

ANNEX A - Estimates for applying varying demersal trawl bass catch limits based on UK historic data

UK fleet landings from area 7 and 4bc demersal trawls (i.e. bottom trawls, seines and beam trawl) 2011-13 average – effects of applying limit options									
Month	Bass landings 2011-13 Average	3% cap/trip	3% cap/trip & 400kg/month	3% cap/month	3% & 400kg cap per month	5% cap/trip	5% cap/trip & 400kg/month	5% cap per month	5% & 400kg cap per month
1	24	8	6	11	8	10	7	14	9
2	17	5	5	7	5	6	5	9	6
3	21	6	4	8	5	7	4	10	5
4	17	6	4	8	5	7	5	10	6
5	13	4	4	6	5	5	5	7	5
6	11	3	3	4	4	4	3	5	4
7	11	2	2	3	3	3	3	4	4
8	12	3	3	4	4	3	3	5	4
9	11	3	3	4	4	4	4	5	5
10	14	4	4	6	5	5	5	7	6
11	24	6	6	8	7	7	6	10	8
12	20	5	4	7	6	6	5	8	6
Total	194	54	48	76	61	67	54	95	68

1. NB. The estimating method applied here reflects the position that trip based data from years *subsequent* to the bass measures being introduced from 2015 cannot be utilised to analyse the effects of applying more flexibility for trawls/seines than has featured so far in the per day/cap per month limits since 2015. The method has relied upon checking 2011-13 data forecasts against one alternative limit scenario for demersal trawls against the *actual* limit and outcome from the limits applied in 2017 – and using the % difference between forecast and actual outcome (forecast reflecting 59% of actual) as a ‘tuning’ adjustment for examining alternative limit estimates (i.e. 5% per day at 400kg per month) based on the 2011-13 average data.
2. UK landed 66 tonnes with the **3% per day/400kg cap per month** limits set in 2017. Trawl and seine landings in 2017 according to the ICES catch distribution by fleet table 10 for that year indicates an **EU total of 325 tonnes**. The above prediction for the same limits based on the 2011-13 UK average trip level analysis shows an outcome of 48 tonnes, and taking away the Feb/Mar closed season tonnage provides a figure of 39 tonnes (which is 59% of the *actual* 2017 landings for trawl/seine at 66 tonnes for UK).
3. Selecting a **5% cap per day/400kg cap per month** in the above table above suggests an outcome of 54 tonnes all year for the UK based on 2011-13 average trip level analysis: removing the Feb/Mar closed season tonnage indicates a total of 45 tonnes. In 2018 UK took 21% of the EU demersal trawl/seine landings total according to the relevant 2018 table 10 catch distribution by fleet assessment in ICES advice (EU: 136 tonnes; of which UK accounted for 29 tonnes). Taking the 45 tonnes estimate from setting a 5% cap per day/400kg cap per month from the above table and applying the same 59% adjustment ratio as identified in paragraph 2 to estimate the probable actual outcome by applying this limit in 2020, would suggest a UK landings tonnage at 76 tonnes. As the most recent UK share of the EU trawl/seine total landings was at 21%, in 2018 (i.e. EU bottom trawlers and seines at 17% of the EU total landings 801=136, with UK demersal/seine landings at 29 tonnes that year suggests UK share = 21%) , UK outcome at 76 tonnes would suggest an **EU total of 364 tonnes demersal/seine landings**.