

Delivered: 06/02/2025 ([REDACTED])

[OFF-SEN] MMO response to DEFRA queries on EU vessels in UK 6-12nm

This document provides as direct a response to each question posed as viable. This document is accompanied by underlying datasets which can provide further detail if required. Where necessary additional documents are signposted to.

Request details

Project reference ID: [REDACTED]

Coordinator: [REDACTED]

Contributor/s: [REDACTED]

For: [REDACTED]

Response Part 1

Q1.1 - How many EU vessels have access to the 6-12nmz in each year since 2021? (split by MS and whether vessel is over or under 12m)

A1.1 – Overall between 142 and 152 EU vessels per annum are authorised to fish the UK 6-12 zone.

Table 1.1 - EU vessels with a valid UK 6-12nm licence as of the start of the year

Flag State	Length Group	2021	2022	2023	2024	2025
Belgium	12m and over	20	21	17	17	17
France	12m and over	110	104	109	110	110
France	Under 12m	19	17	23	25	25
EU Total	All	149	142	149	152	152

<u>Caveats</u>

- The table provides a snapshot of unique EU vessels that had authorised access to fish in UK 6-12nm as of the start of the year (i.e. 2025 is the list as at 01/01/2025). Vessel number can vary throughout a year.
- Not all these vessels will actively use their authorisation each year (see part 2).

Q1.2 - How many UK vessels have fished in EU 6 - 12nm?

A1.2 – Single UK vessel ('Royal Sovereign') demonstrated track record and authorised to fish EU 6-12

RssNo	VessNat	UKFishingAuthority	VessName	CFR	OverLen	EnginePower	GrossTonnage	UKLicNumber	EU_6_12nm
A16300	GBR	GBE	ROYAL SOVEREIGN	GBR000A16300	17.03	183.82	53	10371	Yes

Response Part 2

Q2.1 - How many of these vessels have made use of this access each year since 2021? (split by MS, ICES subarea (7d, etc) and time of year)

A2.1 – The tables below provide an overall summary response to the request.

Table 2.1.1 – EU vessels with VMS positions at assumed fishing speeds within UK 6-12nm by flag state and length group, by vessel count.

Flag State	Length Group	2021	2022	2023
Belgium	12m and over	14	14	12
France	12m and over	80	83	86
France	Under 12m	6	12	0
EU Total	All	100	109	98

Table 2.1.2 – EU vessels with VMS positions at assumed fishing speeds within UK 6-12nm by flag state and length group, by estimated hours spent.

Flag State	Length Group	2021	2022	2023
Belgium	12m and over	11,720	13,361	14,877
France	12m and over	14,125	20,836	20,293
France	Under 12m	684	2,022	0
EU Total	All	26,529	36,219	35,169

Table 2.1.3 - EU vessels with VMS positions at assumed fishing speeds within UK 6-12nm by FAO division, by vessel count.

FAO Division	2021	2022	2023
IVc – Sothern North Sea	33	40	39
VIId – Eastern English Channel	50	69	66
VIIe – Western English Channel	47	45	41
VIIf – Bristol Channel	29	31	24
VIIg – Celtic Sea North	4	6	8
EU Total	100	109	98

N.b. vessels can be present in more than one of these areas

Table 2.1.4 - EU vessels with VMS positions at assumed fishing speeds within UK 6-12nm by FAO division, by estimated hours spent

FAO Division	2021	2022	2023
IVc – Sothern North Sea	1,901	4,868	6,853
VIId – Eastern English Channel	13,809	18,682	18,817
VIIe – Western English Channel	8,676	10,741	7,666
VIIf – Bristol Channel	1,768	1,627	1,635
VIIg – Celtic Sea North	375	301	197
EU Total	26,529	36,219	35,169

Table 2.1.5 - EU vessels with VMS positions at assumed fishing speeds within UK 6-12nm by month, by vessel count.

Month	2021	2022	2023
January	18	76	55
February	43	67	44
March	55	72	45
April	45	55	54
May	47	60	39
June	31	49	38
July	30	40	36
August	39	39	44
September	38	46	36
October	48	39	44
November	61	63	53
December	52	48	50
EU Total	100	109	98

N.b. This is a unique vessel count. In 2021 100 unique vessels were present of which 18 of them were present in January, 43 in February etc.

Table 2.1.6 - EU vessels with VMS positions at assumed fishing speeds within UK 6-12nm by month, by estimated hours spent.

Month	2021	2022	2023
January	76	4,148	3,843
February	2,394	2,835	2,064
March	3,245	5,327	2,712
April	3,476	3,476	3,717
May	1,948	2,339	1,899
June	1,708	2,880	1,628
July	1,597	1,679	2,105
August	2,187	2,255	3,060
September	1,891	2,540	2,341
October	2,716	1,373	3,094
November	2,908	4,363	4,989
December	2,383	3,004	3,718
EU Total	26,529	36,219	35,169

