Retrospective review of management advice for Northeast Arctic cod



Aglen, A. Nakken, O. Yaragina, N. Sokolov, K.



PINRO, Murmansk, Russia



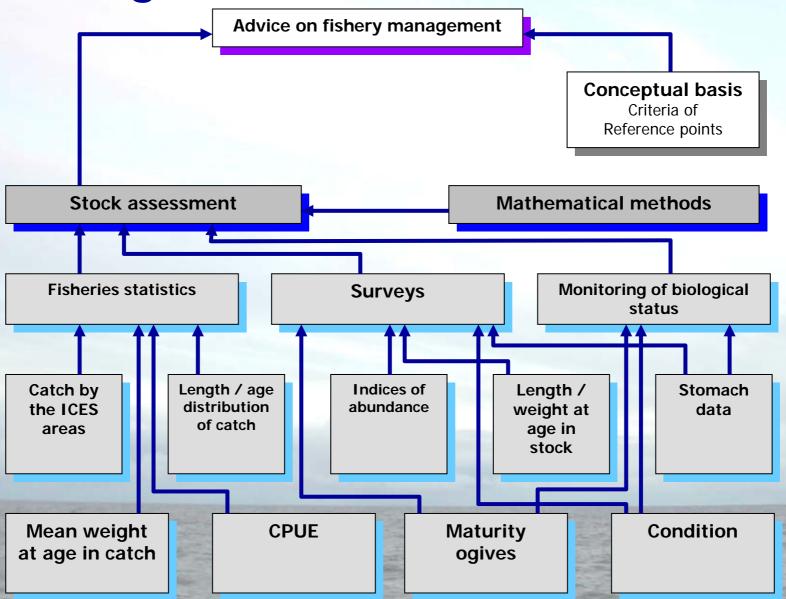
IMR, Bergen, Norway

Brief history of the NEA cod fishery regulation measures

Year	Fishery regulation measures
1946	Introducing minimal mesh size in trawls of 80/90 mm
1961	Introducing minimal mesh size in trawls of 110 mm
1963	Introducing minimal mesh size in trawls of 120/130 mm
1978	Establishing annual TAC for trawl fishery
1979	Introducing measures to improve spawning conditions
1981	Introducing minimal mesh size in trawls of 125 mm
1982	Introducing minimal mesh size in trawls of 135 mm*
1983	Establishing annual TAC (for all fishing gears)
1984	Limiting the by-catch of juvenile <i>Gadidae</i> on shrimp fishery
1992	Limiting the by-catch of juvenile <i>Gadidae</i> on capelin fishery
1993	Introducing sorting grids on shrimp fishery
1997	Introducing sorting grids on cod fishery

^{* -} applied to all vessels operating in Norwegian economic zone

Scheme of Northeast Arctic cod management advices elaboration



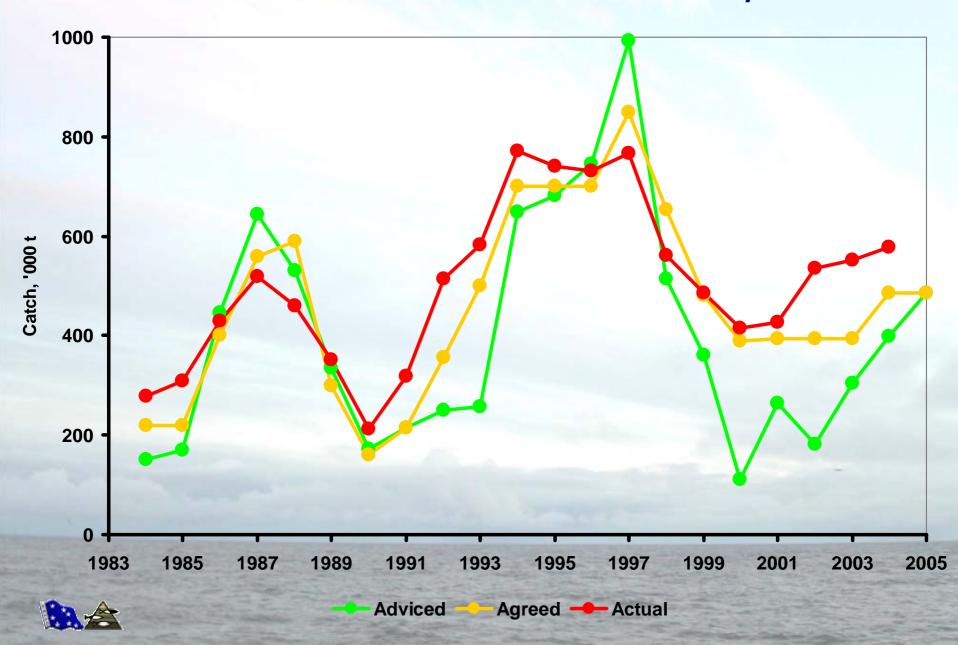
Material and methods

All data are taken from the annual ICES reports (ACFM reports; NEA cod section).

