UK Fleet Capacity Report 2020

This report contains information on UK Fleet Capacity in 2020. 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 1st January 2020, 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 2020 on behalf of the European Commission as approved by the STECF and released via the reports section of the STECF website. 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 2008-2020 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.

Following the end of the transition period the UK became an independent coastal state on 1 January 2021 and is no longer bound by the Common Fisheries policy, though remains aligned to its principles. An action plan as under Article 22(4) of Regulation (EU) No 1380/2013, "Adjustment and management of fishing capacity" has therefore not been provided.

Section A. UK Fishing Fleets

A1. Description of fleets

As of 1st January 2020, the UK fleet contained 5922 vessels (including active and inactive vessels); which was 122 fewer vessels than at the same time in 2019. In terms of active vessels, the UK fleet contained 4,203 vessels as of 1st January 2020, 163 fewer than at the same time in 2019. Of these active vessels, 74 per cent were 10m and under in length. Despite the fall in vessel numbers active fleet capacity has increased by 8,508 kW from 2019 to 2020. Since 2019, most of the fall in active vessel numbers has been to the 10m and under category (126 vessels). Other than >40m vessels other active vessel length groups saw smaller decreases of between 1 and 15 vessels, the 10-18 metre range seeing the second largest decrease.

With regards to gear types employed throughout 2020, potting vessels comprise 48 per cent of the active fleet by number, whilst accounting for 24 per cent of active engine capacity. Similarly, netters account for 11 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 30 per cent of total fleet engine capacity, relatively unchanged from 2019.

Table 1: Vessel numbers (both active a and inactive) by gear type and length
United Kingdom, 2020

As of 01/01/2020:															As of 01/01/2021:	
	DFN	DRB	DTS	FPO	HOK	MGP	PGP	PMP	PS	TBB	TM	Total active vessels	Total inactive vessels	Total fleet	Total fleet	Difference from 01/01/2020 to 01/01/2021
2020 totals	**481**	**242**	**678**	**2,000**	**591**	**24**	**45**	**5**	**6**	**87**	**44**	**4,203**	**1,719**	**5,922**	**5,956**	**34**
VL0010	455	86	214	1,723	558	23	44	4		7	10	3,124	1,553	4,677	4,702	25
VL1012	7	18	64	173	18		1	1		11	1	294	72	366	366	0
VL1218	5	94	168	87	2	1			6	23	6	392	50	442	439	-3
VL1824	8	25	135	14						16	1	199	17	216	219	3
VL2440	6	17	90	3	12					24	2	154	23	177	185	8
VL40XX		2	7		1					6	24	40	4	44	45	1

[a] 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 length
United Kingdom, 2020

As of 01/01/2020:															As of 01/01/2021:	
	DFN	DRB	DTS	FPO	HOK	MGP	PGP	PMP	PS	TBB	TM	Total active vessels	Total inactive vessels	Total fleet	Total fleet	Difference from 01/01/2020 to 01/01/2021
2020 totals	**32,351**	**50,110**	**198,037**	**158,962**	**37,042**	**1,831**	**1,816**	**442**	**1,498**	**35,259**	**133,662**	**651,011**	**106,511**	**757,522**	**775,791**	**18,269**
VL0010	23,842	6,550	23,939	110,536	27,242	1,684	1,764	332		718	943	197,549	66,955	264,504	265,112	608
VL1012	1,192	3,186	9,631	24,261	2,344		52	110		1,636	147	42,559	9,556	52,115	52,728	614
VL1218	1,034	18,389	35,972	18,480	353	147			1,498	4,683	1,304	81,860	9,419	91,279	90,462	-817
VL1824	2,859	8,969	55,787	4,177						3,757	298	75,846	5,781	81,627	83,786	2,159
VL2440	3,425	11,186	56,237	1,508	6,313					15,583	3,570	97,822	12,334	110,156	116,388	6,232
VL40XX		1,830	16,472		790					8,883	127,401	155,376	2,466	157,842	167,316	9,474

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

Table 3: Vessel tonnage capacity (GT) by gear type and length
United Kingdom, 2020

As of 01/01/2020:															As of 01/01/2021:	
	DFN	DRB	DTS	FPO	HOK	MGP	PGP	PMP	PS	TBB	TM	Total active vessels	Total inactive vessels	Total fleet	Total fleet	Difference from 01/01/2020 to 01/01/2021
2020 totals	**5,125**	**12,513**	**68,945**	**17,043**	**5,222**	**152**	**116**	**47**	**233**	**10,586**	**65,459**	**185,440**	**13,441**	**198,881**	**207,322**	**8,441**
VL0010	1,513	498	2,192	8,199	1,214	133	103	22		54	109	14,035	3,645	17,680	17,782	102
VL1012	130	363	1,200	2,795	223		12	25		205	18	4,972	951	5,923	5,362	-561
VL1218	357	3,575	8,528	3,574	55	19			233	661	247	17,250	1,688	18,938	18,702	-236
VL1824	1,187	3,190	20,284	1,703						2,108	139	28,611	1,763	30,374	31,034	660
VL2440	1,938	4,155	26,343	772	3,214					4,491	1,066	41,979	4,080	46,059	49,250	3,191
VL40XX		732	10,398		516					3,067	63,880	78,593	1,313	79,906	85,192	5,286

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 (41 per cent by weight), much less than potting vessels (56 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 71 per cent by weight.

Dredgers account for the majority of molluscs caught (48 per cent by weight), with 75 per cent of landings (by weight) by vessels between 10 and 40m in length, with 33 percent being accounted for by the 12-18m category. Under 10m vessels account for a further 23 per cent of mollusc landings by weight.

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

Table 4: Proportion of fishery landings by value (Euros) accounted for by different gear types
United Kingdom, 2020

Gear:	Crustacean	Demersal	Mollusc	Pelagic	Total value (€)
DFN	1%	7%	1%	0%	24,098,849
DRB	0%	1%	45%	0%	55,487,265
DTS	33%	74%	13%	0%	299,649,406
FPO	64%	3%	26%	0%	148,135,018
HOK	0%	4%	4%	1%	19,886,001
MGP	0%	0%	1%	0%	1,256,399
PGP	0%	0%	0%	0%	499,779
PMP	0%	0%	0%	0%	42,619
PS	0%	0%	0%	1%	2,279,302
TBB	1%	12%	7%	0%	47,647,446
TM	0%	1%	1%	97%	307,255,236
Total value (€)	170,573,721	307,640,439	117,072,133	310,951,027	906,237,320

Note: Data are based on annual landings for all vessels included in the fleet as of 1st January 2020, and includes vessels joining after this date.

Table 5: Proportion of fishery landings by weight (kg) accounted for by different gear types
United Kingdom, 2020

Gear:	Crustacean	Demersal	Mollusc	Pelagic	Total weight (kg)
DFN	1%	5%	2%	1%	11,315,890
DRB	0%	0%	48%	0%	32,549,555
DTS	41%	82%	7%	1%	147,814,915
FPO	56%	0%	33%	0%	53,155,337
HOK	0%	3%	1%	0%	6,673,867
MGP	0%	0%	1%	0%	1,002,387
PGP	0%	0%	0%	0%	166,727
PMP	0%	0%	0%	0%	7,039
PS	0%	0%	0%	2%	6,211,350
TBB	2%	7%	6%	0%	14,919,255
TM	0%	3%	1%	96%	342,630,591
Total value	54,075,177	145,723,276	65,430,123	351,218,335	616,446,912

Note: Data are based on annual landings for all vessels included in the fleet as of 1st January 2020, and includes vessels joining after this date.
Exchange rate GBP/EUR = 1.12397 (Eurostat - https://ec.europa.eu/eurostat/databrowser/view/tec00033/default/table?lang=en)

Table 6: Proportion of fishery landings by value (Euros) accounted for by different vessel length groups
United Kingdom, 2020

Length:	Crustacean	Demersal	Mollusc	Pelagic	Total value (€)
VL0010	34%	7%	22%	1%	107,876,777
VL1012	13%	2%	9%	0%	38,212,480
VL1218	26%	4%	28%	1%	91,479,183
VL1824	23%	20%	17%	0%	122,079,589
VL2440	4%	56%	21%	2%	209,787,050
VL40XX	0%	12%	2%	96%	336,802,241
Total value (€)	49,062	35,645,801	2,673,875	298,433,502	906,237,320

Note: Data are based on annual landings for all vessels included in the fleet as of 1st January 2020 and includes vessels joining after this date.
Exchange rate GBP/EUR = 1.12397 (Eurostat - https://ec.europa.eu/eurostat/databrowser/view/tec00033/default/table?lang=en)

Table 7: Proportion of fishery landings by weight (kg) accounted for by different vessel length groups
United Kingdom, 2020

Length:	Crustacean	Demersal	Mollusc	Pelagic	Total weight (kg)
VL0010	24%	3%	23%	1%	34,464,928
VL1012	10%	1%	10%	1%	15,697,508
VL1218	32%	3%	33%	2%	52,012,626
VL1824	29%	19%	16%	0%	53,727,008
VL2440	5%	56%	17%	2%	101,130,908
VL40XX	0%	18%	2%	95%	359,413,934
Total value	54,075,177	145,723,276	65,430,123	351,218,335	616,446,912

Note: Data are based on annual landings for all vessels included in the fleet as of 1st January 2020, 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 2019 to 2020 by 32 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. The number of potting vessels decreased by 146 from 2019 to 2020, which despite increases in recent

The number and capacity of demersal trawlers and seiners has been declining since 2008 and, although for vessel numbers this pattern stalled between 2018 and 2019, 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 3 vessels in 2020 compared with 2019.

