CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

Listing of Patagonian toothfish (*Dissostichus eleginoides)* on Appendix II of the Convention, in accordance with Article II 2(a).

Dissostichus eleginoides is proposed to be included in accordance with Article II 2(a). It is known that the accumulated harvesting from the wild of this species for international trade by illegal, unregulated and unreported fishing operators has a detrimental impact on the species due to these activities making the annual harvest continually exceed the level that can be continued in perpetuity.

Listing of Antarctic toothfish (*Dissostichus mawsonii)* on Appendix II of the Convention, in accordance with Article II 2(b).

Dissostichus mawsoni is proposed for inclusion in accordance with Article II 2(b) in that the species resembles *Dissostichus eleginoides* closely such that a non-expert with reasonable effort is unlikely to be able to distinguish between them.

Annotations (+200 series)
Populations of Dissostichus species (spp.)

The conservation, management or other relevant measures or resolutions adopted for *Dissostichus* spp. by the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), relating to *Dissostichus* spp. harvested from within the CCAMLR Convention Area, shall apply for the purposes of regulating trade in *Dissostichus* spp. under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) including for the purposes of Article IV of CITES.

States party to CITES conducting trade in *Dissostichus* spp. harvested and traded in compliance with the conservation, management and other relevant measures or resolutions adopted by CCAMLR, including the Catch Documentation Scheme for *Dissostichus* spp., shall be regarded as having fulfilled their obligations under CITES as regards trade in *Dissostichus* spp.

Trade in *Dissostichus* spp. harvested outside the CCAMLR Convention Area shall be subject to the relevant provisions of CITES and shall be regulated accordingly.

B. Proponent

Australia.

Executive summary

1. This proposal seeks to nominate to Appendix II of CITES Patagonian toothfish, *Dissostichus eleginoides*, in accordance with Article II 2(a), and Antarctic toothfish *Dissostichus mawsonii* in accordance with Article II 2(b). An annotation has been included as an integral part of the species listing. The annotation provides for the application of CCAMLR conservation and management measures in respect of trade in *Dissostichus* spp. harvested from within the CCAMLR Convention Area. It also provides for the regulation of trade in *Dissostichus* spp harvested from waters that are outside the CCAMLR Convention Area (both high seas and waters under the jurisdiction of coastal States). The regulation of trade in these specimens would occur in accordance with the normal operation of the relevant provisions of CITES (Article IV).

2. Patagonian Toothfish are a slow-growing, long-lived species with a life history that makes it particularly vulnerable to over-exploitation. It has a wide geographical distribution in the Antarctic and Southern

Oceans. The main stocks occur on the continental shelves of the Atlantic and Indian Oceans, within the national EEZs of Chile and Argentina and within the CCAMLR Convention Area.

3. Commercial exploitation of toothfish began in the late 1980s. Illegal, unregulated and unreported (IUU) fishing began in the 1990s, representing a serious threat to the species' biological status and long-term yields.

4. In the mid-1990s, IUU fishing resulted in extreme local depletion of the Prince Edward and Marion Islands stock resulting in closure of this fishery. Many other fisheries have been affected by IUU fishing despite the national and regional efforts by management authorities responsible for the management of toothfish.

5. IUU fishing remains a significant threat to the species. Over the past four years, around 243,282 tonnes of toothfish were traded in international markets with only 123,165 tonnes legally caught within and outside the CCAMLR Area.

6. The impact of the CCAMLR's Catch Documentation System on IUU fishing and the trade in illegally caught toothfish is constrained by being binding only on the Contracting Parties to the CCAMLR Convention. A large number of IUU fishing vessels are flagged to non-Contracting Parties who are not bound by management regulations but are Parties to the CITES Convention.

7. A CITES Appendix II listing of both Patagonian and Antarctic toothfish would complement efforts to control the exploitation and trade in toothfish by extending the coverage of trade regulation to the 159 CITES Parties.

C. Supporting statement

1. Taxonomy

1.1	Class:	Actinopteryii	
1.2	Order:	Perciformes	
1.3	Family:	Nototheniidae	
1.4	Genus:	Dissostichus	
	Species:	eleginoides (Nelson, 1994)	
1.5	Scientific synonyms:	Not known.	
1.6	Common names:	English:	Butterfish (Mauritius), Chilean Seabass (USA and Canada)
		French:	
		Spanish:	Bacalao de profundidad (Chile), Merluza negra (Argentina), Róbalo (Spain) (Lack & Sant, 2001)
		Japanese:	Mero
1.7	Code numbers:	Not applicable.	

2. Biological parameters

2.1 Distribution

2.1.1 General Description

Dissostichus spp. have a widespread distribution within Antarctic and Southern Ocean waters. The two species are circumpolar in distribution: *Dissostichus eleginoides* occurring in sub-Antarctic and cool temperate waters; *Dissostichus mawsoni* in the high latitudes around the Antarctic continent. While they have a sympatric distribution, the extent of overlap is thought only to be small, lying between 60°S and 65°S (WG-FSA 1998). These species occur in waters down to 3 000 m in depth and, consequently, are restricted to shelf areas surrounding islands or continents as well as submarine banks. The northern limit for most populations is 45ºS, except along the Chilean and Argentine coasts where these fish may extend further north in deeper cold water. Although some populations may spread slightly to the north of 45ºS in the Indian Ocean, this is not considered to be substantial (SC-CAMLR, 2001).

2.1.2 Population Structure

Populations of toothfish are generally observed in waters 300 – 1 800 m in depth with juveniles (ages 2-15) occurring in shallow waters (down to 1000 m) and mature fish occurring in deeper waters (500 – 1 800 m) with some being observed to 2 900 m (WG-FSA, 1995; Agnew *et al.* 1999). The first year of life is pelagic, with eggs and larvae living in the surface waters, then settling to the bottom in relatively shallow water (about 300 m depth). This pelagic phase is considered to be the period with greatest opportunity for movement between areas in the Southern Ocean (Evesenko, 1995). Current knowledge indicates that juvenile fish remain in local areas (10-20 km wide) for many years, although a few fish have been reported moving over large distances between islands in the Indian Ocean (Williams *et al.*, in press). Adult fish are thought to migrate within island shelf areas to deeper water as they mature (Agnew *et al.* 1999).

