



GOBIERNO
DE ESPAÑA

MINISTERIO
DE AGRICULTURA Y PESCA,
ALIMENTACIÓN Y MEDIO AMBIENTE

SUPPLEMENTARY DOCUMENTATION TO THE 2016 ANNUAL REPORT ON THE ACTIVITY OF THE SPANISH FISHING FLEET

Article 13-14 of Commission Regulation (EU) No 1013/2010 laying down

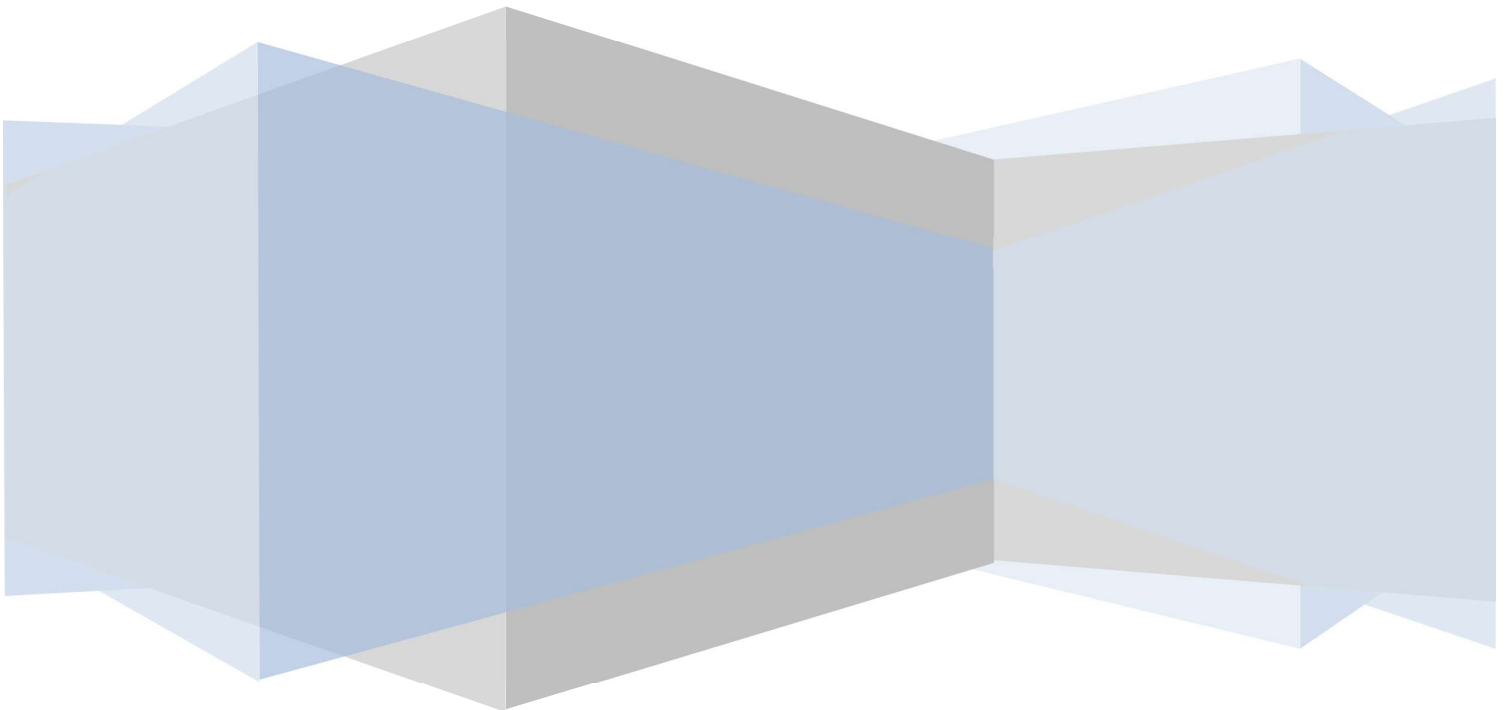




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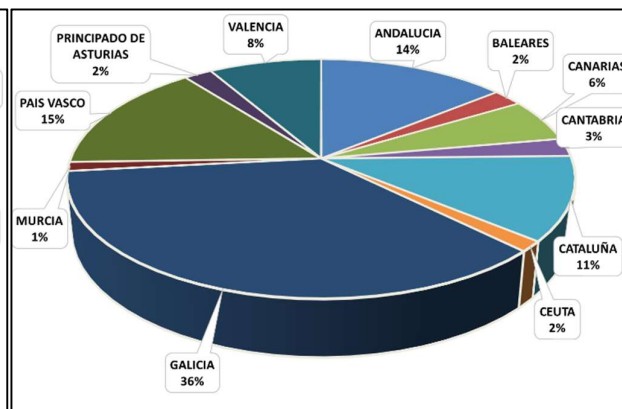
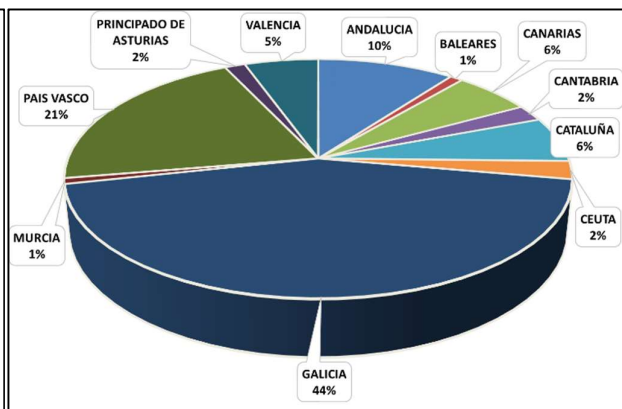
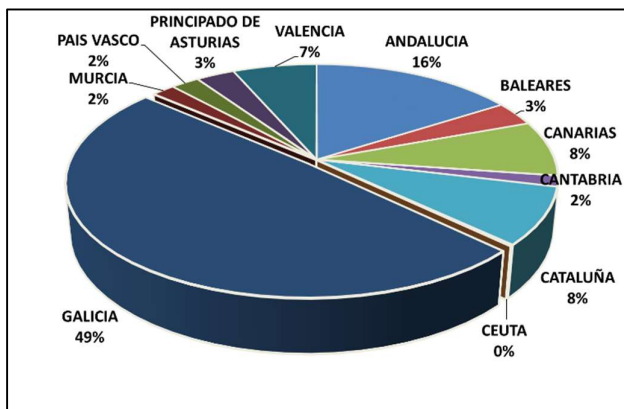
A. ANNEX I: FLEET **STRUCTURE**

The fishing fleet census is organised according to fishing method and the fishing ground for which the fleet holds its main licence. There are also variations in the activity carried out by each vessel throughout the year, with authorisations, temporary fishing permits and temporary changes in fishing method.

CHARACTERISATION OF ACTIVE FLEET IN 2016 BY METHOD CENSUS 31/12/2016

	CENSUS OF ACTIVE VESSELS BY FISHING GROUND	VESSELS	TOTAL GT	TOT KW	% VESSELS	% GT	% KW	AVERAGE LENGTH	AVERAGE AGE
SPANISH FISHING GROUND	SMALL-SCALE GEAR IN CANARY ISLANDS	583	2.134'21	16.485'48	93'28%	45,97%	67,74%	7'98	37
	PURSE SEINE IN CANARY ISLANDS	42	2.507'98	7.851'35	6'72%	54,03%	32,26%	19'67	24
	SUBTOTAL	625	4.642'19	24.336'83	7'87%	3'78%	5'1%		
	BOTTOM TRAWLING IN NW CANTABRIAN SEA	75	17.042'59	25.209'39	1'70%	30'26%	12,65%	28'32	16
	SMALL-SCALE GEAR IN NW CANTABRIAN SEA	3.945	11.188'61	94.337'14	89'35%	19'87%	47,33%	6'76	32
	PURSE SEINE IN NW CANTABRIAN SEA	263	21.470'46	62.500'62	5'96%	38'13%	31,36%	22'35	19
	BOTTOM-SET LONGLINE IN NW CANTABRIAN SEA	64	2.839'18	8.086'56	1'45%	5'04%	4,06%	16'89	17
	ANGLERFISH GILLNET IN NW CANTABRIAN SEA	23	1.051'74	2.988'99	0'525	1'87%	1,50%	17'10	15
	BOTTOM-SET GILLNET IN NW CANTABRIAN SEA	45	2.722'8	6.208'07	1'02%	4'83%	3,11%	18'21	18
	SUBTOTAL	4.415	56.315'38	199.330'77	55'57%	45'92%	41'8%		
	BOTTOM TRAWL IN THE GULF OF CADIZ	130	5.624'98	20.530'21	18,08%	52,16%	40,98%	18'89	15
	SMALL-SCALE GEAR IN GULF OF CADIZ	510	2.875'55	18.524'56	70,93%	26,67%	36,98%	9'33	25
	PURSE SEINE IN GULF OF CADIZ	79	2.283'41	11.037'56	10,99%	21,17%	22,03%	17'18	18
	SUBTOTAL	719	10.783'94	50.092'33	9'05%	8'79%	10'51%		
	BOTTOM TRAWL IN MEDITERRANEAN	602	35.495'89	109.398'88	27'54%	69,73%	53,87%	20'4	22
	SMALL-SCALE GEAR IN MEDITERRANEAN	1.316	5.497'59	47.926'9	60'20%	10,80%	23,60%	8'73	31
	BLUEFIN TUNA PURSE SEINE IN MEDITERRANEAN	6	1.612'36	5.843'38	0'27%	3,17%	2,88%	38'68	14
	PURSE SEINE IN MEDITERRANEAN	218	7.960'51	36.674'56	9'97%	15,64%	18,06%	18'05	24
	BOTTOM-SET LONGLINE IN MEDITERRANEAN	44	338'05	3.234'67	2'01%	0,66%	1,59%	10'76	27
	SUBTOTAL	2.186	50.904'4	203.078'39	27'51%	41'51%	42'59%		
SPANISH FISHING GROUNDS SUBTOTAL	7.945	122.645'91	476.838'32	95'10%	37'68%	63'27%			
EU FISHING GROUNDS	BOTTOM TRAWLING IN ICES ZONES VB, VI, VII and VIIIabde.	33	11.570'06	16.376'14	31'73%	40,62%	38,38%	35'47	14
	TRAWLING IN PORTUGUESE WATERS	15	2.340'38	4.477'08	14'42%	8,22%	10,49%	25'45	14
	PASSIVE GEAR IN ICES ZONES VB, VI, VII and VIIIabde.	44	12.690'7	18.598'4	42'31%	44,55%	43,59%	31'64	14
	BOTTOM-SET LONGLINE UNDER 100 GRT IN VIIIabde.	12	1.884'06	3.219'12	11'54%	6,61%	7,54%	24'74	20

