

# The Potential Value to the UK Fishing Fleet of Larger Shares of the Landings from the UK EEZ

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30<sup>th</sup> April 2018





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# Summary

An analysis of available data has been carried out to provide estimates of the potential value to the UK fishing fleet of larger shares of the fish and shellfish currently landed from the UK's Exclusive Economic Zone (UK EEZ).

The results of the analysis indicate that:

- UK fishing boats caught just over one-third (36%) of all the fish and shellfish landed from the UK EEZ in 2016, with a value of about £815 million (49% of the total).
- UK fishing boats caught a further £112 million worth of fish and shellfish from other areas of the EU EEZ.
- If UK fishing boats could catch half of the principal species landed from the UK EEZ the total value of their landings would increase to about £1,000 million (a 23% increase from 2016). A 75% share would be worth about £1,300 million (a 60% increase).
- In a worst case scenario, with a complete loss of UK boats' access to the EU EEZ, a 50% share of the catch from the UK EEZ would result in a net 9% increase in the value of their landings, and a 75% share would result in a net 47% increase.
- The pelagic and demersal sectors would gain the most from an increased share of the catch from the UK EEZ. The industrial sector could see very large increases but the overall potential values would remain relatively small. The shellfish sector probably has the least to gain since it already enjoys a large share of the catch from the UK EEZ, and could experience a small net loss if it loses access to other EU waters.

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# Introduction

This analysis has been carried out at the request of the Shetland Fishermen's Association (SFA) to provide estimates of the potential values to the UK fishing fleet of larger shares of the fish and shellfish currently caught within the UK's Exclusive Economic Zone (EEZ).

This complements previous reports on landings by EU fishing boats from the UK EEZ and by UK boats from other areas of the EU EEZ<sup>1</sup>.

#### **Exclusive Economic Zones**

An Exclusive Economic Zone is a sea area defined in International Law that extends up to 200 nautical miles (371 km) from the coast. The outer limit of the EEZ, and the area of the EEZ, are sometimes referred to as the '200-mile limit' or the 'fisheries limit'. Within its EEZ a country is entitled to control the exploitation of fish and shellfish, as well as other economic resources such as oil and gas, and minerals. Under the European Common Fisheries Policy (CFP) the United Kingdom ceded control of fisheries within the UK EEZ to the European Union.

Where the Exclusive Economic Zones of two adjacent nations overlap, a Median Line is defined equidistant from the two nations' coastlines to separate their respective zones. (For example, the boundary of the UK and Norwegian EEZs is a median line drawn down the middle of the North Sea.)

The area of the United Kingdom's Exclusive Economic Zone is shown in Figure 1.

<sup>&</sup>lt;sup>1</sup> Available at: <u>www.uhi.nafc.ac.uk/eez-reports</u>





Figure 1 The United Kingdom Exclusive Economic Zone (EEZ), overlain by ICES statistical rectangles. (As defined in The Exclusive Economic Zone Order 2013, SI 2013-3161.)



# **Data and Analysis**

## Data

The weights of fish and shellfish landed from the United Kingdom's EEZ by UK and EU fishing boats, and of fish landed by UK fishing boats from outside of the UK EEZ, were estimated from data published by the European Commission's Scientific, Technical and Economic Committee for Fisheries (STECF)<sup>1</sup>.

These data gave the live weight of all landings from the North-East Atlantic (FAO Area 27)<sup>2</sup> by UK and EU fishing boats in 2016, broken down by area, species, nationality, year and ICES statistical rectangle<sup>3</sup>.

These data did not include landings by non-European Union fishing boats (such as Faroe or Norway).

The values of landings were estimated from their weights using average prices ( $\pounds$  per tonne) of UK landings of each species, calculated from data published by the UK's Marine Management Organisation (MMO)<sup>4</sup>. These data included the total weight and value of each species landed in the UK by UK and foreign fishing boats.

