Department for Environment Food & Rural Affairs

Fisheries: Quota allocation and management in 2021 and beyond

England and the Crown Dependencies

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Any enquiries regarding this publication should be sent to us at

fisheriesengagement@defra.gov.uk

or

Consultation Coordinator, Defra
2nd Floor
Foss House
Kings Pool
1-2 Peasholme Green
York
YO1 7PX

www.gov.uk/defra

1. Introduction

In January 2021, at the end of the transition period, the UK will be an independent coastal State with rights under the UN Convention on the Law of the Sea to control and manage the resources in our waters. We will have left the Common Fisheries Policy and will no longer be bound by the EU's outdated method for sharing fishing opportunities. We are committed to moving away from relative stability to a fairer share of fishing opportunities for our fishing industry across the British Isles.

We will be negotiating with the EU and other coastal States this year on 2021 fishing opportunities, including quotas, for shared fish stocks. There will be negotiations in future years for fishing opportunities beyond 2021.

We aim to secure additional quota in these negotiations - over and above what we had before we left the EU – and we need to be ready to allocate any additional quota we secure. However, we will not know what precise stocks and tonnages we will have in 2021 until negotiations conclude later this year.

This additional quota provides us with an ideal opportunity to explore alternate methods for allocating and managing quota. Quota management is complex, and actions taken over the years have had unintended consequences. We aim to move carefully and avoid radical reforms which could lead to unintended consequences and potentially be destabilising for industry. We will also apply some of the lessons we have learned to date. We envisage this work being an iterative process which will see us trial, evaluate and refine methods over a period of time.

This consultation is about how we use this quota in England and the Crown Dependencies. For simplicity, we just refer to England throughout the rest of this document.

We expect our approach will evolve over time as we trial, evaluate and refine methods. This means that how we allocate and manage quota in 2021 may differ from that in future years. It also covers our aims for quota more broadly, the future of the English quota reserve and future English quota management trials.

This consultation will run for 4 weeks from 13 October 2020 until 10 November 2020.

At the same time, we are consulting separately on how we apportion this additional quota between the UK fisheries administrations. The devolved administrations are responsible for allocating quota in their parts of the UK. We are also consulting separately on the future of the economic link in England.

2. Our engagement so far

In our 2018 fisheries white paper, Sustainable Fisheries for Future Generations[1] we set out plans to promote a more competitive, profitable and sustainable fishing industry across the whole of the UK and to set a gold standard for sustainable fishing. The responses we received to the white paper showed no consensus for how quota should be allocated in future.

Following publication of that white paper, we held a call for evidence in 2019 about how we should use additional quota in England. We received 36 responses to that call for evidence from a range of sources including producer organisations, individual fishermen and environmental organisations.

Again, there was no consensus about how we should use additional quota. Views on the positive and negative aspects of our current quota allocation and management methods were varied and at times conflicting. For example, some responses said that stability was important for facilitating investment and providing security for businesses. Others said things should change and that the current methods were unfair. However, some themes did emerge. Examples include a desire for clear aims, using additional quota to provide 'something for everyone' and a desire for more regional approaches. A more detailed analysis of the results is set out in Annex 1.

We followed that call for evidence with an informal scoping exercise earlier this year. This exercise focused on prioritising aims and methods for allocating additional quota. In total we received 20 individual responses from fishermen and fishing companies, producer organisations and other industry representatives. We also further held a wider range of informal conversations with stakeholders.

Again, there was no consensus about how any additional quota should be used but some themes did emerge. Examples include the importance of stability in supporting industry investment and also addressing imbalances in the current system. A more detailed analysis on the results is set out in Annex 2.

[1] https://www.gov.uk/government/consultations/fisheries-white-paper-sustainable-fisheries-for-future-generations/sustainable-fisheries-for-future-generations-consultation-document

3. Our aims

The Fisheries Bill, which is currently being debated in Parliament, reiterates a number of the high level aims that need to be considered when allocating and managing shared public assets. The Bill also sets out our longer term aims and aspirations for delivering a sustainable, profitable and competitive fishing industry.

A very clear message that came from our previous engagement was the need to set clear and transparent aims for quota management. We have therefore developed five proposed aims for how we use English quota, drawing from what our stakeholders have previously told us.

These proposed aims would apply to all English quota, both our current share and any additional quota we secure in future.

The proposed aims are:

1. **Fair distribution of fishing opportunities**
2. **Maximise long term economic investment and return**
3. **Incentivise good behaviours and innovation**
4. **Transparent and objective allocation, trading and management of quota**
5. **Simplifying the system over time, with decisions made closer to those affected**

We are now seeking your views on whether these are the right aims.

Fair distribution of fishing opportunities

It has long been recognised that fish are a public asset. They are held by the Crown for the benefit of the public. As a public asset, it is right that the opportunities to catch these fish are distributed fairly.

However, it can be difficult to decide what is fair. We know that many people do not consider the current distribution of fishing quotas to be fair. We most often hear this message from representatives of the inshore vessels and from other stakeholders campaigning on their behalf. However, there are concerns raised by other parts of the industry too. When deciding what is fair, we think there are various factors that should be considered:

- We should **respect investments that have been made**. Many people have invested in fixed quota allocation (FQA) units. Some have borrowed money to buy these. Others have secured loans using these units as collateral. It is fair to respect these investments, and this is why we have been clear in our 2018 white paper and elsewhere that we will continue to allocate our existing share of quota using the current system.

- We should **recognise where imbalances exist**. It is no secret that most quota is held by the sector with far less quota held by the non-sector. Many stakeholders have raised particular concerns about the quota available for the under 10m fleet. There may be valid historical reasons for the current quota distribution but there are also problems arising from this. It is fair to recognise this and the additional quota we aim to secure now we have left the EU gives us an opportunity to do something different and address this imbalance.

- **The benefits should be shared widely**. Many communities around the English coastline could benefit from additional quota. It is fair to spread this quota across these communities so that all may benefit.

- **If the quota is not used then nobody benefits**. It is fair to manage quota in such a way as to ensure it is used. This means being flexible. If one part of the fleet does not have capability to catch some stocks it may be fairer to give that quota to other parts of the fleet that do have this capability. Similarly, if quota is not being used by one person then it may be fair to reallocate this to someone else.

There will be other factors in deciding what is fair too. We cannot set out a definitive list of all the factors, but we have listed some of the ones which seem most important at this time based on our previous discussions with industry and other stakeholders.

Maximise long term economic investment and return

Fishing provides many benefits to the UK and supports our coastal communities. It provides jobs, contributes to our food supply and supports tourism. All of these benefits depend on fishing businesses being profitable.

We need to allocate and manage quota in a way that allows businesses to invest for the long term in a profitable way. Again, there are various factors to consider in doing this, although we cannot set out a definitive list of them all here.

One factor is **stability and certainty**. We have heard how fishing businesses borrow and invest money based on the quota they expect to receive in future. That is best supported by having stable quota allocations which provide a degree of certainty from year to year (recognising that quotas will vary depending on scientific advice).

Another factor is **considering potential** as well as current performance. We have heard how some businesses have plans to invest and grow but have been unable to do so without access to quota.

Supporting **new entrants** is another vital factor for enabling businesses to achieve their potential and safeguarding industry's future. We have heard the barriers for new entrants around acquiring licences, vessels and quota - although these are not the only ones.

Incentivise good behaviours and innovation

If we want our fisheries to have a long term and sustainable future, then everyone needs to play their part in managing this public asset. That means finding new ways to reduce the adverse impacts of fishing and providing the conditions to allow for innovation.

We think quota can be used to encourage people to do this. In both our call for evidence and scoping exercise we heard ideas about allocating additional quota based on criteria around sustainability and low impact fishing. We also heard ideas about community plans and allocating additional quota in ways that best support local coastal communities.

This would take us in a different direction to how we have generally allocated quota in the past. We think it is right that we explore this and that we do so in partnership with industry and other stakeholders.

We had planned to hold workshops this year to begin to develop criteria that we could trial in 2021. Unfortunately, the coronavirus pandemic meant that wasn't possible. As such, we don't think this is an approach we could use to allocate quota next year, but we do intend to begin a conversation with industry and other stakeholders in 2021 about how we develop such options for future years.

Transparent and objective allocation, trading and management of quota

Transparency and objectivity are important in their own right and support our other aims.

We already allocate quota in a transparent and objective way. This is done in accordance with the published UK Quota Management Rules[2], English Quota Management Rules[3] and the Fisheries Concordat[4]. The Fisheries Bill also contains a clause which makes this a legal

2 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/890051/UK_2020_QMR_-_FINAL.pdf

3 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/890054/English_QMR_May_2020__DEFRA_.pdf

4 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69547/pb13771-fish-concordat.pdf

obligation. Additionally, the Fixed Quota Allocation Register[5] enables the public to see who holds FQA units and receives the UK's fish quotas.

But we think there is scope to improve transparency in other areas. For example, quota is often traded (swapped or leased) during the year but there isn't a public register of this which is easy to access. Making this more transparent would better show how this public resource was being used as well as improving opportunities for industry to exchange quotas.

Simplifying the system over time, with decisions made closer to those affected

The current allocation model in the UK has developed and evolved over many years. This is summarised in Annex 3 and set out in detail in the published UK and English Quota Management Rules.

In short, most quota in England is currently allocated using FQA units but this is not the only way we allocate quota:

- Some stocks do not have FQA units. For example, skates and rays are allocated using track record from 2006 to 2008.

- Other stocks are allocated using the FQA units of a different stock. For example, Cod 7d is allocated using Cod 7b-k FQA units.

- Other stocks are allocated either in an entirely different way. For example, we have a 'special allocation' for handline mackerel.

- Sometimes we allocate to particular parts of the fleet in a different way. For example, we 'underpin' quota for some of the fleet to ensure they receive a minimum amount in certain stocks each year.

- Through our reserve quota policy some quota has been 'top-sliced' for the non-sector, whilst some is used to support sustainability schemes such as the Fully Documented Fisheries Scheme.

Some of these allocation methods, such as underpinning, pre-date devolution and take place at a UK level. Other allocation methods such as the reserve quota policy are unique to England.

Alongside this, the under 10 metre pool receives quota donations as part of the economic link policy. Quotas can also be traded (swapped and leased) throughout the year.

[5] https://www.fqaregister.service.gov.uk/

There are valid historical reasons for each of these different approaches but the cumulative impact over time has been to create a complex system. This could be made even more complex once we have additional quota.

Complexity can make things harder to understand. We have heard how many fishermen do not have time to read through things like English Quota Management Rules and the supporting spreadsheets that are published. They need to be out fishing and running their businesses. A complex system can act as a barrier to fishermen engaging with policy makers and quota managers about decisions which affect them.

And this is not just about how we allocate quota. It is about all the decision making throughout the quota system. We want to make this simpler and allow decisions to be made closer to those affected by them. In our engagement with stakeholders, we have heard a whole range of ideas about how we could do this.

We think setting a clear aim to simplify the quota management system will help. This is not something we can do immediately, it would need to be done over time.

QUESTION 1 – What do you think about our proposed aims?

4. How we allocate quota

Our existing quota

By our existing share of quota, we mean the quota we received under the Common Fisheries Policy's relative stability key plus the quota we regularly gained due to Hague Preference. The separate consultation on how we apportion any additional quota between the UK fisheries administrations contains a full breakdown of our existing quota shares by stock.

We made clear in our 2018 white paper and elsewhere that we do not intend to change how we allocate our existing share of quota. This will continue to be based primarily on FQA units.

Reserve quota

In recent years, some of our existing share of quota secured during implementation of the discard ban has been held in a reserve. This reserve has been used to deliver different policy aims. For example, this year reserve quota is being used to:

- Provide a small uplift in quota to the English under 10m fleet based on historic track records
- Support the fully documented fisheries scheme
- Help manage choke risk

We allocated the remainder of the reserve this year using FQA units. More information on how the reserve quota is being used this year can be found on gov.uk.[6]

We are seeking your views on what we should do with the reserve quota in 2021. There are various options.

One option is to **continue the approach we have taken in 2020**. We could continue to use the reserve quota to support the English under 10m fleet, the fully documented fisheries scheme and to manage choke risk. Any remaining reserve quota could be allocated using FQA units.

Another option is to **merge the reserve quota with how we allocate the rest of our existing quota share**. This would see it largely allocated using FQA units. This could make the allocation process simpler and easier to understand. However, it could also mean that those who have benefited from reserve quota in recent years lose out.

[6] https://www.gov.uk/government/publications/guidance-on-englands-demersal-reserve-quota-allocation-for-2020

A third option is to **merge the reserve quota with the new additional quota pot.** Again, this could make the allocation process simpler and easier to understand by removing the reserve quota element. We would need to decide how to use additional quota before we could understand the impacts of merging reserve quota with it (see **The additional** quota we get in future).

There may be other options too. We are interested in your views about this.

Before any changes were made, we would need to understand the implications. It may be that we cannot assess these until international negotiations are completed and we know how much additional quota we have secured for 2021.

QUESTION 2 – What do you think we should do with reserve quota in 2021 and why do you think we should do that?

The additional quota we get in future

By additional quota, we mean the extra quota the UK aims to secure now we have left the EU and will be negotiating as an independent coastal State. It is defined as anything above our existing share of quota.

In our 2018 white paper, we clearly stated that we would allocate additional quota in a different way. There are many ways we could do this but our engagement to date has demonstrated there is no consensus among industry and other stakeholders about how this should be done.

We have considered all the evidence submitted to us and have reviewed other models in Europe and elsewhere in the world. We have also looked back at the history of quota allocation in the UK to see what lessons we can learn from there.

We have already set out our proposed aims for quota in this consultation. Once finalised, our aims will guide how to allocate additional quota in England next year and in future years.

We don’t expect to get the allocation of additional quota right first time. It is essential that we evaluate and improve how we allocate quota from year to year. In that sense, whatever we do in 2021 could be considered a form of trial.

Challenges for 2021

We will not know how much additional quota we have for 2021 until negotiations conclude later this year. This means we have to develop an allocation approach before knowing what additional quota we will have secured. This means we have focused on options which can be applied to any amount of additional quota. We have not looked at things like specific arrangements for specific stocks.

We are also aware of the significant disruption and uncertainty that the coronavirus pandemic has caused the fishing industry. We realise that until markets have been fully restored it may be difficult, for example, to properly assess need for quota and capacity to use quota.

Whatever we do in 2021 will be the first step in an iterative process. We need to evaluate what we do next year to see what works and what does not work. Our approach to allocations in 2021 may look very different to future years. We also need to be flexible during 2021. It may be that we allocate additional quota to one part of the fleet and find it is not being used for some reason. In that case, we may need to consider reallocating that additional quota during the 2021 fishing year.