To date, there are clear differences in genetic and morphological characteristics of Patagonian toothfish between the three ocean sectors, Indian, Atlantic and Pacific (Smith & McVeagh 2000; Appleyard *et al.*, in prep). The degree to which isolated banks and shelf areas are connected within an ocean sector is unknown at this stage.

2.1.3 Distribution in relation to jurisdiction

Dissostichus spp. are primarily found within the area covered by the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR), except for the distribution of *Dissostichus eleginoides* around southern South America, where the relevant coastal States (Chile and Argentina) are members of CCAMLR (SC-CAMLR, 2001). The CCAMLR convention area extends northwards from Antarctica as far as 50°S throughout most of the Atlantic Ocean, 45°S in the western sector of the Indian Ocean, 55°S in the eastern sector of the Indian Ocean, and 60°S in the Pacific Ocean.

The distribution and seabed area (km^2) of locations potentially suitable for toothfish, based on depth distribution, were determined by WG-FSA (1998) and through seabed calculations undertaken by the CCAMLR Secretariat in 1999 and can be summarised as follows (coastal State figures for fishing grounds are shown in parentheses) (Note some totals appear different to the sum of the columns because of rounding errors). Further detail on the major fishing grounds discussed in 2.3 (population status) can be found in the CCAMLR Statistical Bulletin on the CCAMLR website (CCAMLR 2002).

Sector	Juvenile Habitat 0-300m	Fishing Grounds 600-1800m	% of total	% of total less Patagonian shelf
Within the CCAMLR Convention Area				
Atlantic	5262	129634	11	14
Indian	127254	495159 (280892)	41 (23)	53 (30)
Pacific	0	10844	1	1
Total CCAMLR Area	*132516*	*635637*	*53*	*68*
Outside the CCAMLR Convention Area			0	0
Atlantic - Patagonian Shelf (coastal States)	362569	275278	23	
Atlantic - nth Bouvet Island	71	10703	1	1
Indian	49	32428	3	3
Pacific – sw (coastal States)	33410	188341	16	20
Pacific Central	0	3780	0	0.5
Pacific - sth Chile (coastal State)	74766	59734	5	7
Total Outside CCAMLR	*470865*	*570264*	*47*	*32*
Grand Total	603382	1205901		
Grand Total less Patagonian Shelf	240813	930623		

These data show that only 4% of fishing grounds fall outside of CCAMLR or coastal State jurisdiction. They also show that 32% of fishing grounds (45% of available fishing grounds not including the Patagonian Shelf) are high seas areas within CCAMLR.

2.2 Habitat availability

Habitat availability or threats to the habitat are not considered an issue for either *Dissostichus* species.

2.3 Population status

Currently, Patagonian toothfish are managed in units according to coastal waters and statistical units in the CCAMLR Convention area. These units correspond to continental and island shelf areas and submarine banks. As indicated above, only 4% of potential toothfish habitat (fishing grounds) occurs in high seas areas outside of the CCAMLR Convention Area, in the Indian Ocean and the best scientific evidence available indicates that this is most likely to be a negligible component of the population (SC-CAMLR, 2001).

There is no method for directly estimating the absolute abundance of the spawning populations in each management unit. However, a combination of trawl surveys on the juvenile component of the populations and trends in catch rates over time provide good indicators of the status of the populations in all of the important Patagonian toothfish areas. The assessment below is with regard to the status of Patagonian toothfish in the CCAMLR Convention Area and includes the sub-population around Macquarie Island, adjacent to the CCAMLR Convention Area in the Pacific Ocean.

It summarises the information and methods used to draw conclusions about the status of the populations in that area.

2.3.1 Productivity of *Dissostichus* spp.

Patagonian toothfish, *Dissostichus eleginoides*, is a member of the 'Antarctic Cod' family, which is only found in Antarctic and subantarctic waters; it gains its name from the prominent canine-like teeth that are unusual in this group of fishes. *D. eleginoides* is one of the few Antarctic species to grow to large size, approximately 220 cm long and about 100kg weight at the maximum size. It can live for up to 40-50 years, and maybe longer, as few very large fish have been aged. It attains sexual maturity at 90-100cm long (12-15 years old) and spawns in deep water (approx. depth 1500m +) on the slopes of island shelves in winter (June-July) (Agnew et al. 1999). The species exhibits a relatively low fecundity, ranging from 48 000 to 500 000 eggs, varying with fish length and location (Kock, 2000). These life history characteristics make Patagonian toothfish particularly vulnerable to overfishing (Agnew, 2000).

Antarctic toothfish, *Dissostichus mawsoni*, are considered to be smaller and faster growing than Patagonian toothfish, with a maximum observed length and weight of 180 cm and around 75 kilograms. Antarctic toothfish of 140 to 165 cm in length have been estimated to be from 22 to 30 years old (Kock, 2000). Like Patagonian toothfish, Antarctic toothfish are bottom-living, inhabiting waters from 300 to 2500 metres.

2.3.2 Methods for assessing status

Since the beginning of the longline fishery in 1987 around Sth Georgia/Islas Georgias del Sur, the CCAMLR Working Group on Fish Stock Assessment (WG-FSA) has endeavoured to use a number of different conventional methods for assessing abundance based on Catch Per Unit Effort (CPUE). These were found to be unreliable (WG-FSA, 1994; Parkes et al. 1996).

The current method for estimating status was adopted in 1995 by WG-FSA through a special workshop on Methods for Assessing *Dissostichus*. This method uses a time series of estimates of young fish at Age 4 (recruits) based on trawl surveys of juvenile fish on shelf areas. Each cohort is projected forward using population modelling software, the Generalised Yield Model (GYM) (Constable & de la Mare, 1996) which is based on the approach developed for estimating krill yield (Butterworth et al. 1994). Such projections require estimates of natural mortality and catches taken in particular years in order to determine how many fish remain after a given number of years. As a consequence, a time series of recruitment estimates can be used to estimate the age composition of the stock for a given year. This can then be converted into biomass using standard von Bertalanffy growth equations and conversions from length to weight. Uncertainty in the estimates is determined based on the uncertainties of the input parameters.

For some areas, catch per unit effort has been used as an estimate of relative abundance. This method uses standard generalised linear models to standardise CPUE data across a range of sometimes influential variables such as differences between vessels, and seasons (WG-FSA, 1995). More recently, mark-recapture experiments have begun to help estimate numbers of fish in the vulnerable part of the population.

Where possible, the different indicators are integrated into a single assessment, such as for Sth Georgia/Islas Georgias del Sur (Kirkwood & Constable, 2001).