Where the MMO data did not provide a value for a specific species an average value for the relevant species group was used.

#### Landings by Non-EU Fishing Boats

Data on landings of fish and shellfish from the UK EEZ by non-EU (Faroese and Norwegian) fishing boats were not available. The amounts of fish and shellfish landed from the UK EEZ by Faroese and Norwegian fishing boats were estimated by reference to the agreed quotas for those nations' fishing vessels fishing in the European Union EEZ (including the UK EEZ)<sup>5</sup>.

<sup>&</sup>lt;sup>1</sup> Available through the Joint Research Centre's (JRC) Data Collection Framework data portal at: <u>steef.jrc.ec.europa.eu/data-dissemination</u>

<sup>&</sup>lt;sup>2</sup> FAO Area 27 (North-East Atlantic) encompasses all waters north of latitude 36° N (Straits of Gibraltar) and between longitudes 40° W (southern tip of Greenland) to 68°30' E (northern tip of Novaya Zemlya), including the Baltic but excluding the Mediterranean.

<sup>&</sup>lt;sup>3</sup> For the purposes of fisheries data collection and reporting, the International Council for the Exploration of the Sea (ICES) divides the waters around Europe into 'statistical rectangles' (see Figure 1). These rectangles are one degree of longitude (east-west) by half a degree of latitude (north-south).

<sup>&</sup>lt;sup>4</sup> Available at: <u>www.gov.uk/government/uploads/system/uploads/attachment\_data/file/647578/Landings\_data\_by</u> <u>Exclusive\_Economic\_Zone\_for\_all\_UK\_registered\_vessels\_2016.xlsx</u>

<sup>&</sup>lt;sup>5</sup> Bilateral agreements between the EU and the Faroe Islands (<u>ec.europa.eu/fisheries/cfp/international/agreements/faeroe\_islands</u>) and the EU and Norway (<u>ec.europa.eu/fisheries/cfp/international/agreements/norway</u>)



For the purposes of this analysis it was assumed that 75% of the quotas allocated to these vessels in the EU EEZ were caught in the UK EEZ.

# Analysis

#### **Estimation of Current Landings from UK EEZ**

The weight of each species landed from each ICES statistical rectangle in 2016 by UK and EU fishing boats were determined from the STECF data. The weight and value of landings of each species by UK boats from other areas of the EU EEZ were also estimated.

ICES rectangles were classified as being inside or outside of the UK or EU Exclusive Economic Zones (EEZs). Where a rectangle lies partly within an EEZ the proportion of the area of the rectangle within the EEZ was estimated.

The total weight and value of each species landed from the UK EEZ by UK and EU fishing boats were estimated by summing the weights landed from all of the statistical rectangles that fell wholly or partly within the UK EEZ. Where only part of a rectangle lay within the UK EEZ the proportion of the landings from that rectangle caught within the UK EEZ was assumed to be equal to the proportion of the area of the rectangle that lay within the EEZ. (For example, if 40% of the area of a rectangle lay within the UK EEZ then 40% of the weight of fish landed from that rectangle was assumed to have been caught in the UK EEZ.

The estimated weights landed by UK and EU fishing boats were combined with those estimated for Faroese and Norwegian boats to provide estimates of the overall total landings from the UK EEZ The value of landings of each species was estimated from their weights using average prices for UK landings derived from the MMO data.

#### **Estimation of Potential Future Landings**

All calculations were carried out at the level of individual species.

For each of the principal species landed from the UK EEZ in 2016 the total weight and value of the landings and the UK share of the totals were estimated.

For each species the potential value of potential 'target' shares of the landings from the UK EEZ by UK boats were estimated by firstly estimating the weight of each share; and then estimating the potential value based on the average value of landings of that species by UK boats in 2016.

Where the 'target' share was less than the current (2016) UK share, the projected share was taken to be equal to the current share (that is, it was assumed that the UK fleet would not catch less fish in the UK EEZ than it does are present).