It is important to note that conferring rights to access additional quota will be for regulators to decide. **We do not intend any long term rights to this quota to develop** from any of the options we are putting forward for 2021 and beyond.

To help understand the impacts of the different options we have modelled how each would work. This modelling does not use real stocks because we do not yet know what additional quota we will have next year. Similarly, it does not use real producer organisations or pools. This helps to keep this model simple and easier to understand. But the model does show in broad terms how each option would work. This model can be found in Annex 4.

How we are considering options

When looking at options for allocating additional quota in England we are considering three broad questions:

- How should we split additional quota between the sector and the non-sector?
- How should we split sector quota between producer organisations (POs)?
- How should we split non-sector quota between the under 10m and over 10m pools?

We think that asking the questions in this way helps to simplify the options. In particular, it is important to distinguish between the sector and non-sector because their quota is managed very differently during the year.

For the purposes of this consultation, we refer to the producer organisations and pools collectively as ‘fleet segments’.

This is illustrated in Figure 1 below.

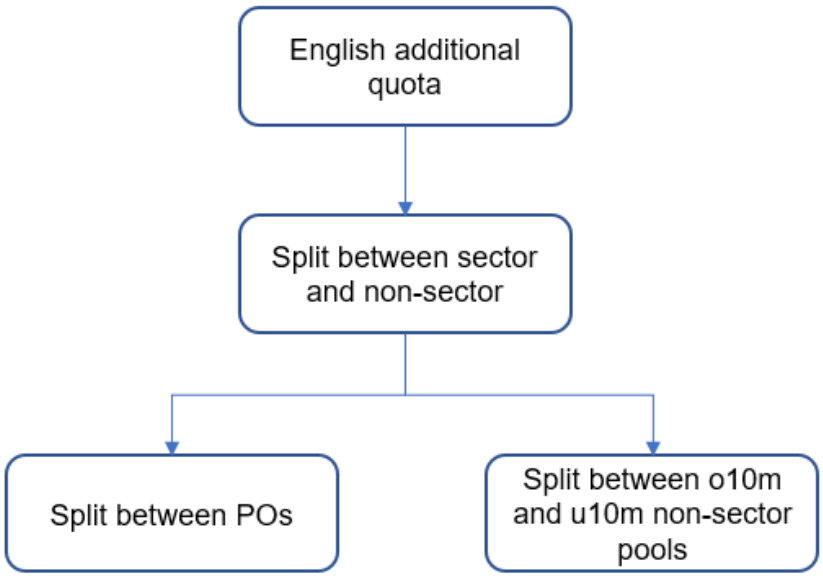


Figure 1: England quota allocation process map: two levels of allocations

We have identified **five possible options** for allocating additional quota in England for 2021 and would like your views on each of these.

These options each show different ways of splitting quota between the sector and non-sector (the first step in the two levels of allocation shown above). These different ways are also reflected in how the non-sector quota could be split between the pools.

At this time, we have not considered different ways of splitting sector quota between producer organisations in detail. There are various reasons for this including that some have members from other parts of the UK. We don't want to do anything which destabilises producer organisations or causes problems with cross-border membership. Until we have the opportunity to discuss this in detail with the sector – and this has not been possible due to coronavirus restrictions – we do not want to propose changes to how the sector quota is split between producer organisations. But we are interested in your views on this point too and whether you think that is sensible for 2021.

For future years we think there are other approaches we could take to splitting the sector quota between producer organisations. This is something we intend to explore and trial beyond 2021.

Option 1: Fixed quota allocation units

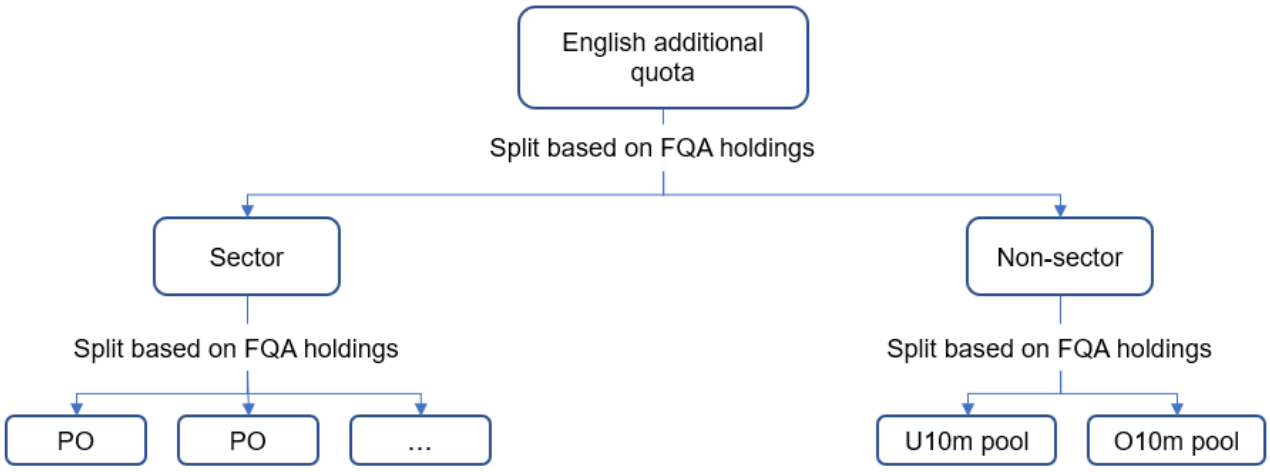


Figure 2: England quota allocation process map: FQA holdings

One option is to allocate using FQA units (this is broadly what we do for existing quota). This would mean splitting additional quota between the sector and non-sector based on FQA unit holdings. The sector quota would also be split between producer organisations using FQA units and the non-sector quota would be split between the pools this way too.

Allocating additional quota in this way means that those who hold more FQA units would benefit more from additional quota. While this would reflect the investment they have made in FQA units, it would also continue any imbalances within the current system. Those who do not hold FQA units - particularly within the non-sector - would benefit less from additional quota. This includes stocks which are of particular interest to the non-sector. As such, allocating additional quota in this way may not achieve the aim of a fair distribution of quota.

We have been clear that we intend to allocate additional quota in a new way. As such this **is not our preferred option.**

Option 2: Equal distribution between sector and non-sector

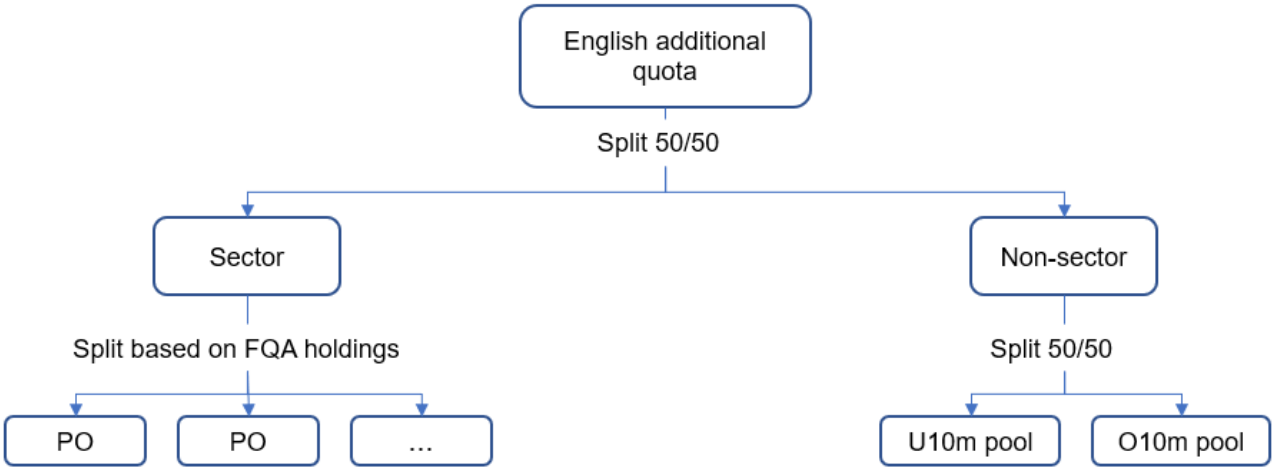


Figure 3: England quota allocation process map: Equal distribution

Another option is to split the additional quota equally between the sector and the non-sector. The sector quota could then be split using FQA unit holdings - or possibly by an equal split too. The non-sector quota could be split between the pools using an equal share.

Advantages of this approach include helping move towards a fair distribution of quota. If all the fleet segments receive an equal share this could be considered fair. This could help deal with the current imbalances in the quota distribution. In particular, the non-sector would receive a significantly higher proportion of additional quota than they would using the FQA units in option 1.

Disadvantages include the fact that a 50/50 split could be seen as arbitrary. Also, some parts of the fleet would likely gain additional quota in stocks they are unable to fish, for example, the under 10m pool gaining quota in deep water stocks (this can be seen in the modelling in Annex 4).

Option 3: Track record

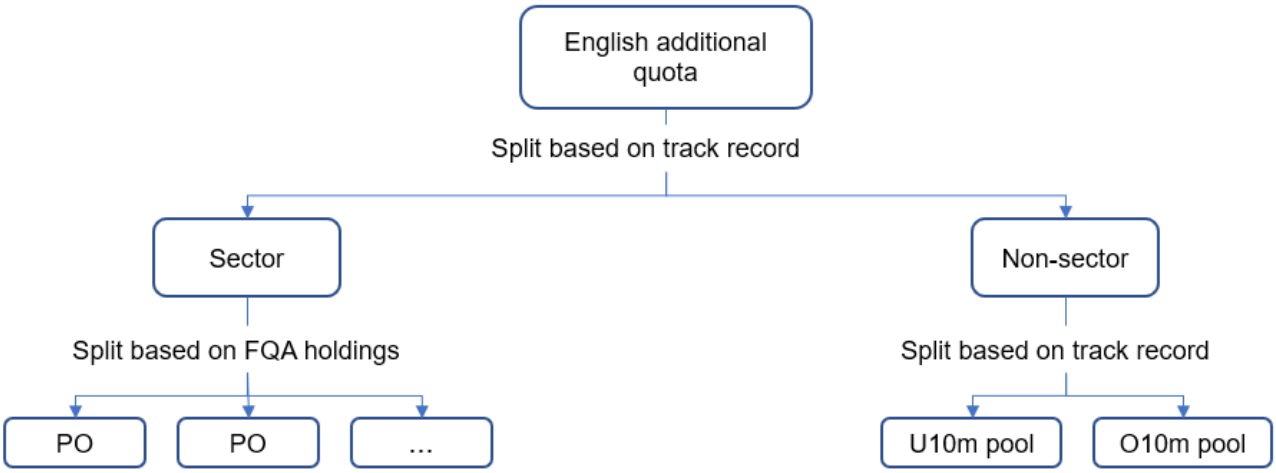


Figure 4: England quota allocation process map: Track record

Another option is to use track record. This is different from using FQA units because it takes account of things like past quota trading and other ways in which allocations are adapted during the year.

An advantage of this approach is that quota would likely be allocated to those fleet segments who have the capacity and capability to fish it. If someone has fished that type of quota in the past we can reasonably assume they will be able to make use of that type of quota again in future.

Disadvantages include the fact that those fleet segments that did not have access to quota in the past would not have been able to build a track record. This could perpetuate imbalances within the quota system and not meet our proposed aim of a fairer distribution.

There are further challenges with this option including that uptake varies year on year depending upon circumstances other than quota holdings i.e. fishermen do not catch exactly the same number of fish each year. This could make it difficult to establish a baseline that is seen as fair.

Option 4: Capacity

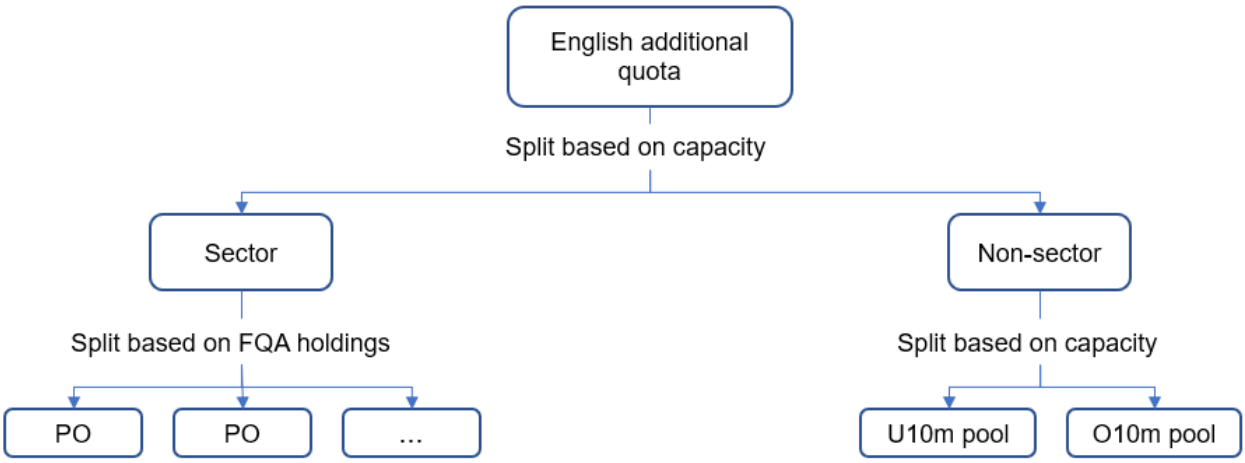


Figure 5: England quota allocation process map: Capacity

Another option is to use capacity. There are different ways we can define and measure this. One way of measuring capacity is to use the number of vessels in each fleet segment. However, this would not work well because vessels can be very different from each other. Even where they catch the same species. For example, a small boat handlining for mackerel is very different to an 80m pelagic trawler.

Other ways we could define capacity include using the gross engine power or gross vessel tonnage of each fleet segment. We have used both in our modelled example in Annex 4.

Advantages of this approach include basing allocations on the future potential of a fleet segment to catch quota rather than their history of doing so. This is an advantage because historical measures are affected by previous imbalances in quota distribution.

Disadvantages include the risk that it could lead to parts of the fleet getting quota that they are unable to catch. As with option 2, this may be a particular issue for the under 10m pool.

Capacity-based allocations may also have long-term impacts on fishing behaviour, including incentivising some fishermen to increase capacity and disincentivising others from decreasing their capacity. It is difficult to predict exactly how behaviour would change.

There are also questions about exactly how to define capacity and how we deal with issues like latent capacity. Each definition is likely to result in different proportions of quota being allocated to different parts of the fleet. More detail on this can be found within Annex 4.

