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## Northwest Atlantic



# Fisheries Organization

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### SCIENTIFIC COUNCIL MEETING - JUNE 1985

### Denmark (Greenland) Request for Scientific Advice on Management

### in 1986 of Certain Stocks in Subarea 1

by

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 Denmark, on behalf of Greenland, requests the Scientific Council of NAFO at its June 1985 Meeting to provide advice on the status of the stocks and on the scientific basis for management in 1986 and as many years onward as the data allow for the following stocks:

a) Stocks occurring in Subarea 1

Atlantic cod Redfish by species, if possible Wolffish by species (spotted and striped), if possible

b) Stocks overlapping Subareas 0 and 1 (subject to the concurrence of Canada)

Greenland halibut Roundnose grenadier Northern shrimp (*Pandalus borealis*)

- 2. In the analyses on which management advice will be based, the following should be included:
  - a) For <u>cod</u> in Subarea 1, the current stock size and its composition and distribution should be analyzed and form the basis for management options in which catch and catch composition (by age-groups) and the resultant stock size and spawning stock size are to be given, with the examples of options:
    - i)  $F = F_{0,1}$  from 1986 onward
    - ii)  $F = F_{(max)}$  from 1986 onward .
    - iii)  $F = F_{(1984)}$  from 1986 onward
    - iv) A steady catch level from 1986 onward with the annual catch level equal to

       TAC for 1985 (25,000), (2) any other qualified estimate of the 1985 catch,
       and (3) the catch for 1985 calculated by the above options for F(1986).

The maximum potential for rebuilding the spawning stock (i.e. complete stop of cod fishing) should also be analyzed up to and including the stock size by January 1989.

A graph should be produced illustrating the resulting spawning stock by 1 January 1987 for any given 1986 catch level between zero and that for F(max), assuming that the catch level in 1985 is equal to the above-mentioned TAC for that year.

The possibility and the advantages and disadvantages of combining, in future, the annual analyses of cod at West and East Greenland should be discussed.

- b) For redfish and wolffish in Subarea 1, options for management should, if possible, be expressed graphically in terms of catches in 1986 and the stock and spawning stock biomass by 1 January 1987 for a range of F-values covering at least half to double that in 1984.
- c) For <u>Greenland halibut</u> and <u>roundnose grenadier</u> in Subareas 0+1, the guidelines provided above for redfish and wolffish in Subarea 1, supplemented by any other guidelines provided by Canada, should form the basis for the analyses and advice.

- d) The Scientific Council should feel free to report on such other invertebrate and finfish stocks in Subarea 1 and on such other scientifically-based management options for the above-mentioned Subarea 1 stocks as it feels applicable.
- 3. As in the past, advice on status of stock and management options for shrimp at East Greenland should also be provided in cooperation with ICES.