

NSW COMMERCIAL FISHERIES REFORM PROGRAM

Share linkage options

Ocean Trap and Line Fishery – school & gummy shark

NOTE: THIS DOCUMENT HAS BEEN PREPARED FOR DISCUSSION WITH THE OCEAN TRAP AND LINE – SCHOOL & GUMMY SHARK SHAREHOLDERS ONLY. IT IS NOT THE FINAL ANALYSIS AND DOESN'T REPRESENT THE INFORMATION THAT WILL BE SENT TO ALL SHAREHOLDERS FOR COMMENT

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Share Linkage Options – Ocean Trap and Line Fishery – school & gummy shark

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More information

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Foreword

The purpose of this paper is to describe potential share linkage options for school & gummy sharks (hereafter abbreviated to S&G sharks) for consideration by S&G shark shareholders at their second meeting in January 2014.

The share linkage options presented in this paper were short-listed by S&G shark shareholders at their first meeting having regard to the following hierarchy of linkage options proposed by the independent review team in the *Independent Review of NSW Commercial Fisheries Policy, Management and Administration* (the Review):

- Where catch quota is a feasible proposition for a species, it should be pursued as the
 preferred option for linking shares to resource access. In multi-species share classes where
 species specific catch quotas do not encompass the bulk of the catch taken, the alternative
 linkage options below may need to be pursued for non-quota species.
- 2. If species specific catch quotas are not a feasible proposition, shares in that sector should be linked to fishing effort in the form of transferable time/gear based quota.
- 3. In the event that the two approaches above are demonstrated to not be feasible for a share class (i.e. the financial and other costs heavily outweigh the benefits), shares should be linked to resource access at the endorsement level whereby eligibility for an endorsement is determined by holding a minimum number of the corresponding shares.

The share linkage options presented in this paper are not the only feasible share linkage options for this fishery. A hybrid or combination of the linkage options presented in this paper may also be feasible.

Another important part of the reform program is the streamlining of current management arrangements to improve industry viability through, for example, increased business flexibility, improved operational efficiency and minimised management costs. The streamlining of current management arrangements will be influenced by the strength of the linkages pursued and whether the reasons for implementing the management arrangements can be met in other ways. Towards the end of this paper is detailed discussion on the management arrangements that may be able to be streamlined, for further consideration by the Working Group.

Depending on their feasibility, the share linkage options and ancillary reforms will be referred to shareholders for consideration and comment, and a public consultation phase will be needed given the interests of the other fishing sectors and some parts of the community in changes to the rules and regulations applying to the State's commercial fisheries. They will then be referred to the Structural Adjustment Review Committee (SARC), along with all submissions received for consideration, and final recommendations will be provided to the Minister for Primary Industries.

The background and justification for the commercial fisheries reform program and the linking of shares to resource access is explained in detail in the *Independent Review of NSW Commercial Fisheries Policy, Management and Administration* (the Review), the Government's response to the Review, an Information Paper summarising the major findings of the Review and Commercial Fisheries Newsletters – all of which are available on the Commercial Fisheries Reform Homepage on the NSW DPI website. The overarching objectives of the reform program are to:

- Provide shareholders improved flexibility to tailor their access (and management costs)
- Improve the overall viability of the NSW commercial fishing industry
- Improve the value of shareholders' property rights (i.e. shares)
- Improve investment confidence and support from financial institutions
- Improve management and the public's perception of the NSW commercial fishing industry.

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Major issues facing the NSW Ocean Trap and Line Fishery – school & gummy shark share class

Some of the major issues facing shareholders in the S&G shark share class that can be addressed through the reform program (and the linking of shares to resource access) include:

- Surplus fishing capacity that can be activated at any time and that poses a risk to the viability of active participants in the fishery. There is significant surplus capacity in the S&G shark share class.
- Distortion between shareholdings and the catch obtained and/or the level of effort expended within the share class.

Interim Total Commercial Access Levels (ITCALs)

In this paper there are many references to Interim Total Commercial Access Levels (ITCALs). Understanding ITCALs is important because they are a key element of the catch and effort quota management options set out in this paper. As the term suggests, an "ITCAL" is a temporary limit set for the purpose, and during a period, of significant industry adjustment.

Once set, an ITCAL operates in the same way as a Total Allowable Catch (TAC), Total Allowable Commercial Catch (TACC) or a Total Allowable Effort (TAE), but it serves a different purpose and is set in a different way.