Option 5: Hybrid option

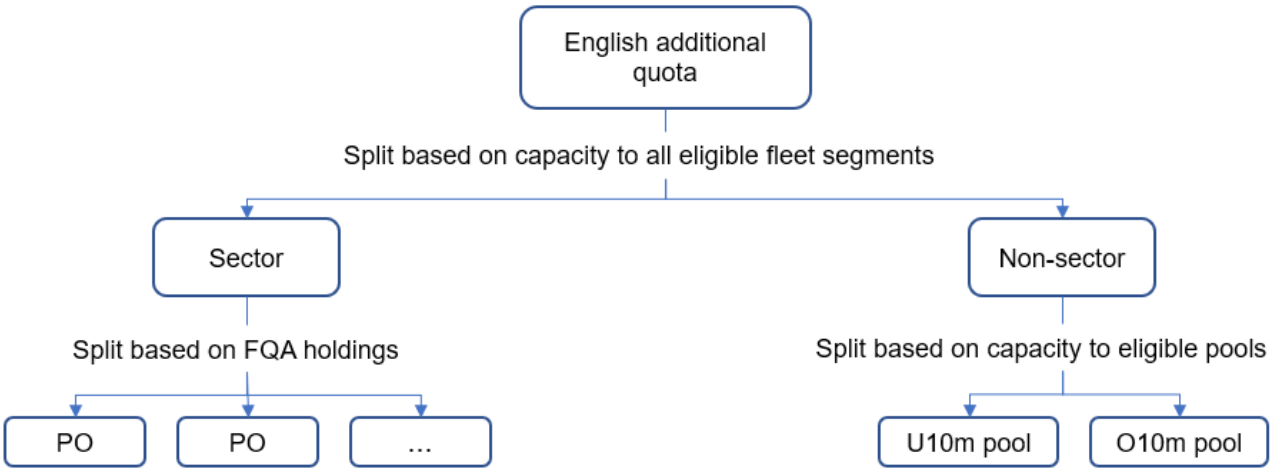


Figure 6: England quota allocation process map: hybrid option

Another option is to use a hybrid of some of the above options. Our proposal here is to use a capacity-based approach similar to option 4 but with an additional criterion to ensure quota is not allocated to those fleet segments who cannot use it.

Under this option we would determine which stocks are important to the sector and which are important to the non-sector:

- If a stock is only important to the sector, it would be split between them using FQA units. None of it would go to the non-sector.
- If a stock is only important to the non-sector, it would be split between the pools based on capacity. None of it would go to the sector.
- Where a stock is important to both the sector and non-sector, it would be split between them using capacity. The quota would then be split within the sector and non-sector as above.

For this option, as well as the questions about capacity in option 4, we would need to decide how to determine which stocks are important.

On balance, this may be our preferred option as it seems to best deliver on our proposed aims. But before we could decide to do this, we would need to do more work to understand how best to define capacity and to determine which stocks are important.

Helping us identify the right option

No decisions have been made about what option we should use to allocate additional quota in England.

We have set out 5 different options on how this could be done and we want your view to help us identify the right option.

QUESTION 3 – What do you think about each of the five options? In particular, which option do you think best delivers on our proposed aims?

QUESTION 4 – What do you think about using FQA units to split sector quota between producer organisations in 2021?

QUESTION 5 – How could we best define capacity if we used this for allocation? Which factors should we take into account and why?

QUESTION 6 – How could we determine which stocks are important to different fleet segments?

QUESTION 7 – Should all stocks be allocated using the same method? Why?

Allocating additional quota beyond 2021

Beyond 2021, we have other ideas we would like to explore. These include allocating quota to those who can best demonstrate they meet certain sustainability standards and other criteria. This would help meet our proposed aim of incentivising good behaviours and innovation. We may also want to allocate quota to trial specific management approaches as detailed in the next section.

We would also like to explore market based approaches such as auctions. We are currently seeking powers in the Fisheries Bill to use auction and tender processes for English quota. However, this option has not been considered for 2021 because we do not currently have these powers. It is important to note that any auction may not be done on price or only price. There are other elements that could be used, such as demonstration of sustainability or benefits to the local economy.

Another option to explore beyond 2021 is something for new entrants. We know quota is not the only challenge for new entrants. There are also needs for capital investment in vessels and gear, securing a fishing licence and training. But there may be a way we can reserve quota to act as an incentive to help them enter the industry.

In the 2018 white paper we also said that we would explore reserving quota to tackle the problem of choke species. We are currently not proposing this as an option for 2021 as we cannot effectively develop a stock specific approach without knowing the negotiation outcome. However, we are keen to hear your views on whether this should be considered in future.

QUESTION 8 – Beyond 2021, should we create a new reserve of quota for new entrants? How could this work?

QUESTION 9 – Beyond 2021, should we create a new reserve of quota to help tackle the problem of choke species? How could this work?

5. How we manage quota

Additional quota provides an opportunity to trial not only new approaches to allocations, but also to develop alternative methods to managing quota during the fishing year. In particular, we want to explore ways we can enable decisions to be made closer to those affected.

It should be noted, that any development of new management approaches will require trailing, evaluation and iterative development over time.

Community trials

A previous pilot scheme in 2012/13 and the Future of our Inshore Fisheries Conference report of 2020, have shown that there is an appetite for community quota management schemes. Our recent engagement has reinforced this message and shown a desire for more regional approaches to quota management and ideas for things like community plans.

We would like to explore this area further. We believe that community groups can have a positive impact on the environmental, social and cultural sustainability of coastal communities and also provide greater flexibility to fishermen in relation to issues such as poor weather.

It is important to learn the lessons from the previous pilot scheme - what worked well and what didn't. We have found one key issue affecting the previous pilots was the lack of available quota. The additional quota we secure in future provides a unique opportunity to overcome that issue and to explore these types of scheme further.

We hope to pilot such schemes using a collaborative, partnership approach. We would like to see fishermen creating their own community groups and working with the Marine Management Organisation and us to develop the specific arrangements for each pilot scheme. It is possible that schemes in different parts of England will vary significantly based on what works for their community. In some parts of the country it is possible that producer organisations could also play a significant role.

We expect each scheme would be provided with quota management responsibilities. This would offer fishermen the flexibility they need to improve key factors such as safety and to manage quota in a way which best suits their needs and their community.

At this stage we are seeking your views on the best way of setting up such schemes and to seek expressions of interest from those who may wish to be involved in them next year and beyond.

QUESTION 10 – How do you think we should define a community? For example, should it be focused on a port, region, type of stock or something else?

QUESTION 11 – Are you interested in participating in a community scheme trial and can we contact you about this?

Effort pilot

Industry feedback has demonstrated some interest in trialling effort to manage fishing activity. Benefits highlighted include the ability to land all catches, remove wasteful discarding and offer simplicity and flexibility for fishermen.

However, we recognise that concerns have also been expressed about this type of approach. This includes a potential 'race to fish' for valuable species, crew safety and whether effort can be managed sustainably within overall UK quota management.

Effort management has previously been trialled in England as part of the Cefas and Seafish Environmentally Responsible Fisheries project 2008-09. Effort limits are also used for managing the Western Waters and the VIIe sole recovery zone. Effort has also been used to manage other fisheries across the world, including within the Mediterranean, Faroes and Iceland - with varying results. We need to learn what we can from these examples to ensure any pilot we run has the best possible chance to succeed.

As with all quota management trials, to ensure the outcomes from any effort pilot are robust it is also important that we undertake proper evaluation. We want to work with fishermen to design these pilots, with fishermen playing an important role in helping make decisions for the benefit of the fishery and fishing communities.

At this stage, we are seeking your views on the best way of setting up such a pilot and to seek expressions of interest from those who may wish to be involved in a pilot next year or beyond.

QUESTION 12 – Are you interested in participating in an effort pilot and can we contact you about this?

Merging the non-sector pools

Currently the non-sector quota is managed in England by the Marine Management Organisation in two quota pools:

1. One pool is for vessels of 10m and under in length. We commonly refer to this as the ‘under 10m pool’.
2. The other pool is for vessels over 10m in length. We commonly refer to this as the ‘over 10m pool’ or the ‘non-sector pool’.

The non-sector quota has been split into these two pools to help their quota be managed in a way that best meets the needs of different parts of the fleet. However, it is widely recognised that vessel length alone does not determine fishing behaviour and there may be better ways of managing this.

We have heard views from some parts of industry who have suggested that the under 10m and over 10m pools could be merged. This could make our current quota management arrangements simpler. It could also make the system fairer by applying the same catch limits to all non-sector vessels.

Alternatively, we could allow the MMO greater flexibility to manage quota between the pools (including quota donated as part of the economic link – see the separate consultation on this).

But changes could have unintended consequences too. We would need to carefully explore the potential impacts on industry before deciding to make changes. And again, we would need to evaluate this to see if how well it worked. If necessary, we could make further changes following that.

We are seeking your views on whether changing how the pools are structured is a good idea and what you think the potential impacts might be.

QUESTION 13 – What do you think about merging the non-sector pools in England and why do you think that?

6. Your opportunity to contribute

This is an opportunity for you to help shape and influence our quota policy in England and the Crown Dependencies in 2021 and beyond.

About you

First name:

Last name:

Organisation (if applicable):

Postal address:

Email address:

Telephone number:

Do you wish for your name to be published alongside your response in any documents we make available to the general public as a result of this call? (Yes/No)

Summary of questions

1. What do you think about our proposed aims?

2. What do you think we should do with reserve quota in 2021 and why do you think we should do that?

3. What do you think about each of the five options? In particular, which option do you think best delivers on our proposed aims?

4. What do you think about using FQA units to split sector quota between the producer organisations in 2021?

5. How could we best define capacity if we used this for allocation? Which factors should we take into account and why?

6. How could we determine which stocks are important to different fleet segments?

7. Should all stocks be allocated using the same method? Why?

8. Beyond 2021, should we create a new reserve of quota for new entrants? How could this work?

9. Beyond 2021, should we create a new reserve of quota to help tackle the problem of choke species? How could this work?

10. How do you think we should define a community? For example, should it be focused on a port, region, type of stock or something else?

11. Are you interested in participating in a community scheme trial and can we contact you about this?

12. Are you interested in participating in an effort pilot and can we contact you about this?

13. What do you think about merging the non-sector pools in England and why do you think that?

14. Are there any other issues you think we should consider regarding quota allocation and management in England and the Crown Dependencies? Why should we consider them?

Responses

To submit your response, please complete the questionnaire available from the Citizen Space website at the following link: https://consult.defra.gov.uk/fisheries/quota-allocation-and-management-in-2021-and-beyond

Alternatively, you can send us your comments by post to:

Consultation Coordinator, Defra
2nd Floor
Foss House
Kings Pool
1-2 Peasholme Green
York
YO1 7PX

Or directly to our dedicated email account: fisheriesengagement@defra.gov.uk

Please let us have your comments by **10 November 2020**.

7. Confidentiality and data protection

This consultation is being conducted in line with the Cabinet Office "Consultation Principles" and be found at: https://www.gov.uk/government/publications/consultation-principles-guidance.

Representative groups are asked to give a summary of the people and organisations they represent and where relevant who else they have consulted in reaching their conclusions when they respond.

Information provided in response to this consultation, including personal data, may be published or disclosed in accordance with the access to information regimes these are primarily the Environmental Information Regulations 2004 (EIRs), the Freedom of Information Act 2000 (FOIA) and the Data Protection Act 2018 (DPA). We have obligations, mainly under the EIRs, FOIA and DPA, to disclose information to particular recipients or to the public in certain circumstances.

If you want the information that you provide to be treated as confidential, please be aware that, as a public authority, the Department is bound by the Freedom of Information Act and may therefore be obliged to disclose all or some of the information you provide. In view of this it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information, we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the Department.

Defra will process your personal data in accordance with the law and in the majority of circumstances this will mean that your personal data will not be disclosed to third parties. A full privacy notice is included the parts above.

Defra may publish the content of your response to this consultation to make it available to the public without your personal name and private contact details (e.g. home address, email address, etc).

Defra may also use your name and private contact details to contact you where you have expressed interest in taking part in a community trial or effort pilot.

If you have any comments or complaints about the consultation process, please address them to:

Consultation Coordinator, Defra
2nd Floor, Foss House, Kings Pool,
1-2 Peasholme Green, York, YO1 7PX

Or email: consultation.coordinator@defra.gov.uk

8. Next steps

A summary of responses to this consultation will be published on the Government website at: www.gov.uk/defra. An annex to the consultation summary will list all organisations that responded but will not include personal names, addresses or other contact details.

The response to the consultation will be communicated before the start of the 2021 fishing year.

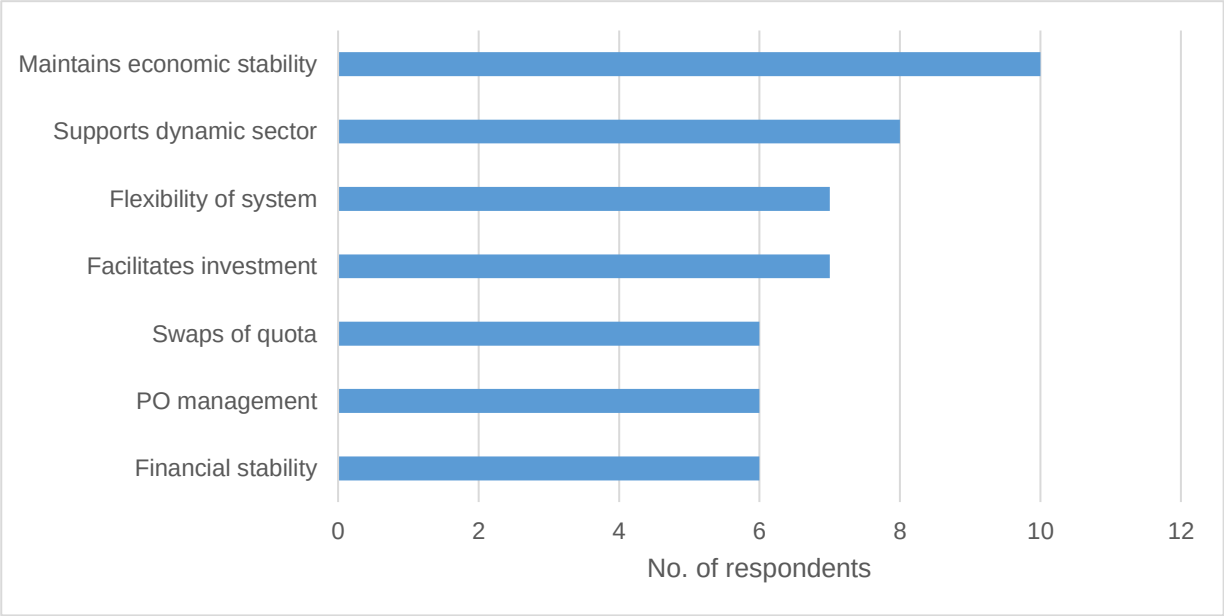
Annex 1 - Call for evidence

Defra ran an 8 week call for evidence between 19 July 2019 and 13 September 2019[7] to collect views on methods to allocate quota in England. We received 36 responses to this call for evidence. 30 of these respondents replied through the online platform (Citizen Space) and 6 submitted letters in response. Respondents included producer organisations (POs), individual fishermen and environmental organisations. Below we explore some key themes from responses to this call for evidence.