- Vessels do not report to state they fished within UK 6-12 waters, so this response relates to
 those EU vessels with a valid UK 6-12 fishing licence that had VMS position presence within
 the zones of the UK 6-12 they have a right to fish in at speeds that are usually expected for
 trawling activity (>0 to 6 knots). Therefore, the tables provide a view on how many may be
 actively using their authorised licence (in comparison to table A1.1)
- To be present on this count the following conditions must be met: (1) licenced to fish 6-12 that year (2) VMS position/s within UK 6-12 of IVc or VIId-g at assumed fishing speed (3) that position/s is within a specific section of the UK 6-12 where that nationality is allowed to fish

- and vessel was assessed as likely using a gear that has been designated as viable to target the species/species group they have rights to fish based on UK 6-12 rainbow chart access rights (see map 2 in annex)
- Although this response includes under 12m EU vessel VMS data where available, these
 vessels are not obliged to report VMS positions as such these figures must be treated as a
 potential underestimate for those vessels.
- The 'fishing speed' threshold used is crude and may be less suited for non-trawler type vessels (i.e. static gear vessels). There is no certainty that the vessel did in fact fish, but this provides an indication that it is more likely.
- Tables 2.1.2, 2.1.4 and 2.1.6 use time spent in hours rather than vessel count to give an idea of how much activity occurred. This is again reliant on instant fishing speed to determine whether a position is included or not and due to the time gap between positions (usually 1 or 2 hours) there is a large gap in information on where that vessel is between positions leaving uncertainty on these figures (i.e. the vessel may have left the zone a few minutes after position within it but we may still be assigning 1 hour of time spent within the zone to that position or vice versa)

Q2.2 - Have vessels without licenses been recorded fishing in the UK 6-12nmz since 2021? (which MS, how many)

A2.2 – This question cannot be answered directly as there is no requirement for EU vessels to report whether they fished from UK 6-12 and available data is not sufficient to make an accurate assessment of non-compliant fishing from an analytical perspective. The response below is therefore an attempt to answer indirectly with some contextual information based on what is available rather than answering the question itself.

Based on an ad hoc review of at sea inspection and detected infringement data covering the period 11/04/2022 to 21/01/2025 there have been 8 at sea boarding inspections that detected the infringement 'ECXD - Cat6 Failure to Produce Valid Eu Fishing Licence / Authorisation'. Each time this related to a vessel skipper being unable to produce an up-to-date UKSIA issued authorisation onboard, either physical or online copy. Each time on review by inspection officer the vessel was found to be on the authorised UKSIA list and therefore did have permission to fish in the UK 6-12nm. Out of these cases 7 have resulted in an outcome of verbal advice/verbal warning and the 8th has the outcome decision listed as pending.

The tables below provide a view on vessels that had the potential to fish in the UK 6-12 purely based on presence within the area at a speed usually associated with fishing. We can give no assurance fishing occurred and in vast majority of cases it likely did not. There have been investigations in VMS activity by EU vessels in and around the UK 6-12 but as of writing, as far as [REDACTED] are aware, there have been no formal prosecutions [REDACTED].

Table 2.2.1 - EU vessels with no UK 6-12 licence but with at least some VMS positions at assumed fishing speeds within any part of the UK 6-12nm, by vessel count.

Flag State	Length Group	2021	2022	2023
Belgium	12m and over	30	31	32
Germany	12m and over	7	7	5
Denmark	12m and over	11	11	6
Spain	12m and over	9	8	8
France	12m and over	47	54	33
France	Under 12m	3	6	0
Ireland	12m and over	45	38	43
Ireland	Under 12m	0	1	0
Lithuania	12m and over	0	0	1
Netherlands	12m and over	42	35	39
Poland	12m and over	0	1	2
Sweden	12m and over	0	1	1
EU Total	All	194	193	170

Table 2.2.2 - EU vessels with no UK 6-12 licence but with at least some VMS positions at assumed fishing speeds within any part of the UK 6-12nm, by time spent (hours)

Flag State	Length Group	2021	2022	2023
Belgium	12m and over	481	718	690
Germany	12m and over	70	67	20
Denmark	12m and over	30	56	31

Spain	12m and over	36	32	31
France	12m and over	378	1,861	517
France	Under 12m	8	77	0
Ireland	12m and over	524	368	311
Ireland	Under 12m	0	93	0
Lithuania	12m and over	0	0	8
Netherlands	12m and over	525	432	442
Poland	12m and over	0	13	5
Sweden	12m and over	0	2	2
EU Total	All	2,052	3,721	2,057

- This question cannot be answered directly as there is no requirement for EU vessels to report whether they fished from UK 6-12 and available data is not sufficient to make an accurate assessment. Table 2.2.1 and 2.2.2 will be a <u>heavy</u> overestimate showing vessels that had the potential to fish due to at least some presence within the area.
- We recommend these data tables are used as a demonstration of the limitations of the data currently available to assess EU in UK 6-12nm activity accurately rather than a reflection of EU non-compliant fishing.
- This instead provides a view on how many EU vessels without a UK 6-12 licence had at least some VMS positional presence within the area at speeds that are usually associated with trawling activity (>0 to 6 knots) meaning they had the *potential* to fish. This approach is likely to pick up many cases where the vessel is sheltering from bad weather inshore or steaming through at slow speeds for example rather than non-compliant fishing so must be treated with extreme caution. A vessel by vessel and day by day review plotting each VMS track against available AIS (as the [REDACTED] do for legal cases) would provide more assurance but this isn't feasible within this response considering scale of cases to review.
- The licences are based on a snapshot as of the start of the year, so it is conceivable some French and Belgium vessels were granted a licence within the year via direct replacement mechanism for example (and thus did in fact have the right to fish at that point in time).
- This includes activity in UK 6-12 areas outside IVc and VIId-g so has a wider scope than section 2.1.
- Although this response includes under 12m EU vessel VMS data where available these
 vessels are not obliged to report VMS positions as such these figures must be treated as a
 potential underestimate for those vessels
- The 'fishing speed' threshold used is crude and may be less suited for non-trawler type vessels (i.e. static gear vessels). There is no certainty that the vessel did in fact fish, but this provides an indication that it is more likely.
- As in table 2.2.2 there are certain member states with only a few positions over the course of a year. These are unlikely to be fishing the UK 6-12