A TAC is the total amount of catch that can be taken in a specified period, usually a year. TACs are sometimes set up to apply across all, or a range of, stakeholder groups however they can also be set up to apply to a given sector only - for example, the TACC applying to the NSW Rock Lobster Fishery applies only to the commercial sector. A TAE is similar but relates to the total amount of effort that may be used in the specified period.

TACs are usually based on a stock assessment that takes into account a wide range of information from a variety of sources including logbooks and scientific surveys etc. TAEs, which act as a proxy for limiting total catch, are based on similar information.

Because of the time and resources required to establish biologically based TACs and TAEs that are scientifically robust, an alternative approach is being pursued for setting the initial total catch and effort levels where necessary. This alternative approach involves:

- Recognising the new total catch and effort levels as ITCALs given that they will not be biologically based as per the vast majority of TACs and TAEs; and,
- Setting the initial ITCALs at levels commensurate with current catch or effort levels in the sector(s) concerned.

This approach was referred to in the Independent Review report:

"Catch and effort limits are likely to be set, at least initially, at levels commensurate with current levels. While these limits may need to be scaled back over time in some share classes to increase the productivity of the resource or deal with overfishing issues, the issues associated with doing so will be considerably easier once a meaningful linkage has been established." (Independent Review of NSW Commercial Fisheries Policy, Management and Administration Report; pg 72).

In recognition of the role of the ITCALs during the structural adjustment phase and to provide industry with some level of certainty, it is proposed to set the ITCALs for a three year period and only modify them within this period if there is a demonstrable sustainability problem that arises in a particular share class, or if the shareholders themselves request, and DPI agrees, for it to be

modified. After that point, the ITCALs will progressively be turned into TAC/TAEs determined in accordance with the processes and requirements set out in the *Fisheries Management Act 1994 (Part 2, Division 4).*

Option 1: Species catch quota – gummy sharks

Under this scenario gummy sharks taken in the S&G shark share class are managed by catch quota. Consultation with other Ocean Trap and Line sectors, as well as with Working Groups for other fisheries, would need to occur to determine how best to confine their catch to the allocated amount while maintaining the integrity of the quota system.

The major features of a catch quota system include:

- Optimum opportunity to remove a wide range of controls that inhibit fishers' profitability and government efficiency.
- Provides for autonomous (as opposed to forced) adjustment.
- Opportunity for shareholders to upscale or downscale their access (and associated management charges which would be proportional to the number of shares held).
- Strong security of investment in a fishers' share within the fishery relative to effort quota and minimum shareholding regimes.
- Tight 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.
- Increased confidence that the fishery is operating at sustainable levels. Confidence that
 catches are tightly controlled may lead to greater community and government support for
 proposed changes/streamlining to benefit fishers, including their fishing efficiency.

These major features must, however, be considered alongside the full range of issues sometimes associated with catch quota systems such as implementation/ongoing costs. These issues are highlighted later in this part (under "Other issues to consider") and in Appendix 1.

Determining the ITCALs

In response to feedback from earlier working group meetings, the ITCAL for this option has been calculated using the highest reported recent catch level for gummy sharks between 1997/98 and 2012/13. Based on this approach the NSW industry wide ITCAL for gummy sharks is 45.0117 tonnes

Table 1: NSW ITCAL and proposed gummy shark ITCAL for the S&G share class

ITCAL (tonnes)	Ave % of S&G catch of total	S&G ITCAL (tonnes)
47.8102	59.38	28.3895

Note: DPI will present the data used to calculate the industry wide ITCAL above. These discussions, and advice from shareholders, may result in changes to the above ITCAL and the quota that would be available to shareholders as presented below.

Determining the quota for gummy sharks available to shareholders

If the S&G shark ITCAL was allocated amongst shareholders proportional to the number of shares held, the gummy shark quota issued per share (Table 2) and per shareholding (Table 3) would be as follows:

Table 2: Calculation of quota per share for gummy sharks in the S&G share class

Species	ITCAL (tonnes)	Total shares	Quota per share (kg)
Gummy sharks	28.3895	765	37.109 kg

Table 3: Calculation of gummy shark quota per shareholding for the S&G share class

Shareholding	Quota (kg)
20	742.2
25	927.7
40	1,484.4
45	1,669.9
50	1,855.5
80	2,968.7
*	

However, S&G shark shareholders have raised, for consideration, alternative options for quota to be allocated using a mixture of shareholdings and recent participation (e.g. recent catch history). Using the above ITCAL, quota allocation based on 20/80, 33/67, and 50/50 options (shareholdings/recent catch) are in Tables 4a-c.

