# UK Fleet Capacity Report 2019

This report contains information on UK Fleet Capacity in 2019. 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 2019, 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 2019 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 2008-2019 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 1st January 2019, the UK fleet contained 6044 vessels (including active and inactive vessels); which was 149 fewer vessels than at the same time in 2018. In terms of active vessels, the UK fleet contained 4,366 vessels as of 1st January 2019, 38 fewer than at the same time in 2018. Of these active vessels, 74 per cent were 10m and under in length. Active fleet capacity has increased slightly by 461 kW from 2018 to 2019. Since 2018, the less than 10m active vessel group decreased by 36 vessels but with a small increase of 59 kW. Other active vessel length groups saw smaller changes each decreasing by between 2 and 13 vessels.

With regards to gear types employed throughout 2019, potting vessels comprise 48 per cent of the active fleet by number, whilst accounting for 25 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, unchanged from 2018.

**Table 1**: Vessel numbers (both active a and inactive) by gear type and length

United Kingdom, 2019

| As of 01/01/2019: | | | | | | | | | | | | | | | | As of 01/01/2020: | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DFN | DRB | DTS | FPO | HOK | MGP | PGP | PMP | PS | TBB | TM | Total active vessels | Total inactive vessels | Total fleet | Total fleet | Difference from 01/01/2019 to 01/01/2020 |
| **2019 totals** | | **518** | **265** | **690** | **2,087** | **586** | **34** | **54** | **4** | **6** | **85** | **37** | **4,366** | **1,678** | **6,044** | **5,930** | **-114** |
| | VL0010 | 492 | 99 | 201 | 1,806 | 552 | 31 | 54 | 3 | | 7 | 5 | 3,250 | 1,515 | 4,765 | 4,685 | -80 |
| | VL1012 | 7 | 25 | 71 | 177 | 19 | | | 1 | | 7 | 2 | 309 | 70 | 379 | 366 | -13 |
| | VL1218 | 5 | 95 | 182 | 88 | | 3 | | | 6 | 22 | 4 | 405 | 48 | 453 | 442 | -11 |
| | VL1824 | 8 | 26 | 141 | 12 | | | | | | 16 | 2 | 205 | 16 | 221 | 216 | -5 |
| | VL2440 | 6 | 17 | 87 | 4 | 14 | | | | | 27 | 3 | 158 | 22 | 180 | 177 | -3 |
| | VL40XX | | 3 | 8 | | 1 | | | | | 6 | 21 | 39 | 7 | 46 | 44 | -2 |

[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, 2019

| As of 01/01/2019: | | | | | | | | | | | | | | | | As of 01/01/2020: | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DFN | DRB | DTS | FPO | HOK | MGP | PGP | PMP | PS | TBB | TM | Total active vessels | Total inactive vessels | Total fleet | Total fleet | Difference from 01/01/2019 to 01/01/2020 |
| **2018 totals** | | **33,397** | **52,421** | **198,146** | **162,896** | **37,155** | **3,058** | **3,278** | **315** | **1,498** | **35,807** | **114,530** | **642,502** | **110,152** | **752,654** | **757,843** | **5,189** |
| | VL0010 | 24,974 | 7,863 | 22,237 | 113,717 | 26,168 | 2,497 | 3,278 | 215 | | 685 | 473 | 202,107 | 65,699 | 267,805 | 264,825 | -2,981 |
| | VL1012 | 1,219 | 4,203 | 10,001 | 24,871 | 2,564 | | | 100 | | 911 | 185 | 44,054 | 9,905 | 53,959 | 52,115 | -1,844 |
| | VL1218 | 1,034 | 18,353 | 38,669 | 18,930 | | 561 | | | 1,498 | 4,487 | 899 | 84,432 | 7,881 | 92,313 | 91,279 | -1,034 |
| | VL1824 | 2,872 | 9,179 | 56,518 | 3,433 | | | | | | 3,757 | 816 | 76,574 | 5,276 | 81,850 | 81,627 | -223 |
| | VL2440 | 3,299 | 10,456 | 52,400 | 1,945 | 7,633 | | | | | 17,084 | 4,279 | 97,097 | 11,036 | 108,133 | 110,156 | 2,023 |
| | VL40XX | | 2,367 | 18,322 | | 790 | | | | | 8,883 | 107,878 | 138,240 | 10,354 | 148,594 | 157,842 | 9,248 |

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

**Table 3**: Vessel tonnage capacity (GT) by gear type and length

United Kingdom, 2019

| As of 01/01/2019: | | | | | | | | | | | | | | | | As of 01/01/2020: | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DFN | DRB | DTS | FPO | HOK | MGP | PGP | PMP | PS | TBB | TM | Total active vessels | Total inactive vessels | Total fleet | Total fleet | Difference from 01/01/2019 to 01/01/2020 |
| **2018 totals** | | **33,397** | **52,421** | **198,146** | **162,896** | **37,155** | **3,058** | **3,278** | **315** | **1,498** | **35,807** | **114,530** | **642,502** | **110,152** | **752,654** | **757,843** | **5,189** |
| | VL0010 | 24,974 | 7,863 | 22,237 | 113,717 | 26,168 | 2,497 | 3,278 | 215 | | 685 | 473 | 202,107 | 65,699 | 267,805 | 264,825 | -2,981 |
| | VL1012 | 1,219 | 4,203 | 10,001 | 24,871 | 2,564 | | | 100 | | 911 | 185 | 44,054 | 9,905 | 53,959 | 52,115 | -1,844 |
| | VL1218 | 1,034 | 18,353 | 38,669 | 18,930 | | 561 | | | 1,498 | 4,487 | 899 | 84,432 | 7,881 | 92,313 | 91,279 | -1,034 |
| | VL1824 | 2,872 | 9,179 | 56,518 | 3,433 | | | | | | 3,757 | 816 | 76,574 | 5,276 | 81,850 | 81,627 | -223 |
| | VL2440 | 3,299 | 10,456 | 52,400 | 1,945 | 7,633 | | | | | 17,084 | 4,279 | 97,097 | 11,036 | 108,133 | 110,156 | 2,023 |
| | VL40XX | | 2,367 | 18,322 | | 790 | | | | | 8,883 | 107,878 | 138,240 | 10,354 | 148,594 | 157,842 | 9,248 |

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 (46 per cent by weight), much less than potting vessels (52 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 70 per cent by weight.

Dredgers 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 19 per cent of mollusc landings by weight.

In terms of pelagic landings, pelagic trawlers account for 97 per cent of pelagic landings by value and 96 per cent by weight. Vessels of over 40m account for 96 percent of pelagic landings by value and 94 per cent by weight.

**Table 4**: Proportion of fishery landings by value (Euros) accounted for by different gear types
United Kingdom, 2019

| Gear: | Crustacean | Demersal | Mollusc | Pelagic | Total value (€) |
|---|---|---|---|---|---|
| DFN | 1% | 8% | 1% | 0% | 33,991,961 |
| DRB | 0% | 1% | 45% | 0% | 76,854,262 |
| DTS | 42% | 74% | 20% | 0% | 435,551,938 |
| FPO | 56% | 2% | 19% | 0% | 192,004,813 |
| HOK | 0% | 4% | 5% | 1% | 27,091,366 |
| MGP | 0% | 0% | 1% | 0% | 1,911,189 |
| PGP | 0% | 0% | 0% | 0% | 997,805 |
| PMP | 0% | 0% | 0% | 0% | 130,075 |
| PS | 0% | 0% | 0% | 1% | 2,008,112 |
| TBB | 0% | 11% | 8% | 0% | 56,976,672 |
| TM | 0% | 0% | 2% | 97% | 277,081,493 |
| **Total value (€)** | 270,594,319 | 389,334,066 | 164,547,737 | 280,123,564 | 1,104,599,686 |

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

**Table 5**: Proportion of fishery landings by weight (kg) accounted for by different gear types
United Kingdom, 2019

| Gear: | | Crustacean | Demersal | Mollusc | Pelagic | Total weight (kg) |
|---|---|---|---|---|---|---|
| DFN | | 0% | 5% | 1% | 1% | 11,067,792 |
| DRB | | 0% | 0% | 49% | 0% | 36,240,068 |
| DTS | | 46% | 82% | 12% | 1% | 178,960,953 |
| FPO | | 52% | 0% | 28% | 0% | 59,074,713 |
| HOK | | 0% | 4% | 2% | 1% | 8,720,309 |
| MGP | | 0% | 0% | 1% | 0% | 1,870,613 |
| PGP | | 0% | 0% | 0% | 0% | 264,225 |
| PMP | | 0% | 0% | 0% | 0% | 63,671 |
| PS | | 0% | 0% | 0% | 1% | 4,584,268 |
| TBB | | 1% | 7% | 6% | 0% | 16,648,380 |
| TM | | 0% | 1% | 1% | 96% | 298,523,649 |
| Total weight (kg) | **Total value** | 72,460,508 | 162,592,741 | 72,702,048 | 308,263,344 | 616,018,641 |

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

**Table 6**: Proportion of fishery landings by value (Euros) accounted for by different vessel length groups
United Kingdom, 2019

| Length: | Crustacean | Demersal | Mollusc | Pelagic | Total value (€) |
|---|---|---|---|---|---|
| VL0010 | 30% | 6% | 19% | 1% | 140,773,647 |
| VL1012 | 12% | 1% | 9% | 0% | 52,815,903 |
| VL1218 | 26% | 4% | 27% | 1% | 133,321,359 |
| VL1824 | 26% | 20% | 17% | 0% | 175,676,773 |
| VL2440 | 5% | 58% | 21% | 2% | 278,788,469 |
| VL40XX | 0% | 11% | 7% | 96% | 323,223,535 |
| Total value (€) | 1,283,583 | 41,964,285 | 12,215,135 | 267,760,532 | 1,104,599,686 |

Note: Data are based on annual landings for all vessels included in the fleet as of 1st 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, 2019

| Length: | Crustacean | Demersal | Mollusc | Pelagic | Total weight (kg) |
|---|---|---|---|---|---|
| VL0010 | 24% | 3% | 21% | 1% | 40,119,476 |
| VL1012 | 10% | 1% | 9% | 1% | 17,604,671 |
| VL1218 | 30% | 3% | 32% | 3% | 58,897,473 |
| VL1824 | 29% | 19% | 16% | 0% | 63,238,103 |
| VL2440 | 6% | 58% | 16% | 1% | 115,361,376 |
| VL40XX | 1% | 15% | 6% | 94% | 320,797,541 |
| Total weight (kg) | 72,460,508 | 162,592,741 | 72,702,048 | 308,263,344 | 616,018,641 |

Note: Data are based on annual landings for all vessels included in the fleet as of 1st 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 2018 to 2019 by 19 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 8 from 2018 to 2019 continuing 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 although for vessel numbers this pattern halted 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 4 vessels in 2019 compared with 2018.