The lengths of the time series of recruitments for the two areas being routinely surveyed (Sth Georgia/Islas Georgias del Sur, Heard Island and McDonald Islands) are now sufficiently long

that the estimates of abundance of spawning stock from the GYM has only a small level of uncertainty relative to the trends in the stock (see for example the results of WG-FSA 2001).

2.3.3 Summary of population status

The status of a fish population is generally assessed in terms of biomass rather than as numbers. In particular, the status of a population is considered relative to specified reference states. CCAMLR uses two reference states for the spawning biomass for managing fisheries. The first is a target reference state, which, for toothfish, is that once fishing has become established (over one generation of the species) the median status (over time) of the spawning part of the population (spawning biomass) will be 50% of the pre-exploitation median spawning biomass. The second is a threshold level, which is 20% of the pre-exploitation median spawning biomass. CCAMLR aims to ensure that the population is not likely to go below this level. The manner in which these are used for management purposes is discussed below.

Patagonian toothfish are assessed using the GYM in two areas of the subantarctic, South Georgia/Islas Georgias del Sur in the South Atlantic and Heard Island in the Indian Ocean. For South Georgia/Islas Georgias del Sur, the projections based on the time-series of recruitments combined with the time series of standardised CPUE show that the spawning biomass is in a condition consistent with the target state. The median expectation of its status in the last year of the most recent assessment is that it is approximately 80-90% of the median pre-exploitation level (WG-FSA, 2001). This is not unexpected because the strong series of recruitments in the late 1980s are now entering the spawning biomass. In the near future, the annual status of the spawning biomass is expected to be reduced because of a series of low recruitments over the 1990s. Nevertheless, the recent assessment indicates this spawning biomass is not expected to be reduced below the threshold level, provided that no IUU fishing occurs (SC-CAMLR, 2001).

For the Heard Island area, the median expectation for the spawning biomass is for it to be at approximately 70-80% of the median pre-exploitation level in the most recent year (WG-FSA, 2001). This is consistent with the population approaching the target status. It is not in a state approaching the threshold level.

In contrast to these two areas, the other areas for which stock assessments have been undertaken show that the populations are below the target status and some are below the threshold level. These assessments are based on analyses of CPUE and, in the case of Macquarie Island, mark-recapture data.

Population status can be summarised for all the major Patagonian toothfish sub-populations/populations in the CCAMLR Convention Area and for Macquarie Island, as follows:

<u>Indian Ocean</u>
Marion and Prince Edward Islands: below threshold level (WG-FSA, 2001).
Crozet Island: above threshold level but below target status (WG-FSA, 1997)
Kerguelen Island: declining CPUE from 1990-1994 (WG-FSA, 1998) with no trend following that time (WG-FSA, 1998, 2000)
Heard Island and McDonald Islands: above target level (WG-FSA, 2001)

<u>South Pacific Ocean</u>
Macquarie Island: above threshold level but below target status (Tuck *et al.*, 2001)

<u>South Atlantic Ocean</u>
South Georgia/Islas Georgias del Sur: above target level (WG-FSA, 2001).

2.4 Population trends

The targeted fishery for Patagonian toothfish in the subantarctic started in 1985 near Kerguelen Island when trawlable concentrations were discovered, although there had been a fishery off the Chilean coast for many years. Longline fisheries started soon after at South Georgia/Islas Georgia del Sud (probably in 1986 – WG-FSA, 1992) and gradually spread to most islands and seamounts over the next 10 years. Most fisheries now use longlines, except trawl operations are still used at Heard Island and Macquarie Island because of concern about the bycatch of seabirds.

Illegal, unregulated and unreported (IUU) fisheries for toothfish first became evident in 1993 in the vicinity of South Georgia/Islas Georgias del Sud (WG-FSA, 1993). The level of IUU fishing in this area increased substantially by 1995/96 but then reduced to negligible levels by UK patrols in 1996/97 and remains at a low level (less than 10% of IUU catch has been estimated to come from this area – WG-FSA 2000). IUU longline vessels rapidly moved eastwards to the Indian Ocean islands once counter measures began. The impact of IUU fishing on the South Georgia/Islas Georgias del Sud stock is evident in the rapid decline in CPUE over the last two years of the presence of IUU fishing in that area (WG-FSA, 2001).

Known trends in populations impacted by IUU longline fishing show that rapid declines can ensue (see 2.3). The population around Crozet Island was reduced to 55% of its pristine abundance within one year (WG-FSA, 1997). No data are available to assess the trends in this population past that time. The population at Marion and Prince Edward Islands was reduced to less than 10% of its pre-exploitation abundance in only three years between 1996 and 1998 (WG-FSA, 1998). Since that time, the IUU fishing has been sequentially depleting populations from west to east in the Indian Ocean and is know to be concentrating now on the Kerguelen Plateau. Despite this shift in focus, IUU fishing is known to be continuing in the depleted areas as part of their operations.

No toothfish population is known to be increasing.

The rate of IUU catch has been documented in the report of Lack and Sant (2001). In that report, current IUU catch rates are equivalent or, more likely, greater than the legally reported catches of Patagonian toothfish. The catch limits for Patagonian toothfish are at sustainable levels if these were the only removals from the populations into the future (see WG-FSA 2001 for a full explanation). The additional IUU catch results in over-harvesting of the species. Unpublished estimates of the effects of the current and increasing IUU catch levels indicates that the populations on the Kerguelen Plateau could be below threshold levels within 5 years.

2.5 Geographic trends

As described above, IUU fishing started in the southwest Atlantic, which has been largely controlled since 1997. IUU fishing then moved to the southwest Indian Ocean where Patagonian toothfish stocks show evidence of serious local depletion in the fishing grounds of Crozet and Prince Edward/Marion Islands. Ob and Lena Banks are also known to have been exploited by IUU vessels (WG-FSA, 1999, 2001). Increased IUU activity over a sustained period in the eastern Indian Ocean would suggest that populations in that area are now under threat and could be depleted within 5 years.

2.6 Role of the species in its ecosystem

Patagonian toothfish are known to be top predators in the Southern Ocean feeding principally on squid and fish found in the water column, but will eat almost anything including bottom living fish and crustacea (Goldsworthy *et al.*, 2001a,b).

