## UK Fleet Capacity Report 2018

This report contains information on UK Fleet Capacity in 2018. It has been prepared as required by Article 22 of EC Regulation 1380/2013. The guidelines issued within Commission Communication COM (2014) 545 have been followed. The data presented are based on analysis of data submitted to the Scientific, Technical and Economic Committee for Fisheries (STECF) for the fleet economic report, ensuring a consistent approach. These data are based on UK fleet size as of 1<sup>st</sup>January 2018, with activity data including vessels joining the UK fleet after this date.

Section F includes details of the biological balance indicators produced by the Joint Research Council (JRC) in 2018 on behalf of the European Commission as approved by the STECF and released via the reports section of the STECF web-site. In addition to the biological indicators produced by the JRC section F also includes economic and technical indicators produced by the Marine Management Organisation using data submitted for the call for fleet economic data concerning 2008-2018 as per Chapter III of Council Regulation (EU) 2017/1004. The indicators have been checked and verified before use to the extent possible given the information supplied. It is requested that the Commission make available the full data processes for all the balance indicators to allow a full validation of processes.

## Section A. UK Fishing Fleets

## A1. Description of fleets

As of 1<sup>st</sup> January 2018, the UK fleet contained 6193 vessels (including active and inactive vessels); which was 30 fewer vessels than at the same time in 2017. In terms of active vessels, the UK fleet contained 4,394 vessels as of 1<sup>st</sup> January 2018, 134 fewer than at the same time in 2017. Of these active vessels, 74 per cent were 10m and under in length. Active fleet capacity has decreased by 20,636 kW from 2017 to 2018. Since 2017, the less than 10m active vessel group decreased by 114 vessels and 7,100kW. Other active vessel length groups saw smaller changes each decreasing by between 2 and 13 vessels.

With regards to gear types employed throughout 2018, potting vessels comprise 46 per cent of the active fleet by number, while accounting for 24 per cent of active engine capacity. Similarly netters account for 12 per cent of active vessel numbers, but only 5 per cent of engine capacity. Demersal trawlers and seiners on the other hand account for 16 per cent of active fleet numbers and 31 per cent of total fleet engine capacity.

## **Table 1**: Vessel numbers (both active a and inactive) by gear type and lengthUnited Kingdom, 2018

As of 01/01/20	of 01/01/2018: A										As of 01/	01/2019:							
															Total	Total			Difference from
															active	inactive	Total	Total	01/01/2018 to
		DFN	DRB		DTS	FPO	HOK	MGP	PGP	PMP	PS	TBB	TM		vessels	vessels	fleet	fleet	01/01/2019
2017 totals		525	;	282	6	33 2,03	0 632	2	39	66	5	5	92	35	4,394	1,799	6,193	6,149	-44
	VL0010	500	)	98	19	91 1,75	1 598	3	32	66	5		9	5	3,255	1,622	4,877	4,851	-26
	VL1012	7	,	30		71 18	3 17	7	3				9		320	70	390	381	-9
	VL1218	5	5	109	1	77 8	1 2	2	4			5	23	6	412	49	461	463	2
	VL1824	8	8	24	14	19 1	2						17		210	26	236	231	-5
	VL2440	5	5	19	:	38	3 15	5					27	1	158	25	183	181	-2
	VL40XX			2		7							7	23	39	7	46	42	-4

<sup>a</sup> An active vessel is defined as a registered vessel that has undertaken fishing activity in the reference year. Note: DCF gear codes are included in Appendix C for reference.

# **Table 2:** Vessel engine capacity (kW) by gear type and lengthUnited Kingdom, 2018

As of 01/01/20	018:															As of 01/01/	2019:
													Total	Total			Difference from
													active	inactive	Total	1	01/01/2017 to
		DFN	DRB	DTS	FPO	HOK	MGP	PGP	PMP	PS	TBB	TM	vessels	vessels	fleet	Total fleet	01/01/2018
2018 totals		34,640	55,435	196,693	156,620	39,582	3,922	3,928	238	1,277	37,180	114,761	644,277	117,192	761,469	740,879	-20,589
	VL0010	26,694	7,911	20,799	108,451	28,956	2,848	3,928	238		775	529	201,129	72,403	273,532	529,033	255,501
	VL1012	1,039	4,824	9,792	25,284	2,401	324				1,227		44,891	10,217	55,108	48,356	-6,752
	VL1218	1,034	21,048	37,222	17,720	294	750			1,277	4,746	1,081	85,172	8,396	93,568	66,650	-26,918
	VL1824	2,872	8,183	59,554	3,657						3,976		78,241	7,661	85,902	41,590	-44,312
	VL2440	3,001	11,638	53,885	1,508	7,931					16,230	3,000	97,193	13,097	110,290	44,259	-66,032
	VL40XX		1,830	15,442							10,226	110,152	137,650	5,418	143,068	10,991	-132,077

Note: DCF gear codes are included in Appendix C for reference.

## **Table 3**: Vessel tonnage capacity (GT) by gear type and lengthUnited Kingdom, 2018

As of 01/01/2018:																As of 01/0	01/2019:
													Total	Total			Difference from
													active	inactive	Total	Total	01/01/2017 to
		DFN	DRB	DTS	FPO	НОК	MGP	PGP	PMP	PS	TBB	TM	vessels	vessels	fleet	fleet	01/01/2018
2018 totals		4,902	13,215	67,113	14,750	5,611	385	211	8	199	11,056	53,497	170,947	16,265	187,211	179,773	-7,439
VL	0010	1,694	632	1,971	6,378	1,251	217	211	8		70	47	12,479	3,983	16,462	118,276	101,813
VL	1012	110	610	1,268	2,971	208	37				163		5,366	925	6,290	10,579	4,289
VL	1218	357	4,076	8,939	3,229	47	131			199	650	191	17,819	1,558	19,377	17,066	-2,311
VL	1824	1,162	2,984	21,444	1,400						2,197		29,188	2,471	31,658	12,134	-19,524
VL	2440	1,579	4,181	24,373	772	4,105					4,481	850	40,341	4,552	44,893	17,688	-27,205
VL	40XX		732	9,118							3,495	52,409	65,754	2,776	68,530	4,030	-64,500

Note: DCF gear codes are included in Appendix C for reference.

#### A2. Fishing fleets in relation to fisheries

Vessels using demersal and pelagic trawls account for the greatest proportion of UK demersal landings (by weight and value) with the bulk of landings by vessels of 18m or over. Demersal trawlers also account for a significant proportion of crustacean landings (35 per cent by weight), much less than potting vessels (61 per cent by weight). Unlike demersal, the majority of crustacean landings are by the under 24m fleet, with under 10m vessels accounting for 24 per cent of the catch by weight, and 10 to 24m vessels accounting for a further 69 per cent by weight.

Dredges account for the majority of molluscs caught (49 per cent by weight), with 73 per cent of landings (by weight) by vessels between 12 and 40m in length. Under 10m vessels account for a further 18 per cent of mollusc landings by weight.

In terms of pelagic landings, pelagic trawlers account for 98 per cent of pelagic landings by value and 97 per cent by weight. Vessels of over 40m account for 96 percent of pelagic landings by value and 95 per cent by weight.

Between 2017 and 2018 the average value molluscs and demersal and crustacean species and the weight of all species groups decreased. Overall this is reflected in the decrease in total value (table 4) and a decrease in total weight (table 5) when compared to 2017 (to 1,112,359,828 total value (euro) and 694,711,697 total weight (kg) respectively).

	Crustacean	Demersal	Mollusc	Pelagic	Total value (€)
Gear:					
DFN	0%	6%	0%	0%	26,402,072
DRB	0%	0%	47%	0%	76,962,111
DTS	35%	75%	21%	0%	408,847,420
FPO	61%	1%	16%	0%	175,490,865
НОК	0%	4%	4%	1%	26,793,496
MGP	0%	0%	1%	0%	3,291,257
PGP	0%	0%	0%	0%	1,231,190
PMP	0%	0%	0%	0%	29,041
PS	0%	0%	0%	1%	2,358,293
TBB	1%	11%	10%	0%	62,192,786
TM	2%	2%	0%	98%	328,761,296
Total value (€)	229,996,604	385,100,030	177,939,678	295,817,569	1,088,853,881

**Table 4**: Proportion of fishery landings by value (Euros) accounted for by different gear typesUnited Kingdom, 2018

Note: Data are based on annual landings for all vessels included in the fleet as of 1<sup>st</sup> January 2018, and includes vessels joining after this date.

## **Table 5**: Proportion of fishery landings by weight (kg) accounted for by different gear typesUnited Kingdom, 2018

		Crustacean	Demersal	Mollusc	Pelagic	Total weight (kg)
Gear:						
DFN		0%	5%	0%	1%	11,604,300
DRB		0%	0%	49%	0%	34,771,926
DTS		36%	81%	14%	0%	175,507,727
FPO		58%	0%	26%	0%	57,131,689
НОК		0%	4%	2%	0%	9,154,650
MGP		0%	0%	2%	0%	2,858,617
PGP		0%	0%	0%	0%	359,704
PMP		0%	0%	0%	0%	8,265
PS		0%	0%	0%	1%	5,010,147
TBB		2%	7%	6%	0%	17,537,198
TM		2%	3%	0%	97%	380,767,476
Total weight (kg)	Total value	65,750,783	174,199,712	69,189,837	385,571,366	694,711,698

Note: Data are based on annual landings for all vessels included in the fleet as of 1<sup>st</sup> January 2018, and includes vessels joining after this date.

<b>Table 6</b> : Proportion of fishery landings by value (Euros) accounted for by different vessel length groups	
United Kingdom, 2018	

	Crustacean	Demersal	Mollusc	Pelagic	Total value (€)
Length:					
VL0010	32%	6%	15%	1%	125,998,402
VL1012	13%	1%	9%	0%	50,783,687
VL1218	28%	3%	26%	1%	125,234,715
VL1824	20%	22%	18%	0%	160,525,864
VL2440	5%	55%	22%	2%	268,364,606
VL40XX	2%	13%	11%	96%	381,452,555
Total value (€)	4,633,682	49,564,151	16,938,588	310,316,134	1,112,359,828

Note: Data are based on annual landings for all vessels included in the fleet as of 1<sup>st</sup> January 2018 and includes vessels joining after this date.

Table 7: Proportion of fishery landings by weight (kg) accounted for by different vessel length groups
United Kingdom, 2018

	Crustacean	Demersal	Mollusc	Pelagic	Total weight (kg)
Length:					
VL0010	24%	3%	18%	1%	36,231,629
VL1012	11%	1%	10%	1%	18,485,869
VL1218	36%	3%	32%	2%	58,770,118
VL1824	22%	21%	15%	0%	61,312,271
VL2440	5%	56%	17%	2%	117,611,652
VL40XX	2%	16%	8%	95%	402,300,158
Total weight (kg)	65,750,783	174,199,712	69,189,837	385,571,366	694,711,698

Note: Data are based on annual landings for all vessels included in the fleet as of 1<sup>st</sup> January 2018, and includes vessels joining after this date.

## A3. Development(s) during the previous year, including fisheries covered by multiannual management or recovery plans

The number of dredgers in the UK fishing fleet decreased from 2017 to 2018 by 23 vessels (see table 8). Over 15 metre vessels are currently managed under a strict days at sea regime which will act to restrict the overall activity of these vessels in area VII (see Appendix A). Latent capacity in the fleet caused by inactive vessels with shellfish permits, combined with high effort uptake by the scalloping sector, has led to more active and tightly regulated management of scalloping vessels operating in Western Waters since 2012. In comparison, the number of potting vessels has increased by 75 from 2017 to 2018 continuing a reversal of an overall trend of decline since 2008.

In 2013, UK fisheries administrations introduced active management of crabbing effort in ICES area VII under the Western Waters regime. During 2015 the UK also introduced the monitoring and management of fishing activity related to Sea Bass as required by Council Regulation 2015/960.

