



PUBLIC CONSULTATION PAPER:

Reform options for the Purse Seine component of the NSW Ocean Haul Fishery



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Public consultation paper: reform options for the Purse Seine component of the NSW Ocean Haul Fishery

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More information

www.dpi.nsw.gov.au/fisheries/commercial/reform

Acknowledgments

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (May 2014). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of the Department of Primary Industries or the user's independent adviser.

Readers guide

This paper includes reform options for comment that are specific to the purse seine component of the NSW Ocean Haul (OH) Fishery.

Anyone with an interest in these share classes should read the options presented in this paper and, where possible, provide feedback.

The following provides an overview of the documents available:

General information paper	Provides general information about the reform program and issues applicable to all reform fisheries. A ‘must read’ for everyone to understand the background. The paper is titled “ <i>General information relating to the reform program and reform options for the NSW commercial fisheries</i> ”.
Fisheries options papers This paper you are reading	These contain information about the options that have been shortlisted for specific fisheries or share classes. They include possible linkages, total catch/effort levels and potential changes to existing restrictions, along with the advantages and disadvantages of each option. A ‘must read’ if you hold shares in, or have an interest in, these fisheries.
Technical paper	A separate paper has been prepared which outlines in detail how the proposed total catch/effort levels have been calculated. The paper is titled “ <i>Setting the Interim Total Commercial Access Level (ITCALs)</i> ”.
Submission forms	Submission forms are available for each of the fisheries options papers. Relevant forms will be mailed to all shareholders and will also be available on the reform webpage: www.dpi.nsw.gov.au/fisheries/commercial/reform

Have your say

A key part of the Reform Program is getting valuable feedback and ideas from industry and interested stakeholders. Constructive feedback to help work out the best overall approach will assist in shaping future management arrangements.

The complexity of the options laid out in this paper are acknowledged, as is the difficulty some fishers may have in working through the issues covered. If you require assistance in understanding the options presented or in developing a submission please contact the relevant Fisheries Manager, or the Industry Liaison Manager on the contact details provided below.

DPI staff will be available to discuss questions and issues.

A submission form is available to provide comments. Alternatively, you may submit your comments in another form, such as a letter or summary of your views on each of the reform packages presented in this paper.

Note that submissions may suggest variations to the options presented in the fisheries options papers, provided they are within the broad scope of what the NSW Government approved and announced in November 2012¹ and are consistent with the reform program objectives described below.

However you choose to provide comment, it is important to note that subsequent decisions will be based on merit, rather than numbers for and against particular options.

The closing time for comments is 5pm Friday 27th June, 2014. Note that this is later than the closing date applied to other fisheries options papers as this paper has been released later than the others.

Send your response to:

Mail: PO Box 4291, Coffs Harbour, NSW, 2450

Fax: (02) 6391 4726

Email: commfish.wg@dpi.nsw.gov.au

Following the closing date, a summary of the submissions will be prepared and made available on the DPI website. In arriving at decisions, the Minister will consider the issues raised in submissions, the views of key stakeholder groups, DPI's advice and final recommendations from the independent Structural Adjustment Review Committee (SARC).

For more information on the NSW Commercial Fisheries Reform Program visit www.dpi.nsw.gov.au/fisheries/commercial/reform

Or contact Commercial Fisheries Management on (02) 6691 9684.

¹ See www.dpi.nsw.gov.au/_data/assets/pdf_file/0005/448187/Govt-response-to-independent-comm-fisheries-review.pdf

Foreword

The reform options presented in this paper focus on an important component of the broader reform program, that being to create a stronger link between shares and resource access.

The key objectives of the reform program are to:

- improve the long-term viability of the NSW commercial fishing industry;
- improve the strength and value of shareholders' access rights (i.e. shares); and
- provide shareholders with improved opportunities and flexibility to tailor their access.

The reform options in this paper have been developed by DPI having regard to:

- the Commercial Fisheries Reform Program as approved by the NSW Government in 2012 (after consideration of the *Independent Review of NSW Commercial Fisheries Policy, Management and Administration*);
- ideas submitted by shareholders in writing and through discussions with fisheries managers;
- views from Ocean Hauling Purse Seine Net (OHPSN) shareholders put forward at several face to face meetings; and
- advice and recommendations of the Structural Adjustment Review Committee (SARC).

