

H0590

15 February 2010

Minister of Fisheries

Introduction of Patagonian Toothfish (PTO) into the Quota Management System on 1 October 2010: Final Advice Paper

- 1 This Final Advice Paper (FAP) provides you with the Ministry of Fisheries' (MFish) recommendations on the proposed introduction of Patagonian toothfish into the Quota Management System (QMS) on 1 October 2010.
- 2 The paper consists of the following sections:
 - a) Part 1: Final Advice Paper
 - b) Part 2: Summary of recommendations
 - c) Part 3: Initial Position Paper
 - d) Part 4: Submissions
- 3 Section 18 of the Fisheries Act 1996 states that if you determine to make a stock subject to the QMS you must, by notice in the *Gazette*, declare the stock to be subject to the QMS on and from the first day of the fishing year stated in the notice. Should you agree with the MFish recommendations, MFish will provide you with a *Gazette* notice shortly after making your decisions.
- 4 Some consequential regulatory amendments will be required if Patagonian toothfish enters the QMS on 1 October 2010. In order to allow sufficient time for those regulatory amendments to be progressed, MFish requests that you make your determination on or before 26 February 2010.

PATAGONIAN TOOTHFISH – FINAL ADVICE PAPER

Executive Summary

- 5 Patagonian toothfish (*Dissostichus eleginoides*) are known to occur in some areas of New Zealand's Exclusive Economic Zone (EEZ) with distribution largely confined to the south of the EEZ. This paper proposes that you make a determination under section 17B of the Fisheries Act 1996 (the Act) to introduce Patagonian toothfish ("toothfish") within the EEZ into the QMS on and from 1 October 2010.
- 6 MFish believes that the introduction of toothfish into the QMS is desirable in order to:
1) create a framework enabling the utilisation potential of the fishery to be realised;
and 2) ensure the sustainability of toothfish within the EEZ.
- 7 Between 1996 and 2003, prior to the lifting of the permit moratorium, four special permits were issued to enable exploratory fishing trips for toothfish to take place. Since the lifting of the moratorium in 2004, toothfish has been managed as an open access species. Despite this, only two fishing trips have been undertaken since 2004 where toothfish has been targeted; both took place in 2009. In all less than 50 tonnes have been taken since 1994/95.
- 8 Although it is likely that there will be further refinements in the techniques used for catching toothfish within the EEZ, MFish believes that some fishers are now at a point where commercially viable catch rates can be achieved in some areas. However, these fishers are currently unwilling to make significant investments in the fishery due to uncertainty over future access. Despite this, MFish anticipates that the high value of this species could attract other fishers; the current open access nature of the fishery means there are no barriers to entry.
- 9 Toothfish within the New Zealand EEZ are likely to form part of a wider straddling and trans-boundary stock encompassing the Australian EEZ around Macquarie Island, part of the Area to be covered by the recently agreed South Pacific Regional Fisheries Management Organisation (SPRFMO) in the High Seas waters directly adjacent to the southern portion of the EEZ, and the northern waters of the Ross Sea in the Convention for the Conservation of Antarctic Marine Living Resources Area (CCAMLR). For this reason MFish proposes only one option for toothfish quota management areas (QMAs), a single QMA covering all New Zealand fisheries waters (PTO1, see Figure 2). However, should you decide to introduce toothfish into the QMS finer scale management measures, such as effort spreading arrangements and sub-area catch limits, may be necessary in the future.
- 10 MFish also proposes that toothfish stocks be subject to the 1 October to 30 September fishing year and that the total allowable commercial catch (TACC) and annual catch entitlements for toothfish be expressed in greenweight.
- 11 The key factor influencing your decision is whether you are satisfied that the current management of toothfish is not ensuring the sustainability of the species or is not providing for its utilisation. The security of rights and access provided by the QMS should enable rights holders to invest in developing the fishery and better provide for

utilisation. Management under the QMS would also enable catch limits to be put in place to ensure sustainability of the fishery to the extent possible within New Zealand's EEZ.

- 12 If introduced into the QMS on 1 October 2010 20% of toothfish quota would be allocated to Maori via Te Ohu Kai Moana Trustee Ltd (TOKM). The remaining 80% would be allocated to the Crown and would be tendered at the earliest opportunity. Regardless of the date toothfish enters the QMS there will be no catch history-based quota allocation.
- 13 The fact that toothfish is a straddling and trans-boundary stock, together with the management measures already in place for toothfish in other jurisdictions, adds an additional dimension to toothfish management. MFish considers that the international context is important. However, it is not a factor relevant to your immediate decisions but is something you should be aware of (the international context is outlined in paragraphs 78-84 of this paper). If you decide to introduce toothfish into the QMS on 1 October 2010 the international context will be of relevance during the subsequent process of setting sustainability measures.
- 14 If you decide to introduce toothfish into the QMS MFish will provide you with a further two FAPs prior to 1 October 2010. The first will address regulatory proposals that are consequential to toothfish's entry into the QMS. MFish will aim to provide you with this FAP in April or May 2010. The second FAP will address sustainability measures such as catch limits and deemed value rates and would likely be incorporated into the October 2010 sustainability round. This FAP would be provided to you in August or September 2010. This current FAP therefore represents the first stage of a possible three-stage process.

Regulatory Impact Analysis Requirements

- 15 The process of introducing a species into the QMS does not require a decision from Cabinet. Because of this a Regulatory Impact Statement (RIS) has not been included with this Final Advice Paper (FAP). Should you decide to introduce toothfish into the QMS, some regulatory measures will be necessary and MFish will provide a RIS when consulting on those measures.

Background

- 16 Toothfish is a valuable commercial species, with an export value during 2008 of over \$20 per kg for frozen headed and gutted product. There is an established world-wide demand with the largest market being the United States.
- 17 Prior to 1 October 2004 toothfish was subject to the permit moratorium i.e. commercial fishers could not obtain a permit authorising the taking of this species. Between 1996 and 2003 MFish issued four special permits to enable exploratory fishing trips for toothfish to take place. Fishing during this period resulted in catches totalling less than 30 tonnes. MFish understands that the type of bottom longline gear that was used may have been unsuitable for the areas fished and often resulted in low catch rates.

- 18 The permit moratorium ceased to apply for most species, including toothfish, on 1 October 2004 and a fishing permit was all that was necessary to gain access to the fishery. However, it was not until 2009 that further targeted fishing for toothfish was carried out. This most recent fishing activity used experience gained from fishing in other areas and, on occasion, resulted in commercially viable catch rates being achieved.
- 19 There is still uncertainty regarding the distribution of the species within the EEZ and the potential size of the resource. Although recent fishing activity has achieved catch rates considered commercially viable, further fishing is still necessary to refine fishing techniques and to gather additional biological information. At present, the companies involved in the fishery to date are unwilling to make significant investments in the fishery because of the lack of certainty regarding both future management and access to the fishery.
- 20 A summary of information on toothfish biology and catches to date is provided in Appendix 1.

Problem definition

- 21 Toothfish in New Zealand's EEZ is currently managed under an open access regime. Given the small amount of in-zone fishing to date MFish has no current concerns over toothfish sustainability. However, MFish notes that continued management outside the QMS could lead to an unsustainable increase in catch and effort over a relatively short time frame.
- 22 The current management regime does have implications for the utilisation of the resource. Without the security provided by property rights the potential of the fishery is unlikely to be fully realised. At present commercial fishing is not occurring because, in the absence of security of access to the fishery, some companies are unwilling to undertake further exploratory fishing.
- 23 Your key decision, whether to make a determination to make toothfish stocks subject to the QMS, is made pursuant to sections 17B(1) and (2) of the Act. If satisfied that current management is a) not ensuring sustainability or b) not providing for the utilisation of toothfish you must determine to make the species subject to the QMS unless you determine that the purpose of the Act would be better met by setting one or more sustainability measures under section 11.
- 24 MFish considers, as a matter of policy, that the QMS is the best framework available within the Act to provide for the utilisation of fisheries resources while ensuring sustainability (the purpose of the Act) notwithstanding the availability of the section 11 measures. MFish is not aware of any reasons why that policy would not apply in this case.

Summary of Options

Option 1 – Status quo

25 Under the status quo toothfish would remain as an open access species outside the QMS.

Option 2 – Introduce toothfish into QMS on 1 October 2010 (MFish preferred option)

26 MFish's preferred option is for toothfish to be introduced into the QMS on 1 October 2010 and within that option:

- a) The quota management area for toothfish would be PTO1 (all New Zealand fisheries waters);
- b) The fishing year for toothfish would be 1 October to 30 September; and
- c) The unit of measure for toothfish would be kilograms greenweight.

Consultation

27 Your decision to make a stock or species subject to the QMS is made pursuant to section 17B of the Act. Section 17B(3) requires that before any determination under 17B is made you must consult with those persons or organisations considered to be representative of the classes of persons who have an interest in the relevant determination.

28 Additionally, should you decide to make toothfish subject to the QMS, section 19(7) of the Act requires consultation with those persons or organisations you consider to be representative of those classes of persons having an interest in:

- a) The proposed quota management areas for the stock;
- b) The proposed fishing year for the stock;
- c) Whether the TACC for the stock is expressed in meatweight or greenweight; and
- d) Other relevant matters.

29 The Initial Position Paper (IPP) released by MFish on 25 November 2009 satisfies the consultation requirements.

Submissions Received

30 Submissions on the IPP were received from:

- a) Te Ohu Kai Moana Trustee Ltd (TOKM)
- b) The New Zealand Seafood Industry Council Ltd (SeaFIC)
- c) Sealord Group Ltd (Sealord)
- d) Sanford Ltd (Sanford)

e) Talley's Group Ltd (Talley's)

Overview of submissions

- 31 Talley's supports the proposal as outlined in the IPP. Sanford Ltd supports QMS introduction subject to conditions regarding future access to quota. TOKM also supports QMS introduction but is concerned that the 20% of quota shares that would be allocated to Maori may generate costs that outweigh the benefit iwi would receive from that quota.
- 32 SeaFIC expresses concerns that QMS introduction may not be merited at this time due to the lack of information. However, they acknowledge that QMS introduction at this time would suit those parties that wish to invest in developing the fishery.
- 33 Sealord does not support QMS entry based on their view that there is not, and will not be, a commercially viable toothfish fishery in New Zealand waters. Sealord believes that the toothfish found in New Zealand waters are most likely part of the Macquarie Island stock. They also believe that prior to New Zealand introducing toothfish into the QMS a full discussion needs to take place between the New Zealand and Australian governments.

Analysis of Management Options

Option 1

- 34 Under Option 1 toothfish would remain an open access species outside the QMS.
- 35 Continuing to manage toothfish outside the QMS is an option available for your consideration. In assessing the appropriateness of this option you must look at sustainability and utilisation considerations and whether they are best provided for by retaining toothfish outside the QMS.

Sustainability

- 36 At present, there are no stock sustainability concerns associated with the current catch of toothfish. However, the species' high value could attract the interest of fishers and result in an increase in catch and effort over a relatively short time frame. While this could provide additional information on the fishery, it could also result in sustainability concerns arising.
- 37 Under section 11 of the Act you have the ability to set sustainability measures, such as catch limits, for non-QMS species. MFish notes that although a catch limit established under section 11 would address sustainability concerns it would not provide adequately for utilisation and does not provide certainty of access to fishers targeting toothfish. Such a catch limit essentially establishes a race for fish. The impact of such a regime on fishers is dependent on the number of vessels participating in the fishery.

Utilisation

- 38 Rationale for continuing to manage toothfish outside the QMS includes:

- a) The status quo would avoid the administrative costs to Industry associated with acquiring annual catch entitlement (ACE) or paying deemed values and paying cost recovery levies; and
- b) The fact there is little information on toothfish distribution and abundance within the EEZ. It is possible that there is insufficient biomass to sustain a viable fishery.

