De-Minimis Assessment

For Self-Certified Measures in Defra

Policy teams are advised to submit this assessment to their Better Regulation Business Partner, and, once signed-off, to upload the checklist alongside the relevant entry on SIPI. The assessment will need to be self-certified by Defra's BRU G7 Economist. The RTA fields have been amended to reflect the latest Better Regulation Framework updates which have introduced a de-minimis threshold, and a self-certification and call-in process.

Title of Measure	Technical measure changes within the UK's 0-200nm
Lead Department/Agency	DEFRA
Expected Date of Implementation	January 2023
Origin (Domestic or International)	Domestic
Date of Assessment	25th May 2022
Lead Departmental Contact	Lina Dohia/Phil McBryde
RMT ID / Legislative ID	

Rationale for intervention and intended effects

Briefly summarise the reason for intervention and the intended effects of the new measure

Non-Quota Species (NQS) are stocks not subject to a Total Allowable Catch, a limit to the amount of a stock that can be caught by all fishers. They are often high-value, potentially vulnerable and generally data-poor species. The importance of NQS is recognised in the Government's draft Joint Fisheries Statement (JFS) where we highlight our intention to manage NQS in future through effort limits, fisheries closures, and technical measures. This involves limiting the time, energy or resource fishers can use, preventing the catch of certain stocks at a given time and introducing regulations on how fishers can catch NQS species respectively. The JFS also sets out our intention to prioritise the development of management approaches for NQS domestically, through Fisheries Management Plans. Longer-term, we are looking to the Channel Demersal NQS FMP to provide a framework for future management approaches. This FMP will cover a number of the species targeted by larger flyseining vessels and will overlap with certain aspects of the consultation.

This is complemented by our commitments to develop 'multi-year strategies for the conservation and management of non-quota stocks' under the UK/EU Trade and Co-operation Agreement (TCA).

Since January 2021, parts of the English inshore fleet in the Channel and the southern North Sea have raised concerns about the alleged increase in the capacity and use of 'flyseining' gear on the sustainability of demersal NQS. Demersal fish are those that inhabit the bottom of the ocean. Flyseining (also known as flyshooting or Scottish seining) is a fishing method involving long weighted ropes to herd fish into the mouth of the trawl before hauling to the vessel as it maintains its position under power. Concerns have also focused on the displacement of inshore vessels out of areas, away from traditional inshore fishing grounds within English waters (0-12 nautical miles from the coast), by larger flyseining vessels.
Both academic literature as well as our industry engagement confirm that these new super-capable seiners are targeting NQS such as red mullet and gurnards.[1]

Whilst flyseining is not a new fishing method, and previously believed to be a sustainable gear type, recent months have seen regular reports of the increased capacity of the newer fleet. The increased capacity of some vessels fishing in the Channel has become clearer, where they are targeting data-poor demersal NQS such as red mullet, gurnards and squid, and allegedly squeezing the space smaller vessels operate in, raising the risk of conflict at sea.

Unlike in other sectors, in fisheries, greater efficiency and capacity can have negative impacts, particularly on fish stocks. But also to the marine ecosystem as a whole. This is why it needs managing.

[1] Polet, H. & Depestele, J., 2010. Impact assessment of the effects of a selected range of fishing gears in the North Sea. ILVO.

Defra's Non Quota Species team is developing a public consultation for this summer to explore different technical measures and gather data to protect demersal NQS in English waters, in particular the risk posed by flyseine effort. In consulting on these proposals, we aim to explore the viability of putting in place measures to more effectively manage demersal NQS in the short term and provide more evidence to help further shape our future longer-term approach to demersal NQS management. Our aim is to put in place a cohesive approach which:

- Implements a level of protection for unmanaged, valuable, but data-poor demersal NQS; and
- Addresses the reported impact of some highly efficient fishing methods;

With very few well-developed stock assessments to determine the vulnerability or suitability of overall stocks, it is clear that NQS are in need of immediate attention. We have identified the following measures to consider applying to all vessels fishing with demersal seine gear in the English territorial waters (0-12nm from the coast) or Exclusive Economic Zone (EEZ) (0-200nm from the coast) as appropriate:

- Introducing an 'entitlement' (restricting the number of vessels) for flyseining gear in English waters (0-200nm);
- Restricting engine power to 221kW or 600kW (for 0-12nm only); and/or
- Removing the derogation to use 40mm mesh size when targeting squid (0-200nm); and/or
- Restricting vessels' rope diameter used in flyseining gear to 30-40mm (0-200nm); and/or
- Restricting vessels' rope length used in flyseining gear to 1500m (0-12nm) and 3000-3200m (12-200nm).

We chose to focus our consultation on these technical measures as a precautionary approach. We are under considerable pressure from our stakeholders to act imminently and manage fishing efforts within our inshore fleet to avoid the risk of a depleted demersal NQS. In the absence of a solid evidence base, we want to minimise any obvious fishing strain on NQS. The technical measures outlined above aim to minimise such strain.