Q2.3 - What is the registration port of the vessels that have access to UK 6-12nm?

A2.3 – The table below provide an overall summary response to the request. However, the accompanying dataset '250117_ [REDACTED]_EU_VMS_in_UK_6_12_nm_2021_23' can be accessed for further information.

Table 2.3 - EU vessels with VMS positions at assumed fishing speeds within UK 6-12nm by registration place.

Flag State	2021	2022	2023
France			
Boulogne-sur-Mer	31	38	28
Saint-Brieuc	21	21	21
Dieppe	6	11	12
Caen	5	5	8
Guilvinec	5	5	7
Cherbourg-en-Cotentin	6	5	5
Saint-Malo	6	5	2
Concarneau	3	3	2
Saint-Nazaire	1	1	1
Cork	1	1	0
Morlaix	1	0	0
Belgium			
Zeebrugge	9	10	7
Blankenberge	2	2	2
Nieuwpoort	1	0	1
Oostende (Ostend)	2	1	2
Unknown	0	1	0
EU Total	100	109	98

- Home port information was originally requested, but this is not available to MMO for EU vessels. As an alternative the 'Registration place' has been used instead which is the port where the vessel is administered. It may be based routinely at a different port location.
- This information is sourced from the public EU fleet register based on a snapshot taken by [REDACTED] in March 2024. As of writing the EU's fleet register is currently unavailable (Error 404--Not Found) (Edit: confirmed back online on check 05/02/2025)

Response Part 3

Q3.1 - If possible, to see their catches, how many tonnes have been caught by each MS in the UK 6-12nmz each year (which year do we have data for)? Which species? Which ICES subareas? Indicative maximum figures only

A3.1 (indicative maximum) – The tables below provide an overall summary response to the request.

Table 3.1.1 – EU-27 landings from ICES rectangles that contain at least some UK 6-12nm zone within 4c or 7dg, based on STECF FDI23 EU published spatial landings data call.

Year	Live Weight (tonnes)	Value (£)
2013	62,919	109,047,471
2014	52,635	100,785,330
2015	65,391	92,974,644
2016	62,867	103,792,235
2017	62,207	116,115,615
2018	58,807	118,727,945
2019	51,569	110,830,554
2020	50,575	98,196,622
2021	53,797	96,280,011
2022	55,087	104,458,247
EU Total	575,853	1,051,208,674

Table 3.1.2 – EU-27 landings from ICES rectangles that contain at least some UK 6-12nm zone within 4c or 7dg, based on STECF FDI23 EU published spatial landings data call, top 10 species by live weight volume (tonnes) (all years 2013-22 combined)

Species Name	Live Weight (tonnes)	Value (£)
Atlantic herring	144,159	51,040,242
Jack and horse mackerels nei	70,277	29,686,364
Whiting	40,910	52,246,069
European plaice	38,949	56,155,240
Common sole	32,525	289,316,381
Anglerfishes nei	16,080	53,551,748
Haddock	16,004	24,652,357
European pilchard (=Sardine)	14,851	5,217,178
Atlantic mackerel	13,703	14,078,269
Cuttlefish, bobtail squids nei	13,251	36,646,522
Other Species	175,144	438,618,305

Table 3.1.3 – EU-27 landings from ICES rectangles that contain at least some UK 6-12nm zone within 4c or 7dg, based on STECF FDI23 EU published spatial landings data call, top 10 species by value (£) (all years 2013-22 combined)

Species Name	Live Weight (tonnes)	Value (£)
Common sole	32,525	289,316,381
Common squids nei	12,969	76,856,832

European plaice	38,949	56,155,240
Anglerfishes nei	16,080	53,551,748
Whiting	40,910	52,246,069
Atlantic herring	144,159	51,040,242
Turbot	4,502	38,818,792
Cuttlefish, bobtail squids nei	13,251	36,646,522
Great Atlantic scallop	9,843	30,934,348
Surmullet	6,404	30,086,164
Other Species	256,261	335,556,336

Table 3.1.4 – EU-27 landings from ICES rectangles that contain at least some UK 6-12nm zone within 4c or 7dg, based on STECF FDI23 EU published spatial landings data call, by FAO Division (all years 2013-22 combined)