**Table 8**: Developments in fleet capacity and composition
United Kingdom, 2012 – 2019

| | DRB | | DTS | | FPO | | TM | |
|---|---|---|---|---|---|---|---|---|
| | No. of vessels | Capacity kW | No. of vessels | Capacity kW | No. of vessels | Capacity kW | No. of vessels | Capacity 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** | **304** | **64,153** | **831** | **218,239** | **2,019** | **148,820** | **37** | **138,909** |
| VL0010 | 108 | 9,923 | 258 | 26,193 | 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** | **308** | **63,948** | **820** | **221,295** | **2,003** | **148,304** | **33** | **133,392** |
| VL0010 | 105 | 9,533 | 256 | 25,846 | 1,742 | 105,305 | 2 | 224 |
| VL1040 | 201 | 52,585 | 554 | 172,856 | 261 | 42,999 | 4 | 3,630 |
| VL40XX | 2 | 1,830 | 10 | 22,593 | | | 27 | 129,538 |
| **2016 totals** | **308** | **62,542** | **786** | **215,434** | **2,087** | **156,870** | **34** | **133,889** |
| VL0010 | 112 | 9,323 | 238 | 24,611 | 1,813 | 110,936 | 3 | 341 |
| VL1040 | 193 | 50,644 | 539 | 170,630 | 274 | 45,934 | 4 | 3,630 |
| VL40XX | 3 | 2,574 | 9 | 20,193 | | | 27 | 129,918 |
| **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** | **293** | **57,730** | **699** | **206,379** | **2,153** | **165,633** | **39** | **136,510** |
| VL0010 | 101 | 7,986 | 198 | 21,702 | 1,865 | 115,866 | 5 | 529 |
| VL1040 | 190 | 47,914 | 493 | 165,635 | 288 | 49,767 | 8 | 4,350 |
| VL40XX | 2 | 1,830 | 8 | 19,042 | | | 26 | 131,632 |
| **2019 totals** | **274** | **55,290** | **702** | **205,333** | **2,145** | **167,644** | **43** | **146,735** |
| VL0010 | 102 | 8,238 | 203 | 22,564 | 1,856 | 116,244 | 5 | 473 |
| VL1040 | 169 | 44,685 | 491 | 164,448 | 289 | 51,401 | 12 | 6,524 |
| VL40XX | 3 | 2,367 | 8 | 18,322 | | | 26 | 139,738 |

Note: Data are based on annual landings for all vessels included in the fleet as of 1st January 2019, and includes vessels joining after this date.

## Section B. Effort reduction Schemes

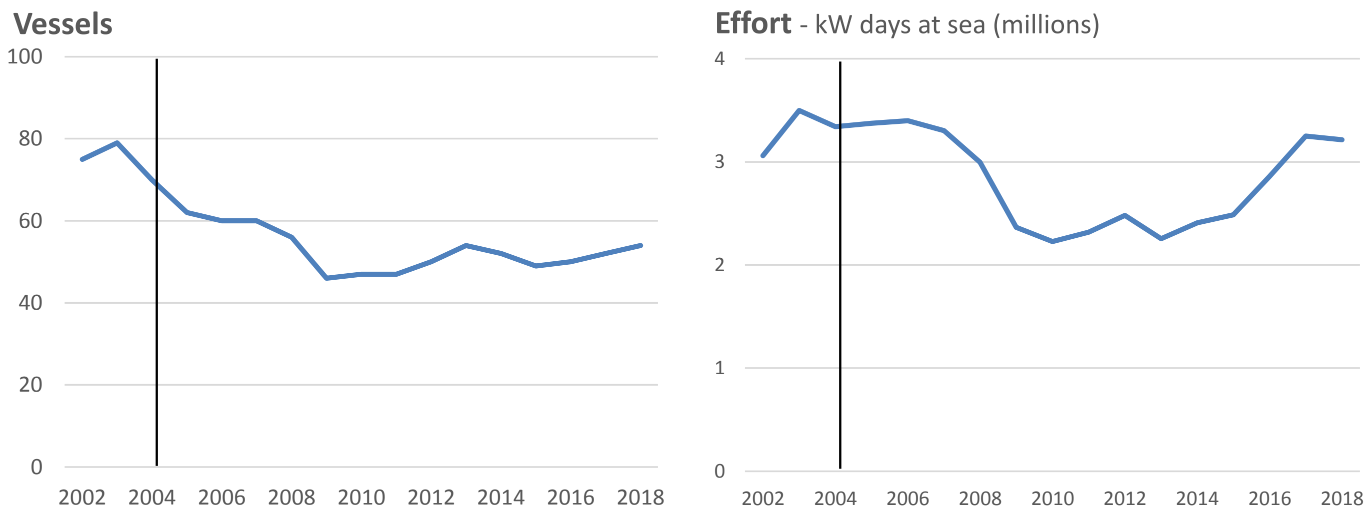
### B1. Statement on effort reduction schemes

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 23 per cent and effort (kW days) has decreased by 4 per cent (see figure 3).

Figure 3: Fleet size and effort of vessels using beam trawls in the Sole Recovery Zone: 2002 to 2019




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 2019, however, the effort has increased.

**Table 9**: Changes in fleet capacity and effort in the Sole Recovery Zone
United Kingdom, 2013 – 2019

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|
| No. of active vessels | 54 | 52 | 49 | 50 | 52 | 54 | 52 |
| Days effort | 6,121 | 6,116 | 6,246 | 6,786 | 7,535 | 7,507 | 7,658 |
| kW days effort | 2,255,310 | 2,407,901 | 2,485,062 | 2,859,242 | 3,243,843 | 3,214,075 | 3,232,680 |

**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. 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 – 2020

| | | GT | | KW | |
|---|---|---|---|---|---|
| **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) | | 175974 | | 572347 |
| **5** | Increases in tonnage GT for safety reasons | GTS | 0 | | 0 |
| **6** | **Total Entries (3+4+5)** | | **175974** | | **572347** |
| **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) | | 203075 | | 705764 |
| **10** | **Total exits (7+8+9)** | | **225518** | | **774101** |
| **11** | Other net changes to vessel capacity (i.e. modifications to data) | | 7442 | | 17220 |
| **12** | Power of engines replaced with public aid conditional to power reduction | | 0 | KW r | 0 |
| **13** | **Capacity of the fleet on 01/01/2020(1+6-10+11)** | **GTt** | **198898** | **KWt** | **757843** |
| **14** | **Fleet Ceiling on 01/01/2020** | | **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 2020.

## 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 agree to work the concordat ensures that where appropriate, 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 pre-defined dates, and removing shellfish entitlements where vessels have caught less than 1kg of shellfish during a pre-defined period.

In total there were 2141 active English under 10m licences as of 1 January 2020, 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 policy is under review

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. This policy will be reviewed under Marine Scotland's Future Fisheries Management initiative.

**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 31/12/2019.

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 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 | No | 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 | Exceeded | | | |
| GBR NAO DRB0010 | NAO | DRB | VL0010 | No | No | Exceeded | No | Exceeded |
| GBR NAO DRB1012 | NAO | DRB | VL1012 | No | No | Exceeded | No | Exceeded |
| GBR NAO DRB1218 | NAO | DRB | VL1218 | No | No | No | No | Exceeded |
| GBR NAO DRB1824 | NAO | DRB | VL1824 | No | No | No | No | |
| GBR NAO DRB2440* | NAO | DRB | VL2440 | No | No | Exceeded | No | |
| | NAO | DRB | VL40XX | No | No | | | |
| GBR NAO DTS0010 | NAO | DTS | VL0010 | Exceeded | No | No | No | Exceeded |
| GBR NAO DTS1012 | NAO | DTS | VL1012 | No | Exceeded | Exceeded | No | Exceeded |
| GBR NAO DTS1218* | NAO | DTS | VL1218 | Exceeded | No | No | No | Exceeded |
| GBR NAO DTS1824 | NAO | DTS | VL1824 | Exceeded | No | No | No | Exceeded |
| GBR NAO DTS2440 | NAO | DTS | VL2440 | Exceeded | Exceeded | No | No | |
| GBR NAO DTS40XX* | NAO | DTS | VL40XX | Exceeded | No | No | No | |
| | OFR | DTS | VL40XX | No | No | | | |
| GBR NAO FPO0010 | NAO | FPO | VL0010 | No | No | No | No | Exceeded |
| GBR NAO FPO1012 | NAO | FPO | VL1012 | No | No | No | No | Exceeded |
| GBR NAO FPO1218 | NAO | FPO | VL1218 | No | 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 | No | |
| | NAO | HOK | VL2440 | No | No | | | |
| | OFR | HOK | VL2440 | Exceeded | No | | | |
| | OFR | HOK | VL40XX | No | No | | | |
| GBR NAO MGP0010* | NAO | MGP | VL0010 | No | No | No | No | Exceeded |
| | NAO | TM | VL0010 | No | No | | | |
| GBR NAO MGP1218* | NAO | MGP | VL1012 | No | No | No | No | Exceeded |
| | NAO | MGP | VL1218 | 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 | Exceeded | No | Exceeded |
| | NAO | PGP | VL1012 | Exceeded | No | | | |
| | NAO | PGP | VL1218 | No | No | | | |
| | NAO | PMP | VL0010 | Exceeded | No | | | |
| | NAO | PMP | VL1012 | No | No | | | |
| GBR NAO TBB0010* | NAO | TBB | VL0010 | No | No | No | No | Exceeded |
| | NAO | TBB | VL1012 | No | No | | | |
| GBR NAO TBB1218 | NAO | TBB | VL1218 | No | No | No | No | 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 | No | | | |
| GBR NAO TM40XX* | NAO | TM | VL2440 | No | Exceeded | No | No | Exceeded |
| | NAO | TM | VL40XX | Exceeded | Exceeded | | | |
| | OFR | TM | VL40XX | No | No | | | |