However, MFish considers that these factors can be discounted for the following reasons.

- 39 The cost of acquiring ACE or paying deemed values, together with cost recovery levies, is common to all QMS species. As almost all commercially valuable species are managed under the QMS framework it would be anomalous for toothfish to remain outside the QMS simply for this reason.
- 40 Although toothfish's abundance and the extent of its distribution in the EEZ are uncertain, there is some information available. Exploratory fishing to date has shown that commercially viable catch rates can be achieved in some areas. Information is also available from areas outside the EEZ. Some toothfish is taken in the northern Ross Sea (part of the area managed by the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)) and there is also an established fishery in the Macquarie Island fishing zone¹, which borders the south of New Zealand's EEZ. MFish anticipates that information from these fisheries could be of some relevance to the New Zealand fishery. MFish believes that uncertainty regarding biomass should not be used as a reason for toothfish remaining outside the QMS.
- 41 One of the implications associated with retaining the status quo is that as long as toothfish remains outside the QMS it will be subject to the annual assessment process undertaken by MFish to determine whether non-QMS stocks or species should be considered for introduction into the QMS. MFish undertook this assessment in 2009 (included as Appendix 2 of the IPP), which confirms that consideration for QMS introduction is appropriate for toothfish.

Costs

- 42 Continuing to manage toothfish outside the QMS may necessitate negotiating voluntary arrangements² consistent with international obligations or implementing section 11 measures, which will place demands on MFish resources. There may also be issues with preserving the integrity of voluntary arrangements in an open access fishery as fishers not party to an arrangement are free to enter the fishery.
- 43 Managing toothfish outside the QMS is still likely to require research, which has an associated cost. In order to fund this research either industry will have to be levied or the Crown will be required to pay. The cost recovery regime allows MFish to charge

¹ The current Macquarie Island fishing zone catch limit is 210 tonnes and the fishery has existed since 1994. The Macquarie Ridge, the geographical feature on which that fishery is undertaken, extends north into New Zealand's EEZ. The extent to which the toothfish biomass found in New Zealand waters has been affected by the Macquarie Island fishery is unknown.

² Such arrangements currently include, but are not limited to, fish tagging, completion of CCAMLR forms and data collection.

levies for non-QMS species. The levy rate for toothfish is currently set at \$0.00 per tonne; however this could change as appropriate.

Benefits

- 44 As with other non-QMS species there are no administrative barriers to entry to the toothfish fishery. This means that anyone can fish for toothfish provided they have a fishing permit.

Option 2 (MFish preferred option)

- 45 Under Option 2 toothfish would be introduced into the QMS on 1 October 2010. Twenty percent of toothfish quota would be allocated to Maori via TOKM and the remaining 80% would be allocated to the Crown and would be tendered at the earliest opportunity.
- 46 MFish has a policy preference for management under the QMS where sustainability or utilisation of a species is not being adequately provided for. As your decision to introduce a species into the QMS is based on sustainability and utilisation considerations these two factors are described in more detail below.

Utilisation

- 47 Fishers wishing to further develop the fishery for this species are currently unwilling to invest significant resources in doing so without security of access to the fishery. MFish considers that QMS introduction and acquisition of quota shares by the fishing industry would provide the necessary security of access to the fishery required by the industry. For this reason MFish considers that current management is not providing for the utilisation of toothfish and that the test in section 17B(1)(b) of the Act is met; MFish believes you should bring toothfish into the QMS as the purpose of the Act would not be better met by setting one or more sustainability measures under section 11 of the Act. As noted above section 11 sustainability measures do not adequately provide for utilisation.
- 48 If toothfish is introduced into the QMS on 1 October 2010 it would be at the early stages of the fishery's development in New Zealand. MFish anticipates that the value of the quota at this time could be comparatively low relative to its potential long-term value. This would provide the best opportunity for those companies wishing to participate in the fishery to secure the long-term rights to the fishery before committing to being involved in its development.

Sustainability

- 49 As noted above, the current open access regime, combined with toothfish's value and recent improvements in harvesting techniques, means there is the potential for an increase in fishing effort. Management under the QMS would provide a mechanism to ensure that catches are constrained to a sustainable level.

Costs

- 50 Some regulatory amendments would be necessary but the cost to the fishing industry of these administrative amendments would be negligible. At a minimum the required

amendments include specifying the codes to be used by permit holders when completing returns required by the Fisheries (Reporting) Regulations 2001.

- 51 If toothfish enters the QMS fishers will be faced with the same costs they face for all other QMS species. This includes the cost of acquiring ACE or paying deemed values and the requirement to pay cost recovery levies (quota owners only). Cost recovery levies cover research, observer coverage, compliance services and registry costs.
- 52 Research would likely form the largest component of the levies as the cost of any research directed at toothfish would be recovered from quota holders. Concerns that the biomass of the stock, and therefore the value from the fishery, may not be able to support a full research programme are valid. However, MFish is satisfied that any research programme implemented for toothfish would be modified to reflect the total value of the stock. MFish notes that limited information on toothfish would be reflected in a cautious approach being taken when setting catch levels.
- 53 Concern over possible research and management costs outweighing the value from the fishery was a common theme in submissions. Submitters generally felt that the current lack of information regarding stock size, together with the possible cost of additional research to inform sustainability decisions, could discourage people from becoming stakeholders in the fishery.
- 54 MFish reiterates that it has confidence that any costs imposed on the fishery after QMS entry would be in proportion to the value of that fishery. MFish also notes that given New Zealand's international obligations some level of research would be required irrespective of whether the stock is managed inside or outside the QMS.

Benefits

- 55 The primary benefit of QMS introduction, and consequent transfer of property rights to the fishing industry, is that those parties who purchase or acquire quota will have appropriate incentives to invest in the fishery.
- 56 The rights-based approach is likely to provide the best opportunity for maximising utilisation of the fishery as the security provided by quota ownership will allow quota owners to invest in the development of the toothfish fishery. However, as noted in Sealord's submission there is a valid argument that there may not be sufficient biomass of toothfish in our EEZ to support a viable long-term fishery. Given New Zealand's location is at the northern end of the species' range this is a plausible scenario.
- 57 Despite this, MFish believes that QMS introduction provides the best way of managing this uncertainty. It is likely that a low initial total allowable catch (TAC) would be set reflecting the lack of knowledge on biomass and yield. The cost to industry of acquiring quota under a low TAC would likely be correspondingly low.
- 58 Once quota is owned by industry, MFish believes a suitable framework exists to enable development of the fishery to take place. In early 2009 you approved a new purpose for issuing special permits under section 97(1)(c) of the Act:

"To allow persons or organisations to take fish from stocks in excess of their

annual catch entitlement without paying deemed values, in conjunction with a research programme that is likely to provide sufficient information to establish a total allowable catch in accordance with statutory requirements.”

- 59 In the case of toothfish, this new purpose would enable special permits to be issued to fishers to take fish in excess of the TACC for an agreed period provided that an approved research programme was in place. MFish notes that this tool, which is designed to generate additional information about a fishery, only applies to QMS species.
- 60 MFish considers that the new special permit purpose provides the incentive for industry to lead a research programme directed at toothfish, particularly if the initial TAC is set at a relatively low level due to the lack of existing information. This view was supported by Sanford, whose submission expressed support for QMS entry and subsequent industry-led research.
- 61 Should the research lead to increased catch levels it is the quota owners who would benefit from that. Conversely, if research does not indicate the existence of a long-term fishery then an appropriate TAC can be set to manage sustainability concerns. Management costs would also be reduced to ensure that the cost of holding toothfish quota does not become a burden to quota owners.
- 62 Although not relevant to your decision, introducing toothfish into the QMS and setting a TAC may also go some way to fulfilling New Zealand’s international obligations with regard to toothfish management. Under international law New Zealand is obliged to ensure that its management measures are compatible with existing measures³ so that the effectiveness of measures adopted elsewhere for the stock is not undermined.

Other Management Controls Concurrent with Entry to QMS

- 63 Should you agree to introduce toothfish into the QMS, section 18 of the Act requires your decision to be notified in the *Gazette*. Section 19 specifies the matters to be included in a notice given under section 18 and requires that the notice must:
- a) Define the quota management area to which the notice relates by reference to an area or areas defined in the First Schedule to the Act or in any other manner;
 - b) State the fishing year in respect of the stock, which shall be a 12-month period commencing on either the 1st day of April or the 1st day of October;
 - c) State whether, for the stock concerned, the total allowable commercial catch (TACC) is, and annual catch entitlements (ACE) are, to be expressed in meatweight or greenweight; and
 - d) Make provision for such other matters as may be contemplated by this Act.

³ In the case of toothfish existing conservation and management measures apply to Australian Fishing Zone waters around Macquarie Island and to the CCAMLR Area. The high seas area of the South Pacific south of New Zealand to the CCAMLR Area boundary is expected to be covered by the South Pacific Regional Fisheries Management Organisation (SPRFMO). Currently, voluntary interim conservation and management measures for bottom fisheries in the proposed SPRFMO Area have been agreed by participants to the negotiations but toothfish-specific management measures have not.

Quota Management Areas

64 Sections 19(2) and 19(3) of the Act are relevant to any decision regarding QMAs. These sections state:

19(2) - in defining the quota management areas, the Minister shall, as far as practicable, maintain the same quota management areas for different species;

19(3) - if the Minister is satisfied that any species that occur in the waters around the Chatham Islands can, for fisheries management purposes, be managed effectively as a unit, a notice under section 18 of this Act may create around the Chatham Islands a separate quota management area for that species.

65 Biological and fishery information on toothfish is included as Appendix 1. It is likely that the toothfish occurring within New Zealand's EEZ are part of a wider biological stock found in the Australian EEZ around Macquarie Island, in the northern parts of the Ross Sea (within the CCAMLR area) and in the area of the High Seas between the NZ EEZ and the CCAMLR area (see Figure 1 below).