The number and capacity of demersal trawlers and seiners has been declining since 2008 and for vessel numbers this pattern continued between 2017 and 2018. Overall this has resulted in a reduced fishing fleet in UK demersal fisheries. The number and capacity of pelagic trawlers has stabilised following the decline seen in earlier years, increasing by 1 vessel in 2018 compared with 2016.

# **Table 8**: Developments in fleet capacity and compositionUnited Kingdom, 2012 – 2018

	DRB		DTS		FPO		ТМ	
	No. of	Capacity	No.of	Capacity	No.of	Capacity	No.of	Capacity
	vessels	kW	vessels	kW	vessels	kW	vessels	kW
2012 totals	267	56,015	889	236,015	2,053	145,660	41	148,226
VL0010	106	9,106	280	28,896	1,797	105,595	3	299
VL1040	158	44,533	597	184,781	256	40,065	6	1,960
VL40XX	3	2,376	12	22,338			32	145,968
2013 totals	294	62,816	854	224,615	2,026	149,016	37	141,673
VL0010	104	9,395	267	27,309	1,760	106,390	3	299
VL1040	187	50,846	578	178,713	266	42,626	4	937
VL40XX	3	2,574	9	18,593			30	140,438
2014 totals	305	64,265	830	218,127	2,019	148,820	37	138,909
VL0010	109	10,035	257	26,081	1,753	105,595	3	560
VL1040	193	51,657	564	173,452	266	43,224	4	3,630
VL40XX	3	2,574	9	18,593			30	134,719
2015 totals	307	63,591	821	220,781	2,000	149,275	33	131,912
VL0010	105	9,530	257	26,062	1,739	105,794	2	224
VL1040	200	52,231	554	172,126	261	43,481	4	3,630
VL40XX	2	1,830	10	22,593			27	128,058
2016 totals	308	62,182	786	214,742	2,072	157,184	34	132,409
VL0010	113	9,391	237	24,606	1,800	110,989	3	341
VL1040	192	50,218	540	169,943	272	46,195	4	3,630
VL40XX	3	2,574	9	20,193			27	128,438
2017 totals	313	60,510	755	215,989	2,114	160,753	37	136,386
VL0010	119	9,985	215	22,571	1,842	113,958	1	112
VL1040	192	48,695	531	173,225	272	46,795	10	4,705
VL40XX	2	1,830	9	20,193			26	131,570
2018 totals	290	57,484	696	205,379	2,089	161,337	38	136,241
VL0010	99	7,958	194	21,104	1,802	111,600	5	529
VL1040	189	47,695	494	165,234	287	49,737	7	4,081
VL40XX	2	1,830	8	19,042			26	131,632

Note: Data are based on annual landings for all vessels included in the fleet as of 1<sup>st</sup> January 2018, and includes vessels joining after this date.

#### Section B. Effort reduction Schemes

#### **B1. Statement on effort reduction schemes**

The UK Devolved Authorities (DAs) administer three distinct effort management schemes. The Sole Recovery Zone (SRZ) (ICES sub-area VIIe) effort reduction scheme and two Western Waters schemes to limit the maximum uptake of effort, rather than actively reduce it. These Western Waters schemes cover scalloping effort and crabbing effort (both covering effort in ICES sub-area VII) (see appendix A for more information on the Western Waters scheme). Under each scheme, key fleet segments are targeted and control measures taken to limit or reduce the number of vessels active and/or the effort they exert on the fishery.

#### Sole Recovery Zone (SRZ) Days at Sea Scheme:

The SRZ scheme limits the number of days spent at sea by vessels fishing with beam trawls of mesh size greater than or equal to 80mm and by vessels using static nets (including gill nets, trammel nets and tangle nets) with mesh size less than 220mm. The introduction of the SRZ scheme in 2004 initially reduced the number of vessels active, and the effort exerted, in SRZ areas. Since 2004, the first year of implementation of the SRZ scheme, the number of vessels beam trawling in the Western Channel has decreased by 26 per cent and effort (kW days) has decreased by 3 per cent (see figure 3).

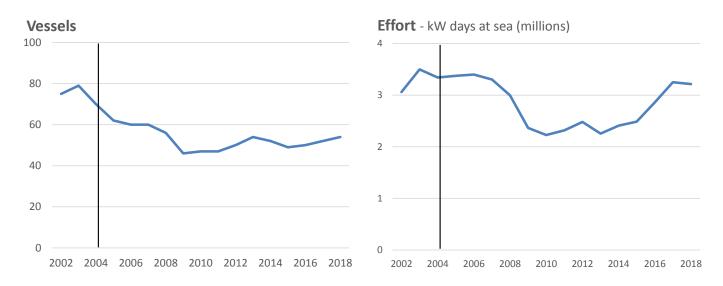


Figure 3: Fleet size and effort of vessels using beam trawls in the Sole Recovery Zone: 2002 to 2018

Note: The data presented here have been compiled for Sea Fisheries Statistics 2017 published in September 2018. The 2018 publication is due in September 2019.

Looking at more recent data (see table 9) we can see that the number of vessels active in the SRZ has remained relatively stable between 2013 and 2018, however, the effort has increased.

**Table 9**: Changes in fleet capacity and effort in the Sole Recovery ZoneUnited Kingdom, 2013 – 2018

	2013	2014	2015	2016	2017	2018
No. of active vessels	54	52	49	50	52	54
Days effort	6,121	6,116	6,246	6,786	7,544	7,507
kW days effort	2,255,310	2,407,901	2,485,062	2,859,242	3,249,740	3,214,075

## B2. Impact of effort reduction schemes on fleet capacity

The active fleet size has declined under the SRZ scheme, however, effort has started to increase after falling<sup>1</sup>. The decline in the SRZ fleet size observed since the introduction of the schemes may be the result of an actual decline in capacity, or may be the result of a shift in activity, but at the same time, an overall decline in active fleet size has been observed.

It is important to note that the UK fleet is involved in a wide variety of fishing activities, many outside of the SRZ scheme. Furthermore, effort schemes have been run in parallel with other fleet management schemes, notably quota and licensing controls, as well as national decommissioning schemes, therefore reduction in fleet capacity and effort cannot be attributed to a single causal factor.

The UK has operated several decommissioning schemes from the mid-1990s through to the last such scheme operated in 2010/11. Such schemes are difficult to structure so that they are targeted sufficiently to deliver value for money. Consequently, the emphasis in the UK in recent years has been on the use of alternative management measures such as quota limits to manage fleet activity.

<sup>&</sup>lt;sup>1</sup> Please see our annual Sea Fisheries Statistics publication for further details <u>https://www.gov.uk/government/collections/uk-sea-fisheries-annual-statistics</u>

## Section C. Entry/Exit Schemes

### C1. Statement of compliance with entry/exit schemes with level of reference

An Entry/Exit regime has been in place since 1993 as part of the UK licensing system, so that any new vessel can only be brought into the fleet if a corresponding exit of vessel capacity has already occurred. Furthermore, reductions in reference levels downwards has since occurred to take account of fleet exits funded with public aid through official decommissioning schemes. Exits under such schemes occurred in 2003 and 2004 (schemes related to the need to reduce fishing effort under the Cod Recovery regime), in 2007 (a limited scheme focussed on reducing effort related to Western Channel Sole), and in 2008/9 (a scheme focussed on the English inshore fleet). It is important to note that the UK has been fully compliant with fleet ceilings across the whole period.

**Table 10**: The impact of entry/exit schemes on fleet capacityUnited Kingdom, 2003 – 2018

		C	ЭТ	K	W
1	Capacity of the fleet on 01/01/2003	GTFR	241001	KWFR	942376
2	Capacity level for the application of the entry-exit regime (incorporates GT3 adjustments above)	GT03	254291	KW03	981757
3	Entries of vessels of more than 100GT financed with public aid	GT100	0	KW100	0
4	Other entries or capacity increases (not included in 3 or 4)		155278		527848
5	Increases in tonnage GT for safety reasons	GTS	0		0
6	Total Entries (3+4+5)		155278		527848
7	Exits before 1/1/2007 financed with public aid	GTa1	16454	KW a	44371
8	Exits after 1/1/2007 financed with public aid	GTa2	5989	NV a	23966
9	Other exits (not included in 7 and 8)		184504		654433
10	Total exits (7+8+9)		206947		722770
11	Other net changes to vessel capacity (i.e. modifications to data)		-9560		-6575
12	Power of engines replaced with public aid conditional to power reduction		0	KW r	0
13	Capacity of the fleet on 01/01/2019 (1+6-10+11)	GTt	179773	KWt	740879
14	Fleet Ceiling on 01/01/2019		231106		909141

Note: Data are extracted from the European Community Fleet Register and Appendix B contains a more detailed look at UK compliance with fleet ceilings from January 2003 to January 2019.

### Section D. General Fleet Management

#### D1. Summary of weaknesses and strengths of the management system

Effort management systems administered by the UK administrations are multi-faceted in their approach to controlling effort while simultaneously promoting conservation and sustainable behaviours. Both SRZ and the now defunct CRZ management schemes offer incentives to vessels committed to Fully Documented Fisheries (FDF), in the form of Catch Quota schemes. Vessels signed up to FDF schemes, and therefore carrying cameras on board, benefit from the receipt of extra effort allocation when fishing in these areas.

The primary challenge to these schemes is their enforcement. Once extra days have been granted for use of selective gears or for sustainable fishing strategies, UK fishing administrations are unlikely to be able to inspect every vessel. However UK administrations do closely monitor landings of these vessels, for instance 5 per cent cod vessels where checks are carried out to ensure that vessels remain compliant with the landings threshold.

The UK considers the move away from traditional effort (days at sea) for Cod and the implementation of regional multi-annual management plans and the landing obligation for demersal species in 2017 as a positive move for fisheries management.

### D2. Plan for improvement in fleet management system

On 2nd May 2012, following discussions between all four Fisheries Ministers within the UK, a revised concordat was agreed to give the administrations a greater degree of control over the management of their own commercial fishing fleets within a UK wide quota and effort management and licensing system. It also set out broad principles within which the administrations agreed to work. Devolution of fisheries powers results in the increased ability for fishing administrations to manage the vessels within and capacity of their respective fleets, by allowing each administration to take forward changes that suit the particular situations prevalent within their fishing fleets and to provide new opportunities to better support fishing communities on a sustainable basis. By setting out principles within which the administrations have an agreed or co-ordinated approach to specific areas within devolved competence. The concordat also sets out the approach by which Defra, the Northern Ireland Executive, the Scottish Government, and the Welsh Government are allocated annually agreed shares of UK quotas for distribution to their fleets. The concordat rationalises arrangements for the licensing and administration of fishing vessels.

The UK government ran a consultation on proposed changes to the Concordat from 7 December 2016 to 28 February 2017. UK Government and the Devolved Administrations have agreed that where necessary, part of the existing EU fisheries framework could be replaced by a UK framework. We are therefore working together to develop a new framework which will be made up of legislative and non-legislative elements that delivers for the whole of the UK and respects the devolution settlements of Wales, Scotland and Northern Ireland. Non-legislative elements of the framework will be set out in a Memorandum of Understanding (MoU) which is being jointly developed with the Devolved Administrations, and will replace the current Concordat. This is being supported by the ongoing sample testing of vessel engines across the UK fleet to confirm that the engine power of the vessel is as reported.

More recent work to improve fleet management and the capacity of the UK fleet includes several licence capping schemes by Scottish and English Fisheries Administrations. In England, this has occurred in 2 tranches, the first in 2008-09 in line with the decommissioning of vessels within the English inshore fleet and the second in 2016 where a review of the uncapped licences was undertaken. The scheme entails capping the licences of under 10m vessels that have not caught more than 300kg of quota between predefined dates, and removing shellfish entitlements where vessels have caught less than 1kg of shellfish during a pre-defined period.