Please note that the graphs presented are based on an interpretation of the themes arising from the free-text questions within the call for evidence. Only responses entered directly into Citizen Space are included within the graphs. The number of responses to this call for evidence means that these results are not necessarily representative of the views of stakeholders more broadly.

Stability and flexibility within the current quota system

Some respondents felt that consistency within the current and future additional quota allocation systems was important for providing economic stability and facilitating investment, providing fishermen with the security needed to run a successful business. Some felt that property rights led to more sustainable fishing by those who wanted to protect their future investment. Alongside this, many respondents wanted to maintain a system which enables industry to adapt and develop, particularly through the ability to swap quotas.



[7] https://consult.defra.gov.uk/fisheries/fishing-quota-allocation-developing-a-newapproach/supporting_documents/additionalquotaconsultevidence.pdf

Figure 1: Question asked - Are there positive aspects of the current allocation model which should be replicated in the approach for allocating additional quota? This question received 25 responses on Citizen Space.

Other respondents felt that additional quota shouldn't follow the same allocation method as current quota, and we should use this opportunity to do something different. They viewed the stability within the system as leading to a lack of incentive within industry to change fishing behaviours towards better practice.

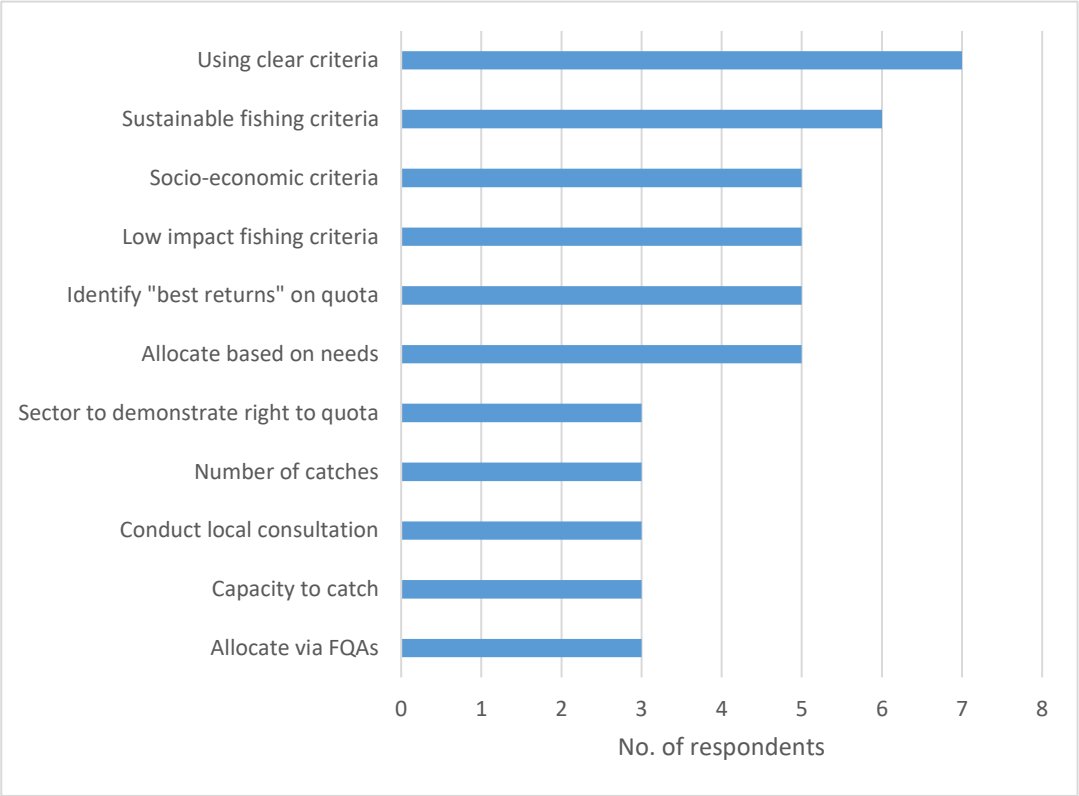


Figure 2: Question asked - Are there aspects of the current allocation model which should not be replicated in the approach for allocating additional quota? This question received 29 responses on Citizen Space

In particular, respondents commented that allocations based on historic catches and 'unfair' allocations should not be replicated within any new quota system for additional quota.

The most frequently mentioned aspect of the current system which respondents did not want to see replicated in additional quota allocations was the lack of regional or tailored allocations.

Supporting coastal communities

Despite a call for more regional quota allocation being a key theme throughout the call for evidence, there were still mixed responses to the question on how we could best support coastal communities. Concerns from respondents included whether regional allocations

would lead to sustainability issues and some questioned whether coastal communities were recoverable at all. One respondent also raised issues about coastal schemes adding to the complexity of the current system by creating a range of different allocation pots.

However, the most common response regarding how best to support coastal communities was to adopt a more holistic approach which supported local infrastructure and markets, providing opportunities for local and co-management of stocks, as well as ensuring availability of stocks in the local area. A clear message here was that support for communities needed to extend beyond quota.

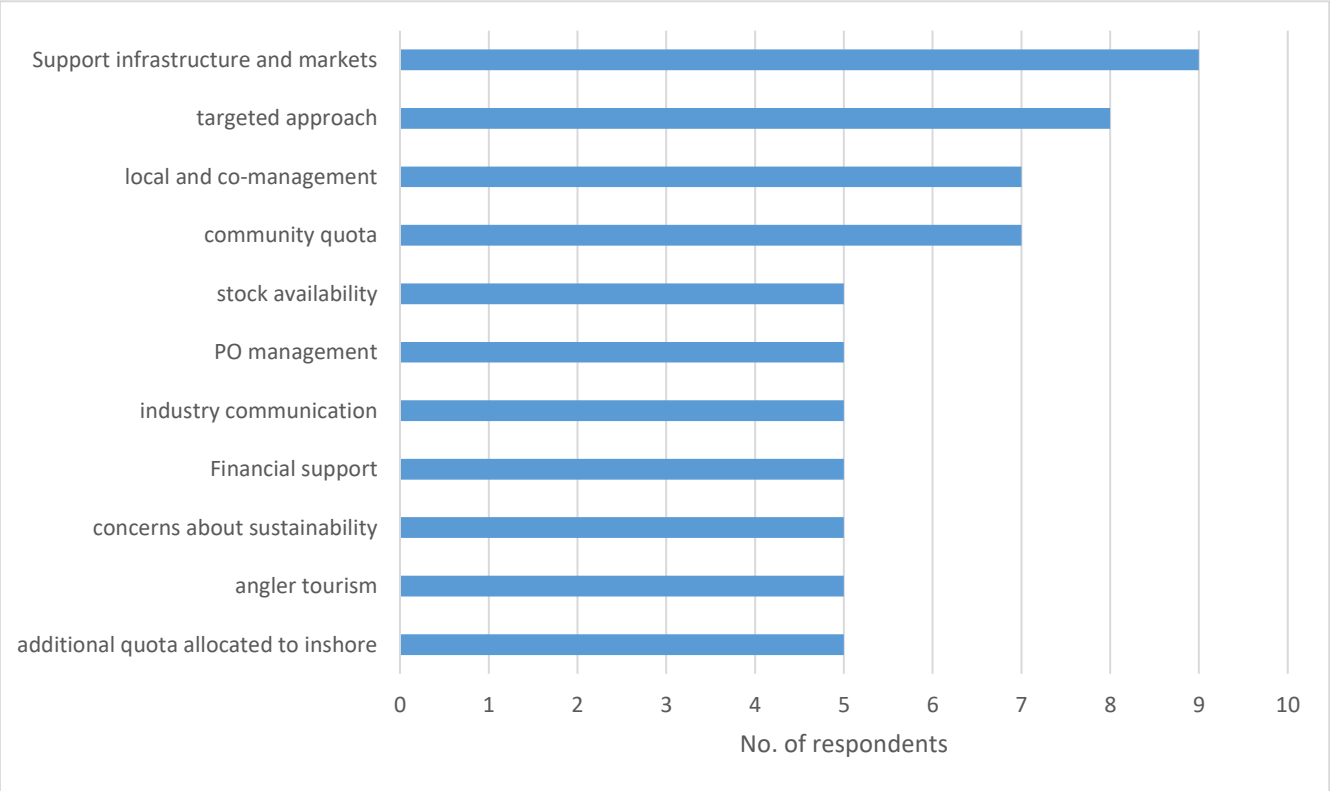


Figure 3: Question asked - How could we best support coastal communities with additional quota? This question received 28 responses on Citizen Space.

Identifying recipients for additional quota

When asked how we could identify recipients for additional quota respondents highlighted a need for clear criteria. This theme arose throughout the call for evidence. However, there was no clear consensus around determining who should get any additional quota. Suggestions ranged from supporting sustainable or low-impact fishing, to socio-economic criteria, to allocations based on needs of fishermen.

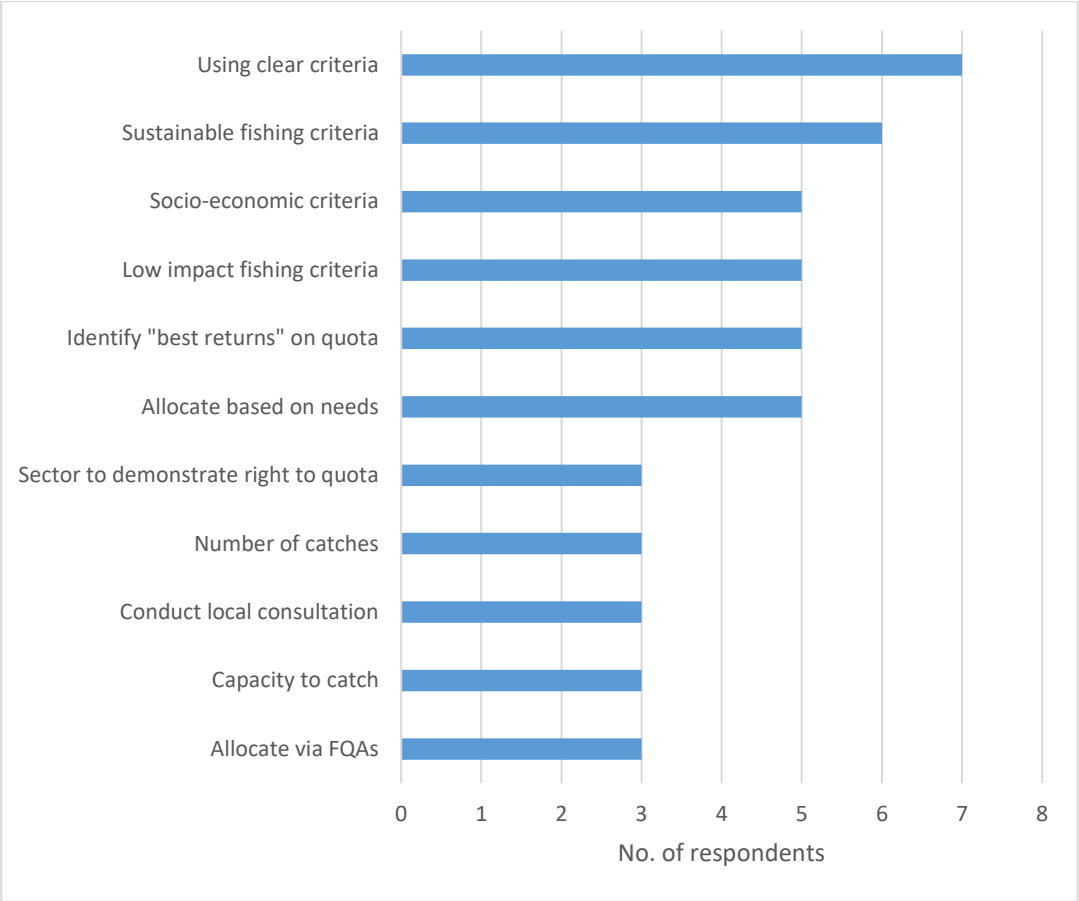


Figure 4: Question asked - How could we identify groups or individuals that could use additional quota and determine why they need this quota? This question received 28 responses on Citizen Space.

Determining capacity for additional quota

The majority of responses to a question regarding how we could determine the capacity of the fleet to catch additional quota suggested that the current fleet had capacity to catch more already, or that increases in quota will lead to increases in capacity. Some suggestions were put forward around how capacity could be determined, these included considering the wider infrastructure in place, market demands and regional capacities.

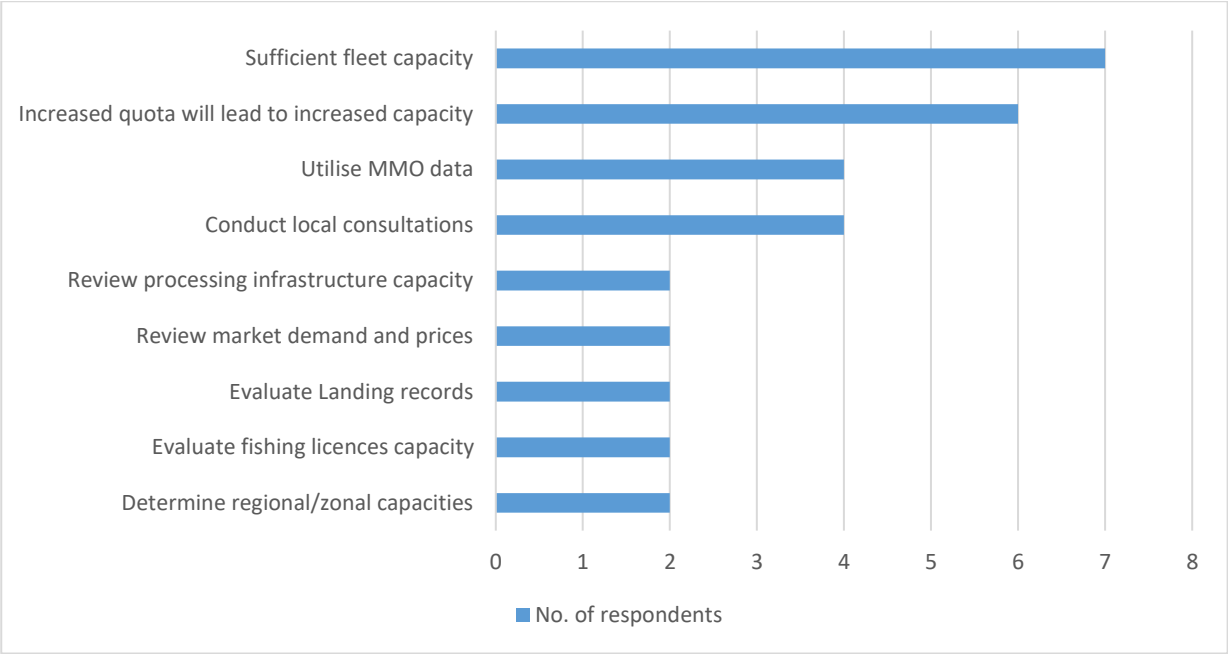


Figure 5 Question asked - How could we determine the capacity of the current fleet to catch additional quota? This question received 23 responses on Citizen Space.