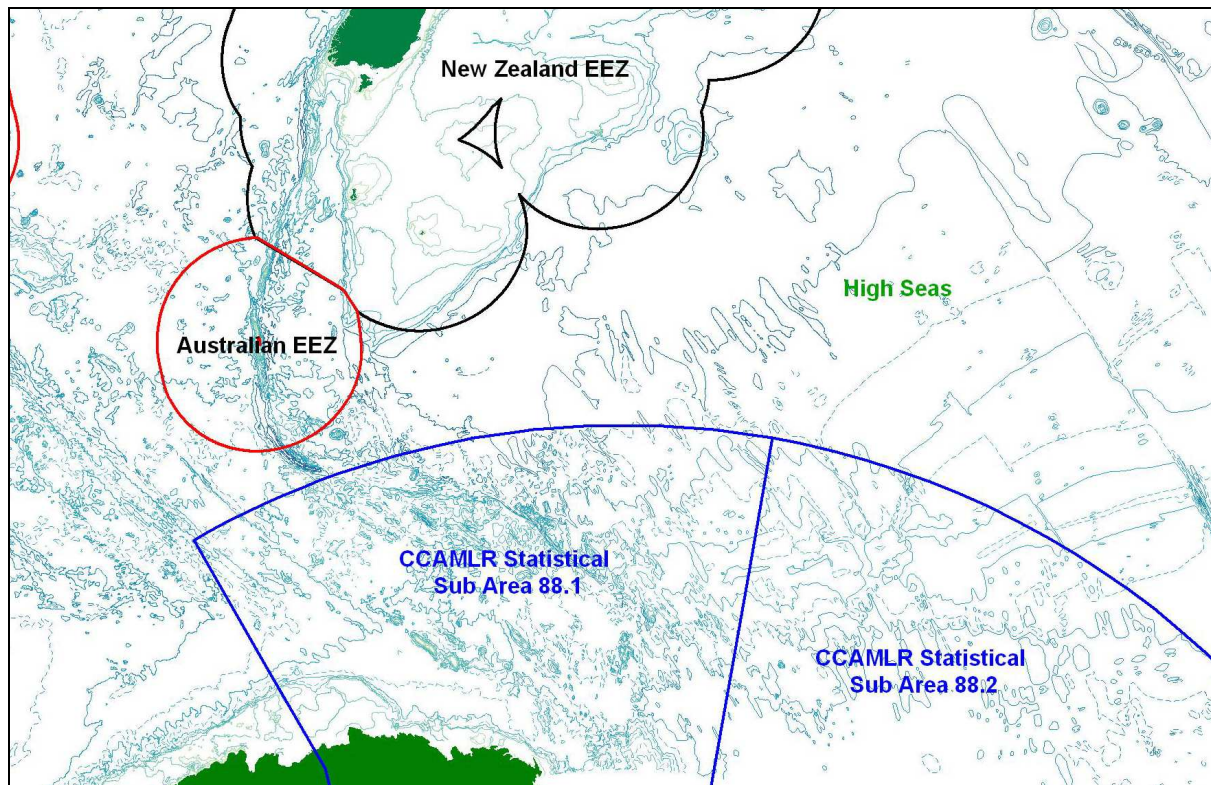


Figure 1. Diagram showing New Zealand EEZ, Australian EEZ around Macquarie Island and the Ross Sea CCAMLR statistical areas.

66 For this reason MFish proposes that a single QMA encompassing all New Zealand fisheries waters (PTO1) be established. This proposal is shown in Figure 2. Only the Sanford submission stated a preference for QMAs and supported this option. MFish considers defining a single toothfish QMA is consistent with the approach to setting a single QMA for other stocks whose distribution extends beyond New Zealand waters, for example highly migratory species such as southern bluefin tuna.

- 67 This proposal means not establishing a separate QMA for the waters around the Chatham Islands. MFish considers that toothfish in the waters around the Chatham Islands cannot be managed effectively as a unit and, therefore, that a separate QMA should not be established around the Chatham Islands.

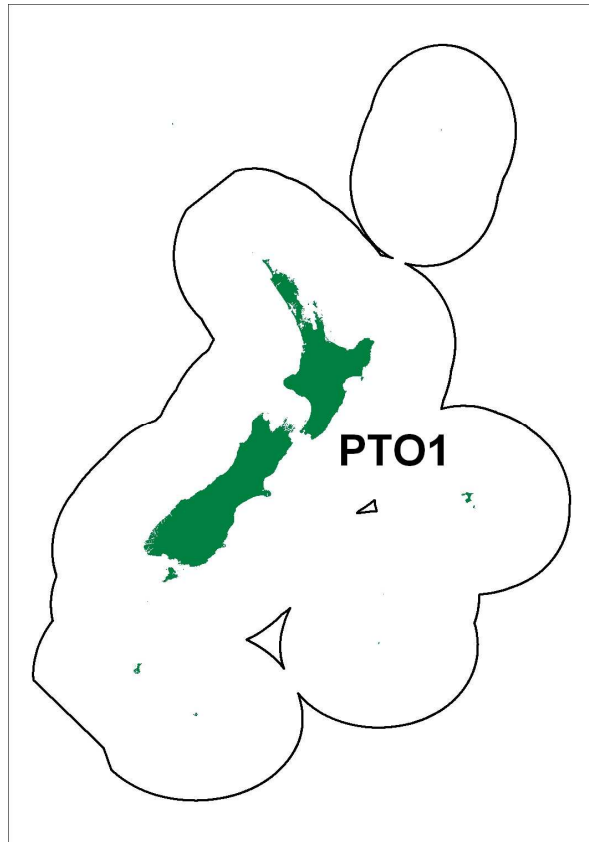


Figure 2. Diagram showing proposed PTO1 quota management area

Fishing year

- 68 MFish proposes that the toothfish stock be subject to the 1 October fishing year. The majority of finfish stocks are subject to this fishing year and MFish considers it is most appropriate for this species.

Meatweight or greenweight

- 69 ACE and the TACC for all QMS species except scallop and the Foveaux Strait dredge oyster fishery are expressed as greenweight. Consistent with this MFish proposes that the TACC and ACE for the toothfish stock be expressed as greenweight.

Other matters

- 70 MFish considers there are no other matters that need to be provided for in the notice declaring toothfish to be subject to the QMS.

General Management Issues

- 71 There are a number of issues associated with the toothfish fishery that need to be considered, regardless of whether toothfish enters the QMS or not. These issues are detailed in the following paragraphs.

Management interventions

- 72 Continued management outside the QMS will still likely require some management interventions to ensure New Zealand's international obligations with respect to stock sustainability and environmental mitigation are met. Such measures could consist of voluntary arrangements between MFish and fishers or measures implemented under section 11 of the Act such as a catch limit. Implementation of such section 11 measures is relatively straightforward although, as noted earlier, MFish's policy preference is to manage species under the QMS.
- 73 Mandatory and voluntary measures relating to the environmental effects of fishing currently apply to all fishing activity irrespective of the species being targeted. If further commercial fishing eventuates, additional toothfish-specific voluntary arrangements relating to New Zealand's international obligations may still be likely regardless of whether toothfish is managed under the QMS framework or not.
- 74 In its submission Sanford notes concerns with some of the possible management measures for the fishery and questions the validity and value of those measures. Sanford believes it is essential that the fishery is not burdened by a management framework that impedes the development of the fishery. MFish acknowledges these concerns and will work with all interested parties in developing an appropriate management strategy for toothfish within the EEZ irrespective of your decision on QMS introduction.

Toothfish catch documentation scheme

- 75 Any New Zealand fisher wishing to fish for toothfish must participate in the CCAMLR catch documentation scheme (CDS)⁴, regardless of where in the world it is caught. The CDS is designed to track the catch, landings and trade flows of toothfish and its aim is to eliminate illegal, unregulated and unreported (IUU) toothfish catches. It has played a significant role in reducing the international trade in illegally caught IUU toothfish.
- 76 Fishers are required to complete the relevant CDS documents and are prohibited from landing and exporting toothfish without verified CCAMLR catch documents from MFish that certify that the toothfish was caught legally. This verification process includes inspection by MFish Field Operations on arrival of a vessel in port, as well as overseeing and checking of all toothfish unloaded by an MFish observer. The CDS already applies to all in-EEZ fishing for toothfish and this will not change if the species is managed under the QMS or not.

⁴ The Fisheries (Toothfish Catch Documentation Scheme) Regulations 2000, which give effect to Conservation Measure 170/XVIII adopted by the Commission for the Conservation of Antarctic Marine Living Resources, in accordance with Article IX of the Convention on the Conservation of Antarctic Marine Living Resources, sets out the duties of the master of a registered New Zealand ship when landing toothfish in New Zealand or transshipping toothfish to another vessel.

Bycatch

- 77 Some toothfish fishing has resulted in significant bycatch of non-QMS species such as a large undescribed chimaerid (ghost shark), basketwork eel and rattail species. Bycatch rates will be monitored by MFish regardless of whether toothfish is in the QMS or not. Consistently high bycatch rates may require additional management measures to ensure the sustainability of these bycatch species.

International context

- 78 The international context relevant to the management of toothfish was noted in some submissions. While not material to your immediate decision on QMS entry, international considerations are briefly outlined below as they will be directly relevant to the process of setting sustainability measures if you agree to introduce toothfish into the QMS.
- 79 Best scientific evidence indicates that only part of the toothfish stock is found in New Zealand waters. The stock is considered to be straddling (found on the high seas and in New Zealand's EEZ) and trans-boundary (found in New Zealand's EEZ and Australia's abutting EEZ around Macquarie Island). This means that New Zealand has cooperation and compatibility obligations under the United Nations Convention on the Law of the Sea (UNCLOS) and the United Nations Fish Stock Agreement (UNFSA) to ensure the sustainability of the toothfish stock throughout its range. The likelihood that only a portion of the wider toothfish stock is found in New Zealand waters does mean that ensuring the sustainability of the toothfish stock is not fully within New Zealand's control.
- 80 As a party to UNCLOS and UNFSA, New Zealand is required to cooperate in managing the fishery with Australia, and CCAMLR and SPRFMO as the Regional Fisheries Management Organisations responsible for the management of the stock on the high seas where the stock occurs. The development of an in-EEZ toothfish fishery will require the establishment of sustainability measures 'compatible' with CCAMLR, SPRFMO and Australian EEZ measures. The introduction of toothfish into the QMS will advance New Zealand's delivery on compatibility obligations. There may, however, be a need to consider additional species-specific sustainability measures.
- 81 The Australian Fisheries Management Authority has adopted management measures for the Macquarie Island toothfish fishery that are described as being complementary to CCAMLR measures. A total allowable catch is set, and is reviewed annually using a tag – recapture stock assessment.
- 82 MFish has already informed Australian authorities that New Zealand is considering introducing toothfish into the QMS. Discussions with Australia on trans-boundary issues would commence once a decision is made whether or not to introduce the stock into the QMS.
- 83 Existing CCAMLR Conservation Measures for toothfish include 24 hour observer coverage, gear and season restrictions, by-catch limits, seabird mitigation, benthic impact assessments and catch documentation.

- 84 While the negotiations to establish a SPRFMO have not adopted any toothfish specific measures, interim conservation and management measures for bottom fisheries have been agreed and include area and catch/capacity limits, gear restrictions, and observer coverage.

Other issues for your consideration

- 85 In its submission on the IPP Sanford expresses support for toothfish entering the QMS. However, that support is conditional on preferential access to toothfish quota and an understanding that Sanford will be successful with an application to hold quota above the aggregation limit. MFish notes that these issues are not relevant to your decision regarding QMS introduction.

Tendering of quota

- 86 As noted in paragraph 45 if toothfish were to enter the QMS on 1 October 2010 80% of quota would be allocated to the Crown and 20% to Maori via TOKM. MFish would endeavour to tender the Crown quota before the end of the 2010 calendar year. Quota tendering can be undertaken through an open public tender and anybody can bid for quota with the exception of overseas persons.
- 87 In its submission Sanford refers to a 2005 decision by the then Minister of Fisheries that MFish should dispose of Crown-held ACE and quota through an open public tender, except in specific circumstances. Sanford believes that disposal of toothfish quota fits the “except in specific circumstances” category and that it should be given preferential access to the quota due to its significant investment in the fishery.
- 88 MFish will provide a separate briefing on issues relating to the disposal of Crown-held quota.

Quota aggregation limits

- 89 For the majority of species in the QMS the quota aggregation limit is 35%. That is, no person may own quota that is equivalent to more than 35% of the combined TACCs for every stock of that species. For species that are listed on Schedule 5 of the Act the quota aggregation limit is 45%. Should you agree to introduce toothfish into the QMS adding toothfish to Schedule 5 of the Act is something MFish will consider as many other deepwater species are currently listed on that Schedule.
- 90 Despite the aggregation limits the Act contains a provision allowing you to consent to a person holding quota in excess of the relevant limit. For this reason MFish cannot prejudice your decision on such matters and believes that any potential application to hold toothfish quota in excess of the aggregation limit should be treated on its merits. Should you decide to introduce toothfish into the QMS Sanford would be welcome to make an application for a quota aggregation limit exemption.