FAO Division	Live Weight (tonnes)	Value (£)
IVc – Southern North Sea	120,123	314,328,524
VIId – Eastern English Channel	246,828	307,079,012
VIIe – Western English Channel	127,826	221,912,373
VIIf – Bristol Channel	50,968	131,295,019
VIIg – Celtic Sea North	30,108	76,593,745
EU Total	575,853	1,051,208,674

- This section was produced before STECF FDI24 figures were available. Now available the blue tables within A3.2 and A3.4 can be seen as directly superseding these figures and used as the default going forward. The figures within this section A3.1 are not incorrect but are no longer best available estimates.
- The primary issue with this figure is caused by the fact the EU STECF FDI spatial landings data is published at EU-27 fleet level now (it used to be published by member state fleet) combined with the fact ICES rectangles are large areas in comparison to the UK 6-12 zone. This means these maximum figures include landings from non-French and non-Belgian fleet that have no rights to fish in UK 6-12 currently (since 2021 due to lack of track record) meaning these figures will be including irrelevant catches.
- A solution to this would be applying a very rough assumption using VMS data to apportion EU-27 landings to member state level based on time spent estimate i.e. if Belgium 12m+ TBB vessels account for 80% of the time spent according to VMS in an ICES rectangle then allocate 80% of the EU-27 total 12m+ TBB landings in that rectangle to Belgium. This approach will be implemented in the 'best estimates' delivery for the 30th of January.
- A good example of these tables describing the maximum possible estimate is the fact that 58% of Herring reported from an ICES rectangle that is at least partially within UK 6-12 was reported from ICES rectangle 29E9 – this ICES rectangle is in the central section of the Eastern English Channel (VIId) and less than 2 per cent of its total surface area is within the UK 6-12. Theoretically all those landings could be from 6-12 waters, but it is highly unlikely and more likely most EU in UK Herring was not caught within 12nm of the UK coast.

- Using the aggregated ACDR data that MMO receives from the EU and filtering to ICES division 4c and 7d-g and Belgium and French port landings only (using a required rough assumption that Belgian vessel land fish into Belgian port and same for French) suggest this maximum EU-27 total could be a large overestimate with the 2023 figure using the ACDR data at 24,000 tonnes (£67 million). The ACDR dataset does not have member state nationality only port of landing nationality leading to a problematic comparison where French vessels landing into a Dutch port for example would be completely discounted. As the ACDR data is only available as low spatial resolution there is no way to use it to differentiate between landings close to UK 6-12 or far away within each ICES division.
- For context ahead of the best estimate figures using a rough approximate method of apportioning based purely on landings reported from ICES rectangles and their sea surface area within the UK 6-12 the actual quantity of fish caught by EU vessel from the UK 6-12 is likely closer to the range 7,000 to 10,000 tonnes per annum (£14-18 million). VMS apportioning will provide a more accurate range with high uncertainty here, this is just to provide initial context on how different the maximum possible figures presented in this section are likely to be from final best estimates.

Q3.2 - If possible, to see their catches, how many tonnes have been caught by each MS in the UK 6-12nmz each year (which year do we have data for)? Which species? Which ICES subareas? *Current best estimates*.

A3.2 (best estimate) – The tables below provide an overall summary response to the request using best available estimates. *Figures in this section have been rounded to the nearest 100 and 100,000 for weight and value figure respectively.*

Key findings

- On average between 2021 and 2023 EU 12 metre and over vessels landed an estimated 4,000 tonnes (range: 0 to 47,800 tonnes) of fish from UK 6-12nm waters, valued at £12.4 million (range: £0 to 99.1 million).
- French vessels accounted for most of these landings (74% by volume, 64% by value) with the remainder landed by Belgian vessels. No other member states had access to the UK 6-12 during the period 2021-23.
- Whiting, Squid and Herring made up approximately 40 per cent of total estimated EU-27 live weight landings from the UK 6-12 during the period 2021-23. Squid was the most important species by estimated landed value.
- EU under 12m vessels landed an estimated 110 tonnes (£400,000) per annum from the UK 6-12 during the period 2021-23 accounting for approximately 3 per cent by volume and value of the EU total landings from the zone.

Method summary

- A pre-existing method ([REDACTED]) was used by MMO [REDACTED] to process published STECF FDI24 EU landings data (FDI - European Commission) to UK waters estimates using ICES rectangle apportioning. Sea surface areas were used to apportion landings reported from ICES rectangles that straddled the UK EEZ border using the assumption landings were made evenly across the entire sea surface area of that rectangle.
- A pre-existing method ([REDACTED]) was used by [REDACTED] to process EU in VMS data received in the UK SFM database (dbo.SatSightings table) for period 2021 to 2023 to a format ready for onward analysis. Secondary processing was then completed in ArcPro by the MMO [REDACTED] to produce a required VMS based lookup that could be applied to the EU landings data. This used the latest published UKHO 6-12 limits. A key assumption used in this step was that only positions that were >0 to 6 knots were retained with other positions discarded due to assumption they were non-fishing type and irrelevant to the onward analysis.
- An updated ICES rectangle sea surface area within UK 6-12 lookup was produced as part of [REDACTED] using the latest UKHO published 6-12 limits as of date of analysis (accessed Jan 2025, <u>UK Hydrographic Office Maritime Limits and Boundaries | ADMIRALTY Marine Data</u> <u>Portal</u>)
- A new R method ([REDACTED]) was developed within the MMO [REDACTED] to combine EU landings and VMS data together to produce EU in UK 6-12 estimates. The primary steps are as follows:
 - Filtering datasets to correct scope (UK waters, 2021-23) and separating 12m+ and
 <12m landings dataset to be handled separately due to no requirement for VMS data for under 12m fleet. VMS positions outside UK EEZ were dropped so scope aligned with the EU landings dataset which had been pre-apportioned to UK EEZ only.