Table 11 highlights the segmentation used in 2019 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 |
|---|---|---|---|---|---|---|---|---|
| GBR NAO TM40XX* | NAO | TM | VL2440 | No | Exceeded | No | No | Exceeded |
| | 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.

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, 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 | 1.08 | 1.07 | 0.91 |
| GBR NAO DFN2440 NGI* | NAO | DFN | VL1824 | 8 | 1.04 | 1.09 | 0.89 |
| GBR NAO DFN2440 NGI* | NAO | DFN | VL2440 | 5 | 1.17 | 1.12 | 0.87 |
| GBR NAO DTS1012 NGI | NAO | DTS | VL1012 | 72 | 1.06 | 1.04 | 0.98 |
| GBR NAO DTS2440 NGI | NAO | DTS | VL2440 | 94 | 1.32 | 1.22 | 1.27 |
| GBR NAO TM 40XX NGI* | NAO | TM | VL2440 | 1 | 1.07 | 1.21 | 1.21 |
| GBR NAO TM 40XX NGI* | NAO | TM | VL40XX | 26 | 1.10 | 1.22 | 1.19 |

The STECF Balance Capacity Meeting in 2019 (STECF-19-13) noted that out of 44 fleet segments active in 2017, landings in value had been provided for all 44 and SHI indicator values were available for 40.

According to the criteria in the 2014 Balance Indicator Guidelines, the SHI indicator values for 21 fleet segments could not be used meaningfully to assess the balance or imbalance because the indicator values were based on stocks that comprise less than 40 % of the total value of landings by those fleet segments.

The EWG noted that for the 19 fleet segments for which the SHI indicator may be considered meaningful to assess balance or imbalance, accounted for over 76 % of the total value of the landings in 2017 and were as follows:

• 7 fleet segments may not be in balance with their fishing opportunities (of which 4 had dropped below 1 in 2018);

• 12 fleet segments may be in balance with their fishing opportunities.

In the period 2012-2017, the SHI indicator values considered meaningful to assess balance or imbalance were increasing for 1 fleet segment, decreasing for 9 fleet segments, with no evident trend for 7 fleet segments. For 2 fleet segments complete time series information was not available.

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 2017 by STECF-19-13 according to the guidelines are as follows:

| FS name | supra_reg | fishing_tech | vessel_length | Vessel numbers 2018 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|
| GBR NAO DFN2440 NGI* | NAO | DFN | VL1824 | 8 | | 1 | 2 |
| GBR NAO DTS0010 NGI | NAO | DTS | VL0010 | 194 | 2 | 2 | |
| GBR NAO DTS1218 NGI* | NAO | DTS | VL1218 | 179 | 2 | 1 | 2 |
| GBR NAO DTS1824 NGI | NAO | DTS | VL1824 | 149 | 8 | 11 | 9 |
| GBR NAO DTS2440 NGI | NAO | DTS | VL2440 | 94 | 12 | 13 | 14 |
| GBR NAO DTS40XX NGI* | NAO | DTS | VL40XX | 7 | 2 | 2 | 3 |
| GBR NAO HOK0010 NGI | NAO | HOK | VL0010 | 621 | 1 | 2 | |
| GBR NAO HOK2440 NGI* | OFR | HOK | VL2440 | 1 | | 1 | 2 |
| GBR NAO PGP0010 NGI* | NAO | PGP | VL1012 | | | 2 | |
| GBR NAO PGP0010 NGI* | NAO | PMP | VL0010 | 5 | | 1 | |
| GBR NAO TBB2440 NGI* | NAO | TBB | VL2440 | 27 | 2 | 2 | 3 |
| GBR NAO TM 40XX NGI* | NAO | TM | VL40XX | 26 | 3 | 4 | 6 |

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 2016 and 2018:

| | Fleet segment - as defined by JRC indicators | 2016 | 2017 | 2018 | Number of vessels in fleet segment (2018) |
|---|---|---|---|---|---|
| HOK | | | | | |
| | GBR NAO HOK2440* | -1.13 | -11.38 | -2.35 | 16 |

**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 3 segments where the ratio was below 1 in 2018. |

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:

| | 2017 | 2018 | 2019 |
|---|---|---|---|
| VL0010 | 31.03% | 32.65% | 31.79% |
| VL1012 | 16.36% | 18.04% | 18.47% |
| VL1218 | 10.04% | 14.94% | 10.60% |
| VL1824 | 6.69% | 11.06% | 7.24% |
| VL2440 | 12.85% | 13.66% | 12.22% |
| VL40XX | 10.42% | 13.04% | 15.22% |

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 2015 to 2018 are given below:

| | Fleet segment - as defined by JRC indicators | 2016 | 2017 | 2018 | Number of vessels in fleet segment (2018) |
|---|---|---|---|---|---|
| **DFN** | | | | | |
| | GBR NAO DFN0010 | 0.26 | 0.23 | 0.24 | 516 |
| | GBR NAO DFN1012* | 0.58 | 0.50 | 0.56 | 12 |
| | GBR NAO DFN2440* | 1.12 | 1.13 | 1.10 | 13 |
| **DRB** | | | | | |
| | GBR NAO DRB0010 | 0.33 | 0.28 | 0.32 | 101 |
| | GBR NAO DRB1012 | 0.60 | 0.54 | 0.54 | 32 |
| | GBR NAO DRB1218 | 0.66 | 0.57 | 0.57 | 113 |
| | GBR NAO DRB1824 | 0.95 | 0.96 | 0.93 | 26 |
| | GBR NAO DRB2440* | 0.94 | 1.00 | 0.97 | 21 |
| **DTS** | | | | | |
| | GBR NAO DTS0010 | 0.43 | 0.36 | 0.37 | 198 |
| | GBR NAO DTS1012 | 0.60 | 0.57 | 0.50 | 72 |
| | GBR NAO DTS1218* | 0.75 | 0.71 | 0.69 | 179 |
| | GBR NAO DTS1824 | 0.82 | 0.81 | 0.83 | 148 |
| | GBR NAO DTS2440 | 0.97 | 0.92 | 1.00 | 94 |
| | GBR NAO DTS40XX* | 1.06 | 1.17 | 0.93 | 8 |
| **FPO** | | | | | |
| | GBR NAO FPO0010 | 0.50 | 0.36 | 0.36 | 1865 |
| | GBR NAO FPO1012 | 0.69 | 0.69 | 0.66 | 190 |
| | GBR NAO FPO1218 | 0.82 | 0.83 | 0.80 | 83 |
| | GBR NAO FPO1824* | 1.09 | 1.13 | 1.23 | 15 |
| **HOK** | | | | | |
| | GBR NAO HOK0010 | 0.19 | 0.16 | 0.16 | 622 |
| | GBR NAO HOK1012* | 0.40 | 0.39 | 0.45 | 19 |
| | GBR NAO HOK2440* | 1.08 | 1.15 | 1.23 | 16 |
| **MGP** | | | | | |
| | GBR NAO MGP0010* | 0.25 | 0.26 | 0.29 | 40 |
| | GBR NAO MGP1218* | 0.53 | 0.39 | 0.49 | 20 |
| **PGP** | | | | | |
| | GBR NAO PGP0010* | 0.21 | 0.21 | 0.20 | 72 |
| **TBB** | | | | | |
| | GBR NAO TBB0010* | 0.19 | 0.26 | 0.37 | 16 |
| | GBR NAO TBB1218 | 0.49 | 0.53 | 0.56 | 24 |
| | GBR NAO TBB1824 | 1.15 | 1.14 | 1.08 | 17 |
| | GBR NAO TBB2440* | 1.04 | 0.95 | 1.02 | 34 |
| **TM** | | | | | |
| | GBR NAO TM40XX* | 0.30 | 0.29 | 0.34 | 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 2018.