Table 8: Developments in fleet capacity and composition

United Kingdom, 2014 – 2020

	DRB		DTS		FPO		TM	
	No. of vessels	Capacity kW	No. of vessels	Capacity kW	No. of vessels	Capacity kW	No. of vessels	Capacity kW
2014 totals	**304**	**64,160**	**831**	**218,250**	**2,019**	**148,834**	**37**	**138,909**
VL0010	108	9,927	258	26,199	1,753	105,605	3	560
VL1040	193	51,659	564	173,458	266	43,229	4	3,630
VL40XX	3	2,574	9	18,593			30	134,719
2015 totals	**308**	**63,897**	**820**	**221,954**	**2,003**	**147,865**	**33**	**133,392**
VL0010	105	9,541	256	25,968	1,742	104,842	2	224
VL1040	201	52,526	554	173,393	261	43,023	4	3,630
VL40XX	2	1,830	10	22,593			27	129,538
2016 totals	**308**	**62,515**	**786**	**216,134**	**2,087**	**156,454**	**34**	**133,889**
VL0010	112	9,355	238	24,709	1,814	110,705	3	341
VL1040	193	50,586	539	171,232	273	45,749	4	3,630
VL40XX	3	2,574	9	20,193			27	129,918
2017 totals	**316**	**60,420**	**754**	**216,420**	**2,129**	**159,891**	**37**	**136,387**
VL0010	122	10,308	214	22,369	1,858	113,813	1	112
VL1040	192	48,628	531	173,858	271	46,078	10	4,705
VL40XX	2	1,484	9	20,193			26	131,570
2018 totals	**294**	**57,427**	**699**	**206,473**	**2,157**	**164,702**	**39**	**136,526**
VL0010	102	8,133	199	22,342	1,870	115,600	5	544
VL1040	190	47,810	492	165,089	287	49,102	8	4,350
VL40XX	2	1,484	8	19,042			26	131,632
2019 totals	**276**	**55,040**	**700**	**204,882**	**2,191**	**169,192**	**43**	**146,784**
VL0010	104	8,449	204	22,616	1,900	118,054	5	458
VL1040	169	44,570	488	163,944	291	51,138	12	6,588
VL40XX	3	2,021	8	18,322			26	139,738
2020 totals	**244**	**50,325**	**688**	**204,178**	**2,045**	**163,318**	**46**	**145,047**
VL0010	87	6,671	215	24,108	1,757	112,669	10	943
VL1040	155	42,170	466	163,598	288	50,649	10	5,383
VL40XX	2	1,484	7	16,472			26	138,721

Section B. Effort reduction Schemes

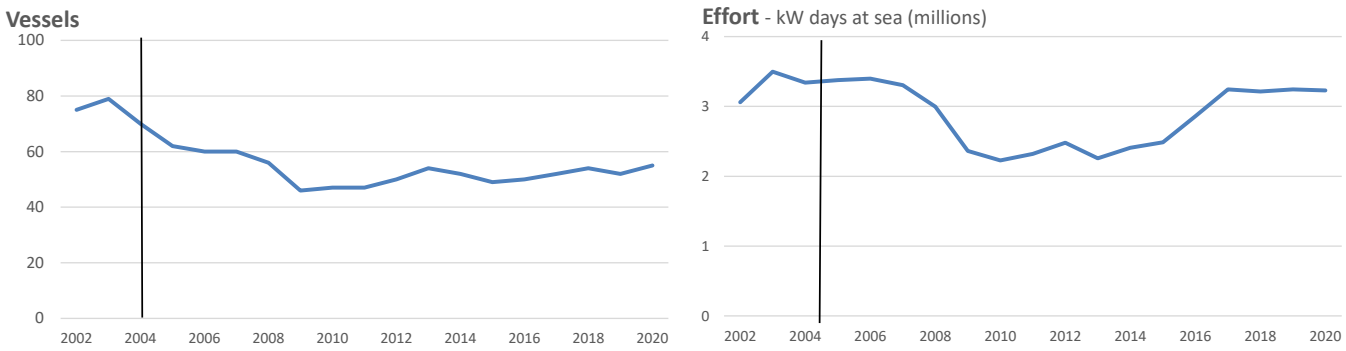
B1. Statement on effort reduction schemes

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 21 per cent and effort (kW days) has decreased by 3 per cent overall (see figure 3).

Figure 3: Fleet size and effort of vessels using beam trawls in the Sole Recovery Zone: 2002 to 2020



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 2019, however the effort has increased in this period.

Table 9: Changes in fleet capacity and effort in the Sole Recovery Zone
United Kingdom, 2013 – 2020

	2013	2014	2015	2016	2017	2018	2019	2020
No. of active vessels	54	52	49	50	52	54	52	55
Days effort	6,121	6,116	6,246	6,786	7,535	7,507	7,691	7,564
kW days effort	2,255,310	2,407,901	2,485,062	2,859,242	3,243,843	3,214,075	3,242,461	3,229,468

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[1].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 compared with other publicly funded fleet infrastructure support measures. 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.

[1] Please see our annual Sea Fisheries Statistics publication for further details https://www.gov.uk/government/collections/uk-sea-fisheries-annual-statistics

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 focused on reducing effort related to Western Channel Sole), and in 2008/9 (a scheme focused 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 capacity United Kingdom, 2003 – 2021

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)		180504		598414
5	Increases in tonnage GT for safety reasons	GTS	0		0
6	**Total Entries (3+4+5)**		**180504**		**598414**
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		23966
9	Other exits (not included in 7 and 8)		205661		721776
10	**Total exits (7+8+9)**		**228105**		**790113**
11	Other net changes to vessel capacity (i.e. modifications to data)		13921		25113
12	Power of engines replaced with public aid conditional to power reduction		0	KW r	0
13	**Capacity of the fleet on 01/01/2021(1+6-10+11)**	**GTt**	**207322**	**KWt**	**775791**
14	**Fleet Ceiling on 01/01/2021**		**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 2021.

D1. Summary of weaknesses and strengths of the management system

Following the end of the transition period the UK became an independent coastal state on 1 January 2021. The UK Government subsequently implemented a new fisheries management framework under the UK Fisheries Act 2020. Underpinning everything in the Act is a commitment to sustainability, ensuring healthy seas for future generations. The Fisheries Act sets out eight objectives as the overall aims of the Act:

1. **Sustainability**: fish and aquaculture activities are environmentally sustainable in the long term, and managed so as to achieve economic, social and employment benefits and contribute to the availability of food supplies, and the fishing capacity of fleets is such that fleets are economically viable but do not over exploit marine stocks.
2. **Precautionary**: the precautionary approach to fisheries management is applied, and exploitation of marine stocks restores and maintains populations of harvested species above biomass levels capable of producing maximum sustainable yield.
3. **Ecosystem:** fish and aquaculture activities are managed using an ecosystem-based approach so as to ensure that their negative impacts on marine ecosystems are minimised and, where possible, reversed, and incidental catches of sensitive species are minimised and, where possible, eliminated.
4. **Scientific evidence**: scientific data relevant to the management of fish and aquaculture activities is collected; where appropriate, the fisheries policy authorities work together on the collection of, and share, such scientific data, and the management of fish and aquaculture activities is based on the best available scientific advice.
5. **Bycatch**: The catching of fish that are below minimum conservation reference size, and other bycatch, is avoided or reduced; catches are recorded and accounted for, and bycatch is landed only where this is appropriate and (in particular) does not create an incentive to catch fish that are below minimum conservation reference size.
6. **Equal access**: The access of UK fishing boats to any area within British fishery limits is not affected by the location of the fishing boat's home port, or any other connection of the fishing boat, or any of its owners, to any place in the United Kingdom.
7. **National benefit**: fishing activities of UK fishing boats bring social or economic benefits to the United Kingdom or any part of the United Kingdom.
8. **Climate change:** the adverse effect of fish and aquaculture activities on climate change is minimised, and fish and aquaculture activities adapt to climate change.

The UK Government and Devolved Administrations will now develop new fisheries management plans for managing fisheries to achieve these objectives to the benefit the fishing industry and the marine environment.

D2. Plan for improvement in fleet management system

As set out in Section D 1, the UK will be developing new plans under domestic legislation following exit from the EU.

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 31/12/2020.

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 continually monitored 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, where 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-20-11):

https://stecf.jrc.ec.europa.eu/documents/43805/2703097/STECF+20-11+-+Balance+capacity.pdf/3266b928-a188-419b-b87e-4e2c3513a8f6.

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 2018. 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 2008-2018 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 2018.

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 (http://stecf.jrc.ec.europa.eu/c/document_library/get_file?uuid=69257a77-ddaf-4038-8375-ed2e5962e834&groupId=43805).

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	Area	Gear	Vessel Length	SAR	SHI	ROI	CRBER	VUI
GBR NAO DFN0010	NAO	DFN	VL0010	Exceeded	No	No	No	Exceeded
GBR NAO DFN1012*	NAO	DFN	VL1012	No	No	No	No	Exceeded
	NAO	DFN	VL1218	No	Exceeded			
GBR NAO DFN2440*	NAO	DFN	VL1824	Exceeded	Exceeded	No	No	
	NAO	DFN	VL2440	No	No			
GBR NAO DRB0010	NAO	DRB	VL0010	No	No	Exceeded	No	Exceeded
GBR NAO DRB1012	NAO	DRB	VL1012	No	No	No	No	Exceeded
GBR NAO DRB1218	NAO	DRB	VL1218	No	No	No	No	Exceeded
GBR NAO DRB1824	NAO	DRB	VL1824	No	No	Exceeded	No	
GBR NAO DRB2440*	NAO	DRB	VL2440	No	No	No	No	
	NAO	DRB	VL40XX	No	No			
GBR NAO DTS0010	NAO	DTS	VL0010	No	No	No	No	Exceeded
GBR NAO DTS1012	NAO	DTS	VL1012	No	No	No	No	Exceeded
GBR NAO DTS1218*	NAO	DTS	VL1218	Exceeded	No	No	No	Exceeded
	NAO	PMP	VL1218	No	No			
GBR NAO DTS1824	NAO	DTS	VL1824	Exceeded	Exceeded	No	No	Exceeded
GBR NAO DTS2440	NAO	DTS	VL2440	Exceeded	Exceeded	No	No	
GBR NAO DTS40XX*	NAO	DTS	VL40XX	Exceeded	No	Exceeded	No	
	OFR	DTS	VL40XX	No	No			
GBR NAO FPO0010	NAO	FPO	VL0010	Exceeded	No	No	No	Exceeded
GBR NAO FPO1012	NAO	FPO	VL1012	No	No	No	No	
GBR NAO FPO1218	NAO	FPO	VL1218	Exceeded	No	No	No	
GBR NAO FPO1824*	NAO	FPO	VL1824	No	No	No	No	
	NAO	FPO	VL2440	No	No			
GBR NAO HOK0010	NAO	HOK	VL0010	Exceeded	No	No	No	Exceeded
GBR NAO HOK1012*	NAO	HOK	VL1012	No	No	Exceeded	Exceeded	Exceeded
	NAO	HOK	VL1218	No	No			
GBR NAO HOK2440*	NAO	HOK	VL1824	No	No	Exceeded	Exceeded	
	NAO	HOK	VL2440	No	Exceeded			
	OFR	HOK	VL2440	No	No			
	OFR	HOK	VL40XX	No	No			
GBR NAO MGP0010*	NAO	MGP	VL0010	No	No	Exceeded	Exceeded	Exceeded
	NAO	TM	VL0010	No	No			
GBR NAO MGP1218*	NAO	MGP	VL1012	No	No	No	No	Exceeded
	NAO	MGP	VL1218	No	No			
	NAO	MGP	VL1824	No	No			
	NAO	MGP	VL2440	No	No			
	NAO	PS	VL1218	No	No			
	NAO	TM	VL1012	No	No			
	NAO	TM	VL1218	No	No			
GBR NAO PGP0010*	NAO	PGP	VL0010	No	No	No	No	Exceeded
	NAO	PGP	VL1012	No	No			
	NAO	PGP	VL1218	No	No			
	NAO	PMP	VL0010	No	No			
	NAO	PMP	VL1012	No	No			
GBR NAO TBB0010*	NAO	TBB	VL0010	No	No	Exceeded	No	Exceeded
	NAO	TBB	VL1012	No	No			
GBR NAO TBB1218	NAO	TBB	VL1218	No	No	No	Exceeded	Exceeded
GBR NAO TBB1824	NAO	TBB	VL1824	No	No	No	No	
GBR NAO TBB2440*	NAO	TBB	VL2440	Exceeded	No	No	No	
	NAO	TBB	VL40XX	No	Exceeded			
GBR NAO TM40XX*	OFR	PS	VL40XX	No	No	No	No	Exceeded
	NAO	TM	VL2440	No	No			
	NAO	TM	VL40XX	Exceeded	Exceeded			
	OFR	TM	VL40XX	No	No			

