

# Terms of Reference

## Transboundary Resources Assessment Committee (TRAC) Assessment of Eastern Georges Bank Cod, Eastern Georges Bank Haddock, and Georges Bank Yellowtail Flounder

July 12-14, 2016  
Woods Hole, MA  
USA

Chairpersons: Liz Brooks (United States of America) and Kristian Curran (Canada)

### Objectives

The Transboundary Resources Assessment Committee (TRAC) annually obtains requests for harvest advice on transboundary resources from the Transboundary Management Guidance Committee (TMGC). For the following resources: Eastern Georges Bank Cod, Eastern Georges Bank Haddock, and Georges Bank Yellowtail Flounder:

#### Cod:

- Provide a summary of biological and fishery indicators of the state of cod in the eastern GB management area.
- Provide a review of projection performance for VPA and ASAP since the benchmark meeting in 2013, including a comparison of projection assumptions against subsequent assessment results.
- Update the benchmark VPA and ASAP models and the consequence analysis table.
- Develop and apply an empirical approach:
  - Identify how surveys will be used;
  - Identify and explain an appropriate starting point (catch amount or quota) for applying the empirical approach. To the extent possible, characterize uncertainties and sensitivities.
  - Recommend thresholds for annual increases/decreases in catch advice.
- Provide catch advice in consideration of all scientific analytical results that have been presented and discussed. Describe the rationale for how the catch advice was chosen, recognizing that it may depart from the approach outlined in the 2013 Benchmark Proceedings. Similar to the catch advice approach used for other stocks, to the extent possible, the catch advice should cover a range from a low to neutral (higher) risk of exceeding the fishing mortality reference and/or from a higher probability of a stock increase to a lower probability of a stock increase.
- Report on any factors and risks that should be considered in interpreting the catch advice provided.

#### Haddock:

- Update the latest information from fisheries, including discard estimates and research surveys.
- Describe appropriateness of the projection from the previous assessment based on recent survey data.
- Advise on whether the stochastic projections from the 2015 assessment continue to adequately characterize the risks and uncertainties of the catch advice that was provided.

- Review the 2016 interim update approach for effectiveness and provide recommendations on usefulness and/or improvement.

#### **Yellowtail Flounder:**

- Apply the benchmark assessment (i.e., empirical approach) for yellowtail flounder, update results for the latest information from fisheries, including discard estimates and research surveys, and characterize the uncertainty of estimates.
- Provide catch advice for 2017 based on the empirical approach for a range of exploitation rates and, if appropriate, any other approach (e.g., constant quota) that includes catch advice for 2017 and 2018. Catch advice based on the empirical approach should consider information on survey catchability, if available.
- Report on catchability studies for flatfish if information is available.
- Discuss criteria for identifying when and how to change the management approach for yellowtail flounder.
- Describe any adjustments to benchmark assessment models applied during the TRAC, including impacts on the advice given to TMGC.
- Evaluate and quantify, if possible, scientific uncertainty of the assessment output (catch projection), discussing current practices of characterization and alternative methods of evaluation.

#### **Allocation Shares:**

- Review the biomass distribution relative to the U.S./Canada boundary, update results with the 2015 survey information, and apply the allocation shares formula.
- Note any changes to surveys (e.g., timing) that should be considered in the 2017 allocation shares.

#### **Other:**

- Draft terms of reference for the 2017 TRAC assessment of Eastern Georges Bank Atlantic Cod, Eastern Georges Bank Haddock, and Georges Bank Yellowtail Flounder.
- Other matters.

#### **Expected Publications**

- **TRAC Transboundary Status Reports** for the Eastern Georges Bank Atlantic Cod management unit and Georges Bank Yellowtail Flounder management unit.
- **TRAC Transboundary Status Update** for the Eastern Georges Bank Haddock management unit.
- **TRAC Reference Documents** for Eastern Georges Bank Atlantic Cod management unit, Georges Bank Yellowtail Flounder management unit, and Allocation Shares.
- **TRAC Proceedings** of meeting discussion.

#### **Participation**

- DFO Maritimes scientists and managers
- NMFS Northeast Region scientists and managers
- Canadian and U.S. fishing industry
- U.S. State and Canadian Provincial (NB and NS) representatives
- NEFMC representatives
- Scientific and Statistical Committee (SSC) representatives