APPENDIX 1- BIOLOGICAL AND FISHERY INFORMATION

- 1 Toothfish are large notothenids and are endemic to Antarctic and Sub-Antarctic waters. The two main species, Antarctic toothfish (*Dissostichus mawsoni*) and Patagonian toothfish (*Dissostichus eleginoides*), are closely related. Generally, Antarctic toothfish are confined to the waters around the Antarctic continent with a northern limit at around 60°S (i.e. well south of the southern-most extent of the NZ EEZ).



Figure 1. Photograph of Patagonian toothfish (*Dissostichus eleginoides*) (MFish Observer Programme).

- 2 Patagonian toothfish has a more northerly distribution and is widely distributed in all southern oceans south of approximately 40-45°S. There is limited overlap between distributions of the two species. In the Ross Sea the main area of overlap is thought to occur between latitudes 62.5°S and 65°S.
- 3 Patagonian toothfish (toothfish) is the species found in New Zealand's EEZ. It is known to occur in certain areas towards the southern boundary of the EEZ with the occasional specimen being recorded as far north as the Chatham Rise.
- 4 Toothfish occur in water as shallow as 50m and as deep as over 3,000m. In general this species' depth distribution is related to size; very small fish are found in less than 100m and very large fish are found in depths greater than 1,200m. Most commercial catch comes from 800-1,200m.
- 5 Toothfish can grow to over 2m long and weigh over 150kg. Large individuals are thought to be 40-50 years old. Males are thought to mature at 90-100cm and females at 110-130cm. The species feeds on a variety of other fish, octopods, squid and crustaceans.
- 6 Juvenile toothfish have been located around Macquarie Island. As they grow individuals are assumed to move both north-east, some into the New Zealand EEZ, and south-east down the Macquarie Ridge into the northern CCAMLR region.

- 7 A fish that was captured inside the New Zealand EEZ on the northern extension of the Macquarie Ridge was tagged and released in early 2009. The fish was recaptured inside the Macquarie Island fishing zone in mid 2009. Another fish tagged in the Macquarie Island fishing zone was subsequently recaptured from the northern CCAMLR region.
- 8 The assumed distribution of toothfish within the NZ EEZ and in the Australian EEZ around Macquarie Island is summarised in Figure 2 below. Some of the information on which this is based comes from returns completed by commercial fishers. This figure may not fully represent the actual distribution of this species.
- 9 Prior to 1 October 2004 toothfish was subject to the permit moratorium and a special permit was necessary to enable exploratory fishing to be undertaken. Four exploratory fishing trips were undertaken between 1996 and 2003. After the lifting of the permit moratorium a further two fishing trips where toothfish was targeted were undertaken in early 2009. Most fishing to date has taken place along the northern end of the Macquarie ridge, around the southern periphery of the Campbell Plateau and on the Bounty Plateau.
- 10 Small amounts of toothfish are sometimes taken as bycatch, most commonly in the ling longline fishery. Total catches since 1994/95 are summarised in the table below.

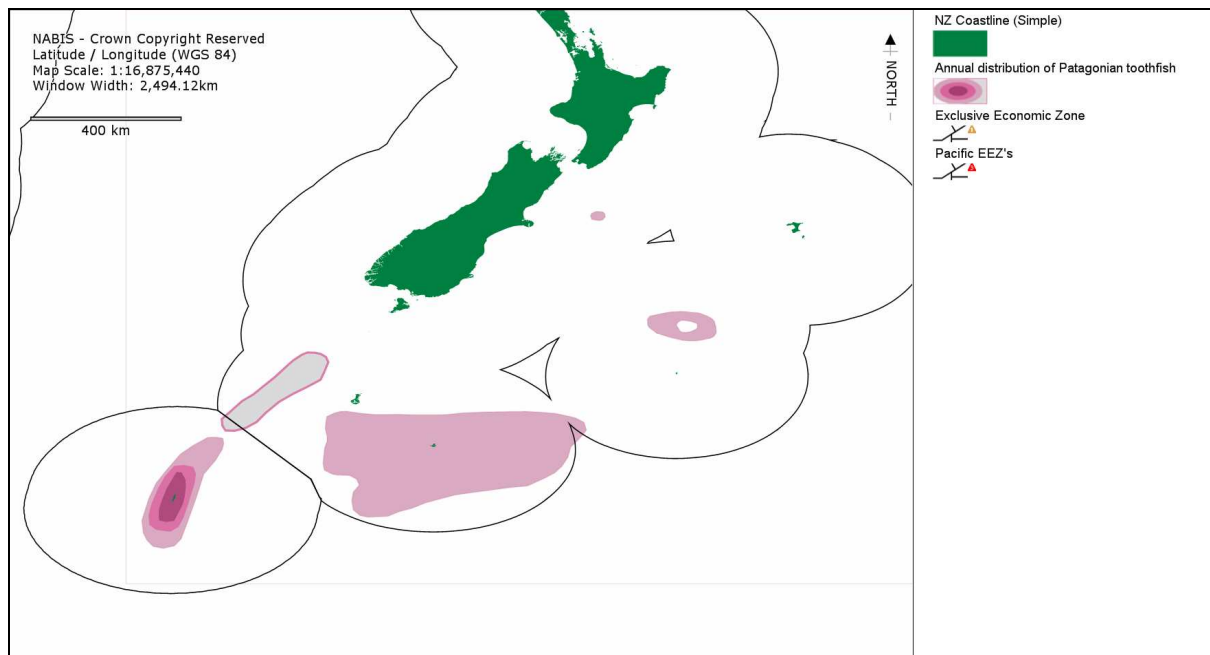


Figure 2. Patagonian toothfish distribution within New Zealand EEZ and, to the south of New Zealand, within the Macquarie Island zone (Australia). The information on which this is based comes in part from returns completed by commercial fishers.

Table 1. Landed catch of toothfish as reported by commercial fishers since 1994/95.

Fishing year	Reported landing of PTO taken within EEZ (tonnes)
1994/95	0.1
1995/96	18.6
1996/97	4.1
1997/98	<0.1
1998/99	1.0
1999/00	<0.1
2001/02	0.2
2002/03	0.1
2003/04	3.3
2004/05	<0.1
2005/06	<0.1
2006/07	0.1
2007/08	-
2008/09	20.5

PART 2: SUMMARY OF RECOMMENDATIONS

1 MFish recommends that you:

- a) **Agree** to retain Patagonian toothfish as an open access species managed outside the QMS.

OR

- b) **Agree** to introduce Patagonian toothfish into the QMS on 1 October 2010 and within that option:

- i. Agree to set one quota management area encompassing all New Zealand fisheries waters (PTO1):
- ii. Agree that the fishing year for Patagonian toothfish is 1 October to 30 September; and
- iii. Agree that the unit of measure for Patagonian toothfish is kilograms greenweight.

Aoife Martin
Fisheries Manager Deepwater

APPROVED / NOT APPROVED / APPROVED AS AMENDED

Hon Phil Heatley
Minister of Fisheries

/ / 2010

PART 3: INITIAL POSITION PAPER

Executive Summary

- 1 Patagonian toothfish (*Dissostichus eleginoides*) are known to occur in some areas of New Zealand's Exclusive Economic Zone (EEZ) with distribution largely confined to the south of the EEZ. This paper proposes that the Minister of Fisheries make a determination under section 17B of the Fisheries Act 1996 (the Act) to introduce Patagonian toothfish ("toothfish") within the EEZ into the Quota Management System (QMS) on and from 1 October 2010.
- 2 The Ministry of Fisheries (MFish) believes that the introduction of toothfish into the QMS is desirable in order to: 1) create a framework enabling the utilisation potential of the fishery to be realised; and 2) ensure the sustainability of toothfish within the EEZ.
- 3 Between 1996 and 2003, prior to the lifting of the permit moratorium, four special permits were issued to enable exploratory fishing trips for toothfish to take place. Since the lifting of the moratorium in 2004, toothfish has been managed as an open access species. Despite this only two fishing trips have been undertaken since 2004 where toothfish has been targeted; both took place in 2009. In all less than 50 tonnes have been taken since 1994/95.
- 4 Although it is likely that there will be further refinements in the techniques used for catching toothfish within the EEZ, MFish believes that some fishers are now at a point where commercially viable catch rates can be achieved in some areas. However, these fishers are currently unwilling to make significant investments in the fishery due to uncertainty over future access. However MFish anticipates that the high value of this species could attract other fishers; the current open access nature of the fishery means there are no barriers to entry.
- 5 Toothfish within the New Zealand EEZ are likely to form part of a wider straddling and trans-boundary stock encompassing the Australian EEZ around Macquarie Island, High Seas waters directly adjacent to the southern portion of the EEZ and the northern waters of the Ross Sea in the Convention for the Conservation of Antarctic Marine Living Resources Area. For this reason MFish proposes only one option for toothfish quota management areas (QMAs), a single QMA covering all New Zealand fisheries waters (PTO1, see Figure 2). However, should the Minister decide to introduce toothfish into the QMS finer scale management measures, such as effort spreading arrangements and sub-area catch limits, may be necessary.
- 6 MFish also proposes that toothfish stocks be subject to the 1 October to 30 September fishing year and that the total allowable commercial catch and annual catch entitlements for toothfish be expressed in greenweight.
- 7 The key factor influencing the Minister's decision is whether he is satisfied that the current management of toothfish is not ensuring the sustainability of the species or is not providing for its utilisation. The security of rights and access provided by the QMS should enable rights holders to invest in developing the fishery and better

provide for utilisation. Management under the QMS would also enable catch limits to be put in place to ensure sustainability of the fishery to the extent possible within New Zealand's EEZ.

- 8 Should the Minister agree to introduce toothfish into the QMS MFish proposes two further periods of consultation. The first will deal with regulatory amendments while the second will address sustainability measures including catch limits and deemed values. The two additional consultation periods will ensure that MFish can compile information and undertake research to inform the setting of catch limits while also allowing sufficient time for regulatory amendments to go through the Cabinet process.
- 9 If introduced into the QMS on 1 October 2010 20% of toothfish quota would be allocated to Maori via Te Ohu Kai Moana Trustee Ltd (TOKM). The remaining 80% would be allocated to the Crown and would be tendered at the earliest opportunity. Regardless of the date toothfish enters the QMS there will be no catch history-based quota allocation.
- 10 The fact that toothfish is a straddling and trans-boundary stock, together with the management measures already in place for toothfish in other jurisdictions, adds an additional dimension to toothfish management. MFish considers the international context is important and is something the Minister should be aware of (this is outlined in paragraphs 64-69 of this paper). If the Minister decides to introduce toothfish into the QMS on 1 October 2010 the international context will be of relevance during the subsequent process of setting sustainability measures.

Regulatory Impact Analysis Requirements

- 11 The process of introducing a species into the QMS does not require a decision from Cabinet. Because of this a Regulatory Impact Statement (RIS) has not been included with this Initial Position Paper (IPP). Should the Minister decide to introduce toothfish into the QMS, some regulatory measures will be necessary and MFish will provide a RIS when consulting on those measures.

Background

- 12 Toothfish is a valuable commercial species, with an export value during 2008 of over \$20 per kg for frozen headed and gutted product. There is an established world-wide demand with the largest market being the United States.
- 13 Prior to 1 October 2004 toothfish was subject to the permit moratorium i.e. commercial fishers could not obtain a permit authorising the taking of this species. Between 1996 and 2003 MFish issued four special permits to enable exploratory fishing trips for toothfish to take place. Fishing during this period resulted in catches totalling less than 30 tonnes. MFish understands that the type of bottom longline gear that was used may have been unsuitable for the areas fished, which often resulted in low catch rates.
- 14 The permit moratorium ceased to apply to toothfish on 1 October 2004 and a fishing permit was all that was necessary to gain access to the fishery. However, it was not until 2009 that further targeted fishing for toothfish was carried out. This most recent

fishing activity used experience gained from fishing in other areas and, on occasion, resulted in commercially viable catch rates being achieved.

