NEW AND EXPLORATORY FISHERIES

8.1 Five notifications of intent to initiate new fisheries in 1996/97 under Conservation Measure 31/X were received by the Commission (Table 8).

Table 8: Summary of notifications of intent to initiate new fisheries under Conservation Measure 31/X in 1996/97.

Member	Fishery	Area	Document No.
Republic of Korea/UK	Squid	Subarea 48.3	CCAMLR-XV/7
Australia	*D eleginoides*, *D. mawsoni*, other species	Division 58.4.3	CCAMLR-XV/9
	Miscellaneous species	Division 58.5.2	
New Zealand	*D. eleginoides*	Subareas 88.2, 88.1	CCAMLR-XV/8 (Rev. 1)
Norway	*D. eleginoides*	Subarea 48.6	CCAMLR-XV/10 (Rev. 1)
South Africa	*D. eleginoides*	Subareas 48.6, 58.6, 58.7 Divisions 58.4.3, 58.4.4	CCAMLR-XV/11

New Fishery for *M. hyadesi* in Subarea 48.3

8.2 The Republic of Korea and the UK jointly submitted a notification for a new fishery for *M. hyadesi* in Subarea 48.3 (CCAMLR-XV/7). The proposal was for two vessels to harvest up to 2 500 tonnes of *M. hyadesi*. WG-FSA considered this proposal in depth (Annex 5, paragraphs 4.11 to 4.14).

8.3 The Scientific Committee noted the precautionary approach proposed for this fishery and endorsed WG-FSA's advice regarding data collection for this fishery.

New Fishery for *D. eleginoides* in Subarea 48.6

8.4 Norway submitted a notification (CCAMLR-XV/10 Rev. 1) for a new longline fishery for *D. eleginoides* in Subarea 48.6. WG-FSA was unable to comment on the proposal as there was no information on catch levels, the biology of proposed harvested species, dependent/associated species-effects or comparisons with similar fisheries.

8.5 Clarification by Norway indicated that the notification was preliminary and that no permit had been issued for fishing during 1996/97. Appropriate information for review will be provided in the future. It was noted that the intent was to distribute fishing activity widely within Subarea 48.6 in order to maximise fisheries data collection.

New Fishery for *D. eleginoides*, *D. mawsoni* and
Mixed Species in Divisions 58.4.3 and 58.5.2

8.6 Australia submitted a notification (CCAMLR-XV/9) for a new bottom trawl fishery in Division 58.5.2 which was similar to that submitted last year (CCAMLR-XIV, paragraph 6.1). This fishery proposes to take up to 50 tonnes per species (other than *C. gunnari* and *D. eleginoides*, which are subject to TACs under Conservation Measure 78/XIV) and to allow a bottom trawl fishery in Division 58.4.3 with a catch limit of 200 tonnes for *D. eleginoides* and *D. mawsoni* combined.

New Fishery for *D. eleginoides* in Subareas 88.1 and 88.2

8.7 New Zealand submitted a notification of its intention to initiate a fishery for *D. eleginoides* in Subareas 88.1 and 88.2 (CCAMLR-XV/8 Rev. 1) which includes a plan of data collection and a fishery operation protocol. The notification proposes setting precautionary limits of 2 500 tonnes per statistical area with subarea limits between 200 and 1 500 tonnes being distributed by rectangles of 0.25° latitude by 0.25° longitude on the basis of catch limits established during limited periods of fishing. Catch rates are to be used to terminate fishing in specific rectangles and to provide criteria to be applied to the resumption of fishing.

8.8 A question was raised whether proposed plans included strict adherence to Conservation Measure 29/XIV for the avoidance of incidental mortality. New Zealand noted that if a permit were to be issued, full compliance with mitigation measures for the avoidance of incidental mortality would be required.

8.9 It was noted that the small size of the rectangles could be problematic; for example, taking 1 500 tonnes from such a small rectangle could be detrimental to the stock.

New Fishery for *D. eleginoides* in Subareas 48.6,
58.6, 58.7 and Divisions 58.4.3 and 58.4.4

8.10 South Africa submitted a proposal (CCAMLR-XV/11) for a longline fishery for *D. eleginoides* in a number of areas in the Indian Ocean which have never been fished (e.g., Subareas 48.6 and 58.7) or where South Africa has not fished (e.g., Divisions 58.4.3 and 58.4.4). It was noted that the management plan described a data collection plan and fishery operation protocol. It proposes setting precautionary catch limits by statistical area (a limit of 3 200 tonnes per area was chosen

based on historic catches from Subarea 48.3) with local limits of between 200 and 800 tonnes being distributed by rectangles of 0.5° latitude by 1.0° longitude depending on the catch rates achieved during specific periods of fishing.

8.11 A question was raised as to whether Conservation Measure 87/XIII, regulating the fishery for *L. squamifrons* in Division 58.4.4 on the Ob and Lena Banks, applies to the proposed new fishery for *D. eleginoides*. This measure requires the by-catch of *D. eleginoides* to be reported monthly. It was also noted that this conservation measure, which specifically applies to trawl fishing, expires during the 1995/96 season.