To allow for a worst case scenario (complete loss of access for UK boats to other areas of the EU EEZ), an amount equal to the UK fleet's landings of each species from other areas of the EU EEZ was deducted from the predicted values under each scenario.

The estimated total net values for each species were then summed across species groups and overall.

The analysis predicted the potential value to the UK fishing fleet if it was able to catch the following shares of the fish and shellfish landed from the UK EEZ:

- ♦ 50%
- ♦ 75%
- 84% the 'Norwegian Scenario' (Norwegian fishing boats are believed to catch about 84%<sup>1</sup> of the fish and shellfish landed from the Norwegian EEZ).
- 95% the 'Icelandic Scenario' (Icelandic fishing boats catch about 95%<sup>2</sup> of the fish and shellfish landed from the Icelandic EEZ).
- ♦ 100%

The results for each species were summed to obtain total for each species group and overall for all fish and shellfish.

<sup>&</sup>lt;sup>1</sup> Statement by Sheryll Murray MP (Hansard: <u>https://goo.gl/FK2oYh</u>).

<sup>&</sup>lt;sup>2</sup> Calculated from published Icelandic fisheries statistics.



# Results

Please note: all of the figures presented below for species groups have been derived by summing the results of calculations for individual species within those groups. They may differ, therefore, from what might be expected if the calculations were performed directly on the species group totals.

## All Fish and Shellfish

It is estimated that a total of about 1.63 million tonnes of fish and shellfish of all species were landed from the UK EEZ in 2016, with an estimated value of about £1,700 million (Figure 2). UK fishing boats are estimated to have caught just over one-third (36%) of all the fish and shellfish landed from the UK EEZ, or just under half (49%) by value.

UK fishing boats are also estimated to have landed about 83,000 tonnes of fish and shellfish, with a value of about £112 million, from other areas of the EU EEZ (Figure 2).

It is predicted that a 50% share of the fish and shellfish landed from the UK EEZ would be worth just over £1,000 million to the UK fishing fleet, almost one quarter (23%) more than in 2016 (Figure 3, Table 1).

If UK fishing boats lost all access to other areas of the EU EEZ they would lose landings of about £112 million reducing the predicted net value of 50% of the landings from the UK EEZ to £891 million, 9% more than in 2016 (Table 1).

A 75% share of the fish and shellfish landed from the UK EEZ would be worth a predicted £1,306 million to the UK fishing fleet, almost two-thirds (60%) more than in 2016 (Figure 3, Table 1). Even if a complete loss of access to the EU EEZ is assumed the net value to the UK fleet of a 75% share would be about £1,195 million, 47% more than in 2016 (Table 1).

An 84% share of the fish and shellfish landed from the UK EEZ (the 'Norwegian Scenario') would be worth a predicted £1,427 million (a 75% increase), or £1,316 million (+75%) if loss of access to the EU EEZ is assumed (Figure 3, Table 1).

A 95% share of the fish and shellfish landed from the UK EEZ (the 'Icelandic Scenario') would be worth a predicted £1,677 million (a 96% increase), or £1,483 million (+82%) if loss of access to the EU EEZ is assumed (Figure 3, Table 1).



#### ALL Fish and Shellfish



# **United Kingdom EEZ**

All Fish & Shellfish	Weight ( '000 t.	)	Value ( £ m )	
UK Boats	585.0	<mark>36</mark> %	£814.7	49%
EU Boats	793.5	49%	£677.6	41%
Faroese Boats (FO)	42.5	3%	£26.7	2%
Norwegian Boats (NO)	207.9	13%	£150.0	9%
TOTAL	1,628.8		£1,669.0	
UK Boats in EU EEZ	83.4		£111.6	

Figure 2 Breakdown of the estimated weights and values of fish and shellfish landed from the UK EEZ by UK, EU, Faroese and Norwegian fishing boats in 2016. The estimated weight and value of fish and shellfish landed from elsewhere in the EU EEZ by UK boats is also shown for comparison.





