

**Calculation tables for Commission  
Non Paper of 8th December**

ICES data	Haddock Via
ICES catch TAC	3749
Calculated landings	2991
Calculated DR	758
Discard rate (all fleets)	20.2% from whole stock

**STECF Data For TR1 and TR2**

Step	Deduct de minimis	ICES catch advice 2016	
Step 1		ICES catch advice 2016	3749
		de minimis	0%
		Contr. to total catches	0%
		de minimis deduction (A)	0
Step 2	Deduct discards fleets	Total discards 2016	758
		Contribution to discards by fleets not under LO (Landings under Lo/total landings)	74.8%
		If no data under previous step consider ICES discard rate	0.0%
		Discards by fleets not under LO to be	567
		Total deduction A+B	567
		New catch TAC	3182.0
		TAC top up % relative to ICES landings TAC	6.39%
		TAC top up % if no deduction of de minimis	
		New catch TAC	3182
		TAC top up %	6.4%
			top up

Comments
Fleet meeting threshold for inclusion
STECF identify TR1 75% included TR2 13% included.
Fleet contribution to discard under the LO TR1 contribute 19.7% of all discards TR2 contribute 80.3% of all discards
Excluded discards TR1: 75% of 19.7%=14.77% TR2: 13% of 80.3%= 10.439%
Total under LO =25.2% Continuing discards =74.8%

LO applies where total landings of all species consist of more than 5% of haddock, whiting, cod and saithe.

icestotal catch for entire stock =	39461
9.5% allocated to Via	3749
Discard rate (ICES)	20.23%
Resulting landings	2991

Revised 6-12-2017

<b>ICES data</b>	<b>Haddock Vib (XII, XIV)</b>	
ICES catch TAC		4690
ICES landings TAC		4130
ICES discards		560
Discard rate (all fleets)		11.9%

<b>Step 1</b>	<b>Deduct de minimis from ICES total catch figure</b>	
	ICES catch advice 2016	4690
	de minimis	0%
	Contr. to total catches	0%
	<b>de minimis deduction (A)</b>	<b>0</b>
<b>Step 2</b>	<b>Deduct discards fleets <u>not</u> under LO</b>	
	Total discards 2016	560
	Contribution to discards by fleets <b>not</b> under LO (Landings under Lo/total landings)	<b>0.0%</b>
	If no data under previous step consider ICES discard rate	0.0%
	<b>Discards by fleets not under LO to be deducted (B)</b>	<b>0</b>
	<b>Total deduction A+B</b>	<b>0</b>
	New catch TAC	4690
	TAC top up % relative to ICES landings TAC	<b>13.56%</b>
	<b>top up</b>	<b>560</b>

LO applies where total landings of all species consist of more than 5% of haddock, whiting, cod and saithe.

<b>Comments</b>
Fleet meeting threshold for inclusion
<b>MS identify that</b> <b>UK: all landings are by vessels covered under LO.</b> <b>IR: all 6 vessels in area are under LO</b>
Fleet proportions under the LO
All discards are assumed to be from TR1 fleet, TR2 fleet do not operate in area.
Excluded discards
Total under LO =100%
Continuing discards =0%

REVISED 1-12	Landings scenario
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ICES data	Hake VI, VII
ICES catch TAC	69409
ICES landings TAC	62729
ICES discards	6680
Discard rate (all fleets)	9.6%

Step 1	Deduct <i>de minimis</i>	ICES catch advice 2016	69409
		<i>de minimis</i>	0%
		Contr. to total catches	0%
		<i>de minimis</i> deduction (A)	0
Step 2	Deduct discards fleets	Total discards 2016	6680
		Contribution to discards by fleets not under LO (Landings under Lo/total landings)	26.21%
		If no data under previous step	0.0%
		Discards by fleets not under LO to	1751
		Total deduction A+B	1751
		New catch TAC	67658
		TAC top up % relative to ICES landings TAC	7.86%
		top up	4929

Note taking vessel

Comments
<b>Fleet meeting threshold for inclusion</b>
landings TR1 and 2= 78% Gillnets 100% LL 100%
<b>Landings</b>
ALL TR gears contribution to discards
Gillnets contribute 5% longlines 0.3%
<b>Excluded discards</b>
All TR=(87.8**78%)=68%
Gillnets 5% LL=0.3%
Total under LO =73.3%
<b>Continuing discards =26.7%</b>