Analyses would suggest that juvenile toothfish may constitute part of the diet of seals, although this is not sufficient to have them considered an important prey species in the Antarctic food web

(WG-EMM, 1997). More recent analyses at Macquarie Island shows that there are only weak trophic linkages between Patagonian toothfish and land-based predators (seals, seabirds and penguins) in that region (Goldsworthy *et al.* 2001b).

The CCAMLR Fish Stock Assessment Working Group (WG-FSA) continues to gather information on ecological interactions in order to understand the role of Patagonian toothfish in the Antarctic ecosystem.

2.7 Threats

The primary threat to Patagonian toothfish is illegal, unregulated and unreported (IUU) longline fishing. The extent of that threat is illustrated by catch data that show fishers claimed in 2000/01 to have caught about 20% of global catches from the 4% of fishing grounds which occur outside CCAMLR of coastal State jurisdiction. CCAMLR concluded that practically all of these catches were misreported and had been taken from within the CCAMLR Area (CCAMLR 2001). As described above, the level of IUU catch being taken can cause dramatic declines of stocks in only a short period.

As only a very small percentage of available toothfish fishing grounds is in international waters outside of the CCAMLR area and these are considered to have a negligible contribution to Patagonian toothfish populations (SC-CAMLR, 2001), the harvest area is fully managed according to the precautionary approach of CCAMLR and by coastal States. CCAMLR considers that it is unlikely that there are toothfish stocks in the CCAMLR area that have not been exploited (CCAMLR, 1999). Additional fishing by IUU activities has meant that total catch rates are in excess of long-term sustainable yields for the toothfish stocks as a whole (CCAMLR, 1998, SC-CAMLR, 1998,1999, 2001).

The aggregate CCAMLR Total Allowable Catches (TACs) adopted annually have been far exceeded with the addition of IUU fishing (WG-FSA, 2001). This excess is caused by the unsustainable practices of IUU fishers and their unwillingness to participate in the CCAMLR management framework (see below).

CCAMLR sets catch limits by determining long-term sustainable yields using methods that account for uncertainties in or lack of information. This process also takes into account historical catches. Thus, if catches in a given year are greater than the long-term annual yield then the future long-term annual yield is reduced. As has been the case with the Marion-Prince Edward Island area, the level of IUU catches can be such as to not only reduce legal catch limits in an area to zero over a very short period but can cause substantial depletion below the threshold level of the spawning biomass. The current level of IUU fishing is such that it threatens all CCAMLR fisheries.

If depleted, toothfish stocks are unlikely to recover for many decades because of their low fecundity (Kock 2000) and their other life history characteristics (Agnew, 2000). Another species of the same taxonomic family and with very similar biological characteristics, *Notothenia rossii*, was depleted to very low levels in the 1970s and early 1980s around Sth Georgia/Islas Georgias del Sur. It remains at less than 5% of its pre-exploitation biomass after 20 years without fishing. The WG-FSA expressed great concern at the potential for *D. eleginoides* not to be able to recover from overharvesting caused by IUU catches (WG-FSA, 1999).

Unlike trawl fisheries for *N. rossii* which rely on aggregations to remain viable, longline activities can remain catching fish even when they are at low levels of abundance because they use baited hooks to attract fish to be caught. The potential for IUU fishers to utilise by-catch species may mean continued fishing in toothfish grounds remains viable despite stock depletion and, therefore, such depletion will not necessarily result in removing the threat of fishing this species to extinction. It should also be noted that as catches have declined, the prices paid for toothfish have significantly increased meaning that smaller catches will be profitable for IUU fishers.

An indirect threat of IUU fishing is that depletion of a population on a given shelf or bank might contribute to recruitment failure on neighbouring shelf areas if the supply of new recruits to an area is dependent wholly or in part on stocks from "upstream" areas. This is the subject of genetic studies at this time.

IUU fishing is known to be on the increase as a result of excess global fishing capacity, increasing percentage of global fisheries that are fully or over fished, an increasing fleet being dedicated to longline fishing for toothfish and other southern ocean/hemisphere fisheries.

An additional threat of IUU fishing is the impact it has on seabirds. This arises because of the incidental capture of seabirds is considerable in IUU operations (WG-FSA, 2001). IUU operators do not implement mitigation measures specified by CCAMLR and the rate of catch of seabirds for IUU fishing has been estimated to be considerable.

3. Utilization and trade

3.1 National utilization

Three significant national fisheries for toothfish occur outside the CCAMLR Convention Area in South America. The largest national toothfish catches have been taken in Chilean waters in the early 1990s and in Argentinian waters in the mid-late 1990s. Commercial fishing for Patagonian toothfish in the Falkland Islands/Islas Malvinas region began in 1994. In 2000, the total catch was 2 314 tonnes with 740 t caught as by-catch in trawl fisheries.

In the years 1991/92 to 1996, before the spread of IUU fishing, these national fisheries landed most toothfish catches, taking up to six times the total landings in CCAMLR waters.

In all cases, catches of Patagonian toothfish are for human consumption, nationally or internationally. Chile is a major exporter of toothfish to the US, while Argentine catches supply the national market.

3.2 Legal international trade

Legal fishing of toothfish began primarily as by-catch in the 1970s and developed into a targeted fishery in the mid 80s, firstly around Islas Georgias del Sur/South Georgia and Kerguelen Island. Fisheries in the Chile and Argentine EEZs have an even earlier history and reported catches are large by comparison with the legal catches from the CCAMLR area.

Toothfish are currently fished mainly in the South Atlantic, the southern Indian Ocean and the eastern Pacific (Chile). Fishing is undertaken in areas managed by CCAMLR, in the EEZs of several countries both inside and outside the CCAMLR area and in international waters (ISOFISH 1999). Patagonian toothfish comprise approximately 90-95% of the annual reported catch of these two species in the CCAMLR Area with the total catch of Antarctic toothfish for the last 10 years being 1675 tonnes up to June 2001 (CCAMLR, 2002).

A review of trade statistics for *D. eleginoides* indicates that approximately 85% of toothfish catches are exported to Japan and the USA. Other markets include China, Singapore, Taiwan, Spain, Canada and other European markets (Lack and Sant 2001).

Over the past four seasons, approximately 243,282 tonnes of toothfish was traded on international markets (Lack and Sant 2001). Of these figures, only 123,165 tonnes were caught legally inside or outside of the CCAMLR area. The legal catch from within the CCAMLR area is likely to remain relatively stable over the coming years if IUU fishing is controlled.