- 15 There is still uncertainty regarding the distribution of the species within the EEZ and the potential size of the resource. Although recent fishing activity has achieved catch rates considered commercially viable, further fishing is still necessary to refine fishing techniques and to gather additional biological information. At present, the companies involved in the fishery to date are unwilling to undertake further fishing because of the lack of certainty regarding both future management and access to the fishery.
- 16 A summary of information on toothfish biology and catches to date is provided in Appendix 1.

Problem definition

- 17 Toothfish in New Zealand's EEZ is currently managed under an open access regime. Given the small amount of in-zone fishing to date MFish has no current concerns over toothfish sustainability. However, MFish notes that continued management outside the QMS could lead to an unsustainable increase in catch and effort over a relatively short time frame.
- 18 The current management regime may also have implications for the utilisation of the resource. Although open access does not prevent utilisation, without the security provided by property rights the potential of the fishery is unlikely to be fully realised. At present commercial fishing is not occurring because, in the absence of security of access to the fishery, some companies are unwilling to undertake further exploratory fishing.
- 19 In 2007 the Minister of Fisheries approved the "Identification of candidate stocks for Quota Management System (QMS) introduction standard" and noted the related organisational procedures. This standard established a risk-based approach for evaluating stocks to determine whether they should be considered for QMS introduction. A draft risk assessment has been completed for toothfish on the basis of the information currently available and this is included as Appendix 2. The assessment confirms that consideration for QMS introduction is appropriate for this species.
- 20 MFish would usually release a risk assessment for external consultation prior to release of a formal IPP. MFish has not done so in this case, although stakeholders are welcome to comment on the risk assessment as part of their submission on the IPP.
- 21 The Minister's key decision, whether to make a determination to make toothfish stocks subject to the QMS, is made pursuant to sections 17B(1) and (2) of the Act. If satisfied that current management a) is not ensuring sustainability or b) is not providing for the utilisation of toothfish the Minister must determine to make the species subject to the QMS unless he determines that the purpose of the Act would be better met by setting one or more sustainability measures under section 11.
- 22 MFish considers, as a matter of policy, that the QMS is the best framework available within the Act to provide for the utilisation of fisheries resources while ensuring sustainability (the purpose of the Act) notwithstanding the availability of the section

11 measures. MFish is not aware of any reasons why that policy would not apply in this case.

Summary of Options

Option 1 – Status quo

23 Under the status quo toothfish would remain as an open access species outside the QMS.

Option 2 – Introduce toothfish into QMS on 1 October 2010 (MFish preferred option)

24 MFish's preferred option is to introduce toothfish into the QMS on 1 October 2010 and within that option:

- a) The quota management area for toothfish would be PTO1 (all New Zealand fisheries waters);
- b) The fishing year for toothfish would be 1 October to 30 September; and
- c) The unit of measure for toothfish would be kilograms greenweight.

Consultation

25 The Minister's decision to make a stock or species subject to the QMS is made pursuant to section 17B of the Fisheries Act 1996 (the Act). Section 17B(3) requires that before any determination under 17B is made the Minister must consult with those persons or organisations considered to be representative of the classes of persons who have an interest in the relevant determination.

26 Should the Minister decide to make toothfish subject to the QMS, section 19(7) of the Act requires consultation with the persons or organisations considered by the Minister to be representative of those classes of persons having an interest in:

- a) The proposed quota management areas for the stock;
- b) The proposed fishing year for the stock;
- c) Whether the total allowable commercial catch (TACC) for the stock is expressed in meatweight or greenweight; and
- d) Other relevant matters.

27 This IPP seeks submissions on both the introduction of toothfish into the QMS and on the matters referred to in the preceding paragraph.

28 If QMS introduction proceeds MFish proposes two further periods of consultation on the additional management measures that will be required. The first will deal with regulatory amendments while the second will address sustainability measures including catch limits and deemed values. The two additional consultation periods will ensure that MFish maximises the time available to compile information and undertake research to inform the setting of catch limits while also allowing sufficient time for regulatory amendments to go through the Cabinet process.

Analysis of Management Options

Option 1

- 29 Under Option 1 toothfish would remain an open access species outside the QMS.
- 30 Continuing to manage toothfish outside the QMS is an option available for the Minister's consideration. In assessing the appropriateness of this option the Minister must look at sustainability and utilisation considerations and whether they are best provided for by retaining toothfish outside the QMS.

Sustainability

- 31 At present, there are no stock sustainability concerns associated with the current catch of toothfish. However, the species' high value could attract the interest of fishers and result in an increase in catch and effort over a relatively short time frame. While this could provide additional information on the fishery, it could also result in sustainability concerns arising.
- 32 Under section 11 of the Act the Minister has the ability to set sustainability measures, such as catch limits, for non-QMS species. MFish notes that although a catch limit established under section 11 would address sustainability concerns it would not provide adequately for utilisation and does not provide certainty of access to fishers targeting toothfish. Such a catch limit essentially establishes a race for fish. The impact of such a regime on fishers is dependent on the number of vessels participating in the fishery.

Utilisation

- 33 There are factors that could be interpreted as providing rationale for continuing to manage toothfish outside the QMS; these include:
- a) The status quo would avoid the administrative costs to Industry associated with acquiring annual catch entitlement (ACE) or paying deemed values; and
 - b) There is little information on toothfish distribution and abundance within the EEZ. It is possible that there is insufficient biomass to sustain an economically viable fishery.

However, MFish considers that these factors can be discounted for the following reasons.

- 34 The cost of acquiring ACE or paying deemed values is common to all QMS species. As almost all commercially valuable species are managed under the QMS framework it would be anomalous for toothfish to remain outside the QMS simply for this reason.
- 35 Although toothfish's abundance and the extent of its distribution in the EEZ are uncertain, there is some information available. Exploratory fishing to date has shown that viable catch rates can be achieved in some areas and not in others. Information is also available from areas outside the EEZ. Toothfish is taken in the northern Ross Sea (part of the area managed by the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)) and there is also an established fishery in the

Macquarie Island fishing zone¹, which borders the south of New Zealand's EEZ. MFish anticipates that information from these fisheries could be of some relevance to the New Zealand fishery. MFish believes that uncertainty regarding biomass should not be used as a reason for retaining toothfish outside the QMS.

- 36 One of the implications associated with retaining the status quo is that as long as toothfish remains outside the QMS it will be subject to the annual assessment process undertaken by MFish to determine whether non-QMS stocks or species should be considered for introduction into the QMS. As noted earlier, MFish has undertaken this assessment, which confirms that consideration for QMS introduction is appropriate for toothfish.

Costs

- 37 Continuing to manage toothfish outside the QMS may necessitate negotiating voluntary arrangements consistent with international obligations or implementing section 11 measures, which will place demands on MFish resources. There may also be issues with preserving the integrity of voluntary arrangements in an open access fishery as fishers not party to an arrangement are free to enter the fishery.
- 38 Managing toothfish outside the QMS is still likely to require research, which has an associated cost. In order to fund this research either industry will have to be levied or the Crown will be required to pay. The cost recovery regime allows MFish to charge levies for non-QMS species although the levy rate for toothfish is currently set at \$0.00 per tonne.

Benefits

- 39 As with other non-QMS species there are no administrative barriers to entry to the toothfish fishery. This means that anyone can fish for toothfish provided they have a fishing permit.

Option 2 (MFish preferred option)

- 40 Under Option 2 toothfish would be introduced into the QMS on 1 October 2010. Twenty percent of toothfish quota would be allocated to Maori via TOKM and the remaining 80% would be allocated to the Crown and would be tendered at the earliest opportunity.
- 41 MFish has a policy preference for management under the QMS where sustainability or utilisation of a species is not being adequately provided for. As the Minister's decision to introduce a species into the QMS is based on sustainability and utilisation considerations these two factors are described in more detail below.

Utilisation

- 42 Fishers wishing to further develop the fishery for this species are currently unwilling to invest significant resources in doing so without security of access to the fishery.

¹ The current Macquarie Island fishing zone catch limit is 210 tonnes and the fishery has existed since 1994. The Macquarie Ridge, the geographical feature on which that fishery is undertaken, extends north into New Zealand's EEZ. The extent to which the toothfish biomass found in New Zealand waters has been affected by the Macquarie Island fishery is unknown.

MFish considers that QMS introduction and acquisition of quota shares by the fishing industry would provide the necessary security of access to the fishery required by the industry. For this reason MFish considers that current management is not providing for the utilisation of toothfish and that the test in section 17B(1)(b) of the Act is met; MFish believes the Minister should bring toothfish into the QMS as the purpose of the Act would not be better met by setting one or more sustainability measures under section 11 of the Act. As noted above section 11 sustainability measures do not adequately provide for utilisation.

- 43 If toothfish is introduced into the QMS on 1 October 2010 it would be at the early stages of the fishery's development in New Zealand. MFish anticipates that the value of the quota at this time could be comparatively low relative to its potential long-term value. This would provide the best opportunity for those companies wishing to participate in the fishery to secure the long-term rights to the fishery before committing to being involved in its development.

Sustainability

- 44 As noted above, the current open access regime, combined with toothfish's value and recent improvements in harvesting techniques, means there is the potential for an increase in fishing effort. Management under the QMS would provide a mechanism to ensure that catches are constrained to a sustainable level.

Costs

- 45 Some regulatory amendments would be necessary. At a minimum this would include specifying the codes to be used by permit holders and licensed fish receivers when completing returns required by the Fisheries (Reporting) Regulations 2001.
- 46 If toothfish enters the QMS fishers will be faced with the same costs they face for all other QMS species. This includes the cost of acquiring ACE or paying deemed values and the requirement to pay cost recovery levies (quota owners only). Cost recovery levies cover research, observer coverage, compliance services and registry costs.
- 47 Research would likely form the largest component of the levies as the cost of any research directed at toothfish would be recovered from quota holders. Concerns that the biomass of the stock, and therefore the value from the fishery, may not be able to support a full research programme are valid. MFish is satisfied that any research programme implemented for toothfish would be modified to reflect the total value of the stock. MFish notes that limited information on toothfish would be reflected in a cautious approach being taken when setting catch levels
- 48 MFish also notes that given our international obligations some level of research would be required irrespective of whether the stock is managed inside or outside the QMS.

Benefits

- 49 The primary benefit of QMS introduction, and consequent transfer of property rights to the fishing industry, is that those parties who purchase or acquire quota will have appropriate incentives to invest in the fishery. The rights-based approach is likely to provide the best opportunity for maximising utilisation of the fishery as the security

provided by quota ownership will allow quota owners to invest in the development of the toothfish fishery.

- 50 Although not relevant to the Minister's decision, introducing toothfish into the QMS and setting a total allowable catch (TAC) may also go some way to fulfilling New Zealand's international obligations with regard to toothfish management. Under international law New Zealand is obliged to ensure that its management measures are compatible with existing measures² so that the effectiveness of measures adopted elsewhere for the stock is not undermined.
- 51 Given New Zealand's location is at the northern end of the species' range it is conceivable that there may be an insufficient biomass of toothfish in our EEZ to support an economically viable long-term fishery. Should this scenario eventuate, the benefit of managing the stock under the QMS will mean that an appropriate TAC can be set.