In total there were 2762 active English under 10m licences as of 1 January 2019, 987 licences of these licences were capped at 350kgs following the 2009 and 2016 capping exercises with 106 of these licences had their shellfish permit temporarily suspended. This is intended to address some of the latent capacity existent in the under 10m fleet. This exercise included an appeals process. Some appeals were successful but subject to a monitoring period of 2 two years. Monitoring has ended for all licences and the UK is intending to review the policy in 2019.

In 2015 the Scottish Government, in light of scientific evidence, suspended indefinitely latent king scallop dredge entitlements, where they had not been utilised in the preceding six years. This cap was introduced to prevent over-exploitation of the stocks and applies to the use of mechanical dredges.

### D3. Information on the general level of compliance with fleet policy instruments

The UK has operated a licensing system since the mid-1990s under the principle that the total UK fleet capacity available has been ring-fenced to the levels seen at the creation of the UK licensing regime (i.e. no new capacity has been created since then). As such, the UK has been operating a fleet Entry/Exit regime in line with EU guidelines before they came into force in 1/1/2003. This has helped ensure that the UK has been able to operate within the EU level fleet Entry/Exit provisions as introduced from 1/1/2003 with only minimal transitional effects, and has operated within the fleet reference levels and capacity ceilings set for UK across the whole period of 1/1/2003 to 31/12/2018.

Fleet entries can only take place when an associated fleet exit of capacity equal to or greater than the new vessel has already taken place or will take place as part of any licence transaction associated with the fleet entry. The licensing system includes what are known as "entitlements" to licences to cover cases where there is an interval between the exit of one vessel and the entry of a replacement to the UK fleet. They can thus be used in the same way as an actual licence in transfers and aggregations. These represent the practical situation that there is a certain level of capacity always present within this holding state; this virtual capacity means that the physical capacity of the UK fleet will be consistently below the level of the fleet capacity ceilings.

Unused capacity, including safety capacity and the capacity premium for decommissioning (where only 96 per cent of the tonnage of vessels decommissioned is removed from the UK fleet ceilings), is not reallocated.

#### Section E. General Administrative Procedures

#### E1. Information on changes of the administrative procedures relevant to fleet management

Fleet management measures in the UK are carried out primarily through the licensing regime administered by Fisheries Administrations in the UK. This seeks to control both the capacity of the UK fishing fleet and, critically, access to the various fishing opportunities available to UK vessels. The quota and effort uptake by industry groups is monitored on a regular basis through the use of internal management reports in the UK. These are similar in nature to the monthly quota uptake reports operated by the Commission, but are carried out on a weekly basis (or daily if needed). Since the introduction of electronic logbooks, monitoring reports and management decisions have been based on real-time fleet data.

Under the concordat, many administrative procedures have become devolved and subsequently more localised, nevertheless fisheries administrations continue to work very closely to unify procedures and ensure clarity for industry. As part of this, devolved authorities' frequently conduct detailed reviews of operations and compliance systems.

### Section F. Balance Indicators

This section contains a summary of the background for each indicator, the key threshold levels relevant for the use of the indicator and details of those fleet segments where the thresholds appear to have been exceeded. Appendices E and G include where appropriate the fuller details of fleet segments where the indicator results are available. Where fleet segments are not included it is because the appropriate information has not been available to produce indicator values for that fleet segment.

It should be noted for the balance indicators included below that the biological balance indicators have been produced by the JRC on behalf of the Commission as approved by the STECF and released via the reports section of the STECF web-site. Biological indicators have been checked and verified before use to the extent possible given the information supplied. This includes checks as possible on detailed information on the compilation processes for the SHI and SAR indicators provided by staff at the JRC as set out in STECF's report on balance indicators (STECF-17-18):

### https://stecf.jrc.ec.europa.eu/documents/43805/1716169/STECF+17-18+-+Balance+capacity.pdf

This information was needed to allow identification of the specific fisheries that were involved for the fleet segments highlighted as operating outside the balance thresholds, which is needed to allow Member States to identify potential fishery-specific actions that might be possible to deal with any potential imbalance. The UK found the resources available within the Atlas very useful and would be grateful for the JRC to consider delivering a tutorial on the full contents and functionality of the Atlas.

Clarification was sought in 2017 from the Commission on the period indicators should be produced for. The Commission requests indicators to be calculated using the most recent data available with a reference year for this report of 2016. In accordance with these instructions the UK has produced Economic and technical indicators using data submitted for the Call for fleet economic scientific data concerning 2008-2017 as per Chapter III of Council Regulation (EU) 2017/1004. These indicators are calculated for the most recent 3 years up to the reference year of 2016.

Within the guidelines for the production of the report related to assessing the balance between fleet capacity and fishing opportunity, it states that the indicators are intended to be used in combination to draw conclusions for each fleet segment, as aggregating analyses across many different fisheries in a Member State is not useful. This leads to a degree of contradiction especially for the UK, in that within each fleet segment, while vessels will be of a similar size and carrying out fishing activity with similar gears, these activities will generally be being carried out in a variety of different seas all around the UK. This means that each fleet segment can represent a complex mix of very different types of activity in terms of the fish species being targeted, as well as the ecosystems within which this is occurring.

This can lead to two contradictory situations. Firstly a fleet segment may appear by the indicators to be below thresholds, but within that segment there may be sub-sections of the segment that have exceeded individual or a combination of thresholds and where a Member State may thus want to take specific management action. Secondly there can be fleet segments where they appear to be exceeding thresholds, but that position may be driven by just one sub-section of the fleet. This is especially true for the biological indicators where a fleet segment can be regarded as exceeding the threshold if it lands a significant proportion of what can be small amounts of quota. This issue was also highlighted in STECF's report on balance indicators 15-02 (<u>http://stecf.jrc.ec.europa.eu/c/document\_library/get\_file?uuid=69257a77-ddaf-4038-8375-ed2e5962e834&groupId=43805</u>).

Consequently, as stated within the guidelines issued to Member States, it should be borne in mind that where key thresholds for the indicators appear to have been exceeded, it is indicative of a **potential** imbalance between fishing capacity and fishing opportunity within the fleet segments concerned rather than a definitive conclusion.

Notwithstanding these methodological uncertainties, the UK can report that having assessed each fleet segment against the combination of indicators, as set out below, we consider that none of them can be conclusively defined as out of balance using the full range of indicators available (more detail is given in subsequent sections of the report):

## Table 11: Potential Fleet Segment Imbalance

Fleet Segment as								[]
defined by JRC								
Indicators	Area 🔽	Gear 🔽	Vessel Length 🔽	SAR 🔽	SHI 🔽	ROI 🔽	CRBER 🔽	VUI 🔽
GBR A27 DFN0010	AREA27	DFN	VL0010	Exceeded	No SHI V	No	No	Exceeded
OBITAZ7 DI NOOIO	AREA27	DFN	VL1012	No	No	NO		LACEEded
GBR A27 DFN1012 °	AREA27	DFN	VL1218	No	No	No	No	Exceeded
	AREA27	DFN	VL1824	No	No			
GBR A27 DFN2440 °	AREA27	DFN	VL2440	No	Exceeded	No	No	
GBR A27 DRB0010	AREA27	DRB	VL0010	No	No	No	No	Exceeded
GBR A27 DRB1012	AREA27	DRB	VL1012	No	No	No	No	Exceeded
GBR A27 DRB1218	AREA27	DRB	VL1218	No	No	No	No	Exceeded
GBR A27 DRB1824	AREA27	DRB	VL1824	No	No	No	No	
	AREA27	DRB	VL2440	No	No		N	
GBR A27 DRB2440 °	AREA27	DRB	VL40XX	No	No	No	No	
GBR A27 DTS0010	AREA27	DTS	VL0010	No	No	No	No	Exceeded
GBR A27 DTS1012	AREA27	DTS	VL1012	No	Exceeded	No	No	Exceeded
GBR A27 DTS1218 °	AREA27	DTS	VL1218	No	No	No	No	
GBR A27 DTS1824	AREA27	DTS	VL1824	Exceeded	Exceeded	No	No	
GBR A27 DTS2440	AREA27	DTS	VL2440	Exceeded	Exceeded	No	No	
GBR A27 DTS40XX °	AREA27	DTS	VL40XX	Exceeded	No	No	No	
OBIT A27 D1340AX	OFR	DTS	VL40XX	No	No	NO	NO	
GBR A27 FPO0010	AREA27	FPO	VL0010	No	No	No	No	Exceeded
GBR A27 FPO1012	AREA27	FPO	VL1012	No	No	No	No	
GBR A27 FPO1218	AREA27	FPO	VL1218	No	No	No	No	
GBR A27 FPO1824 °	AREA27	FPO	VL1824	No	No	No	No	
	AREA27	FPO	VL2440	No	No			
GBR A27 HOK0010	AREA27	НОК	VL0010	Exceeded	Exceeded	No	No	Exceeded
GBR A27 HOK1012 °	AREA27	НОК	VL1012	No	No	No	No	Exceeded
	AREA27	НОК	VL1218	No	No	-	-	
	AREA27	НОК	VL1824	No	No			
GBR A27 HOK2440 °	AREA27	HOK	VL2440	No	No	No	No	
	OFR	НОК	VL2440	No	No	-		
	OFR	HOK	VL40XX	No	No			
GBR A27 MGP0010 °	AREA27	MGP	VL0010	No	No	No	No	Exceeded
	AREA27	TM	VL0010	No	No			
	AREA27	MGP MGP	VL1012	No	No	-		
	AREA27 AREA27	MGP	VL1218 VL2440	No No	No No			
GBR A27 MGP1218 °	AREA27	PS	VL1218	No	No	No	No	Exceeded
	AREA27	TM	VL1012	No	No			
	AREA27	тм	VL1218	No	No	-		
	AREA27	PGP	VL0010	No	Exceeded			
	AREA27	PGP	VL1012	No	No			
GBR A27 PGP0010 °	AREA27	PGP	VL1218	No	No	No	No	Exceeded
	AREA27	PMP	VL0010	No	No			
	AREA27	PMP	VL1012	No	No	-		
	AREA27	твв	VL0010	No	No			
GBR A27 TBB0010 °	AREA27	ТВВ	VL1012	No	No	No	No	Exceeded
GBR A27 TBB1218	AREA27	твв	VL1218	No	Exceeded	No	No	Exceeded
GBR A27 TBB1824	AREA27	твв	VL1824	No	Exceeded	No	No	
	AREA27	твв	VL2440	No	Exceeded	No	No	
GBR A27 TBB2440 °	AREA27	твв	VL40XX	No	No	No	No	
	AREA27	TM	VL2440	Exceeded	Exceeded			
GBR A27 TM40XX °	AREA27	TM	VL40XX	Exceeded	Exceeded	No	No	Exceeded
	OFR	TM	VL40XX	No	No			

Table 11 highlights the segmentation used in 2018 when computing indicators. Fleet segments have been defined to combine fleet groups for which there are a low number of vessels. Technical and economic indicators are computed at this granularity. The MMO have produced indicators using the JRC segmentation in order for indicators to be comparable. For biological indicators assessments have been computed at a more detailed granularity where data permits. As an example fleet segment GBR A27 TM 40XX has an exceeding VUI value and for its components of TM VL2440 and TM VL40XX but not for other economic indicators.

Fleet Segment as								
defined by JRC								
Indicators	Area	Gear	Vessel Length	SAR	SHI	ROI	CRBER	VUI
	AREA27	ТМ	VL2440	Exceeded	Exceeded			
GBR A27 TM40XX °	AREA27	TM	VL40XX	Exceeded	Exceeded	No	No	Exceeded
	OFR	TM	VL40XX	No	No			

Given the methodological constraints outlined above, the UK perceives that the exceedance of indicator thresholds by a fleet segment can only give information on **potential** imbalance between fishing capacity and fishing opportunity. As such, the UK has developed an associated Fleet Action Plan to address those areas of the fleet where the STECF assessment suggested that there may be some indication of imbalance, including through the provision of support for improved selectivity and any other appropriate actions under our EMFF Operational Programme. The proposed actions are aimed largely at supporting stock recovery and sustainable harvesting. It is our view that these measures, along with our quota management system and associated arrangements for quota trading are sufficient to balance fishing opportunities.