- o Identifying and marking certain VMS positions within the 6-12 as non-fishing even if at assumed fishing speed using the following logic/criteria: the positions must be within 4c or 7d-g, it must be from a vessel with a valid authorisation to fish the UK 6-12 that year, it must be a valid vessel nationality/rainbow chart zone/gear combination in line with EU rainbow chart access rights and it must not be a TBB vessel of >24m. Positions failing this criteria were discarded as non-fishing positions
- Apportioning EU-27 12m+ landings data to member state level based on matching fishing type VMS positions on year, quarter, gear code, length group and rectangle code. Then using the proportion of time spent by each member state within UK EEZ for that combination to apportion the landings to each member state (i.e. if French vessels accounted for 70% of time spent for that combination, then 70% of reported landings for that combination would be assigned to French fleet). A key and unavoidable assumption here is time spent is directly related to volume and value of landed which may be untrue in some cases.
- Apportioning EU-27 12m+ landings data to UK 6-12 waters using proportion of total fishing time spent in UK waters that is within the UK 6-12 zone for the matching criteria year, quarter, vessel nationality, gear code, length group and rectangle code. This match is now reliant on the previous apportionment to member state level (as it's using vessel nationality in matching criteria) so has an additional layer of uncertainty due to this. As above this relies on assumption time spent is directly related to volume and value landed.
- Apportioning EU <12m landings to UK 6-12 using the [REDACTED] produced lookup of ICES rectangle sea surface area factors which apportions landings reported from an ICES rectangle to the UK 6-12 based on how much of the rectangle's sea surface area falls within the zone. The apportionment was corrected to ensure only landings within area 4c and 7d-g have landings assigned to UK 6-12 waters as no access rights to other parts of UK 6-12 for EU fleet for 2021 to 2023.
- The outputs of this R method were exported and summary tables produced and shared via this report.

Table 3.2.1 – Estimated EU 12m+ landings from UK 6-12nm based on VMS apportioning method, by year.

Year	Live weight (tonnes)	Value (£)
2021	2,700	7,500,000
2022	5,200	16,500,000
2023	4,100	13,200,000
Grand Total	11,900	37,200,000

Source: STECF FDI24 EU published spatial landings data call. MMO internal analysis. VMS apportioning applied to produce best estimates.

Table 3.2.2 – Minimum EU 12m+ landings from UK 6-12nm, by year

Year	Live weight (tonnes)	Value (£)
202	1 0	0
202	2 0	0
202	3 0	0
Grand Tota	al 0	0

Footnote: No EU landings are definitively reported from the UK 6-12 so the theoretically minimum will always be zero.

Table 3.2.3 – Maximum EU 12m+ landings from UK 6-12nm based on landings reported from area 4c or 7d-g from those ICES rectangles that contain at least some UK 6-12 waters, by year.

Year	Live weight	t (tonnes)	Value (£)
202	1	53,300	95,800,000
202	2	54,700	105,100,000
202	3	35,300	96,200,000
Grand Tota	al	143,300	297,200,000

Source: STECF FDI24 EU published spatial landings data call. MMO internal analysis. Based on reported figures meaning figures hold a higher confidence than VMS apportioning based estimates.

Table 3.2.4 – Estimated EU 12m+ landings from UK 6-12nm based on VMS apportioning method, by year and member state (live weight tonnage)

Member State	2021	2022	2023	Grand Total
Belgium	1,100	1,000	1,000	3,100
France	1,600	4,200	3,000	8,800
Grand Total	2,700	5,200	4,100	11,900

Source: STECF FDI24 EU published spatial landings data call. MMO internal analysis. VMS apportioning applied to produce best estimates.

Table 3.2.5 – Estimated EU 12m+ landings from UK 6-12nm based on VMS apportioning method, by year and member state (landings value £)

Member State	2021	2022	2023	Grand Total
Belgium	3,900,000	4,700,000	4,900,000	13,500,000
France	3,600,000	11,800,000	8,300,000	23,700,000
Grand Total	7,500,000	16,500,000	13,200,000	37,200,000

Source: STECF FDI24 EU published spatial landings data call. MMO internal analysis. VMS apportioning applied to produce best estimates.

Table 3.2.6 – Estimated EU 12m+ landings from UK 6-12nm based on VMS apportioning method, top 10 species by live weight tonnage (2021-23 total)

Species Name	Live weight (tonnes)
Whiting	1,800
Common squids nei	1,600
Atlantic herring	1,400
Great Atlantic scallop	700
Small-spotted catshark	700
Common sole	600
Atlantic mackerel	500

European plaice	500
Cuttlefish, bobtail squids nei	400
Pouting(=Bib)	300
Other Species	3,300
Grand Total	11,900

Source: STECF FDI24 EU published spatial landings data call. MMO internal analysis. VMS apportioning applied to produce best estimates.