CENSUS OF ACTIVE VESSELS BY FISHING GROUND		VESSELS	TOTAL GT	TOT KW	% VESSELS	% GT	% KW	AVERAGE LENGTH	AVERAGE AGE
INTERNATIONAL FISHING GROUNDS	EU FISHING GROUNDS SUBTOTAL	104	28.485'2	42.670'74	1'25%	8'75%	5'66%		
	FREEZER TRAWLERS INTERNATIONAL AND THIRD COUNTRY WATERS	52	29.818'95	39.580'59	49'06%	22,72%	22,86%	41'76	16
	NAFO FREEZER TRAWLERS	20	23.753'4	23.658'53	18'87%	18,10%	13,66%	59'17	21
	FREEZER TUNA SEINERS IN ATLANTIC INDIAN AND PACIFIC OCEAN	16	35.644	51.495'63	15'09%	27,16%	29,74%	79'46	27
	FREEZER TUNA SEINERS IN INDIAN AND PACIFIC OCEAN	10	34.909'88	48.692'21	9'43%	26,60%	28,12%	99'31	10
	COD FISHING BOATS	5	6.728	9.141'92	4'72%	5,13%	5,28%	57'63	15
	BOTTOM-SET LONGLINE IN INTERNATIONAL AND THIRD COUNTRY WATERS	3	381'05	600'74	2'83%	0,29%	0,35%	23'6	34
	INTERNATIONAL FISHING GROUND SUBTOTAL	106	131.235'28	173.169'62	1'27%	40'32%	22'98%		
CUP	SURFACE LONGLINE UNIFIED CENSUS	199	43.111'63	60.989'99	2'38%	13'25%	8'09%	26'63	17
TOTAL ACTIVE SPANISH FLEET 2016		8.354	325.478'02	753.668'67	100%	100%	100%	11'24	29



Distribution of vessels by Autonomous Community Distribution of tonnage by Autonomous Community (GT) Distribution of power by Autonomous Community (Kw)

		ACTIVE	INACTIVE	VALID IN THE YEAR	WITHDRAWN AT THE END OF 2016	VALID END OF 2016	ACTIVE	INACTIVE	VALID IN THE YEAR	WITHDRAWN AT THE END OF 2016	VALID END OF 2016	ACTIVE	INACTIVE	VALID IN THE YEAR	WITHDRAWN AT THE END OF 2016	VALID END OF 2016	
METHOD		VESSELS	VESSELS	VESSELS	VESSELS	VESSELS	GT	GT	GT	GT	GT	KW	KW	KW	KW	KW	
NATIONAL FISHING GROUND	NW CANTABRIAN SEA	BOTTOM TRAWLING IN NW CANTABRIAN SEA	75	5	80	3	77	17.042,59	1.140,66	18.183,25	726,00	17.457,25	25.209,34	1.485,29	26.694,63	838,24	25.856,39
		SMALL-SCALE GEAR IN NW CANTABRIAN SEA	3.945	488	4.433	54	4.379	11.188,61	732,74	11.921,35	183,58	11.737,77	94.337,99	7.269,60	101.607,59	1.167,03	100.440,56
		PURSE SEINING IN NW CANTABRIAN SEA	263	4	267	5	262	21.470,46	650,26	22.120,72	305,46	21.815,26	62.500,63	1.492,65	63.993,28	978,68	63.014,60
		BOTTOM-SET LONGLINING IN NW CANTABRIAN SEA	64	4	68	1	67	2.839,18	127,37	2.966,55	27,76	2.938,79	8.086,54	561,03	8.647,57	66,18	8.581,39
		ANGLERFISH GILLNETTING IN NW CANTABRIAN SEA	23	3	26	2	24	1.051,74	30,81	1.082,55	36,44	1.046,11	2.988,97	196,32	3.185,29	227,94	2.957,35
		BOTTOM-SET GILLNETTING IN NW CANTABRIAN SEA	45	1	46	1	45	2.722,80	52,28	2.775,08	52,28	2.722,80	6.208,09	88,24	6.296,33	88,24	6.208,09
		TOTAL	4.415	505	4.920	66	4.854	56.315,38	2.734,12	59.049,50	1.331,52	57.717,98	199.331,56	11.093,13	210.424,69	3.366,31	207.058,38
	GOL	BOTTOM TRAWLING IN THE GULF OF CADIZ	130	7	137	1	136	5.624,98	231,32	5.856,30	17,53	5.838,77	20.530,16	823,53	21.353,69	75,00	21.278,69
		SMALL-SCALE GEAR IN THE GULF OF CADIZ	510	57	567	7	560	2.875,55	138,11	3.013,66	19,81	2.993,85	18.524,22	1.031,58	19.555,80	106,99	19.448,81
		PURSE SEINING IN THE GULF OF CADIZ	79	4	83		83	2.283,41	66,07	2.349,48		2.349,48	11.037,51	392,64	11.430,15		11.430,15
		TOTAL	719	68	787	8	779	10.783,94	435,50	11.219,44	37,34	11.182,10	50.091,89	2.247,75	52.339,64	181,99	52.157,65
	MEDITERRANEAN	BOTTOM TRAWLING IN MEDITERRANEAN	602	17	619	7	612	35.495,89	737,34	36.233,23	200,13	36.033,10	109.398,72	2.931,62	112.330,34	994,85	111.335,49
		SMALL-SCALE GEAR IN MEDITERRANEAN	1.316	301	1.617	44	1.573	5.497,59	722,54	6.220,13	94,86	6.125,27	47.927,04	6.878,27	54.805,31	936,20	53.869,11
		BLUEFIN TUNA PURSE SEINING IN MEDITERRANEAN	6		6		6	1.612,36		1.612,36		1.612,36	5.843,38		5.843,38		5.843,38
		PURSE SEINING IN MEDITERRANEAN	218	10	228		228	7.960,51	253,19	8.213,70		8.213,70	36.674,49	1.639,70	38.314,19		38.314,19
		BOTTOM SET LONGLINING IN MEDITERRANEAN	44	24	68	5	63	338,05	270,90	608,95	29,16	579,79	3.234,68	2.063,97	5.298,65	240,44	5.058,21
		TOTAL	2.186	352	2.538	56	2.482	50.904,40	1.983,97	52.888,37	324,15	52.564,22	203.078,31	13.513,56	216.591,87	2.171,49	214.420,38
	CA	SMALL-SCALE GEAR IN CANARY ISLANDS	583	139	722	18	704	2.134,21	325,12	2.459,33	41,07	2.418,26	16.485,53	2.646,37	19.131,90	335,00	18.796,90
		PURSE SEINING IN CANARY ISLANDS	42	2	44		44	2.507,98	236,49	2.744,47		2.744,47	7.851,35	544,85	8.396,20		8.396,20
		TOTAL	625	141	766	18	748	4.642,19	561,61	5.203,80	41,07	5.162,73	24.336,88	3.191,22	27.528,10	335,00	27.193,10
	TOTAL SPANISH FISHING GROUND		7.945	1.066	9.011	148	8.863	122.645,91	5.715,20	128.361,11	1.734,08	126.627,03	476.838,64	30.045,66	506.884,30	6.054,79	500.829,51