The progressive implementation of the landing obligation is a substantive change. It is possible, as a result, that this policy shift will alter the balance of particular UK fleet segments. In that event, the UK fisheries administrations may wish to take a more active approach to capacity management in order to assist fleet segments in responding to these changes. Until the landing obligation is fully implemented the scale of the challenge for any fleet segment is difficult to predict. As a result UK fisheries administrations may in the future want to consider the use of permanent and temporary cessation in addition to the existing suite of actions. These measures are not included in the current Fleet Action Plan or Operational Programme, but may be introduced in the future depending on need, as will any revisions to the action plan to incorporate any change to the guidelines to the format to be used for action plans that may occur.

#### F1. Biological Indicators

#### **Sustainable Harvest Indicator**

- Definition This is a measure whereby the level of income that the fleet segment derives from a stock is compared to the stock's level of fishing mortality. Information is then collated for all stocks for which that segment has activity recorded to give an overall estimate of the extent the segment relies on stocks harvested above the levels set for Maximum Sustainable Yield (MSY) is available or an appropriate proxy for MSY if it is not. There are two elements involved the Harvest Rate Indicator (HRI) itself and the significance ratio (the proportion that the total value of landings by the fleet segment is related to the quota stocks it fishes).
- Criteria If the HRI for a segment is greater than one for three consecutive years and the significance ratio is also greater than 40%, the fleet segment could possibly be out of balance.
- Key results Full results are included in Appendix D. In total, eleven segments have the Harvest Rate Indicator above 1 and the significance ratio over 40% for three consecutive years:

							No. of vessels in
FS name	supra_reg	fishing_tech	vessel_length	2014	2015	2016	fleet segment 2016
GBR A27 DFN2440 °	AREA27	DFN	VL2440	1.2	1.1	1.1	7
GBR A27 DTS1012	AREA27	DTS	VL1012	1.2	1.0	1.1	85
GBR A27 DTS1824	AREA27	DTS	VL1824	1.2	1.2	1.0	167
GBR A27 DTS2440	AREA27	DTS	VL2440	1.4	1.6	1.3	87
GBR A27 HOK0010	AREA27	НОК	VL0010	1.4	1.3	1.1	541
GBR A27 PGP0010 °	AREA27	PGP	VL0010	1.3	1.3	1.0	91
GBR A27 TBB1218	AREA27	ТВВ	VL1218	1.2	1.0	1.0	24
GBR A27 TBB1824	AREA27	ТВВ	VL1824	1.3	1.1	1.2	17
GBR A27 TBB2440 °	AREA27	ТВВ	VL2440	1.4	1.2	1.3	25
GBR A27 TM40XX °	AREA27	TM	VL2440	1.5	1.4	1.2	1
GBR A27 TM40XX °	AREA27	TM	VL40XX	1.5	1.5	1.3	27

The STECG Balance Capacity Meeting in 2018 (STECF-18-14) did not consider the SHI for 2017 but updated some of the information of 2016. The EWG noted that out of 41 fleet segments active in 2016, landings in value were been provided aggregated in 41 fleet segments and SHI indicator values were available for 38. According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 19 fleet segments could be used meaningfully to assess the balance or imbalance because the indicator values are based on stocks that comprise less than 40% of the total value of landings by those fleet segments. The EWG also noted that for the 19 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 76.03% of the total value of the landings in 2016 provided by MS, and were as follows:

- 11 fleet segments may not be in balance with their fishing opportunities;
- 8 fleet segments may be in balance with their fishing opportunities.

The values in the table above appear to be broadly consistent with the evidence in the European Commission's Communication on Fishing Opportunities for 2016 about the extent to which EU stocks are being fished at Maximum Sustainable Yield (MSY).

Most of the segments showed some improvement in the indicator between 2014 and 2016, in addition three are just marginally above the SHI threshold in 2016 (PGP VL0010 and DTS VL1824 and TBB1218).

As mentioned previously, the fleet segments used in the capacity report do not generally correspond to specific fisheries or ecosystems, and without full access to the processes followed, it is difficult to assess how far each segment is fishing for stocks which lack full MSY assessment, as discussed in the current Commission guidance. It would also be helpful if the indicator itself could be developed to incorporate a rating similar to the significance ratio whereby the degree to which MSY was available for the stocks concerned could be provided. The UK would welcome further guidance on this point, including how far it is possible to use alternative biological indicators relating to particular species in these circumstances.

#### Stocks-at-risk indicator

Definition The number of stocks regarded as at risk where the fleet segment landings for a stock are either more than 10% of total landings by the segment <u>or</u> the fleet segment accounts for more than 10% of total EU landings of that stock.

Criteria If a segment has any stocks at risk identified it has the potential of a biological imbalance

Key results Full details of the results of this indicator are provided in Appendix D. Details for those fleet segments where the stocks at risk results are greater than zero for any year in 2013 to 2016:

							No. of vessels in
FS name	supra_reg	fishing_tech	vessel_length	2014	2015	2016	fleet segment 2016
GBR A27 DFN0010	AREA27	DFN	VL0010	0.0	0.0	1.0	590
GBR A27 DTS1824	AREA27	DTS	VL1824	7.0	4.0	3.0	167
GBR A27 DTS2440	AREA27	DTS	VL2440	8.0	5.0	7.0	87
GBR A27 DTS40XX °	AREA27	DTS	VL40XX	1.0	1.0	3.0	8
GBR A27 HOK0010	AREA27	НОК	VL0010	0.0	0.0	2.0	541
GBR A27 TM40XX °	AREA27	TM	VL2440	0.0	0.0	1.0	1
GBR A27 TM40XX °	AREA27	TM	VL40XX	1.0	1.0	1.0	27

As mentioned above, while each fleet segment includes vessels of similar size and using similar gears, each will include vessels fishing in very different sea areas. In addition, while for some stocks the vessels may be targeting the specific species, for others the fact that the stock is at risk and quotas are set at low levels may mean that a fleet segment as a whole can be regarded as targeting a stock at risk by the activities of only a few vessels within the fleet segment.

This means that this biological indicator is very much driven by the information used to make the scientific judgment on the state of stocks rather than the level of landings of the stocks in question for the fleet segment. It would thus be helpful to have an understanding from the Commission regarding the confidence that can be attached to the stock assessment data used to create the biological indicators. It would also be helpful if the indicator itself could be developed to incorporate a rating similar to the significance ratio within the SHI indicator whereby the degree to which MSY was available for the stocks concerned could be available.

Despite methodological uncertainties, the UK administrations are giving close attention to the fleet segments that have been identified to target stocks at risk for three consecutive years. Remedial action includes the pursuit of improved sustainability through the EU TAC and quota negotiations (which encompasses all but one of the stocks covered by these fleet segments), regional management plans and related technical measures and national measures including the provision of support for improved selectivity in these segments under our EMFF Operational Programme.

#### F2. Economic Indicators

#### **Return on Investment**

- Definition This compares the return on the investment (RoI) vessel owners make in the fishing activity against the level of income they might have had from just investing that same amount of funds elsewhere at no risk.
- Criteria If the RoI is less than 0 it implies the vessel operators are not getting a return on their investment. If the RoI is greater than 0 but less than the average interest rate that could have been found from long-term low-risk investments (e.g. government issues bonds), it implies that the segment is not as attractive as alterative options. Either would show the fleet segment as potentially imbalance and not economically sustainable.
- Key results Full details of the results of this indicator are provided in Appendix E. Details for the single fleet segment where the ROI is consistently less than zero for all three years between 2014 and 2016:

	Fleet segment - as				Number of
	defined by JRC				vessels in fleet
	indicators	2014	2015	2016	segment (2016)
НОК					
	GBR A27 HOK1012 °	-24.46	-4.20	-1.13	19

#### Current versus Break Even Revenue

- Definition This is the ratio of the level of current revenue from the fleet segment against the level needed for break-even i.e. does the fishing activity cover the level of costs involved.
- Criteria If the ratio is less than 1 there is a potential imbalance as the fleet segment is not profitable i.e. income does not cover fixed and variable costs. If the CR/BER result is negative, this means that variable costs alone exceed current revenue, indicating that the more revenue is generated, the greater the losses will be.
- Key results Full details of the results of this indicator are provided in Appendix E. Since this is a short term economic indicator, the use of time series data is not appropriate. There were no segments where the ration was below 1 in 2016.

Achieving return on investment is primarily the responsibility of the fishing industry, though the UK administrations have assisted the development of economic analytical capacity in the sector, as well as seafood marketing, through sponsorship of the arm's-length public body Seafish.

#### F3. Vessel Use Indicators

#### The inactive fleet indicator

Inactive vessels constitute an unused capacity and as such it can be considered that they reduce the overall technical efficiency and capacity utilisation rate of the total fleet. The indicator is calculated on the basis of DCF segment vessel length-classes rather than vessel segments as information on gear and target fishery is not available. The table below shows the proportion of inactive vessels within the total fleet broken down by length banding:

	2016	2017	2018
VL0010	32.1%	31.0%	33.3%
VL1012	16.1%	16.4%	17.9%
VL1218	6.1%	10.0%	10.6%
VL1824	5.7%	6.7%	11.0%
VL2440	11.9%	12.8%	13.7%
VL40XX	9.3%	10.4%	15.2%

If more than 20% of the fleet segment is recurrently inactive this could indicate technical inefficiency that may reveal the existence of an imbalance, unless it can be explained by other reasons, such as unexpected climatic or man-made events or emergency measures as foreseen in the CFP. However, this is only true for the "VL0010" grouping – within this there are very many vessels involved. The UK has historically seen this level of inactive vessels. It relates to the fact that for this group of vessels there can be many reasons why vessel operators choose to keep their vessels registered but inactive. These include (but are not limited to):

- Carrying out other activities (i.e. non-fishing) to gain income, but wanting to retain their boat as an option for the future;
- Wanting to retain the vessel as an asset;
- Wanting to retain the vessel as a family inheritance;
- Using the vessel for marine activities other than commercial fishing (e.g. diving and other recreational activities).

The decision as to whether or not a vessel is active is seen as the responsibility of the fishing industry as part of the process of ensuring that individual businesses achieve the return on investment they require. As mentioned above, UK administrations have assisted the development of economic analytical capacity in the sector, as well as seafood marketing, through sponsorship of the arm's-length public body Seafish.