<u>Important information to note when reviewing the below tables:</u>

- Continued improvement of data quality and data corrections may change the quota allocated based on shareholdings,
- The year used to calculate the ITCAL may change, thereby changing the quota allocated based on shareholdings,
- The potential quota figures are <u>highly unlikely</u> to be the ones that may be implemented due to a number of factors such as resolving misreporting issues, and resolving issues surrounding allocation of recent participation (including an appeals process relating to the issue of shares in a new share class),
- The letter "P" in the tables is where privacy issues may preclude publication of information,

An example of how to read the following tables:

Shareholding	20/80 potential quota (kg)						
	#FBs	Actual catch (kg)	Potential quota (kg)				
40 - 45	7	28 – 1,742	320.8 – 1,785.2				

- There are 7 FBs with 40 45 shares.
- For those FBs, the average reported weight of gummy sharks from 2009/10 2012/13 was 28 1,742 kgs.
- Under the 20/80 scenario (20% based on shareholding/ 80% based on recent participation), those FBs would be allocated 320.8 1,785.2 kgs, i.e. the FB that reported an average of 28 kgs would be allocated 320.8 kgs. The FB that reported an average of 1,742 kgs would be allocated 1,785.2 kgs. The other 6 FBs would get an allocation somewhere in that range.
- Take home message all of these FBs <u>would not</u> be negatively impacted under this allocation scenario compared to their recent catches.

Table 4a: Gummy sharks – FBs where 0 kgs of gummy sharks were reported in between 2009/10 and 2012/13

Shareholding	#FBs	20/80 potential quota (kg)	33/67 potential quota (kg)	50/50 potential quota (kg)	Quota allocated on shareholdings only (kg)
20	1	148.4	244.9	371.1	742.2
25	2	185.5	306.2	463.9	927.7
40	6	296.9	489.8	742.2	1,484.4
50	1	371.1	612.3	927.7	1,855.5

Table 4b: Gummy sharks - FBs where potential quota of gummy shark is equal to or more than the reported average for that FB (2009/10 - 2012/13)

Shareholding	Shareholding 20/80 potential quota (kg)			33/67 potential quota (kg)			50/50 potential quota (kg)		
	#FBs	Actual catch (kg)	Potential quota (kg)	#FBs	Actual catch (kg)	Potential quota (kg)	#FBs	Actual catch (kg)	Potential quota (kg)
40 - 45	7	28 – 1,742	320.8 – 1,785.2	6	28 – 1,302.6	509.9 – 1,421.8	6	28 – 1,302.6	757.1 – 1,391

Table 4c: Gummy sharks - FBs where potential quota of gummy shark is less than the reported average for that FB (2009/10 - 2012/13)

Shareholding 20/80 potential quota (kg)			33/67 potential quota (kg)			50/50 potential quota (kg)			
	#FBs	Actual catch (kg)	Potential quota (kg)	#FBs	Actual catch (kg)	Potential quota (kg)	#FBs	Actual catch (kg)	Potential quota (kg)
40 - 80	2	Р	~6,400 - ~12,800	3	Р	~1,700 - ~11,200	3	Р	~1,600 - ~9,100

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 estimate above.

Other issues to consider

Additional issues relevant to a species catch quota regime, include:

- Defining the fishing period.
- Monitoring quota usage.
- Acquiring additional quota.
- Attributing management charges to shareholders.
- Minimum shareholding requirements for new entrants.

Fishing period

An allocation of quota is available to be fished during what is known under the *Fisheries Management Act 1994* as a 'fishing period'. Fishing periods are generally defined as 'one year', however, they can also be longer or shorter.

Realistic options include a one or two year fishing period. Longer fishing periods can result in reduced total management costs and are a feasible proposition for stocks at low risk of overfishing. Stocks at greater risk of overfishing are best managed using shorter (one year) fishing periods. Shorter fishing periods also allow for ITCALs/TACs to be adjusted more readily to take advantage of 'a good run of years'.