Other Management Controls Concurrent with Entry to QMS

- 52 Should the Minister agree to introduce toothfish into the QMS, section 18 of the Act requires his decision to be notified in the *Gazette*. Section 19 specifies the matters to be included in a notice given under section 18 and requires that the notice must:
- a) Define the quota management area to which the notice relates by reference to an area or areas defined in the First Schedule to the Act or in any other manner;
 - b) State the fishing year in respect of the stock, which shall be a 12-month period commencing on either the 1st day of April or the 1st day of October;
 - c) State whether, for the stock concerned, the total allowable commercial catch is, and annual catch entitlements are, to be expressed in meatweight or greenweight; and
 - d) Make provision for such other matters as may be contemplated by this Act.

Quota Management Areas

- 53 Sections 19(2) and 19(3) of the Act are relevant to any decision regarding QMAs. These sections state:

19(2) - in defining the quota management areas, the Minister shall, as far as practicable, maintain the same quota management areas for different species;

19(3) - if the Minister is satisfied that any species that occur in the waters around the Chatham Islands can, for fisheries management purposes, be managed effectively as a unit, a notice under section 18 of this Act may create

² In the case of toothfish existing conservation and management measures apply to Australian Fishing Zone waters around Macquarie Island and to the CCAMLR Area. The high seas area of the South Pacific south of New Zealand to the CCAMLR Area boundary is expected to be covered by the South Pacific Regional Fisheries Management Organisation (SPRFMO). Currently, voluntary interim conservation and management measures for bottom fisheries in the proposed SPRFMO Area have been agreed by participants to the negotiations but toothfish-specific management measures have not.

around the Chatham Islands a separate quota management area for that species.

- 54 Biological and fishery information on toothfish is included as Appendix 1. It is highly likely that the toothfish occurring within New Zealand’s EEZ are part of a wider biological stock found in the Australian EEZ around Macquarie Island, in the northern parts of the Ross Sea (within the CCAMLR area) and in area of the High Seas between the NZ EEZ and the CCAMLR area (see Figure 1 below).
- 55 For this reason MFish proposes that a single QMA encompassing all New Zealand fisheries waters (PTO1) be established. This proposal is shown in Figure 2. MFish considers defining a single toothfish QMA is consistent with the approach to setting a single QMA for other stocks whose distribution extends beyond New Zealand waters, for example highly migratory species such as southern bluefin tuna.
- 56 This proposal means not establishing a separate QMA for the waters around the Chatham Islands. MFish considers that toothfish in the waters around the Chatham Islands cannot be managed effectively as a unit and, therefore, that a separate QMA should not be established around the Chatham Islands.

Fishing year

- 57 MFish proposes that the toothfish stock be subject to the 1 October fishing year. The majority of finfish stocks are subject to this fishing year and MFish considers it is most appropriate for this species.

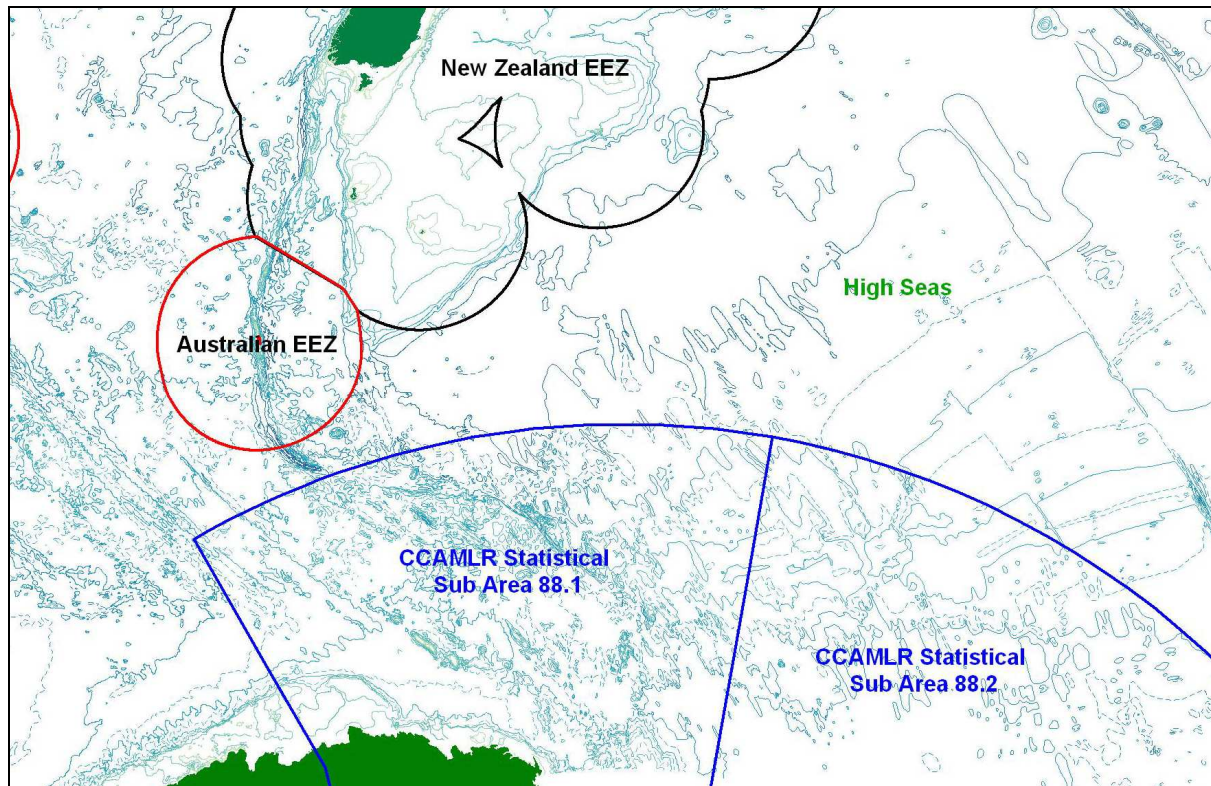


Figure 1. Diagram showing New Zealand EEZ, Australian EEZ around Macquarie Island and the Ross Sea CCAMLR statistical areas.

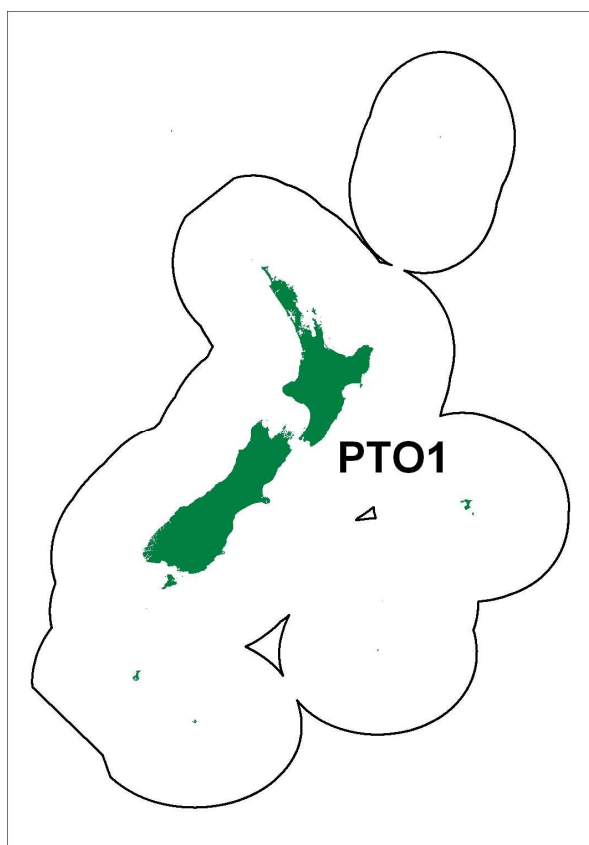


Figure 2. Diagram showing proposed PTO1 quota management area

Meatweight or greenweight

58 Annual catch entitlement (ACE) and the total allowable commercial catch (TACC) for all QMS species except scallop and the Foveaux Strait dredge oyster fishery are expressed as greenweight. Consistent with this MFish proposes that the TACC and ACE for the toothfish stock be expressed as greenweight.

Other matters

59 MFish considers there are no other matters that need to be provided for in the notice declaring toothfish to be subject to the QMS.

General Management Issues

60 There are a number of issues associated with the toothfish fishery that need to be considered, regardless of whether toothfish enters the QMS or not. These issues are detailed in the following paragraphs.

61 Continued management outside the QMS will still likely require some management interventions to ensure New Zealand's international obligations with respect to stock sustainability and environmental mitigation are met. Such measures could consist of voluntary arrangements between MFish and fishers or measures implemented under section 11 of the Act such as a catch limit. Implementation of such section 11

measures is relatively straightforward although as noted earlier MFish's policy preference is to manage species under the QMS. Mandatory and voluntary measures relating to the environmental effects of fishing currently apply to all fishing activity irrespective of the species being targeted. However, additional toothfish-specific voluntary arrangements relating to New Zealand's international obligations may still be likely.

- 62 Any fisher wishing to fish for toothfish, including inside the New Zealand EEZ, must participate in the catch documentation scheme (CDS). The CDS is designed to track the catch, landings and trade flows of toothfish and its aim is to eliminate illegal, unregulated and unreported (IUU) toothfish catches. It has played a significant role in reducing IUU catch of toothfish. Fishers must complete the relevant CDS documents and they are prohibited from landing toothfish without the documents. Catch must be inspected by MFish Field Operations when a vessel arrives back in port and a vessel's unloading must be observed by an MFish observer.
- 63 Some toothfish fishing has resulted in significant bycatch of non-QMS species such as a large undescribed chimaerid (ghost shark) and rattail species. Bycatch rates will be monitored by MFish regardless of whether toothfish is in the QMS or not. Consistently high bycatch rates may require additional management measures to ensure the sustainability of these bycatch species.

International context

- 64 There is an international context relevant to the management of toothfish. International matters are described below and will be directly relevant to the subsequent process of setting sustainability measures should the Minister agree to introduce toothfish into the QMS on 1 October 2010. The international element, and the likelihood that only a portion of the wider toothfish stock is found in New Zealand waters, does mean that ensuring the sustainability of the toothfish stock is not fully within New Zealand's control.
- 65 The United Nations Convention on the Law of the Sea (UNCLOS) and the United Nations Fish Stock Agreement (UNFSA) provide guidance on how countries should manage trans-boundary and straddling stocks. UNCLOS requires New Zealand to consult with Australia and SPRFMO/CCAMLR on measures necessary to ensure the conservation and development of the stock. MFish has already made approaches to Australian authorities to inform them that New Zealand is considering introducing toothfish into the QMS and, depending on the Minister's decision, that we would discuss proposed sustainability matters with them.
- 66 UNFSA also provides that measures adopted for the High Seas and areas under national jurisdiction should be compatible in order to ensure conservation of such stocks in their entirety. Because of these obligations, when setting the management measures that will apply within the EEZ, New Zealand will need to consider the conservation and management measures in place within the CCAMLR and SPRFMO Areas, and within the Macquarie Island portion of the Australian EEZ.
- 67 CCAMLR conservation and management measures for toothfish include:

- a) Method restrictions
- b) Closed season
- c) By-catch limits
- d) Catch limit
- e) Size limit
- f) Vessel Monitoring System
- g) Seabird mitigation
- h) Catch documentation scheme (although this applies to all New Zealand vessels regardless of where the fish is caught)
- i) Catch and effort reporting
- j) Observer coverage
- k) Catch and effort spreading
- l) Fish tagging and scientific sampling

- 68 The Australian Fisheries Management Authority has adopted management measures for the Macquarie Island toothfish fishery that are described as being complementary to CCAMLR measures. A total allowable catch is set, and is reviewed annually using a tag – recapture stock assessment. The assessment only applies to the one small portion of the Macquarie Island fishing zone where the trawl fishery is carried out (the Aurora Trough).³
- 69 SPRFMO participants agreed voluntary interim conservation and management measures for bottom fisheries in negotiations to establish a South Pacific regional fisheries management organisation in May 2007. These measures apply to all forms of bottom fishing, including bottom longlining. The SPRFMO interim measures require at least 10% observer coverage on longline vessels intending to fish in the Area.