The outcomes of meetings with OHPSN shareholders and the SARC throughout 2013 and early 2014 provide insight into the many options and issues considered in the lead-up to developing the reform options in this paper and are available on the NSW DPI website at:

Share linkage working group (including purse seine shareholders) webpage:

www.dpi.nsw.gov.au/fisheries/commercial/consultation/commercial-fisheries-working-groups

SARC webpage: www.dpi.nsw.gov.au/fisheries/commercial/reform/sarc

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Acronyms

DPI	NSW Department of Primary Industries
GVP	Gross Value of Production ²
ITCAL	Interim Total Commercial Access Level
ITQ	Individual Transferable Quota
OHF	Ocean Hauling Fishery
OHPSN	Ocean Hauling Purse Seine Net
SARC	Structural Adjustment Review Committee
TACC	Total Allowable Commercial Catch
TACE	Total Allowable Commercial Effort

² Limited to first point of sale only and calculated using Sydney fish market average prices

Introduction

The purse seine component of the NSW Ocean Haul Fishery (OHF) is a single state-wide share class – Ocean Hauling Purse Seine Net (OHPSN).

This paper seeks your feedback on three primary reform options for this share class including include:

- **Option 1:** an effort quota day regime.
- **Option 2:** catch quota for four main species (individual transferable quotas – ITQs) allocated to shareholders based on either:
 - current shareholdings; or
 - current shareholdings and recent participation (for Australian Sardine and Australian Salmon).
- **Option 3:** basket catch quota where quota could be used to take any species subject to existing target species rules.

Part of the proposal is to identify existing restrictions that could be removed or streamlined if a new management approach was adopted, to improve business and operational efficiency. However, it is recognised that there is limited opportunities to improve efficiency in this fishery sector due to the low regulatory restrictions that impinge on fishing efficiency presently.

The potential changes to current restrictions generally increase with the strength of the linkage option, with the effort quota day linkage being the weakest form of linkage in this paper and species catch quota being the strongest (see the general information paper for further information). The limited proposals for change to the current restrictions for each OHPSN linkage option are presented in the section titled “Potential changes to current restrictions”.

To assist in considering the options and providing feedback, a number of advantages and disadvantages have been identified for each option, and these are also contained at the back of this paper.

It is important that the reform options are considered within the overall structure of the fishery. Those unfamiliar with the OHF, including people unfamiliar with current numbers of shareholders and endorsements and the distribution of shares in each share class, are encouraged to read the document Share & shareholdings – February 2014 located at:

www.dpi.nsw.gov.au/fisheries/commercial/reform/program

Option 1: Effort quota (days) regime

This option involves the implementation of an effort quota (days) regime. This would involve the implementation of an ITQ of days allocated to a fishing business proportional to the number of shares held. In this option it would be proposed to implement the linkage on 1 July 2016.

Minimum shareholding requirement

It is proposed the existing minimum shareholding requirement of 40 shares would be maintained. The existing fishing business share transfer rules limiting the creation of new endorsements in the fishery would also be maintained.

ITCAL determination

An Interim Total Commercial Access Level (ITCAL) is the maximum amount of effort that may be used by fishers over a fishing period – very much like a Total Allowable Commercial Catch (TACC) or the concept of Total Allowable Commercial Effort (TACE). For more information on ITCALs and future transitioning to TACCs and TACEs refer to the general information paper and the technical paper “*Setting the Interim Total Commercial Access Levels (ITCALs)*” available on the DPI website.

It is proposed that the days ITCAL (i.e. the total number of days available) be based on the year that had the maximum number of days reported as being worked in this sector in the 10 year period 2002/03 to 2011/12. The allocation of effort quota (days) is proposed to be allocated to all shareholders proportional to the number of shares held.

Proposed ITCAL determination and quota allocation

Table 1: ITCAL for days of effort in the purse seine net share class

ITCAL (days)	Days per share	Days in 40 share business
1,587	0.80	32

If shares are surrendered for cancellation prior to implementing the quota system, for example during the exit grant process, the amount of quota per share available to those that remain will be greater than the estimates above.