	ACTIVE	INACTIVE	VALID IN THE YEAR	WITHDRAWN AT THE END OF 2016	VALID END OF 2016	ACTIVE	INACTIVE	VALID IN THE YEAR	WITHDRAWN AT THE END OF 2016	VALID END OF 2016	ACTIVE	INACTIVE	VALID IN THE YEAR	WITHDRAWN AT THE END OF 2016	VALID END OF 2016
METHOD	VESSELS	VESSELS	VESSELS	VESSELS	VESSELS	GT	GT	GT	GT	GT	KW	KW	KW	KW	KW
EU															
PORTUGUESE WATERS															
TRAWLING IN PORTUGUESE WATERS	15	1	16		16	2.340,38	208,00	2.548,38		2.548,38	4.477,09	255,15	4.732,24		4.732,24
ICES ZONES VB, VI, VII and VIIIabde.															
BOTTOM TRAWLING IN ICES ZONES VB, VI, VII and VIIIabde.	33	6	39	3	36	11.570,06	2.150,27	13.720,33	1.047,76	12.672,57	16.376,15	2.977,94	19.354,09	1.573,53	17.780,56
PASSIVE GEAR IN ICES ZONES VB, VI, VII and VIIIabde.	44	2	46	2	44	12.690,70	835,00	13.525,70	835,00	12.690,70	18.598,37	1.076,47	19.674,84	1.076,47	18.598,37
ZONES VIIIabde															
BOTTOM-SET LONGLINING UNDER 100 GRT IN VIIIabde.	12		12	1	11	1.884,06		1.884,06	195,95	1.688,11	3.219,12		3.219,12	367,65	2.851,47
TOTAL EU FISHING GROUND	104	9	113	6	107	28.485,20	3.193,27	31.678,47	2.078,71	29.599,76	42.670,73	4.309,56	46.980,29	3.017,65	43.962,64
INTERNATIONAL															
INTERNATIONAL AND THIRD-COUNTRY WATERS															
FREEZER TRAWLERS INTERNATIONAL AND THIRD COUNTRY WATERS	52	12	64	2	62	29.818,95	5.290,26	35.109,21	928,00	34.181,21	39.580,56	8.301,47	47.882,03	1.294,12	46.587,91
BOTTOM-SET LONGLINE IN INTERNATIONAL AND THIRD COUNTRY WATERS	3	1	4		4	381,05	344,00	725,05		725,05	600,74	419,12	1.019,86		1.019,86
NORTH ATLANTIC															
COD FISHING BOATS	5		5	1	4	6.728,00		6.728,00	971,00	5.757,00	9.141,91		9.141,91	1.878,68	7.263,23
NAFO FREEZER TRAWLERS	20		20		20	23.753,40		23.753,40		23.753,40	23.658,53		23.658,53		23.658,53
ATLANTIC, INDIAN, PACIFIC OCEANS															
FREEZER TUNA SEINERS IN ATLANTIC INDIAN AND PACIFIC OCEAN	16		16		16	35.644,00		35.644,00		35.644,00	51.495,62		51.495,62		51.495,62
INDIAN AND PACIFIC OCEAN															
FREEZER TUNA SEINERS IN INDIAN AND PACIFIC OCEAN	10		10		10	34.909,88		34.909,88		34.909,88	48.692,21		48.692,21		48.692,21
TOTAL INTERNATIONAL	106	13	119	3	116	131.235,28	5.634,26	136.869,54	1.899,00	134.970,54	173.169,57	8.720,59	181.890,16	3.172,80	178.717,36
SURFACE LONGLINE UNIFIED CENSUS	199	17	216	3	213	43.111,63	3.907,94	47.019,57	538,00	46.481,57	60.990,01	6.016,18	67.006,19	941,18	66.065,01
GRAND TOTAL	8.354	1.105	9.459	160	9.299	325.478,02	18.450,67	343.928,69	6.249,79	337.678,90	753.668,95	49.091,99	802.760,94	13.186,42	789.574,52

ANNUAL TREND IN CURRENT FLEET DURING THE YEAR (ACTIVE PLUS INACTIVE)

	2010	2011	2012	2013	2014	2015	2016	Change 2010-2011	Change 2011-2012	Change 2012-2013	Change 2013-2014	Change 2014-2015	Change 2015-2016
No of VESSELS	10.847	10.505	10.116	9.871	9.635	9.409	9.299	-3,15%	-3,70%	-2,42%	-2,39%	-2,35%	-1,17%
KW	933.396,83	899.973,56	871.956,77	846.718,74	821.611,98	799.011,23	789.574,52	-3,58%	-3,11%	-2,89%	-2,97%	-2,75%	-1,18%
GT	414.268,61	398.900,67	384.795,73	372.617,02	357.556,35	342.568,58	337.678,90	-3,71%	-3,54%	-3,16%	-4,04%	-4,19%	-1,43%

TREND IN CURRENT VESSELS AT EACH YEAR-END 2010-2016										
FISHING GROUND	METHOD	2.009	2.010	2.011	2.012	2.013	2.014	2.015	2.016	
SPANISH FISHING GROUND	TRAWLING	1.073	1.003	951	921	909	858	834	825	
	SMALL-SCALE GEAR	8.419	8.307	8.090	7.782	7.602	7.474	7.326	7.216	
	PURSE SEINE	683	660	632	624	612	601	588	617	
	BLUE FIN TUNA PURSE SEINE	6	6	6	6	6	6	6	6	
	BOTTOM-SET LONGLINE	190	184	166	157	153	143	137	130	
	SURFACE LONGLINING	164	154	151	148	146	141			
	ANGLERFISH GILLNET	33	33	34	32	31	31	26	24	
	BOTTOM-SET GILLNET	57	57	54	53	51	50	46	45	
	SUBTOTAL	10.625	10.404	10.084	9.723	9.510	9.304	8.963	8.863	
EU FISHING GROUNDS	TRAWLING	122	102	86	74	70	58	55	52	
	PASSIVE GEAR	87	79	72	69	66	62	57	55	
	SUBTOTAL	209	181	158	143	136	120	112	107	
INTERNATIONAL FISHING GROUNDS	TRAWLING	136	123	122	108	94	91	89	86	
	FREEZER TUNA SEINERS	33	33	32	32	32	30	26	26	
	BOTTOM-SET LONGLINE	5	4	4	3	3	3	3	4	
	SURFACE LONGLINING	103	94	94	94	92	86			
	SUBTOTAL	277	254	252	237	221	210	118	116	
NO FISHING GROUND ASSIGNED	NO METHOD ASSIGNED	5	8	11	13	4	1			
SURFACE LONGLINE UNIFIED CENSUS							216	213		
TOTALS		11.116	10.847	10.505	10.116	9.871	9.635	9.409	9.299	



B. ANNEX II: FISHERIES: **MANAGEMENT OF FISHING** **ACTIVITY**

2016 ACTIVITY FISHERIES BY SUPRAREGION AND MAIN GEAR

Vessels by segment, length, gear and supraregion

SUPRA	GEAR	0-10	10-12	12-24	18-24	24-40	>40	TOTAL
NORTH ATLANTIC	GILLNET		106	145	23			274
	DREDGES	1.731	14	84				1.829
	TRAWLING			66	74	107	17	264
	POTS		71	56				127
	HOOK		64	74	33	51		222
	LON. SURFACE				12	33		45
	PASSIVE MULTIPURPOSE					56		56
	MOBILE AND PASSIVE MULTIPURPOSE	2.043	70	47				2.160
	PURSE SEINE		20	116	99	56		291
<i>Total NORTH ATLANTIC</i>		<i>7.774</i>	<i>345</i>	<i>588</i>	<i>241</i>	<i>303</i>	<i>17</i>	<i>5.268</i>
MEDITERRANEAN	GILLNET		84	54				138
	DREDGES		18	13				31
	TRAWLING		19	147	301	130		597
	POTS			25				25
	HOOK		52	21				73
	SURFACE LON.			44	21			65
	MOBILE AND PASSIVE MULTIPURPOSE	109	951	32				1.092
	PURSE SEINE		20	85	86	25		216
<i>Total MEDITERRANEAN</i>		<i>109</i>	<i>1.144</i>	<i>421</i>	<i>408</i>	<i>155</i>	<i>0</i>	<i>2.237</i>
RFOs	TRAWLING					40	30	70
	POTS		16					16
	HOOK		49	43	11	25		128
	LON. SURFACE					64	23	87
	MOBILE AND PASSIVE MULTIPURPOSE	488	20					508
	PURSE SEINE			14			26	40
<i>Total OTHER FISHING REGIONS</i>		<i>488</i>	<i>85</i>	<i>57</i>	<i>11</i>	<i>129</i>	<i>79</i>	<i>849</i>
<i>TOTAL ACTIVE FISHING FLEET 2016</i>		<i>4.371</i>	<i>1.574</i>	<i>1.066</i>	<i>660</i>	<i>587</i>	<i>96</i>	<i>8.354</i>

MANAGEMENT OF SPANISH FLEET FISHING ACTIVITY

1.-North Atlantic (NA)

1.1 Management of fishing activities in the waters of the NA Spanish Fishing Ground (FAO 27.8.c-27.9.a)

Spanish CNW fishing ground waters were the main fishing area for 4 415 vessels, more than 52 % of the active fleet, mainly vessels of under 12 metres, operating with multipurpose gear, pots and anglerfish gillnets mainly targeted at molluscs. These were followed by the purse seine fleet with 246 vessels targeting their effort to catch sardines, horse mackerel and anchovy. This fleet changed its methods, mainly to rod and line with live bait and trolling, for tuna fisheries and mackerel in zones VII and VIII abd. The bottom longline fleets and gillnet fleets directed their effort at hake, monkfish, mackerel, horse mackerel and whiting, while bottom trawlers fished for hake, megrim, monkfish, horse mackerel, whiting and Norway lobster.