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**

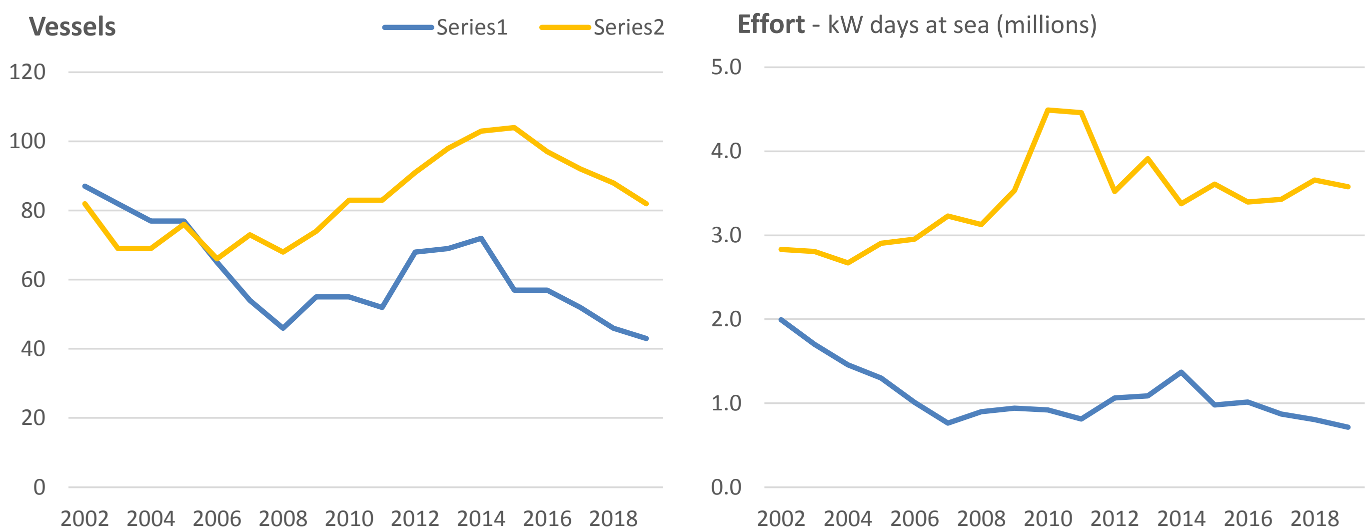
Western Waters Scheme:

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 2019 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, remained the same. Effort in ICES sub-areas V and VI fell by 64 per cent, but effort in ICES sub-area VII increased by 26 per 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.

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).

Figure 1. Fleet size and effort (kW days) of vessels targeting scallops in the Western Waters: 2002 to 2019




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 10 per cent.

**Table 1**: Scalloping fleet capacity and effort in Western Waters sub-area VII
United Kingdom, 2013 – 2019

| | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** |
|---|---|---|---|---|---|---|
| No. active vessels | 103 | 104 | 97 | 92 | 88 | 82 |
| Days effort | 7,888 | 8,318 | 8,478 | 7,938 | 8,290 | 7,782 |
| kW days effort | 3,376,757 | 3,609,826 | 3,397,169 | 3,428,219 | 3,658,163 | 3,578,446 |

## 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

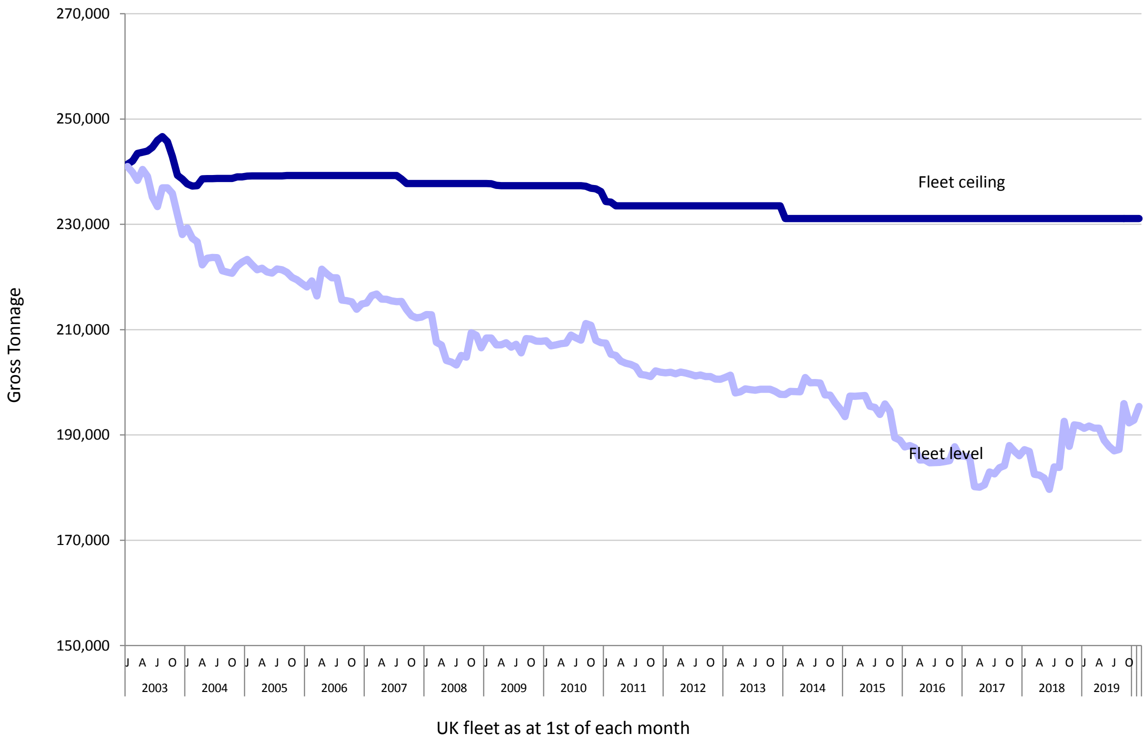
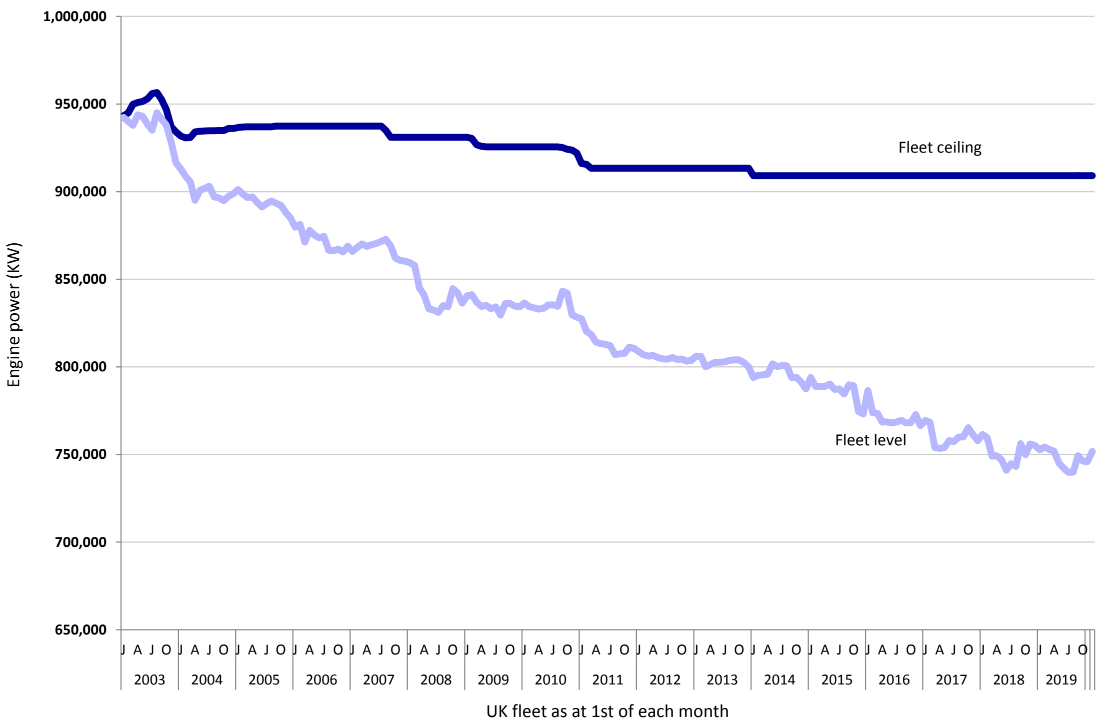