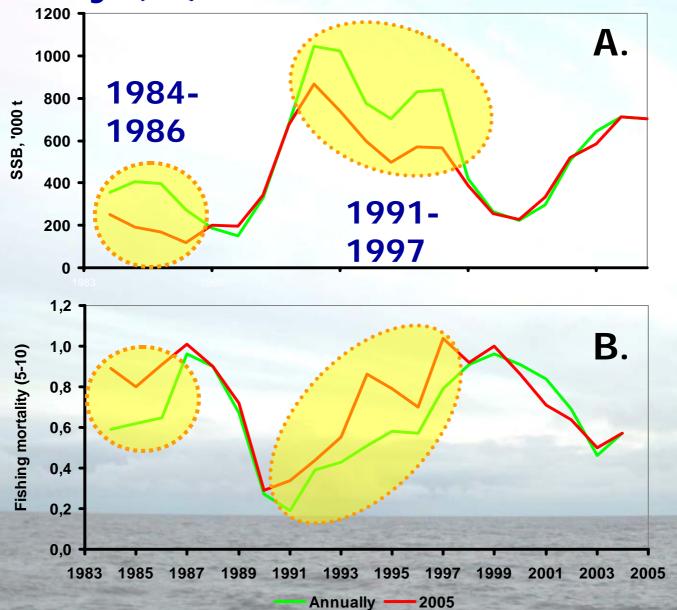
There are comparison of results borrowed from:

- a. Annual assessments taken in previous years;
- b. Updated annual assessments taken in final year (2005).

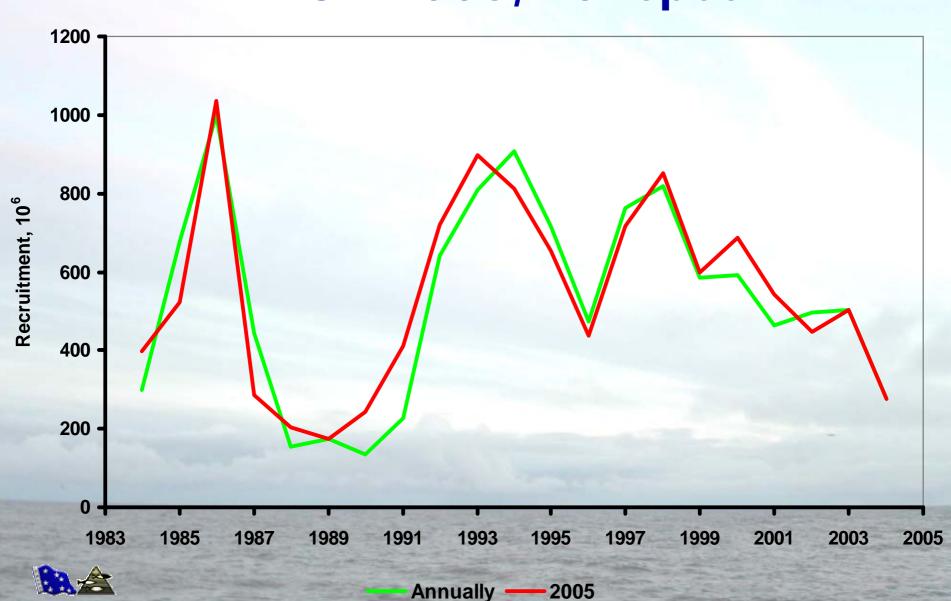
Catch of NEA cod in 1984-2005, '000 t



Spawning stock biomass (A.) and fishing mortality (B.) of NEA cod in 1984-2005



Recruitment of NEA cod at age 3 in 1984-2005, 106 spec.



Consequences for future management advices

- Unification of fishery management rules within the margins of cod area;
- Receiving reliable fishery statistics;
- Improving stock survey's methodology;
- Minimizing uncertainties related to assessment methods and data.