In the context of actions aimed at improving the management of fisheries, we continued to distribute quotas between the different segments of the fleet.

The Northwest Cantabrian bottom trawl fleet can carry out final quota transfers between ships. This instrument will allow an orderly restructuring of the fleet, paving the way for more competitive shipping companies with higher quotas for species that are more profitable due to vessel characteristics or the habitual area of the fishing grounds in which they operate, also modulating pressure on the resource in order to ensure its sustainability.

In the Gulf of Cadiz, 711 vessels operated (8.5 % of the total), mostly artisanal (gillnets, hook tackle and traps) and dredges primarily aimed at striped venus. Even though they do not provide high catch volumes, all these species have a high socio-economic importance locally. Fishing is also carried out by bottom trawlers (southern hake, white shrimp, Norway lobster and octopus) and purse seiners (sardines, anchovy, mackerel and horse mackerel).

1.2 Management of fishing activities in non-Spanish EU waters

ICES EU waters Vb, VI, VII and VIII abde: 89 vessels participated in the fishery for demersal species (hake, anglerfish and megrim), using bottom trawl and passive gear methods (gillnets and bottom longline). In Zone 27.9a, Portuguese waters, 15 trawlers operated, mainly fishing for southern hake.

In 2016, we continued with the management of fleets fishing in EU waters based on individual quota distributions per vessel and permanent transfer mechanisms that have long proven to be a good means of revitalising these fleets.

In 2016, we continued the fisheries agreement with Portugal, which regulates the activity of the fleets of both countries in the other's territorial waters. Aspects of the agreement that regulate the activity of vessels in the vicinity of the mouth of the Minho and the Guadiana are particularly important. Work has

been done to examine alternatives that will allow us to improve the use of our vessels' licences and activity in the waters of our neighbouring country, particularly with a view to bilateral contacts with the Portuguese authorities resulting in an improvement of this activity.

1.3. Management of fisheries in non-EU NA waters

In addition to benefiting from agreements with developing countries, the deep water fleet has access to fishing opportunities in three neighbouring Atlantic countries: Norway, Greenland and the Faroe Islands.

In Norway, the fleet had fishing opportunities for Arctic cod and redfish under this Agreement, which changed throughout the year as a result of intracommunity exchanges.

With regard to Greenland, Spain had fishing opportunities for snow crab under this Agreement and obtained 160 t of pelagic redfish through exchanges.

Lastly, Spain had three licences to fish for blue whiting in Faroe Island waters under the EU/Faroe Islands Fisheries Agreement and the Agreement on Mutual Access.

Fisheries in the NAFO area: Vessels that are dedicated to catching demersal species operate in this area. The level of quotas allocated to Spain for 2016 can be seen in this link [Regulation 2016/72](#)

North East Atlantic Fisheries Commission (NEAFC/NEAFC):

In their regulation area, freezer trawlers fish for the capture of deep-sea species, mainly *grenadiers* and pelagic beaked redfish. There is also sporadic activity of vessels of EU waters (Gran Sol) aimed at catching hake and associated species.

The level of quotas for species regulated by this Organisation, assigned to Spain, was established by the TAC and Quota Regulation and [Regulation \(EU\) No 1367/2014](#) fixing for 2015 and 2016 the fishing opportunities for Union fishing vessels for certain deep-sea fish stocks.

2.- Mediterranean

Mediterranean fishing grounds

The Spanish Mediterranean is characterised by a mixed and multispecies fishery, in which over 50 % of fishing is artisanal for under 90 days/year. Next in importance is the trawler fleet made up of vessels of about 20 metres in average length (615 vessels). These mainly target hake, red mullet, Norway lobster and red shrimp, accounting for over 60 % of the value of the Mediterranean fishery. The purse seine fleet (216 ships) also catches pelagic species, particularly sardines, mackerel, menhaden and anchovy. This fleet includes six larger vessels authorised for bluefin tuna fishing.

3.- Other fishing regions

3.1 Spanish fishing ground. Canary Islands (FAO 34.1.2): This fleet is the oldest (35 years on average) and smallest, accounting for more than 65 % of active vessels operating for under 90 days/year; in 2016, 629 boats were active, 18 of them purse seining (sardines, menhaden, mackerel and horse mackerel) and the rest using multipurpose and hook gear, with the highest catches represented by tunas and native species. 2016 provided the implementation of the new [Order AAA/2536/2015](#), which regulates fishing in the waters of the Canary Islands fishing ground. This standard represents a major updating of the legislation and reflects the true situation in the fishing grounds, allowing better management of their fisheries. This new legislation has redefined fishing patterns in the Canary Islands, allowing multipurpose use of small-scale gear, one of the largest and oldest sectors in the Canary Islands. It also provides for the

rational use of fish pots in order to ensure environmental sustainability and covers the specificities of fishing customs in some of the islands. It is important to highlight the marked artisanal nature of fishing activity in the Canary Islands.

3.2 Trawler fleet fishing international and third country waters

This fleet included 70 active vessels in 2016, fishing in international waters or within EEZs of third countries under EU Fishing Agreements with Mauritania and Guinea Bissau, targeting hake, crustaceans and cephalopods or under private licences granted directly to the shipowning companies. The vessels fished in central and south-eastern waters (FAO 34 and 47) and in the Southwest Pacific (FAO area 81).

3.3 Activity in international waters and fisheries not covered by Fishing Agreements and Regional Fishery Organisations

During 2016, 24 Spanish vessels fished in international waters off the shelf off Argentina, where they caught bottom-dwelling species using trawl gear. The target species were hake and squid and other species associated with these fisheries.

In the absence of an RFO, Spain has unilaterally established measures to protect vulnerable marine ecosystems with the closure of nine zones for bottom fishing in prospected areas as a result of multidisciplinary seabed prospecting campaigns (Atlantis) developed by Spain between October 2007 and April 2010.

3.4 Bottom longline fishing in international and third country waters and hook-live bait gear (Area 34)

Two Atlantic pomfret vessels use bottom longline gear; the rest is essentially made up of a fleet from different fishing grounds, with authorisations for tunas and seabream.

3.5 Freezer tuna fleet.

Throughout 2016, this fleet is made up of 26 vessels and continues to operate in international waters regulated by regional fisheries organisations for the Indian and Pacific Atlantic Ocean and in the EEZs of countries with which there is an EU agreement or those for which private licences have been obtained.

SURFACE LONGLINE FLEET

This fleet operates in national and international waters of the Atlantic, Indian and Pacific Ocean and in the EEZs of countries with which there is EU agreement or those for which private licences have been obtained, and forms the Unified Surface Longline Census. Its main catches include swordfish, pelagic shark and tunas. Of the 197, 9 vessels less than the previous year participating in this fishery in 2016, including the Mediterranean, 45 fished mainly in North Atlantic waters, 65 in the Mediterranean and 87 in other waters.



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C. ANNEX III: FLEET AND FISHERY DEVELOPMENT



DEVELOPMENT OF LICENCES/AUTHORISATIONS/TEMPORARY FISHING PERMITS

DEVELOPMENT OF LICENCES/AUTHORISATIONS/TEMPORARY FISHING PERMITS (The number of licences may or may not coincide with the number of active vessels, since a vessel may have more than one licence throughout the year).

SPANISH FISHING GROUND

		LICENCES							
		2009	2010	2011	2012	2013	2014	2015	2016
CANARY ISLANDS	<i>SMALL-SCALE GEAR</i> ¹	901	889	872	805	799	771	751	751
	<i>POLE-AND-LINE TUNA VESSELS</i> ²	14	14	13	13	13	12	12	45
	Subtotal	915	903	885	818	812	783	763	796
NW CANTABRIAN SEA	<i>BOTTOM TRAWL</i>	117	111	101	99	99	93	80	81
	<i>SMALL-SCALE GEAR</i>	4948	4885	4767	4.627	4546	4473	4400	4265
	<i>PURSE SEINE</i>	304	294	284	280	278	272	264	267
	<i>BOTTOM-SET LONGLINE</i>	86	84	79	79	79	71	68	67
	<i>ANGLERFISH GILLNET</i>	33	33	34	32	31	31	26	24
	<i>BOTTOM-SET GILLNET</i>	57	57	54	53	51	50	46	48
	Subtotal	5545	5464	5319	5170	5084	4990	4884	4752
GULF OF CADIZ	<i>BOTTOM TRAWL</i>	159	149	147	142	142	139	127	134
	<i>SMALL-SCALE GEAR</i>	546	582	580	572	578	571	563	556
	<i>PURSE SEINE</i>	97	92	89	88	87	86	84	86
	Subtotal	802	823	816	802	807	796	774	776
MEDITERRANEAN SEA	<i>BOTTOM TRAWL</i>	797	743	703	680	671	626	617	610
	<i>SMALL-SCALE GEAR</i>	2024	1951	1871	1.778	1723	1658	1612	1502
	<i>PURSE SEINE</i>	268	260	246	243	239	231	228	222
	<i>BLUE-FIN TUNA PURSE SEINE</i>	6	6	6	6	6	6	6	6
	<i>BOTTOM-SET LONGLINE</i>	104	100	87	78	75	71	69	56
	Subtotal	3199	3060	2913	2785	2714	2592	2526	2390
TOTALS		10461	10250	9933	9575	9417	9161	8947	8714