**Figure 2:** UK Compliance with Fleet Capacity Levels
Details for Engine Power of vessels



**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 | 514 | 0.96 | 0.90 | 0.86 |
| GBR NAO DFN1012 NGI* | NAO | DFN | VL1012 | 7 | 1.17 | 0.98 | 0.95 |
| GBR NAO DFN1012 NGI* | NAO | DFN | VL1218 | 5 | 1.08 | 1.07 | 0.91 |
| GBR NAO DFN2440 NGI* | NAO | DFN | VL1824 | 8 | 1.04 | 1.09 | 0.89 |
| GBR NAO DFN2440 NGI* | NAO | DFN | VL2440 | 5 | 1.17 | 1.12 | 0.87 |
| GBR NAO DRB0010 NGI | NAO | DRB | VL0010 | 99 | 0.90 | 0.78 | 0.90 |
| GBR NAO DRB1012 NGI | NAO | DRB | VL1012 | 32 | 0.92 | 0.70 | 0.85 |
| GBR NAO DRB1218 NGI | NAO | DRB | VL1218 | 112 | 1.06 | 0.94 | 1.03 |
| GBR NAO DRB1824 NGI | NAO | DRB | VL1824 | 26 | 0.88 | 0.64 | 0.99 |
| GBR NAO DRB2440 NGI* | NAO | DRB | VL2440 | 19 | 0.95 | 0.92 | 0.84 |
| GBR NAO DRB2440 NGI* | NAO | DRB | VL40XX | 2 | 1.16 | 1.08 | 0.85 |
| GBR NAO DTS0010 NGI | NAO | DTS | VL0010 | 194 | 0.99 | 0.96 | 0.88 |
| GBR NAO DTS1012 NGI | NAO | DTS | VL1012 | 72 | 1.06 | 1.04 | 0.98 |
| GBR NAO DTS1218 NGI* | NAO | DTS | VL1218 | 179 | 0.98 | 0.94 | 0.90 |
| GBR NAO DTS1824 NGI | NAO | DTS | VL1824 | 149 | 1.04 | 0.96 | 1.04 |
| GBR NAO DTS2440 NGI | NAO | DTS | VL2440 | 94 | 1.32 | 1.22 | 1.27 |
| GBR NAO DTS40XX NGI* | OFR | DTS | VL40XX | 1 | | | |
| GBR NAO DTS40XX NGI* | NAO | DTS | VL40XX | 7 | 0.90 | 0.97 | 1.01 |
| GBR NAO FPO0010 NGI | NAO | FPO | VL0010 | 1,802 | 1.02 | 1.00 | 1.00 |
| GBR NAO FPO1012 NGI | NAO | FPO | VL1012 | 189 | 1.02 | 1.00 | 0.99 |
| GBR NAO FPO1218 NGI | NAO | FPO | VL1218 | 83 | 1.02 | 0.99 | 0.96 |
| GBR NAO FPO1824 NGI* | NAO | FPO | VL1824 | 12 | | | |
| GBR NAO FPO1824 NGI* | NAO | FPO | VL2440 | 3 | | | |
| GBR NAO HOK0010 NGI | NAO | HOK | VL0010 | 621 | 0.95 | 0.93 | 0.82 |
| GBR NAO HOK1012 NGI* | NAO | HOK | VL1012 | 17 | 0.76 | 0.67 | 0.55 |
| GBR NAO HOK1012 NGI* | NAO | HOK | VL1218 | 2 | | | |
| GBR NAO HOK2440 NGI* | OFR | HOK | VL2440 | 1 | | 0.83 | 0.80 |
| GBR NAO HOK2440 NGI* | OFR | HOK | VL40XX | | 0.81 | 0.90 | |
| GBR NAO HOK2440 NGI* | NAO | HOK | VL2440 | 14 | 0.89 | 0.96 | 0.82 |
| GBR NAO MGP0010 NGI* | NAO | MGP | VL0010 | 33 | 0.95 | 0.93 | 1.00 |
| GBR NAO MGP0010 NGI* | NAO | TM | VL0010 | 5 | 0.92 | | 0.53 |
| GBR NAO MGP1218 NGI* | NAO | MGP | VL1012 | 3 | | 0.57 | 0.58 |
| GBR NAO MGP1218 NGI* | NAO | MGP | VL1218 | 4 | 0.71 | 0.98 | 0.99 |
| GBR NAO MGP1218 NGI* | NAO | PS | VL1218 | 6 | 1.05 | 1.25 | 1.10 |
| GBR NAO MGP1218 NGI* | NAO | TM | VL1012 | | | 0.50 | |
| GBR NAO MGP1218 NGI* | NAO | TM | VL1218 | 6 | 0.61 | 0.83 | 0.92 |
| GBR NAO PGP0010 NGI* | NAO | PGP | VL0010 | 68 | 0.99 | 0.88 | 0.87 |
| GBR NAO PGP0010 NGI* | NAO | PGP | VL1012 | | | 0.93 | |
| GBR NAO PGP0010 NGI* | NAO | PMP | VL0010 | 5 | 0.99 | 0.16 | 1.10 |
| GBR NAO TBB0010 NGI* | NAO | TBB | VL0010 | 9 | 0.92 | 0.92 | 0.99 |
| GBR NAO TBB0010 NGI* | NAO | TBB | VL1012 | 9 | 0.92 | 0.91 | 0.92 |
| GBR NAO TBB1218 NGI | NAO | TBB | VL1218 | 24 | 0.90 | 0.87 | 0.92 |
| GBR NAO TBB1824 NGI | NAO | TBB | VL1824 | 17 | 0.94 | 0.87 | 0.88 |
| GBR NAO TBB2440 NGI* | NAO | TBB | VL2440 | 27 | 1.05 | 0.99 | 0.89 |
| GBR NAO TBB2440 NGI* | NAO | TBB | VL40XX | 7 | 1.00 | 0.96 | 0.95 |
| GBR NAO TM 40XX NGI* | NAO | TM | VL2440 | 1 | 1.07 | 1.21 | 1.21 |
| GBR NAO TM 40XX NGI* | NAO | TM | VL40XX | 26 | 1.10 | 1.22 | 1.19 |

### 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 | 514 | | | 4 |
| 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 | 2 |
| GBR NAO DFN2440 NGI* | NAO | DFN | VL2440 | 5 | | | |
| GBR NAO DRB0010 NGI | NAO | DRB | VL0010 | 99 | | | |
| GBR NAO DRB1012 NGI | NAO | DRB | VL1012 | 32 | | | |
| GBR NAO DRB1218 NGI | NAO | DRB | VL1218 | 112 | | | |
| GBR NAO DRB1824 NGI | NAO | DRB | VL1824 | 26 | | | |
| GBR NAO DRB2440 NGI* | NAO | DRB | VL2440 | 19 | | | |
| GBR NAO DRB2440 NGI* | NAO | DRB | VL40XX | 2 | | | |
| GBR NAO DTS0010 NGI | NAO | DTS | VL0010 | 194 | 2 | 2 | |
| GBR NAO DTS1012 NGI | NAO | DTS | VL1012 | 72 | 2 | | |
| GBR NAO DTS1218 NGI* | NAO | DTS | VL1218 | 179 | 2 | 1 | 2 |
| GBR NAO DTS1218 NGI* | NAO | PMP | VL1218 | | | | |
| GBR NAO DTS1824 NGI | NAO | DTS | VL1824 | 149 | 8 | 11 | 9 |
| GBR NAO DTS2440 NGI | NAO | DTS | VL2440 | 94 | 12 | 13 | 14 |
| GBR NAO DTS40XX NGI* | OFR | DTS | VL40XX | 1 | | | |
| GBR NAO DTS40XX NGI* | NAO | DTS | VL40XX | 7 | 2 | 2 | 3 |
| GBR NAO FPO0010 NGI | NAO | FPO | VL0010 | 1,802 | | | 1 |
| GBR NAO FPO1012 NGI | NAO | FPO | VL1012 | 189 | | | |
| 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 | 621 | 1 | 2 | |
| GBR NAO HOK1012 NGI* | NAO | HOK | VL1012 | 17 | | | |
| GBR NAO HOK1012 NGI* | NAO | HOK | VL1218 | 2 | | | |
| GBR NAO HOK2440 NGI* | OFR | HOK | VL2440 | 1 | | 1 | 2 |
| GBR NAO HOK2440 NGI* | NAO | HOK | VL2440 | 14 | | | |
| GBR NAO MGP0010 NGI* | NAO | MGP | VL0010 | 33 | | | |
| 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 | PS | VL1218 | 6 | | | |
| GBR NAO MGP1218 NGI* | NAO | TM | VL1218 | 6 | | | |
| GBR NAO PGP0010 NGI* | NAO | PGP | VL0010 | 68 | | | |
| GBR NAO PGP0010 NGI* | NAO | PGP | VL1012 | | | 2 | |
| GBR NAO PGP0010 NGI* | NAO | PMP | VL0010 | 5 | | 1 | |
| GBR NAO TBB0010 NGI* | NAO | TBB | VL0010 | 9 | | | |
| 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 | VL2440 | 27 | 2 | 2 | 3 |
| GBR NAO TBB2440 NGI* | NAO | TBB | VL40XX | 7 | | | |
| GBR NAO TM 40XX NGI* | NAO | TM | VL2440 | 1 | 2 | | |
| GBR NAO TM 40XX NGI* | NAO | TM | VL40XX | 26 | 3 | 4 | 6 |

