April 2026

For the traditional stock assessment:

1. Evaluate the data used in the assessment, including discussion of the strengths and weaknesses of data sources and decisions. Consider the following:
 - a. Are data decisions made by the DW and/or analysts justified?
 - b. Are data uncertainties acknowledged, reported, and within normal or expected levels?
 - c. Is the appropriate model applied properly to the available data?
 - d. Are input data series sufficient to support the assessment approach?
2. Evaluate and discuss the strengths and weaknesses of the methods used to assess the stock, taking into account the available data. Consider the following:
 - a. Are methods scientifically sound and robust?
 - b. Are the methods appropriate for the available data?
 - c. Are assessment models configured properly and used in a manner consistent with standard practices?
3. Consider how uncertainties in the assessment, and their potential consequences, are addressed.
 - a. Comment on the degree to which methods used to evaluate uncertainty reflect and capture the significant sources of uncertainty in the population, data sources, and assessment methods.
 - b. Ensure that the implications of uncertainty in technical conclusions are clearly stated.
4. Evaluate the assessment findings and consider the following:
 - a. Are abundance, exploitation, and biomass estimates reliable, consistent with input data and population biological characteristics, and useful to support status inferences?
 - b. Are the stock status determination methods for the stock appropriate? If not, are there other indicators that may be used to inform managers about stock trends and conditions?
5. Evaluate the stock projection methods, including discussing strengths and weaknesses, and consider the following:
 - a. Are the methods consistent with accepted practices and available data?
 - b. Are the methods appropriate for the assessment model and outputs?
 - c. Are the results informative and robust, and useful to support inferences of probable future conditions?
 - d. Are key uncertainties acknowledged, discussed, and reflected in the projection results?

For the Management Strategy Evaluation (MSE):

1. Evaluate the axes and ranges of uncertainty used in the MSE. Explicitly consider uncertainty in data, life history, process error, non-stationarity, and if appropriate, fishery dynamics.
 - a. Were selected axes of uncertainty relevant to the stock and appropriately characterized? Were levels of uncertainty for each axis meaningful and reasonably encompass plausible uncertainty?
 - b. Were uncertainties appropriately classified into reference (primary) or robustness (secondary) sets and were sufficient explanations provided?



2. Evaluate strengths and weaknesses of methods used to simulate the stock.
 - a. Are methods to generate operating models scientifically sound?
 - b. If data were unavailable to parameterize the model, were the assumptions used to overcome this limitation reasonable and/or multiple assumptions included as an axis of uncertainty?
 - c. Was plausibility weighting of reference operating models appropriate and sufficiently justified?
 - d. Comment on whether the robustness operating model grid was constructed to encompass sensitivity uncertainties (e.g., was the management procedure allowed to fail?).
3. Evaluate operating model conditioning
 - a. Did conditioning the operating model on available data result in simulated data with reasonable statistical properties relative to what would be available to the management procedure?
4. Evaluate MSE projections
 - a. Did the operating models project data that would be available to the management procedure?
 - b. Were projection assumptions reasonable and appropriate for the stock (e.g., decisions about future parameter estimates and uncertainty; resampling approaches to generate future data; future non-stationarity, productivity, etc.)?
5. Evaluate performance metrics
 - a. Do performance metrics include all legally mandated management objectives, including maintaining an acceptable probability of not overfishing, rebuilding an overfished stock in accordance with the specifications of the rebuilding plan, and/or prevent an overfished stock status?
6. Evaluate and comment about the candidate management procedures (e.g.)
 - a. Did the candidate management procedures only utilize data available for the stock in practice?
 - b. Did the management procedure explore management tools and controls that are applicable to the stock (e.g., appropriate management procedure archetype)?
 - c. Were top-performing management procedures tuned to minimally achieve all satisfying criteria?
7. Provide recommendations to improve the MSE.

For both components:

Prepare a Desk Review Summary Report describing the Panel's evaluation of the stock assessment and MSE, addressing each TOR.