Table 3.2.7 – Estimated EU 12m+ landings from UK 6-12nm based on VMS apportioning method, top 10 species by landed value (2021-23 total)

Species Name	Value (£)
Common squids nei	11,000,000
Common sole	7,400,000
Whiting	2,600,000
Great Atlantic scallop	2,000,000
Cuttlefish, bobtail squids nei	1,100,000
European plaice	1,100,000
Shortfin squids nei	1,000,000
Anglerfishes nei	1,000,000
John dory	900,000
Surmullet	900,000
Other Species	8,200,000
Grand Total	37,200,000

Source: STECF FDI24 EU published spatial landings data call. MMO internal analysis. VMS apportioning applied to produce best estimates.

Table 3.2.8 – Estimated EU 12m+ landings from UK 6-12nm based on VMS apportioning method, by FAO division (2021-23 total)

FAO Division	Live weight (tonnes)	Value (£)
27.7.d – Eastern English Channel	4,600	15,100,000
27.4.c – Southern North Sea	3,900	12,800,000
27.7.e – Western English Channel	2,900	6,800,000
27.7.f – Bristol Channel	400	2,100,000
27.7.g – Celtic Sea North	100	400,000
Grand Total	11,900	37,200,000

Source: STECF FDI24 EU published spatial landings data call. MMO internal analysis. VMS apportioning applied to produce best estimates.

Table 3.2.9 – Estimated EU <12m+ landings from UK 6-12nm based on ICES rectangle apportioning method, by year.

Year	Live weight (tonnes)	Value (£)
2021	100	300,000
2022	100	400,000
2023	100	500,000
Grand Total	300	1,200,000

Source: STECF FDI24 EU published spatial landings data call. MMO internal analysis. ICES rectangle apportioning applied to produce best estimates.

- The method used to respond to this request was developed specifically for this request at pace. As such the method is likely to be further developed and figures refined over time meaning the figures here, although they are our current best available estimates, will be subject to change in future as they are estimates rather than definitive reported figures.
- Table 3.2.2 and Table 3.2.3 demonstrate the large uncertainty range in producing the 'headline' figures presented in Table 3.2.1. This reflects the large and severe assumptions required to convert EU published reported landings figures into UK 6-12nm water estimates. For example, EU landings data is only available at an aggregated level meaning VMS data can only be joined on the matching variables available to us (year, quarter, gear code, length group and ICES rectangle).
- The proportion of time spent by member state (derived from those fishing type VMS positions) has been used to apportion the landings to each member state (i.e. if French vessel accounted for 70% of time spent for that combination, then 70% of reported landings would be assigned to French fleet). A key and unavoidable assumption here is time spent is directly related to volume and value of landings which may be untrue in some cases. A very similar approach has been applied then to VMS apportion the member state level landings to produce EU 12m+ in UK 6-12 estimates. The same assumption is in place meaning an additional layer of uncertainty is added.
- There are assumptions in place to determine which VMS positions could be fishing activity. For example, positions that 0 knots or >6 knots were assumed as non-fishing irrespective of the fishing gear technique. Rainbow chart access rights and vessel authorisations were also applied to VMS positions to mark as non-fishing where that vessel did not have permission to fish within that section of the UK 6-12. This inherently assumes compliance with access rights.
- ICES rectangle apportioning was used for 12m+ EU in UK EEZ estimates and <12m EU in UK 612 estimates. Assumption in place that landings were made equally across the sea surface
 area of the reported ICES rectangle. For 12m+ UK EEZ the VMS data appears to show that in
 certain cases this assumption is inaccurate where landings have been assigned to UK waters
 but no VMS positions relevant to that reported landing occurred in the UK waters of the
 reported ICES rectangle; this affects a minority of the data but is worth keeping mind even
 the EU from UK EEZ figures are estimates based on assumptions by necessity.
- The UK 6-12 limits used were the most recent UKHO published ambulatory limits at the time
 the analysis was completed (<u>UK Hydrographic Office Maritime Limits and Boundaries |</u>
 <u>ADMIRALTY Marine Data Portal</u>, accessed January 2025). These limits change slightly each

year meaning we are preventing estimates from activity in the current zone not the zone as it was in 2021, 2022 and 2023 respectively.

Q3.3 – What are the total catches by tonnage and value of EU vessels in UK EEZ, and what proportion of this was within the 6 – 12 nm zone (split by MS)? *Indicative maximum figures only*

A3.3 (indicative maximum) – These tables have been retracted and replaced by the tables present in A3.4 showing best estimates.

Table 3.3.1 – Estimated EU-27 landings from UK EEZ waters (all areas), based on STECF FDI23 EU published spatial landings data call.

This table has been retracted and replaced by the tables present in A3.4 showing best estimates.

Table 3.3.2 – Maximum possible EU-27 in UK 6-12 landings as a proportion of estimated EU-27 landings from UK EEZ waters (all areas), based on STECF FDI23 EU published spatial landings data call.

This table has been retracted and replaced by the tables present in A3.4 showing best estimates.