Alternative allocation models

Respondents highlighted a variety of global quota allocations methods that could be considered in the UK. However, it was noted on a number of occasions that no alternative model would directly fit the context of UK fisheries. Examples of alternative allocation models included:

Individual transferable quota (ITQ) systems

Global examples of ITQs were presented, where quota was allocated to individual fishermen rather than to producer organisations. Suggested benefits of the ITQs included restoring declining fisheries and reducing overcapacity within the fleet. However, they also have been cited to create problems including consolidation of quota, risk of ecological damage and overexploitation of the stocks. In an attempt to address some of these issues, there were some global examples where conditions were applied to these ITQs, such as limiting the amount of quota one individual could hold within a particular species, ringfencing coastal fisheries and time-limiting ITQs.

Regional allocations

Some respondents provided global examples of community quota schemes, where local communities or local authorities purchase and distribute fish quota in a way that benefits local fishermen. The main benefits of such schemes were thought to be that quota could be kept within a local area, and accountability for it fell to the local community.

Alternative suggestions for regional allocations included territorial use-rights for fisheries. With these, users are granted exclusive access to harvesting fish within an area.

Effort trials

Respondents were asked for their views on how additional quota could be used in an effort trial. 11 out of the 13 respondents to this question were against the idea of effort-based regimes, with the key concerns being worries about safety at sea and fear of inciting a “race to fish” effect which could impact on sustainability of the fish stocks. Where there was an appetite for an effort trial, it appears to be for small-scale inshore fisheries. Respondents stressed the need for a targeted approach, stakeholder inclusion and effective monitoring.

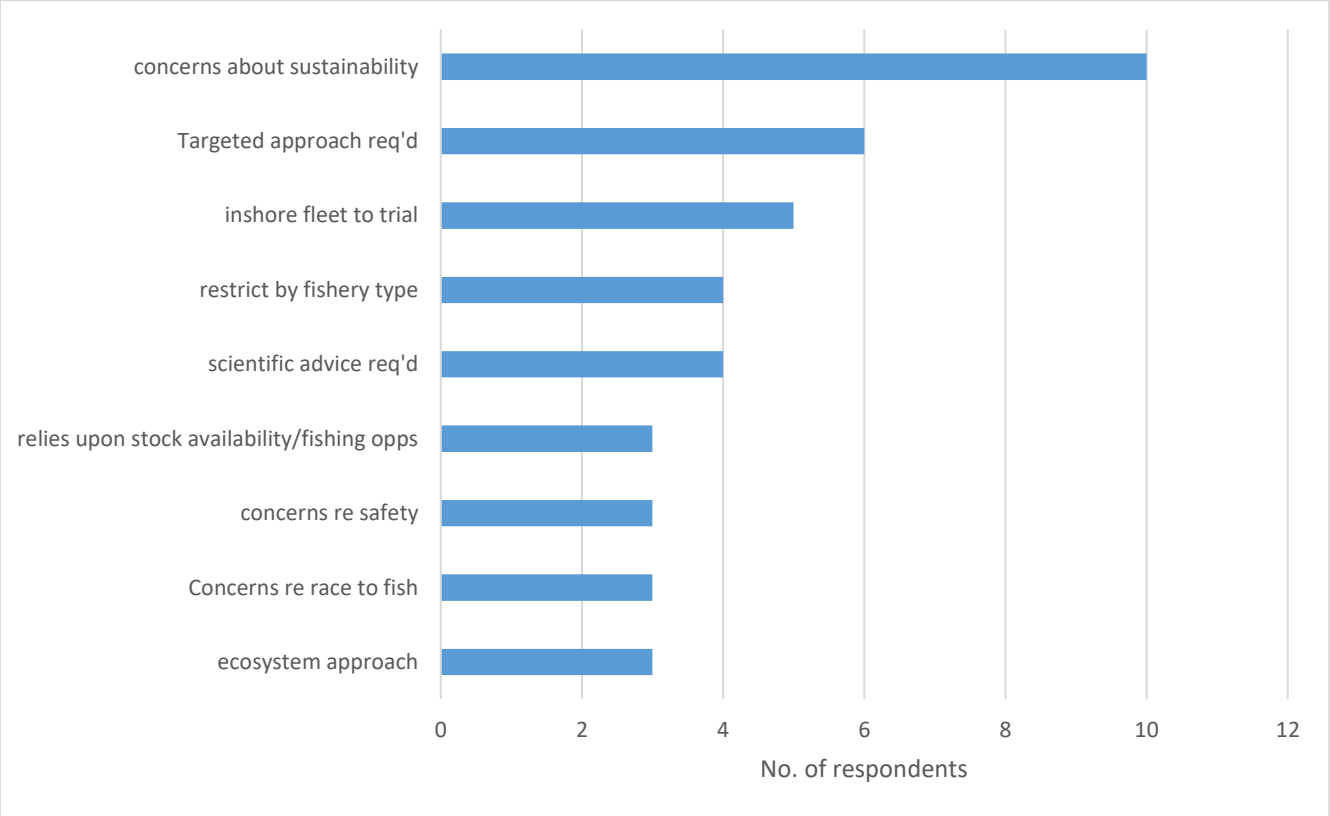


Figure 6: Question asked - How could we use additional quota in a trial to test whether fishing can be carried out sustainably under an effort-based regime? This question received 11 responses on Citizen Space.

Summary

Overall there was a lack of consensus amongst respondents regarding how additional quota should be allocated. However, some clear themes emerged around additional quota ideally being used to provide “something for everyone”, a desire for more targeted/regionalised allocations and a need to develop clear criteria for allocations.

Annex 2 - Scoping exercise results

Defra ran an informal scoping exercise during June and July 2020. The aim of this scoping exercise was to build upon our previous call for evidence and seek views on prioritising aims and methods for 2021 additional quota allocations in England.

The informal engagement included speaking to groups of individual fishers or fishing representatives within meetings; one-to-one phone conversations; email correspondence and completion of a questionnaire. In total we received 20 specific responses to the exercise. Below we explore some key themes from responses to the exercise.

Please note that the graphs presented are based on responses to the questionnaire which formed the scoping exercise. Responses are only included for those who specifically ranked the options within the exercise. Alongside these figures, an exploration of the key themes arising from surrounding engagement are outlined below. The number of responses to this call for evidence means that these results are not necessarily representative of the views of stakeholders more broadly.

Aims summary

Figure one shows the average score given to each of the aims included within the scoping exercise. It should be noted that not all respondents ranked the aims. At times, the highest scored aims did not align with the most positive comments. Scores below are ranked from 1 to 20, whereby 1 was the least important aim for the new system, and 20 was the most important aim for the system[8].

[8] Scores have been reversed for the purpose of this analysis. This is purely for presentational purposes and does not affect the outcome.

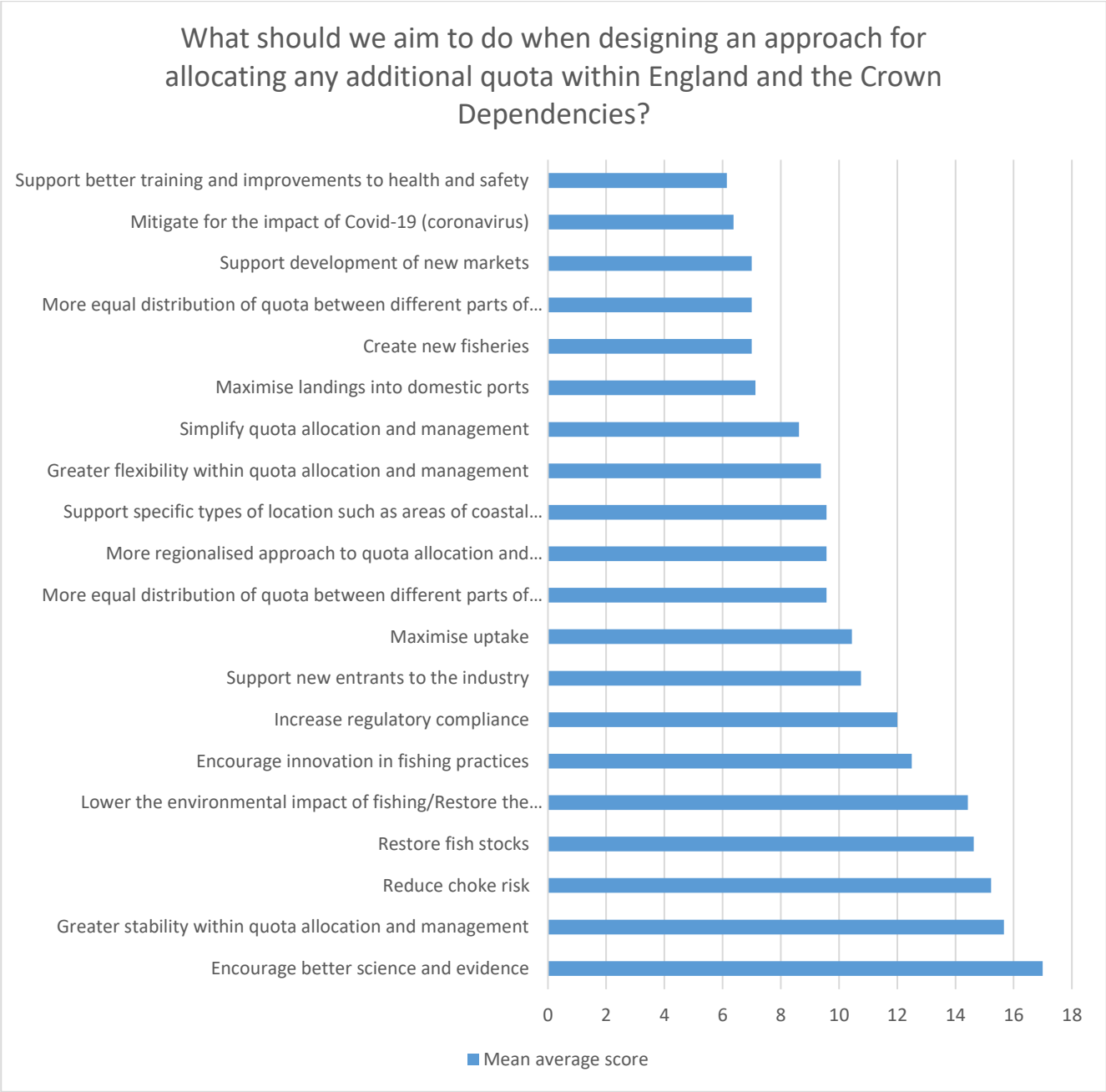


Figure 7 Average mean scores for aims within the scoping exercise

Highest scoring aims

Encourage better science and evidence

In terms of mean average, the highest scoring aim was to encourage better science and evidence. This scores an average of 17 from 8 respondents. There were differing views regarding how we could achieve this aim. Some comments stated that the current system of allocations fosters science-led decision-making. One respondent felt that additional

quota in choke stocks could lead to bycatch data becoming more reliable and therefore improving science.

Others felt science and evidence should be criteria used to determine eligibility for additional quota. Some suggested quota itself could be utilised to help support science, either through leasing of quota to fund science, or using boats as research platforms. Co-management between fishers, scientists and Defra was viewed as key for moving towards this aim.

It should be noted, that retaining quota for scientific purposes was included in the scoping exercise as a method for participants to rank. There was a degree of uncertainty around the extent to which the current scientific allocation was utilised and the demand for more. Concerns included the potential for quota to be underutilised if retained for this purpose. It therefore appeared that whilst encouraging better science and evidence scored highly as an aim, there was less appetite to achieve this through retaining quota for this purpose. One respondent suggested that alternatively any additional quota could be leased to create funding for science projects.

Greater stability within quota allocation and management

The second highest scoring aim was the need for greater stability within quota allocation and management, scoring an average of 16. There were again polarised views regarding this aim within the comments. Those supporting greater stability felt that it enabled investment and effective business planning. A couple of respondents also linked stability to sustainability. One in particular felt that any short-term allocations would be most likely to lead to races to fish in order to maximise profits and damaged stocks.

Others were less certain of this as an aim. One respondent questioned the feasibility of this aim due to the impacts of Covid-19. Another respondent supported less stable, and more time-limited additional quota allocations, to enable reallocation to those with a proven need.

Lowest scoring aims

The lowest scoring options both scored a mean average of 6.

Mitigate for the impact of Covid-19

The mean score for this option was low, at a score of 6 from 8 respondents, and comments were mixed. Some felt covid-19 was a short-term problem and therefore long-term allocation decisions should not be based on this. One respondent felt that quota would not cure the challenge of Covid-19 on the fishing industry, but that a lack of quota would make the situation even worse. Some others felt there should be more focus on

supporting the economy through allocations. In particular, one respondent focused on the need to protect, foster and rebuild businesses and jobs.

Support better training and improvements to health and safety.

The mean score for this option was 6 from 7 respondents. The majority of comments questioned how this could be achieved through quota allocations. However, some respondents did suggest options for implementing this aim, including by using any income raised through quota auctioning/leasing to support training and safety grants. Another respondent considered allocating additional quota to fisheries guaranteeing and certain level of standards.

Additional comments on aims

As not all respondents ranked the aims, some options which attracted a range of comments are outlined below.

