ANNEX 9

GUIDELINES FOR ESTIMATING CONVERSION FACTORS

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The aim of these guidelines is to obtain an accurate description of catch processing methods and to obtain validated conversion factors for whole fish or krill (fresh whole weight) converted into a processed product. Comments relating to the design and application of these guidelines should be forwarded to CCAMLR through the technical coordinators.

Scientific observers and fishing masters are called upon to apply these guidelines in fisheries in the Convention Area during the 1999/2000 season.

SAMPLING PROCEDURE

Conduct random sampling once a week for each species of finfish and processing method so that a series of conversion factors can be obtained. For krill, conduct random sampling twice per season. Samples should also be taken when a vessel moves to a different fine-scale rectangle.

Record a detailed description of the processing method and type of equipment used (e.g. manually cut with a knife, fed through saw, automated cutting or filleting machine, peeling machine) in the comments section of the form. Where appropriate, illustrate the angle and position of the cuts used on the side and top view diagrams provided. Use a separate data form for each processing method. If processing methods change during the trip, record the date and reason for the change in the comments section. Supplementary information may be submitted as needed.

The minimum sample size for *Dissostichus* spp. should be 25 fish or 200 kg and for *Champsocephalus gunnari*, 100 fish or 400 kg. The minimum sample size for *Euphausia superba* should be 500 kg. Take samples that cover the whole size range of the target species caught. If necessary, use size categories and report the range of length in each category (e.g. small, medium, large).

Weigh the sample of whole fish or krill (fresh whole weight) then pass the fish or krill through the factory processing system (with the help of the factory manager). Recover the processed fish or krill and weigh the product (processed weight). All weights must be in kilograms.

DESCRIPTION OF FORM

Processing code:
The following codes indicate the type of processing method used on the catch:

HAG	Headed and gutted: head and internal organs removed;
HAT	Headed and tailed (trunked): head, tail and internal organs removed;
FLT	Filleted: only the fillets of fish with skin are retained;
GUT	Gutted: internal organs removed, head and tail remain;
WHO	Whole: no processing used, product retained in whole form;
TUB	Tubed: refers to the squid mantle only;
TEN	Tentacles: retaining tentacles only (squid, octopus);
PLD	Peeled krill;
MEA	Fish meal;
BOI	Boiled krill; and
OTH	Other: please describe in comments field using diagrams if necessary.

Haul number:
The number of the haul from which the sample was taken. This number should correspond to the set or trawl number recorded in the observer's logbook or, in the case of krill, the catch logbook.

Species code:
The CCAMLR three-character code which identifies the species of fish or krill processed.

Length range:
Record the minimum and maximum total lengths for the fish (cm) or krill (mm) in the sample which is to be processed.

Number of fish:
Record the total number of fish in the sample which is to be processed.

Weighing code:
The following codes refer to the type of weighing device used:

motion-compensated electronic scales (1);
non-motion-compensated electronic scales (2);
spring balance (3);
beam balance (4); and
other: please describe in comments field (5).

Please ensure that the same device is used to measure the fresh whole and processed product for each sample.

Fresh whole weight:
The unprocessed weight of the sample.

Processed weight:
The final weight of the sample at the completion of the processing process.

Grade:
This will be a product quality code used by the factory manager. Record the description of each code in the comments section.

Conversion factor:
This is calculated by dividing the fresh whole weight by the resulting processed weight (e.g. 170 kg fresh whole weight / 100 kg processed weight = 1.70).

CONVERSION FACTOR FORM

Vessel name: _____ Call sign: _____ Processing code: _____

SIDE VIEW OF CUT*

TOP VIEW OF CUT*

Haul Nº	Species Code	Length Range		Nº of Indi-viduals	Weighing Code	Green Weight (kg)	Processed Weight (kg)	Grade	Conversion Factor
		Min.	Max.						

Processing equipment and comments:

* Applies to finfish only