Table 11 highlights the segmentation used 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 NAO TM 40XX* has an exceeding VUI value and biological indicators for its component of TM VL40XX but not for economic indicators.

Fleet Segment as defined by JRC Indicators	Area	Gear	Vessel Length	SAR	SHI	ROI	CRBER	VUI
GBR NAO TM40XX*	OFR	PS	VL40XX	No	No	No	No	Exceeded
	NAO	TM	VL2440	No	No			
	NAO	TM	VL40XX	Exceeded	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.

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, seven segments have the Harvest Rate Indicator above 1 and the significance ratio over 40% for three consecutive years:

FS name	supra_reg	fishing_tech	vessel_length	Vessel numbers 2018	2016	2017	2018
GBR NAO DFN1012 NGI*	NAO	DFN	VL1218	5	1.25	1.25	1.11
GBR NAO DFN2440 NGI*	NAO	DFN	VL1824	8	1.17	1.22	1.09
GBR NAO DTS1824 NGI	NAO	DTS	VL1824	148	1.06	0.97	1.02
GBR NAO DTS2440 NGI	NAO	DTS	VL2440	94	1.40	1.30	1.36
GBR NAO HOK2440 NGI*	NAO	HOK	VL2440	14	1.04	1.12	1.04
GBR NAO TBB2440 NGI*	NAO	TBB	VL40XX	7	1.20	1.19	1.09
GBR NAO TM 40XX NGI*	NAO	TM	VL40XX	26	0.98	1.04	1.01

The STECF Balance Capacity Meeting in 2019 (STECF-20-11) noted that out of 42 fleet segments active in 2019, SHI indicator values were available for 40.

According to the criteria in the 2014 Commission guidelines, the SHI indicator values for 21 fleet segments could not 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 19 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for 70% of the total value of the landings in 2019 provided and were as follows:

- 12 segments may be in balance with their fishing opportunities.
- 7 segments may be out of balance with their fishing opportunities.
- 10 segments displayed a decreasing trend,
- 8 segments displayed no clear trend.

Trends could be calculated for 18 fleet segments.

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 or 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 considered to be out of balance for fleets active in 2018 by STECF-20-11 according to the guidelines are as follows:

FS name	supra_reg	fishing_tech	vessel_length	Vessel numbers 2018	2016	2017	2018
GBR NAO DFN0010 NGI	NAO	DFN	VL0010	516	1		1
GBR NAO DFN2440 NGI*	NAO	DFN	VL1824	8		1	1
GBR NAO DTS1218 NGI*	NAO	DTS	VL1218	179	1	1	1
GBR NAO DTS1824 NGI	NAO	DTS	VL1824	148	3	6	5
GBR NAO DTS2440 NGI	NAO	DTS	VL2440	94	4	6	5
GBR NAO DTS40XX NGI*	NAO	DTS	VL40XX	7	2	2	2
GBR NAO FPO0010 NGI	NAO	FPO	VL0010	1,865			1
GBR NAO FPO1218 NGI	NAO	FPO	VL1218	83			1
GBR NAO HOK0010 NGI	NAO	HOK	VL0010	622	2	1	1
GBR NAO TBB2440 NGI*	NAO	TBB	VL2440	27	1	1	1
GBR NAO TM 40XX NGI*	NAO	TM	VL40XX	26	3	2	2

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 two fleet segments where the ROI is consistently less than zero for all three years between 2017 and 2019 is as follows:

	Fleet segment - as defined by JRC indicators	2017	2018	2019	Number of vessels in fleet segment (2019)
DRB	GBR NAO DRB0010	-2.18	-1.21	-1.26	104
TBB	GBR NAO TBB0010*	-1.75	-1.03	-1.23	14

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 4 segments where the ratio was below 1 in 2019.

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:

	2018	2019	2020
VL0010	28.7%	28.1%	32.3%
VL1012	15.5%	16.1%	19.1%
VL1218	8.0%	7.1%	10.0%
VL1824	6.6%	5.8%	6.8%
VL2440	10.9%	8.3%	13.0%
VL40XX	12.0%	6.4%	8.7%

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 2017 to 2019 are given below:

	Fleet segment - as defined by JRC indicators	2017	2018	2019	Number of vessels in fleet segment (2019)
DFN					
	GBR NAO DFN0010	0.23	0.25	0.22	510
	GBR NAO DFN1012*	0.50	0.56	0.54	12
	GBR NAO DFN2440*	1.13	1.10	1.03	14
DRB					
	GBR NAO DRB0010	0.29	0.32	0.31	104
	GBR NAO DRB1012	0.54	0.55	0.68	24
	GBR NAO DRB1218	0.56	0.56	0.56	100
	GBR NAO DRB1824	0.96	0.94	0.89	27
	GBR NAO DRB2440*	0.99	0.96	0.89	21
DTS					
	GBR NAO DTS0010	0.38	0.36	0.38	204
	GBR NAO DTS1012	0.57	0.49	0.56	70
	GBR NAO DTS1218*	0.71	0.69	0.71	184
	GBR NAO DTS1824	0.81	0.83	0.89	142
	GBR NAO DTS2440	0.92	1.01	1.01	93
	GBR NAO DTS40XX*	1.17	0.93	1.06	8
FPO					
	GBR NAO FPO0010	0.37	0.36	0.37	1900
	GBR NAO FPO1012	0.68	0.66	0.73	181
	GBR NAO FPO1218	0.83	0.80	0.78	92
	GBR NAO FPO1824*	1.13	1.23	1.09	18
HOK					
	GBR NAO HOK0010	0.16	0.16	0.16	576
	GBR NAO HOK1012*	0.40	0.45	0.38	20
	GBR NAO HOK2440*	1.15	1.23	1.22	15
MGP					
	GBR NAO MGP0010*	0.27	0.29	0.21	42
	GBR NAO MGP1218*	0.39	0.51	0.55	19
PGP					
	GBR NAO PGP0010*	0.20	0.20	0.20	57
TBB					
	GBR NAO TBB0010*	0.26	0.37	0.26	14
	GBR NAO TBB1218	0.53	0.56	0.35	22
	GBR NAO TBB1824	1.14	1.08	1.12	16
	GBR NAO TBB2440*	0.95	1.02	1.00	34
TM					
	GBR NAO TM40XX*	0.29	0.34	0.24	29

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 if 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.

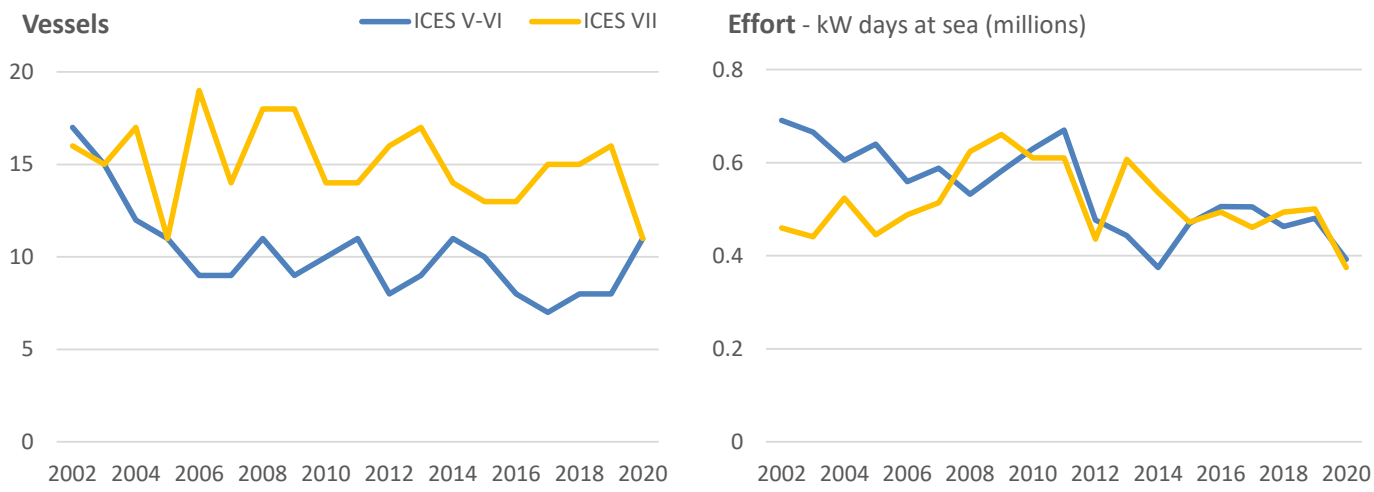
Appendix A. Effort Reduction Schemes Supporting Data

Western Waters Scheme:

The Western Waters scheme 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 2020 the number of vessels targeting scallops in ICES sub-areas V and VI decreased by 51 per cent while the number in ICES sub-area VII, whilst fluctuating across the period, declined by 13 percent. Effort in ICES sub-areas V and VI fell by 64 per cent, but effort in ICES sub-area VII fell by 17 per cent.