It should be noted that CCAMLR advise that trade statistics should be treated with the necessary caution as the export sources of product are not necessarily responsible for the catching of the fish. Other anomalies between catch statistics and market figures might be caused by inter market transfers of product and stockpiling of product in anticipation of better market prices (SC-CAMLR 1998).

As part of developing a system of enforcement and compliance to support its ecologically sustainable harvest strategies, CCAMLR has developed a 'catch documentation scheme' (CDS) to better monitor trade in toothfish amongst CCAMLR members. It encourages non-parties to adopt the scheme where possible. However, this has not been adopted by all non-member States, which are active in the harvesting or trade of toothfish.

3.3 Illegal trade

In the year 2000, available data suggest that Patagonian toothfish products were imported mainly by Japan, USA, EU, China and Canada, and exported mainly by Chile, China, Argentina, France, Mauritius, Uruguay, Australia and Spain (Lack & Sant 2001). Detailed analysis of toothfish trade is complicated by the existence of several different trading names (bacalao de profundidad; butterfish; Chilean sea bass; merluza negra, mero and robalo) and the possible inclusion in some trade statistics of other species within the same generic name. Some countries (particularly China) also both import and re-export toothfish giving the possibility of double counting of the same fish. The following analysis of toothfish trade is drawn from a recent examination of the most reliable trade data from 1998 to 2000 (Lack and Sant 2001).

Patagonian toothfish is highly valued as a restaurant-quality food fish especially in the North American and Japanese markets with wholesale prices of headed and gutted fish being around USD10 per kilogram or higher. About three times higher than in 1997.

Lack and Sant (2001) report that Canadian, EU, Japanese and US markets imported a total of nearly 30 000 t of toothfish products in 2000, equivalent to approximately 56 000 t 'green' weight of fresh fish. 55% of these imports were to Japan. CCAMLR member supplied roughly three-quarters of these fish. Non-CCAMLR suppliers included China, Mauritius and at least nine other countries. They also report that world toothfish trade declined from 1998 to 1999, but then increased again in 2000 almost to 1998 levels.

The conclusion of Lack and Sant (2001) and analyses by CCAMLR (CCAMLR 2000, 2001) confirm that IUU fishing has substantially increased in recent years such that the IUU catch is at least the same as but is likely to be much more than the annual reported catch. These results indicate that trade in IUU catch is continuing to increase.

The amendment of Appendix II to include Patagonian and Antarctic toothfish will provide effective control over trade of these species to all the major market and consumer States which are not members of CCAMLR or are not effectively implementing CCAMLR's management measures. This will substantially restrict opportunities to benefit from IUU fishing for toothfish.

3.4 Actual or potential trade impacts

Virtually all commercial exploitation (including the artisanal fishing within the Chilean EEZ) of Patagonian toothfish is for the purpose of international trade (Lack and Sant, 2001). Consequently, greater controls on trade will restrict trade to products from the legally certified fisheries, which are managed in an ecologically sustainable manner.

3.5 Captive breeding for commercial purposes

There are currently no known captive breeding or artificial propagation programs for commercial purposes.

4. Conservation and Management

4.1 Legal status

4.1.1 National

Management regimes for toothfish fisheries have been established by Chile, Argentina, Australia, France and the Republic of South Africa and for the area around the Falkland Islands/Islas Malvinas.

Within Australian waters Patagonian toothfish (*Dissostichus eleginoides*) are fished in sub-Antarctic waters adjacent to Heard Island and the McDonald Islands (HIMI) and adjacent to Macquarie Island. In both areas, the fisheries extend from 13 nautical miles offshore to the edge of the 200 nautical mile Australian Economic Exclusive Zone (EEZ) around the Islands. The Macquarie Island Fishery is adjacent to the CCAMLR Convention area while the HIMI fishery lies in Statistical Division 58.5.2 of the area of application of the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR). In the latter fishery, Australia complies with CCAMLR conservation measures for Division 58.5.2 as well as maintaining environmental standards in addition to the CCAMLR measures.

Management of the HIMI Fishery (HIMI) is through the Heard Island and McDonald Islands Fishery Management Plan 2001 which was recently assessed under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). The assessment examined the extent to which the fishery is managed in accordance with the Australian Government's *Guidelines for the ecologically sustainable management of fisheries* and assessed, among other things, the management of Patagonian toothfish stocks. The assessment concluded that provided IUU fishing could be contained, the management regime is sufficiently precautionary and capable of controlling; monitoring and enforcing the level of take from the fishery, and ensures that removals of the target and bycatch species are sustainable with mechanisms in place to ensure that population levels do not fall below a defined reference point.

At Macquarie Island, the fishery for toothfish is very small and exploratory and allows only one operator. It is managed in a manner consistent with the CCAMLR Conservation Measures under the Macquarie Island Fishery Interim Management Policy 1999. The broad management regime is very similar to that adopted in the HIMI fishery.

4.1.2 International

The Convention on the Conservation of Antarctic Marine Living Resources (1980) governs all of the range of Antarctic toothfish and almost the entire range of Patagonian toothfish except for the primary extension of its range on the coasts of Chile and Argentina and around the Falkland Islands/Islas Malvinas. The overlap between toothfish habitat and jurisdiction is presented in section 2.1.3.

The Convention on the Conservation of Antarctic Marine Living Resources came into force in 1982 with the aim to conserve Antarctic marine living resources, where "conservation" provides for rational use. The Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) and its Scientific Committee pioneered the development of what has become known as the 'ecosystem approach' to the regulation of fisheries. An ecosystem

approach does not concentrate solely on the species fished, but also takes appropriate steps to conserve 'dependent and related species' that may be affected by those fisheries. CCAMLR has the attributes of a Regional Fisheries Management Organisation (RFMO) in addition to its broader mandate to address the conservation of the Antarctic marine ecosystem.

The precautionary and ecosystem approaches of CCAMLR are described elsewhere (section 2.3, 4.2.3) and on the CCAMLR website (CCAMLR 2002). The Parties to the Convention have agreed that the Commission establish conservation (management) measures according to Article II to achieve:

- 'prevention of decrease in the size of any harvested population to levels below those which ensure its stable recruitment ...;
- maintenance of the ecological relationships between harvested, dependent and related populations of Antarctic marine living resources and the restoration of depleted populations to the levels defined in the above sub-paragraph; and
- prevention of changes or minimisation of the risk of changes in the marine ecosystem which are not potentially reversible over two or three decades, ..., with the aim of making possible the sustained conservation of Antarctic marine living resources .'