**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 | 514 | 3.2 | 8.7 | 9.1 |
| GBR NAO DFN1012 NGI* | NAO | DFN | VL1012 | 7 | 28.0 | 23.7 | 20.6 |
| GBR NAO DFN2440 NGI* | NAO | DFN | VL2440 | 5 | 29.0 | 42.9 | 38.6 |
| GBR NAO DRB0010 NGI | NAO | DRB | VL0010 | 99 | 5.2 | 0.0 | -23.5 |
| GBR NAO DRB1012 NGI | NAO | DRB | VL1012 | 32 | 8.4 | 3.9 | -11.3 |
| GBR NAO DRB1218 NGI | NAO | DRB | VL1218 | 112 | 11.9 | 12.9 | 0.0 |
| GBR NAO DRB1824 NGI | NAO | DRB | VL1824 | 26 | 11.8 | 40.1 | 2.6 |
| GBR NAO DRB2440 NGI* | NAO | DRB | VL2440 | 19 | 15.3 | 42.3 | 30.7 |
| GBR NAO DRB2440 NGI* | NAO | DRB | VL40XX | 2 | | | |
| GBR NAO DTS0010 NGI | NAO | DTS | VL0010 | 194 | 28.7 | 15.2 | 3.8 |
| GBR NAO DTS1012 NGI | NAO | DTS | VL1012 | 72 | 52.8 | 28.1 | -13.9 |
| GBR NAO DTS1218 NGI* | NAO | DTS | VL1218 | 179 | 51.3 | 31.7 | 2.7 |
| GBR NAO DTS1824 NGI | NAO | DTS | VL1824 | 149 | 45.8 | 55.0 | 40.2 |
| GBR NAO DTS2440 NGI | NAO | DTS | VL2440 | 94 | 134.6 | 84.0 | 58.3 |
| GBR NAO DTS40XX NGI* | OFR | DTS | VL40XX | 1 | | | |
| GBR NAO DTS40XX NGI* | NAO | DTS | VL40XX | 7 | 25.9 | 56.6 | 14.4 |
| GBR NAO FPO0010 NGI | NAO | FPO | VL0010 | 1,802 | 29.5 | 13.1 | 11.9 |
| GBR NAO FPO1012 NGI | NAO | FPO | VL1012 | 189 | 67.0 | 38.6 | 36.9 |
| GBR NAO FPO1218 NGI | NAO | FPO | VL1218 | 83 | 50.3 | 103.6 | 103.6 |
| GBR NAO FPO1824 NGI* | NAO | FPO | VL1824 | 12 | 49.2 | 79.7 | 102.5 |
| GBR NAO FPO1824 NGI* | NAO | FPO | VL2440 | 3 | | | |
| GBR NAO HOK0010 NGI | NAO | HOK | VL0010 | 621 | 11.8 | 8.0 | 5.5 |
| GBR NAO HOK1012 NGI* | NAO | HOK | VL1012 | 17 | 5.9 | -26.5 | 20.3 |
| GBR NAO HOK1012 NGI* | NAO | HOK | VL1218 | 2 | | | |
| GBR NAO HOK2440 NGI* | OFR | HOK | VL2440 | 1 | | | |
| GBR NAO HOK2440 NGI* | NAO | HOK | VL1824 | | | | |
| GBR NAO HOK2440 NGI* | NAO | HOK | VL2440 | 14 | 155.6 | 16.8 | -58.0 |
| GBR NAO MGP0010 NGI* | NAO | MGP | VL0010 | 33 | 13.9 | 13.8 | -15.2 |
| GBR NAO MGP0010 NGI* | NAO | TM | VL0010 | 5 | | | |
| GBR NAO MGP1218 NGI* | NAO | MGP | VL1012 | 3 | | | |
| GBR NAO MGP1218 NGI* | NAO | MGP | VL1218 | 4 | 11.7 | 45.1 | 50.6 |
| GBR NAO MGP1218 NGI* | NAO | PS | VL1218 | 6 | | | |
| GBR NAO MGP1218 NGI* | NAO | TM | VL1012 | | | | |
| GBR NAO MGP1218 NGI* | NAO | TM | VL1218 | 6 | | | |
| GBR NAO PGP0010 NGI* | NAO | PGP | VL0010 | 68 | 14.4 | 7.3 | 3.7 |
| GBR NAO PGP0010 NGI* | NAO | PMP | VL0010 | 5 | | | |
| GBR NAO TBB0010 NGI* | NAO | TBB | VL0010 | 9 | 34.7 | -0.6 | 26.3 |
| GBR NAO TBB0010 NGI* | NAO | TBB | VL1012 | 9 | | | |
| GBR NAO TBB1218 NGI | NAO | TBB | VL1218 | 24 | 46.8 | 5.0 | 2.6 |
| GBR NAO TBB1824 NGI | NAO | TBB | VL1824 | 17 | 73.9 | 102.0 | 59.3 |
| GBR NAO TBB2440 NGI* | NAO | TBB | VL2440 | 27 | 50.5 | 42.5 | 14.7 |
| GBR NAO TBB2440 NGI* | NAO | TBB | VL40XX | 7 | | | |
| GBR NAO TM 40XX NGI* | NAO | TM | VL2440 | 1 | | | |
| GBR NAO TM 40XX NGI* | NAO | TM | VL40XX | 26 | 73.5 | 88.6 | 94.7 |

## 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 | 514 | 1.2 | 1.7 | 1.7 |
| GBR NAO DFN1012 NGI* | NAO | DFN | VL1012 | 7 | 2.0 | 1.8 | 1.6 |
| 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 | 1.8 |
| GBR NAO DRB0010 NGI | NAO | DRB | VL0010 | 99 | 1.1 | 1.0 | 0.3 |
| GBR NAO DRB1012 NGI | NAO | DRB | VL1012 | 32 | 1.4 | 1.2 | 0.7 |
| GBR NAO DRB1218 NGI | NAO | DRB | VL1218 | 112 | 1.5 | 1.3 | 1.0 |
| GBR NAO DRB1824 NGI | NAO | DRB | VL1824 | 26 | 1.5 | 2.4 | 1.1 |
| GBR NAO DRB2440 NGI* | NAO | DRB | VL2440 | 19 | 1.4 | 2.7 | 2.2 |
| GBR NAO DRB2440 NGI* | NAO | DRB | VL40XX | 2 | | | |
| GBR NAO DTS0010 NGI | NAO | DTS | VL0010 | 194 | 2.0 | 1.7 | 1.2 |
| GBR NAO DTS1012 NGI | NAO | DTS | VL1012 | 72 | 3.0 | 1.9 | 0.6 |
| GBR NAO DTS1218 NGI* | NAO | DTS | VL1218 | 179 | 2.4 | 1.8 | 1.1 |
| GBR NAO DTS1824 NGI | NAO | DTS | VL1824 | 149 | 3.0 | 2.9 | 2.4 |
| GBR NAO DTS2440 NGI | NAO | DTS | VL2440 | 94 | 5.3 | 4.0 | 3.1 |
| GBR NAO DTS40XX NGI* | OFR | DTS | VL40XX | 1 | | | |
| GBR NAO DTS40XX NGI* | NAO | DTS | VL40XX | 7 | 3.5 | 3.4 | 1.6 |
| GBR NAO FPO0010 NGI | NAO | FPO | VL0010 | 1,802 | 2.1 | 1.4 | 1.3 |
| GBR NAO FPO1012 NGI | NAO | FPO | VL1012 | 189 | 3.3 | 2.2 | 2.1 |
| GBR NAO FPO1218 NGI | NAO | FPO | VL1218 | 83 | 2.5 | 2.4 | 2.4 |
| GBR NAO FPO1824 NGI* | NAO | FPO | VL1824 | 12 | 2.8 | 2.6 | 3.0 |
| GBR NAO FPO1824 NGI* | NAO | FPO | VL2440 | 3 | | | |
| GBR NAO HOK0010 NGI | NAO | HOK | VL0010 | 621 | 1.7 | 1.5 | 1.4 |
| GBR NAO HOK1012 NGI* | NAO | HOK | VL1012 | 17 | 1.1 | 0.1 | 1.8 |
| GBR NAO HOK1012 NGI* | NAO | HOK | VL1218 | 2 | | | |
| GBR NAO HOK2440 NGI* | OFR | HOK | VL2440 | 1 | | | |
| GBR NAO HOK2440 NGI* | NAO | HOK | VL2440 | 14 | 4.4 | 1.6 | -0.7 |
| GBR NAO MGP0010 NGI* | NAO | MGP | VL0010 | 33 | 1.7 | 1.6 | 0.5 |
| 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 | 2.5 | 2.6 |
| GBR NAO MGP1218 NGI* | NAO | PS | VL1218 | 6 | | | |
| GBR NAO MGP1218 NGI* | NAO | TM | VL1218 | 6 | | | |
| GBR NAO PGP0010 NGI* | NAO | PGP | VL0010 | 68 | 1.3 | 1.5 | 1.3 |
| GBR NAO PGP0010 NGI* | NAO | PMP | VL0010 | 5 | | | |
| GBR NAO TBB0010 NGI* | NAO | TBB | VL0010 | 9 | 1.7 | 1.1 | 3.6 |
| GBR NAO TBB0010 NGI* | NAO | TBB | VL1012 | 9 | | | |
| GBR NAO TBB1218 NGI | NAO | TBB | VL1218 | 24 | 1.4 | 1.3 | 1.2 |
| GBR NAO TBB1824 NGI | NAO | TBB | VL1824 | 17 | 4.0 | 6.4 | 4.1 |
| GBR NAO TBB2440 NGI* | NAO | TBB | VL2440 | 27 | 2.7 | 4.5 | 2.2 |
| GBR NAO TBB2440 NGI* | NAO | TBB | VL40XX | 7 | | | |
| GBR NAO TM 40XX NGI* | NAO | TM | VL2440 | 1 | | | |
| GBR NAO TM 40XX NGI* | NAO | TM | VL40XX | 26 | 5.3 | 11.4 | 11.6 |