Figure 1. Fleet size and effort (kW days) of vessels targeting scallops in the Western Waters: 2002 to 2020



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 sub-area VII. Since 2012, the effort exerted by UK vessels in the Western Waters scalloping fleet has declined by 22 per cent.

Table 1: Scalloping fleet capacity and effort in Western Waters sub-area VII
United Kingdom, 2013 – 2020

	2013	2014	2015	2016	2017	2018	2019	2020
No. active vessels	98	103	104	97	92	88	81	71
Days effort	8,923	7,888	8,318	8,478	7,938	8,290	7,876	5,000
kW days effort	3,911,181	3,376,757	3,609,826	3,397,169	3,428,219	3,658,163	3,594,342	2,345,345

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

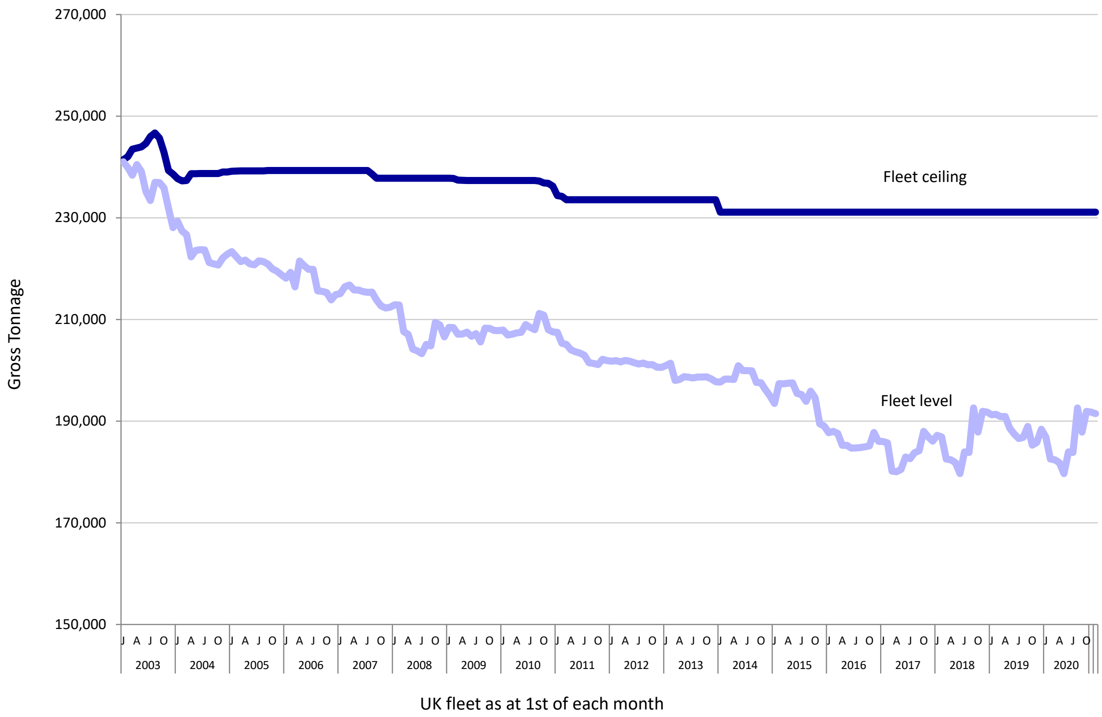
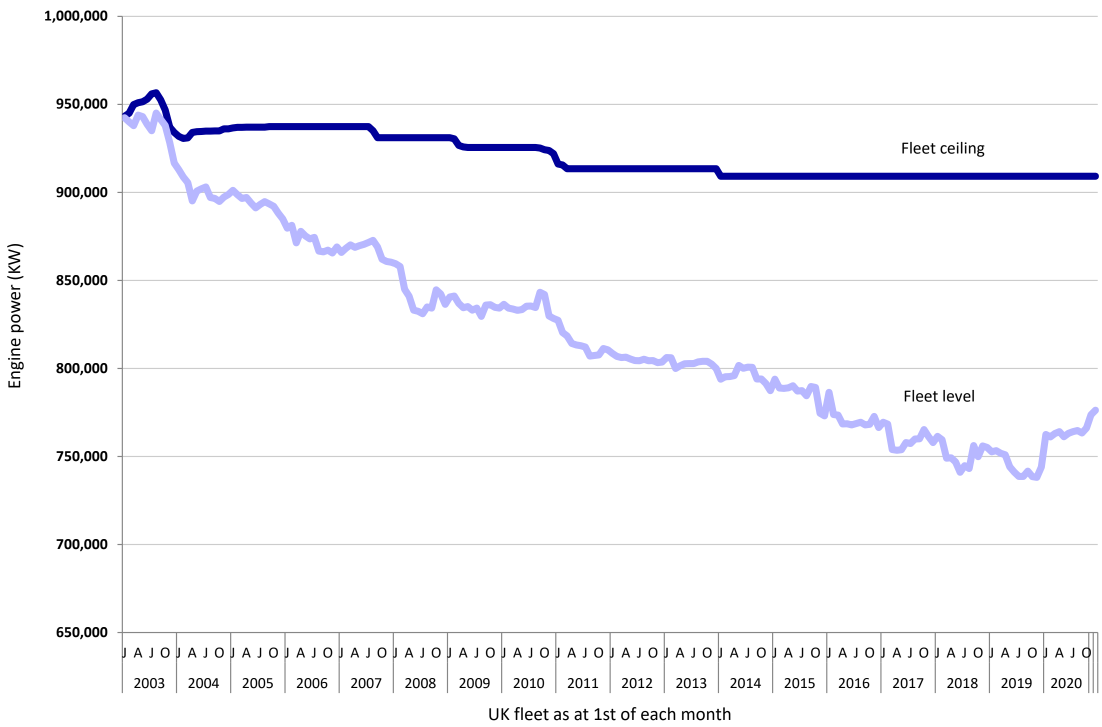


Figure 2: UK Compliance with Fleet Capacity Levels
Details for Engine Power of vessels



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
TM	Pelagic trawlers
TBB	Beam trawlers

Appendix D. Results for balance indicators produced by the JRC

Biological – Harvest Rate indicator:

FS name	supra_reg	fishing_tech	vessel_length	Vessel numbers 2018	2016	2017	2018
GBR NAO DFN0010 NGI	NAO	DFN	VL0010	516	1.04	0.96	0.89
GBR NAO DFN1012 NGI*	NAO	DFN	VL1012	7	1.26	1.04	0.95
GBR NAO DFN1012 NGI*	NAO	DFN	VL1218	5	1.25	1.25	1.11
GBR NAO DFN2440 NGI*	NAO	DFN	VL1824	8	1.17	1.22	1.09
GBR NAO DFN2440 NGI*	NAO	DFN	VL2440	5	1.21	1.13	1.10
GBR NAO DRB0010 NGI	NAO	DRB	VL0010	101	0.91	0.84	0.87
GBR NAO DRB1012 NGI	NAO	DRB	VL1012	32	0.94	0.71	0.85
GBR NAO DRB1218 NGI	NAO	DRB	VL1218	113	1.07	0.95	0.89
GBR NAO DRB1824 NGI	NAO	DRB	VL1824	26	0.90	0.63	0.66
GBR NAO DRB2440 NGI*	NAO	DRB	VL40XX	2	1.22	1.13	0.89
GBR NAO DRB2440 NGI*	NAO	DRB	VL2440	19	0.98	0.95	0.87
GBR NAO DTS0010 NGI	NAO	DTS	VL0010	198	1.05	0.99	0.80
GBR NAO DTS1012 NGI	NAO	DTS	VL1012	72	1.07	1.06	0.85
GBR NAO DTS1218 NGI*	NAO	DTS	VL1218	179	0.98	0.94	0.70
GBR NAO DTS1218 NGI*	NAO	PMP	VL1218				
GBR NAO DTS1824 NGI	NAO	DTS	VL1824	148	1.06	0.97	1.02
GBR NAO DTS2440 NGI	NAO	DTS	VL2440	94	1.40	1.30	1.36
GBR NAO DTS40XX NGI*	OFR	DTS	VL40XX	1			
GBR NAO DTS40XX NGI*	NAO	DTS	VL40XX	7	1.04	1.09	1.12
GBR NAO FPO0010 NGI	NAO	FPO	VL0010	1,865	1.02	0.99	0.69
GBR NAO FPO1012 NGI	NAO	FPO	VL1012	190	1.02	1.00	0.62
GBR NAO FPO1218 NGI	NAO	FPO	VL1218	83	1.02	0.99	0.60
GBR NAO FPO1824 NGI*	NAO	FPO	VL1824	12			
GBR NAO FPO1824 NGI*	NAO	FPO	VL2440	3			
GBR NAO HOK0010 NGI	NAO	HOK	VL0010	622	0.91	0.86	0.76
GBR NAO HOK1012 NGI*	NAO	HOK	VL1012	17	0.76	0.66	0.52
GBR NAO HOK1012 NGI*	NAO	HOK	VL1218	2			
GBR NAO HOK2440 NGI*	OFR	HOK	VL40XX	1	0.81	0.83	0.81
GBR NAO HOK2440 NGI*	OFR	HOK	VL2440	1		0.83	0.80
GBR NAO HOK2440 NGI*	NAO	HOK	VL1824				
GBR NAO HOK2440 NGI*	NAO	HOK	VL2440	14	1.04	1.12	1.04
GBR NAO MGP0010 NGI*	NAO	MGP	VL0010	35	1.07	1.07	0.99
GBR NAO MGP0010 NGI*	NAO	TM	VL0010	5	1.00		0.53
GBR NAO MGP1218 NGI*	NAO	MGP	VL1012	3		0.56	0.54
GBR NAO MGP1218 NGI*	NAO	MGP	VL1218	4	0.70	0.97	0.80
GBR NAO MGP1218 NGI*	NAO	MGP	VL1824				
GBR NAO MGP1218 NGI*	NAO	MGP	VL2440				
GBR NAO MGP1218 NGI*	NAO	PS	VL1218	6	0.96	1.05	1.07
GBR NAO MGP1218 NGI*	NAO	TM	VL1012			0.50	
GBR NAO MGP1218 NGI*	NAO	TM	VL1218	7	0.59	0.82	0.71
GBR NAO PGP0010 NGI*	NAO	PGP	VL0010	68	1.04	0.90	0.87
GBR NAO PGP0010 NGI*	NAO	PGP	VL1012			0.88	
GBR NAO PGP0010 NGI*	NAO	PGP	VL1218				
GBR NAO PGP0010 NGI*	NAO	PMP	VL0010	4	1.00	0.18	0.96
GBR NAO PGP0010 NGI*	NAO	PMP	VL1012				
GBR NAO TBB0010 NGI*	NAO	TBB	VL0010	7	1.09	0.92	0.98
GBR NAO TBB0010 NGI*	NAO	TBB	VL1012	9	0.94	0.87	0.92
GBR NAO TBB1218 NGI	NAO	TBB	VL1218	24	0.92	0.86	0.93
GBR NAO TBB1824 NGI	NAO	TBB	VL1824	17	0.96	0.88	0.90
GBR NAO TBB2440 NGI*	NAO	TBB	VL40XX	7	1.20	1.19	1.09
GBR NAO TBB2440 NGI*	NAO	TBB	VL2440	27	1.10	1.02	0.92
GBR NAO TM 40XX NGI*	OFR	PS	VL40XX				
GBR NAO TM 40XX NGI*	OFR	TM	VL40XX				
GBR NAO TM 40XX NGI*	NAO	TM	VL40XX	26	0.98	1.04	1.01
GBR NAO TM 40XX NGI*	NAO	TM	VL2440	1	0.88	1.03	0.98