Defining a ‘day’

It is proposed that a day be defined as a 24 hour period from the time the fisher makes a pre-fishing report. Discussions have been held in other fisheries about using smaller time allocations such as 8 or 12 hour periods. If these latter periods were to be considered the ITCAL would need to be reduced accordingly as the baseline data relates to 24 hour days (i.e. by half for a 12 hour period or by two thirds for an 8 hour period). Using a shorter period is therefore not proposed.

Fishing period

It is proposed that a 12 month fishing period commencing on 1 July each year would apply under an effort quota (days) regime.

Transferability of effort quota

It is proposed that the effort quota (days) would be able to be transferred between shareholders. Note that such quota transfers would only apply to the fishing period within which the transfer was made. The quota allocated for future fishing periods would be based on the shares held by each shareholder at the beginning of each fishing period.

How shareholders could use their quota and acquire additional quota

Information on the use of quota and how to acquire additional quota, along with how quota use would be monitored is provided in the general information paper “*General information relating to the reform program and reform options for the NSW commercial fisheries*”.

Option 2: Catch quota (kg) on key species

The option involves managing total catch of Australian Salmon, Blue Mackerel, Australian Sardine and Yellowtail Scad using a consumable ITQ of kilograms. This is a direct way of managing catch for these species.

The catch quota could be allocated to shareholders based on new species shares for each of those species issued either:

- a) proportionally based only on existing shareholdings; or
- b) using a mix of existing shareholdings and recent participation.

ITCAL determination

An industry-wide ITCAL has been calculated because the relevant species are reported as having been taken across multiple commercial fisheries. The industry-wide ITCAL for these species has then been apportioned to each fishery and then each share class. This means an OHPSN ITCAL has been determined (i.e. the total amount of relevant species that can be taken by the OHF).

It is proposed that the industry-wide ITCAL for these species be set at the maximum annual weight reported as being landed in the 15 year period 1997/98 to 2011/12. The apportionment to each fishery has been determined using total catches of each species from each fishery over the same 15 year period. The industry-wide and the fishery-wide ITCAL for the OHF is included in Table 2 below.

An alternate approach has been used for Australian sardine. Further information on how the industry wide ITCALs and the proportional distributions between fisheries and share classes can be found in the “*Setting the Interim Total Commercial Access Levels (ITCALs)*” paper available on the DPI website.

Table 2: Proposed industry-wide and fishery-wide catch quota ITCALS

Species	Industry wide ITCAL (kg)	% of Industry wide ITCAL	OHF ITCAL (kg)
Australian Salmon	1,449,200	98%	1,415,200
Blue Mackerel	583,500	93%	540,100
Australian Sardine	1,627,000	99%	1,612,300
Yellowtail Scad	504,900	81%	410,100

The OHF ITCAL then needs to be allocated to the purse seine share class compared with the other share classes within the OHF (refer Table 3). The allocation to the purse seine share class was determined using more recent catch and effort data from 2009/10 to 2011/12.

Table 3: Purse seine catch quota ITCALS

Species	Purse seine% of OHF ITCAL	Purse seine ITCAL (kg)
Australian Salmon	50%	711,500
Blue Mackerel	99.8%	539,100
Australian Sardine	98%	1,577,400
Yellowtail Scad	99%	406,400

Option 2a: Catch quota for key species based on current shareholdings

Under this option the OHF ITCALs for the relevant species (as shown in Table 3) would be allocated to shareholders in proportion to the current shareholdings (as per Table 4).

Table 4: Purse seine catch quota ITCALs

Species	OHPS ITCAL (kg)	Kg per share	Kg per 40 shares
Australian Salmon	711,500	359	14,360
Blue Mackerel	539,100	272	10,880
Australian Sardine	1,577,400	797	31,880
Yellowtail Scad	406,400	205	8,200

New classes of shares

Under this option a new class of species quota share would be issued for each of the four species. The shares would be issued proportionally to the existing shareholdings. The species shares would allow the issue of transferable catch quota only. To fish the quota using the method of purse seining a shareholder would also need to hold the relevant access shares which have been already issued.