Viable policy options (including alternatives to regulation)

Set out the live policy options that are actively being considered. This should not include the 'status-quo' option.

Option 1: Monitor the situation for a further 6-12 months

This [status quo] option would mean that we take no specific action other than to monitor the situation for another 6-12 months, to see if any evidence or patterns emerge. In the meantime, no measures or restrictions would be implemented in the English 0-200nm. It would mean that highly capable towed gear vessels would continue to have access to our waters and would be able to fish NQS in high volumes with no limits aside from those set out in the TCA (which is a trade agreement rather than a conservation agreement). It is difficult to measure the exact consequences of this option due to the lack of data and stock assessments for NQS. The issue then becomes that by the time we are able to access a comprehensive stock assessment, lack of regulation may have had a dire impact on demersal NQS stock health and any measures could come too late for fish stocks and/or fishermen.

Option 2: Self-regulation

Self-regulation entails relying on industry to regulate itself in the face of continued lack of regulation surrounding NQS fishery in the English 0-200nm.

In April 2021 Producer Organisations in France, Belgium, the Netherlands and the UK recognised the need to tackle the impact of these larger flyseine vessels operating in the Channel and southern North Sea. They put in place a voluntary agreement to limit activity where there was increased fishing pressure from these larger flyseine vessels. The voluntary agreement sought to limit activity in Area 7d by fleet size, vessel length, rope size, fishing days allowed, and spatial management in Area 7d and outside the 12-mile line off the coast of Normandy. We understand the voluntary agreement, which would have been self-monitored, collapsed by July 2021. The agreement, while short-lived, demonstrated clear concerns about the operation, or government regulation, of these larger flyseine vessels. But it also demonstrates the difficulty in getting

an agreement off the ground, and in this instance wasn't discussed with policy makers or regulators, or indeed most of those fishermen most affected on the south coast, before the agreement was put in place and shortly after collapsed.

In the event of self regulation failing and no government intervention, there would remain no restrictions to the type of vessels or gears as fishers could catch NQS using the most capable and novel mechanisms as they choose. The 'tragedy of the commons' predicts that this would result in overfishing of NQS and, in the worst case, the collapse of some NQS fisheries. Individuals fail to factor in the wider societal impacts of their consumption, or even if they are aware of them there is the incentive to increase their consumption for their own economic benefit[2].

Bass is an example of an NQS species which has previously been in critical condition due to overfishing, with conservation emergency measures necessary in 2015 by the UK government and the European Commission[3]. If we take a lesson from the management of bass, it should be that self-regulation in the face of incomplete evidence has the potential to endanger NQS stocks.

Option 3: Introduction of technical measures (preferred option)
The following options have been suggested through conversations with the fishing industry and regulators. The consultation will seek views on whether one, or more, in combination, are viable measures for managing the believed impact on demersal NQS by UK and EU demersal seines in English 0-200nm. Implementation would be through secondary legislation, or licence conditions, or a combination. The following measures would apply only to demersal seine vessels:

- Restricting engine power to 221kW or 600kW (for 0-12nm only); and/or
- Removing the derogation to use 40mm mesh size when targeting squid (0-200nm); and/or
- Restricting vessels' rope diameter used in flyseining gear to 30-40mm (0-200nm); and/or
- Restricting vessels' rope length used in flyseining gear to 1500m (0-12nm) and 3000-3200m (12-200nm).

Longer-term, we are looking to the Channel Demersal NQS FMP to provide a framework for future management approaches.

Description of Novel and Contentious Elements (if any)
Does the measure have novel or contentious elements that may attract stakeholder or political interest, or which may require additional analysis?

The measures are likely to attract criticism from the EU as the measures curtail fly seining especially in the Channel, at present this activity is commonly done by larger EU vessels. They may create licensing disputes with member states. However, they are unlikely to attract criticism from UK inshore fishers as they have argued for government intervention and should benefit from the measures by reducing the number of large EU vessels that they have to compete with and generally reducing the quantity of fish that the larger EU vessels are able to catch.

This issue has already gathered a lot of political and media attention and the measures are expected to garner further controversy as more UK and EU vessels could be restricted from accessing the 0-200nm using specific gear types.

Assessment of Impacts on Business
Describe how the business or community or voluntary sector will be affected, whether beneficially/adversely:
- *Include some quantification of the range of impact (e.g. the number and type of businesses affected, and the additional obligations that are being imposed)*
- *Indicate whether the impacts will be mainly one-off or ongoing*

[2] Fisheries are Classic Example of the "Tragedy of the Commons" (perc.org)
[3] https://ec.europa.eu/fisheries/european-commission-acts-protect-sea-bass-stock_en

- *estimate the likely costs associated with the impacts, including both monetisable and non monetisable costs*
- *give orders of magnitude of the costs, and if possible, benefits*
- *For call-in purposes, please also explain why the net impacts are below the de-minimis threshold of +/- £5m EANDCB and identify whether there are any significant gross effects despite small net impacts.*

Brief Assessment of Distributional Impacts

Will the measure have significant distributional impacts? For example, will the measure lead to a significant transfer between different business and sectors?