More equal distribution of quota between different parts of the industry

Whilst this aim scored relatively low (with a mean average of ten), a range of comments addressed disparity within quota allocations. Some respondents felt that the current allocation system led to quota consolidation and disadvantaged those in the non-sector who needed to lease quota. Others specifically mentioned the non-sector over 10m fleet as a group currently disadvantaged, especially those who do not hold FQA units. However, a diverse fleet was viewed positively, with the idea that allocations should support the whole fleet, and not specific groups within it.

There was also concern around how to define equal distribution – in part due to the variances in prices of different types of stocks meaning 1 tonne did not equate to the same value for every stock. On top of these responses addressing current disparities, one response also stated that a key aim of future allocations should be distributing the benefits of leaving the EU between the whole of the UK fishing industry, ensuring no group is left worse off than before.

The scoping exercise also included some methods which could be used to achieve this aim, these included sharing quota equally between all English licence holders or between the sector and non-sector. Both these options received mixed comments. Those supportive of the methods suggested that additional quota should be righting the wrongs of the past, and that these options may lead to fairer shares of quota than utilising FQA units. However, there was also concern that quota should only go to those who can catch the fish, and the suggested methods may lead to some going unfished.

Supporting new entrants

Challenges for new entrants were thought to extend beyond quota. Comments mentioned challenges around attracting new entrants. Other comments raised broader issues including the undesirability of capped licences, the challenges of affording vessels and the lack of available FQA units for new entrants.

In developing any scheme to support new entrants' respondents mentioned the need to ensure new entrants had a business plan and that any scheme couldn't be exploited. There was a suggestion that current licence holders should have priority of any scheme, which linked to another response that there was a need for clarity in terms of what was meant by new entrants. One respondent felt that community groups could help bring in new entrants.

Methods summary

Figure two shows the average score given to each of the methods included within the scoping exercise. It should be noted that not all respondents ranked the methods. At times, the highest scored aims did not align with the most positive comments. Scores below are ranked from 1 to 20, whereby 1 was the least important aim for the new system, and 20 was the most important aim for the system9.

[9] Scores have been reversed for the purpose of this analysis

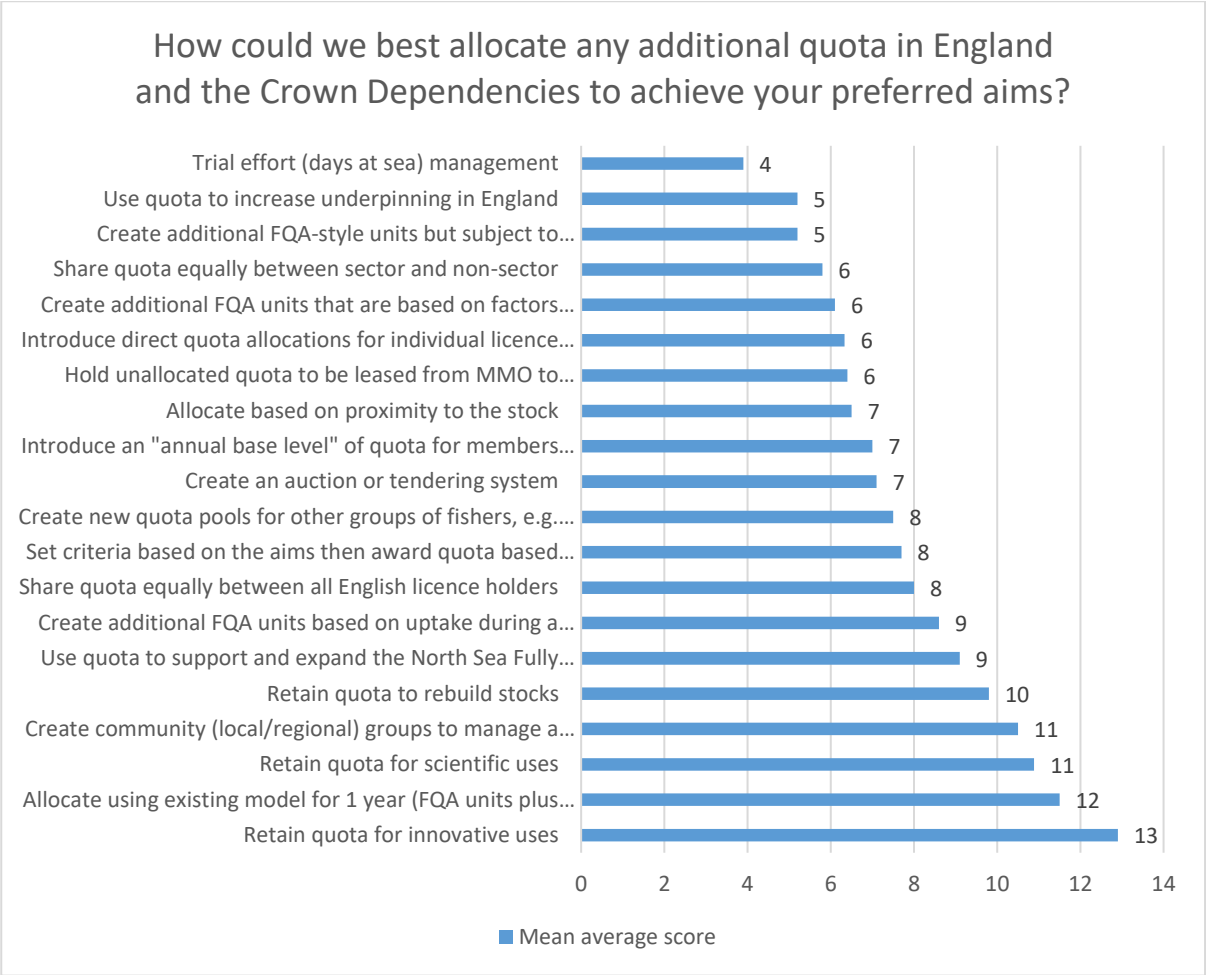


Figure 8 Average mean scores for aims within the scoping exercise

Highest scoring methods

Retain quota for innovative uses

Retaining quota for innovative uses scored highest with a mean average of 13. Comments regarding how this could be implemented included that a small scale focused pot of quota could be utilised for this purpose and there would need to be monitoring in place to ensure compliance. One respondent suggested the current fully documented fisheries scheme could be used for this purpose.

The concern with this method was that it could lead to some quota being unutilised.

Allocate using existing model for 1 year

Despite having the second highest mean average, responses to this question were polarised. Some felt that this option was sensible for a number of reasons: enabling industry stability to recover from Brexit and Covid-19; ensuring any allocation decision is

not rushed; ensuring that we understand available opportunities before making allocation decisions.

A number of concerns were raised, including that the current model does not lead to more sustainable management and would delay further decision-making regarding new approaches to allocations. Additionally there were concerns that the existing model did not work for the whole fleet, including those without FQA units. Some respondents felt that FQA allocations were based on inaccurate track records which led to an unfair split between the non-sector and the sector.

Lowest scoring methods

Trial effort (days at sea) management

This method scored a mean average of only 4 in the rankings. Concerns raised included that effort would not enable scientific analysis or benefit stocks, fishers or scientists. Some were concerned about the impact of effort controls upon fishing behaviour, feeling that they were less effective than quota/catch controls, could lead to choke of key species or create a race to fish. Others were concerns that previous trials have been unsuccessful and another tier of management would be created within the system.

However, despite the low score, some respondents were supportive of this option. Supporters discussed potentially trialling this method in small scale low impact fisheries. A key benefit of this method was perceived to be that it would enable fishers to land everything they catch and would enable restrictions of foreign vessel activity. It was suggested that gear and effort restrictions could be used to manage the inshore fleet, replacing the current pools in order to increase flexibility for this fleet.

Use quota to increase underpinning in England

The second lowest scoring method, with a mean average of 5.

The majority of concerns regarding this question reflect an imbalance between the current uptake within the under 10m pool and their allocations, with respondents feeling that many stocks are already underutilised. One respondent felt that only a small quantity is needed for this, whilst others highlighted the need for quota within the non-sector over 10m pool. As stated above, whilst a number of comments addressed disparity within the current system, increasing underpinning was not generally viewed as a way to address this.

Additional comments on methods

Create community (local/regional) groups to manage a share of quota

Respondents on this question were quite polarised. Some felt that regionalisation of the quota system, and more local focused allocations should be the primary aim of any allocations. For some this regionalisation involved more localised management, evidence gathering, ensuring local economic benefits and allocating to those based near a fishery. Others suggested that additional quota should be used to support businesses that create jobs in order to support local communities. There was a sense that allocating via FQA units did not necessarily lead to benefits within a local area. One respondent felt that the creation of community groups could create a greater sense of ownership of the stocks and lead to more sustainable fishing activities.

A suggestion for the creation of community schemes involved using the current POs rather than creating new groups. These were felt to already have strong community ties and could present plans regarding how they would achieve key aims. A couple of other respondents felt that those who were catching the fish should be the main points of contact for any community group.

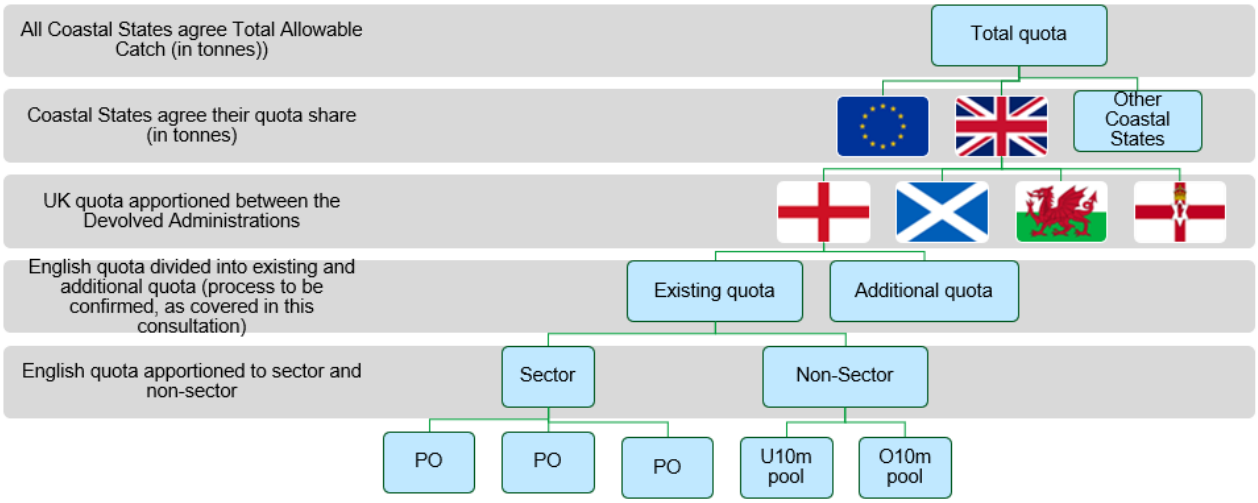
Concerns around community groups were often focused on complexity of allocations, including the potential for it to lead to more fragmented allocations, increasing the burden on quota management and questions around the legal rights for such schemes. Additionally, some questioned the interest for getting involved in such scheme and potential for this to lead to a decrease in terms of transparency and compliance.

Summary

The aim of the scoping exercise was to seek to prioritise aims and methods for allocating additional quota. Whilst some options scored highly, the number of respondents scoring these options was low and cannot be said to be representative of the fishing industry. Further, written/verbal responses to the informal engagement were nuanced and comments on many of the options were polarised. However, some themes did arise from responses which highlighted issues to be considered in future allocations. These included the need for stability in order to enable industry investment and business planning, and perceived disparities within the current allocations at both a UK and England level.

Annex 3 – How the UK and English allocation process works

The diagram below shows a simplified version of the allocations process, from agreeing the total allowable catch to allocations within England.



UK apportionment

Once the UK share of the total allowable catch has been determined, this is split across the four UK fisheries administrations. The Crown Dependencies receive their quota from the England share. The details of this are set out in the publicly available Fisheries Concordat[10] and UK Quota Management Rules.[11]

Following this split, it is up to each administration to then manage their share of the quota.

10 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69547/pb13771-fish-concordat.pdf

11 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/890051/UK_2020_QMR_-_FINAL.pdf

English allocations

Quota allocations in England follow the publicly available English Quota Management Rules.[12]

Most quota in England is allocated using fixed quota allocation (FQA) units. FQA units are an abstract, tradeable unit which represent a quota share. They do not guarantee access to a certain amount of quota.

Quota is allocated to the sector and the non-sector. The sector comprises producer organisations. They then manage this quota on behalf of their members. The non-sector comprises all other vessels. Their quota is managed by the Marine Management Organisation.

However, not all quota is allocated via FQA units. For example, the under 10m pool receives a guaranteed minimum share in certain stocks through a process known as underpinning.

12 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/890054/English_QMR_May_2020__DEFRA_.pdf

Annex 4 – Analytical model for allocating additional quota in England

a. Introduction: Why build a model?

Analysts often rely on models in order to help them understand the real world. We use simplified versions of the real world to study different outputs. They don't need all the detail and complexity of reality to still be useful.