#### Vessel utilisation indicator

- Definition This indicator concerns the average activity levels of vessels that did fish at least once in the year, taking account of the seasonality of the fishery and other restrictions. Under normal conditions, it can be expected that 10% or less of the vessels in a fleet segment should be inactive, which could be due to major repairs, refits, conversions or pending sales and transfers. It assumes a theoretical maximum number of 220 days could be fished by all fleet segments if there were no external constraints.
- Criteria If less than 70% of the potential, workable activity of comparable vessels is demonstrated, this could indicate technical inefficiency that may reveal the existence of an imbalance, unless it can be explained by other reasons, such as unexpected climatic or man-made events or emergency measures as foreseen in the CFP.
- Key results Full details of the results of this indicator are provided in Appendix E. Details for those fleet segments where the utilisation ratio is consistently below 70% (assuming the theoretical maximum of 220 days) for each year during 2014 to 2017 are given below:

Fleet segment - as defined by JRC indicators	2015	2016	2017	Number of vessels in fleet
Indicators	2015	2016	2017	segment (2017)
GBR A27 DFN0010	0.25	0.26	0.23	533
GBR A27 DFN1012 °	0.58	0.20	0.23	16
GBR A27 DFN2440 °	1.04	1.12	1.13	13
	1.01	1.12	1.15	15
GBR A27 DRB0010	0.33	0.33	0.28	119
GBR A27 DRB1012	0.50	0.60	0.54	29
GBR A27 DRB1218	0.57	0.66	0.56	117
GBR A27 DRB1824	0.88	0.95	0.96	25
GBR A27 DRB2440 °	0.97	0.94	1.00	23
GBR A27 DTS0010	0.41	0.43	0.36	215
GBR A27 DTS1012	0.52	0.60	0.57	79
GBR A27 DTS1218 °	0.67	0.75	0.71	196
GBR A27 DTS1824	0.78	0.82	0.81	163
GBR A27 DTS2440	0.97	0.97	0.92	93
GBR A27 DTS40XX °	0.92	1.06	1.17	9
GBR A27 FPO0010	0.54	0.50	0.36	1842
GBR A27 FPO1012	0.71	0.69	0.68	179
GBR A27 FPO1218	0.74	0.82	0.83	77
GBR A27 FPO1824 °	1.15	1.09	1.13	16
GBR A27 HOK0010	0.21	0.19	0.16	649
GBR A27 HOK1012 °	0.41	0.40	0.39	18
GBR A27 HOK2440 °	1.09	1.08	1.15	15
GBR A27 MGP0010 °	0.33	0.26	0.27	38
GBR A27 MGP1218 °	0.42	0.53	0.39	21
GBR A27 PGP0010 °	0.22	0.21	0.21	100
GBR A27 TBB0010 °	0.32	0.24	0.26	23
GBR A27 TBB1218	0.64	0.49	0.53	21
GBR A27 TBB1824	1.10	1.15	1.14	17
GBR A27 TBB2440 °	0.97	1.04	0.95	36
GBR A27 TM40XX °	0.33	0.30	0.29	27

Given the highly variable nature of activity seen within each fleet segment within the UK fleet, the UK wished to take up the option of applying differential days at sea figures for certain segments. Eight of the segments listed above relate to vessels under 10m in length. These vessels are often engaged in highly seasonal patterns of activity. They may thus fish for only limited periods of the year as opposed to the level of 220 days that could be more applicable to larger vessels. The UK considers that the heterogeneous

nature of vessels within the under 10m in length fleet segments alongside the seasonal restrictions on fishing makes it inappropriate to draw conclusions on fleet utilisation for these segments from the vessel utilisation indicator even is an alternative level of days is used in the comparison. Appendix F provides evidence in support of this statement in the form of frequency distributions of days effort for the under 10 fleet segments in 2017.

Notably, vessels in the TM - VL40XX segment are affected by similar factors as they are involved in highly seasonal and time limited pelagic fisheries. As such, this level of utilisation is not seen as indicative of an unsustainable level of activity. As stated above, the UK position is that the decision as to whether or not a vessel is inactive or not is seen as the responsibility of the fishing industry. While it is thus important to be aware of such capacity in terms of the potential level of fishing activity that could be seen, the fact that the effort is not currently being used is not necessarily evidence of an imbalance and is more likely to reflect other factors such as economic factors and the limitations of available quotas.

### Appendix A. Effort Reduction Schemes Supporting Data

#### Western Waters Scheme:

The Western Waters was introduced in 2003 and covers nine sea areas. Fishing trips targeting crabs, demersal species or scallops are all covered by the regulation. Regulated activity is permitted for UK registered vessels in only four of these (ICES sub-areas V and VI, ICES sub-area VII, ICES sub-area VIII, and a Biologically Sensitive Area to the south and west of Ireland).

From 2002 to 2018 the number of vessels targeting scallops in ICES sub-areas V and VI decreased by 47 per cent while the number in ICES sub-area VII increased by 9 per cent. Effort in ICES sub-areas V and VI fell by 60 per cent, but effort in ICES sub-area VII increased by 34per cent. This increase is partly due to diversion of activity from other sea areas as well as increased activity by vessels already fishing in ICES sub-area VII.

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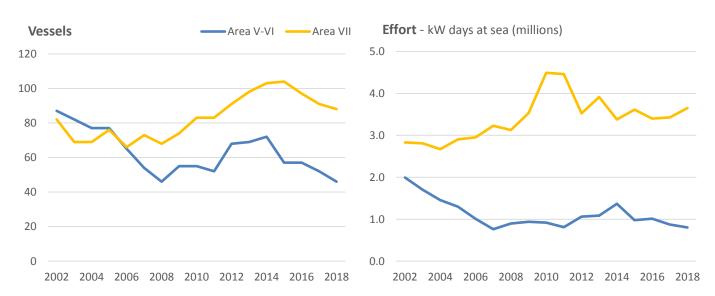


Figure 1. Fleet size and effort (kW days) of vessels targeting scallops in the Western Waters: 2002 to 2018

As a result of the UK fleet approaching its allocated limits, at the start of 2012 UK fisheries administrations introduced a scheme to limit the allocation of days at sea to 15m and over vessels targeting scallops in subarea VII. Since 2012, the effort exerted by UK vessels in the Western Waters scalloping fleet has declined by 10 per cent.

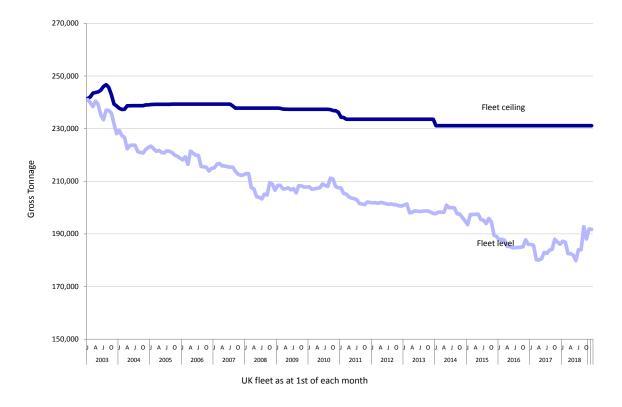
<b>Table 1</b> : Scalloping fleet capacity and effort in Western Waters sub-area VII
United Kingdom, 2013 – 2018

	2014	2015	2016	2017	2018
No. active vessels	103	104	99	93	89
Days effort	8,196	8,626	8,723	8,405	8,730
kW days effort	3,479,957	3,714,216	3,475,450	3,604,208	3,801,964

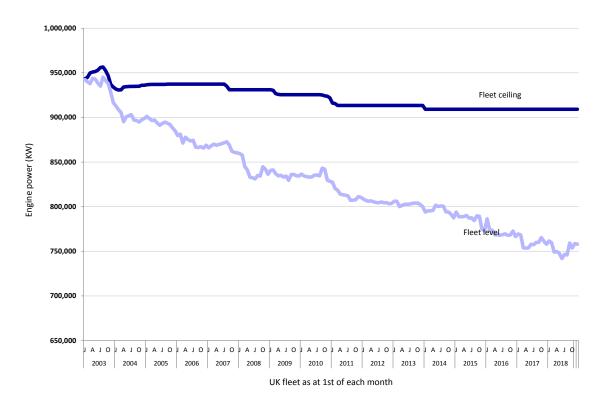
#### Appendix B. Entry/Exit Schemes Summary Data

Extracts from EU Community Fleet Register analysis of UK reported fleet positions

**Figure 1**: UK Compliance with Fleet Capacity Levels Details for Gross Tonnage of vessels



**Figure 2:** UK Compliance with Fleet Capacity Levels Details for Engine Power of vessels



## Appendix C. Gear Codes

DCF fishing gear codes used in Fleet Capacity Report:

DFN	Drift and/or fixed netters
DRB	Dredgers
DTS	Demersal trawlers and/or demersal seiners
FPO	Vessels using pots and/or traps
HOK	Vessels using hooks
MGO	Vessel using other active gears
MGP	Vessels using polyvalent active gears only
PG	Vessels using passive gears only
PGO	Vessels using other passive gears
PGP	Vessels using polyvalent passive gears only
PMP	Vessels using active and passive gears
PS	Purse seines
ТМ	Pelagic trawlers
TBB	Beam trawlers

## **Biological – Harvest Rate indicator:**

		<i>.</i>					No. of vessels in
FS name	supra_reg	fishing_tech	vessel_length	2014	2015		fleet segment 2016
GBR A27 DFN0010	AREA27	DFN	VL0010	1.3	1.2	1.0	590
GBR A27 DFN1012 °	AREA27	DFN	VL1012	1.2	1.2	1.1	10
GBR A27 DFN1012 °	AREA27	DFN	VL1218	1.0	1.0	1.0	6
GBR A27 DFN2440 °	AREA27	DFN	VL1824	1.2	0.9	0.9	7
GBR A27 DFN2440 °	AREA27	DFN	VL2440	1.2	1.1	1.1	7
GBR A27 DRB0010	AREA27	DRB	VL0010	1.2	1.0	0.9	112
GBR A27 DRB1012	AREA27	DRB	VL1012	1.1	0.9	1.0	31
GBR A27 DRB1218	AREA27	DRB	VL1218	1.1	1.0	1.1	111
GBR A27 DRB1824	AREA27	DRB	VL1824	1.5	1.0	1.1	24
GBR A27 DRB2440 °	AREA27	DRB	VL2440	1.2	1.0	1.1	27
GBR A27 DRB2440 °	AREA27	DRB	VL40XX	1.3	1.2	1.1	3
GBR A27 DTS0010	AREA27	DTS	VL0010	1.2	1.0	1.0	237
GBR A27 DTS1012	AREA27	DTS	VL1012	1.2	1.0	1.1	85
GBR A27 DTS1218 °	AREA27	DTS	VL1218	1.1	0.9	1.0	201
GBR A27 DTS1824	AREA27	DTS	VL1824	1.2	1.2	1.0	167
GBR A27 DTS2440	AREA27	DTS	VL2440	1.4	1.6	1.3	87
GBR A27 DTS40XX °	AREA27	DTS	VL40XX	0.8	0.9	0.9	8
GBR A27 DTS40XX °	OFR	DTS	VL40XX				1
GBR A27 FPO0010	AREA27	FPO	VL0010	1.1	0.8	1.0	1814
GBR A27 FPO1012	AREA27	FPO	VL1012	1.1	0.7	1.0	178
GBR A27 FPO1218	AREA27	FPO	VL1218	1.1	0.7	1.0	80
GBR A27 FPO1824 °	AREA27	FPO	VL1824				13
GBR A27 FPO1824 °	AREA27	FPO	VL2440				2
GBR A27 HOK0010	AREA27	НОК	VL0010	1.4	1.3	1.1	541
GBR A27 HOK1012 °	AREA27	НОК	VL1012	1.3	1.2	0.8	18
GBR A27 HOK1012 °	AREA27	НОК	VL1218				1
GBR A27 HOK2440 °	AREA27	НОК	VL1824				0
GBR A27 HOK2440 °	AREA27	НОК	VL2440	0.8	0.8	0.8	13
GBR A27 HOK2440 °	OFR	НОК	VL2440				0
GBR A27 HOK2440 °	OFR	НОК	VL40XX	0.8	0.8	0.8	1
GBR A27 MGP0010 °	AREA27	MGP	VL0010	1.1	1.2	0.9	13
GBR A27 MGP0010 °	AREA27	ТМ	VL0010	0.7	0.9	0.9	3
GBR A27 MGP1218 °	AREA27	MGP	VL1012	0.6			0
GBR A27 MGP1218 °	AREA27	MGP	VL1218	1.1	1.2	0.8	6
GBR A27 MGP1218 °	AREA27	MGP	VL2440				0
GBR A27 MGP1218 °	AREA27	PS	VL1218		1.5	1.3	5
GBR A27 MGP1218 °	AREA27	ТМ	VL1012				0
GBR A27 MGP1218 °	AREA27	ТМ	VL1218	0.9	1.1	0.7	3
GBR A27 PGP0010 °	AREA27	PGP	VL0010	1.3	1.3	1.0	91
GBR A27 PGP0010 °	AREA27	PGP	VL1012	1.3	1.2		0
GBR A27 PGP0010 °	AREA27	PGP	VL1218	1.5			0
GBR A27 PGP0010 °	AREA27	PMP	VL0010	1.2	1.0	1.1	8
GBR A27 PGP0010 °	AREA27	PMP	VL1012				0
GBR A27 TBB0010 °	AREA27	твв	VL0010	1.1	1.1	0.9	20
GBR A27 TBB0010 °	AREA27	твв	VL1012	1.1	1.0	0.9	11
GBR A27 TBB1218	AREA27	ТВВ	VL1218	1.2	1.0	1.0	24
GBR A27 TBB1824	AREA27	ТВВ	VL1824	1.3	1.1	1.2	17
GBR A27 TBB182440 °	AREA27	твв	VL2440	1.5	1.1	1.2	25
GBR A27 TBB2440 °	AREA27	TBB	VL2440 VL40XX	1.4	1.2	1.0	8
GBR A27 TM40XX °	AREA27	ТМ	VL4077	1.1	1.0	1.0	1
GBR A27 TM40XX °		TM	VL2440 VL40XX		1.4		27
GBR A27 TM40XX °	AREA27 OFR	TM	VL40XX VL40XX	1.5	1.3	1.3	0