The measure shouldn't have any significant distributional impacts as it is most likely to change the way that existing fishers behave, but not stop any fishers from fishing. It may cause some fishers to change the species they target or the area they fish in, but this is not known.

Brief Assessment of Small Business Impacts

Will the measure lead to disproportionate burdens on small businesses?

The overwhelming majority of businesses in the UK marine catching sector are small or micro businesses, with 97% of the businesses in fishing and aquaculture employing under 10 employees[4]. Therefore, most of the businesses impacted by the proposed measures will be small or micro businesses. However, within the marine fishing sector, the measures will not have a greater impact on small and micro businesses than on larger businesses. As some of the proposed measures impose maximum gear and vessel restrictions, including a maximum engine size and maximum rope size, they will have a greater impact on the larger fishing enterprises which may have previously had vessels and gear above the new restrictions. These restrictions won't be binding for smaller vessels.

Brief Assessment of Wider Impacts

Will the measure have significant wider social, environmental, or financial impacts?

The majority of seafood caught by the UK catching sector is exported, primarily to the EU. Therefore, if the measures proposed in this consultation reduced the value of landings by the UK catching sector, it would be likely to reduce exports of UK seafood. Landings are the fish caught and retained by vessels, so in this case the value of all fish caught by the UK catching sector may be reduced, causing a potential reduction in exports.

Summary of monetised impacts

If impacts have been estimated please provide

- *Estimated Net Present Value*
- *Estimated Business Net Present Value*
- *Estimated Equivalent Annualised Net Costs to Business*
- *Appraisal period (please explain if it's different to the 10 year appraisal period typically adopted)*
- *The Price Base Year and Present Value Base Year chosen*
- *A breakdown by transitional and ongoing costs, if applicable*

The benefit from introducing one or a combination of these technical measures is the protection of vulnerable demersal NQS species into the future, to prevent extinction and allow NQS fisheries to remain open. As there are currently very few well developed stock assessments of NQS species and such a wide range of variation between species, it is not possible to accurately measure the benefits of these measures. In the consultation we will be asking respondents to help us develop the evidence baseline by telling about changes to demersal NQS stocks they have observed and if current fishing patterns or methods have had any effects on those stocks.

The main cost to business will be through reduced annual profits of fishers who are no longer able to catch NQS species in the same manner due to the technical measures introduced. It is assumed that fishers will

[4] UK business: activity, size and location - Office for National Statistics (ons.gov.uk)

change their activity to continue fishing once the new regulations are introduced, for example changing fishing gear or fishing outside the 0-12nm if impacted by the engine size measures. Their new activity may be less efficient than their activity before regulations were introduced, otherwise they would already have been fishing that way. The measures therefore may reduce the efficiency of the fishers, but as we do not know exactly how they will change activity, we also do not know the extent of the efficiency loss. Therefore, the upper limit on the cost to fishers from the introduction of these technical measures is the foregone profits from the fishing activity that would no longer be permitted under the measures. However, this upper limit is very unlikely to be realised as it would only occur if fishers simply stopped the fishing activity that was prohibited by the measures and did not increase their activity using different gears or in different fishing areas. If fishers instead adjust their activity as a result of the measures, as we expect them to, the cost to fishers will be less. Fishers would also face a one-off familiarisation cost of the time that it takes them to read the new regulations that are being implemented.

The Marine Management Organisation (MMO) have estimated total landings from UK demersal seine vessels which may be affected by the technical measures being introduced using 2021 data. MMO provided a range of theoretical extreme bounds along with their estimation. Data is only available at an ICES rectangle level, with many ICES rectangles being partially, but not fully, in the English 0-12nm (or 0-200nm). This means landings within that rectangle may or may not have been landed in the English 0-12nm(0-200nm). Landings have been apportioned to the 0-12nm (or 0-200nm) but there is uncertainty as to whether or not species was actually landed in the 0-12nm (or 0-200nm). For this reason, the estimations are not reported data and cannot give a definitive value, with the same challenges applying to the vessel count data used for familiarisation costs later. Figures for the English 0-12nm, as opposed to the 0-200nm, need to be treated with considerable caution as they have a high uncertainty. Landings value for vessels affected by both rope size measurements are not available as fishers are not required to report the rope size they currently use, meaning MMO do not have the required data. Only vessels that use demersal seine net gear may have rope sizes that are affected by the technical measures, with rope sizes varying between vessels. From MMO unpublished statistics, 17 UK vessels use demersal seine gear, which provides an upper limit on the number of UK vessels that may be impacted by the rope length or width measures. Of these 17 vessels, 5 completed most of their activity in non-English waters and at least 9 also fished with alternative gear types, and therefore would not necessarily need to buy new gear in response to the measures. This means that 17 vessels being affected by the rope measurements is very likely to be an overestimate. Reducing the rope size for demersal seine vessels will reduce their ability to pull bigger, heavier gear which remove a greater quantity of fish from the sea.