Monitoring quota usage

A day quota system requires effort to be monitored on a daily basis if the system is to have integrity. One way to do this is through the current paper-based log book system, however, there are several reasons why this would be inadequate including:

- Log books are used to capture a range of information (e.g. catch, effort and disposal information) some of which is not readily available for the purpose of submitting log books daily;
- Resource intensive for fishers and DPI;
- Inability to monitor and enforce effort quota in real time;
- The online log book system in FishOnline is not designed to deal with acquitting quota usage.

The most cost effective ways to closely monitor a catch quota would be to utilise the Integrated Voice Response (IVR) System recently developed by DPI or the new smart phone app being built. With respect to monitoring catches, the IVR system has been designed to require endorsement holders to make a pre-fishing, pre-landing and post landing report using a mobile phone. The smart phone app will have functionality covering these three types of reports. The IVR system provides for real-time monitoring of quota usage and real-time quota balances in FishOnline, which will be accessible by shareholders (and any 'agents' they appoint to access FishOnline on their behalf). Reporting other information could be done separately either online or by using a streamlined version of the current commercial log book.

FishOnline and the IVR system have been designed to deal with quota management regimes along the lines of that presented here. Consequently, it is envisaged that neither system would need to be enhanced unless industry or DPI decides that additional requirements are needed e.g. no quota transfers within a certain timeframe. However, complications may arise for fishers working fishing businesses with many share classes that are subject to 'consumable' catch or effort quotas.

Each time a fisher phones in on the IVR system, he or she would need to listen to the full range of quota regimes relevant to the fishing business concerned before choosing the quota regime to report against. Preliminary testing of the IVR system indicates that having more than 3 to 4 quota regimes linked to a fishing business may frustrate some users. There are, however, a number of potential solutions:

- Move the shares that are linked to a quota regime into a separate fishing business. This would alleviate the need for the fisher to listen to the full range of quota regimes relevant to the fishing business concerned each time he or she uses the IVR system.
- NSW DPI is developing new technology (i.e. a smart phone app) that should be easier for fishers to use than the IVR system - much like using the internet where the user chooses the quota regime he or she is interested in without first having to listen to a list of quota regimes.

Acquiring additional quota

Acquiring additional catch quota could be achieved by a fisher in two ways:

- By transferring relevant shares, which would result in the shareholder having an ongoing right to a greater portion of the ITCAL/TAC for future fishing periods; or
- By transferring quota from other relevant shareholders, which may be fished during the balance of the relevant fishing period only.

Share and quota transfers will be able to be done at minimal or no cost using FishOnline or for a fee if done via a paper-based application.

If all (or the last) share of the relevant class is transferred from a business, any quota remaining - quota that has not been used or not already transferred to another shareholder - would be transferred along with the last share to the new shareholder. This arrangement currently applies in the Abalone, Lobster and SUTS fisheries and has been hardwired into FishOnline.

Reasons for allowing leasing:

- Helps those wanting to fish at a desired level but cannot afford to buy shares.
- Helps those who run out of quota and want to top up their allocation without buying shares.
- Helps those who want to transfer their quota to another fisher and use the proceeds for other purposes such as adjusting their business/purchasing more shares.
- Helps to ensure the entire ITCAL/TAC is used (i.e. such that there is little or no quota left over at the end of a fishing period).

Reasons against allowing leasing:

- Slows the rate of adjustment.
- Means that shares are less available to purchase for those fishing business owners who want the ongoing right/certainty to a greater portion of the ITCAL/TAC.
- May stimulate 'quota barons' (i.e. people who purchase significant numbers of shares with the intent of leasing quota to other fishers).

DPI's preliminary view is that the ability to transfer quota is an important component of any (catch or effort) quota management regime, and that the amount of quota that may be transferred to a shareholder during a fishing period should not be restricted unless there is a compelling reason to do so. However, there may be reasons why shareholders consider that an interim limitation on quota transfers be implemented.

Also important to note is that:

FishOnline has been designed to allow quota transfers and this function cannot be turned on for one quota regime (or fishery) and at the same time be turned off for another – in other words because FishOnline has been set up to provide for quota transfers in the Rock

- Lobster, Abalone and Sea Urchin fisheries, any other fisheries that proceed to quota management and use FishOnline will need to provide for the transfer of quota unless significant cost to modify FishOnline is incurred; and,
- Modifying FishOnline to introduce limits on the amount of quota that may be transferred to a shareholder during a fishing period will impact the performance (i.e. speed) of FishOnline, come at a cost that will need to be borne by government or industry and may frustrate shareholders trying to acquire additional quota.