8.12 South Africa noted that any current conservation measure in force would apply to the proposed fishery. With regard to Conservation Measure 87/XIII, the reported by-catch of *D. eleginoides* from the Ob and Lena Banks would be included in any TAC established for the new longline fishery.

8.13 Additionally, South Africa noted that Conservation Measure 29/XIV, designed to minimise incidental mortality of seabirds, would apply to the proposed fishery. The period of fishing was noted as a potential issue because it may be difficult to adhere to night-time setting of longlines as mandated in Conservation Measure 29/XIV if fishing is allowed for a 12-month period.

8.14 Clarification was requested from South Africa on item (3).(g) in its proposed fishery plan (CCAMLR-XV/11); this specifies that the by-catch of species other than *D. eleginoides* shall not exceed 50 tonnes. If this was exceeded, the fishable resource would become a new fishery and it would not commence until the notification procedure requirement under Conservation Measure 31/X was fulfilled. This plan was considered appropriate for the mixed species fishery.

8.15 The Scientific Committee was encouraged by the thoroughness of the South African plan for the collection of data, including environmental, catch and effort and biological data.

8.16 The Scientific Committee endorsed the observation of WG-FSA (Annex 5, paragraphs 4.19 and 4.20) that a number of general principles, particularly with reference to finfish, were common to all five notifications of new fisheries.

8.17 These principles for the new fisheries for *D. eleginoides* (which could be applied to other new fisheries to some degree) are as follows:

(i) CCAMLR should adopt a common and integrated approach to areas likely to be developed by new fisheries;

(ii) as part of such an integrated approach, the application of Conservation Measure 31/X should anticipate the requirements of Conservation Measure 65/XII by setting up scientifically-based data collection and fishery/research operation plans. This will facilitate the acquisition of data necessary to manage the development of new fisheries in accordance with CCAMLR's precautionary approach;

(iii) precautionary catch limits should be determined for statistical areas using available information (e.g. based on catches from similar fisheries elsewhere and/or on areas likely to be suitable for fishing). Limits for smaller areas (e.g. rectangles of 0.5° latitude by 1.0° longitude) should also be developed. These will serve to distribute catch and fishing effort while augmenting the collection of relevant information over a wide geographic area in a way that should reduce the risk of localised overfishing;

(iv) the collection of crucial fisheries and biological information mandates the deployment of scientific observers; and

(v) accurate positional information is essential, particularly if fine-scale rectangles are applied, if the fishery should follow stock across the Convention Area boundaries (as appears to be the case for *D. eleginoides* in Subarea 58.7 and on the banks adjacent to Subarea 48.3) or if the fishery should move between subareas within the Convention Area.

8.18 The Scientific Committee discussed at length the issue of fine-scale limits as described in paragraph 4.20(iii) of Annex 5. The Scientific Committee agreed with WG-FSA on the scientific rationale for catch limits for fine-scale areas and the proposed size of such fine-scale areas.

8.19 The observation was made that it would be extremely difficult to implement a system of catch limits in such fine-scale areas. The administration of fine-scale area limits requires near real-time catch reporting and positional information as well as near real-time dissemination of this data to those involved in the fishery.

8.20 However, in order to ensure that a new fishery will provide sufficient data required under Conservation Measure 65/XII, fishing effort must not be concentrated in too small an area.

8.21 The Scientific Committee also noted that the level of effort must be taken into account when setting fine-scale area limits. The level of effort in the finfish proposals was not addressed by WG-

FSA, nor was advice provided by the Scientific Committee. It was recognised that this was an important topic for the Commission.

8.22 Based on discussions by WG-FSA (Annex 5, paragraphs 4.28 to 4.30) on the calculation of a precautionary limit for *D. eleginoides* in previously unfished statistical areas, the Scientific Committee recommended that a limit of 2 200 tonnes for *D. eleginoides* be applied to each subarea or division in the new fisheries proposals.

8.23 It was noted that the best data for the estimation of stock size and recruitment levels using current methods would be obtained from trawl surveys and that such estimations are not possible from commercial fishing data.

8.24 The applicability of the level of 2 200 tonnes to each subarea or division was of concern to some Members. The Scientific Committee noted that a better basis for adjusting areal limits would probably be to take into consideration the proportional seabed area for specific depth ranges. Such calculations were not possible for WG-FSA this year but have been given a high priority for next year's meeting of the Working Group.

8.25 It was noted that no commercial fishing had been allowed until now in the French EEZ surrounding Crozet Island due to conservation reasons, this island being a major breeding area for albatrosses and petrels. Such considerations may also be applicable to other areas for future new fisheries.

8.26 Detailed information on the distribution and abundance of albatrosses in the region is available in SC-CAMLR-XV/BG/21; similar data on petrels can be made available via ad hoc WG-IMALF as required.