Similarly, for the squid derogation technical measure, it is likely that the vessels already have alternative gears they use or would be able to purchase alternative gear. The cost of purchasing alternative gear is not known, but hopefully information on this will be gathered in the consultation published alongside this DMA. Sensitivity analysis using upper and lower bounds provided by MMO has also been completed and is included in a table below.

The average profit margin for fishers has been calculated at 14% in 2019 using Seafish data[5]. The most recent available data come from 2020, but Covid-19 restrictions reduced fishers' profit margins during that year. 2019 was selected as a more suitable central estimation. 2020 profit margins were estimated at 8% and used as a lower bound while the segment of the fleet with the highest profit margin in 2019, at 27%, that could feasibly be affected by the measures, was selected as an upper bound for the sensitivity analysis. It is important to note that since 2019, with the effects of Covid-19, Brexit and more recently the oil price increase, profit margins within the fishing sector are already lower than 2019 levels. This means that even the central estimation of profit margins at 14% is likely to be an overestimation. Similarly, the impact of the recent oil price increase has caused a decline in fishing activity, landings and therefore profit, again decreasing the impact that these measures will have on fishers. The impact of the oil price increase is likely to have been particularly strong on demersal trawlers, as this is a relatively fuel intensive fishing method.

MMO estimated that 11 UK vessels landed fish in the English 0-200nm that would be affected by the removal of the squid derogation of 40mm mesh size limit, with a total landings value of £510,000. With a

[5] Fleet Enquiry Tool | Tableau Public

14% profit margin, the introduction of this measure would have a maximum cost to business of £71,000 per year. However, the cost is expected to be lower than this as fishers may switch fishing method rather than just reducing effort.

MMO estimated that 12 UK vessels would be affected by an engine power restriction of 221kW in the English 0-12nm, with an estimated total landings value of £1m. With a profit margin of 14%, the introduction of this measure would have a cost to business of £0.14m per year if fishers responded to the measures by just stopping fishing activity that was now prohibited and did not, for example, increase fishing outside of the 0-12mn area or change fishing method.

MMO estimated that 11 UK vessels would be affected by an engine power restriction of 600kW in the English 0-12nm, with an estimated total landings value of £0.89m. With a profit margin of 14%, the introduction of this measure would have a cost to business of £0.12m per year if fishers responded to the measures by just stopping fishing activity that was now prohibited and did not, for example, increase fishing outside of the 0-12mn area or change fishing method.

Sensitivity Analysis

Technical Measure	*Lower bound of landings value with lower estimate of profit margin (8%)*	*Central Estimate*	*Upper bound of landings value with higher estimate of profit margin (27%)*
Removing the squid derogation of 40mm mesh size limit for vessels in English territorial waters	*£0m (landings value of £0m)*	*£0.071m*	*£0.13m (landings value of £0.49m)*
Engine power restriction of 221kW to vessels in the 0-12nm	*£0 (landings value of £0)*	*£0.14m*	*£0.40m (landings value of £2.9m)*
Engine power restriction of 600kW to vessels in the 0-12nm	*£0 (landings value of £0)*	*£0.12m*	*£0.38m (landings value of £2.7m)*

It is important to remember that the upper-bound estimations are likely to be overestimations for the reasons outlined earlier.

Familiarisation costs

The familiarisation cost of these technical measures is the cost to fishers of reading the regulations. It is assumed that all vessels affected by one of the technical measures would read the regulations, with one individual from each vessel doing so. The document outlining the changes that will be used to notify fishers is estimated to be the same length as the consultation document being published alongside this DMA. The consultation document is currently still being edited but the current draft is approximately 2,000 words. Based upon the lower limit of reading technical text of 50 words per minute[6], there would be a required read time of 40 minutes per vessel. MMO estimated that there are 17 UK demersal seine vessels operating in the English 0-200nm that could be affected by the technical measures being introduced . This means the total time spent reading the document across all vessels would be 680 minutes, or 11.3 hours. Fishers normally receive a crew share rather than a fixed salary, so incomes can vary dramatically across different vessel sizes and types, but the average salary for employees in fishing and aquaculture in 2021 was

[6] EFTEC (2013), "Evaluating the cost savings to business from revised EA guidance – method paper"

£32,937[7]. There are 52.1 weeks in a year, assuming the statutory annual leave of 5.6 weeks including bank holidays[8] this leaves 46.5 working weeks. Assuming an average 36 hour working week[9], this means 1,674 hours worked a year. An average salary of £32,937 split across 1,674 hours generates a wage per hour of £19.68. At £19.68 per hour, the 11.3 hours spent reading the document across all vessels would generate a cost of £223. A 22% uplift for non-wage labour hourly costs needs to be added[10] to generate the total familiarisation costs, which will be £272, at a cost of £16 per vessel.

