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SCIENTIFIC COUNCIL MEETING – 2012**CANADIAN REQUEST FOR SCIENTIFIC ADVICE ON MANAGEMENT IN 2013 OF CERTAIN STOCKS IN SUBAREAS 0 TO 4**

Canada requests that the Scientific Council, at its meeting in advance of the 2012 Annual Meeting of Northwest Atlantic Fisheries Organization, subject to the concurrence of Denmark (on behalf of Greenland), provide advice on the scientific basis for management in 2013 of the following stocks:

1. Greenland halibut (Subareas 0 and 1)

The Scientific Council has noted previously that there is no biological basis for conducting separate assessments for Greenland halibut throughout Subareas 0-3, but has advised that separate Total Allowable Catch be maintained for different areas of the distribution of Greenland halibut.

- a) The Council is therefore, subject to the concurrence of Denmark (on behalf of Greenland) as regards Subarea 1, to provide an overall assessment of status and trends in the total stock area throughout its range and comment on its management in Subareas 0+1 for 2013, and to specifically advise on appropriate Total Allowable Catch levels for 2013, separately, for Greenland halibut in the offshore area of Divisions 0A+1AB and Divisions 0B+1C-F. The Scientific Council is also asked to advise on any other management measures it deems appropriate to ensure the sustainability of these resources.
- b) Recognizing that only general biological advice and/or catch data are available, few standard criteria exist on which to base advice and risk implications. The stock status should be evaluated in the context of the management requirements for long-term sustainability and management options should be provided in risk-based terms. The Scientific Council is therefore asked to provide risk implications, to the extent possible, for a range of total allowable catch options, from -5% to +15% of the current total allowable catch.
- c) Presentation of the results should include the following:
 - a graph of historical catch for the longest time period possible;
 - a graph of the biomass index for the longest time period possible; and
 - any other graph the Scientific Council feels is relevant.

2. Shrimp (Divisions 0A and Subarea 1)

Canada requests the Scientific Council to consider the following options in assessing and projecting future stock levels for Shrimp in Subareas 0 and 1:

- a) The status of the stock should be reviewed and management options evaluated in terms of their implications for fishable stock size, spawning stock size, recruitment prospect, catch rate and catch in both the short and long term. The implications of catch options ranging from 50,000 t to the catch corresponding to Z_{msy} , in 10,000 t increments, should be forecast for 2013 through 2017 if possible, and evaluated in relation to precautionary reference points of both mortality and fishable stock biomass. The present stock size and fishable stock size should be described in relation to those observed historically and those to be expected in the longer term under this range of fishing mortalities, and any other options the Scientific Council feels worthy of consideration.

- b) Management options should be provided within the Northwest Atlantic Fisheries Organization Precautionary Approach Framework. Uncertainties in the assessment should be evaluated and presented in the form of risk analyses related to the limit reference points of B_{lim} and Z_{MSY} .
- c) Presentation of the results should include the following:
- a graph and table of historical yield and fishing mortality for the longest time period possible;
 - a graph of biomass relative to B_{msy} , and recruitment levels for the longest time period possible.
 - a graph of the stock trajectory compared to B_{lim} and/or B_{MSY} and Z_{MSY} ;
 - graphs and tables of total mortality (Z) and fishable biomass for a range of projected catch options (as noted in 2 a) for the years 2013 to 2017 if possible. Projections should include both catch options and a range of cod biomass levels considered appropriate by SC. Results should include risk analyses of falling below B_{MSY} and B_{lim} , and of exceeding Z_{MSY} ;
 - a graph of the total area fished for the longest time period possible; and
 - any other graph or table the Scientific Council feels is relevant.

NOTE: With respect to shrimp, it is recognized that the Council may, at its discretion, delay providing advice until later in the year, taking into account data availability, predictive capability, and the logistics of additional meetings.