Harvest controls are made on the best scientific evidence available (as prescribed in Article IX), which is provided by the Scientific Committee. This management advice is based on assessments conducted by the two working groups of the Scientific Committee. The Working Group on Fish Stock Assessment (WG-FSA) which develops management advice on toothfish and other fisheries. The Working Group for Ecosystem Monitoring and Management (WG-EMM) which is primarily concerned with the assessments of krill fisheries and the integration of data from the CCAMLR Ecosystem Monitoring Program (CEMP).

CCAMLR currently comprises 24 members and 7 contracting parties. The Commission actively encourages all States involved in fishing for or trading in species obtained from the Southern Ocean to join CCAMLR. Such States are invited to attend annual meetings of the Commission. Namibia, primarily as a result of its role as a port State, has recently become a member of the Commission, and Vanuatu, a flag State, has become a contracting party.

4.2 Species management

4.2.1 Population monitoring

Monitoring of toothfish populations is undertaken using fishery-independent surveys, structured fishery research plans and monitoring of commercial activities.

As indicated above, the two areas where assessments of yield are possible through recruitment surveys are at South Georgia/Islas Georgias del Sur and at Heard Island. In other cases, standardised CPUE is used. For new and exploratory fisheries, CCAMLR has implemented a research plan for exploratory fisheries (CCAMLR, 1999) that provides for a number of "research" shots amongst the commercial operations that are separated by a minimum distance. This is designed to help identify the characteristics of catch per unit effort (CPUE) across a wider area than just the areas targetted by commercial fishing. This is currently used as the basis for assessments of *Dissostichus mawsoni* in the Ross Sea (WG-FSA, 2000).

Monitoring of commercial activities is undertaken through the CCAMLR Scheme of Observation. This was adopted and designed to gather and validate scientific information

from commercial operations that can assist with assessing the status of fish populations, including Patagonian toothfish, and for assessing the impacts of fishing on those populations and dependent species, such as the incidental mortality of seabirds. This scheme is well established and continues to be modified to suit the requirements of the scientists and the fisheries. The scheme applies to harvesting and research vessels and operates during annual fishing seasons and research surveys. The Scientific Committee and the Working Group on Fish Stock Assessment have developed a *Scientific Observers Manual,* which contains the guidelines for observations and logbook forms for collecting information. Observers collect information on biological characteristics, catches, by-catches, observed interactions between species and impacts of fishing gear (www.ccamlr.org).

4.2.2 Habitat conservation

There are currently no specific programs for the protection of Patagonian toothfish habitat although Australia has declared a marine reserve in its EEZ around Macquarie Island and is currently in the process of establishing a large IUCN Category 1a Reserve in its EEZ surrounding Heard Island and McDonald islands.

The Macquarie Island Marine Park is the largest marine reserve to date and protects from human disturbance the unique habitats of threatened species, migratory and foraging marine mammals and seabirds and benthic and pelagic species dependant on the Macquarie Island region. It also provides a scientific reference area for further studies of natural ecosystems and monitoring of sustainable resource management. Specifically, the reserve will help to protect habitat of Patagonian toothfish by prohibiting fishing activities within its boundaries.

The purposes for declaring the Heard Island and McDonald Islands Marine Reserve are to protect conservation values of Heard Island and McDonald Islands, the territorial sea and the adjacent Exclusive Economic Zone (HIMI EEZ), including the unique features of the benthic and pelagic environments. Patagonian toothfish habitat is included in the habitats to be protected under the proposed Marine Reserve.

In addition, management arrangements in place for the Heard Island and McDonald Islands Fishery and the Macquarie Island Fishery incorporate environmental requirements designed to protect the habitat of Patagonian toothfish and other species from the impacts of fishing.

4.2.3 Management measures

Current management tools available to protect and sustainably manage toothfish are primarily provided by the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR).

The precautionary approach of CCAMLR is described on the CCAMLR web site (www.cccamlr.org). The approach was developed in recognition of the uncertainties surrounding estimates of the status of the stocks, how current status might relate to the status prior to exploitation and how predictions of future status are dependent on the accuracy and precision of the estimates of population demographic parameters and estimates of mortality arising from fishing. Combining these uncertainties gives many plausible scenarios of the time series of stock status. In the final analysis, the status of the stock in a given year cannot be indicated as a point estimate as in a survey but as a probability distribution that integrates across all the uncertainties described above.

The precautionary approach specifies operational objectives based on Article II of the Convention and includes:

a reference point, which has been agreed to be the median pre-exploitation spawning biomass. All decisions are now in reference to this level with the knowledge that the status of the stock will vary naturally over time. It is inappropriate to use the abundance of the stock in the year prior to exploitation as the reference point as this does not take into account the status of the stock in that year relative to the median level.

a target status, which currently is agreed to be the median spawning biomass after at least one generation time since the start of fishing. The ratio of this median to the pre-exploitation median is set at 0.5 for species that are not considered to be substantial prey species in the food web, such as toothfish. For target species that are important prey species, such as krill, this ratio is set at 0.75 to help ensure sufficient prey escape the fishery for consumption by predators.

a threshold level, which currently is agreed to be 20% of the pre-exploitation median spawning biomass. It is considered that if the spawning biomass falls below this level then recruitment of new fish to the stock will begin to be reduced substantially.

Decision rules for determining catch limits have been formulated around these levels and take account of the probabilistic nature of the assessment process. Rational use has been interpreted to mean a constant long-term annual yield over a generation of the target species. Thus, for toothfish, the aim of the assessment is to determine the long-term annual yield over 35 years that will have a high likelihood of the population arriving at the target level with only a low likelihood of the population declining below the threshold level.

The presence of IUU fishing means that the long-term annual yield will be reduced to compensate for the estimated level of over-harvesting in a given year.

This approach has now been applied to assessments of krill and Patagonian toothfish using information predominantly derived from fishery-independent surveys. As indicated above, CCAMLR has adopted a precautionary approach to new and developing fisheries, which includes a staged development of these fisheries to ensure that the ability for CCAMLR to meet its objectives is retained at all times.