Minimum shareholding requirements

It is proposed that the existing minimum shareholding of 40 OHPSN shares would continue to apply to that share class but that no minimum shareholding would apply to each of the new species shares.

Fishing period and annual catch quota allocations

An allocation of catch quota would be available to be fished during what is known as a fishing period. It is proposed that a 12 month fishing period apply commencing on 1 July each year.

At the beginning of each fishing period, catch quota (kg) would be issued to each shareholder, based on the ITCAL (or in the future the TACC) and proportional to the number of 'species shares' held by each shareholder. This quota may be traded among shareholders during the fishing period.

If the ITCAL/TACC increased or decreased in the future, the amount of catch quota allocated to each shareholder at the beginning of each fishing period would increase or decrease accordingly.

If the assessment of the fishery was likely to remain stable, then a 2 year fishing period (with a TACC set for each year of the 2 years) could be considered to keep costs down.

Transferability of catch quota between jurisdictions

While maybe not an option that could be implemented straight away, but there may be scope in future for NSW catch quota to be transferred to Commonwealth fishers to be used in Commonwealth quota fisheries, and vice versa. Catch quota is used in the Commonwealth fisheries to manage Australian Sardine and Blue Mackerel. It should be noted that such arrangements would need to be negotiated with Commonwealth fisheries management authorities and industry.

How shareholders could use their quota and acquire additional quota

Information on the use of quota and how to acquire additional quota, along with how quota use will be reported and monitored is provided in the general information paper “*General information relating to the reform program and reform options for the NSW commercial fisheries*”.

Other species not subject to catch quota

All other species taken by the purse seine method that would not be subject to a catch quota could still be fished under the under existing access regime with no catch individual catch limits. Broader industry-wide controls could still be introduced if issues arose with a particular species not subject to catch quota, such as trip limits, size restrictions and/or time or areas closures.

Novel shareholder proposal to use recent participation for allocating new species shares for Australian Sardine and Australian Salmon

In the purse seine fishery there are a couple of species which are almost exclusively harvested by a small number of stakeholders and the purse seine take of Australian salmon has only ever come from one business. The bulk, value-added fishery for sardines has only been done by four businesses in the sector.

The development of harvest in the purse seine sector by these businesses has been very species specific and has sought to add value through investment in onshore processing. That investment has led to considerable local employment and value for the communities hosting those processing operations.

The two proposals for novel allocation approaches follow:

Australian Salmon

One business in this sector received a restricted allocation, where a past catch history equivalent to approximately 2,500 shares was capped at 500. This was the only operator in the fishery limited in this way and this situation has remained, despite undertakings that the cap was not intended to change the allocation of a quota (for any species) to this business. This business has a substantial historical catch in a variety of species, including being the only business to take Australian Salmon.

There are a number of possible solutions to restore some equity to that business. Full share allocation equity to the stakeholder in direct proportion to its catch history (providing the unallocated 2000 shares) is not an option available under the existing *Fisheries Management Act 1994* and would severely distort the relative equity of the other stakeholders in the general pool.

An alternative approach would be creation of species specific shares for Australian Salmon and provision of a resource share between the holders of general purse seine shares and this business would provide a reasonable measure of relative equity in harvest of this species.

It needs to be noted that successive Fisheries Ministers & Fisheries Directors have assured this shareholder that implementation of Share Management would not affect his access to resources he had historically harvested when the share management issues affecting him were repeatedly raised.

The proposal would be to create a resource share of 20% of the Australian Salmon harvest for the general purse seine shareholders (distributed in proportion to their shareholdings). This would provide the general purse seine operations with more access to Australian salmon than their operations have achieved historically as well as providing some equity into the future.

A resource share of 80% of the Australian Salmon harvest to species specific shares allocated to this single business would reflect the historical and ongoing situation. Implementation of such a process to create Australian Salmon species shares and allocating them as suggested would partly rectify a gross anomaly in the original share allocation.

Australian Sardines

The historical NSW purse seine fishery harvest of Australian Sardine in ocean waters at the time of creation of share management fisheries was in the order of 100-200 tonnes annually. In the subsequent 15 years it peaked at about 2,000 tonnes per annum in NSW.