## Biological – Stocks at Risk indicator:

GBR A27 TBB1824 AREA27 TBB VL1824 0 0 0 17   GBR A27 TBB2440° AREA27 TBB VL2440 0 0 0 25   GBR A27 TBB2440° AREA27 TBB VL00XX 0 -1 0 8   GBR A27 TM40XX° AREA27 TM VL2440 0 0 1 1   GBR A27 TM40XX° AREA27 TM VL2440 0 0 1 1 1		1						No. of vessels in
CBR A27 DFN1012*ARLA27DFNVL101200010GBR A27 DFXA40*ARLA27DFNVL121800007GBR A27 DFXA40*ARLA27DFNVL12140000112GBR A27 DFRA40*ARLA27DFNVL121400000111GBR A27 DFR1012ARLA27DFRVL10120000111GBR A27 DFR1218ARLA27DFRVL12180000227GBR A27 DFR2440*ARLA27DFRVL12400000227GBR A27 DFR2440*ARLA27DFRVL12400000227GBR A27 DFR2440*ARLA27DTSVL10120000227GBR A27 DTS1124ARLA27DTSVL12181000227GBR A27 DTS140X*ARLA27DTSVL121810001814GBR A27 DTS140X*ARLA27DTSVL12180001814GBR A27 DTS40X*OFFDTSVL24000001814GBR A27 FP01218ARLA27FP0VL1218000180GBR A27 FP01214ARLA27FP0VL1240-1-1-1111111111111111111								
GBR A27 DFN1012*AREA27DFNV112180000GBR A27 DVA240*AREA27DFNV124000007GBR A27 DVB400*AREA27DFNV12400000111GBR A27 DVB4010AREA27DFNV12100000111GBR A27 DRB124AREA27DFNV110120000111GBR A27 DRB2440*AREA27DFNV11244000027GBR A27 DRB2440*AREA27DFNV11244000027GBR A27 DTS1012AREA27DTSV110100000287GBR A27 DTS1012AREA27DTSV112181000101GBR A27 DTS1012AREA27DTSV11218100011								
CBR A27 DFN2440*AREA27DFNV18240000CBR A27 DR0440*AREA27DFNV124000000112CBR A27 DR01012AREA27DR8V1010120000311GBR A27 DR01218AREA27DR8V11218000244GBR A27 DR81244AREA27DR8V12440000244GBR A27 DR81244AREA27DR8V1244000024GBR A27 DR81244AREA27DR8V12440000277GBR A27 DR1010AREA27DTSV10112000287GBR A27 DTS1010AREA27DTSV11218100201GBR A27 DTS1444AREA27DTSV12440857877GBR A27 DTS1444AREA27DTSV12440857877GBR A27 DTS1444AREA27DTSV140XX-1-11111GBR A27 DTS1444AREA27PTOV1010200008GBR A27 DTS1444AREA27FPOV101020000111111111111111111111111111111111111 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td></t<>							-	
CBR A27 DFN2440*AREA27DFNVL24400000112GBR A27 DBR010AREA27DBRVL01012000311GBR A27 DBR31218AREA27DBRVL12180000224GBR A27 DBR344AREA27DBRVL1218000224GBR A27 DBR344AREA27DBRVL12440000227GBR A27 DBR3440*AREA27DBRVL400X-1-113GBR A27 DTS1012AREA27DTSVL10120000257GBR A27 DTS1244AREA27DTSVL12181000251GBR A27 DTS1244AREA27DTSVL102474311738GBR A27 DTS12440AREA27DTSVL10247-1-11138677<								
GBR A27 DR80101AREA27DR8VL0010000111GBR A27 DR81CRA27DR8VL1212000131GBR A27 DR81241AREA27DR8VL1244000224GBR A27 DR81244AREA27DR8VL1244000227GBR A27 DR31244AREA27DR8VL2440000237GBR A27 DR3144AREA27DR5VL0010000201GBR A27 DT51010AREA27DT5VL012000201GBR A27 DT51244AREA27DT5VL1218100201GBR A27 DT5140X4*AREA27DT5VL124811388GBR A27 DT540X4*AREA27DT5VL40XX111111GBR A27 DT540X4*AREA27DT5VL40XX11 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td></td<>								-
GBR A27 DRB1012   AREA27   DRB   VL1012   0   0   0   111     GBR A27 DRB124   AREA27   DRB   VL1218   0   0   0   24     GBR A27 DRB124   AREA27   DRB   VL1240   00   0   0   24     GBR A27 DRB2440*   AREA27   DRB   VL00XX   -1   -1   -1   -1   3     GBR A27 DTS1012   AREA27   DTS   VL1012   0   0   0   267     GBR A27 DTS1214   AREA27   DTS   VL1218   1   0   0   267     GBR A27 DTS12440   AREA27   DTS   VL240   8   5   7   87     GBR A27 DTS4040   AREA27   PTO   VL0101   0   0   0   11   1								
GBR A27 DRB1218AREA27DRBVL1218000111GBR A27 DRB444AREA27DRBVL124400024GBR A27 DRB4440AREA27DRBVL40XX-1-1-13GBR A27 DTS010AREA27DTSVL0101000267GBR A27 DTS112AREA27DTSVL1218100201GBR A27 DTS112AREA27DTSVL1218100201GBR A27 DTS12440AREA27DTSVL12181138GBR A27 DTS12440AREA27DTSVL40X11138GBR A27 DTS12440AREA27FPOVL10120001814GBR A27 FP01012AREA27FPOVL12180001814GBR A27 FP0128AREA27FPOVL1218000181GBR A27 FP0128AREA27FPOVL1218000181GBR A27 FP0128AREA27FPOVL1218000181GBR A27 FP0128AREA27HOKVL1012000181GBR A27 FP018244AREA27HOKVL1218000181GBR A27 HOX1010AREA27HOKVL1218000131GBR A27 HOX24404AREA27HOKVL1218000133GBR A27 HOX24404AREA27<							_	
GR A27 DRB1824   AREA27   DRB   VL1824   0   0   0   24     GR A27 DRB2440*   AREA27   DRB   VL2440   0   0   0   27     GR A27 DRB2440*   AREA27   DRB   VL40XX   -1   -1   3     GR A27 DTS1010   AREA27   DTS   VL1012   0   0   0   85     GR A27 DTS1212   AREA27   DTS   VL1218   1   0   0   201     GR A27 DTS1244   AREA27   DTS   VL1824   7   4   3   157     GR A27 DTS40XX*   AREA27   DTS   VL40XX   -1   -1   1   1   3   8     GR A27 DTS40XX*   AREA27   FPO   VL0010   0   0   0   1814     GR A27 FPO1012   AREA27   FPO   VL1824   -1   -1   1   1   1   3     GR A27 FPO1844   AREA27   HOK   VL1824   -1   -1   1   1   1 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
GBR A27 DRB2440*AREA27DRBVL244000027GBR A27 DRB2440*AREA27DTSVL40XX-1-1-13GBR A27 DTS0101AREA27DTSVL1012000237GBR A27 DTS1212*AREA27DTSVL1218100201GBR A27 DTS1212*AREA27DTSVL12181138GBR A27 DTS1244AREA27DTSVL12181138GBR A27 DTS444AREA27DTSVL40XX111111GBR A27 DTS40X*AREA27TFOVL00X-1-1-111	-							
GBR A27 DR82440° GBR A27 DTSAREA27 UTSDTSVL0010-1-1-1113GBR A27 DTS1010 GBR A27 DTS1118'AREA27 AREA27 AREA27DTSVL1012 VL1218000<								
GBR A27 DTS0101AREA27 AREA27 DTSVL001000<								
GBR A27 DTS1012AREA27 AREA27 DTSVL1012 VL1218000								
GBR A27 DTS1218*AREA27DTSVL1218100201GBR A27 DTS2440AREA27DTSVL124085787GBR A27 DTS40XX*AREA27DTSVL040X1138GBR A27 DTS40XX*AREA27PTSVL0010000111GBR A27 DTS40XX*AREA27FPOVL001000001181GBR A27 FPO1010AREA27FPOVL0112000080GBR A27 FP01218AREA27FPOVL1218000080GBR A27 FP01214AREA27FPOVL12440-1-1-11								
GBR A27 DTS1824   AREA27   DTS   VL1824   7   4   3   167     GBR A27 DTS4040   AREA27   DTS   VL2440   8   5   7   87     GBR A27 DTS40XX*   AREA27   DTS   VL40XX   1   1   3   8     GBR A27 DTS40XX*   OFR   DTS   VL40XX   -1   -1   1								
GBR A27 DTS2440AREA27DTSVL2440BS7B7GBR A27 DTS40XX*OFRDTSVL40XX1138GBR A27 DTS40XX*OFRDTSVL40XX-1-1-1111GBR A27 DTS40XX*OFRDTSVL40XX-1-1-1111GBR A27 DTS40X**OFRDTSVL40XX-1-1-111<								
GBR A27 DTS40X*AREA27DTSVL40XX113MessGBR A27 DTS40X*OFRDTSVL40XX-1-1-1111GBR A27 DTS40X*OFRDTSVL40XX-1-1-11111GBR A27 FP01012AREA27FPOVL1012OOO00000GBR A27 FP0124*AREA27FPOVL1218OOO000								
GBR A27 DTS40XX*OFRDTSVL40XX111IGBR A27 FP01010AREA27FP0VL00100001814GBR A27 FP01212AREA27FP0VL1012000080GBR A27 FP01224AREA27FP0VL12180002541GBR A27 FP01824*AREA27FP0VL12440-1-1-112GBR A27 FP01824*AREA27HOKVL1012000018GBR A27 HOK1012*AREA27HOKVL1218-1-111 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
GBR A27 FPO0101AREA27FPOVL00100001814GBR A27 FPO1212AREA27FPOVL1012000178GBR A27 FPO1218AREA27FPOVL11800080GBR A27 FPO1824*AREA27FPOVL240-1-1-112GBR A27 FPO1824*AREA27FPOVL240-1-1-112GBR A27 HOK0101AREA27HOKVL01200018GBR A27 HOK1012*AREA27HOKVL1218-1-111GBR A27 HOK2440*AREA27HOKVL1218-1-1111GBR A27 HOK2440*AREA27HOKVL1218-1-111<								
GBR A27 FPO1012   AREA27   FPO   VL1012   0   0   0   880     GBR A27 FP01218   AREA27   FPO   VL1218   0   0   0   80     GBR A27 FP01824*   AREA27   FPO   VL1824   -1   -1   1   13     GBR A27 FP01824*   AREA27   FPO   VL1824   -1   -1   1   12     GBR A27 HOK1010   AREA27   HOK   VL1012   0   0   0   18     GBR A27 HOK1012*   AREA27   HOK   VL1218   -1   -1   11   1     GBR A27 HOK2440*   AREA27   HOK   VL1240   0   0   0   13     GBR A27 HOK2440*   AREA27   HOK   VL2440   -1   -1   1								
GBR A27 FP01218   AREA27   FP0   VL1218   0   0   0   80     GBR A27 FP01824*   AREA27   FP0   VL1824   -1   -1   -1   13     GBR A27 FP01824*   AREA27   FP0   VL2440   -1   -1   1   2     GBR A27 HOK01012   AREA27   HOK   VL0010   0   0   0   18     GBR A27 HOK1012*   AREA27   HOK   VL1218   -1   -1   1   1     GBR A27 HOK1012*   AREA27   HOK   VL1218   -1   -1   1   1     GBR A27 HOK2440*   AREA27   HOK   VL1240   0   0   0   13     GBR A27 HOK2440*   AREA27   HOK   VL2440   0   0   0   13     GBR A27 MGP010*   AREA27   MGP   VL1012   -1   -1   1   1   1   1   1   1   1   1   1   1   1   1   1   1   1 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>								
GBR A27 FP01824*AREA27FP0VL18241111GBR A27 FP01824*AREA27FP0VL2440-1-1-1112GBR A27 HOK0010AREA27HOKVL0010OOO18111<								
GBR A27 FPO1824*AREA27FPOVL240-1-1-10GBR A27 HOK0010AREA27HOKVL0010000018GBR A27 HOK1012*AREA27HOKVL101200018GBR A27 HOK1012*AREA27HOKVL1218-1-111GBR A27 HOK2440*AREA27HOKVL12400000GBR A27 HOK2440*AREA27HOKVL2440000013GBR A27 HOK2440*OFRHOKVL2440-1-1-111GBR A27 HOK2440*OFRHOKVL0010000013GBR A27 MOR2010*AREA27MGPVL0010-1-1-1111GBR A27 MGP010*AREA27MGPVL012-1-1-10000GBR A27 MGP1218*AREA27MGPVL1012-1-100<								
GBR A27 HOK0010AREA27HOKVL00100002541GBR A27 HOK1012*AREA27HOKVL101200018GBR A27 HOK1012*AREA27HOKVL1218-1-111GBR A27 HOK2440*AREA27HOKVL2480000013GBR A27 HOK2440*OFRHOKVL24400000000GBR A27 HOK2440*OFRHOKVL244000 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
GBR A27 HOK1012° AREA27 HOK VL1012 0 0 0 18   GBR A27 HOK1012° AREA27 HOK VL1218 -1 -1 11   GBR A27 HOK2440° AREA27 HOK VL1824 - -0 0   GBR A27 HOK2440° AREA27 HOK VL2440 0 0 0 0 0   GBR A27 HOK2440° AREA27 HOK VL2440 -1 -1 -1 1 1   GBR A27 MGP0010° AREA27 MGP VL0010 -1 -1 -1 1 1 1 1 3   GBR A27 MGP010° AREA27 TM VL0010 -1 -1 -1 -1 0 0 0 0 1 0 0 0 1 1 0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>								
GBR A27 HOK1012*AREA27HOKVL1218-1-11GBR A27 HOK2440*AREA27HOKVL1824000013GBR A27 HOK2440*OFRHOKVL2440000013GBR A27 HOK2440*OFRHOKVL2440-1-1-111GBR A27 HOK2440*OFRHOKVL2440000013GBR A27 HOK2440*OFRHOKVL0010000013GBR A27 MGP0010*AREA27MGPVL0010-1-1-1113GBR A27 MGP0118*AREA27MGPVL1012-1-10006GBR A27 MGP1218*AREA27MGPVL2440-1-100066GBR A27 MGP1218*AREA27MGPVL2180000033GBR A27 MGP1218*AREA27TMVL1012-1-100 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>								
GBR A27 HOK2440°AREA27HOKVL182400000GBR A27 HOK2440°OFRHOKVL2440000013GBR A27 HOK2440°OFRHOKVL2440-1-1-111GBR A27 MC2440°OFRHOKVL001000013GBR A27 MC2010°AREA27MGPVL0010-1-1-111GBR A27 MCP010°AREA27MGPVL0112-1-1-10GBR A27 MCP1218°AREA27MGPVL121800006GBR A27 MCP1218°AREA27MGPVL24401006GBR A27 MCP1218°AREA27MGPVL218000066GBR A27 MCP1218°AREA27MGPVL218000033GBR A27 MCP1218°AREA27TMVL10120033GBR A27 MCP1218°AREA27TMVL101200			-			0		
GBR A27 HOK2440°AREA27HOKVL244000013GBR A27 HOK2440°OFRHOKVL2440-1-1-111GBR A27 HOK2440°OFRHOKVL001000013GBR A27 MGP010°AREA27MGPVL0010-1-1-113GBR A27 MGP010°AREA27MGPVL1012-1-1-13GBR A27 MGP1218°AREA27MGPVL12180006GBR A27 MGP1218°AREA27MGPVL24400GBR A27 MGP1218°AREA27MGPVL24400GBR A27 MGP1218°AREA27MGPVL24400GBR A27 MGP1218°AREA27TMVL1012-1000GBR A27 MGP1218°AREA27TMVL121800003GBR A27 MGP1218°AREA27TMVL1218000000GBR A27 PGP010°AREA27PGPVL1012000<					1		1	
GBR A27 HOK2440*OFRHOKVL2440II1111GBR A27 HOK2440*OFRHOKVL40XX-1-1-1111GBR A27 MGP0010*AREA27MGPVL0010000013GBR A27 MGP010*AREA27TMVL0010-1-1-113GBR A27 MGP1218*AREA27MGPVL1012-1-10006GBR A27 MGP1218*AREA27MGPVL24400066GBR A27 MGP1218*AREA27PSVL12180000566<					0	0	0	_
GBR A27 HOK2440°   OFR   HOK   VL40XX   -1   -1   -1   1     GBR A27 MGP0010°   AREA27   MGP   VL0010   0   0   0   13     GBR A27 MGP010°   AREA27   TM   VL0010   -1   -1   -1   3     GBR A27 MGP1218°   AREA27   MGP   VL1012   -1   -1   0   6     GBR A27 MGP1218°   AREA27   MGP   VL1218   0   0   0   6     GBR A27 MGP1218°   AREA27   MGP   VL2440				_	0	0	0	
GBR A27 MGP0010* AREA27 MGP VL0010 0 0 0 13   GBR A27 MGP0010* AREA27 TM VL0010 -1 -1 -1 33   GBR A27 MGP1218* AREA27 MGP VL1012 -1 -1 0 0 0 66   GBR A27 MGP1218* AREA27 MGP VL2440 - - 0 0 66   GBR A27 MGP1218* AREA27 MGP VL2440 - -1 0					-1	-1	_1	
GBR A27 MGP0010°AREA27TMVL0010-1-1-10GBR A27 MGP1218°AREA27MGPVL1012-1-10000GBR A27 MGP1218°AREA27MGPVL24400<								_
GBR A27 MGP1218°ARA27MGPVL1012-1-10GBR A27 MGP1218°ARA27MGPVL12180006GBR A27 MGP1218°AREA27MGPVL2440-10000GBR A27 MGP1218°AREA27PSVL1218-10003GBR A27 MGP1218°AREA27TMVL1012-0033GBR A27 MGP1218°AREA27TMVL1218000913GBR A27 MGP1218°AREA27PGPVL0010000913GBR A27 MGP101°AREA27PGPVL00100000003GBR A27 PGP0010°AREA27PGPVL01120000333 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
GBR A27 MGP1218° AREA27 MGP VL1218 0 0 0 6   GBR A27 MGP1218° AREA27 MGP VL2440 -1 0 0   GBR A27 MGP1218° AREA27 PS VL1218 -1 0 5   GBR A27 MGP1218° AREA27 TM VL1012 -1 0 0 0   GBR A27 MGP1218° AREA27 TM VL1012 -1 0 0 3   GBR A27 MGP1218° AREA27 TM VL1012 0 0 0 3   GBR A27 MGP1218° AREA27 PGP VL0010 0 0 0 91   GBR A27 PGP0010° AREA27 PGP VL012 0 0 0 0 0 0   GBR A27 PGP0010° AREA27 PGP VL012 0 0 0 8 0 0 0 8 0 0 0 20 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td>							1	
GBR A27 MGP1218AREA27MGPVL2440Image: constraint of the symbol							0	
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GBR A27 PGP0010°AREA27PGPVL12180100GBR A27 PGP0010°AREA27PMPVL00101008GBR A27 PGP0010°AREA27PMPVL1012-00020GBR A27 TBB0010°AREA27TBBVL00100002020GBR A27 TBB0010°AREA27TBBVL10120-1011 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td>							-	
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GBR A27 TBB2440°   AREA27   TBB   VL40XX   0   -1   0   8     GBR A27 TM40XX°   AREA27   TM   VL2440   0   0   1   1   1     GBR A27 TM40XX°   AREA27   TM   VL2440   0   0   1   1   1   27	GBR A27 TBB2440 °							
GBR A27 TM40XX °   AREA27   TM   VL2440   0   0   1   1   1   1   1   27     GBR A27 TM40XX °   AREA27   TM   VL40XX   1   1   1   27	GBR A27 TBB2440 °							
GBR A27 TM40XX °   AREA27   TM   VL40XX   1   1   27	GBR A27 TM40XX °							
	GBR A27 TM40XX °							
	GBR A27 TM40XX °	OFR	TM	VL40XX				0