All fisheries in the Convention Area are subject to a series of management regulations or conservation measures. CCAMLR recommends Total Allowable Catches (TACs) for each fishery in each Sub-area or division. The first scientifically-based catch limit for toothfish was set in 1989 for the first major fishery around South Georgia/Islas Georgia del Sud. Catch limits have been in place for all toothfish fisheries since 1990, including the new and exploratory fisheries.

Annually, countries interested in fishing in a specific area, announce their intention to fish and provide information on the number of vessels and methods to be used. The names of the vessels licensed to fish are submitted to CCAMLR. CCAMLR maintains a register of legal vessels and also monitors catches to ensure that TACs are not exceeded. As soon as a TAC is approached, the fishery is officially closed. All vessels involved in legal CCAMLR fisheries must be fully marked to assist their identification and monitoring.

In recent years CCAMLR has concentrated efforts on consolidating and building on the catch documentation scheme (CDS) and encouraging non-Party States engaged in toothfish fishing and trade to join CCAMLR.

In accordance with UNCLOS, coastal States and CCAMLR Members regularly deploy enforcement vessels and several arrests have been made in the last five years.

4.3 Control measures

4.3.1 International trade

CCAMLR has been active in its attempts to control IUU fishing for Patagonian toothfish since 1998, implementing a range of measures to help ensure enforcement and compliance with CCAMLR harvest controls. and to ensure the sustainability of populations that occur in the CCAMLR Convention area, including those for which their range might extend marginally into high seas or coastal state jurisdictions (see CCAMLR website for more details – CCAMLR, 2002).

A major advance was the rapid development and adoption of the CCAMLR Catch Documentation Scheme (CDS). The CDS has quickly demonstrated its power to document trade in toothfish. The CDS provides import States with the means to identify the origins of the catch and, for catch taken within CCAMLR waters, whether the catch was caught in a manner that complies with CCAMLR requirements. The CDS provides the means for members of CCAMLR and other States to disallow trade of IUU caught fish. The scheme has been in effect since May 7, 2000. Specifically, the CDS requires CCAMLR Members to ensure that:

1. *Dissostichus* spp. harvested in the CCAMLR Area and imported to, or exported from its territories, or transhipped to its vessels, were caught in a manner consistent with CCAMLR's Conservation Measures;

2. each of its authorized flag vessels engaged in toothfish fishing completes a *Dissostichus* catch document (or DCD) for each landing or transshipment; and

3. each landing or transshipment of *Dissostichus* spp is accompanied by a completed catch document, which must be validated by the flag State before the catch moves into trade.

The CDS measure stipulates that each Contracting Party shall in accordance with their laws and regulations, provide their flag vessels which intend to harvest *Dissotichus spp.* including on the high seas outside the Convention Area with specific authorization to do so" (CM 170/XX).

The CDS is also open to participation by non-Contracting Parties of CCAMLR, with all States being required to comply with the same standards and procedures. CCAMLR Members have extended the use of the CDS to non-contracting parties by adopting the CCAMLR Resolution 14/XIX on "Implementation of the CDS by Acceding States and Non-Contracting Parties" and undertaking a range of diplomatic actions to that end. Thus, non-Contracting Parties may issue catch documents to their flag vessels that harvest *Dissostichus* spp. in the same manner as a Contracting Party, using the same mechanism as CCAMLR Contracting Parties, that is by VMS.

All shipments of toothfish, regardless of location of harvest or flag of harvesting vessel, must be accompanied by a validated catch document in order to be imported by a CCAMLR Member (CCAMLR, 2000). The effectiveness of the scheme hinges on the veracity of the catch documents, which must be verified and validated by the Flag State using VMS reports on the harvesting vessel and other information. The requirement to use VMS to verify and validate catch locations was introduced in 2001 to assist in addressing concerns about IUU catch taken from within the Convention Area, being reported as having been caught outside the Convention Area but is not of itself adequate to guarantee the prevention of such catch laundering.

To date, nearly all CCAMLR Members and several non-Contracting Parties have implemented the CDS.

Not all States that trade in toothfish are Members of CCAMLR. The major threat to the sustainability of toothfish populations in the Southern Ocean is IUU fishing and it has the capacity to deplete those populations very quickly. The development of a complimentary relationship between CCAMLR and CITES could enhance implementation of the CCAMLR CDS by extending coverage to all the major States trading in toothfish.

4.3.2 Domestic measures

The CCAMLR Conservation Measures are currently implemented by most countries fishing for toothfish as those countries are Members of CCAMLR. Contracting Parties, directly or indirectly involved in toothfish fishing or trade are implementing the CDS in national legislation. In addition, some Members have increased their enforcement capabilities on the water to ensure compliance with CCAMLR Conservation Measures. Further, coastal States implement national management plans for the fisheries within their EEZs.

Australia has implemented a range of measures for the management of fisheries resources such as Patagonian toothfish. The Heard Island and McDonald Islands (HIMI) Fishery and the Macquarie Island Fishery are Australia's only fisheries that target Patagonian toothfish. Harvest of the species from these fisheries is managed under the HIMI Fishery Management Plan 2002 and the Macquarie Island Fishery Interim Management Policy 1999.

Measures for the management of HIMI Patagonian toothfish stocks include an annually set total allowable catch, a range of input controls, sound compliance and enforcement arrangements, a vessel monitoring system and catch documentation scheme. CCAMLR Conservation Measures are a minimum requirement under the draft Plan and the HIMI management regime incorporates additional measures. The stock assessment process is underpinned by species specific precautionary biological reference points set by CCAMLR and adopted by the Australian Fisheries Management Authority.

Patagonian toothfish stocks harvested in the Macquarie Island Fishery are subject to similar management requirements to those imposed in the HIMI Fishery. Whilst adoption of CCAMLR Conservation Measures is not required for this fishery, current management arrangements adopt an approach consistent with those measures.

5. Information on Similar Species

Patagonian toothfish is highly similar in visual appearance to Antarctic toothfish *D. mawsonii*, although the two can be distinguished on the basis morphological attributes when whole. Once processed into fillets, *D. eleginoides* and *D. mawsonii* are distinguishable by isoelectric techniques (WG-FSA, 2000), but are not distinguishable by visual examination.

Both Patagonian toothfish and Antarctic toothfish occur in the CCAMLR Convention Area, and while Patagonian toothfish is found both inside and outside of the Convention Area, Antarctic toothfish is found only inside CCAMLR waters (Kock 1992).