Two very significant viral mortality events in both 1994 and 1998 and the cooperative management actions to maximise recovery opportunities for the stock of the species resulted in reduced harvest following the 1998 mortality event until 2002. Harvest rapidly increased from 2002 involving four stakeholders between them having three processing plants in NSW. Three of the four operators are dual endorsement holders (NSW & Commonwealth) to enable efficient resource access across the 3nm jurisdictional boundary. Research to support stock assessment underpinning approval for substantial harvest development of the resource was funded by two stakeholders involved in one of the processing plants under a negotiated agreement with the Department. This situation is very different to changes in fishery harvest in other fisheries since the implementation of share management and in total involves only four stakeholders.

Significantly, less than 10% of the harvest of Australian Sardine reports directly to the unprocessed "whole chilled fresh fish" market. This highlights the dependence of the Australian Sardine fishery development on provision of processing capacity by the four current stakeholders.

A number of options exist to create share linkage to resource access and implement a share management regime for the Australian Sardine component of the NSW purse seine fishery.

If the current OHPSN shares were directly linked to Australian Sardine access, the investment by the four particular stakeholders, and the economic viability of processing facilities operated by those stakeholders would be fatally compromised. The employment of up to 50 staff in regional coastal communities and the value of approx \$7M annually into the NSW economy is also compromised. Likewise any opportunity for further value-added product development within the fishery into the future would be stifled.

A resource share split of 20% allocated to the general OHPSN shareholding at current harvest levels would provide more access to Australian Sardine harvest to the general purse seine shareholders than taken by that component of the sector. This access would provide relative equity for those shareholders into the future.

An allocation of 80% to the four businesses who have participated in significant Australian Sardine harvest and investment would provide relative equity to their harvest activities and underpin the economic viability of their associated processing facilities.

This allocation would be best handled by issuing the access rights as new Australian Sardine shares issued to existing shareholders and the four invested businesses. This share allocation would need to occur prior to implementation of the ITCALs in the NSW purse seine fishery to be meaningful.

DPI comment

The above proposals are modelled in the options paper under option 2b below. Certain criteria have been chosen to deliver the intent of the above shareholder proposal. This criterion could be subject to change or negotiation dependant on shareholder feedback.

Shareholders need to be aware of the process involved with using recent participation as a share allocation option for new shares. Further information on the use of recent participation and the process involved is provided in Appendix 1 of the “*General information relating to the reform program and reform options for the NSW commercial fisheries*”.

Option 2b: Catch quota for Australian Salmon and Australian Sardine based on a mix of shareholdings and recent catch history

This option involves:

- catch quota being determined using a mix of current shareholdings and recent participation;
- the creation of a new classes of shares – ‘Australian Sardine’ and ‘Australian Salmon’; and
- new shares being issued to reflect the quota allocated to each fishing business.

It is proposed to use a mix of current shareholding and recent catch history based on:

- a 20/80 split (current shareholding/recent participation);

Example of how this approach would work (using a 20/80 model):

Quota allocation where Australian Sardine ITCAL = 1577 tonnes.

20% = 315.4 tonnes, 80% = 1261.6 tonnes

So, 20% of Australian Sardine shares would be allocated to each FB based on the shares currently held (each share is worth 159 kg, giving a total based on the ITCAL of 315.4 t.).

80% of Australian Sardine shares would be allocated to each FB based on recent participation (the proportion of catch they have contributed to the total catch). That is, their average annual reported landings in the last 5 years from 2007/08 to 2011/12. Each FB then gets this proportion of the 1261.6 tonnes.

To calculate the overall quota for each FB, the quota allocated based on current shareholdings is added to the quota allocated based on recent participation.

The final step would be for the new shares to be issued based on each individual’s proportion of total quota allocated. Quota allocations for future years would be based on the new species shares only.

Outcomes of recent history based allocation of new species shares

The outcomes of using recent participation for the purposes of issuing new species based quota shares will differ by fishing business. Individual fishing business reports have been sent to all OHPSN shareholders. It is important for all shareholders to understand this information.