Attributing management charges to shareholders

Under a catch quota system the cost of management is attributed to shareholders proportional to the number of shares held. In other words, a shareholder with a large package of shares (and greater access) will pay a larger share of the management costs than a shareholder with a smaller package of shares. Paying per share (or catch quota) can be beneficial to fishers who are diversified and need only a small number of shares (or kgs) to compliment their other fishing activities – particularly when compared to a minimum shareholding system where all shareholders are charged the same regardless of how many shares they hold and how many days they fish or how much catch they may take.

Minimum shareholding requirements for new entrants

Minimum shareholding requirements can be used in conjunction with a quota system to assist in adjustment within the share class. This would mean that, as with other share classes, as soon as share trading occurs, both the buyer and seller of shares must have the minimum shareholding requirement to be issued with an endorsement. Quota could still be transferred from a fishing business that has less than the minimum shareholding.

Additional issues to note

Issues to note that are not covered in the share linkage options comparison table – Table 7 Appendix 1 – include:

- Gummy sharks are taken in other share classes within the Ocean Trap and Line Fishery, and in share classes in other fisheries. Consideration by DPI and other Working Groups/stakeholders will need to be given as to how the integrity of the catch quota regime would be maintained. Options include, but are not limited to:
 - Managing the species by quota across all share classes across all fisheries,
 - Applying a catch cap in any other share class with additional trip limits etc if needed.
- 2. Gummy sharks are also managed by a catch quota system in Commonwealth fisheries. If a catch quota is implemented in NSW, consideration will need to be given to any cross-jurisdictional resource sharing issues.

Discussion and advice required

Shareholder advice is sought on the following:

- Are the ITCALs and how they've been determined appropriate?
- The feasibility of allocating species catch quota in proportion to existing shareholdings;
- The feasibility of allocating species catch quota using a mixture of shareholdings and recent participation. Issues to consider under this scenario include:
 - b) How is catch to be attributed from FBs that have catch associated with them from 2009/10 2012/13 but that no longer have a shareholding (likely amalgamated with another FB)? There are a few instances of this. In the options above, the catch associated with those FBs has not been included.

- c) What happens to partial shareholdings if/when traded does any portion of the catch get allocated to the new FB?;
- Whether minimum shareholding requirements should be used in conjunction with a species catch quota regime;
- A suitable 'fishing period' and when the fishing period should commence;
- The use of the IVR or smart phone app system to monitor effort quota usage.

Option 2: Limiting endorsement numbers (minimum shareholdings)

Under this scenario catches are indirectly managed by actively managing the number of endorsement holders in each sector of the fishery. This is achieved by adjusting the minimum shareholding (which determines shareholders' eligibility to an endorsement). The major features of moving to a minimum shareholding system include:

- Forced (as opposed to autonomous) adjustment.
- A very direct and effective mechanism to adjust the number of endorsements in the fishery.
- Limited opportunity to modify or remove current controls that inhibit fishers' efficiency and profitability.
- Management charges are shared amongst shareholders equally, regardless of the number of shares held.
- The security of investment is not a strong as a catch or effort linkage regime endorsement holders continue to compete for their share of the available resource.

A minimum shareholding regime is an extremely indirect way of managing catch and as such does not offer the higher levels of control over total catches or catches of particular species in the fishery. Total catches of major species would still need to be monitored to ensure that harvest levels do not exceed sustainable limits or levels that result in adverse resource sharing issues. If such a situation occurred, consideration would be given to increasing the minimum shareholding requirements (i.e. to reduce the number of endorsements in the fishery).

Determining the adjustment targets

Determining a target number of endorsements is the first step. This can be done intuitively, but is best achieved by considering fishers' catch or Gross Value of Production (GVP). For the purpose of this paper total GVP over the three year period 2009/10 to 2011/12, calculated using the average monthly prices for fish sales through the Sydney Fish Market, has been used. The following table shows the numbers of businesses that accounted for the various percentages of total GVP (60% through to 99%) across these three years.

Table 5: Numbers of FBs that contributed towards various percentages of total GVP for the S&G share class

60% GVP	70% GVP	75% GVP	80% GVP	90% GVP	95% GVP	97% GVP	99% GVP	#FBs with shareholdings
2	2	2	3	4	5	5	6	20

Calculating the minimum shareholding requirements

The adjustment targets are then used to calculate the minimum shareholdings that would apply. This is achieved by dividing the total number of shares in the fishery by the target number of endorsements.