¹ PURSE-SEINING VESSELS ARE INCLUDED

² NEW CENSUS BY MODE

EU FISHING GROUNDS

		LICENCES							
		2009	2010	2011	2012	2013	2014	2015	2016
PORTUGUESE WATERS	<i>TRAWL</i>	25	21	14	13	13	14	14	15
ICES ZONES Vb, VI, VII and VIIIabde.	<i>BOTTOM TRAWL AND PASSIVE GEAR (bottom-set longlines and gillnets)</i>	175	170	146	115	114	88	82	87
ZONES VIIIabde	<i>BOTTOM-SET LONGLINE UNDER 100 GRT</i>	25	24	21	15	15	15	11	12
TOTALS		225	215	181	143	142	117	107	114

INTERNATIONAL WATERS

		TEMPORARY FISHING PERMITS							
		2009	2010	2011	2012	2013	2014	2015	2016
LONG-DISTANCE TRAWL	<i>COD FISHING BOATS</i>	10	10	9	9	4	7	10	11
	<i>NAFO</i>	24	22	24	24	14	24	22	11
	<i>INTERNAT. AND THIRD COUNTRY WATERS</i>	102	91	91	89	136	117	227	226
FREEZER TUNA SEINERS	<i>ATLANTIC, INDIAN AND PACIFIC OCEANS</i>	33	23	22	22	21	21	18	22
	<i>INDIAN AND PACIFIC OCEANS</i>	10	10	10	10	10	9	11	16
BOTTOM-SET LONGLINE	<i>INTERNATIONAL AND THIRD COUNTRY</i>	5	4	4	4	7	6	6	7
TOTALS		184	160	160	158	192	184	294	293

SURFACE LONGLINE

	TEMPORARY FISHING PERMITS							
	2009	2010	2011	2012	2013	2014	2015	2016
ZONE 1. MEDITERRANEAN SEA	92	70	92	89	76	75	73	71
ZONE 2. NATIONAL WATERS UP TO 80 MILES	68	73	63	71	73	72	60	61
ZONE 3. NATIONAL WATERS OVER 80 MILES AND ATLANTIC NORTH OF THE 5TH PARALLEL NORTH	87	89	78	97	89	82	69	74
ZONE 4. ATLANTIC SOUTH OF THE 5TH PARALLEL NORTH	40	43	43	41	34	32	31	27
ZONE 5. INDIAN OCEAN	16	14	13	17	22	21	19	16
ZONE 6. PACIFIC OCEAN	32	28	26	31	30	28	25	28
TOTALS	335	317	315	346	324	310	277	277



D. ANNEX IV: FISHING EFFORT ADJUSTMENT REGIMES

INDICATION OF EFFORT REGIMES

TYPE OF TEMPORARY HALT	EMFF REGULATION (EU) No 508/2014	Decrease of accumulated effort in 2016		Decrease of accumulated effort in 2016	
		GTs	KWs	GtxDays	KWxDays
Palamos red shrimp management plan	Art.33.1.a)	1.013,48	4.228,11	15.202,14	63.421,63
Provisional closed season Ría de Arousa 2016	Art.33.1.a) REMFF.Art7 RCFP.	377,35	6.437,53	15.094,00	257.501,10
Mediterranean bottom trawling management plan	Art.33.1.c) REMFF	10.481,46	35.349,76	157.221,90	530.246,36
Mediterranean purse seine management plan	Art.33.1.c) REMFF	2.223,59	11.779,99	33.353,85	176.699,78
Grand total		14.095,88	57.795,38	220.871,89	1.027.868,87



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E.ANNEX V: ENTRY/EXIT **REGIME**



DEF ADDITIONS AND WITHDRAWALS IN 2016 CENSUS			
WITH DEFINITIVE WITHDRAWAL DATE IN 2016 CENSUS			
STATUS	VESSELS	GT	KW
WITHDRAWAL FOR NEW CONSTRUCTION	19	125,78	774,85
CHANGE TO ANOTHER LIST	1	0,46	
SCRAPPED	37	196,34	1.210,43
TEMPORARY EXPORT	1	28,49	105,15
EXPORTED	11	3.982,11	6.561,40
SUBMERGED BY COLLISION	1	4,41	66,18
SUBMERGED BY LEAKAGE	1	262,00	397,06
WITHDRAWAL FROM FISHING ACTIVITY	56	135,27	1.034,19
ACCIDENT	9	99,18	440,81
	136	4.834,04	10.590,07

ADDITIONS TO THE THIRD LIST CENSUS 2016			
REASON ADDITION	VESSELS	GT	KW
IMPORT	1	123,30	261,03
NEW CONSTRUCTION	50	977,15	2.975,70
	51	1.100,45	3.236,73

FLEET ADDITIONS AND WITHDRAWALS DURING THE LAST FIVE YEARS

YEAR WITHDRAWAL	AID	ADDITION OF VESSELS TO CENSUS			DEFINITIVE WITHDRAWAL OF VESSELS CENSUS ACCORDING TO THE DATE OF DEFINITIVE WITHDRAWAL		
		VESSELS	TOTAL GT	TOTAL KW	VESSELS	TOTAL GT	TOTAL KW
2012	WITH AID				146	8.810,58	19.874,48
	WITHOUT AID	40	1.055,47	2.475,29	282	6.535,42	11.797,09
		40	1.055,47	2.475,29	428	15.346,00	31.671,57
2013	WITH AID				51	8.480,11	16.361,79
	WITHOUT AID	48	251,06	1.799,58	242	3.814,37	10.818,07
		48	251,06	1.799,58	293	12.294,48	27.179,86
2014	WITH AID				108	10.999,55	24.003,17
	WITHOUT AID	49	5.991,91	12.133,23	183	10.896,05	21.671,66
		49	5.991,91	12.133,23	291	21.895,60	45.674,83
2015	WITH AID				97	10.093,95	19.794,85
	WITHOUT AID	49	8.327,69	12.456,51	186	15.467,35	25.689,65
		49	8.327,69	12.456,51	283	25.561,30	45.484,50
2016	WITH AID						
	WITHOUT AID	51	1.100,45	3.236,73	136	4.834,04	10.590,11
		51	1.100,45	3.236,73	136	4.834,04	10.590,11

Aid data approved as of May 2016



F. ANNEX VI: ADMINISTRATIVE PROCEDURES

LEGISLATION

Law 33/2014 of 26 December 2014 amending Law 3/2001 of 26 March 2001, on State sea fishing, with the main aim of acting with a greater degree of deterrence and prevention concerning the activity of vessels on international lists of illegal fishing, with a stronger and more appropriate judicial response against the real beneficiaries of illegal fishing, with a firm commitment to prevent, deter and prosecute any Spanish involvement in or connection with such activities.

State level

- General Secretariat of Fisheries Decision of 11 January 2016, establishing the initial quotas available by modality or census for the different species included in the Management Plan for the Cantabrian and Northwest vessels.
- General Secretariat for Fisheries Decision of 11 March 2016, amending the Decision of 2 September 2011 publishing a list of designated ports under Order ARM/2017/2011, of 11 July 2011, establishing control of vessels with landings of more than 10 t of herring, mackerel and horse mackerel.
- Order AAA/55/2016 of 26 January 2016, amending Order AAA/1589/2012 of 17 July 2012, regulating the fishery of red seabream (*Pagellus bogaraveo*) with fishing gear called voracera in the Strait of Gibraltar
- General Secretariat for Fisheries Decision of 3 February 2016 publishing an updated census of the middle-water and deep sea fleets and longline vessels over and under 100 gross registered tonnes operating within the geographical boundaries of the Northeast Atlantic Fisheries Commission.
- General Secretariat for Fisheries Decision of 3 February 2016 publishing an update of the bottom trawl fleet census in waters of International Council for the Exploration of the Sea subzone IX subject to Portuguese sovereignty or jurisdiction.
- General Secretariat for Fisheries Decision of 5 February 2016 establishing individual fishing opportunities and individual fishing quotas for 2016, for vessels in the bottom trawl census authorised to fish in Cantabrian and Northwest fishing grounds in 2016.
- General Secretariat for Fisheries Decision of 11 February 2016 publishing a census of gillnet vessels authorised to fish for hake in the Northwest Cantabrian fishing ground during 2016 as well as the individual hake quota assigned to each one.
- General Secretariat for Fisheries Decision of 11 February 2016 publishing mackerel quotas for purse seine census vessels in 2016.
- General Secretariat for Fisheries Decision of 17 February 2016 publishing a census of bottom trawl vessels authorised to fish for Norway lobster in the Gulf of Cadiz fishing ground during 2016, as well as the individual Norway lobster quota assigned to each one.
- Order AAA/196/2016 of 18 February 2016 amending Order AAA/1512/2014 of 30 July 2014, establishing a management plan for the sardine (*Sardina pilchardus*) in Iberian waters (VIIIc and IXa) and amending Order AAA/1307/2013 of 1 July 2013 establishing a management plan for vessels in the Cantabrian and Northwest Spanish fishing ground censuses.