New classes of shares

Under this option a new class of species quota share would be issued for each species. Species shares would allow the issue of transferable catch quota only. To fish the quota using the method of purse seining a shareholder would also need to hold OHPSN shares above the minimum shareholding.

Minimum shareholding requirements

It is proposed that the existing minimum shareholding of 40 OHPSN shares would continue to apply to that share class but that no minimum shareholding would apply to each of the new species shares.

How shareholders could use their quota and acquire additional quota

Information on the use of quota and how to acquire additional quota, along with how quota use will be monitored is provided in the general information paper "*General information relating to the reform program and reform options for the NSW commercial fisheries*".

Resource sharing considerations

Some of the proposed quota species taken in NSW ocean haul purse seine fishery are also taken in other jurisdictions. In particular Australian Sardine is managed under a species quota regime in Commonwealth managed Small Pelagic Fishery. Shareholders need to be aware that resource sharing discussions between NSW and the Commonwealth could have implications such as:

- changes over time to the overall quota available for NSW fishers;
- sharing of costs for research and other measures that support the setting of a Recommended Biological Catch (RBC) and TACC; and
- cross jurisdictional quota transfer considerations.

Option 3: Basket quota (kg) on all species

Under this scenario selected species taken in the purse seine sector would be managed by a basket catch quota for all target species. A basket quota is where a shareholder can take any amount of the species of fish included in the basket, up to the point that the total basket quota limit has been reached. At that point, no more of those species can be landed during that particular fishing period.

Determining the ITCALs

The ITCAL for this option was determined from the last 15 years of catch data (1997/98 to 2011/12). Each financial year basket weight was calculated by combining the reported catch weight for all species taken in the OHPS fishery for each financial year. The most productive financial year basket weight value was used to set the ITCAL.

Table 5: Purse seine basket catch quota ITCAL

Basket Quota	No. of shares	Kg per share
3,459,660	1,980	1,747

Fishing period

An allocation of basket catch quota is available to be fished during what is known as a fishing period. It is proposed under this option that a 12 month fishing period would apply commencing on 1 July each year.

Minimum shareholding requirements

It is proposed that the existing minimum shareholding of 40 OHPSN shares would continue to apply.

How shareholders could use their quota and acquire additional quota

Information on the use of quota and how to acquire additional quota, along with how quota use will be reported and monitored is provided in the general information paper "*General information relating to the reform program and reform options for the NSW commercial fisheries*".

Note also that a basket quota system is likely to have unpredictable performance as the species in the "basket" differ in value. That is, operators are more likely to target the higher value species to maximise their return on the quota. This could result in adverse outcomes such as a race to fish for the valuable species and higher occurrence of high grading.

Transferability of catch quota between jurisdictions

Commonwealth fisheries use species specific quotas, therefore these quota units would not be suitable for cross jurisdiction transfer now or into the future.

Potential changes to current restrictions

The table below identifies the potential changes to existing restrictions that could apply as shares are linked to resource access. In most cases, stronger linkage options (quotas) include the scope for removing more of the existing restrictions than weaker options. In the case of the purse seine sector however, it is clear that there are few options for streamlining the existing rules and that the likelihood of removal doesn't depend much on the linkage options.

Table 6: Potential changes to current management arrangements under different options

Potential changes to current management arrangements for consideration with relevant reform options	Option 1	Option 2	Option 3
Foreign ownership restrictions: Remove the restrictions on foreign ownership of shares on the basis that there is negligible to nil risk of significant foreign ownership of the relatively small scale fisheries in NSW.	✓	✓	✓
Maximum shareholdings: The current default maximum shareholding of 40% of the shares in the fishery is ineffective and proposed to be removed on the basis that there is negligible risk of a monopoly in the relatively small scale fisheries in NSW.	✓	✓	✓
Boat licences: Remove the requirement to licence boats in the OHF, saving on future licence fees.	✓	✓	✓
Fishing businesses and share transfer rules: Remove fishing businesses as a management tool (but use them for administrative purposes only) and relax, if not remove, the fishing businesses transfer rules (aka. share transfer rules) once a stronger link between shares and access has been made.	✓	✓	✓
OG1 notations on boat licences: Subject to what transpires in other fisheries, consideration could be given to removing OG1 notations from boat licences.	✓	✓	✓
Nomination process: The requirement to register 'eligible fishers' against fishing businesses is being removed as part of the development of FishOnline, which will automatically check that nominated fishers are already licensed, and remove the rule preventing subsequent nominations within a 48 hour period.	✓	✓	✓
Net registrations: Remove the requirement to register purse seine nets.	✓	✓	✓