Source of Cost	**Value of Cost**
Limiting the engine size in the UK 0-12nm to 221Kw	£0.14 million
Removing the squid derogation of 40mm mesh size limit in the 0-200nm	£0.071 million
Familiarisation of regulation change	£272
Total Cost	***£0.21 million***

The equivalent annual net direct cost to business is £0.21 million. This doesn't include the non-quantified costs which are the costs to business from implementing the rope size restrictions, any cost to business of buying new gear or any displacement costs that result from the technical measures.

The cost to business of implementing rope size restrictions cannot be monetised as MMO doesn't collect data on the rope size that vessels use when landing fish, and so we can't estimate the cost to business of these technical measures. A small number of vessels may have one off costs of buying new gear, but this has not been quantified as we do not have data on how many vessels would be likely to respond in this way. Vessels would only buy new gear if it were more profitable than just stopping the fishing activity that was prohibited under the measures. Therefore, the costs of buying new gear would be less than the costs currently included in estimates of the annual cost to business. Displacement costs as a result of the technical measures also cannot be monetised as it is impossible to predict how fishers will adjust their behaviour following the introduction of technical measures. Without knowing the displacement that will take place because of the technical measures we can't estimate the cost of this displacement. The non-monetised costs are expected to be relatively small as they will have a large overlap with the costs to businesses that were monetised. The consultation will allow stakeholders to share their views and further evidence on the proposed technical measures in this DMA, which may generate additional data that could be used to monetise some of these costs.

The overall estimated business cost is reliant on the accuracy of the MMO estimates. As explained in the beginning of the section, exact landings values in the 0-12nm (0-200nm) are unknown, and so landings from ICES rectangles have to be apportioned to the 0-12nm (0-200nm) instead. This is not a robust assumption as there is no evidence that landings are caught equally across ICES rectangles, but there is also no evidence to suggest that landings aren't caught equally across ICES rectangles. There is no alternative to relying on this assumption due to the availability of data, even if this does limit the reliability of the results. Another key assumption is that fishers will change their activity because of the technical measures to continue fishing legally. In a worst case scenario, if this isn't the case and the technical measures cause fishers to stop fishing costs to business wouldn't exceed those estimated in the DMA, as costs to business are already estimated

[7] ONS, Earnings and Hours worked, ASHE table 4, Earnings and hours worked, all employees: ASHE Table 4 - Office for National Statistics (ons.gov.uk)

[8] Holiday entitlement: Entitlement - GOV.UK (www.gov.uk)

[9] ONS Average actual weekly hours of work for full time workers, Average actual weekly hours of work for full-time workers (seasonally adjusted) - Office for National Statistics (ons.gov.uk)

[10] RPC_short_guidance_note_-_Implementation_costs__August_2019.pdf (publishing.service.gov.uk)

at the upper limit, as the total profits of affected vessels. This assumption doesn't affect the reliability of estimates. This leads on to the assumption that the cost to businesses will be the entirety of the profits of affected vessels. This is a strong assumption as we expect fishers to change their behaviour following the technical measures, not stop fishing. By changing their behaviour, they will be able to continue fishing and making a profit, just a lower profit than before the technical measures were introduced. The profit will be lower following the behaviour change otherwise fishers would already have been fishing that way before the technical measures were introduced. Even the central estimation of costs to business is an overestimation as it doesn't account for the profits that fishers will continue to make, impacting the reliability of the estimation. The majority of the data used in this DMA is sourced from MMO, with the reliability issues outlined above in apportioning the data to the English 0-12nm (0-200nm), but the underlying data is reliable. Other data largely came from the ONS and gov.uk websites so is also reliable.

Evaluation and Monitoring

As NQS are data-poor, with stock statuses unknown for most species, there is currently no accurate baseline of stock levels which can be used to compare the result of these technical measures. As Defra's NQS evidence strategy develops and data on NQS species becomes more readily available it mayl be possible to monitor stock levels. If the stock status of NQS species is not improving, then the measures discussed in this DMA may not have been effective. However, if the stock health of NQS species is improving, then the measures would likely be contributing to that. The lack of data available for NQS species makes monitoring and evaluating this policy extremely challenging at this current time, but this data availability may improve with the introduction of the NQS evidence strategy. If this is the case, potential evaluation strategies for this policy could be investigated in the future.