- Figure 3 The current (2016; left bar) and predicted potential values of landings of all fish and shellfish from the UK EEZ by UK fishing boats under different shares of the total. The line (right axis) shows the predicted increases in the value of landings by UK boats relative to the current for the various scenarios.
- Table 1The current and predicted potential values of landings of all fish and shellfish<br/>from the UK EEZ by UK fishing boats under different shares of the total. Rows<br/>show: the potential (gross) value of UK boats' landings under each scenario;<br/>the potential (gross) gain; the potential loss to UK boats in other areas of the<br/>EU EEZ; the potential net value; and the potential net gain

		Aspirational Share (UK EEZ)				EZ)
£ million	2016	50%	75%	84%	95%	100%
Potential Value (UK EEZ)	£815	£1,003	£1,306	£1,427	£1,595	£1,677
Potential Gain (UK EEZ)	£0	£188	£492	£612	£780	£863
Potential Gain (%)	0%	23%	60%	75%	96%	106%
Value from EU EEZ	£0	£112	£112	£112	£112	£112
Potential Net Value	£815	£891	£1,195	£1,316	£1,483	£1,566
Potential Net Gain	£0	£145	£410	£520	£673	£753
Potential Net Gain (%)	0%	9%	47%	61%	82%	92%



## **Pelagic Fish**

It is estimated that a total of just over 1 million tonnes of pelagic fish were landed from the UK EEZ in 2016, with an estimated value of about £675 million (Figure 4). UK fishing boats are estimated to have caught just under one-third (30%) of all the pelagic fish landed from the UK EEZ, or just over one-third (35%) by value.

UK fishing boats are also estimated to have landed about 42,000 tonnes of pelagic fish, with a value of about £17 million, from other areas of the EU EEZ (Figure 4).

It is predicted that a 50% share of the pelagic fish landed from the UK EEZ would be worth £338 million to the UK fishing fleet, 42% more than in 2016 (Figure 5, Table 2).

If UK fishing boats lost all access to other areas of the EU EEZ they would lose landings of about £17 million reducing the predicted net value of 50% of the landings from the UK EEZ to £320 million, 34% more than in 2016 (Table 2).

A 75% share of the pelagic fish landed from the UK EEZ would be worth a predicted  $\pounds$ 506 million to the UK fishing fleet, more than double that in 2016 (+113%; Figure 5, Table 2). Even if a complete loss of access to the EU EEZ is assumed the net value to the UK fleet of a 75% share would be about £251 million, still more than double that in 2016 (+105%; Table 2).

An 84% share of the pelagic fish landed from the UK EEZ (the 'Norwegian Scenario') would be worth a predicted £567 million (a 138% increase), or £549 million (+131%) if loss of access to the EU EEZ is assumed (Figure 5, Table 2).

A 95% share of the pelagic fish landed from the UK EEZ (the 'Icelandic Scenario') would be worth a predicted £641 million (a 169% increase), or £624 million (+162%) if loss of access to the EU EEZ is assumed (Figure 5, Table 2).



### **Pelagic Fish**



# **United Kingdom EEZ**

Pelagic Fish	Weight ( '000 t.	t )	Value ( £ m )	
UK Boats	314.2	30%	£238.1	35%
EU Boats	561.9	54%	£339.9	50%
Faroese Boats (FO)	33.4	3%	£24.0	4%
Norwegian Boats (NO)	136.8	13%	£72.9	11%
TOTAL	1,046.4		£674.9	
UK Boats in EU EEZ	41.7		£17.5	

Figure 4 Breakdown of the estimated weights and values of pelagic fish landed from the UK EEZ by UK, EU, Faroese and Norwegian fishing boats in 2016. The estimated weight and value of pelagic fish landed from elsewhere in the EU EEZ by UK boats is also shown for comparison.





