De-Minimis Assessment update: Spatial Management Measures for Sandeel Fishing

May 2025

Introduction

In 2023, Defra launched a public consultation on spatial management measures for industrial sandeel fishing in UK waters of the North Sea. A consultation-stage De-Minimis Assessment (DMA) was published and made available to the public alongside the consultation¹. Following consultation a final-stage DMA was then produced internally by Defra. Given that the evidence gathered in the consultation responses was largely in line with the economic evidence previously presented this only included very minor changes from the consultation DMA. The final-stage DMA was made available to the Arbitration Panel and EU as an exhibit in the arbitration.

This evidence update reviews and summarises additional economic evidence and data following the 2024 closure of UK (English and Scottish) waters of the North Sea to sandeel fishing and addresses some of the concerns raised by the Tribunal. It considers the evidence that would go into an updated DMA, should the policy intervention be introduced in 2025. The 2023 DMA is appended and should be read together with this summary update. This update maintains the same structure as the earlier DMA.

¹ Sandeels DMA final.pdf

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Summary of preferred option, closure of English waters within the North Sea

	Impact type	Description/scale
Direct impacts	Value of lost catches	Revenue loss of around £30m a year to the EU
	Cost of enforcement	No expected additional costs
	Familiarisation costs	<£100
	Environmental benefits	Unmonetised. Although most ecosystem benefits will fall in UK waters, it's possible there may be spillover benefits to EU waters.
Indirect Impacts	Knock-on costs to fish processing businesses	Unmonetised. Sandeels have historically been an important input into fish meal and fish oil. Scale of impact depends on processing businesses adaptability to find alternative input sources/adjust prices. Most impacts will be in the EU, where most sandeels are landed
	Environmental benefits	Unmonetised. There may be an increase in the abundance of other commercial fish species. Whilst most ecosystem benefits will fall in UK waters, it's possible there may be spillover benefits to EU waters alongside possible displacement costs.
	Environmental costs	Unmonetised. There is a small risk that displacement of fishing to other areas, might merely shift the impact to EU waters or onto other species. The risk may be harmful if stocks are overexploited.

Table 1 - Summary of Impacts

Costs

The 2023 DMA identified three direct costs and two indirect costs. From the first year of the closure of sandeel fishing in English waters in the North Sea, there has been varying evidence as to the extent to which these costs are being realised. One new distributional impact, loss of value in Individual Transferable Quotas (ITQs), has come to light during the Tribunal hearing.

a) Direct costs to the fishing industry from reduced access to fishing grounds

In a worst case scenario, assuming that all sandeel landings from English waters will be lost, vessels may lose a predicted c.£30M per year (2023 prices) in revenue if they were unable to catch an equivalent amount of sandeel from within EU waters or of other species, whether in UK, EU or other waters. This estimate is updated from the 2023 DMA. It is based on 2015 – 2019 landing data provided to Defra by the Marine Management Organisation (MMO) and published Scientific, Technical and Economic Committee for Fisheries (STECF) landings data for 2020 – 2023. The STECF data reports on all landings caught in the UK EEZ, this is therefore an upper estimate of what is caught in the English parts of the UK EEZ. These costs all fall onto EU vessels, as the assumption remains that UK Government will continue not to allocate sandeel quota to UK vessels.

This estimate is broadly in the middle of evidence provided during consultation and correspondence by the Danish government to Defra (\pounds 13M) and the 2023 DMA (\pounds 40M, based on 2015 – 2019 landing averages, 2021 prices).

As in previous evidence provided, it remains important to note that these costs are based on values of landed fish, rather than operating profit. The costs are therefore considerably overestimated as they are based solely on revenue foregone.

Last year, the first year of the closure coming into place, the EU fished ~60% of its sandeel quota and Danish landings were similar to 2021 and 2022 volumes when there were limited catch opportunities due to low biomass (table 2). Despite this implying there are viable sandeel fisheries for the EU fleet outside UK waters, the closure in UK waters likely still limited the quota uptake and revenue potential for the EU fleet. Although this may also imply that revenue loss for the EU fleet was partially mitigated due to displacement of fishing activity into other areas, the evidence is not definitive. This is because

- there may have been natural fluctuation in sandeel numbers which can exhibit significant natural fluctuation in size and distribution²
- with only one year of data, robust conclusions cannot be drawn
- the revenue potential of the Danish fleet may still not be fully realised as uptake figures suggest the fleet has not fully utilised its available quota

² Research done jointly by Natural England, Cefas and JNCC. <u>What are the ecosystem risks and benefits of full prohibition of industrial Sandeel fishing in the UK waters of the North Sea (ICES Area IV)? (defra.gov.uk)</u>

Year	Landings (tonnes)	Notes	
2019	124,077	EU vessels have access to	
2020	237,676	UK waters for sandeel	
2021	99,094	fishing	
2022	85,473		
2023	139,810		
		UK (Scottish and English) waters close to sandeel	
2024	90,700	fishing	

Table 2 – Landings of sandeels by the Danish fleet (tonnes)³

b) Direct cost of fisheries patrol vessels and inspections

Defra have received no evidence to suggest there have been additional compliance costs beyond those previously discussed.

c) Direct familiarisation costs to the vessels

Defra have received no evidence to suggest there have been additional transitional costs associated with the vessels impacted familiarising themselves with the changes beyond those previously discussed.

d) Indirect costs to the fishing industry associated with displacement to other fishing grounds;

Defra have received no evidence to suggest there have been additional costs associated with displacement beyond those previously discussed.

e) Indirect costs to the fish processers and fishmeal importers associated with a decline in their factor input, sandeels.