- The UK still does not have useable reported data from EU fleet on how much fish is being caught in UK EEZ by EU fleet outside of ACDR data which has lack of clarity of sharing and lack of detail/granularity. As such these figures are also reliant on publicly available EU landings data and employing assumptions to produce a best estimate
- In the upcoming best estimate delivery this will also be split up in member state using further assumptions but for now the figure is covering all EU-27 fleet in line with the level of detail reported/published by the EU
- The UK EEZ figure includes landings from all FAO Divisions of UK Waters not just 4c and 7d-g (i.e. not just those ICES divisions relevant to current EU in UK 6-12 access rights)

Q3.4 – What are the total catches by tonnage and value of EU vessels in UK EEZ, and what proportion of this was within the 6-12 nm zone (split by MS)? Current best estimates

A3.4 (best estimate) – The tables below provide an overall summary response to the request using best available estimates. *Figures in this section have been rounded to the nearest 100 and 100,000 for weight and value figure respectively.*

Key findings

- Although they landed less fish overall from the zone the smaller Belgian fleet appears to be
 more reliant on access to the 6-12nm section of UK waters compared to the French fleet. An
 estimated 12 per cent by volume and 11 per cent by value of Belgium total estimated
 landings from UK waters during this period was from the UK 6-12 zone compared to 2 per
 cent by volume and 5 per cent by value for the French fleet.
- In the context of the EU under 12m fleet an estimated 8 per cent by volume and 11 percent by value of the total estimated landings from UK waters was caught within the UK 6-12 zone during the period 2021 to 2023 suggesting a similar level of reliance on the zone to the Belgian 12m+ fleet.

Method summary

• Please refer to the method outlined in A3.2 which is still relevant here.

Table 3.4.1 – Estimated EU 12m+ landings from UK EEZ based on VMS apportioning method, by year and member state (live weight tonnage)

Member State	2021	2022	2023	Grand Total
Belgium	9,000	9,500	8,600	27,000
Germany	47,000	45,500	45,100	137,500
Denmark	142,300	77,900	87,800	308,100
Spain	4,200	4,700	7,100	16,000
Finland	3,800	1,700	0	5,500
France	117,000	124,200	114,400	355,500
Ireland	62,100	44,300	50,500	157,000
Lithuania	26,000	10,100	25,800	61,900
Netherlands	158,300	146,500	168,400	473,200
Poland	16,700	4,000	6,800	27,500
Sweden	28,500	22,700	41,900	93,100
Unassigned	28,100	30,300	20,100	78,500
Grand Total	643,000	521,300	576,400	1,740,700

Source: STECF FDI24 EU published spatial landings data call. MMO internal analysis. ICES rectangle apportioning applied to produce best estimates.

Table 3.4.2 – Estimated EU 12m+ landings from UK EEZ based on VMS apportioning method, by year and member state (landed value £)

Member State	2021	2022	2023	Grand Total
Belgium	34,600,000	44,200,000	39,400,000	118,300,000

Germany	22,700,000	30,300,000	29,200,000	82,200,000
Denmark	68,000,000	44,100,000	42,800,000	154,900,000
Spain	11,600,000	13,100,000	15,800,000	40,400,000
Finland	1,500,000	800,000	0	2,300,000
France	140,700,000	153,600,000	143,800,000	438,200,000
Ireland	64,700,000	56,500,000	59,500,000	180,700,000
Lithuania	10,900,000	3,200,000	10,600,000	24,800,000
Netherlands	104,300,000	93,600,000	124,900,000	322,900,000
Poland	4,600,000	200,000	2,400,000	7,200,000
Sweden	13,200,000	11,900,000	19,700,000	44,700,000
Unassigned	23,300,000	22,000,000	20,000,000	65,200,000
Grand Total	500,200,000	473,600,000	508,100,000	1,481,800,000

Source: STECF FDI24 EU published spatial landings data call. MMO internal analysis. ICES rectangle apportioning applied to produce best estimates.

Table 3.4.3 – Estimated EU 12m+ proportion of landings from UK EEZ that were from the UK 6-12 zone, by year and member state (live weight tonnage)

Member State	2021	2022	2023	Grand Total
Belgium	12%	11%	12%	12%
Germany	0%	0%	0%	0%
Denmark	0%	0%	0%	0%
Spain	0%	0%	0%	0%
Finland	0%	0%	0%	0%
France	1%	3%	3%	2%
Ireland	0%	0%	0%	0%
Lithuania	0%	0%	0%	0%
Netherlands	0%	0%	0%	0%
Poland	0%	0%	0%	0%
Sweden	0%	0%	0%	0%
Unassigned	0%	0%	0%	0%
Grand Total	0%	1%	1%	1%

Source: STECF FDI24 EU published spatial landings data call. MMO internal analysis. VMS apportioning and ICES rectangle apportioning applied to produce best estimates.

Table 3.4.4 – Estimated EU 12m+ proportion of landings from UK EEZ that were from the UK 6-12 zone, by year and member state (landed value £)

Member State	2021	2022	2023	Grand Total
Belgium	11%	11%	12%	11%
Germany	0%	0%	0%	0%
Denmark	0%	0%	0%	0%
Spain	0%	0%	0%	0%
Finland	0%	0%	0%	0%

France	3%	8%	6%	5%
Ireland	0%	0%	0%	0%
Lithuania	0%	0%	0%	0%
Netherlands	0%	0%	0%	0%
Poland	0%	0%	0%	0%
Sweden	0%	0%	0%	0%
Unassigned	0%	0%	0%	0%
Grand Total	2%	3%	3%	3%

Source: STECF FDI24 EU published spatial landings data call. MMO internal analysis. VMS apportioning and ICES rectangle apportioning applied to produce best estimates.