- General Secretariat for Fisheries Decision of 18 February 2016 publishing a census of bottom longline vessels authorised to fish for hake in the Northwest Cantabrian fishing ground during 2016 as well as the individual hake quota assigned to each one.
- Order AAA/221/2016 of 22 February 2016, establishing temporary close seasons for fishing using the bottom trawling method in certain coastal areas of the Mediterranean in the Autonomous Community of Andalusia.
- Order AAA/222/2016 of 22 February 2016, establishing temporary close seasons for fishing using the purse seine method in certain coastal areas of the Mediterranean in the Autonomous Community of Andalusia.
- Order AAA/223/2016 of 23 February 2016, establishing a temporary close season for fishing using the bottom trawling method on the coast of the Region of Murcia.
- General Secretariat for Fisheries Decision of 23 February 2016, publishing the allocation of bluefin tuna quotas and quotas for the specific census of the fleet authorised to fish for bluefin tuna.
- General Secretariat for Fisheries Decision of 23 February 2016, establishing provisions regulating the Iberian sardine fishery (*Sardina pilchardus*), which is fished in Spanish waters of ICES zone VIIIc and IXa.
- Order AAA/256/2016 of 29 February 2015, establishing temporary close seasons for fishing using the bottom trawling method in certain coastal areas of the Balearic Islands.
- General Secretariat for Fisheries Decision of 7 March 2016, publishing a census of purse seine vessels authorised to fish for anchovy in the Gulf of Cadiz fishing ground during 2016, as well as the individual anchovy quota assigned to each one.
- Order AAA/393/2016 of 16 March 2016, which recognises, for the purposes of aid, certain voluntary halts from fishing using the purse seine method in the coast of the Autonomous Community of Murcia.
- Order AAA/399/2016 of 18 March 2016, which recognises, for the purposes of aid, voluntary halts from fishing using the purse seine method in specific areas on the coast of the Autonomous Community of Valencia.
- Order AAA/400/2016 of 18 March 2016, which recognises, for the purposes of aid, voluntary halts from fishing using the purse seine method in specific areas on the coast of the Autonomous Community of Catalonia.
- General Secretariat for Fisheries Decision of 22 March 2016, publishing horse mackerel quotas for Cantabrian and Northwest purse seine census vessels in 2016.
- Order AAA/486/2016 of 31 March 2016, establishing temporary close seasons for fishing using the bottom trawling method in certain coastal areas of the Autonomous Community of Valencia.
- Order AAA/487/2016 of 31 March 2016, extending the close season established by the Order of 21 December 1999, establishing the Masía Blanca marine reserve, in front of the municipal area of El Vendrell.
- Order AAA/661/2016 of 3 April 2016, establishing landing criteria for red seabream caught in EU and international waters of VI, VII and VIII of the International Council for the Exploration of the Sea (ICES).
- Order AAA/514/2016 of 4 April 2016, establishing temporary close seasons for fishing using the bottom trawling method in certain coastal areas of the Autonomous Community of Catalonia.



- Order AAA/531/2016 of 5 April 2016, which recognises, for the purposes of aid, voluntary halts from fishing using the bottom trawling method in specific areas on the coast of the Autonomous Community of Catalonia.
- General Secretariat for Fisheries Decision of 15 April 2016 amending Decision of 2 September 2011, publishing a list of designated ports under Order ARM/2017/2011 of 11 July 2011, establishing control of vessels over landings of more than 10 t of herring, mackerel and horse mackerel.
- General Secretariat for Fisheries Decision of 26 April 2016 which establishes the census of vessels of the National Canary Islands Fishing Grounds according to the method of sea fishing.
- General Secretariat for Fisheries Decision of 4 May 2016, publishing an update of the freezer trawler fleet census.
- General Secretariat for Fisheries Decision of 4 May 2016, publishing an update of the cod fleet census.
- General Secretariat for Fisheries Decision of 4 May 2016, publishing an update of Annexes I, II, III, IV, V, VI, VII, VIII and IX of the Order of 21 December 1999 regulating the fishing activity of the Spanish fleet operating in the Northwest Atlantic Fisheries Organisation regulation zone.
- Order AAA/1136/2016 of 30 June 2016, establishing the regulatory bases for granting aid to the owners and fishermen of Spanish fishing vessels affected by the permanent cessation of fishing activities.
- General Secretariat for Fisheries Decision of 28 July 2016, amending the Decision of 23 February 2016, establishing provisions regulating the Iberian sardine fishery (*Sardina pilchardus*), which is fished in Spanish waters of ICES zone VIIIc and IXa.
- General Secretariat for Fisheries Decision of 12 August 2016, publishing a list of small-scale vessels surveyed for the Gulf of Cadiz census allowed to fish for octopus south of the 36º 22.9'N parallel (Isla de Sancti Petri) during 2016.
- Order AAA/1406/2016 of 18 August 2016, establishing a management plan for the Gulf of Cadiz National Fishing Ground census vessels:
- General Secretariat for Fisheries Decision of 5 September 2016, updating the census of vessels authorised to carry out fishing, using the bottom trawling method, in the Alborán fishing grounds and its fishing reserve.
- Order APM/1919/2016 of 7 December 2016, establishing the deadline for the submission of applications for using the exceptional method for freezer tuna seiners.
- General Secretariat of Fisheries Decision of 12 December 2016, amending Annex I of Order AAA/923/2013 of 16 May 2013, regulating the fishing of pink shrimp (*Aristeus antennatus*) with bottom trawling fishing gear in specific marine areas near Palamós.
- Order APM/1950/2016 of 22 December 2016, establishing temporary close seasons for fishing using the purse seine method in certain coastal areas of the Autonomous Community of Valencia.

Autonomous Community level

- Decision extending the clams extraction period in the level of the Clam Exploitation Plan in the Santoña Molluscan Production Zones. (Cantabria)



- Minister for the Environment, Agriculture and Fisheries Decision, approving the Adjustment Plan for the Conservation of Fishery Resources in the Waters of the Balearic Islands Affected by the Fishing carried out using Small-Scale Gear, for 2016-2018.
- Order of the President of the Agricultural-Fishery Guarantee Fund of the Balearic Islands (FOGAIBA) convening aid temporary cessation of fishing activity in the Balearic Islands for 2016.
- ORDER of 22 January 2016 which publishes the annexes of Order of 22 December 2015, which establishes a temporary closed season on the free shellfish gathering banks of the Arousa estuary (Lombos do Ulla, Boído, Cabío and other areas), regulates the bases and the convening of aid for 2016, on a competitive basis, by temporary cessation of shellfish gathering activities of the shipowners and crew of the vessels affected by this conservation measure (co-financed by the European Maritime and Fisheries Fund for 50 %). (Galicia)
- Minister of Environment, Agriculture and Fisheries Decision of 28 January 2016, regulating the temporary halts for using the bottom trawling method in the Balearic Islands.
- DECISION of 28 January 2016, authorising the Eel Fishery Plan for the fishermen's guilds of the Arousa estuary. (Galicia)
- DECISION of 28 January 2016, authorising the Eel Fishery Plan for the fishermen's guilds of the Vigo estuary. (Galicia)
- Directorate General for Fisheries and Aquaculture Decision of 15 March 2016, amending the close season for fishing for the wedge-shell (*Donax trunculus*) on the Atlantic coast of the Autonomous Community of Andalusia during 2016. (Andalusia)
- Order MED/21/2016 of 16 March 2016, establishing the regulatory bases of the aids to support first vessel purchase, targeted at young fishermen, co-funded by the European Maritime Fisheries Fund (2014-2020). (Cantabria)
- Regional Ministry of Agriculture, Environment, Climate Change and Rural Development DECISION of 23 March 2016, establishing close seasons for bottom trawling fishing in certain coastal areas of the Autonomous Community of Valencia. (Valencia)
- DECISION of 30 March 2016 authorising the Eel Fishery Plan for the fishermen's guilds of the Ferrol estuary. (Galicia)
- Order of 1 April 2016 on general fishing close seasons of the Autonomous Community of Extremadura for 2016. Ministry of Rural Development and Natural Resources Decision of 13 April 2016, approving the regulatory bases for granting public aid to owners or shipowners and crew of Asturian vessels engaged in fishing for angula, belonging to the management plan of Nalón estuary during the 2015/2016 campaign, by immobilising its activity, under the minimis scheme. (Asturias)
- Ministry of Rural Development and Natural Resources Decision of 13 April 2016, approving the regulatory bases for granting public aid to owners or shipowners and crew of Asturian vessels engaged in fishing for angula, belonging to the management plan of Nalón estuary during the 2015/2016 campaign, by immobilising its activity, under the minimis scheme (Asturias)
- Order MED/28/2016 of 27 April 2016, regulating close seasons, minimum sizes and gathering of shellfish and other species of commercial interest, during the 2016 season in the Autonomous Community of Cantabria. (Cantabria)
- General Directorate for Fisheries Development DECISION of 4 May 2016, approving the scale for access to specific resource methods in the operating permit of the vessels, as well as providing lists



and updating the merits for increasing the number of catch quotas for vessels included in a specific resource management plan. (Galicia)