EU fish processors

During the call for evidence from October to November 2021, Defra received figures from international fish processing businesses suggesting there will be indirect costs to their businesses. The figures detailed that 66% (\in 37 million) of average annual Danish export value of fishmeal and fish oil, made from sandeels, was from sandeels caught in UK waters (2016 – 2020). Evidence provided during the Arbitration Tribunal in 2025 by European Fishmeal and fish oil producers states that sandeels account for 6.5% of the raw materials historically sourced. Defra assume some of this will have historically been from English waters.

The Danish fishmeal and fish oil factories also directly employ ~500 workers in coastal communities. Although, Danish fishmeal and fish oil producers have reported up to a 48% decrease in their 2024 production compared to the pre-closure historic average, there is not definitive evidence that the sandeel closure alone caused this. As highlighted in Table 2, the level of sandeel caught in 2024 is similar to previous years of low catch limits. Furthermore, catch fluctuations in other species which are used to make fishmeal, such as Norway Pout, may have impacted production.

³ Landings - LFST

Despite this, an expected reduction in raw material supply likely disrupts the EU value chain. Associated employment and economic activity may be heavily reduced if fish processing businesses don't find alternative input sources or increase the price of fishmeal.

The information presented above was largely evidenced in some of the Amicus Curiae submissions at the sandeel arbitration. Notably from the Danish Fishers Producer Organisation, Danish Pelagic Producer Organisation, European Fishmeal and Fish oil Producers, Marine Ingredients Denmark and Swedish Pelagic Federation Producer Organisation.

Defra are not aware of any impacts to the UK fishmeal and fish oil processing sector. There were no landings of sandeel, an input into some fishmeal and fish oil, into UK ports from industrial fishing in 2021 and 2022, and between 2019 and 2023, landings averaged approximately 800 tonnes annually, worth £0.2m each year⁴. All landings were into Scottish ports.

Fishmeal importers

As identified in the 2023 DMA, the expected reduction in sandeel landings by non-UK vessels, predominantly Danish vessels, may increase the price of fishmeal and fish oil as fewer sandeels are available as a production input.

Since the 2024 closure of the sandeel fishery in English and Scottish waters, there has been no evidence of a change in the global fishmeal price due to a reduction in sandeel landings. Although Denmark is the biggest producer of fishmeal in the EU, the fishmeal global market is large – with Denmark making up 5-6% of global production⁵ and accounting for around a tenth of the UK's fishmeal imports by value⁶. Therefore, it's unlikely a possible price rise in Danish fishmeal production will increase costs for UK's fishmeal importers, such as aquaculture.

Additionally, Defra have seen no evidence to suggest a clear adverse commercial impact on UK users of fishmeal such as salmon producers in Scotland. Fishmeal and fish oil are commodities purchased from a variety of global sources and often 3-6 months in advance – so impact would not be easily spotted or proven.

f) Distributional impact to quota holders through the loss of Individual Transferable Quotas ("ITQs")

Although not initially covered in the 2023 DMA, one Amicus Curiae submission at the sandeel arbitration identified costs to quota holders. For the avoidance of doubt, this is addressed here.

With access to fewer fishing grounds, there may be a loss of value of sandeel ITQs. ITQs allow quota holders to temporarily lease quota to other fishers for a price. If the sandeel fishery becomes less profitable because of the closure, there may be less

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⁴ <u>UK sea fisheries annual statistics report 2023 - GOV.UK</u>

⁵ <u>Fishmeal+and+fish+oil.pdf</u>

⁶ 2023, Trade statistics collected by HM Revenue & Customs – available at https://www.uktradeinfo.com

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demand for ITQs, driving prices down. This means the value of businesses long term investments in ITQs may be lost. As the ITQs represent a share of the quota, and the quota represents the potential landing value of the sandeels, the impact of this will be captured in the predicted revenue foregone of the fishery (part a). The loss of value in ITQs is therefore a distributional impact and not an additional cost.

Benefits

The main benefit is improvements in the wider marine ecosystem, as summarised in the 2023 DMA and accompanying science report. This update provides additional explanation as to why the marine ecosystem benefits are not monetised, and there is therefore not a common metric to compare the costs to businesses with the environmental benefits.

There is no 'market' for healthy ecosystems and so any economic valuation is challenging. For illustrative purposes, the UK marine natural capital assets for which we can estimate a value have an asset value of £211bn⁷. This estimate includes different components of the UK marine natural capital for which data exists such as recreation, tourism, carbon sequestration and fish capture. For many services derived from the UK marine natural capital, there is not yet reliable quantifiable data which can be applied in the policy context – this includes regulating lifecycle and habitat services.

Wider Impacts

Assessment of Impact on Small and Micro Businesses

An assessment of impact on Small and Micro Businesses is now provided. Although vessels operating in the sandeel fishery are relatively large (more than 40m)⁸, a commercial fishing business is generally small or micro – employing fewer than 50-full time equivalents⁹. The ecosystem benefits associated with closing English waters of the North Sea to sandeel fishing are only achievable by applying the restrictions to all businesses. They are not expected to have a disproportionate impact on small and micro businesses.

Conclusion

This evidence update is to be read alongside the 2023 DMA. In summary, the costs of the preferred option falls predominately outwith the UK. The benefits are mainly environmental and associated with the value of the wider marine ecosystem. Sandeel landings in 2024 suggest the EU fleet may have displaced some of their fishing activity to EU waters, however the evidence is not definitive as this may be due to natural fluctuations in the sandeel stock.

⁷ Marine accounts, natural capital, UK - Office for National Statistics

⁸ What are the ecosystem risks and benefits of full prohibition of industrial Sandeel fishing in the UK waters of the North Sea (ICES Area IV)?

⁹ <u>Table 18, UK business: activity, size and location (2024);</u> shows that 96.13% of UK businesses in fishing aquaculture employ fewer than 10 employees.