³ The catch limit for the Aurora Trough for the period 1 July 2009 – 14 April 2010 is 60 tonnes. A further 150 tonne catch limit applies to the remaining portion of the Macquarie Island fishing zone. As well as a catch limit for toothfish there is a 200 tonne bycatch species catch limit with a 50 tonne limit on any one species. A number of operational requirements are also imposed on vessel operators.

APPENDIX 1- BIOLOGICAL AND FISHERY INFORMATION

- 70 Toothfish are large notothenids and are endemic to Antarctic and Sub-Antarctic waters. The two main species, Antarctic toothfish (*Dissostichus mawsoni*) and Patagonian toothfish (*Dissostichus eleginoides*), are closely related. Generally, Antarctic toothfish are confined to the waters around the Antarctic continent with a northern limit at around 60°S (i.e. well south of the southern-most extent of the NZ EEZ).



Figure 1. Photograph of Patagonian toothfish (*Dissostichus eleginoides*) (MFish Observer Programme).

- 71 Patagonian toothfish has a more northerly distribution and is widely distributed in all southern oceans south of approximately 40-45°S. There is limited overlap between distributions of the two species. In the Ross Sea the main area of overlap is thought to occur between latitudes 62.5°S and 65°S.
- 72 Patagonian toothfish (toothfish) is the species found in New Zealand's EEZ. It is known to occur in certain areas towards the southern boundary of the EEZ with the occasional specimen being recorded as far north as the Chatham Rise.
- 73 Toothfish occur in water as shallow as 50m and as deep as over 3,000m. In general this species' depth distribution is related to size; very small fish are found in less than 100m and very large fish are found in depths greater than 1,200m. Most commercial catch comes from 800-1,200m.
- 74 Toothfish can grow to over 2m long and weigh over 150kg. Large individuals are thought to be 40-50 years old. Males are thought to mature at 90-100cm and females at 110-130cm. The species feeds on a variety of other fish, octopods, squid and crustaceans.
- 75 Juvenile toothfish have been located around Macquarie Island. As they grow individuals are assumed to move both north-east, some into the New Zealand EEZ, and south-east down the Macquarie Ridge into the northern CCAMLR region.

- 76 A fish that was captured inside the New Zealand EEZ on the northern extension of the Macquarie Ridge was tagged and released in early 2009. The fish was subsequently recaptured inside the Macquarie Island fishing zone in mid 2009. A fish tagged in the Macquarie Island fishing zone was recaptured from the northern CCAMLR region.
- 77 The distribution of toothfish within the NZ EEZ and in the Australian EEZ around Macquarie Island is summarised in Figure 2 below. Some of the information on which this is based comes from returns completed by commercial fishers. This figure may not fully represent the actual distribution of this species.
- 78 Prior to 1 October 2004 toothfish was subject to the permit moratorium and a special permit was necessary to enable exploratory fishing to be undertaken. Four exploratory fishing trips were undertaken between 1996 and 2003. After the lifting of the permit moratorium a further two fishing trips where toothfish was targeted were undertaken in early 2009. Most fishing to date has taken place along the northern end of the Macquarie ridge, around the southern periphery of the Campbell Plateau and on the Bounty Plateau.
- 79 Small amounts of toothfish are sometimes taken as bycatch, most commonly in the ling longline fishery. Total catches since 1994/95 are summarised in the table below.

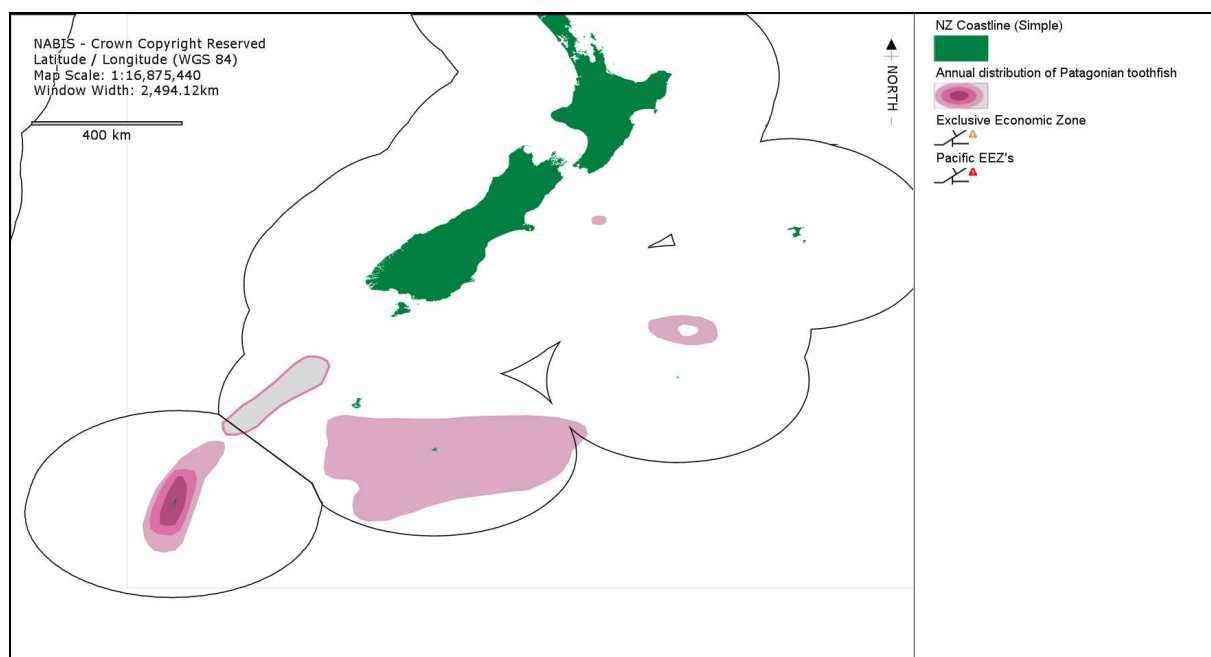


Figure 2. Patagonian toothfish distribution within New Zealand EEZ and, to the south of New Zealand, within the Macquarie Island zone (Australia). The information on which this is based comes in part from returns completed by commercial fishers.

Table 1. Landed catch of toothfish as reported by commercial fishers since 1994/95.

Fishing year	Reported landing of PTO taken within EEZ (tonnes)
1994/95	0.1
1995/96	18.6
1996/97	4.1
1997/98	<0.1
1998/99	1.0
1999/00	<0.1
2001/02	0.2
2002/03	0.1
2003/04	3.3
2004/05	<0.1
2005/06	<0.1
2006/07	0.1
2007/08	-
2008/09	20.5

APPENDIX 2

Risk analysis and evaluation forms for QMS introduction

This analysis comes from the organisational procedures, which form part of the Identification of Candidate Stocks for QMS Introduction Standard, which was approved by the Minister of Fisheries in 2008.

STOCK: Patagonian toothfish (*Dissostichus eleginoides*)

Severity/likelihood risk analysis:

Generic objective 1: Risk to maintaining the potential of the stock to meet the reasonably foreseeable needs of future generations.

Analysis:

Patagonian toothfish are known to exist within the New Zealand EEZ although the stock structure and stock size remains unclear. The species has a relatively low productivity and is likely to be vulnerable to over-exploitation. Patagonian toothfish is valuable and it is highly likely that there will be increased targeting of this species.

Specialised gear and experience are likely pre-requisites for successful targeting of Patagonian toothfish. At the present time only the four New Zealand vessels that have been involved in the Ross Sea toothfish fishery are likely to be able to successfully target this species within the New Zealand EEZ. This reduces the risk to the sustainability of the stock of retaining the open access framework in the short term.

Given the value of toothfish, increasing efforts to target toothfish within the New Zealand EEZ are likely to pose a sustainability risk for the stock if it is retained as an unconstrained open access fishery in the medium term.

Severity of impact (low, medium or high): High

Likelihood of impact (low, medium or high): Medium

Risk score (1-9) : 8

Generic objective 2: Risk to avoiding, remedying or mitigating any adverse effects of fishing on the aquatic environment.

Analysis:

Patagonian toothfish is targeted in the New Zealand EEZ using bottom longlines. Bottom longlines do have an impact on the seabed but less of an impact than other methods such as bottom trawling. The high currents typical of the sub-Antarctic slope may result in greater movement of the lines along the bottom increasing their impact on benthic structures. It has also been shown to result in some loss of gear.

Bottom longlines are known to interact with seabirds although measures are in place to address this issue.

A significant amount of non-QMS ghost shark species has been taken as bycatch in the exploratory fishery to date including catch of the, to date, infrequently encountered giant black ghost shark.

It remains unclear as to the habitat interactions or of the marine ecosystem role of Patagonian toothfish within the New Zealand EEZ.

The risk of adverse effects on the aquatic environment from targeting Patagonian toothfish as an open access fishery will increase if commercial effort targeting this species increases.

Severity of impact (low, medium or high): Medium

Likelihood of impact (low, medium or high): Medium

Risk score (1-9) : 4

Generic objective 3: Risk to providing access that enables social, cultural and economic wellbeing.

Analysis:

As an open access fishery there are no barriers to entry to the fishery other than obtaining a fishing permit. Such permits are granted on request.

There are, however, costs related to developing the fishery that are not insignificant. One company has, to date, invested in several exploratory fishing trips over a number of years to determine if a viable fishery can be established. Retention of the fishery as open access provides this company with no certainty of ownership of the resource it is developing.

There will be no recreational or customary fishery for Patagonian toothfish and there are no specific Treaty settlement obligations known.

Severity of impact (low, medium or high): Medium

Likelihood of impact (low, medium or high): High

Risk score (1-9) : 7

Objective(s) returning highest score: 1

Risk based on severity/likelihood (low, medium, high): High

Draft Risk Evaluation

Is risk after severity/likelihood analysis HIGH? **Yes – stock is in GROUP 1**

Is risk after severity/likelihood analysis MEDIUM; **and** immediacy and/or uncertainty is MEDIUM or HIGH? **No**

Is risk after severity/likelihood analysis LOW; **or** is risk after severity/likelihood analysis MEDIUM and immediacy and uncertainty are LOW? **No**

Group 1 stocks or species are those the analysis identifies as requiring consideration for QMS introduction within the short term.

PART 4: SUBMISSIONS

- 1 MFish received submissions on the IPP relating to the introduction of toothfish into the QMS on 1 October 2010 from:
 - a) Te Ohu Kai Moana Trustee Ltd (TOKM)
 - b) The New Zealand Seafood Industry Ltd (SeaFIC)
 - c) Sealord Group Ltd (Sealord)
 - d) Sanford Ltd (Sanford)
 - e) Talley's Group Ltd (Talley's)

- 2 The submission from Sanford Ltd has not been included here at the request of the company.

SUBMISSIONS RECEIVED ON THE PROPOSAL TO INTRODUCE TOOTHFISH INTO THE QMS ON 1 OCTOBER 2010



Q108-14-1

15 January 2010

Tracey Steel
Ministry of Fisheries
PO Box 1020
Wellington 6140

INTRODUCTION OF PATAGONIAN TOOTHFISH INTO THE QMS

1. This submission is from Te Ohu Kai Moana Trustee Ltd (Te Ohu Kaimoana) in its role as corporate trustee of Te Ohu Kai Moana Trust. The submission is in response to the above consultation document released by the Ministry of Fisheries on 25 November 2009. This submission does not remove the responsibility for the Ministry of Fisheries to consult with iwi/Maori and other stakeholders in the appropriate manner. Nor does it seek to undermine any submission that you may receive from individual iwi or iwi collectives.