- Figure 5 The current (2016; left bar) and predicted potential values of landings of pelagic fish from the UK EEZ by UK fishing boats under different shares of the total. The line (right axis) shows the predicted increases in the value of landings by UK boats relative to the current for the various scenarios.
- Table 2The current and predicted potential values of landings of pelagic fish from the<br/>UK EEZ by UK fishing boats under different shares of the total. Rows show:<br/>the potential (gross) value of UK boats' landings under each scenario; the<br/>potential (gross) gain; the potential loss to UK boats in other areas of the EU<br/>EEZ; the potential net value; and the potential net gain

		Aspirational Share (UK EEZ)				EZ)
£ million	2016	50%	75%	84%	95%	100%
Potential Value (UK EEZ)	£238	£338	£506	£567	£641	£675
Potential Gain (UK EEZ)	£0	£100	£268	£329	£403	£437
Potential Gain (%)	0%	42%	113%	138%	169%	183%
Value from EU EEZ	£0	£17	£17	£17	£17	£17
Potential Net Value	£238	£320	£489	£549	£624	£657
Potential Net Gain	£0	£85	£251	£311	£386	£419
Potential Net Gain (%)	0%	34%	105%	131%	162%	176%



### **Demersal Fish**

It is estimated that a total of about 315,000 tonnes of demersal fish were landed from the UK EEZ in 2016, with an estimated value of about £585 million (Figure 6). UK fishing boats are estimated to have about two-fifths of all the demersal fish landed from the UK EEZ (40% by weight, 42% by value).

UK fishing boats are also estimated to have landed about 32,000 tonnes of demersal fish, with a value of about £72 million, from other areas of the EU EEZ (Figure 6).

It is predicted that a 50% share of the demersal fish landed from the UK EEZ would be worth £322 million to the UK fishing fleet, 32% more than in 2016 (Figure 7, Table 3).

If UK fishing boats lost all access to other areas of the EU EEZ they would lose landings of about £72 million reducing the predicted net value of 50% of the landings from the UK EEZ to £249 million, only slightly (2%) more than in 2016 (Table 3).

A 75% share of the demersal fish landed from the UK EEZ would be worth a predicted £445 million to the UK fishing fleet, almost double that in 2016 (+82%; Figure 7, Table 3). Even if a complete loss of access to the EU EEZ is assumed the net value to the UK fleet of a 75% share would be about £373 million, still 53% more than in 2016 (Table 3).

An 84% share of the demersal fish landed from the UK EEZ (the 'Norwegian Scenario') would be worth a predicted £499 million (a 104% increase), or £426 million (+75%) if loss of access to the EU EEZ is assumed (Figure 7, Table 3).

A 95% share of the demersal fish landed from the UK EEZ (the 'Icelandic Scenario') would be worth a predicted £564 million (a 131% increase), or £492 million (+100%) if loss of access to the EU EEZ is assumed (Figure 7, Table 3).



#### **Demersal Fish**



# **United Kingdom EEZ**

I	Demersal Fish	Weight ( '000 t.	t )	Value ( £ m )	
	UK Boats	125.8	40%	£244.2	42%
	EU Boats	129.7	41%	£266.0	45%
	Faroese Boats (FO)	0.5	0%	£0.7	0%
	Norwegian Boats (NO)	59.8	19%	£74.4	13%
	TOTAL	315.9		£585.2	
	UK Boats in EU EEZ	31.8		£72.1	

Figure 6 Breakdown of the estimated weights and values of demersal fish landed from the UK EEZ by UK, EU, Faroese and Norwegian fishing boats in 2016. The estimated weight and value of demersal fish landed from elsewhere in the EU EEZ by UK boats is also shown for comparison.