Biological – Stocks at Risk indicator:

FS name	supra_reg	fishing_tech	vessel_length	Vessel numbers 2018	2016	2017	2018
GBR NAO DFN0010 NGI	NAO	DFN	VL0010	516	1		1
GBR NAO DFN1012 NGI*	NAO	DFN	VL1012	7			
GBR NAO DFN1012 NGI*	NAO	DFN	VL1218	5			
GBR NAO DFN2440 NGI*	NAO	DFN	VL1824	8		1	1
GBR NAO DFN2440 NGI*	NAO	DFN	VL2440	5			
GBR NAO DRB0010 NGI	NAO	DRB	VL0010	101			
GBR NAO DRB1012 NGI	NAO	DRB	VL1012	32			
GBR NAO DRB1218 NGI	NAO	DRB	VL1218	113			
GBR NAO DRB1824 NGI	NAO	DRB	VL1824	26			
GBR NAO DRB2440 NGI*	NAO	DRB	VL40XX	2			
GBR NAO DRB2440 NGI*	NAO	DRB	VL2440	19			
GBR NAO DTS0010 NGI	NAO	DTS	VL0010	198	1	2	
GBR NAO DTS1012 NGI	NAO	DTS	VL1012	72	1		
GBR NAO DTS1218 NGI*	NAO	DTS	VL1218	179	1	1	1
GBR NAO DTS1218 NGI*	NAO	PMP	VL1218				
GBR NAO DTS1824 NGI	NAO	DTS	VL1824	148	3	6	5
GBR NAO DTS2440 NGI	NAO	DTS	VL2440	94	4	6	5
GBR NAO DTS40XX NGI*	OFR	DTS	VL40XX	1			
GBR NAO DTS40XX NGI*	NAO	DTS	VL40XX	7	2	2	2
GBR NAO FPO0010 NGI	NAO	FPO	VL0010	1,865			1
GBR NAO FPO1012 NGI	NAO	FPO	VL1012	190			
GBR NAO FPO1218 NGI	NAO	FPO	VL1218	83			1
GBR NAO FPO1824 NGI*	NAO	FPO	VL1824	12			
GBR NAO FPO1824 NGI*	NAO	FPO	VL2440	3			
GBR NAO HOK0010 NGI	NAO	HOK	VL0010	622	2	1	1
GBR NAO HOK1012 NGI*	NAO	HOK	VL1012	17			
GBR NAO HOK1012 NGI*	NAO	HOK	VL1218	2			
GBR NAO HOK2440 NGI*	OFR	HOK	VL40XX	1			
GBR NAO HOK2440 NGI*	OFR	HOK	VL2440	1		1	
GBR NAO HOK2440 NGI*	NAO	HOK	VL1824				
GBR NAO HOK2440 NGI*	NAO	HOK	VL2440	14			
GBR NAO MGP0010 NGI*	NAO	MGP	VL0010	35			
GBR NAO MGP0010 NGI*	NAO	TM	VL0010	5			
GBR NAO MGP1218 NGI*	NAO	MGP	VL1012	3			
GBR NAO MGP1218 NGI*	NAO	MGP	VL1218	4			
GBR NAO MGP1218 NGI*	NAO	MGP	VL1824				
GBR NAO MGP1218 NGI*	NAO	MGP	VL2440				
GBR NAO MGP1218 NGI*	NAO	PS	VL1218	6			
GBR NAO MGP1218 NGI*	NAO	TM	VL1012				
GBR NAO MGP1218 NGI*	NAO	TM	VL1218	7			
GBR NAO PGP0010 NGI*	NAO	PGP	VL0010	68			
GBR NAO PGP0010 NGI*	NAO	PGP	VL1012				
GBR NAO PGP0010 NGI*	NAO	PGP	VL1218				
GBR NAO PGP0010 NGI*	NAO	PMP	VL0010	4			
GBR NAO PGP0010 NGI*	NAO	PMP	VL1012				
GBR NAO TBB0010 NGI*	NAO	TBB	VL0010	7			
GBR NAO TBB0010 NGI*	NAO	TBB	VL1012	9			
GBR NAO TBB1218 NGI	NAO	TBB	VL1218	24			
GBR NAO TBB1824 NGI	NAO	TBB	VL1824	17			
GBR NAO TBB2440 NGI*	NAO	TBB	VL40XX	7			
GBR NAO TBB2440 NGI*	NAO	TBB	VL2440	27	1	1	1
GBR NAO TM 40XX NGI*	OFR	PS	VL40XX				
GBR NAO TM 40XX NGI*	OFR	TM	VL40XX				
GBR NAO TM 40XX NGI*	NAO	TM	VL40XX	26	3	2	2
GBR NAO TM 40XX NGI*	NAO	TM	VL2440	1	1		

Economic – Return on Investment

FS name	supra_reg	fishing_tech	vessel_length	Vessel numbers 2018	2016	2017	2018
GBR NAO DFN0010 NGI	NAO	DFN	VL0010	516	1.2	1.8	1.8
GBR NAO DFN1012 NGI*	NAO	DFN	VL1012	7	2.0	1.8	3.0
GBR NAO DFN1012 NGI*	NAO	DFN	VL1218	5			
GBR NAO DFN2440 NGI*	NAO	DFN	VL1824	8			
GBR NAO DFN2440 NGI*	NAO	DFN	VL2440	5	2.0	1.9	3.2
GBR NAO DRB0010 NGI	NAO	DRB	VL0010	101	1.1	1.0	1.0
GBR NAO DRB1012 NGI	NAO	DRB	VL1012	32	1.4	1.2	1.2
GBR NAO DRB1218 NGI	NAO	DRB	VL1218	113	1.5	1.3	1.2
GBR NAO DRB1824 NGI	NAO	DRB	VL1824	26	1.5	2.2	0.7
GBR NAO DRB2440 NGI*	NAO	DRB	VL40XX	2			
GBR NAO DRB2440 NGI*	NAO	DRB	VL2440	19	1.4	2.5	1.1
GBR NAO DTS0010 NGI	NAO	DTS	VL0010	198	2.0	1.7	1.1
GBR NAO DTS1012 NGI	NAO	DTS	VL1012	72	3.0	1.8	1.8
GBR NAO DTS1218 NGI*	NAO	DTS	VL1218	179	2.4	1.8	1.5
GBR NAO DTS1218 NGI*	NAO	PMP	VL1218				
GBR NAO DTS1824 NGI	NAO	DTS	VL1824	148	3.0	2.8	2.2
GBR NAO DTS2440 NGI	NAO	DTS	VL2440	94	5.3	4.0	3.8
GBR NAO DTS40XX NGI*	OFR	DTS	VL40XX	1			
GBR NAO DTS40XX NGI*	NAO	DTS	VL40XX	7	3.5	1.4	1.3
GBR NAO FPO0010 NGI	NAO	FPO	VL0010	1,865	2.1	1.4	1.5
GBR NAO FPO1012 NGI	NAO	FPO	VL1012	190	3.3	2.2	2.6
GBR NAO FPO1218 NGI	NAO	FPO	VL1218	83	2.5	2.4	1.8
GBR NAO FPO1824 NGI*	NAO	FPO	VL1824	12	2.8	2.6	2.1
GBR NAO FPO1824 NGI*	NAO	FPO	VL2440	3			
GBR NAO HOK0010 NGI	NAO	HOK	VL0010	622	1.7	1.5	1.3
GBR NAO HOK1012 NGI*	NAO	HOK	VL1012	17	1.1	0.0	1.0
GBR NAO HOK1012 NGI*	NAO	HOK	VL1218	2			
GBR NAO HOK2440 NGI*	OFR	HOK	VL40XX	1			
GBR NAO HOK2440 NGI*	OFR	HOK	VL2440	1			
GBR NAO HOK2440 NGI*	NAO	HOK	VL1824				
GBR NAO HOK2440 NGI*	NAO	HOK	VL2440	14	4.4	1.6	1.2
GBR NAO MGP0010 NGI*	NAO	MGP	VL0010	35	1.7	1.6	1.3
GBR NAO MGP0010 NGI*	NAO	TM	VL0010	5			
GBR NAO MGP1218 NGI*	NAO	MGP	VL1012	3			
GBR NAO MGP1218 NGI*	NAO	MGP	VL1218	4	2.9	1.7	1.4
GBR NAO MGP1218 NGI*	NAO	MGP	VL1824				
GBR NAO MGP1218 NGI*	NAO	MGP	VL2440				
GBR NAO MGP1218 NGI*	NAO	PS	VL1218	6			
GBR NAO MGP1218 NGI*	NAO	TM	VL1012				
GBR NAO MGP1218 NGI*	NAO	TM	VL1218	7			
GBR NAO PGP0010 NGI*	NAO	PGP	VL0010	68	1.3	1.5	1.2
GBR NAO PGP0010 NGI*	NAO	PGP	VL1012				
GBR NAO PGP0010 NGI*	NAO	PGP	VL1218				
GBR NAO PGP0010 NGI*	NAO	PMP	VL0010	4			
GBR NAO PGP0010 NGI*	NAO	PMP	VL1012				
GBR NAO TBB0010 NGI*	NAO	TBB	VL0010	7	1.7	1.2	1.5
GBR NAO TBB0010 NGI*	NAO	TBB	VL1012	9			
GBR NAO TBB1218 NGI	NAO	TBB	VL1218	24	1.4	1.2	1.2
GBR NAO TBB1824 NGI	NAO	TBB	VL1824	17	4.0	5.2	2.9
GBR NAO TBB2440 NGI*	NAO	TBB	VL40XX	7			
GBR NAO TBB2440 NGI*	NAO	TBB	VL2440	27	2.7	4.5	1.6
GBR NAO TM 40XX NGI*	OFR	PS	VL40XX				
GBR NAO TM 40XX NGI*	OFR	TM	VL40XX				
GBR NAO TM 40XX NGI*	NAO	TM	VL40XX	26	5.3	11.1	6.2
GBR NAO TM 40XX NGI*	NAO	TM	VL2440	1			