6. Other Comments

6.1 Incidental mortality of seabirds in IUU longline activities

CCAMLR has been working to reduce and eliminate if possible the incidental mortality of seabirds in longline activities. A Conservation Measure on this matter (CM 29/XIX) was first agreed in 1991 and has been refined several times since, most recently in 2000. The measure sets out mitigation

methods to minimise seabird by-catch in longline fisheries. Considerable progress has been made in reducing the mortality of seabirds in the CCAMLR (legal) longline fisheries (SC-CAMLR 2001). However, the estimated mortality in IUU fishing remains extremely high and is a key threat to many seabirds, including petrels and endangered albatross species breeding in the CCAMLR area (CCAMLR 2001).

Along with CCAMLR assessments, Birdlife International (1995, 2000) have identified that many species are at risk throughout the Southern Ocean, particularly in the Indian Ocean sector, including:

- Wandering albatross *Diomedea exulans* (vulnerable, population < 28,000 and decreasing rapidly),
- Amsterdam albatross *Diomedea amsterdamensis* (critical, population about 90, slightly increasing)
- Southern Royal albatross *Diomedea epomophora* (vulnerable, about 28,000 , relatively steady)
- Northern Royal albatross *Diomedea dabbenena* (endangered, population 9,000 and decreasing)
- Salvin's albatross *Thalassarche salvini* (vulnerable, population 62,700, steady)
- Buller's ablatross *Thalassarche bulleri* (vulnerable, population 58,000, steady)
- Grey-headed albatross *Thalassarche chrysostoma* (vulnerable, population 250,000 and decreasing rapidly)
- Sooty albatross *Phoebetria fusca* (vulnerable, population 42,000 decreasing)
- Southern giant petrels *Macronectes giganteus* (vulnerable, population 62,000, decreasing rapidly)
- White-chinned petrel *Procellaria aequinoctialis* (vulnerable, population 5,000,000, decreasing rapidly)
- Spectacled petrel *Procellaria conspicillata* (critical, population 2,500 – 10,000, decreasing)

Most of these species feed in the Indian Ocean sector of the Southern Ocean (BirdLife International 2000).

The CCAMLR Conservation Measures are complementary to a number of other international activities that focus on the conservation of seabirds, including addressing the threat posed by IUU fishing.

These international activities include the recently finalised Agreement on the Conservation of Albatrosses and Petrels. This Agreement provides a holistic framework for the conservation of albatrosses and petrels, including both land and marine based conservation activities to mitigate the threats posed to these seabirds from a number of sources, including IUU longline fishing.

The Agreement recognises that there are existing international instruments that contain some conservation measures relevant to seabirds, such as the Convention on the Conservation of Antarctic Marine Living Resources and the FAO International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries. The FAO has also recently developed an International Plan of Action to Prevent, Deter and Eliminate IUU fishing.

The range of measures outlined above contribute complementary, and important, areas of action that either directly or indirectly seek to address the impact of IUU fishing on seabirds globally.

6.2 Complementarity of CITES and CCAMLR measures

There is considerable potential complementarity between the requirements of CCAMLR and CITES. In particular there is potential for CCAMLR's Catch Documentation Scheme to be used as the foundation for the development of CITES export certificates for toothfish. Cooperation with CCAMLR would assist in keeping the method of tracking trade in toothfish as simple as possible and could avoid duplication of administrative functions for States party to both Conventions. It should also ensure that a certification scheme established under CITES does not limit the potential for refinements of the Catch Documentation Scheme by CCAMLR. This potential should be

examined by the Parties to CITES, and guidance sought from CCAMLR on the implementation of a certification scheme to facilitate an integration of the CCAMLR Catch Documentation Scheme into the CITES administrative framework.

Currently, the key markets for toothfish consumption are already covered by the Catch Documentation Scheme, and 96% of all areas of the sea where stocks occur are either under the jurisdiction of CCAMLR or under the jurisdiction of a CCAMLR Coastal State. However a number of States are involved in the harvesting, landing or trade of toothfish which are not party to CCAMLR. IUU fishers deliberately choose such States to register their vessels or land and trade their catches as a means of avoiding the obligations arising from CCAMLR and a range of other international agreements related to fishing. A CITES Appendix II listing of Patagonian toothfish could extend the coverage of regulations on trade to an extra 130 countries which are Parties to CITES but not to CCAMLR. In particular, it would oblige Parties to CITES, whose nationals or vessels are involved in the harvesting, landing or other trade of toothfish, to implement the CCAMLR CDS and other conservation measures, including catch limits, designed to ensure all fishing for toothfish is ecologically sustainable. It would also significantly reduce the ability for IUU fishers to change their operations to another State which is party to obligations regarding toothfish.

7. Additional Remarks

Attachment A Range State Consultation.

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Attachment A: Additional Remarks

Range State Consultation

A number of CITES Range States were consulted. The proposal was sent directly to the Range States on 25 April 2002 with responses requested by 24 May 2002. The Range States consulted are shown in the table below which indicates those States that did and did not respond. The table includes all States that responded up to 6th June 2002.

CITES States Consulted

CITES States that Responded	**CITES States that didn't Respond**
Canada	Argentina
Chile	Belgium
Italy	Brazil
Japan	Bulgaria
Namibia	China
Netherlands	Germany
New Zealand	Greece
Norway	India
Poland	Mauritius
South Africa	Peru
Sweden	Republic of Korea
Ukraine	Russian Federation
United Kingdom of Great Britain and Northern	Seychelles
Ireland	Spain
	United States of America
	Uruguay
	Vanuatu

Other Consultation

Consultation was also carried out to obtain comments from members of the Commission on the Conservation of Antarctic Marine Living Resources (CCAMLR), which is the international organisation responsible for the conservation and sustainable use of toothfish in the CCAMLR Convention Area. The parties to the convention that were consulted are shown below. Documentation was sent out on 25 April with a due date for comments of 24 May.

Parties to CCAMLR that were Consulted

Parties that Responded	Parties that did not respond	
European Union	Argentina	Spain
Norway	Belgium	Sweden
	Namibia	India
	New Zealand	Ukraine
	Brazil	Italy
	Poland	United Kingdom
	Chile	United States of America
	Russia	Republic of Korea
	South Africa	Uruguay
	France	

The concerns expressed by those parties that do not support a nomination at this time were largely due to a perception that a CITES listing would undermine the role of CCAMLR. We have structured the nomination to ensure that the strength of CCAMLR management is ensured.