REVISED 6-12-2017

ICES data	Hake Villadbe
ICES catch TAC	46292
ICES landings TAC	41837
ICES discards	4455
Discard rate (all fleets)	9.6%

Step 1	Deduct <i>de minimis</i> from ICES total catch figure	
	ICES <u>catch</u> advice 2016	46292
	<i>de minimis</i>	7%
	Contr. to total catches	23%
	<b><i>de minimis</i> deduction (A)</b>	745

Step 2	Deduct discards fleets <u>not</u> under LO	
	Total discards 2016	4455
	Contribution to discards by fleets <u>not</u> under LO	16.6%
	<b>Discards by fleets <u>not</u> under LO to be deducted (B)</b>	740
	<b>Total deduction A+B</b>	1485

New catch TAC	44808
TAC top up % relative to ICES landings TAC	7.1%
top up	2971

Comments
Contribution from Trawls = 23%,
<b>Fleet meeting threshold for inclusion</b>
All TR1 gear, (>100mm) Gillnets 100% LL 100%
<b>Fleet contribution to discard under the LO</b>
TR1 contribute <b>42.8%</b> of all discards Gillnets contribute 40.6% longlines 0%
<b>Excluded discards</b>
TR1 contribute <b>42.8%</b> of all discards Gillnets contribute 40.6% longlines 0%
Total under LO =83.4%
<b>Continuing discards =16.6%</b>

ICES data	S Hake
ICES catch TAC 2016	8049
ICES landings TAC 2016	6838
ICES discards 2016	1211
Discard rate (all fleets)	15.05%

Comments
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<b>Step 1</b>	<b>Deduct de minimis from ICES total catch figure</b>	ICES catch TAC 2015  <i>de minimis</i> Contr. to total catches <b><i>de minimis</i> deduction (A)</b>	8049  7% 38.36% 216	60.9% of landings are included under the LO which contribute 63% to catch of hake ==38.36% total contribution to overall catch
<b>Step 2</b>	<b>Deduct discards fleets not under LO</b>	Total discards 2016	1211	<b>Fleet meeting threshold for inclusion</b>
		Contribution to discards by fleets not under LO	<b>39.26%</b>	MS identify by landings all bottom trawls 60.9% of landings included All gill netters all longlines
		If no data under previous step consider ICES discard rate	15%	
		<b>Discards by fleets not under LO to be deducted (B)</b>	475	<b>Fleet contribution to discard under the LO</b> All bottom trawlers contribute 97.6% of discards Gillnetters contribute 1.3% longlines 0% discards
		<b>Total deduction A+B</b>	692	<b>Excluded discards</b>
	New catch TAC	7357.4		bottom trawl (60.9% of 97.6%)= 59.438%
	TAC top up % relative to ICES landings TAC	7.60%		Gillnetters 1.3% LL zero
				<b>Total under LO =60.738%</b>
		Top up	519.4	<b>Continuing discards =39.262%</b>

Nephrops in IV - N Sea	ICES advice		wanted catch		Discards	Rates	6% de minimis	top up	Non-zero top up
	catch		landing						
Botney Gut	5	895	895		0	0.00%	53.7	-53.7	0
Farn Deep	6	1143	1070		123	10.76%	68.58	54.42	54.42
Fladen	7	12699	12656		43	0.34%	761.94	-718.94	0
Firth Forth	8	2548	2190		358	14.05%	152.88	205.12	205.12
Moray Firth	9	1070	1018		52	4.86%	64.2	-12.2	0
Noup	10	40	38		2	5.00%	2.4	-0.4	0
Horn's Reef	33	1119	1119		0	0.00%	67.14	-67.14	0
Devil's Hole	34	492	459		33	6.71%	29.52	3.48	3.48
other rectangles		376	376		0	0	22.56	-22.56	0
<b>Overall</b>		<b>20382</b>	<b>19771</b>		<b>611</b>	<b>0.029977</b>		<b>-611.92</b>	<b>263.02</b>
de min rate	0.06					1.330%		TAC	20034.0
						263.02			

Nep VI	Total Catch at current discard rate	Landings at current discard rate	Discard	Discard rate	7% de minimis	top up	Non Zero top up
outside	326	326	0	0	22.82	-22.82	0
11	3814	3610	204	5.35%	266.98	-62.98	0
12	6419	6196	223	3.47%	449.33	-226.33	0
13	5755	5276	479	8.32%	402.85	76.15	76.15
13	992	909	83	8.37%	69.44	13.56	13.56
<b>Totals</b>	<b>17306</b>	<b>16317</b>	<b>989</b>	<b>5.7%</b>	<b>1211.42</b>	<b>-222.42</b>	<b>89.71</b>

de min rate	0.07					0.550%		TAC	16406.71
de min amount	remaining	16094.58				89.71			