An alternative way to measure and evaluate the technical measures introduced in this DMA would be to look at landings data held by MMO. If landings for NQS species have fallen due to the implementation of these technical measures, then they have been effective in protecting NQS species. Looking at the value of these landings may also enable the evaluation of the effect these measures had on fishers. However, efforts would have to be made to account for the change in activity that fishers may undertake, for example potentially switching to different species, and so a reduction in the value of NQS landings would not necessarily mean an equal reduction in the income of the fishers that these technical measures effect. MMO landings data does not capture stock health or stock statuses, or the quantity of fish caught and then discarded back into the sea, but just shows the level of fish caught and retained. For this reason, using MMO landings data to try and evaluate the effect of this policy would be misleading, and so this method cannot be taken forward as an accurate evaluation of the technical measures.

Alongside these technical measures, Remote Electronic Monitoring (REM) could be used more broadly for monitoring, data gathering or management of NQS fisheries or flyseiners. There is a separate piece of work happening to prioritise fisheries (including flyseiners and other fisheries that impact NQS) for long-term REM programmes. It is important that this is done objectively and as part of a wider programme, not least because there is a risk of challenge under the TCA if it appears that REM requirements are unfairly focused on EU vessels and could be argued to be discriminatory. Should REM be introduced in the future, this may be used as an effective tool to measure the impact that these technical measures are having on fishing activity.

Rationale for producing an DMA (as opposed to an IA)

Please summarise why an RTA was a proportionate approach to estimating the impacts of your policy option.

We are producing a DMA because the total monetised impacts fall below the £5m threshold necessary for an IA. The equivalent annual net direct cost to business of the technical measures is estimated at £1.4 million, as shown above.

	Name, Role	**Date**

Departmental sign off		
Economist sign off (senior analyst)		
Better Regulation Unit Sign off		
Confirmation of self-certification by the BRU G7 Economist		

Supporting evidence

The narrative in this section should provide evidence that supports the information in the summary template. For the majority of proposals this would be around 2-3 pages and no more than 6 pages of supporting information. The narrative should include the following items:

1. The policy issue and rationale for Government intervention

NQS are of significant economic value and the fisheries are of huge importance to local communities. In 2020, landings of NQS species made up 19% of the total quantity of landings by the UK fleet and 28% of the value[11].

However NQS, which includes all commercial shellfish apart from nephrops, are largely data-poor, compared to quota species. Many of these NQS have radically different biology to most quota species, with a mix of very short-lived species (for example, cuttlefish and squid), and more sedentary species (such as whelk, scallop, as well as finfish). The level of management applied is variable and complex, due primarily to the diverse nature and location of NQS fisheries. Given these issues we therefore have concerns about the potential vulnerability of demersal non-quota finfish and squid. Flyseine activity in the Channel and southern North Sea is specifically targeted at non-quota finfish and squid, with non-quota stocks making up around 70% of the catch. Fleet capacity has also increased over the last 12 years from around six vessels prior to 2018 to around 11 vessels in 2022[11].

The Fisheries Act 2020 clause 1[12] sets out clear objectives to provide the basis against which the fisheries policy authorities of all four UK Administrations will manage their fisheries, including around NQS stocks. The Fisheries Act sets out the precautionary objective in which the absence of sufficient scientific information is not used to justify postponing or failing to take management measures to conserve target species, associated or dependent species, non-target species or their environment'. This consultation acknowledges that while NQS are data-poor, this is not a barrier to taking action where there are concerns about the sustainability of stocks, in particular the management of some demersal NQS. Part of the intent of the consultation is, additionally, to gather more evidence and to test the anecdotal data we have heard.

Newer flyseining fleet

Since January 2021, parts of the English inshore fleet in the Channel and the southern North Sea have raised concerns about the reported increase in the capacity and use of flyseine gear on the sustainability of demersal NQS. Both academic literature as well as industry engagement confirm that these new larger flyseine vessels are targeting NQS such as red mullet and gurnards[13]. Concerns have also focused on the displacement of inshore vessels out of limited waters, away from traditional fishing grounds within English waters (0-12nm), by larger flyseine vessels.

While flyseining is a decades old, and previously sustainable method, recent months have seen regular reports of the increased capacity of the newer fleet. Flyseining (also known as flyshooting or Scottish seining) is a fishing method involving long weighted ropes to herd fish into the mouth of the trawl before hauling the net to the vessel as it maintains its position under power. Flyseiners in the Channel and southern North Sea are purpose-built seine netting vessels and/or converted beam trawlers with higher engine powers and capacity when compared to traditional Scottish flyseine vessels.

Fishermen have highlighted that the newer flyseiners have up to double the gross tonnage, engine power, rope diameter, rope weight and vessel length (up to 40m) of traditional flyseiners. The fishing technique employed by these adapted seiners, requires far more power than the traditional Scottish seine netters they were based upon. This fast technique allows for more hauls per day, and larger areas to be covered.