Economic – Current Versus Break Even Revenue

FS name	supra_reg	fishing_tech	vessel_length	Vessel numbers 2018	2016	2017	2018
GBR NAO DFN0010 NGI	NAO	DFN	VL0010	516	1.2	1.8	1.8
GBR NAO DFN1012 NGI*	NAO	DFN	VL1012	7	2.0	1.8	3.0
GBR NAO DFN1012 NGI*	NAO	DFN	VL1218	5			
GBR NAO DFN2440 NGI*	NAO	DFN	VL1824	8			
GBR NAO DFN2440 NGI*	NAO	DFN	VL2440	5	2.0	1.9	3.2
GBR NAO DRB0010 NGI	NAO	DRB	VL0010	101	1.1	1.0	1.0
GBR NAO DRB1012 NGI	NAO	DRB	VL1012	32	1.4	1.2	1.2
GBR NAO DRB1218 NGI	NAO	DRB	VL1218	113	1.5	1.3	1.2
GBR NAO DRB1824 NGI	NAO	DRB	VL1824	26	1.5	2.2	0.7
GBR NAO DRB2440 NGI*	NAO	DRB	VL40XX	2			
GBR NAO DRB2440 NGI*	NAO	DRB	VL2440	19	1.4	2.5	1.1
GBR NAO DTS0010 NGI	NAO	DTS	VL0010	198	2.0	1.7	1.1
GBR NAO DTS1012 NGI	NAO	DTS	VL1012	72	3.0	1.8	1.8
GBR NAO DTS1218 NGI*	NAO	DTS	VL1218	179	2.4	1.8	1.5
GBR NAO DTS1218 NGI*	NAO	PMP	VL1218				
GBR NAO DTS1824 NGI	NAO	DTS	VL1824	148	3.0	2.8	2.2
GBR NAO DTS2440 NGI	NAO	DTS	VL2440	94	5.3	4.0	3.8
GBR NAO DTS40XX NGI*	OFR	DTS	VL40XX	1			
GBR NAO DTS40XX NGI*	NAO	DTS	VL40XX	7	3.5	1.4	1.3
GBR NAO FPO0010 NGI	NAO	FPO	VL0010	1,865	2.1	1.4	1.5
GBR NAO FPO1012 NGI	NAO	FPO	VL1012	190	3.3	2.2	2.6
GBR NAO FPO1218 NGI	NAO	FPO	VL1218	83	2.5	2.4	1.8
GBR NAO FPO1824 NGI*	NAO	FPO	VL1824	12	2.8	2.6	2.1
GBR NAO FPO1824 NGI*	NAO	FPO	VL2440	3			
GBR NAO HOK0010 NGI	NAO	HOK	VL0010	622	1.7	1.5	1.3
GBR NAO HOK1012 NGI*	NAO	HOK	VL1012	17	1.1	0.0	1.0
GBR NAO HOK1012 NGI*	NAO	HOK	VL1218	2			
GBR NAO HOK2440 NGI*	OFR	HOK	VL40XX	1			
GBR NAO HOK2440 NGI*	OFR	HOK	VL2440	1			
GBR NAO HOK2440 NGI*	NAO	HOK	VL1824				
GBR NAO HOK2440 NGI*	NAO	HOK	VL2440	14	4.4	1.6	1.2
GBR NAO MGP0010 NGI*	NAO	MGP	VL0010	35	1.7	1.6	1.3
GBR NAO MGP0010 NGI*	NAO	TM	VL0010	5			
GBR NAO MGP1218 NGI*	NAO	MGP	VL1012	3			
GBR NAO MGP1218 NGI*	NAO	MGP	VL1218	4	2.9	1.7	1.4
GBR NAO MGP1218 NGI*	NAO	MGP	VL1824				
GBR NAO MGP1218 NGI*	NAO	MGP	VL2440				
GBR NAO MGP1218 NGI*	NAO	PS	VL1218	6			
GBR NAO MGP1218 NGI*	NAO	TM	VL1012				
GBR NAO MGP1218 NGI*	NAO	TM	VL1218	7			
GBR NAO PGP0010 NGI*	NAO	PGP	VL0010	68	1.3	1.5	1.2
GBR NAO PGP0010 NGI*	NAO	PGP	VL1012				
GBR NAO PGP0010 NGI*	NAO	PGP	VL1218				
GBR NAO PGP0010 NGI*	NAO	PMP	VL0010	4			
GBR NAO PGP0010 NGI*	NAO	PMP	VL1012				
GBR NAO TBB0010 NGI*	NAO	TBB	VL0010	7	1.7	1.2	1.5
GBR NAO TBB0010 NGI*	NAO	TBB	VL1012	9			
GBR NAO TBB1218 NGI	NAO	TBB	VL1218	24	1.4	1.2	1.2
GBR NAO TBB1824 NGI	NAO	TBB	VL1824	17	4.0	5.2	2.9
GBR NAO TBB2440 NGI*	NAO	TBB	VL40XX	7			
GBR NAO TBB2440 NGI*	NAO	TBB	VL2440	27	2.7	4.5	1.6
GBR NAO TM 40XX NGI*	OFR	PS	VL40XX				
GBR NAO TM 40XX NGI*	OFR	TM	VL40XX				
GBR NAO TM 40XX NGI*	NAO	TM	VL40XX	26	5.3	11.1	6.2
GBR NAO TM 40XX NGI*	NAO	TM	VL2440	1			

Appendix E. Results for balance indicators produced by the MMO

Economic – Return on Investment:

	Fleet segment - as defined by JRC indicators	2017	2018	2019	Number of vessels in fleet segment (2019)
DFN					
	GBR NAO DFN0010	4.01	2.18	2.09	510
	GBR NAO DFN1012*	9.47	8.28	9.70	12
	GBR NAO DFN2440*	11.33	7.02	11.25	14
DRB					
	GBR NAO DRB0010	-2.18	-1.21	-1.26	104
	GBR NAO DRB1012	0.91	2.22	2.99	24
	GBR NAO DRB1218	3.76	1.34	3.28	100
	GBR NAO DRB1824	10.53	-3.91	0.99	27
	GBR NAO DRB2440*	45.04	0.10	20.26	21
DTS					
	GBR NAO DTS0010	1.32	-1.42	2.32	204
	GBR NAO DTS1012	7.83	2.26	3.31	70
	GBR NAO DTS1218*	34.06	8.69	9.00	184
	GBR NAO DTS1824	34.95	19.21	23.18	142
	GBR NAO DTS2440	36.60	36.23	39.58	93
	GBR NAO DTS40XX*	0.79	-0.95	-0.87	8
FPO					
	GBR NAO FPO0010	57.72	147.71	200.18	1900
	GBR NAO FPO1012	31.03	34.80	27.62	181
	GBR NAO FPO1218	25.77	18.00	32.01	92
	GBR NAO FPO1824*	3.11	1.75	3.62	18
HOK					
	GBR NAO HOK0010	0.79	0.08	1.78	576
	GBR NAO HOK1012*	-10.81	0.34	-3.35	20
	GBR NAO HOK2440*	4.84	-0.26	-4.23	15
MGP					
	GBR NAO MGP0010*	6.44	1.57	-2.36	42
	GBR NAO MGP1218*	7.12	3.21	3.44	19
PGP		0.03	-1.20	2.20	
	GBR NAO PGP0010*	0.03	-1.20	2.20	57
TBB					
	GBR NAO TBB0010*	-1.75	-1.03	-1.23	14
	GBR NAO TBB1218	0.34	2.51	-8.77	22
	GBR NAO TBB1824	9.05	3.55	9.56	16
	GBR NAO TBB2440*	169.43	9.02	57.53	34
TM					
	GBR NAO TM40XX*	14.74	10.24	12.63	29

Economic – Current verses Breakeven Revenue:

	Fleet segment - as defined by JRC indicators	2017	2018	2019	Number of vessels in fleet segment (2019)
DFN					
	GBR NAO DFN0010	1.66	1.42	1.39	510
	GBR NAO DFN1012	1.69	2.71	2.53	12
	GBR NAO DFN2440*	1.85	3.05	3.47	14
DRB					
	GBR NAO DRB0010	0.96	1.06	1.05	104
	GBR NAO DRB1012	1.16	1.32	1.25	24
	GBR NAO DRB1218	1.31	1.22	1.34	100
	GBR NAO DRB1824	2.12	0.69	1.22	27
	GBR NAO DRB2440*	2.34	1.06	1.56	21
DTS					
	GBR NAO DTS0010	1.56	1.07	1.22	204
	GBR NAO DTS1012	1.79	1.73	1.56	70
	GBR NAO DTS1218*	1.71	1.47	1.45	184
	GBR NAO DTS1824	2.68	2.05	2.27	142
	GBR NAO DTS2440	3.79	3.46	3.43	93
	GBR NAO DTS40XX*	1.34	1.16	1.15	8
FPO					
	GBR NAO FPO0010	1.38	1.68	1.97	1900
	GBR NAO FPO1012*	2.07	2.27	2.20	181
	GBR NAO FPO1218	2.34	2.60	2.99	92
	GBR NAO FPO1824*	2.55	2.97	3.55	18
HOK					
	GBR NAO HOK0010	1.43	1.28	1.33	576
	GBR NAO HOK1012*	0.09	1.11	0.96	20
	GBR NAO HOK2440*	1.49	1.12	0.82	15
MGP					
	GBR NAO MGP0010*	1.49	1.29	0.90	42
	GBR NAO MGP1218*	1.68	1.29	1.33	19
PGP					
	GBR NAO PGP0010*	1.26	1.07	1.43	57
TBB					
	GBR NAO TBB0010*	1.06	1.49	1.41	14
	GBR NAO TBB1218	1.17	1.20	0.42	22
	GBR NAO TBB1824	4.89	2.84	4.65	16
	GBR NAO TBB2440*	3.42	1.11	2.53	34
TM					
	GBR NAO TM40XX*	9.51	5.47	2.62	29

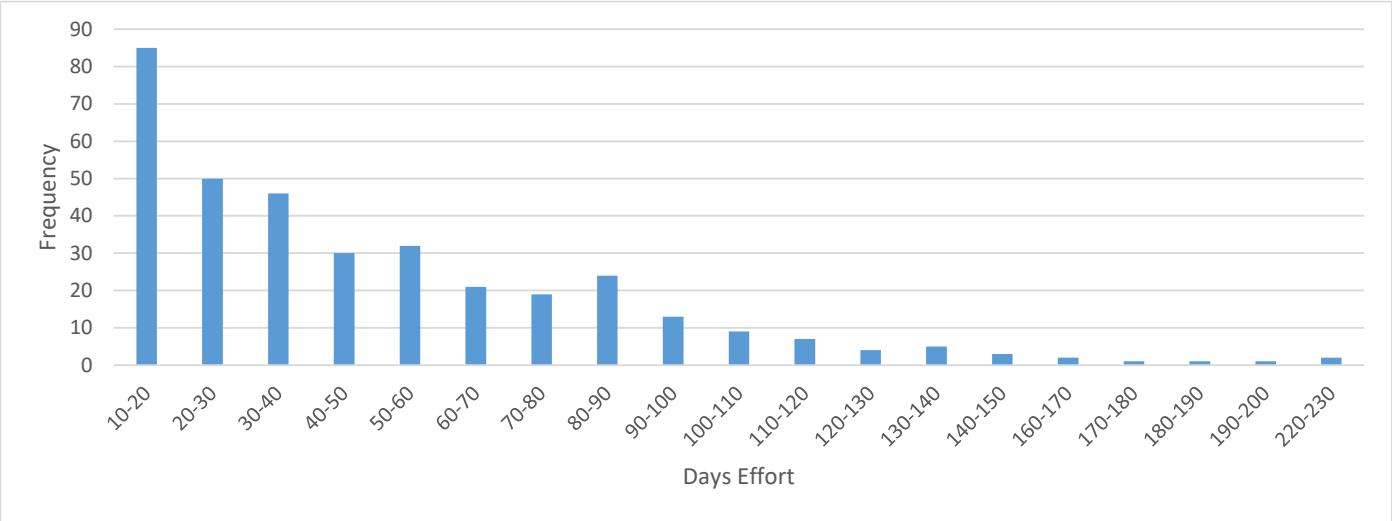
Technical – Vessel Utilisation Indicator:

	Fleet segment - as defined by JRC indicators	2017	2018	2019	Number of vessels in fleet segment (2019)
DFN					
	GBR NAO DFN0010	0.23	0.25	0.22	510
	GBR NAO DFN1012*	0.50	0.56	0.54	12
	GBR NAO DFN2440*	1.13	1.10	1.03	14
DRB					
	GBR NAO DRB0010	0.29	0.32	0.31	104
	GBR NAO DRB1012	0.54	0.55	0.68	24
	GBR NAO DRB1218	0.56	0.56	0.56	100
	GBR NAO DRB1824	0.96	0.94	0.89	27
	GBR NAO DRB2440*	0.99	0.96	0.89	21
DTS					
	GBR NAO DTS0010	0.38	0.36	0.38	204
	GBR NAO DTS1012	0.57	0.49	0.56	70
	GBR NAO DTS1218*	0.71	0.69	0.71	184
	GBR NAO DTS1824	0.81	0.83	0.89	142
	GBR NAO DTS2440	0.92	1.01	1.01	93
	GBR NAO DTS40XX*	1.17	0.93	1.06	8
FPO					
	GBR NAO FPO0010	0.37	0.36	0.37	1900
	GBR NAO FPO1012	0.68	0.66	0.73	181
	GBR NAO FPO1218	0.83	0.80	0.78	92
	GBR NAO FPO1824*	1.13	1.23	1.09	18
HOK					
	GBR NAO HOK0010	0.16	0.16	0.16	576
	GBR NAO HOK1012*	0.40	0.45	0.38	20
	GBR NAO HOK2440*	1.15	1.23	1.22	15
MGP					
	GBR NAO MGP0010*	0.27	0.29	0.21	42
	GBR NAO MGP1218*	0.39	0.51	0.55	19
PGP					
	GBR NAO PGP0010*	0.20	0.20	0.20	57
TBB					
	GBR NAO TBB0010*	0.26	0.37	0.26	14
	GBR NAO TBB1218	0.53	0.56	0.35	22
	GBR NAO TBB1824	1.14	1.08	1.12	16
	GBR NAO TBB2440*	0.95	1.02	1.00	34
TM					
	GBR NAO TM40XX*	0.29	0.34	0.24	29

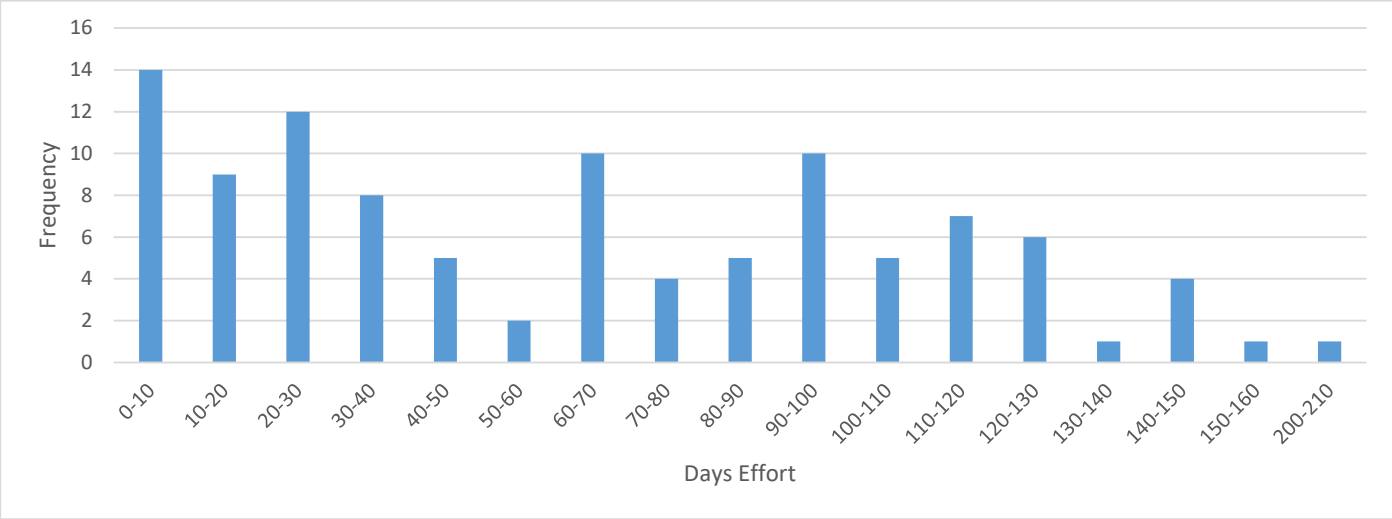
Appendix F. Vessel Utilisation Indicator analysis

Eight 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 2019. 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.