- Figure 7 The current (2016; left bar) and predicted potential values of landings of demersal fish from the UK EEZ by UK fishing boats under different shares of the total. The line (right axis) shows the predicted increases in the value of landings by UK boats relative to the current for the various scenarios.
- Table 3The current and predicted potential values of landings of demersal fish from<br/>the UK EEZ by UK fishing boats under different shares of the total. Rows<br/>show: the potential (gross) value of UK boats' landings under each scenario;<br/>the potential (gross) gain; the potential loss to UK boats in other areas of the<br/>EU EEZ; the potential net value; and the potential net gain

		Aspirational Share (UK EEZ)				EZ)
£ million	2016	50%	75%	84%	95%	100%
Potential Value (UK EEZ)	£244	£322	£445	£498	£564	£593
Potential Gain (UK EEZ)	£0	£77	£201	£254	£320	£349
Potential Gain (%)	0%	32%	82%	104%	131%	143%
Value from EU EEZ	£0	£72	£72	£72	£72	£72
Potential Net Value	£244	£249	£373	£426	£492	£521
Potential Net Gain	£0	£49	£140	£183	£247	£277
Potential Net Gain (%)	0%	2%	53%	75%	101%	113%



### Shellfish

It is estimated that a total of about 160,000 tonnes of shellfish were landed from the UK EEZ in 2016, with an estimated value of about £384 million (Figure 8). UK fishing boats are estimated to have caught most of the shellfish landed from the UK EEZ (87% by weight, 86% by value).

UK fishing boats are also estimated to have landed about 10,000 tonnes of shellfish, with a value of about £22 million, from other areas of the EU EEZ (Figure 8).

As the UK fishing fleet already accounts for a relatively large proportion of the shellfish landed from the UK EEZ (87%) most of the scenarios tested are predicted to have a negligible effect on the potential value of the fleet's landings of shellfish (Figure 9, Table 4).

If the UK fishing fleet were to lose all access to other areas of the EU EEZ, the shellfish fleet could end up slightly worse off under most scenarios (Table 4) as there would be no gain from additional catches in the UK EEZ to offset the losses from the EU EEZ.

A 95% share of the shellfish landed from the UK EEZ (the 'Icelandic Scenario') would be worth a predicted £366 million (an 11% increase), or £344 million (+9%) if loss of access to the EU EEZ is assumed (Figure 9, Table 4).



### Shellfish



Shellfish	Weight ( '000 t.	t )	Value ( £ m )	
UK Boats	139.0	87%	£330.9	86%
EU Boats	21.4	13%	£52.7	14%
Faroese Boats (FO)	0.0	0%	£0.0	0%
Norwegian Boats (NO)	0.0	0%	£0.0	0%
TOTAL	160.4		£383.6	
UK Boats in EU EEZ	9.8		£21.9	

Figure 8 Breakdown of the estimated weights and values of shellfish landed from the UK EEZ by UK, EU, Faroese and Norwegian fishing boats in 2016. The estimated weight and value of shellfish landed from elsewhere in the EU EEZ by UK boats is also shown for comparison.

# **United Kingdom EEZ**





- Figure 9 The current (2016; left bar) and predicted potential values of landings of shellfish from the UK EEZ by UK fishing boats under different shares of the total. The line (right axis) shows the predicted increases in the value of landings by UK boats relative to the current for the various scenarios.
- Table 4The current and predicted potential values of landings of shellfish from the<br/>UK EEZ by UK fishing boats under different shares of the total. Rows show:<br/>the potential (gross) value of UK boats' landings under each scenario; the<br/>potential (gross) gain; the potential loss to UK boats in other areas of the EU<br/>EEZ; the potential net value; and the potential net gain

		Aspirational Share (UK EEZ)				EZ)
£ million	2016	50%	75%	84%	95%	100%
Potential Value (UK EEZ)	£331	£331	£336	£340	£366	£384
Potential Gain (UK EEZ)	£0	£0	£5	£10	£35	£53
Potential Gain (%)	0%	0%	2%	3%	11%	16%
Value from EU EEZ	£0	£22	£22	£22	£22	£22
Potential Net Value	£331	£309	£314	£319	£344	£362
Potential Net Gain	£0	£0	£2	£6	£17	£32
Potential Net Gain (%)	0%	-7%	-5%	-4%	4%	9%



### **Industrial Fish**

It is estimated that a total of about 106,000 tonnes of industrial fish were landed from the UK EEZ in 2016, with an estimated value of about £25 million (Figure 10). UK fishing boats are estimated to have caught only a very small proportion of this total (6% by weight or value).