- Director-General for Fisheries and the Marine Environment Decision of 9 May 2016, amending the maximum quota for professional shellfish gathering of sea nettles (*Anemonia sulcata*) on the island of Ibiza (Balearic Islands).
- Order of 12 May 2016, establishing the regulatory bases for granting of aid on a competitive basis for the temporary cessation of fishing activity of the fleet with a port in Andalusia, which operates in the National Fishing Grounds, provided in the Operational Program of the European Maritime and Fisheries Fund 2014-2020. (Andalusia)
- Ministry of Rural Development and Natural Resources Decision of 16 May 2016, approving the call for public aid to owners or shipowners and crew of angula from boarding craft. (Asturias)
- Order of 20 May 2016, by which aid provided for in the Order of 12 May 2016 is announced for 2016. It establishes the regulatory bases for the granting of aid on a competitive basis for the temporary cessation of fishing activity of the fleet with a port in Andalusia, operating in the National Fishing Grounds, provided for in the Operational Program of the European Maritime and Fisheries Fund 2014-2020. (Andalusia)
- DECREE 62/2016 of 20 May 2016, of the Council, establishing a Management Plan for fishing of bivalve molluscs with mechanised dredges in the Autonomous Community of Valencia.
- General Directorate of Agriculture, Livestock and Fisheries DECISION of 25 May 2016, which establishes and classifies the production areas of bivalve molluscs, echinoderms, tunicates and gastropods in the waters of the Autonomous Community of Valencia.
- ORDER ARP/138/2016 of 27 May 2016, approving the regulatory bases for aid to the fisheries sector in the areas of temporary cessation of fishing activities using the purse seine and bottom trawling fishing methods, in accordance with the European Maritime and Fisheries Fund, and convening aid corresponding to the temporary close seasons made in 2015 and 2016 (Catalonia)
- Order MED/34/2016 of 6 June 2016, establishing the regulatory basis for aid to support the purchase of the first vessel, aimed at young fishermen, co-funded by the European Maritime Fisheries Fund (2014-2020). (Cantabria)
- Ministry of Water, Agriculture and Environment Order of 14 June 2016, which establishes the regulatory bases for the granting of aid for temporary cessation of the fishing activity of the purse seine and/or trawler fleet of the Autonomous Community of Murcia.
- Order of 23 June 2016, convening aid for the temporary cessation of activity of the purse seine and/or trawler fleet of the Autonomous Community of Murcia for the 2016 financial year.
- Ministry of Agriculture, Environment and Rural Development Order of 23 June 2016, amending Order of 19 January 2016 on Fishing Close Seasons of 2016. (Castile-La Mancha)
- DECISION ARP/1715/2016 of 11 July 2016, convening aid targeted for the temporary cessation of fishing activities of the fishing vessels using the trawling method of the province of Tarragona during 2016 and aid for fishermen of the vessels affected by this temporary cessation, in accordance with the European Maritime and Fisheries Fund. (Catalonia)
- General Directorate for Fishing, Aquaculture and Technological Innovation DECISION of 11 July 2016, establishing a close season in the Vigo estuary for catching common cuttlefish. (Galicia)



- General Directorate for Fishing, Aquaculture and Technological Innovation DECISION of 11 July 2016, establishing a close season in the Pontevedra estuary for catching common cuttlefish. (Galicia)
- Extract of the Order of the Ministry for Rural Environment, Fisheries and Food of 18 July 2016, convening aid to support the purchase of the first vessel, aimed at young fishermen, co-funded by the European Maritime Fisheries Fund (2014-2020). (Cantabria)
- Ministry of Rural Development and Natural Resources Decision of 28 July 2016, approving the regulatory bases for granting public aid to shellfish fishers of the Villaviciosa estuary in Asturias due to cessation of their extraction activity, under the de minimis regime.
- ORDER ARP/214/2016 of 28 July 2016, amending Order ARP/138/2016 of 27 May 2016, approving the regulatory bases for aid to the fisheries sector in the areas of temporary cessation of fishing activities using the purse seine and bottom trawling fishing methods, in accordance with the European Maritime and Fisheries Fund, and convening aid corresponding to the temporary close seasons made in 2015 and 2016 (Catalonia).
- DECISION ARP/1914/2016 of 28 July 2016, amending Decision ARP/1715/2016 of 11 July 2016, convening aid targeted at the temporary cessation of fishing activities of the fishing vessels using the trawling method of the province of Tarragona during 2016 and aid for fishermen of the vessels affected by this temporary cessation, in accordance with the European Maritime and Fisheries Fund. (Catalonia)
- DECISION of 5 August 2016, of the Regional Ministry of Agriculture, Environment, Climate Change and Rural Development, convening aid for 2016 for shipowners and fishermen of fishing vessels with a port located in the Autonomous Community of Valencia, affected by the temporary cessation of fishing activity. (Valencia)
- Ministry of Rural Development and Natural Resources Decision of 31 August 2016, approving the convening of public aid to shellfish fishers of the Villaviciosa estuary due to cessation of their extraction activity, under the de minimis regime. (Asturias).
- Order MED/43/2016 of 2 September 2016, amending Order MED/23/2016 of 1 April 2016, approving the Clam Exploitation Plan in Santoña Molluscan Production Zones. (Cantabria)
- Ministry of Rural Development and Natural Resources Decision of 12 September 2016 approving the regulatory bases for public aid to the Asturian fishing sector aimed at the adaptation of the fishing fleet. (Asturias)
- ORDER of 15 September 2016 establishing the bases and regulating the procedure for the granting, on a competitive basis, of aid for investments to promote sustainable fishing for crew members of fishing vessels co-funded with the European Maritime and Fisheries Fund (EMFF), and convening of aid for 2016 (Galicia).
- ORDER of 23 September 2016, establishing the bases and regulating the procedure for the granting, on a competitive basis, of aid for investments to promote sustainable fishing for owners of fishing vessels co-funded with the European Maritime and Fisheries Fund (EMFF), and convening of aid for 2016. (Galicia)
- ORDER ARP/266/2016 of 3 October 2016, amending Order ARP/54/2016 of 11 March 2016, establishing the immersion period and weekly rest of vessels engaged in fishing with fixed net gear, longlines, snails, buckets, carriers for crustaceans and molluscs and lobster nets. (Catalonia)



- Ministry of Rural Development and Natural Resources Decision of 14 October 2016, approving the convening of public aid to shellfish fishers of the Villaviciosa estuary due to cessation of their extraction activity, under the de minimis regime. (Asturias)
- Regional Ministry of Agriculture, Environment, Climate Change and Rural Development DECISION of 21 November 2016 establishing close seasons for purse seine fishing in certain coastal areas of the Autonomous Community of Valencia.
- ORDER of 24 November 2016, amending the Order of 8 September 2006, declaring and classifying the production areas of bivalve molluscs and other marine invertebrates in the waters falling within the jurisdiction of the Autonomous Community of Galicia.
- Order of 25 November 2016, of the Ministry of Water, Agriculture and Environment, regulating the fishing of transparent goby (*Aphia minuta*) in inland waters of the Autonomous Community of Murcia.
- ORDER ARP/319/2016 of 29 November 2016, establishing certain close seasons for fishing using the purse seine method for the period 2016-2017. (Catalonia)
- Order of 30 November 2016, adopting temporary measures for the recovery and conservation of the fishing for striped venus (*Chamelea gallina*) in the Gulf of Cadiz.
- Directorate-General for Fisheries and Aquaculture Decision of 21 December 2016, announcing the extension of the validity of the management plan for fishing by trawling or mechanised dredges on the Mediterranean coast of Andalusia.
- Minister of Environment, Agriculture and Fisheries Decision of 27 December 2016, regulating the temporary halts for using the bottom trawling method in the Balearic Islands.



G. ANNEX VII: BALANCE **INDICATORS BETWEEN** **FLEET CAPACITY AND** **FISHING OPPORTUNITY**

PROCEDURE FOR ESTABLISHING ACTIVE POPULATIONS BY SUPRAREGION AND MAIN FISHING GEAR; PROCESSING OF INDICATORS

With regard to the **economic indicators**, if only Data Call data are taken into account, we obtain a distorted image of the true situation for the Spanish fleet because, given that the economic data are grouped at supraregion level, the same profitability is considered for one trawler, for example a NAFO trawler, as for a Gulf of Cadiz trawler, which is not certain. We therefore segmented the population in accordance with the fishing grounds (North Atlantic national fishing ground, rest of the North Atlantic, Mediterranean, Canary Islands and other regions) and obtained economic survey data for those segments. In this way it was possible to adjust the economic indicator (see Action Plan).

Conversely, calculation of the **biological indicator SHI**, does not necessarily unequivocally reflect the true situation of the fleet today, where the stock situation may have changed considerably due to the lack of scientific mortality rates (for example, during 2011-2013, no scientific data are available on the sardine in 27.8c, meaning that there are no biological indicators to warn of stock over-exploitation). It is difficult to find a stock for which scientific data are available for a continuous series of years, which means that a biological indicator is available for one year but not for another. For this reason, like the STECF, we considered the most recent scientific data for each stock and applied it to all the years of the study, aware that by doing this we are not assessing the effort in the capacity decrease. Furthermore, in many cases we are not aware of the mortality rates of stocks amounting to more than 40 % of the catch level, which is necessary to ensure that the indicator is reliable. This means that we do not know whether this segment is exercising high pressure on a vulnerable stock.