We have constructed a model in order to illustrate some of the different impacts that allocation choices could have. This model has simplified the number of elements in the fleet and looks at only three hypothetical stocks. We will scale up this simplified version of the model for the Marine Management Organisation (MMO) to allocate additional quota within England.

b. Methodology

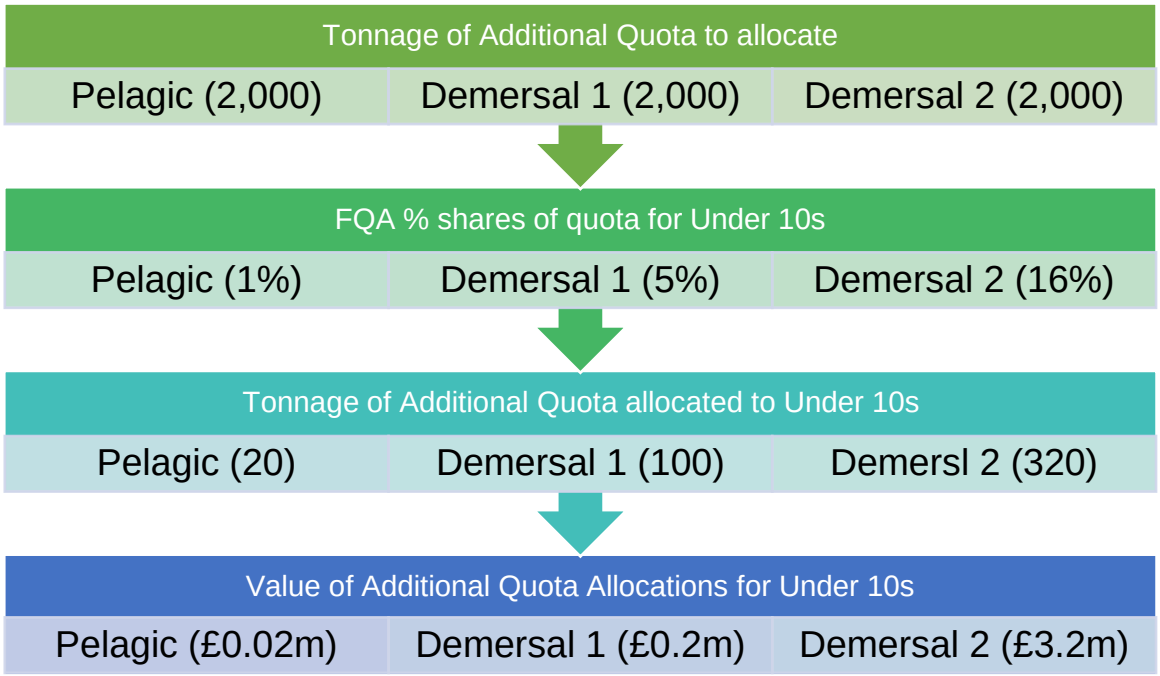
The model starts with some hypothetical additional quota secured in negotiations and then shared between the UK fisheries administrations. We will only consider the English share of this. Three hypothetical stocks are used to make up the additional quota. One pelagic stock and two different demersal stocks. We assume that each stock gets **2,000 tonnes** of additional quota. This is done to simplify the process and make the results easier to interpret. However, in reality, we wouldn't expect parity in additional quota shares. This will vary between the stocks. In addition, there are hypothetical prices for each of the stocks, along with the existing quota share amongst the fleet. **0** lists all of these assumptions and figures in further detail.

The additional quota is then allocated using the different 5 options set out in the consultation document.

iii. Options for allocations in England has a summary of these options.

The diagram below gives an example of this process. The example looks at the process for allocating additional quota to the under 10m pool if this was done using fixed quota allocation (FQA) units. Below we show an estimation of the total value of the allocation[13].

[13] See table 1 **0** for the hypothetical price/tonne figures used



i. Stocks in the model

We make use of three hypothetical stocks. One pelagic and two demersal. Pelagic fish can be found in the open ocean from the surface of the ocean down to almost the bottom. They are not typically found in large quantities in coastal waters. Examples include mackerel, herring, whiting and sardines. Demersal fish live at or near the bottom of the sea. They are mostly not found in the open ocean, instead being largely fished in coastal areas on the continental shelf. Demersal fish examples include cod, haddock, sole and skates.

The three hypothetical stocks are:

- Pelagic: A typical pelagic stock predominantly fished by sector over 10s
- Demersal 1: A typical demersal stock overwhelmingly fished by over 10s but with a sizable number of under 10s also fishing
- Demersal 2: An inshore demersal stock that under 10s predominantly rely on.

ii. Fleets in the model

Overall, the fleet used in the model is broken up into three parts. The sector is made up of 3 hypothetical producer organisations (POs). There is also a non-sector over 10m pool and there is a non-sector under 10m pool.

Fleet segment	Definition in this model
POs/Sector	**Producer Organisations (POs) are officially recognised bodies set up by fishery or aquaculture producers. They play a role in managing quotas and marketing the fisheries products of their members.**
PO1	A PO containing the majority of the pelagic over 40m vessels in the fleet. They focus on the pelagic stock. The number of vessels is lower than other POs but the higher proportion of over 40m vessels means their fleet has the highest capacity in terms of gross tonnage.
PO2	The smallest PO. They are more varied in the type of stock they can catch due to high diversity in their fleet, both in vessel size and gear.
PO3	This PO is the most populous in terms of vessel count and is largely made up of vessels on the smaller side of the over 10m group. They primarily fish demersal stocks and have the largest share of FQA units for Demersal 2.
Non-sector	**Vessels which don't belong to a PO. These vessels are split into two pools based on their vessel size: the non-sector over 10 m vessels and the under 10 m vessels. Both pools have their own allocated quota. This quota is managed by the MMO and distributed according to set catch limits.**
under 10m pool	Formed of under 10 metre vessels. This group forms one part of the non-sector. The largest group by vessel count but lower in tonnage compared to the sector. Demersal 2 is the key species and they catch very little pelagic fish.
over 10m pool	Formed of over 10 metre vessels who are not part of a PO. This pool sits alongside the under 10 metre pool to form the non-sector. Their quota is held by the MMO and managed via catch limits. They account for almost 50% of all over 10m vessels, but a small proportion of the quota the over 10m vessels own (less than 1%[14]). They also are predominantly on the smaller end of the over 10m vessels in terms of size.

[14] Source: England tab https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/886705/2020_England_-_final.xls

In order to make findings from the model reflective of the real world, the characteristics are loosely based on the real-world characteristics of the sector and non-sector. However, there are differences, including more POs, more stocks and the existence of non-quota stocks in the real world.

iii. Options for allocations in England

The model looks at five options for allocation of additional quota. These proposed options are also covered in **The additional** quota we get in future of the consultation document.

1. FQA

The additional quota allocations are based on the FQA units. This is the primary method used for allocating existing quota. The 2019 England allocations were used a reference for the hypothetical FQA shares for this option in the model.

2. Even Split

In this option the additional quota is equally shared (50/50) between the sector and the non-sector (meaning the sector gets 50% and the non-sector get 50%). Within the sector, individual PO allocations are weighted by their FQA share (i.e. the PO share of FQA out of the total sector FQA). Within the non-sector, additional quota is split between the two pools 50/50 so the over 10m pool gets 25% and the under 10m pool gets 25%.

3. Track Record

In this option the allocations are based on historic track record of catches for the sector and non-sector. This option therefore considers both swaps and other methods fleet segments can use to adapt their quota holdings in year and uptake. Once allocated to the sector, the shares for each PO are based on their FQA shares, as above.

4. Capacity

This option is split into two versions. Additional quota is allocated between the sector and non-sector based on their physical capacity, measured by either:

a. Gross tonnage: The total tonnage of all vessels within each fleet segment.

b. Engine power: The total combined power (measured in kW) of all vessels within each fleet segment.

The sector/non-sector split doesn’t vary between stocks, as both capacity measures look at the physical characteristics of vessels as a whole, not their individual behaviours. This is done for simplicity. Once allocated to the sector, the shares for each PO are based on their FQA shares.

5. Hybrid

The option is largely based on the capacity option (option 4), as the initial split between the sector, over 10m pool and under 10m pool is done with the capacity shares. And similar to the other options, the subsequent split between the POs is based on their FQA shares.

The big difference for the hybrid option is that there is an eligibility check for stocks “of importance”. The eligibility check is in place to more accurately identify stocks that both matter to the fleet segments and identify which stocks fleet segments are capable of catching. If a fleet segment doesn’t meet this eligibility check for a stock, they are excluded from the additional quota allocation process for that stock. This means that unlike for option 4, this option differs between stocks. If both the sector and non-sector are eligible for a stock, the quota will be split based on their capacity. If only one fleet segment is deemed eligible for a stock, then they will be allocated all the relevant quota.

A flowchart outlining the process can be found in the consultation document above in **section The** additional quota we get in future**, Option 5: Hybrid option.** There is also a step-by-step example of the process in **v. Option 5: Hybrid**.

Multiple measures could be used to for this eligibility check, such as gear type, uptake and track record. Each option is likely to result in different stocks being deemed eligible for the fleet segments. For illustrative purposes, this annex deems Pelagic, Demersal 1 and Demersal 2 as important for the sector, and stocks Demersal 1 and Demersal 2 important for the non-sector.

For the hybrid option in this modelling, **engine power** is used for the capacity measure as an example

c. Hypothetical data assumptions and allocations

This section lists all of the key assumptions and figures used in the model. The allocation process for POs is also discussed here.

i. Data and assumptions

Table 1: Quota assumptions

	Existing Quota Tonnage	Additional quota tonnage	Price/tonne
Pelagic	74,000	2,000	£1,200
Demersal 1	18,000	2,000	£1,500
Demersal 2	10,000	2,000	£10,000

As mentioned, the additional quota has been made equal so it’s easier to compare between the different allocation options. **The additional quota figures here are purely**

hypothetical and do not relate to any negotiations' objectives. The existing quota is hypothetical, but the difference in magnitude for the three stocks is based on historical quota allocations. The price/tonne for the stocks are used to give an estimate of the value of the hypothetical allocations for each of the groups.

Table 2: Capacity Assumptions

	Vessel Gross Tonnage Share	Engine Power Share
Sector	79%	41%
Over 10m pool	11%	11%
Under 10m pool	10%	48%

The share of gross tonnage and engine power (kW) of English administered vessels for each of the groups is shown above. The figures are partially based on tonnage data from the MMO[15].

ii. PO Allocation Share

There are a couple of important concepts when understanding how additional quota has been allocated to the POs. We talk about both the total sector share, PO share and PO sector share. This is because the PO allocations depend on how many FQA units a PO holds compared to the rest of the sector.

"Total sector share" refers to the share of FQA units that the sector holds out of the total FQA units held by the sector and non-sector.

'PO share' refers to the share of FQA units a PO holds out of the total FQA units held by the sector and non-sector.

'PO sector share' refers to the share of FQA units a PO holds out of just the FQA units held by the sector (ie. with other POs).

For example, if a PO holds 20% of total FQA units and the sector holds 50% of the total FQA units, then the total sector share is 50% and its PO share is 20%. Therefore, its PO sector share is 40% (20% divided by 50%).

[15] MMO 2018 Annual stats table 2.3
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/863732/UK_sea_fisheries_statistics_2018.pdf

d. Allocations and Results

This section shows the additional quota allocation shares for all of the different options. Total additional quota share in the tables below can be interpreted as such:

> In a hypothetical option, of the **6,000** tonnes of additional quota for the three stocks, the sector gets **91%** of additional quota and the non-sector gets **9%**. Therefore, the sector has a total additional quota share of **91%** and the non-sector has a **9%** share.

These allocations are based on the assumptions in **0**. The PO allocations in all options come from splitting the sector share between the three POs, weighted by their individual FQA shares.[16]

The results are expressed both in terms of tonnage of the additional quota allocation and the value of that allocation in £m. For reference, there is a yellow box for each option's results that gives a step-by step worked example of the calculations used from the allocation % shares to the value of the additional quota allocation. The value comes from multiplying the tonnage allocation figures by the price/tonne assumptions for each of the stocks. Note that for value, this is only theoretical, as it assumes all of the additional quota allocation was caught and sold and doesn't take into account the costs of fishing.

> **Important:** The share of benefits from additional quota in the real-life allocation will depend on *all* of the stocks, and real data on the sector and non-sector. **These allocations are hypothetical and are provided to draw out some of the differences between the options.** The 'real life' impact of options may be different.

[16] See **0** for the methodology behind allocating the sector additional quota allocation to the POs

i. Option 1: FQA

*For a summary of the option, see **section 0 option 1 and Option 1: Fixed quota allocation units.***

Table 3: Hypothetical allocation shares for the FQA option

Additional quota allocation % shares				
	Pelagic	Demersal 1	Demersal 2	**Total additional quota share**
PO 1	44%	40%	15%	**33%**
PO 2	29%	23%	24%	**25%**
PO 3	25%	30%	43%	**33%**
Over 10m pool	1%	2%	2%	**2%**
Under 10m pool	1%	5%	16%	**7%**
Summary				
Sector	98%	93%	82%	**91%**
Non-sector	2%	7%	18%	**9%**

Table 4: Hypothetical tonnage allocations for the FQA option

Allocation	**PO 1**	**PO 2**	**PO 3**	**Non-sector over 10s**	**Non-sector under 10s**	**Total**
Pelagic	880	580	500	20	20	2,000
Demersal 1	800	460	600	40	100	2,000
Demersal 2	300	480	860	40	320	2,000
Total	**1,980**	**1,520**	**1,960**	**100**	**440**	**6,000**

Table 5: Hypothetical value of allocations in the FQA option

Value of allocation (£m)	**PO 1**	**PO 2**	**PO 3**	**Non-sector over 10s**	**Non-sector under 10s**	**Total**
Pelagic	£1.1	£0.7	£0.6	£0.0	£0.0	£2.4
Demersal 1	£1.2	£0.7	£0.9	£0.1	£0.2	£3.0
Demersal 2	£3.0	£4.8	£8.6	£0.4	£3.2	£20.0
Total	**£5.3**	**£6.2**	**£10.1**	**£0.5**	**£3.4**	**£25.4**

This scenario has the additional quota allocations based on FQA units. Due to historical shares of FQA, the sector receives the largest share of additional quota. For PO 1, their FQA share of Pelagic is **44%** (see **i. Option 1: FQA**). They therefore receive the largest share of **880** tonnes of Pelagic additional quota (**44%** of **2,000**). With the price per tonne of Pelagic being **£1,200** (see **0**), this additional quota allocation is worth **£1.1m**.

PO 1 – Pelagic

FQA share (**44%**) x additional quota (**2,000 tonnes**) = **880 tonnes** of allocation

Allocation (**880 tonnes**) x Pelagic price/tonne (**£1,200**) = additional quota value of **£1.1m**

ii. Option 2: Even Split

*For a summary of the option, see **section 0 option 2 and Option 2: Equal distribution between sector and non-sector.***

Table 6 Hypothetical allocation shares for the 'even split' option

Additional quota allocation % shares				
Fleet segments	Pelagic	Demersal 1	Demersal 2	**Total additional quota share**
PO 1	22%	22%	9%	**18%**
PO 2	15%	12%	15%	**14%**
PO 3	13%	16%	26%	**18%**
Over 10m pool	25%	25%	25%	**25%**
Under 10m pool	25%	25%	25%	**25%**
Summary				
Sector	50%	50%	50%	**50%**
Non-sector	50%	50%	50%	**50%**

Table 7: Hypothetical tonnage allocations from the 'even split' option

Allocation	**PO 1**	**PO 2**	**PO 3**	**Non-sector over 10s**	**Non-sector under 10s**	**Total**
Pelagic	449	296	255	500	500	2,000
Demersal 1	430	247	323	500	500	2,000
Demersal 2	183	293	524	500	500	2,000
Total	**1062**	**836**	**1102**	**1500**	**1500**	**6,000**

Table 8: Hypothetical value in the 'even split' option

Value of allocation (£m)	PO 1	PO 2	PO 3	Non-sector over 10s	Non-sector under 10s	Total
Pelagic	£0.5	£0.4	£0.3	£0.6	£0.6	£2.4
Demersal 1	£0.6	£0.4	£0.5	£0.8	£0.8	£3.0
Demersal 2	£1.8	£2.9	£5.2	£5.0	£5.0	£20.0
Total	**£3.0**	**£3.7**	**£6.0**	**£6.4**	**£6.4**	**£25.4**

Under the even split option, the non-sector receives **50%** of all quota. This means the under 10m pool and the over 10m pool get **25%** of the total quota each. With **2,000** tonnes of each quota stock, this translates to them both getting **500** tonnes of each stock. For the sector, PO 3 marginally gets the largest amount of quota out of the 3 POs, due to them overall having the largest share of total FQAs. They also have the highest value share, due to their FQA share being heavily weighted to the most valuable stock, Demersal 2. But under this option, a large number of the stocks allocated are unlikely to be fished, especially for the under 10s. This is because this option doesn't consider capability to fish. For example, gear type, uptake and track record for the different fleet segments.