UK fishing boats are also estimated to have landed about 120 tonnes of industrial fish, with a value of less than £30,000, from other areas of the EU EEZ (Figure 10).

As the UK fleet's share of the industrial fish landed from the UK EEZ is currently very small, all of the scenarios tested resulted in very large predicted increases in the potential value of industrial fish to UK fishing boats. It is predicted that a 50% share of the industrial fish landed from the UK EEZ would be worth £13 million to the UK fishing fleet, more than 9 times more than in 2016 (Figure 11, Table 5).

As UK fishing boats catch only very small quantities of industrial fish in other areas of the EU EEZ at present the impact of any loss of access to the EU EEZ on predicted value of industrial fish would be negligible (Table 5).

A 75% share of the industrial fish landed from the UK EEZ would be worth a predicted £19 million to the UK fishing fleet, more than 13 times more than in 2016 (Figure 11, Table 5).

An 84% share of the industrial fish landed from the UK EEZ (the 'Norwegian Scenario') would be worth a predicted £24 million (a 15-fold increase) (Figure 7, Table 3).

A 95% share of the industrial fish landed from the UK EEZ (the 'Icelandic Scenario') would be worth a predicted £24 million (a 17-fold increase) (Figure 7, Table 3).



#### **Industrial Fish**



Industrial Fish	Weight ( '000 t.	t )	Value (£m)	
UK Boats	5.9	6%	£1.4	6%
EU Boats	80.4	76%	£19.1	76%
Faroese Boats (FO)	8.6	8%	£2.0	8%
Norwegian Boats (NO)	11.3	11%	£2.7	11%
TOTAL	106.2		£25.2	
UK Boats in EU EEZ	0.1		£0.0	

Figure 10 Breakdown of the estimated weights and values of industrial fish landed from the UK EEZ by UK, EU, Faroese and Norwegian fishing boats in 2016. The estimated weight and value of industrial fish landed from elsewhere in the EU EEZ by UK boats is also shown for comparison.

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- Figure 11 The current (2016; left bar) and predicted potential values of landings of industrial fish from the UK EEZ by UK fishing boats under different shares of the total. The line (right axis) shows the predicted increases in the value of landings by UK boats relative to the current for the various scenarios.
- Table 5The current and predicted potential values of landings of industrial fish from<br/>the UK EEZ by UK fishing boats under different shares of the total. Rows<br/>show: the potential (gross) value of UK boats' landings under each scenario;<br/>the potential (gross) gain; the potential loss to UK boats in other areas of the<br/>EU EEZ; the potential net value; and the potential net gain

		Aspirational Share (UK EEZ)				EZ)
£ million	2016	50%	75%	84%	95%	100%
Potential Value (UK EEZ)	£1	£13	£19	£21	£24	£25
Potential Gain (UK EEZ)	£0	£11	£18	£20	£23	£24
Potential Gain (%)	0%	805%	1257%	1420%	1619%	1709%
Value from EU EEZ	£0	£0	£0	£0	£0	£0
Potential Net Value	£1	£13	£19	£21	£24	£25
Potential Net Gain	£0	£11	£17	£20	£23	£24
Potential Net Gain (%)	0%	803%	1255%	1418%	1617%	1707%



#### Overview

The predicted net values to the UK fishing fleet of various potential shares of the fish and shellfish landed from the UK EEZ are summarised in Figure 12. These figures represent the worst case scenario, with gains for the UK fleet in the UK EEZ partly offset by loss of access to other areas of the EU EEZ.