Comparison of reform options presented

To assist in considering the options and providing feedback, a number of advantages and disadvantages associated with the various linkage options have been identified as set out in Tables 7-9 below.

Option 1 - Managing effort with a quota of days

Table 7: Advantages and disadvantages associated with reform Option 1

Advantages	Disadvantages
Provides flexibility to take any of the permitted species.	Requires additional mechanisms to deal with species-specific resource issues if they arise.
Cap on total effort should improve community confidence in limits on fishing.	Will distort relativity between small and large businesses that received allocations on kilos caught. Small businesses often catch small amounts frequently for high quality markets. Days as quota may not benefit those types of operations.
Provides a tradeable right that should have a more established value than at present.	Fishing power differences make a day more valuable to a large boat and could cause changes in fleet structure.
Relatively simple and cost effective to manage.	Some businesses would be allocated more days than is possible to fish. (though these fishing businesses will be able to sell excess days).
Generally provides self adjustment among businesses.	Optimum asset (i.e. share) values are unlikely to be realised.
<p>If an ITCAL (or in the future a TACE) is reduced for viability, sustainability or resource sharing reasons, it would:</p> <ul style="list-style-type: none"> • Have a more direct and immediate effect on effort levels – compared to simply increasing minimum shareholdings to reduce endorsement numbers (a management option not contemplated in this paper because most purse seine shareholders are active and the shareholders have shown no concern with the current small number of endorsements in the sector). • Affect all shareholders proportionally, not just those at or near the minimum shareholdings. 	

Option 2 – Specific species catch quotas

Table 8: Advantages and disadvantages associated with reform Option 2

Advantages	Disadvantages
Shareholders can customise their shareholdings to suit their preferred access levels and fee liability.	Expected to cost more administratively to implement than Option 1 (effort quota) and within the same proximity as Option 3 (basket catch quota).
Stronger security of investment in a fishers' share within the fishery relative to effort quota or minimum shareholding regimes.	As the fishery transitions to the new arrangements operators who have been taking large catches from businesses with fewer shares may need to invest in shares if they are to continue to operate at their current levels.
Improved control over each species' total catch from the fishery, which can be beneficial from a range of perspectives including capacity to deliver sustainability and resource sharing objectives within, and between, the fishery and other sectors.	Businesses that commonly vary what species they catch from year to year may have to trade quota more frequently.
Improved community confidence that total catch can be controlled and manage stock issues that may arise. This should lead to greater community and government support (i.e. an improved 'social licence').	

Advantages	Disadvantages
Contributes towards optimum asset (i.e. share) values – because of the above.	
Cap on total catch of each species should improve community confidence in fishing limits and assist in coordinating cross jurisdictional fisheries management arrangements.	
Same as last advantage in Table 8 above.	

Option 3 - Basket catch quota

Table 9: Advantages and disadvantages associated with reform Option 3

Advantages	Disadvantages
Provides flexibility to fish any species.	Requires additional mechanisms to deal with species-specific resource issues if they arise.
Cap on total catch should help to improve community confidence in limits on fishing.	Requires catch monitoring equivalent to a species specific catch quota system.
Provides a tradeable right that should have a more established value than at present.	Optimum asset (i.e. share) values unlikely to be realised.
Provides for some customisation of each shareholders access to the resources.	Race-to-fish still possible on most valuable species and incentive to high grade product at sea.
	Can not be used as a complementary management regime for Commonwealth quota managed species.

Management costs

The costs associated with each of the options are difficult to determine given that a large number of factors will influence them. An indication has been provided of the relative costs of the options in the advantages and disadvantages tables above. Refer to the *general information paper* for further information about estimating management costs.