Table 6: Minimum shareholdings required to achieve various target numbers of endorsements

Note: Total number of shares = 765

#endorsements	2	3	4	5	6	10	15
Min. shares	382.5	255	191.25	153	127.5	76.5	51

If shares are surrendered for cancellation prior to implementing the minimum shareholding scheme, for example during the exit grant process, the minimum shareholdings required to deliver the adjustment targets will be less than those set out in the tables above.

Period during which minimum shareholdings must be satisfied

Under a minimum shareholding regime it is important to determine the timeframe by which shareholders must satisfy the minimum shareholding requirements in order to remain endorsed to participate in the fishery. Options range from a once-off increase in the short term through to progressively increasing the minimum shareholdings over a longer time period. Issues for consideration include:

- Government assistance, in the form of exit grant payments, will only be available in the short term (i.e. in 2014).
- For sectors requiring significant adjustment, one of the few strategies that can be adopted is to extend the timeframe available for shareholders to satisfy the minimum shareholding requirement.

Regardless of whether a short term or long term approach is adopted, to streamline administration DPI would seek to align all minimum shareholding periods across fisheries. This would prevent having to issue new fishing business cards etc each time an endorsement is added or removed from a fishing business card.

DPI's preferred position is to pursue a once-off increase in the short term unless significant adjustment and investment in shares would be required (depends on the target selected). In this latter case DPI would support progressively increasing the minimum shareholding requirements over two periods, or three periods in extreme cases.

Attributing management charges to shareholders

If managing endorsement numbers using minimum shareholdings, the cost of management is attributed to shareholders equally. In other words, all shareholders pay the same regardless of how many shares are held or how much the fisher works or catches.

Discussion and advice required

Shareholder advice is sought on the following:

- Should a minimum shareholding regime be considered as an option (to be put to shareholders for comment) for the S&G share class?
- What is the appropriate adjustment target (i.e. maximum number of endorsements) for each share class?
- An appropriate timeframe for shareholders to satisfy the minimum shareholding requirements in order to remain endorsed to participate in the fishery.

Comparison of share linkage options

The share linkage options investigated in this paper all have pros and cons and address, to different degrees, the various objectives of the reform program.

Changes to fishing rights can also be difficult for fishers. When linking property rights to resource access it is natural for those affected to focus on how much quota they will get and how the

program may adversely affect their business – the negatives are easily speculated and advocated, and the longer term positives seem too far away to be tangible. There is no doubt that linking property rights to resource access will change the way shareholders manage their businesses and/or operate.

The government has advised that the final decision on linkage will be based on merit (i.e. not a shareholder vote), so it is critical that consideration is given to not only the pros and cons of the various linkage options, but their effectiveness delivering on the full range of government and industry objectives of linking property rights to resource access.

Table 7 (Appendix 1) compares the three linkage options set out in this paper against a range of short and long term objectives - from government and industry perspectives - that are important to consider.

Costs associated with the share linkage options

A major consideration for shareholders will be the costs associated with the various linkage options, particularly given the proposed development and introduction of a new cost recovery framework. The cost of management is also an issue for government given current industry subsidies and the Act's [secondary] objective to promote a viability commercial fishing industry.

The costs associated with the various linkage options are, however, only one part of the overall picture in terms of shareholder profitability and the government's obligation to promote industrywide viability. Some important points to note include:

- Individual shareholder profitability is influenced by a wide range of issues many of which are outside the direct control of the State government. Examples include: the cost of boats and equipment; the price received for product harvested; and the fishing ability and business skills of the shareholder concerned.
- Promoting industry-wide viability is a longer term objective that is also influenced by a range of things including, pertinent to the reform program underway: the cost, complexity and flexibility afforded by the management frameworks put in place and the removal/relaxation of controls that inhibit the operational and business inefficiency of fishers.

Overall, these issues need to be considered alongside the range of social and economic benefits that arise from linkage shares to resource access, including gaining a stronger 'social licence' to operate and increased asset (i.e. share) values etc.

The role of government is to establish a framework that promotes improved industry-wide viability in the medium to longer term - not to maintain or improve the profitability of individual shareholders.