Table 3.4.5 – Estimated EU <12m+ landings from UK EEZ based on ICES rectangle apportioning method, by year.

Year	Live weight (tonnes)	Value (£)
202	1 1,300	3,100,000
202	2 1,500	3,700,000
202	3 1,500	4,400,000
Grand Tota	al 4,300	11,200,000

Source: STECF FDI24 EU published spatial landings data call. MMO internal analysis. ICES rectangle apportioning applied to produce best estimates.

Caveats

Please refer to caveats covered in section A3.2 which also apply here. Below covers the caveats that are additional/exclusive to this section.

- The overall EU in UK EEZ figures will not match the ACDR data provided monthly by the EU. For example, 2023 ACDR data has the EU in UK waters (incl. Crown Dependencies) landings as 565,000 tonnes¹ compared to the figure of 576,400 presented on Table 3.4.1. The reason for this is there is a layer of estimation/apportioning that must happen for the figures we have produced here sourced from STECF FDI data as no specific zone of capture information is available on that data source. The ACDR figure could theoretically be used as a replacement to the aforementioned Table 3.4.1, however, we do no have clarity from the EU on sharing permissions for this informal exchange and using it would mean using two differing sources of landings data (one for EU in UK 6-12, another for EU in UK EEZ); it's likely that even if zone reported was present on STECF FDI data the figures would match between STECF FDI23 and ACDR due to different snapshots in time of member states databases and/or differing QA processes in place to produce final figures.
- To get to member state level landings figures VMS data had to be used to apportion the reported EU-27 landings data. In some cases, landings that have been reported did not have a match to VMS position i.e. no relevant matching member state VMS found. One

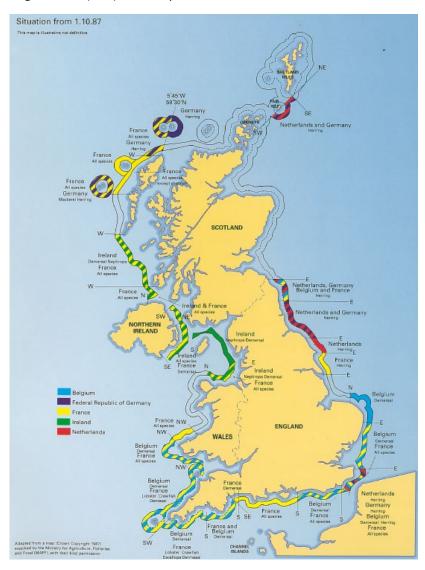
¹ [REDACTED]

explanation for this is working from EU in UK EEZ figures is already subject to an estimation with ICES rectangle apportioning assumption having been applied. As such in some cases that apportioning assumption appears to be inaccurate when compared to available EU in UK EEZ VMS where landings were made just outside of the UK EEZ. You can see the extent of this in the 'Unassigned' category in Table 4.4.1 and the screen shot below shows the worst offending landings record (~14,500 tonnes of Herring that has been allocated to UK waters but according to VMS likely occurred within the much smaller non-UK portion of ICES rectangle 31F1). There are more complex cases where a VMS match is not apparent for landings that are clearly within UK waters; in these cases it perhaps may be the assumption we have used for the vessels active gear at the time of that VMS position was incorrect where they used a gear that doesn't match their primary gear listed on the vessels EU Public Fleet Register entry (Fleet Register). Both ICES rectangle apportioning and VMS apportioning have drawbacks but a future improvement to this method could be applying VMS apportioning to all EU landings and comparing to our pre-existing rectangle apportioning based UK EEZ estimates plus ACDR figures; one drawback to applying VMS apportioning more broadly, outside of time consuming to produce, is we can only be confident that the EU VMS data we have is complete within UK water causing coverage issues if being used to apportion data between UK and non-UK waters (where for the latter we have incomplete VMS coverage for EU vessels).

year 💌 qua	arter zone_name	fao_fishing_area_cod	le <u>rectangle_code</u>	length_group gea	ar_code 👱 species_cod	de 💌 species_name	<pre>species_group</pre>
2022	4 UK/OMS	27.4.c	31F1	VL40XX OT	M HER	Atlantic herring	Pelagic
landing_ty	pe fad_code	tac_code	e_eez vess_nat	weight_estimate	value_estimate v pe	ercent_hrs_in_6_12 wei	ght_6_12 value_6_12 v

Annex

Map 1 - Example of 1964 London Convention based 'rainbow chart' access rights for EU vessels as at 1987 and taken into CFP. This access was in place until the change in rights following the UK-EU Trade and Cooperation Agreement (TCA). The map uses the 1983 6-12nm limits.



Map 2 - Demonstrative map showing the 'rainbow chart' access rights for EU vessels following the TCA using the UK 6-12 limits as of 2021.