Nevertheless, the predicted values show the potential overall benefits to the UK fishing fleet of being able to take a larger share of the fish and shellfish landed from the UK EEZ. The pelagic and demersal sectors stand to gain substantially, especially at catch shares above 50%.

The industrial sector of the UK fleet starts from a very low baseline as UK boats catch only a very small proportion of the industrial fish landed from the UK EEZ, so could see the largest increases in value. However, the potential values of industrial fish remain relatively very small compared to other sectors of the UK fishing industry, reflecting both the relatively small quantities of industrial fish landed from the UK EEZ and their relatively low unit value.

The shellfish sector in contrast starts from a relatively high baseline as UK boats already catch a very large proportion of the shellfish landed from the UK EEZ. The shellfish sector thus has less to gain than other sectors of the fleet from increasing its share of landings from the UK EEZ and could end up slightly worse off if it loses access to other EU waters.





Figure 12 The current (2016; left bar) and predicted potential net values of landings of pelagic, demersal and industrial fish and of shellfish from the UK EEZ by UK fishing boats under different shares of the total. Assumes a complete loss of access for UK boats to the EU EEZ under all scenarios (that is, the value of current UK landings from the EU EEZ have been deducted from the predicted values for the UK EEZ).



# **Discussions and Conclusions**

An analysis of available data has been carried out to provide estimates of the potential value to the UK fishing fleet of larger shares of the fish and shellfish currently landed from the UK's Exclusive Economic Zone (UK EEZ).

The analysis has been hindered by a lack of information on the total quantities of fish and shellfish caught in the UK EEZ. While 'official' data published by the European Commission's Scientific, Technical and Economic Committee for Fisheries (STECF) has provided the weights of fish and shellfish landed by UK and EU fishing boats from each ICES statistical rectangle, comparable data was not available for non-EU (Faroese and Norwegian) boats. Landings by these nations' fishing boats from the UK EEZ have had to be estimated by other, less certain methods.

In spite of this limitations, it has been estimated that a total of about 1.6 million tonnes of fish and shellfish of all species were landed from the UK EEZ in 2016, with an estimated value of about £1,700 million. UK fishing boats are estimated to have caught just over one-third (36%) of that total, with a value of about £815 million (49% of the total).

It was also estimated that landings by UK fishing boats from other areas of the EU EEZ in 2016 were worth about £112 million.

Other EU fishing boats are estimated to have caught almost half (49% by weight) of all the fish and shellfish landed from the UK EEZ in 2016, or two-fifths (41%) by value. Landings by non-EU (Faroese and Norwegian) boats accounted for 15% of the total (by weight), or 10% by value.

The results of the analysis suggest that if the UK fishing fleet were able to catch half of the principal species landed from the UK EEZ then the total value of its landings would increase to about £1,000 million (an increase of 23% compared to 2016). A 75% share of the landings from the UK EEZ would be worth about £1,300 million (a 60% increase).

Any increase in the UK fleet's share of the fish and shellfish caught in the UK EEZ at the expense of other EU fishing boats could result in restrictions on the UK fleet's access to other areas of the EU EEZ and thus to the loss of some or all of the fish and shellfish caught there (worth £112 million in 2016).

However, the results suggest that even in the worst case scenario, where there is a complete loss of access to the EU EEZ, there would still be an overall net gain to the UK fleet overall from an increased share of the landings from the UK EEZ. A 50% share is predicted to result in a net 9% increase in value and a 75% share in a net 47% increase.



The results suggest that the pelagic and demersal sectors would stand to gain the most. The industrial sector could also see very large increases in the value of landings as it starts from a very low baseline, but the potential values of industrial fish would remain relatively very small compared to other sectors. The shellfish sector probably has the least to gain since it already enjoys a relatively large share of the catch from the UK EEZ, and could end up with a small net loss if it loses access to other EU waters.