Nep VII	Total Catch at current discard rate	Landings at current discard rate	Discard	Discard rate	7% de minimis	top up	Non Zero top up
14	995	941	54	5.4%	69.65	-15.65	0
15	11248	9376	1872	14.9%	787.36	1084.64	1084.64
16	3100	3100	0	0.0%	217	-217	0
17	489	456	33	6.7%	34.23	-1.23	0
18	235	235	0	0.0%	16.45	-16.45	0
19	838	598	239	28.5%	58.66	180.34	180.34
20-21	2063	1807	256	12.4%	144.41	111.59	111.59
22	3552	2727	825	23.2%	248.64	576.36	576.36
<b>Totals</b>	<b>22520</b>	<b>19241.00</b>	<b>3279</b>	<b>14.6%</b>	<b>1576.4</b>	<b>1702.6</b>	<b>1952.93</b>

de min rate	0.07					10.1498%		TAC	21193.93
de min amount	1458.31	remaining	20943.6			1932.93			

Nep IIIa	Total Catch at current discard rate	Landings at current discard rate	Discard	Discard rate	0% de minimis	top up	Non Zero top up
Nep IIIa	13098	12715	383	2.9%			

de min rate	0.06					0.00%		TAC	12715
de min amount	#VALUE!					0			

De Minimis applied Survival exemption (80mm trawls with 35mm grid, top panel 270mmdiamond/ 140 smp. MCRS total length 105mm, cp length 59mm)

ICES data	Plaice III Kat
ICES catch TAC	3058
ICES landings TAC	2065
ICES discards	993
Discard rate (all fleets)	32.5%

amended 23/11

Total catch 8333
Landings 6199
Allocation to IIIa
Total Catch 3058, landings 2065

STECF

Step 1	Deduct <i>de minimis</i> from ICES total catch figure	ICES <u>catch</u> advice 2016	3058	Comments
		<i>de minimis</i>	0%	
		Contr. to total catches	0%	
		<i>de minimis</i> deduction (A)	0	
Step 2	Deduct discards fleets <u>not</u> under LO	Total discards 2016	993	Fleet meeting threshold for inclusion
		Contribution to discards by fleets not under LO (Landings under Lo/total landings)	72.0%	All TR1 fleet no discards from TBB
		If no data under previous step consider ICES discard rate	0.0%	
		Discards by fleets not under LO to be deducted (B)	715	Fleet contribution to discard under the LO
		Total deduction A+B	715	TR1 contribution to discards 28%
		New catch TAC	2343	no applicable discards from Beam Trawls
		TAC top up % relative to ICES landings TAC	13.5%	Excluded discards
		TAC top up % if no deduction of <i>de minimis</i>		TR1: 28%
		New catch TAC	2343	Total under LO =28%
		TAC top up %	13.5%	Continuing discards =72%
		top up	278	

LO applies to : catches of plaice by Beam trawl (>120mm)  
Trawls greater than 100mm (TR1)

NO *De minimis* exemptions

Extract from FDI database (JRC data)- omission from STECF report PLEN 16-03

Gear	Discards	Landings	Catch	Discard rate	% contribution to discards
BT2			6	6	0%
GN1			22.39821	22.39821	0%
GT1			43.34709	43.34709	0%
LL1			0.016359	0.016359	0%
NONE			185.065	185.065	0%
OTTER			4.096902	4.096902	0%
PEL_TRAWL			7.944705	7.944705	0%
TR1	86.01304		192.2281	278.2411	31%
TR2	218.8114		903.5832	1122.395	19%
TR3			1.808631	1.808631	0%
Total	304.8245		1097.62	1402.444	



REVISED 1-12 Projection on landings basis

ICES data	Sole VIID
ICES catch TAC	2487
ICES landings TAC	2257
ICES discards	230
Discard rate (all fleets)	9.2%