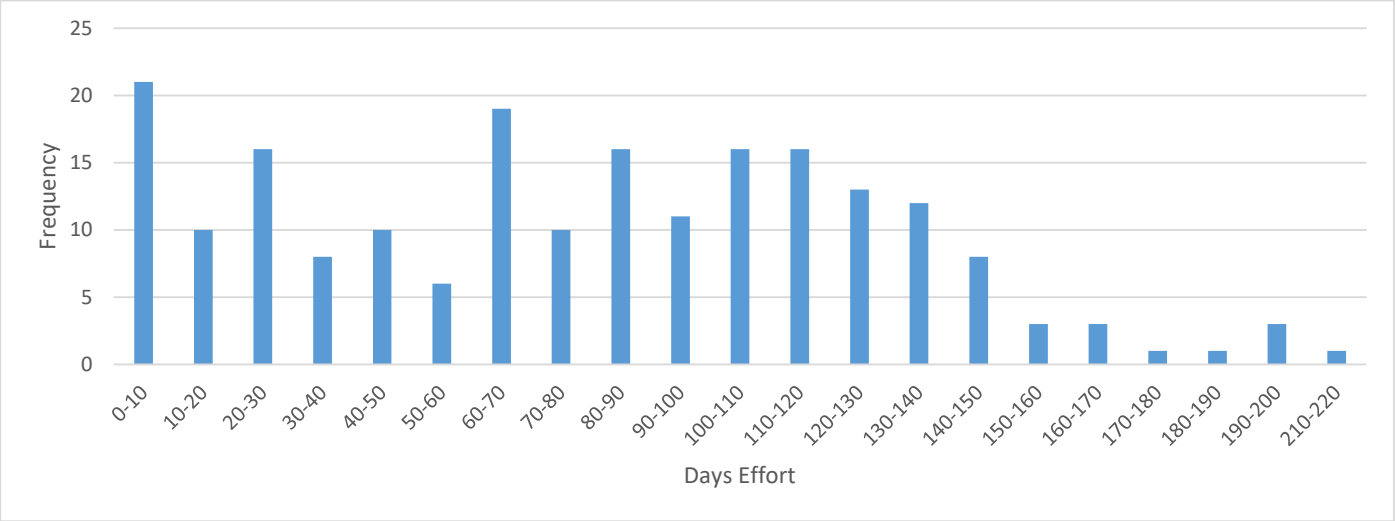
DFN VL0010 – Median: 22



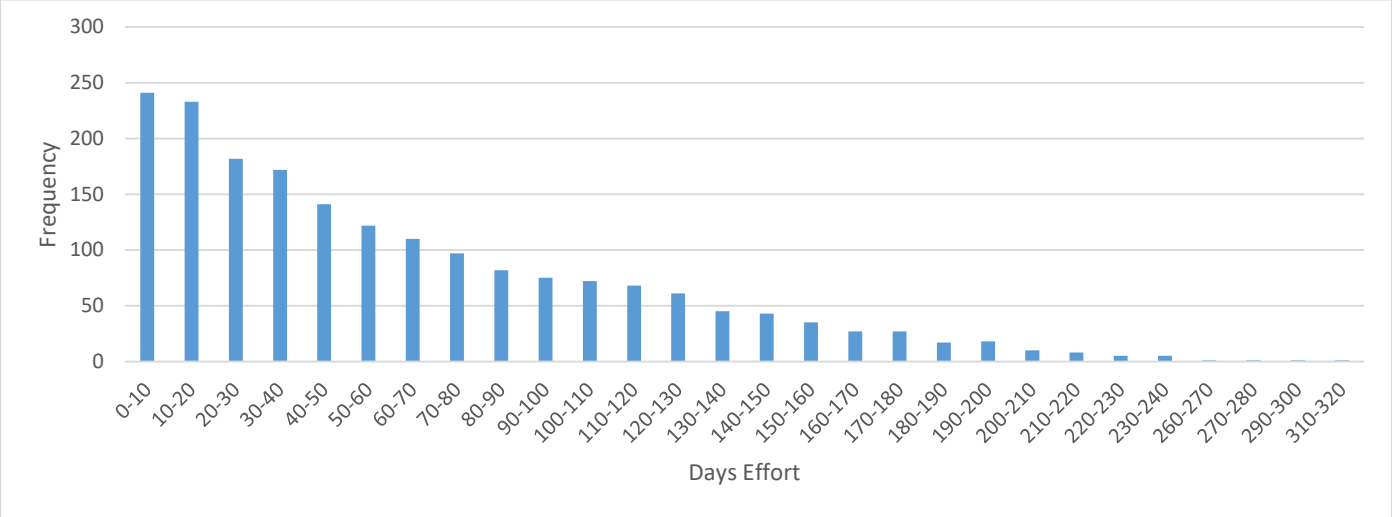
DRB VL0010 - Median: 65



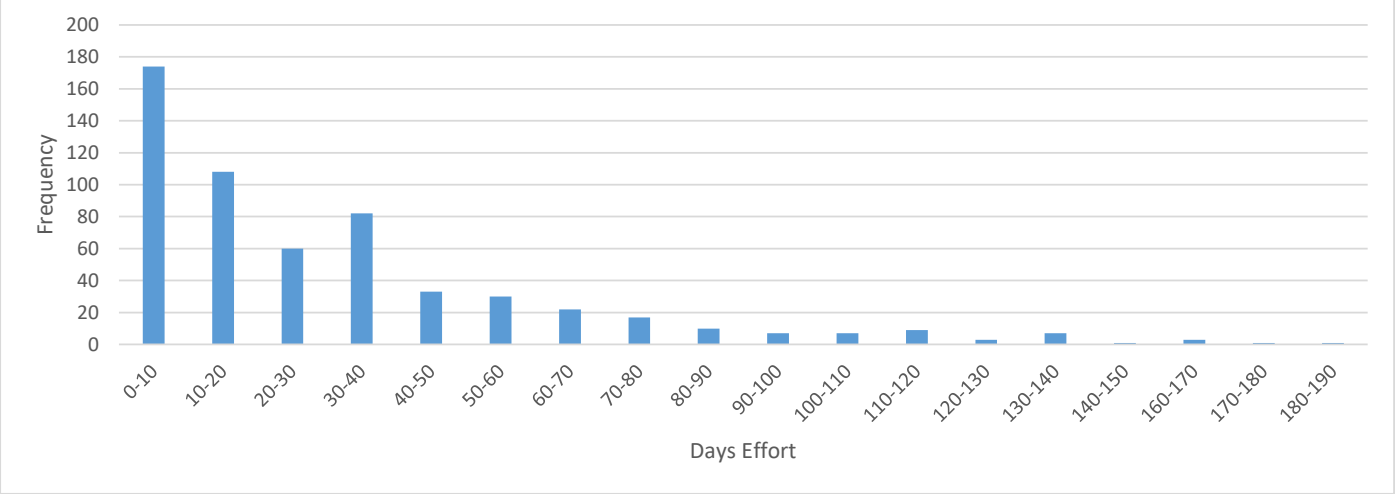
DTS VL0010 – Median: 81



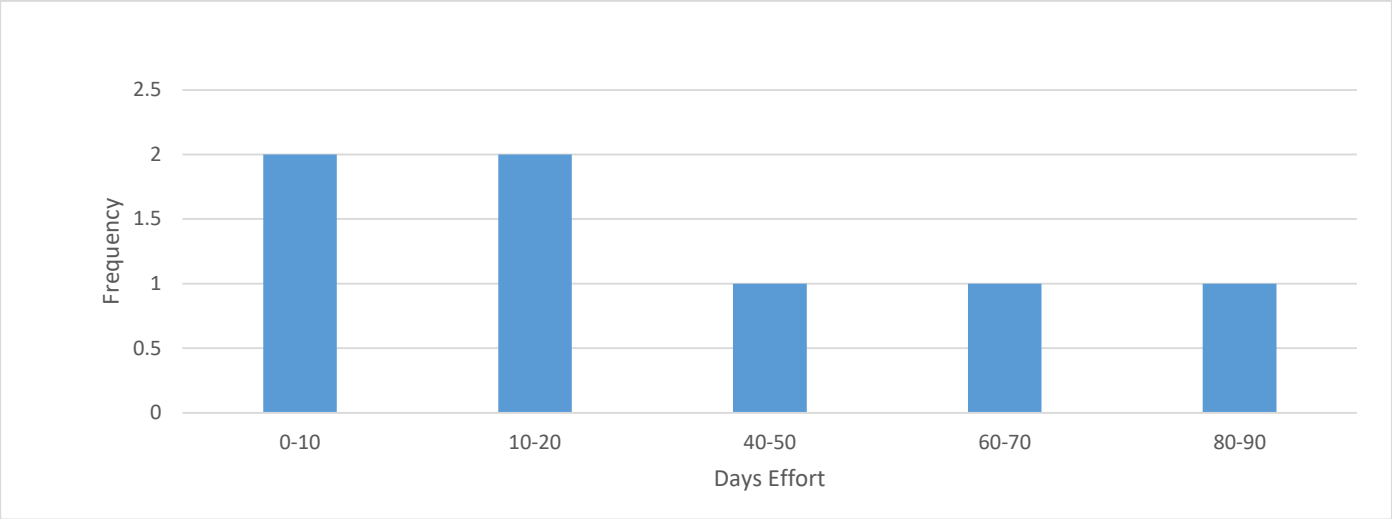
FPO VL0010 – Median: 48



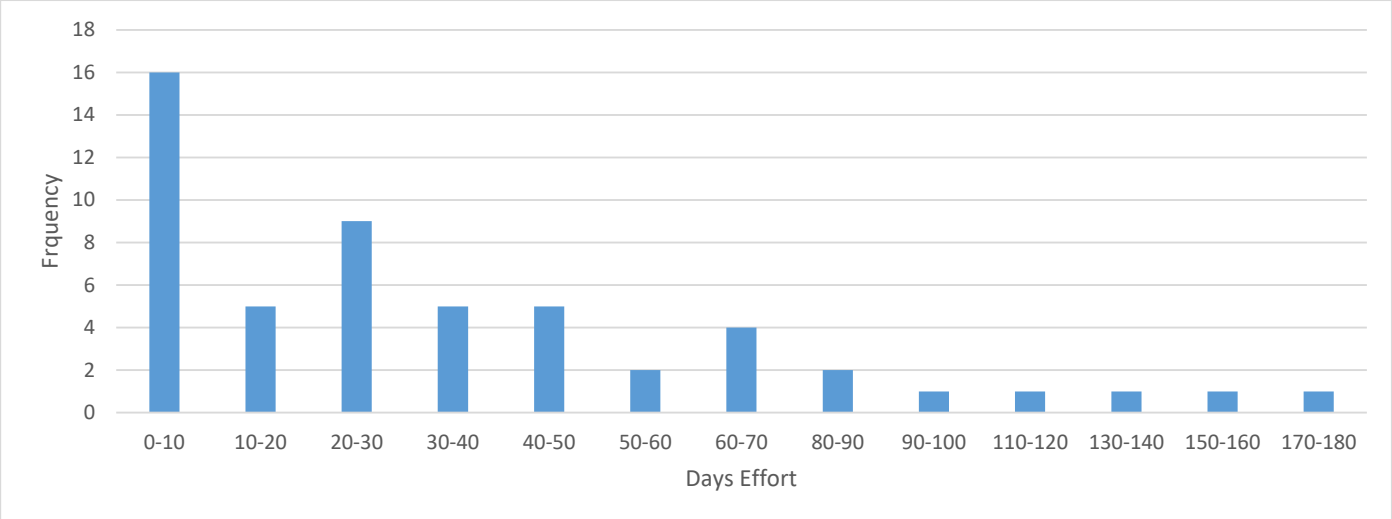
HOK VL0010 – Median: 21



MGP VL0010 – Median: 20



PGP VL0010 – Median: 26



TBB VL0010 – Median: 14