8.27 It was noted that stocks regulated within the Convention Area may move outside the Convention Area, but that insufficient data exist for questions of stock identity to be addressed at this time. Due to the lack of knowledge on stock identity, it was recommended that biological samples, particularly of otoliths, be collected from catches in the new fishery.

8.28 The ASOC Observer expressed concern about the level of catch limits suggested by the Scientific Committee for statistical subareas for the new fisheries for *D. eleginoides*. ASOC stated that the suggested limits seemed to allow commercial-scale catches instead of a fishing level which would allow for adequate data collection; this is not in keeping with Conservation Measure 65/XII. ASOC expressed the opinion that a true precautionary approach would create a transition period from no fishery to full-scale commercial catches and urged CCAMLR to set catch limits for *D.*

eleginoides in the new fisheries at an order of magnitude below the existing TACs in statistical subareas where commercial catches have been taken for several years.

8.29 The Scientific Committee noted that the timing and duration of new fisheries might have implications for incidental mortality due to variation in day length during the year and consequent differences in the likelihood of substantial by-catch of seabirds. The Scientific Committee noted that for the areas under consideration, it did not currently have sufficient data on seabird by-catch in new fishery areas to provide guidance. It was recommended that the topic should be readdressed in the future when more data are available (see paragraph 8.32).

Future Work

New Fishery for *M. hyadesi* in Subarea 48.3

8.30 The Scientific Committee requested that the Secretariat compare the proposed data elements in WG-FSA-96/21 with those of CCAMLR's standard fine-scale catch and effort data form for a squid jig fishery (Form C3 Version 1) to ensure that critical data are collected. Revised data forms should be developed in consultation with Dr P. Rodhouse (British Antarctic Survey).

New Fishery for *D. eleginoides*, *D. mawsoni* and Mixed Species in Subareas 48.6, 58.6, 58.7 and Divisions 58.4.3 and 58.4.4

8.31 The Secretariat was requested to undertake calculations of seabed area for specific depth ranges in previously unfished areas and to compare the results with those for fished areas.

8.32 The ad hoc WG-IMALF subgroup was requested to summarise available data on seabird by-catch within the subareas and divisions of proposed new fisheries.

Management Advice

All New Fisheries

8.33 The Scientific Committee agreed that information collected by scientific observers would be critical for evaluating the potential of new fisheries and recommended that each vessel participating in any of the new fisheries have at least one scientific observer onboard throughout all fishing activities.

These observers should record and submit their data in the most recent version of the Scientific Observer Logbook (paragraphs 9.8 to 9.11).

Squid

8.34 The Scientific Committee recommended a catch limit of 2 500 tonnes for this fishery.

8.35 The Scientific Committee recommended that the fishery collect data in accordance with the revised fine-scale catch and effort data form for a squid jig fishery (paragraph 8.30).

D. eleginoides / *D. mawsoni* / Mixed Species

8.36 The Scientific Committee recalled the Commission's concern that new finfish fisheries have started in the Convention Area without adequate information being available to evaluate either the fishery potential or the possible impacts on target stocks or species dependent on them (Conservation Measure 31/X). The Scientific Committee recommended that the new finfish fisheries proposed for the 1996/97 fishing season should proceed under the data reporting and submission provisions of Conservation Measures 51/XII (Five-day Catch and Effort Reporting System) and 94/XIV (monthly submission of haul-by-haul data). The Scientific Committee further recommended that Conservation Measure 94/XIV be generalised to accommodate data collection and submission from longline and trawl fisheries in all parts of the Convention Area.

8.37 The Scientific Committee agreed that it would be difficult to evaluate the potential of the new finfish fisheries if the catches were taken in short periods of time or over very small areas. In this regard, the Scientific Committee made three specific recommendations:

(i) provisions should be made to distribute fishing effort over as wide a geographic area as possible (this might be accomplished by permitting a nominal level of exploitation in a number of fine-scale rectangles measuring 0.5° latitude by 1.0° longitude);

(ii) the Commission should consider methods for limiting effort in each new finfish fishery; and

(iii) provisions should be made to obtain accurate positional information from each vessel participating in a new finfish fishery.

8.38 The Scientific Committee agreed that each new finfish fishery should be limited by an overall catch limit applied to each statistical subarea or division in which a new fishery will occur. In this regard, the Scientific Committee recommended 2 200 tonnes as an appropriate subarea or division catch limit. The Scientific Committee reiterated WG-FSA's warning that the 2 200-tonne limits do not indicate that such quantities of fish would be available in each statistical subarea or division, or that this limit represents a conservative assessment of the potential yield in each of these statistical subareas or divisions (Annex 5, paragraph 4.30).

8.39 The Scientific Committee also recommended that the Commission consider arrangements for the inclusion of any by-catch of *D. eleginoides* taken in the trawl fishery for *L. squamifrons* on Ob and Lena Banks in the TAC of the new longline fishery in Division 58.4.4.