Economic – Return on Investment

	Fleet segment - as				Number of
	defined by JRC				vessels in fleet
	indicators	2015	2016	2017	segment (2017)
DFN					
	GBR A27 DFN0010	9.45	5.22	9.90	533
	GBR A27 DFN1012 °	-2.45	-0.12	5.20	16
	GBR A27 DFN2440 °	15.07	10.53	12.30	13
DRB					
	GBR A27 DRB0010	8.35	4.47	20.51	119
	GBR A27 DRB1012	0.59	0.86	9.70	29
	GBR A27 DRB1218	14.37	3.29	11.72	117
	GBR A27 DRB1824	6.77	5.35	15.51	25
	GBR A27 DRB2440 °	7.41	5.43	27.98	23
DTS					
	GBR A27 DTS0010	6.94	20.17	30.99	215
	GBR A27 DTS1012	1.40	14.06	13.40	79
	GBR A27 DTS1218 °	5.83	12.67	14.39	196
	GBR A27 DTS1824	5.18	11.47	15.28	163
	GBR A27 DTS2440	4.92	15.41	28.47	93
	GBR A27 DTS40XX °	12.91	36.51	39.89	9
FPO					
	GBR A27 FPO0010	7.42	20.30	21.57	1842
	GBR A27 FPO1012	-1.65	13.88	9.88	179
	GBR A27 FPO1218	22.47	30.64	21.30	77
	GBR A27 FPO1824 °	21.95	28.43	58.12	16
НОК		24.71	35.56	52.29	
	GBR A27 HOK0010	9.27	16.51	6.30	649
	GBR A27 HOK1012 °	-1.99	2.97	5.20	18
	GBR A27 HOK2440 °	-4.20	-1.13	-5.55	15
MGP					
	GBR A27 MGP0010 °	1.87	6.08	18.55	38
	GBR A27 MGP1218 °	-0.82	7.01	15.51	21
PGP					
	GBR A27 PGP0010 °	<mark>-4.10</mark>	1.96	4.75	100
TBB					
	GBR A27 TBB0010 °	4.32	16.23	22.92	23
	GBR A27 TBB1218	1.20	6.32	-0.07	21
	GBR A27 TBB1824	4.44	5.86	1.50	17
	GBR A27 TBB2440 °	7.62	16.54	24.82	36
TM					
	GBR A27 TM40XX °	4.45	12.21	18.76	27