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[11] UK Sea Fisheries Statistics 2020 (publishing.service.gov.uk)

[11] Taking into account replacement vessels in any given year.

[12] Fisheries Act 2020 (legislation.gov.uk)

[12] Polet, H. & Depestele, J., 2010. Impact assessment of the effects of a selected range of fishing gears in the North Sea. ILVO.

Currently flyseine capacity in English waters is not restricted and vessels are free to diversify from other fishing methods to flyseine gear provided they have a valid fishing licence. The UK flyseine fleet has increased from around six vessels prior to 2018 to around 11 vessels in 2022 (taking into account replacement vessels in any given year). Concerns have also been raised about an increase in EU flyseine activity in English waters.

But these concerns are not unique to English Waters. On 12 July 2022 the European Parliament fisheries committee voted on an amendment to the EU's Access Regulation to ban Belgium and Netherlands fleets from demersal seining in French territorial waters (0-12nm). Next steps would usually mean debating this through the whole of the European Parliament, before discussions with the European Commission and European Council. Commissioner Sinkevicius has also flagged the need to guarantee a level playing field and that any rules should be applicable to all fishermen and Member States. Previously, the North Western Waters Advisory Council had previously written to the EU Commission last year asking it to address the evidence gaps related to these newer and larger flyseiners, with a view to future management measures.

And in April 2021 Producer Organisations in France, Belgium, the Netherlands and the UK recognised the need to tackle the impact of these larger flyseining vessels operating in the Channel and southern North Sea. They put in place a voluntary agreement to limit activity where there was increased fishing pressure from these larger flyseining vessels. The voluntary agreement sought to limit activity in Area VIId by fleet size, vessel length, rope size, fishing days allowed, and spatial management in VIId and outside the 12-mile line off the coast of Normandy. We understood the agreement set out the following terms:

- Maximum number of vessels allowed: France 28, Belgium 6, Netherlands 24, UK 17;
- Maximum rope length: 3,200 metres + 15% control margin;
- Maximum rope thickness and weight: 50mm and 2kg;
- Number of days at sea in ICES Area VIId to be a maximum of eight days at sea over two-week blocks;
- Minimum mesh size: 80mm;
- Belgian and Netherlands flyseining vessels to remain outside the nine-mile line from VIId and outside the 12 mile line off the Normandy coast; and
- A review to take place by September 2021 and then no more than six months apart.

We understand the voluntary agreement, which would have been self-monitored, collapsed by July 2021. The agreement, while short-lived, demonstrated clear concerns about the operation of these larger flyseining vessels.

Fisheries Management Plans

We are working with industry to develop more robust management measures for NQS targeted alongside quota stocks. Through our commitment to FMPs in the Fisheries Act, we will reform and redefine our domestic fisheries management. Five of the front-runner FMPs (crab and lobster, whelk, scallop, bass and the Channel Demersal NQS) identified in the draft Joint Fisheries Statement (JFS) are focused primarily on NQS.

The Channel Demersal FMP will cover a number of the species targeted by larger flyseining vessels and will overlap with certain aspects of this consultation. We are also working with the EU on multi-year strategies for managing activity on NQS. However, in line with the 'precautionary objective' in the Fisheries Act and concerns from the inshore industry and environmental NGOs about the operation of these larger flyseining vessels, there is a case for exploring technical conservation measures to manage potential impacts on demersal NQS in English waters ahead of the introduction of wider management through co-ordinated but phased delivery of FMPs.

2. Policy objectives and intended effects

A brief description of the intended effects of the regulatory or deregulatory proposal.

This consultation is primarily concerned with exploring different technical measures and gathering data to protect demersal NQS in English waters, in particular it focuses on the risk posed by flyseine vessel effort.

The proposed measures would support effective management of NQS in the short-term and complement future work through Fisheries Management Plans. Our aim is to put in place a cohesive approach which:

1. Implements a level of protection for unmanaged, valuable but data-poor demersal NQS; and
2. Addresses the reported impact of flyseine vessels in English waters.

3. Policy options considered, including alternatives to regulation

This should cover the main viable policy options that are actively being considered. This should include any alternatives to regulation as well as the highest cost regulatory option. This should not include the 'status-quo' option as this has no impact beyond the status quo.

Option 1: Monitor the situation for 6-12 months

This [status quo] option would mean that we take no specific action other than to monitor the situation for another 6-12 months, to see if any evidence or patterns emerge. In the meantime, no measures or restrictions would be implemented in the English 0-200nm. It would mean that highly capable towed gear vessels would continue to have access to our waters and would be able to fish NQS in high volumes with no limits aside from those set out in the TCA (which is a trade agreement rather than a conservation agreement).