Rationale for introduction

2. There appear to be two drivers for introduction of this species into the QMS: the potential for current open access arrangements to lead to sustainability concerns, and the desire of some companies to obtain secure rights in the fishery as the basis for investment in its development.

Sustainability

3. The MFish paper suggests that there are presently no sustainability concerns in this fishery but that with the current open access arrangements in the New Zealand EEZ, the species' high value could attract the interest of fishers and result in "an increase in catch and effort over a relatively short time frame". MFish notes that "while this could provide additional information on the fishery, it could also result in sustainability concerns".

Utilisation - the development of new fisheries

4. The MFish paper signals that "fishers wishing to further develop the fishery for this species are currently unwilling to invest significant resources in doing so without security of access to the fishery." This is undoubtedly true - the QMS provides a firm basis for developing new fisheries due to the certainty created for quota owners that they will reap any benefits that might arise from their investment in those fisheries.

Costs

5. While secure access is fundamental to the development of new fisheries such as toothfish, there are other matters that need to be addressed to provide sufficient incentives for development. These include the high costs of "proving up" a fishery: the process needs to be undertaken in a way that results in sufficient revenue being obtained to offset a substantial amount of these costs.
6. The costs of fishing for toothfish are high and as MFish notes, there is some debate as to whether there is likely to be a viable fishery within New Zealand's EEZ. For instance very low numbers of this stock have been caught by vessels in the Northern CCMLR area, the High Seas and in New Zealand's EEZ – all thought to be included within the likely range for this stock.
7. MFish also notes that while there has been exploratory fishing carried out in the New Zealand EEZ in past years, it was not until 2009 that further targeted fishing for toothfish was carried out and "on occasion, resulted in commercially viable catch rates being achieved". Nevertheless, there is still uncertainty regarding the distribution of the species within the EEZ and the potential size of the resource and whether such occasional viable catches would be sufficient to sustain a commercial operation on an ongoing basis. In that regard, we are aware that Sealord – in their comments to you (12 January) do not consider there is a commercially viable fishery in the New Zealand EEZ.
8. As MFish notes, the stock is likely to be the same as that found in the Australian EEZ (around Macquarie Island and the Aurora Trough). Sealord's response to you suggests that the size of the fishery found in these areas – which is managed within catch limits, is proving to be viable. MFish notes that it has already made approaches to Australian authorities to inform them that New Zealand is considering introducing toothfish into the QMS and, depending on the Minister's decision, that they would discuss proposed sustainability measures with them. We support such a proactive approach, along with approaches to other organisations that have jurisdiction over this stock.
9. We also refer to Sealord's comments about the high cost of any research necessary to gain information for management of this stock on an ongoing basis, along with the likelihood that the stock would be introduced with a low TAC. The costs of research required to prove the fishery may be so prohibitive as to prevent such exploratory work getting underway. The challenge for any company wishing to invest in proving up the fishery will be to implement exploratory work in a cost effective way.
10. We note that MFish acknowledges these concerns, however they are satisfied any research program would be modified to reflect the total value of the stock. A special permit would likely be required for several years to enable sufficient revenue to justify the investment. We suggest that in discussions with the Australian government, the prospect of an integrated approach to research be raised.
11. If toothfish is to be introduced into the QMS, iwi will obtain 20% of the quota shares and the Crown will tender the remaining 80%. A key issue is what level of benefit is likely to accrue to quota owners in this fishery – and whether these will outweigh the costs of management. Ultimately – if companies cease efforts to fish for toothfish in the area, iwi will be left with quota shares that could continue to attract levies, but that do not yield benefits, for example due to a lack of markets for the ACE.

Conclusions

12. Te Ohu Kaimoana welcomes the introduction of any new species that is likely to provide a viable fishery in which iwi can share the benefits. However we have some concerns that the costs of developing the toothfish fishery could be prohibitive and that iwi will be left with quota that incurs costs with no benefits. We consider these issues are common to other developing fisheries and suggest that further thought needs to be given to measures to rationalise the costs associated with development, while ensuring long term sustainability.
13. The case of Patagonian toothfish presents even more of a challenge given that it is likely to be a straddling stock. Early discussion with the Australian authorities should take place to identify the implications of management measures that might apply to the New Zealand based stock within the QMS. In addition, we can see merit in establishing a joint approach to research so that research activity is integrated across the stock in a cost effective way.
14. We would welcome the opportunity to discuss these matters further with you. I can be contacted on 931 9534, or kirsty.woods@teohu.maori.nz.

Naku noa, na



Kirsty Woods
Manager, Fisheries Leadership



The New Zealand Seafood Industry Council Ltd

Submission

Introduction of Patagonian toothfish
into the Quota Management System on
1 October 2010

January 2010

1. Thank you for the opportunity to comment on the proposed introduction of Patagonian toothfish into the quota management system on 1 October 2010. This submission is made by the New Zealand Seafood Industry Council Ltd (SeaFIC) on behalf of the seafood industry. The submission has been compiled by SeaFIC staff in consultation with our shareholders.
2. SeaFIC is aware that within industry there are opposing views as to whether it is even likely that a commercially viable Patagonian toothfish fishery is present in the New Zealand EEZ. We are therefore not as confident as the Ministry that the current level of exploratory fishing has indicated that there is benefit in QMS introduction.
3. This concern is compounded by the lack of certainty over future management costs of the fishery. For an unknown stock biomass of uncertain economic viability, and as yet undecided international obligations, in the absence of any cost benefit analysis, it is difficult to know whether active management and QMS introduction is merited at this time.
4. The high cost of access to the fishery (distance and technology) and the historic low catch levels reduce the risk of rapid expansion and fisheries development under an open access regime in the short to medium term. The current management regime is enabling a degree of utilisation through authorisation under permits. The Ministry may therefore wish to consider further information gathering or monitoring to increase confidence as to how that utilisation should be actively managed if people are to provide for their well being in the longer term and sustainability is to be ensured.
5. On the other hand, we acknowledge that for parties who may wish in the future to invest in the development of the fishery that QMS introduction now would be an important consideration for the following reasons:
 - It would provide security of access
 - It creates stronger incentives to invest in the development of the fishery
 - It provides certainty regarding future fisheries management
 - The value of the quota at this time could be comparatively low compared to its potential long term value
 - Current levels of knowledge and understanding of the EEZ toothfish fishery would provide an advantage or otherwise in a tender round

The absence of historic Patagonia toothfish bycatch in existing deepwater fisheries would indicate that this fishery would need to be developed as a target fishery. For those parties who doubt that a viable toothfish fishery exists, then QMS introduction should have no bearing as they are not obliged to tender for quota. For those with an interest in utilisation, then the Ministry needs to carefully consider how the management framework is developed to enable utilisation of the resource that generates benefits to potential quota holders. Development of greater clarity on the proposed management framework, including TAC s or catch limits and other management requirements prior to consultation on QMS introduction would have been helpful.

We recommend the Ministry undertakes comprehensive direct consultation with appropriate commercial and Treaty Settlement interests then reflect as to whether the available information and potential management framework support QMS introduction at this time.

From: Ross Tocker
Sent: Tuesday, 12 January 2010 5:17 p.m.
To: 'Martin, Aoife'; Ross Tocker; Greg Johansson; 'Andy Smith'; Graham Patchell
Cc: Mark Soboil; Kirsty Woods; GIBBS, Nici; Graham Stuart; Colin Williams; Jon Safey
Subject: RE: PTO IPP

Aoife

As you are aware, from our meeting of 10 December 2009, I had not particularly seen the IPP prior to the meeting, despite your having circulated it on 25 November.

So the remarks I made then were pretty off the cuff in the meeting, however, in now having looked closely at the IPP, I am in no different place particularly. Sealord does not support moving the PTO into the QMS.

So please consider this the submission from Sealord regarding the inclusion of PTO into the NZ QMS from 1 October 2010.

Commercial Aspects

1. Sealord has been involved in longlining for toothfish, in the Ross Sea, in the Heard and MacDonald Island Australian Zone, and in the Macquarie Australian zone, for a considerable time. For the Ross Sea, around 10 years, in HIMI for 6 years, and in Macquarie, 2 years.
2. Sealord knows longlining, and is very familiar with the value chain for longline caught toothfish. We have detailed knowledge about the operational cost of vessels, and we are fully familiar with the sort of catch rates that are necessary for a commercial fishery in longline toothfish.
3. Sealord has conducted longlining trial work both in the New Zealand Economic Zone, and outside the New Zealand Economic Zone, in areas south of Macquarie.
4. Sealord has also carried out extensive trawling on the Sub-Antarctic plateau, and during the years when the Sealord fleet was the main harvester in the Sub-Antarctic, with up to 4 freezer trawlers, we were aware of the frequency of capture of toothfish in the trawl fishery.
5. Catch rates on freezer trawlers have been extremely low, with perhaps one or two a year, when the Sealord freezer trawler fleet was spending 80% of its time in the Sub-Antarctic.
6. The trial work carried out by Sealord, in the New Zealand EEZ, and international waters, has produced very low catch rates, despite fully developed skill and knowledge about longlining toothfish.
7. We note that in the most recent longline trial carried out by Sanford at the end of the 2009 Ross Sea campaign, that, again, despite knowledgeable, skilful and practised fishermen putting gear in the water, only very low catch rates were made.
8. Our current view is that there is not, and will not be a commercially viable toothfish fishery in the New Zealand Economic Zone.

Australian Stock Issues

9. In our view, the PTO in the New Zealand Economic Zone, in the international waters around Macquarie, and in the Northern Ross Sea area, are most likely part of the Macquarie Island stock.
10. The Macquarie fishery has had a TAC set at above 150 tonnes for the last 2 years, and from work undertaken by Sealord in this fishery, it has been established that there is a substantial spawning stock present and there is a large juvenile stock which has yielded catches up to 1,000 tonnes per year.

11. Sealord believes that prior to any inclusion of Eliginoides toothfish into the New Zealand Quota System, that a full discussion needs to take place between the Australian Government and the New Zealand Government.

12. Sealord believes that it is inappropriate for New Zealand to put Eliginoides PTO into the New Zealand QMS and adopt a TAC, however minor, without acknowledging to the Australians, that the spawning stock is in Australian waters, and some fish have travelled from the Australian Macquarie zone, to the New Zealand zone.

Cost

13. Sealord is convinced from our knowledge and experience in the Ross Sea, and in the 2 Australian zones, that the cost of establishing science around the TAC setting process will be very expensive, and when applied against a small TAC, will be prohibitively high annual dollar per tonne rate.

14. Sealord knows well from the Ross Sea, that undertaking the science is a very lengthy process, particularly if tagging is used. With a 2 - 3,000 tonnes catch in the 88.1 area of CCAMLR and many years of tagging, we still do not have a robust assessment. It is unlikely that sufficient tags would be recaptured from tags in a NZ EEZ for PTO to ever produce a viable assessment. This will keep the TAC token.

15. Surveillance, compliance and environmental mitigation costs will also further count against a commercial fishery, even despite the low CPUEs and TAC.

Thanks Ross.

Ross Tocker
GM International Fishing
Sealord Group Ltd.
Tel +64 3 546 0945

From: Andrew Talley [mailto:Andrew.Talley@talleys.co.nz]
Sent: Wednesday, 20 January 2010 8:32 a.m.
To: Martin, Aoife
Cc: Andy Smith
Subject: RE: Toothfish

We support the proposal as outlined.