Step 1	Deduct <i>de minimis</i> from ICES total catch figure	ICES <u>catch</u> advice 2016	2487	Comments
		<i>de minimis (for some gears)</i>	3%	
	Beam Trawl	<i>Contribution</i>	43%	trammel contribute to catch 42.9%
	Gill; net	<i>Contribution</i>	3%	TBB contribute to catch 34.4%,
		<i>Contribution</i>	34%	
		Contr. to total catches	2.32%	
		<b><i>de minimis deduction (A)</i></b>	57.7	
Step 2	Deduct discards fleets <u>not</u> under LO	Total discards 2016	230	STECF identify discard contribution Beam Trawl 37.1%; Demersal Trawls 53% (TR2) ;Gillnets 7.9%; Total 98%
		Contribution to discards by fleets <u>not</u> under LO (Landings under Lo/total landings)	7.8%	TR2 (and TR3)- 43% of landings under the landing obligation ( 53% * 89%= 47.17%) Beam Trawl 100% (37.1%) Gillnets 100% (7.9%)
		If no data under previous step consider ICES discard rate	0.0%	
		Discards by fleets not under LO to be deducted (B)	17.9	included in LO 92.17%, exclude (discards continue) 7.8%
		<b>Total deduction A+B</b>	76	
		New catch TAC	2411	
		TAC top up % relative to ICES landings TAC	6.84%	
		TAC top up % if no deduction of <i>de minimis</i>		
		New catch TAC		
		TAC top up %		

top up	154
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ICES data	Sole VII,f,g
ICES catch TAC	806
ICES landings TAC	782
ICES discards	24
Discard rate (all fleets)	3.0%

Step 1	Deduct <i>de minimis</i> from ICES total catch figure	ICES <u>catch</u> advice 2016	806		
		<i>de minimis (for some gears)</i>	3%	De minimis applies for beam trawls in VIIe,f and g (gear >80mm) with more than 5% =catch contribution of 30.6% for 93% of vessels=28.45%	
	Beam Trawl	<i>Contribution</i>	28%		
		Gill; net		3%	de minimis applies to gillnets only in VIIe,f,g @ 4% contribution
		<i>Contribution</i>		4%	
		Contr. to total catches <i>de minimis</i> deduction (A)	0.97%	8	
CAP			7.8	It is not possible to link gears with area using STECF information.	
Step 2	Deduct discards fleets not under LO	Total discards 2016	24		
		Contribution to discards by fleets not under LO (Landings under Lo/total landings)	81.4%	All trammel nets included (0% discard) 93% of beam trawls ( for 7bcf-k) under LO with 20% discard contribution (=18.6%)	
		If no data under previous step consider ICES discard rate	0.0%		
		Discards by fleets not under LO to be deducted (B)	20		
		Total deduction A+B	27		
	New catch TAC	779	-0.4%	if de minimis applied at 2%	
	TAC top up % relative to ICES landings TAC				
	TAC top up % if no deduction of <i>de minimis</i>			No de minimis applied ( DR < De minimis)	
	New catch TAC		786		
	TAC top up %		0.6%		

Continuing discards and de minimis higher than current advice;

ICES data	Sole II and IV
ICES catch TAC	15241
ICES landings TAC	14177
ICES discards	1064
Discard rate (all fleets)	7.0%

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Management Plan followed
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STECF

<b>Step 1</b>	<b>Deduct <i>de minimis</i> from ICES total catch figure</b>	ICES catch advice 2016	15241	trammel @ 8.8% contribution to catch increased mesh size BT with highly selective gears discard rte of under MCRS approx 12% Contribution to catches by BT 82.3% discard rate of BT fleet 18% Estimated % of fleet using selective	
		<i>de minimis</i>	3%		
		Contr. to total catches	8.8%		
		<b><i>de minimis</i> deduction (A)</b>	40		
		<i>de minimis</i>	7%		
		Contr. to total catches	0.142%		
		<b><i>de minimis</i> deduction (A)</b>	2		
		<b>Total</b>	42		
<b>Step 2</b>	<b>Deduct discards fleets <u>not</u> under LO</b>	Total discards 2016	0		100% of catches under LO
		Contribution to discards by fleets <b>not</b> under LO (Landings under Lo/total landings)	0.0%		
		If no data under previous step consider ICES discard rate	0.0%		
		<b>Discards by fleets not under LO to be deducted (B)</b>	0		
		<b>Total deduction A+B</b>	42		
		New catch TAC	15199		
		<b>TAC uplift % relative to ICES landings TAC</b>	7.2%		
		<b>Uplift</b>	1022		