It is difficult to measure the exact consequences of this option due to the lack of data and stock assessments for NQS. The issue then becomes that by the time we are able to access a comprehensive stock assessment, lack of regulation may have had a dire impact on demersal NQS stock health and any measures could come too late for fish stocks and/or fishermen.

Option 2: Self-regulation

Self-regulation entails relying on industry to regulate itself in the face of continued lack of regulation surrounding NQS fishery in the English 0-200nm.

In April 2021 Producer Organisations in France, Belgium, the Netherlands and the UK recognised the need to tackle the impact of these larger flyseine vessels operating in the Channel and southern North Sea. They put in place a voluntary agreement to limit activity where there was increased fishing pressure from these larger flyseine vessels. The voluntary agreement sought to limit activity in Area 7d by fleet size, vessel length, rope size, fishing days allowed, and spatial management in Area 7d and outside the 12-mile line off the coast of Normandy. We understand the voluntary agreement, which would have been self-monitored, collapsed by July 2021. The agreement, while short-lived, demonstrated clear concerns about the operation, or government regulation, of these larger flyseine vessels. But it also demonstrates the difficulty in getting an agreement off the ground, and in this instance wasn't discussed with policy makers or regulators, or indeed most of those fishermen most affected on the south coast, before the agreement was put in place and shortly after collapsed.

In the event of self regulation failing and no government intervention, there would remain no restrictions to the type of vessels or gears as fishers could catch NQS using the most capable and novel mechanisms as they choose. The 'tragedy of the commons' predicts that this would result in overfishing of NQS and, in the worst case, the collapse of some NQS fisheries. Individuals fail to factor in the wider societal impacts of their consumption, or even if they are aware of them there is the incentive to increase their consumption for their own economic benefit[14].

Bass is an example of an NQS species which has previously been in critical condition due to overfishing, with conservation emergency measures necessary in 2015 by the UK government and the European Commission[15].

[14] Fisheries are Classic Example of the "Tragedy of the Commons" (perc.org)
[15] https://ec.europa.eu/fisheries/european-commission-acts-protect-sea-bass-stock_en

If we take a lesson from the management of bass, it should be that self-regulation in the face of incomplete evidence has the potential to endanger NQS stocks.

Option 3: Introduction of technical measures (preferred option)

The following options have been suggested through conversations with the fishing industry and regulators. The consultation will seek views on whether one, or more, in combination, are viable measures for managing the believed impact on demersal NQS by UK and EU demersal trawls in English 0-200nm. Implementation would be through secondary legislation, or licence conditions, or a combination. The following measures would apply only to demersal trawl and seine vessels:

- Restricting engine power to 221kW or 600kW (for 0-12nm only);; and/or
- Removing the derogation to use 40mm mesh size when targeting squid (0-200nm); and/or
- Restricting vessels' rope diameter used in flyseining gear to 30-40mm (0-200nm); and/or
- Restricting vessels' rope length used in flyseining gear to 1500m (0-12nm) and 3000-3200m (12-200nm).

4. Expected level of business impact

This section should explain how the business or voluntary sector will be affected, whether beneficially/adversely as a result of intervention. It should be clear what the new proposals are, who they will impact and the likely scale of the impact.

For low-cost regulatory measures where there are a range of viable policy options, the option with the highest cost to business should be assessed.

In particular this section should include the key assumptions that have been made to support analysis of the following areas:

- *Quantification of the range of impact (e.g. the number and type of businesses affected, and the additional obligations that are being imposed)*
- *Indication of whether the impacts will be mainly one-off or ongoing*
- *Estimation of the likely costs associated with the impacts, including both monetisable and non monetisable costs*
- *The overall orders of magnitude of the costs, and if possible, benefits*

Quantification will be difficult at an early stage and attempts to provide spurious accuracy should be resisted. Where impacts cannot be reliably monetised, a qualitative description of the impacts should be undertaken. In particular, a key metric is the number of businesses that will be affected.

The measures could impact up to 17 UK vessels (businesses) depending on which technical measure or combination of technical measures are introduced. As outlined in the main body of the DMA, this has an estimated cost to business of £0.21 million pounds annually and a minimum cost of £0, the lower bound estimation if only an engine size restriction was introduced. The impacts are ongoing, except familiarisation costs, as they will affect fishing activity into the future, however, as fishers adapt to the technical measures and adjust their activity the impact should decline over time. The key non-monetisable costs that couldn't be included in the estimations above are the effects of displacement and also the cost of the rope size technical measures. The explanation for why these are non-monetisable are both outlined in the summary of monetisable impacts. Exact quantification of the impact of technical measures is unknown as the consultation process is needed to help determine which measures to introduce. The benefit from introducing these technical measures are the protection of vulnerable NQS species into the future, to prevent extinction and allow NQS fisheries to remain open. As there are currently very few well developed stock assessment of NQS species and such a wide range of variation between species, it is not possible to accurately measure the benefits of these measures.