While it would be ideal to have firm costings for each option, NSW DPI is unable to provide definitive advice on the actual costs that would be payable. This will be influenced by a wide range of things including: the final design of the linkage options; if a quota scheme is pursued, the number of shares held; the number of shareholders remaining; the adoption of technology (e.g. the IVR, smart phone apps and/or VMS etc) to reduce enforcement costs; streamlining current controls and the new cost recovery framework once implemented. Speculating on specific management costs payable by shareholders at this point in time would be misleading.

The best approach will be to try to give a general indication of the relative costs of the various linkage options having regard to the likely future research, management and compliance needs associated with each, once the options are better defined.

The use of recent participation in the allocation process of a new class of share

The use of recent participation at any level in the allocation of a new class of share brings with it its own set of benefits and issues. Some of the major pros and cons are outlined below and should be carefully considered against the purpose of the reforms.

Pros:

- Opportunity to pursue stronger linkage options rather than defaulting to weaker linkage options (i.e. endorsement numbers).
- Could provide better longer term outcomes and avoid problems associated with deadline driven expediency.
- Avoids major inequities that would occur if existing shares were used to allocate a species catch quota.
- Pursuit of linkage options that will be FishOnline compliant.
- Should satisfy high catch operators, particularly where the cost to buy shares is otherwise high which would depend on the number of shares required to maintain current access, the market value of those shares and the success of the exit grant process.
- Reduced risk of high catch operators exiting, which could have jeopardised short or longer term production levels (and the associated multiplier benefits).
- The original allocation of shares was inadequate for addressing quota for species or days fished. Use of recent participation helps to redress this.
- Reduced risk of downfall in production or supply chain/regional employment issues that could occur if a number of high catch fishers exited within a short period of time.

Cons:

- Government approval would be required as it is a deviation from the approved approach & timeline.
- The share allocation process would come at a cost potentially borne by shareholders in the form of an application fee.
- Depending on the grounds for appeal, some shareholders may feel aggrieved mainly shareholders with low catch/effort resulting from extenuating circumstances or recent investment.
- Risk of legal challenge if a shareholder is not satisfied with the shares allocated and perceive their existing property rights to have been devalued.
- Risk of legal challenge if current shareholders lost access to the species concerned and perceive their existing property rights to have been devalued.
- If the new shares were issued in addition to the current shares, a second layer of rights is created - this and the associated complexity may, however, be a small price to pay if there are demonstrated long term benefits.
- There would be significant debate about the criteria to use for allocating shares in the new share classes (shareholding/recent participation split, criteria years, etc.).
- Assessing recent participation will be time consuming and potentially expensive. In addition to the costs associated with the share allocation process, additional costs will be incurred if validation of the catch and effort records is needed before the preliminary allocation process.
- May unfairly advantage shareholders who have over-reported or fished illegally in the past.
- Risk of shareholders seeking to modify already submitted catch and effort records in an attempt to be eligible for more shares, although there are ways to manage this.

- Upon commencement of the exit grant process, definitive advice may not be available on the shares/quota that each shareholder would be eligible for – depending on the ease of determining appropriate share allocation criteria and its level of complexity.
- The protracted uncertainty could be a cause for concern for some shareholders.
- The quality of the records relied upon to determine participation could be questionable in some cases.

Refining current management arrangements

A significant part of the reform program is to streamline current management arrangements.

Refining management arrangements dependent on share linkage

Scope to streamline current management arrangements is in some cases dependent on the form and strength of the management framework or linkage proposed to be pursued.

Table 8 (Appendix 2) shows the streamlining proposals for which the form and strength of share linkage is important. It also shows whether or not the proposal is supported by the various linkage options that have been short-listed by shareholders to date.

Controls that may be refined regardless of share linkage

Streamlining the following current management arrangements is not so dependent on the form and strength of the management framework or linkage proposed to be pursued.

Maximum shareholdings: The current default maximum shareholding of 40% of the shareholding in the fishery is ineffective and proposed to be removed on the basis that there is negligible to nil risk of a monopoly in the relatively small scale fisheries in NSW. This will streamline administration and reduce the longer term management costs. A new maximum shareholding could be introduced in the future if an unacceptable consolidation of shares becomes evident.

Foreign ownership restrictions: It is proposed that the restrictions on foreign ownership of shares be removed on the basis that there is negligible to nil risk of a significant foreign ownership of the relatively small scale fisheries in NSW. Foreign ownership is also an issue managed by the Commonwealth, not the States. This will streamline administration and reduce the longer term management costs.