	Fleet segment - as defined by JRC			fI	Number of vessels in eet segment
	indicators	2015	2016	2017	(2017)
DFN					
	GBR A27 DFN0010	1.00	1.23	1.99	533
	GBR A27 DFN1012	3.07	1.99	1.86	16
	GBR A27 DFN2440 °	3.15	2.07	2.00	13
DRB					
	GBR A27 DRB0010	1.20	1.15	1.69	119
	GBR A27 DRB1012	1.72	1.40	1.83	29
	GBR A27 DRB1218	1.75	1.48	1.99	117
	GBR A27 DRB1824	1.91	1.49	2.94	25
	GBR A27 DRB2440 °	1.96	1.45	3.15	23
DTS					
	GBR A27 DTS0010	1.28	1.99	2.19	215
	GBR A27 DTS1012	1.97	3.08	2.30	79
	GBR A27 DTS1218 °	1.82	2.45	2.36	196
	GBR A27 DTS1824	2.00	3.10	3.56	163
	GBR A27 DTS2440	3.11	5.40	5.03	93
	GBR A27 DTS40XX °	2.84	3.69	4.49	9
FPO					
	GBR A27 FPO0010	1.05	2.19	1.70	1842
	GBR A27 FPO1012 °	2.86	3.33	2.37	179
	GBR A27 FPO1218	2.03	2.51	2.88	77
	GBR A27 FPO1824 °	2.25	2.83	3.09	16
НОК					
	GBR A27 HOK0010	1.10	1.73	1.88	649
	GBR A27 HOK1012 °	0.64	1.15	0.63	18
	GBR A27 HOK2440 °	3.21	4.48	2.08	15
MGP					
	GBR A27 MGP0010 °	1.08	1.71	2.08	38
	GBR A27 MGP1218 °	1.85	3.23	3.15	21
PGP					
	GBR A27 PGP0010 °	0.76	1.35	1.83	100
TBB					
	GBR A27 TBB0010 °	1.22	1.68	1.31	23
	GBR A27 TBB1218	1.98	1.41	1.42	21
	GBR A27 TBB1824	2.77	4.14	6.92	17
	GBR A27 TBB2440 °	1.33	2.73	5.74	36
TM					
	GBR A27 TM40XX °	3.88	5.45	11.68	27

## Appendix E. Results for balance indicators produced by the MMO

Economic – Return on Investment:

	Fleet segment - as				Number of
	defined by JRC				vessels in fleet
	indicators	2014	2015	2016	segment (2016)
DFN					
	GBR A27 DFN0010	4.65 <mark></mark>	-2.45	-0.12	590
	GBR A27 DFN1012 °	12.07	15.07	10.53	16
	GBR A27 DFN2440 °	20.40	26.74	9.76	14
DRB					
	GBR A27 DRB0010	-2.04	0.59	0.86	112
	GBR A27 DRB1012	14.69	14.37	3.29	31
	GBR A27 DRB1218	11.99	6.77	5.35	111
	GBR A27 DRB1824	11.90	7.41	5.43	24
	GBR A27 DRB2440 °	14.93	13.90	3.87	30
DTS					
	GBR A27 DTS0010	3.15	1.40	14.06	237
	GBR A27 DTS1012	9.18	5.83	12.67	85
	GBR A27 DTS1218 °	7.44	5.18	11.47	201
	GBR A27 DTS1824	8.55	4.92	15.41	167
	GBR A27 DTS2440	21.29	12.91	36.51	87
	GBR A27 DTS40XX °	48.77	2.26	9.58	9
FPO					
	GBR A27 FPO0010	-0.71	-1.65	13.88	1814
	GBR A27 FPO1012	15.06	22.47	30.64	178
	GBR A27 FPO1218	20.42	21.95	28.43	80
	GBR A27 FPO1824 °	20.83	24.71	35.56	15
НОК					
	GBR A27 HOK0010	-3.36	-1.99	2.97	541
	GBR A27 HOK1012 °	-24.46	-4.20	-1.13	19
	GBR A27 HOK2440 °	-3.20	18.36	24.47	14
MGP					
	GBR A27 MGP0010 °	1.75 <mark>1</mark>	-0.82	7.01	16
	GBR A27 MGP1218 °	3.02	2.28	5.96	14
PGP					
	GBR A27 PGP0010 °	-1.37	-4.10	1.96	99
твв					
	GBR A27 TBB0010 °	-9.44	1.20	6.32	31
	GBR A27 TBB1218	-11.60	4.44	5.86	24
	GBR A27 TBB1824	5.25	7.62	16.54	17
	GBR A27 TBB2440 °	-6.05	2.71	17.71	33
TM					
	GBR A27 TM40XX °	9.76	4.45	12.21	28

Economic – Current verses Breakeven Revenue:

	Fleet segment - as defined by JRC				els in t segment
	indicators	2014	2015	2016 (201	-
DFN					-,
	GBR A27 DFN0010	1.23	1.72	1.00	590
	GBR A27 DFN1012	1.67	2.98	3.07	16
	GBR A27 DFN2440 °	1.63	3.03	3.15	14
DRB					
	GBR A27 DRB0010	0.88	1.06	1.20	112
	GBR A27 DRB1012	1.26	1.72	1.72	31
	GBR A27 DRB1218	1.66	1.83	1.75	111
	GBR A27 DRB1824	2.33	1.88	1.91	24
	GBR A27 DRB2440 °	2.26	2.01	1.96	30
DTS					
	GBR A27 DTS0010	1.58	1.48	1.28	237
	GBR A27 DTS1012	2.22	2.31	1.97	85
	GBR A27 DTS1218 °	1.89	1.86	1.82	201
	GBR A27 DTS1824	1.97	2.10	2.00	167
	GBR A27 DTS2440	2.66	3.27	3.11	87
	GBR A27 DTS40XX °	1.19	6.26	2.84	9
FPO					
	GBR A27 FPO0010	1.26	1.14	1.05	1814
	GBR A27 FPO1012 °	1.69	2.29	2.86	178
	GBR A27 FPO1218	1.61	1.88	2.03	80
	GBR A27 FPO1824 °	1.97	2.26	2.25	15
НОК					
	GBR A27 HOK0010	0.94	0.90	1.10	541
	GBR A27 HOK1012 °	0.10	0.05	0.64	19
	GBR A27 HOK2440 °	1.07	0.99	3.21	14
MGP					
	GBR A27 MGP0010 °	1.10	1.42	1.08	16
	GBR A27 MGP1218 °	1.49	1.94	1.85	14
PGP		0.79	1.22	0.76	
	GBR A27 PGP0010 °	0.79	1.22	0.76	99
TBB					
	GBR A27 TBB0010 °	1.05	-0.25	1.22	31
	GBR A27 TBB1218	0.24	-0.95	1.98	24
	GBR A27 TBB1824	2.30	2.45	2.77	17
	GBR A27 TBB2440 °	0.81	0.80	1.33	33
ТМ					
	GBR A27 TM40XX °	1.78	5.17	3.88	28

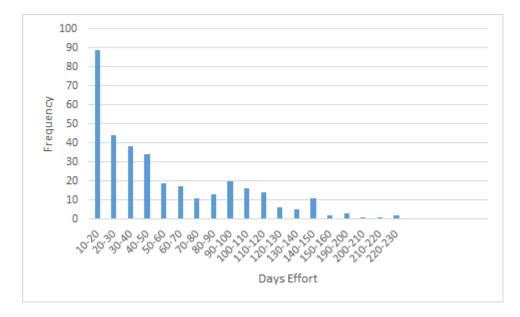
Technical – Vessel Utilisation Indicator:

	Fleet segment - as defined by JRC				Number of vessels in fleet
	indicators	2015	2016	2017	segment (2017)
DFN					
	GBR A27 DFN0010	0.25	0.26	0.23	533
	GBR A27 DFN1012 °	0.58	0.58	0.50	16
	GBR A27 DFN2440 °	1.04	1.12	1.13	13
DRB					
	GBR A27 DRB0010	0.33	0.33	0.28	119
	GBR A27 DRB1012	0.50	0.60	0.54	29
	GBR A27 DRB1218	0.57	0.66	0.56	117
	GBR A27 DRB1824	0.88	0.95	0.96	25
	GBR A27 DRB2440 °	0.97	0.94	1.00	23
DTS					
	GBR A27 DTS0010	0.41	0.43	0.36	215
	GBR A27 DTS1012	0.52	0.60	0.57	79
	GBR A27 DTS1218 °	0.67	0.75	0.71	196
	GBR A27 DTS1824	0.78	0.82	0.81	163
	GBR A27 DTS2440	0.97	0.97	0.92	93
	GBR A27 DTS40XX °	0.92	1.06	1.17	9
FPO					
	GBR A27 FPO0010	0.54	0.50	0.36	1842
	GBR A27 FPO1012	0.71	0.69	0.68	179
	GBR A27 FPO1218	0.74	0.82	0.83	77
	GBR A27 FPO1824 °	1.15	1.09	1.13	16
НОК					
	GBR A27 HOK0010	0.21	0.19	0.16	649
	GBR A27 HOK1012 °	0.41	0.40	0.39	18
	GBR A27 HOK2440 °	1.09	1.08	1.15	15
MGP					
	GBR A27 MGP0010 °	0.33	0.26	0.27	38
	GBR A27 MGP1218 °	0.42	0.53	0.39	21
PGP					
	GBR A27 PGP0010 °	0.22	0.21	0.21	100
TBB					
	GBR A27 TBB0010 °	0.32	0.24	0.26	23
	GBR A27 TBB1218	0.64	0.49	0.53	21
	GBR A27 TBB1824	1.10	1.15	1.14	17
	GBR A27 TBB2440 °	0.97	1.04	0.95	36
тм					
	GBR A27 TM40XX °	0.33	0.30	0.29	27

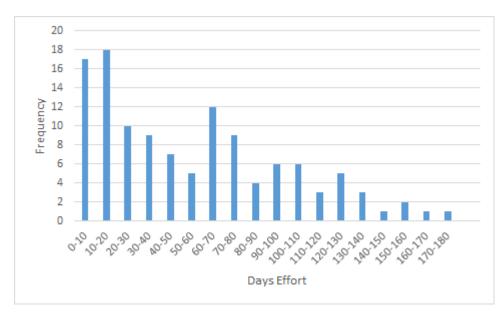
#### Appendix F. Vessel Utilisation Indicator analysis

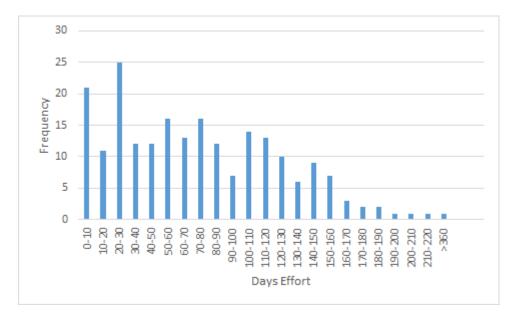
Nine of the segments above the threshold for this indicator when the standard value of 220 days per year is used as the basis of the comparison relate to vessels under 10m in length. These vessels are often engaged in highly seasonal patterns of activity. They may thus fish for only limited periods of the year as opposed to the level of 220 days that could be more applicable to larger vessels. They also vary significantly in their circumstances, ranging from vessels kept on as a hobby up to vessels operating at a level of activity that can exceed that of some vessels over 10m in length. As such the UK considers that the heterogeneous nature of vessels within each fleet segment and the seasonal restrictions on fishing makes it inappropriate to draw conclusions on fleet utilisation from the vessel utilisation indicator. This appendix provides evidence in support of this statement in the form of frequency distributions of days effort for the under 10 fleet segments in 2016. These show a wide range of effort levels within each segment with a large amount of effort between 0-100 days. The UK feels the VUI an unsuitable measure of fleet utilisation.

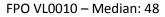
#### DFN VL0010 – Median: 18

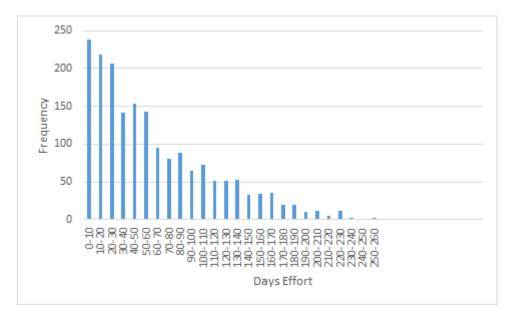


DRB VL0010 - Median: 47









HOK VL0010 – Median: 21