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

**Economic – Return on Investment:**

| | Fleet segment - as defined by JRC indicators | 2016 | 2017 | 2018 | Number of vessels in fleet segment (2018) |
|---|---|---|---|---|---|
| DFN | | | | | |
| | GBR NAO DFN0010 | 5.22 | 7.84 | 6.09 | 516 |
| | GBR NAO DFN1012* | -0.12 | 2.51 | 2.32 | 12 |
| | GBR NAO DFN2440* | 10.53 | 9.47 | 8.32 | 13 |
| DRB | | | | | |
| | GBR NAO DRB0010 | 4.47 | 8.64 | -1.40 | 101 |
| | GBR NAO DRB1012 | 0.86 | -1.99 | -2.15 | 32 |
| | GBR NAO DRB1218 | 3.29 | 1.10 | 0.16 | 113 |
| | GBR NAO DRB1824 | 5.35 | 3.46 | 0.25 | 26 |
| | GBR NAO DRB2440* | 5.43 | 15.42 | -5.73 | 21 |
| DTS | | | | | |
| | GBR NAO DTS0010 | 20.17 | 18.02 | 11.13 | 198 |
| | GBR NAO DTS1012 | 14.06 | 6.32 | -0.80 | 72 |
| | GBR NAO DTS1218* | 12.67 | 7.59 | 2.14 | 179 |
| | GBR NAO DTS1824 | 11.47 | 7.17 | 2.47 | 148 |
| | GBR NAO DTS2440 | 15.41 | 19.25 | 12.22 | 94 |
| | GBR NAO DTS40XX* | 36.51 | 27.62 | 20.15 | 8 |
| FPO | | 9.58 | 6.64 | 0.21 | |
| | GBR NAO FPO0010 | 20.30 | 14.15 | 11.65 | 1865 |
| | GBR NAO FPO1012 | 13.88 | 4.40 | 6.33 | 190 |
| | GBR NAO FPO1218 | 30.64 | 15.63 | 20.91 | 83 |
| | GBR NAO FPO1824* | 28.43 | 41.60 | 15.46 | 15 |
| HOK | | | | | |
| | GBR NAO HOK0010 | 16.51 | 1.34 | -0.37 | 622 |
| | GBR NAO HOK1012* | 2.97 | 1.01 | -0.13 | 19 |
| | GBR NAO HOK2440* | -1.13 | -11.38 | -2.35 | 16 |
| MGP | | | | | |
| | GBR NAO MGP0010* | 6.08 | 6.75 | 2.91 | 40 |
| | GBR NAO MGP1218* | 7.01 | 6.45 | 1.01 | 20 |
| PGP | | 5.96 | 6.88 | 4.10 | |
| | GBR NAO PGP0010* | 1.96 | 1.26 | -1.10 | 72 |
| TBB | | | | | |
| | GBR NAO TBB0010* | 16.23 | 15.25 | 6.12 | 16 |
| | GBR NAO TBB1218 | 6.32 | -1.51 | 2.76 | 24 |
| | GBR NAO TBB1824 | 5.86 | -0.55 | 0.16 | 17 |
| | GBR NAO TBB2440* | 16.54 | 19.47 | 11.67 | 34 |
| TM | | | | | |
| | GBR NAO TM40XX* | 12.21 | 14.92 | 10.35 | 27 |

**Economic – Current verses Breakeven Revenue:**

| | Fleet segment - as defined by JRC indicators | 2016 | 2017 | 2018 | Number of vessels in fleet segment (2018) |
|---|---|---|---|---|---|
| DFN | | | | | |
| | GBR NAO DFN0010 | 1.23 | 1.59 | 1.67 | 516 |
| | GBR NAO DFN1012 | 1.99 | 1.68 | 2.71 | 12 |
| | GBR NAO DFN2440* | 2.07 | 1.85 | 3.04 | 13 |
| DRB | | | | | |
| | GBR NAO DRB0010 | 1.15 | 0.99 | 0.96 | 101 |
| | GBR NAO DRB1012 | 1.40 | 1.18 | 1.17 | 32 |
| | GBR NAO DRB1218 | 1.48 | 1.29 | 1.15 | 113 |
| | GBR NAO DRB1824 | 1.49 | 2.13 | 0.68 | 26 |
| | GBR NAO DRB2440* | 1.45 | 2.35 | 1.06 | 21 |
| DTS | | | | | |
| | GBR NAO DTS0010 | 1.99 | 1.56 | 1.08 | 198 |
| | GBR NAO DTS1012 | 3.08 | 1.76 | 1.71 | 72 |
| | GBR NAO DTS1218* | 2.45 | 1.70 | 1.47 | 179 |
| | GBR NAO DTS1824 | 3.10 | 2.68 | 2.14 | 148 |
| | GBR NAO DTS2440 | 5.40 | 3.79 | 3.56 | 94 |
| | GBR NAO DTS40XX* | 3.69 | 1.34 | 1.17 | 8 |
| FPO | | | | | |
| | GBR NAO FPO0010 | 2.19 | 1.36 | 1.49 | 1865 |
| | GBR NAO FPO1012* | 3.33 | 2.07 | 2.49 | 190 |
| | GBR NAO FPO1218 | 2.51 | 2.33 | 1.77 | 83 |
| | GBR NAO FPO1824* | 2.83 | 2.54 | 2.10 | 15 |
| HOK | | | | | |
| | GBR NAO HOK0010 | 1.73 | 1.35 | 1.22 | 622 |
| | GBR NAO HOK1012* | 1.15 | 0.01 | 0.96 | 19 |
| | GBR NAO HOK2440* | 4.48 | 1.49 | 1.13 | 16 |
| MGP | | | | | |
| | GBR NAO MGP0010* | 1.71 | 1.48 | 1.24 | 40 |
| | GBR NAO MGP1218* | 3.23 | 1.67 | 1.34 | 20 |
| PGP | | | | | |
| | GBR NAO PGP0010* | 1.35 | 1.37 | 1.09 | 72 |
| TBB | | | | | |
| | GBR NAO TBB0010* | 1.68 | 1.05 | 1.46 | 16 |
| | GBR NAO TBB1218 | 1.41 | 1.15 | 1.20 | 24 |
| | GBR NAO TBB1824 | 4.14 | 4.85 | 2.80 | 17 |
| | GBR NAO TBB2440* | 2.73 | 4.00 | 1.58 | 34 |
| TM | | | | | |
| | GBR NAO TM40XX* | 5.45 | 9.51 | 5.47 | 27 |

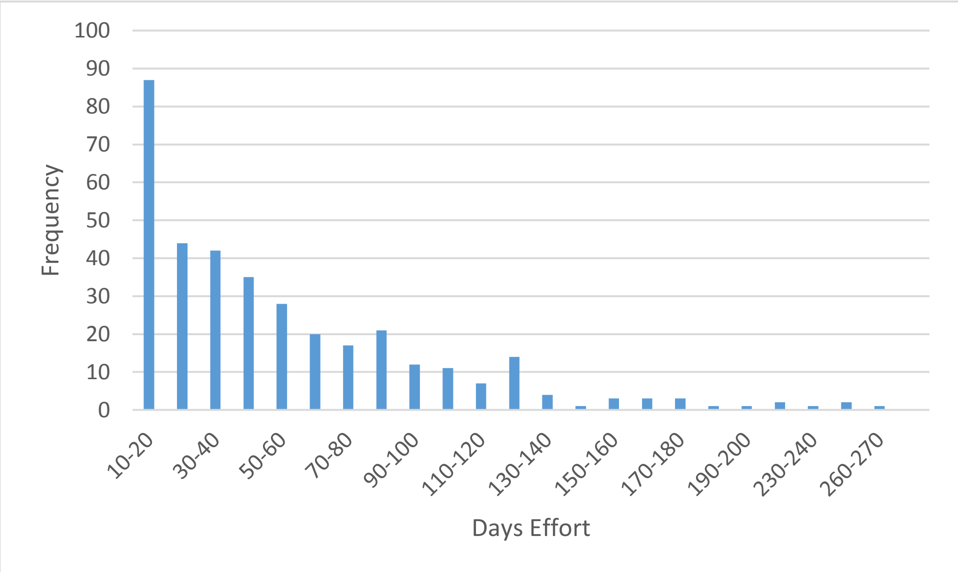
**Technical – Vessel Utilisation Indicator:**

| | Fleet segment - as defined by JRC indicators | 2016 | 2017 | 2018 | Number of vessels in fleet segment (2018) |
|---|---|---|---|---|---|
| **DFN** | | | | | |
| | GBR NAO DFN0010 | 0.26 | 0.23 | 0.24 | 516 |
| | GBR NAO DFN1012* | 0.58 | 0.50 | 0.56 | 12 |
| | GBR NAO DFN2440* | 1.12 | 1.13 | 1.10 | 13 |
| **DRB** | | | | | |
| | GBR NAO DRB0010 | 0.33 | 0.28 | 0.32 | 101 |
| | GBR NAO DRB1012 | 0.60 | 0.54 | 0.54 | 32 |
| | GBR NAO DRB1218 | 0.66 | 0.57 | 0.57 | 113 |
| | GBR NAO DRB1824 | 0.95 | 0.96 | 0.93 | 26 |
| | GBR NAO DRB2440* | 0.94 | 1.00 | 0.97 | 21 |
| **DTS** | | | | | |
| | GBR NAO DTS0010 | 0.43 | 0.36 | 0.37 | 198 |
| | GBR NAO DTS1012 | 0.60 | 0.57 | 0.50 | 72 |
| | GBR NAO DTS1218* | 0.75 | 0.71 | 0.69 | 179 |
| | GBR NAO DTS1824 | 0.82 | 0.81 | 0.83 | 148 |
| | GBR NAO DTS2440 | 0.97 | 0.92 | 1.00 | 94 |
| | GBR NAO DTS40XX* | 1.06 | 1.17 | 0.93 | 8 |
| **FPO** | | | | | |
| | GBR NAO FPO0010 | 0.50 | 0.36 | 0.36 | 1865 |
| | GBR NAO FPO1012 | 0.69 | 0.69 | 0.66 | 190 |
| | GBR NAO FPO1218 | 0.82 | 0.83 | 0.80 | 83 |
| | GBR NAO FPO1824* | 1.09 | 1.13 | 1.23 | 15 |
| **HOK** | | | | | |
| | GBR NAO HOK0010 | 0.19 | 0.16 | 0.16 | 622 |
| | GBR NAO HOK1012* | 0.40 | 0.39 | 0.45 | 19 |
| | GBR NAO HOK2440* | 1.08 | 1.15 | 1.23 | 16 |
| **MGP** | | | | | |
| | GBR NAO MGP0010* | 0.25 | 0.26 | 0.29 | 40 |
| | GBR NAO MGP1218* | 0.53 | 0.39 | 0.49 | 20 |
| **PGP** | | | | | |
| | GBR NAO PGP0010* | 0.21 | 0.21 | 0.20 | 72 |
| **TBB** | | | | | |
| | GBR NAO TBB0010* | 0.19 | 0.26 | 0.37 | 16 |
| | GBR NAO TBB1218 | 0.49 | 0.53 | 0.56 | 24 |
| | GBR NAO TBB1824 | 1.15 | 1.14 | 1.08 | 17 |
| | GBR NAO TBB2440* | 1.04 | 0.95 | 1.02 | 34 |
| **TM** | | | | | |
| | GBR NAO TM40XX* | 0.30 | 0.29 | 0.34 | 27 |