Registering 'eligible fishers': 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. This will streamline the nomination process.

Boat licences: Under a species catch quota regime boat licences would no longer be required to [indirectly] manage catch, except if there were many other non-quota species taken in the fishery that would otherwise be subject to unacceptable increases in fishing pressure if the general size of boats increased over time. The same principle applies under an effort control regime (days etc.) if there is a regime that establishes a strong relationship between effort and catch. Removing boat licences presents a range of administrative and business efficiencies, including reduced paperwork and ongoing licensing costs for fishers.

The main issue to consider is whether there will be an ongoing need to cap boat capacity in the fishery. Given that boats can already be upgraded to 16 metres in all sectors of the fishery (by acquiring a suitable boat licence), the main issue requiring consideration is the future use of boats greater than 16 metres in length in the fishery.

OG1 notations on boat licences: Consideration needs to be given to the use of OG1s in the management of the Ocean Trap and Line Fishery and the possibility of their removal (along with boat licences).

Discussion and advice required

Shareholder advice is sought on the following:

- The 16 metre boat length cap in the S&G shark component of the OTLF and whether there is scope to modify/remove it,
- The ongoing use of OG1s in the OTLF.

Discussion and advice required for Appendices 1 & 2

- Opportunity will be provided for shareholders to review the comparison table which will be an important part of the paperwork to be put to stakeholders for comment.
- Opportunity will be provided for shareholders to discuss the streamlining proposals and, where necessary, firm up the details of any such proposals to be put to stakeholders for comment.

Appendix 1

Table 7: Comparison of share linkage options

Issue	Gummy shark catch quota	Minimum shareholdings
Government interests		
Within powers of Act	Yes	Yes
Can be administered	Yes but major process involved if recent participation used	Yes
Can be enforced	Yes	Yes
FishOnline compliant	Yes	Yes
IVR compliant	Yes	Not applicable
Promotes voluntary compliance	Yes	No
Manages catch	Directly	Indirect (weak)
Can be used to respond to sustainabilty or resource sharing issues	Directly: very strong linkage	Indirectly (weak)
Shareholder interests		
Secure share of catch	Highest security	Minimal security
Investment confidence	Highest confidence	Lowest confidence
Scope to tailor access	Yes	No
Scope to tailor fees	Yes: pay per share	No: flat fee
Fish more efficiently	Yes	Subject to relaxation of input/effort controls
Value of rights	Highest value	Lowest value
Remove input controls	Maximum scope	Limited scope
Addresses public perception issues	Yes	Generally yes, depending on the issue
Ongoing adjustment (for viabilty)	Yes: autonomous and can be stimulated on as needs basis	Yes: forced on an as needs basis
Estimated relative cost of scheme	TBD	TBD
Cost per shareholder	Decided by shareholder: costs proportional to shares held	No choice: all shareholders pay the same.

Appendix 2

Whilst some linkage options may provide for the removal of a control, this will in some cases be dependent on:

- How conservative the ITCAL is; and,
- Whether catches are monitored and strategies exist to offset any unsustainable increases in catch (e.g. reducing the ITCAL).

The following symbol has been used to denote where this is an issue: <a>

Table 8: Streamlining proposals and whether the linkage options short-listed to date support their removal or relaxation

Current control	Gummy shark catch quota	Minimum shareholdings				
Remove fishing businesses as an effort control	Yes	Only if adjustment target is set at a conservative level and has been achieved				
Allow shares to be transferred to any person	Yes	Only if adjustment target is set at a conservative level and has been achieved				
Remove minimum shareholding requirements	Yes, but suggested they be retained to stimulate adjustment should the number of endorsements in a sector need to be reduced to maintain/improve viabilty	No				
Remove 48 hour restriction applying to nominations ¹	Yes	Yes 🌑				
Remove boat capacity restrictions	Yes, but perhaps not feasible since fishers may need to use the same boat for other OTL fishing where boat restrictions may still apply	Yes 🕟 - effort increase? Depends on target				
Remove restrictions on the number of hooks that may be used	Potentially under some options. Gear limits were implemented as part of the FMS as a means of controlling fishing capacity noting that these limits were set at around the maximum level of use at that time. For hook and line fishing, the potential for threatened species interactions, particularly for Greynurse sharks, is still high and any modification to the limits would have adequately respond to this issue.					

¹ This change is occurring as part of the development of FishOnline.