

## Attachment 8

CBSPC meeting in Moscow Sep. 2002

### Japanese proposal for the ABC of 2003 in the Convention area Fisheries Agency of Japan

1. Japan tried to calculate the ABC in the Convention area for the year 2003 in case of which the pollock biomass in the Specific Area is less than one million tons.
2. The estimated values of ABC in the Specific area is 2,336 t
3. Base of estimation of ABC

Operational definition: Summary of the Bering Sea and Aleutian Islands Groundfish Fishery Management Plan 1997, published by North Pacific Fishery Management Council.

ABC estimates in the Specific Area were calculated by using Tier 3.

#### Tier 3

- (1) With considering the lowest biomass estimate in 2002, we do not expect the newly recruitment for the year 2003.
- (2) Natural mortality rate of  $M=0.2$  gives a projected biomass of  $B_{2003}=188,000$  t.
- (3) The values of  $B_{40\%}$ , and  $F_{40\%}$  were estimated 2,000,000 t, and 0.27, respectively.

$$F_{ABC}=F_{40\%} \times (B_{2003}/B_{40\%} - 0.05)/(1-0.05) = 0.012$$

- (4) ABC for 2002 in the Specific area is

$$ABC_{2003}=B_{2003} \times (1 - e^{0.012}) = 2,336 \text{ t}$$

#### 4. Estimation of ABC in the Convention area

We tried to calculate the ABC in the Convention area taking into consideration the provisions of the Annex part I(b) of the Convention that the pollock biomass for the Specific Area shall be deemed to represent 60% of the Aleutian Basin biomass.

ABC<sub>2003</sub> in the Convention area from Tier 3;

$$ABC_{2003} = 2,336 / 0.6 = 3,894 \text{ t}$$