PO3 Demersal 2 allocation

To calculate PO3's Demersal 2 allocation you multiply the sector's share of additional quota by PO 3's share of the sector's share of FQA units. The FQA shares of the stocks are in **table 3**.

In the Even Split option, the sector's additional quota share is **50%** of the Demersal 2 additional quota.

The total sector share of FQA for Demersal 2 is **82%** (the rest goes to the non-sector). PO3 has **43%** of the total FQA for Demersal 2. Therefore, PO3 has **52%** (**43%** divided by **82%**) of the sector FQA.

PO3's share of the Demersal 2 additional quota **(2,000 tonnes**) is therefore **26%** (**50%** x **52%)**.

allocation share (**26%**) x additional quota (**2,000 tonnes**) = **524 tonnes** of allocation

allocation (**524 tonnes**) x Demersal 2 price/tonne (**£10,000**) = additional quota value of

iii. Option 3: Track Record

*For a summary of the option, see **0 option 3 and Option 3: Track record***

Table 9: Hypothetical allocation shares based on track record

Additional quota allocation % shares				
Fleet segments	Pelagic	Demersal 1	Demersal 2	**Total additional quota share**
PO 1	44%	40%	14%	**33%**
PO 2	29%	23%	23%	**25%**
PO 3	25%	30%	41%	**32%**
Over 10m pool	1%	2%	2%	**2%**
Under 10m pool	1%	6%	20%	**9%**
Summary				
Sector	98%	92%	78%	**89%**
Non-sector	2%	8%	22%	**11%**

The track record allocation shares are based off of hypothetical catch/uptake. As a consequence, they are very similar to the FQA allocation shares. But In practice, the allocations shares will vary depending on the measure of historic uptake you use. i.e. using 2019 figures only or a 3-year average. The PO figures, as with the other options come from their FQA share.

Table 10: Hypothetical tonnage allocations in the track record option

Allocation	PO 1	PO 2	PO 3	Non-Sector over 10s	Non-sector under 10s	Total
Pelagic	880	580	500	20	20	2,000
Demersal 1	791	455	594	40	120	2,000
Demersal 2	285	457	818	40	400	2,000
Total	**1,957**	**1,492**	**1,912**	**100**	**540**	**6,000**

Table 11: Hypothetical value of allocations in the track record option

Value of allocation (£m)	PO 1	PO 2	PO 3	Non-Sector over 10s	Non-sector under 10s	Total
Pelagic	£1.1	£0.7	£0.6	£0.0	£0.0	£2.4
Demersal 1	£1.2	£0.7	£0.9	£0.1	£0.2	£3.0
Demersal 2	£2.9	£4.6	£8.2	£0.4	£4.0	£20.0
Total	**£5.1**	**£5.9**	**£9.7**	**£0.5**	**£4.2**	**£25.4**

The track record option is similar to the baseline option, as the share of FQAs is broadly in line with the share of catch. For example, PO 1 has **40%** of the catch for Demersal 1, so receives **791** tonnes of the stock worth **£1.2m**. Which is close to the **800** tonnes PO 1 receives under the FQA option. This is more reflective of the fishing behaviour of fleet segments as actual usage of quota is taken into account i.e. swaps and catch. However, it carries a potential risk of encouraging overfishing. A “use it or lose it” incentive occurs as fleet segments are rewarded higher shares of additional quota, the higher their track record (and therefore uptake) is.

PO1 Demersal 1 allocation

To calculate PO1’s Demersal 2 allocation you multiply the sector’s share of additional quota by PO 3’s share of the sector’s share of FQA units. (The FQA shares of the stocks are in **table 3**.)

The sector’s additional quota share in the Track Record option is **92%** of the Demersal 1 additional quota.

The total sector share of FQA for Demersal 1 is **93%** (the rest goes to the non-sector). PO1 has **40%** of the total FQA for Demersal 1. Therefore, PO1 has **43%** (**40%** divided by **93%**) of the sector FQA.

PO1’s Track Record share of the Demersal 1 additional quota **(2,000 tonnes**) is therefore **40%** (**92%** x **43%)**.

Track Record (**40%**) x additional quota (**2,000 tonnes**) = **791 tonnes** of allocation

allocation (**791 tonnes**) x Demersal 1 price/tonne (**£1,500**) = additional quota value of **£1.2m**

iv. Option 4a: Capacity – Gross Tonnage

*For a summary of the option, see **section 0 option 4a and Option 4: Capacity***

Table 12: Hypothetical allocation shares based on gross tonnage

Additional quota allocation % shares				
Fleet segments	Pelagic	Demersal 1	Demersal 2	**Total additional quota share**
PO 1	35%	34%	14%	**28%**
PO 2	23%	20%	23%	**22%**
PO 3	20%	25%	41%	**29%**
Over 10m pool	11%	11%	11%	**11%**
Under 10m pool	10%	10%	10%	**10%**
Summary				
Sector	79%	79%	79%	**79%**
Non-sector	21%	21%	21%	**21%**

Table 13: Hypothetical tonnage allocations in the 'gross tonnage' capacity option

Allocation	PO 1	PO 2	PO 3	Non-Sector over 10s	Non-sector under 10s	Total
Pelagic	709	468	403	220	200	2,000
Demersal 1	680	391	510	220	200	2,000
Demersal 2	289	462	829	220	200	2,000
Total	**1,678**	**1,321**	**1,741**	**660**	**600**	**6,000**

Table 14: Hypothetical value of allocations in the 'gross tonnage' capacity option

Value of allocation (£m)	PO 1	PO 2	PO 3	Non-Sector over 10s	Non-sector under 10s	Total
Pelagic	£0.9	£0.6	£0.5	£0.3	£0.2	£2.4
Demersal 1	£1.0	£0.6	£0.8	£0.3	£0.3	£3.0
Demersal 2	£2.9	£4.6	£8.3	£2.2	£2.0	£20.0
Total	**£4.8**	**£5.8**	**£9.5**	**£2.8**	**£2.5**	**£25.4**

For the gross tonnage capacity option, the tonnage allocation is the same for each stock for the over 10m pool and under 10m pool vessels. This is because the share of tonnage doesn't differentiate between stocks. It instead represents the fleet segment's overall capacity.

For the POs however, there is variation, as the gross tonnage share is allocated to the sector as a whole (**79%**) based on capacity and is then distributed to the POs based on their FQA shares. PO 3 has the largest allocation in terms of tonnage (**1,741**) and value (**£9.5m**) as their fleet accounts for the highest share of FQAs among the POs. Overall, this

leads to the sector having the largest overall share of quota, totalling **4,740** tonnes, due to the majority of gross tonnage of English vessels belonging to the sector. However, the non-sector receives a larger share in additional quota compared to their share FQA and track record options.

PO3 Demersal 2 allocation

To calculate PO3's Demersal 2 allocation you multiply the sector's share of additional quota by PO 3's share of the sector's share of FQA. The FQA shares of the stocks are in **table 3**.

The sector's additional quota share in the Gross Tonnage Capacity option is **79%** of the Demersal 2 additional quota.

The total sector share of FQA for Demersal 2 is **82%** (the rest goes to the non-sector). PO3 has **43%** of the total FQA for Demersal 2. Therefore, PO3 has **52%** (**43%** divided by **82%**) of the sector FQA.

PO3's Gross Tonnage share of the Demersal 2 additional quota **(2,000 tonnes**) is therefore **41%** (**79%** x **52%)**.

allocation (**41%**) x additional quota (**2,000 tonnes**) = **829 tonnes** of allocation

allocation (**829 tonnes**) x Demersal 2 price/tonne (**£10,000**) = additional quota value of **£8.3m**

iv. Option 4b: Capacity – Engine Power

*For a summary of the option, see **section 0 option 4b and Option 4: Capacity.***

Table 15: Hypothetical allocation shares based on engine power

Additional quota allocation % Shares				
Fleet segments	Pelagic	Demersal 1	Demersal 2	**Total additional quota share**
PO 1	18%	18%	8%	**15%**
PO 2	12%	10%	12%	**11%**
PO 3	11%	13%	22%	**15%**
Over 10m pool	11%	11%	11%	**11%**
Under 10m pool	48%	48%	48%	**48%**
Summary				
Sector	41%	41%	41%	**41%**
Non-sector	59%	59%	59%	**59%**

Table 16: Hypothetical tonnage allocations from the 'engine power' capacity option

Allocation	PO 1	PO 2	PO 3	Non-Sector over 10s	Non-sector under 10s	Total
Pelagic	368	243	209	220	960	2,000
Demersal 1	353	203	265	220	960	2,000
Demersal 2	150	240	430	220	960	2,000
Total	**871**	**685**	**904**	**660**	**2,880**	**6,000**

Table 17: Hypothetical value of allocations from the 'engine power' capacity option

Value of allocation (£m)	PO 1	PO 2	PO 3	Non-Sector over 10s	under 10s	Total
Pelagic	£0.4	£0.3	£0.3	£0.3	£1.2	£2.4
Demersal 1	£0.5	£0.3	£0.4	£0.3	£1.4	£3.0
Demersal 2	£1.5	£2.4	£4.3	£2.2	£9.6	£20.0
Total	**£2.5**	**£3.0**	**£4.9**	**£2.8**	**£12.2**	**£25.4**

When using, engine power as opposed to gross tonnage, the under 10m pool receive a far larger allocation of **2,880 tonnes**, worth **£12.2m**. The sector also receives a smaller share worth **£10.4m**. The split between the different POs is the same as in the gross tonnage capacity options, as both options split between the POs using their FQA shares. But under this option, a smaller allocation for the sector is drawn from.

While the under 10m pool have received a lot more quota in this option, their ability to fish it all isn't guaranteed. There is a risk of the quota not being fully utilised. Similar to the gross tonnage capacity option, the engine power shares are generalised across all stocks, not specifying the fleet segment's capability of fishing specific stocks. This can vary, due to stocks requiring different gear types and different areas of capture.

Non-sector O10 – Demersal 1

engine power share (**11%**) x additional quota (**2,000 tonnes**) = **220 tonnes** allocation

allocation (**220 tonnes**) x Demersal 1 price/tonne (**£1,500**) = additional quota value of **£0.3m**

v. Option 5: Hybrid

*For a summary of the option, see **section 0 option 5 and Option 5: Hybrid option.***

Table 18: Hypothetical allocation shares for the Hybrid option

Additional quota allocation % shares				
Fleet segments	Pelagic	Demersal 1	Demersal 2	**Total additional quota share**
PO 1	45%	18%	8%	**23%**
PO 2	30%	10%	12%	**17%**
PO 3	26%	13%	22%	**20%**
Over 10m pool	0%	11%	11%	**7%**
Under 10m pool	0%	48%	48%	**32%**
Summary				
Sector	100%	41%	41%	**61%**
Non-sector	0%	59%	59%	**39%**

The Hybrid option allocation uses the engine power shares and an uptake eligibility check to determine allocations. In this example, for the over 10m pool, their Demersal 2 allocation is the same as their allocation in the engine power capacity option, but not for Pelagic. This is because the Pelagic stock was not deemed important for them and as such, they are not allocated additional quota. Similarly, for the under 10m pool, their allocation is close to the engine power capacity option, but slightly below, as they lose their pelagic allocation due to the stock not being deemed important.

Below is a step-by-step example for allocating additional quota of the Demersal 1 stock to PO 1 using the Hybrid option. It uses the fictional assumptions about capacity used in this exercise (shown in **0)**.

1. **First check eligibility.** The sector passes eligibility criteria for this stock. The And both the non-sector under 10m pool and the over 10m pool does not also meet the criteria.

2. **Sector/non-sector allocation.** The split between the sector and non-sector is based on capacity share. The sector receives **41%.** The under 10m pool is allocated their capacity share of **48%** for Demersal 1 and the over 10m pool receives their **11%** capacity share.

3. **PO level allocation.** For PO1, they own **43%** of the Demersal 1 FQAs in the sector currently. They are therefore allocated **43%** of the sector additional quota. This translates to **18%** of all the additional quota for this stock.

Table 19: Hypothetical tonnage allocations from the Hybrid option

Allocation	PO 1	PO 2	PO 3	Non-Sector over 10s	Non-sector under 10s	Total
Pelagic	898	592	510	0	0	2,000
Demersal 1	353	203	265	220	960	2,000
Demersal 2	150	240	430	220	960	2,000
Total	**1,401**	**1,035**	**1,205**	**440**	**1,920**	**6,000**

Table 20: Hypothetical value of allocations in the Hybrid option

Value of allocation (£m)	PO 1	PO 2	PO 3	Non-Sector over 10s	Non-sector under 10s	Total
Pelagic	£1.1	£0.7	£0.6	£0.0	£0.0	£2.4
Demersal 1	£0.5	£0.3	£0.4	£0.3	£1.4	£3.0
Demersal 2	£1.5	£2.4	£4.3	£2.2	£9.6	£20.0
Total	**£3.1**	**£3.4**	**£5.3**	**£2.5**	**£11.0**	**£25.4**

In this preferred option, the under 10m pool get the largest amount of quota for all stocks, totalling **£11m**. This is despite the under 10m vessels not being allocated any pelagic additional quota, due to them not meeting the eligibility criteria. For the over 10m pool, they also don't receive pelagic quota due to the eligibility criteria not being met.

But like the engine power capacity option, there is a risk that this large bump in additional quota for the under 10m pool will not all be able to be fished. The capacity share may reflect the under 10m vessels' capability to fish some stocks they're used to, such as Demersal 2. But there may be overestimates for the stocks under 10m vessels historically haven't fished as much of e.g. Demersal 1.

U10 – Demersal 1

engine power share (**48%**) x additional quota (**2,000 tonnes**) = **960 tonnes** allocation

allocation (**960 tonnes**) x Demersal 1 price/tonne (**£1,500**) = additional quota value of **£1.4m**