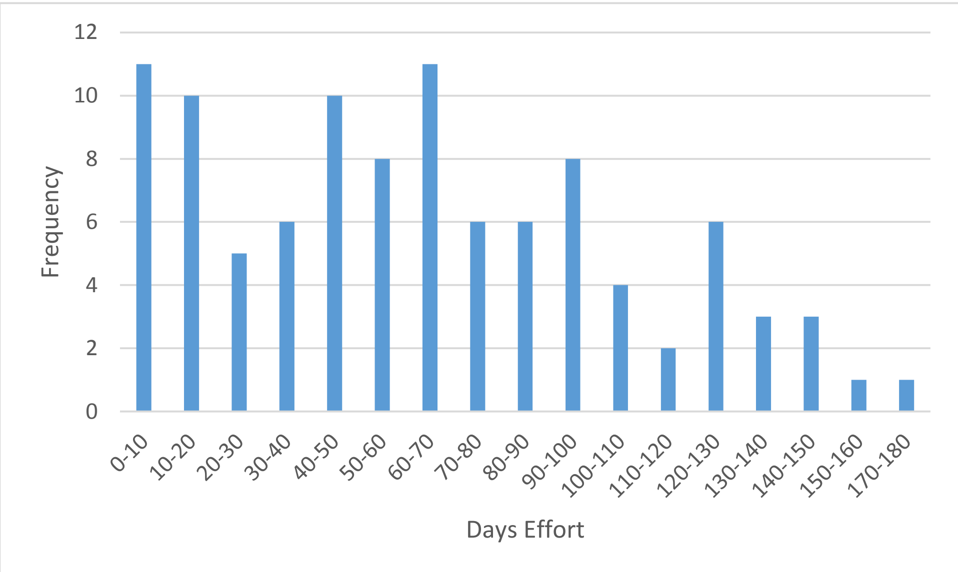
**Appendix F. Vessel Utilisation Indicator analysis**

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 2018. 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.

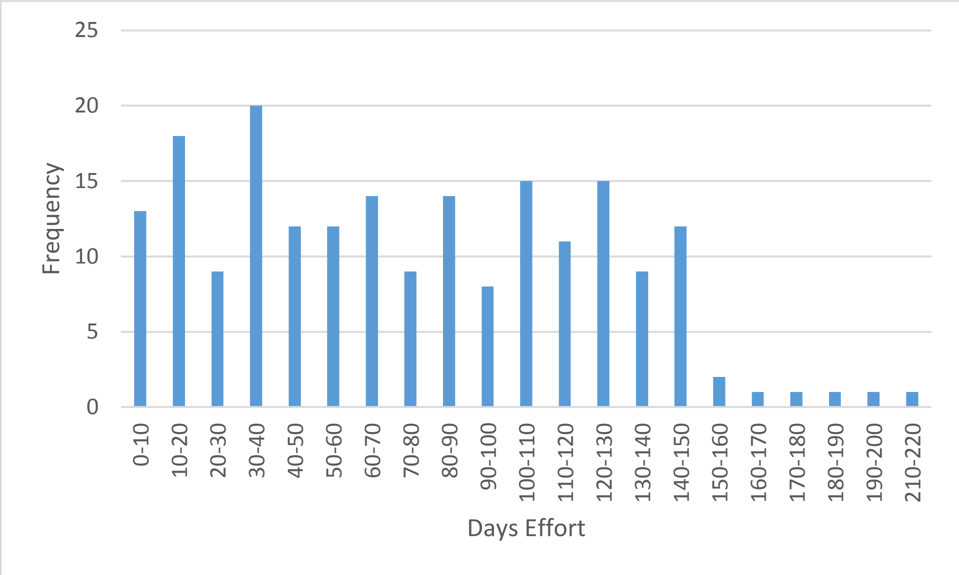
DFN VL0010 – Median: 22



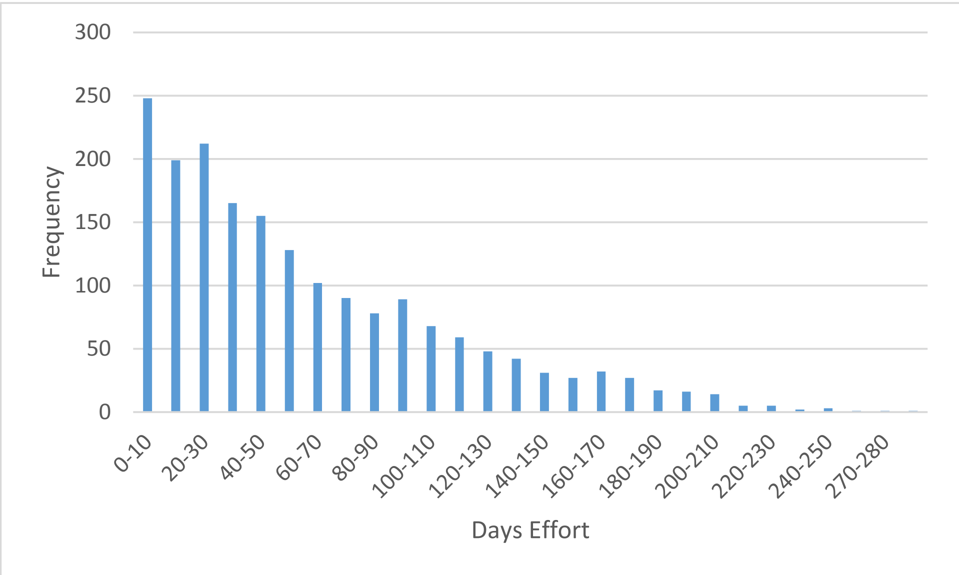

DRB VL0010 - Median: 60



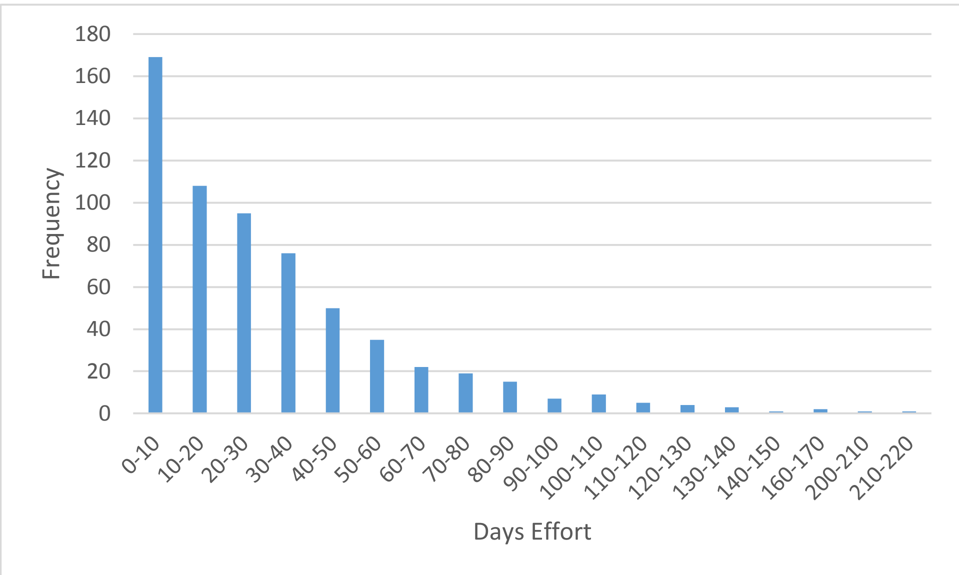
DTS VL0010 – Median: 70.5



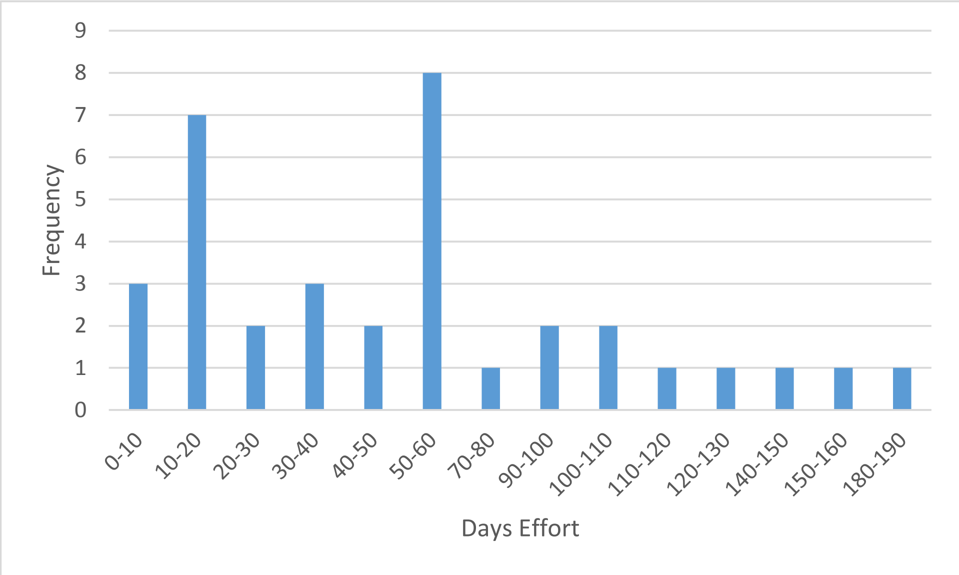

FPO VL0010 – Median: 47




HOK VL0010 – Median: 22



MGP VL0010 – Median: 50




TBB VL0010 – Median: 40