Furthermore, the **SAR** is not considered easily calculable because it is necessary to know the SAR stock catch rates for the other fleets (EU, International), with the level of error that this may involve. We have taken the indicator only in the sense that a segment captures 10 % weight of its SAR capture;

With regard to the **technical indicator**, there is no clear criterion with regard to the use of maximum days at sea in the segment (220, 260, true maximum, top 10 maximum, etc.). The results are very different; we decided to use the average of the 10 maximum, because this is recommended in the Economic data call, even though this data might not be sufficient either. For example, vessels with authorisations to fish in 37.2.2 in the Mediterranean increase the true maximum, making the rest of the fleet appear to be in a situation of technical under-utilisation.

The following studies are carried out for each vessel in order to stratify the active population by supraregion and fishing gear where the greatest activity was mainly exercised using the gear in question:

- For vessels measuring over 10 m in length (or vessels under 10 m with the required data), a detailed study is conducted of the CSP/VMS positions (knowledge of days at sea and vessel position when fishing–sailing) and the catch declaration databases according to the fishing method used for the greatest number of days.
- For vessels under 10 m in length, a supraregion is allocated by the method census. The fishing method is taken from the method census and if the gear is small-scale, PMP is allocated (before 2014, PGP was allocated, but this gear has now been reserved for passive gear used to fish in EU waters with gillnets and bottom longlines). Because the vessels are under 10 m and make one-day



trips, one day of fishing is allocated for each sales note day, although this data is minimal because previous studies have determined that one day of sales notes may correspond to 2.5 days of fishing at sea. The activity considered for the artisanal fleet is therefore minimal compared to the true extent. Vessels that mainly received sales notes with molluscs, with more than 50 % of their weight, are allocated DRB (dredges).

From 2014 and with the aim of being able to study the **surface longline** fleet independently and separate it from the rest of the hook gear, all the vessels that mainly fished using surface longlines have been allocated the fishing method **PGO**. This means that we can study the biological, economic and technical indicators of this fleet and separated from bottom longlines, trolling line, rod and line, etc.

On the other hand, because the Spanish fleet is so dynamic and fishes in such different fishing grounds, the fleet has been segmented in a more detailed manner, differentiating between vessels operating in the North Atlantic, those operating in Spanish fishing grounds (for 2014, vessels operating in the North West Cantabrian Sea have been separated from those fishing in the Gulf of Cadiz) and those operating in EU waters (in this case, vessels operating in ICES waters using passive gear (gillnets and bottom longline) have been allocated the method PGP) and ICES VIIIabde trawlers from NEAFC-NAFO trawlers (essentially by length).

This segmentation, which is increasingly detailed each year, means that there is no continuity throughout the years of study in many segments and it has been observed that INCONSISTENCIAS arise in the populations unless a detailed interpretation is carried out.

In order to process the indicators, we took into account data available for the Spanish fleet, with certain provisos, which are summarised below:

- During the years 2008-2009-2010, it has not been possible, without trawling error, to calculate the actual activity data (effort, catches) per vessel as required by the segmentation of the Economic data call. Therefore, only the socioeconomic indicators are available through the statistical survey (there are no technical or biological indicators for these years).
- Until 2011, the population was segmented based on licences and authorisations available to each vessel. From 2012, a detailed analysis was carried out of actual activity for each vessel, based on catch declarations, logbooks, sales notes and VMS positions. Hence the difference between the 2008- 2010 populations and the segmentation from subsequent years. In order to obtain 2011 data, we re-segmented the population based on actual activity, not licences. For this reason, the 2011 data were amended.
- Because the Spanish fleet fishes in very different fisheries and in a multitude of fishing grounds, the segmentation into only three supraregions carried out in the Economic Data Call does not provide accurate information in order to establish a balance between capacity and opportunity. Because only three supraregions are established (North Atlantic, Mediterranean and Other Fishing Regions), the economic indicators obtained, for example, for the North Atlantic trawler fleet, include very different fisheries such as the NEAFC cod fishing vessels or the NAFO trawlers that are completely unrelated to the trawlers operating in Spanish fishing grounds. For this reason, more detailed studies were conducted on the Spanish fleet, which are presented and analysed in the Action Plan. This report presents the data by the supraregions established in the Economic data call.

- In order to differentiate between the different fisheries of the Spanish fleet, each year we set out to carry out segmentation that allows us to offer data that is more in line with reality and is more detailed, and we are able to differentiate between the different fisheries.

Therefore, from 2013 (and also in 2011, the year when the population was recalculated) the criteria for allocating the gear in accordance with catch declarations were improved. In this way, vessels that were categorised in 2012 under gillnets and hook gear from 24 metres, were classified as PGP or PMP in 2011 and 2013, because the number of days spent using the main gear (hok and dfn) were not sufficiently representative for them ultimately to be allocated to this classification and they were transferred to the corresponding multipurpose category.

- In 2014, with the aim of being able to obtain indicators for the surface longline fleet essentially targeted at catches of swordfish and other migratory species, we reserved the PGO method for these surface longline vessels and this made it possible to differentiate them from the other hook gears (HOK: bottom longlines, trolling lines and rod and line...). Due to this, 2014 marked the first appearance of this gear (PGO), by a process of logic, subdivided into vessels classified as HOK.

The populations and indicators obtained based on the guidelines for 2011-2012-2013-2014-2015 are set out below.

SUPR GEAR	2011 LENGTH GROUPS							2012 LENGTH GROUPS							2013 LENGTH GROUPS							2014 LENGTH GROUPS							2015 LENGTH GROUPS							
	1	2	3	4	5	6	T 2011	1	2	3	4	5	6	T 2012	1	2	3	4	5	6	T 2013	1	2	3	4	5	6	T 2014	1	2	3	4	5	6	T 2015	
A	DFN		147	184	29		360		145	168	32	14	359		122	162	30		314		123	159	31		313		117	152	36		305					
	DRB	1.905	15	83			2.003	1.865	12	83			1.960	1.830	12	83			1.925	1.845	10	81			1.936	1.751	14	81			1.846					
	DTS		69	89	188	23	369		64	82	165	19	330		60	60	82	152	21	315		59	83	140	18	300		61	81	126	18	286				
	FPO		101	68			169		97	75			172		60	49			109		65	56			121		56	49			105					
	HOK		72	91	30	26	219	10	73	104	45	106	338		63	76	28	27	194		66	72	30	15	183		62	75	29	9	175					
	PGO																						16	33		49				14	38	52				
	PGP	1.993		55	25	76	2.149	2.017	45	35			2.097	2.030	87	50	24	71	2.262					63	63					61	61					
	PMP		65				65								30	29			59	1.993	96	64			2.153	2.016	95	68			2.179					
PS		24	123	98	97	342		31	130	97	76	334		21	127	97	96	341		20	128	98	89	335		23	122	93	91	329						
Total Active	3.898	424	673	271	387	23	5.676	3.892	403	659	256	361	19	5.590	3.860	395	636	261	346	21	5.519	3.838	380	619	258	340	18	5.453	3.767	367	608	253	325	18	5.338	
Total Inactive	787	18	29	9	22	6	871	687	19	29	9	18	6	768	624	16	29	5	16	5	695	551	17	31	3	23	4	629	590	14	23	4	13	2	646	
Total A	4.685	442	702	280	409	29	6.547	4.579	422	688	265	379	25	6.358	4.484	411	665	266	362	26	6.214	4.389	397	650	261	363	22	6.082	4.357	381	631	257	338	20	5.984	
B	DFN		99	66			165		100	71			171		85	63			148		84	63			147		45	40			85					
	DRB		73	12			85		55	14			69		35	10			45		26	12			38		33				33					
	DTS		25	174	372	160		731		27	164	346	155		692		21	161	332	147		661		21	160	327	146		654		21	152	307	135	615	
	FPO		24					24		19	15				34			17					21				21		20				20			
	HOK		77	85	17			179		81	90	30			201		55	70	27			152		55	31			86		42	23			65		
	PGO																						41	23			63			45	24			69		
	PGP	120	932	17				1.069	121	944	14				1.079	126	977	23																		
	PMP		46					46								29	13				42	118	999	27			1.144	111	1.032	52				1.195		
PS		22	95	100	26		243		23	92	93	26		234		21	91	91	24		227		20	90	89	25		224		20	90	89	25	224		
Total Active	120	1.298	449	489	186		2.542	121	1.249	460	469	181		2.480	126	1.223	448	450	171		2.418	118	1.205	445	439	171		2.378	111	1.193	422	420	160		2.306	
Total Inactive	243	310	24	11	4		592	206	284	25	11	3		529	149	250	25	13	10		447	136	209	31	14	5		395	116	195	27	9	6		353	
Total B	363	1.608	473	500	190		3.134	327	1.533	485	480	184		3.009	275	1.473	473	463	181		2.865	254	1.414	476	453	176		2.773	227	1.388	449	429	166		2.659	
C	DTS				44	31	75					55	35	90					35	29	64				39	30	69				39	33	72			
	FPO			19			19			15				15									10				10			16			16			
	HOK		24	21	17	99	30	191		30	25	12	112	30	209		23	24		96	28	171		37	26		24		87		42	31		21	94	
	PGO																							69	25	94					62	23	85			
	PGP	486	28			44		558	481	25					506	498	30	30		20		578														
	PMP																																			
	PS			23			32	55			16			32	48			13			32	45	494	26	19		10		549	492	19	17		14	542	
	Total Active	486	52	63	17	187	93	898	481	55	56	12	167	97	868	498	53	67		151	89	858	494	63	75		142	88	862	492	61	82		136	86	857
Total Inactive	263	9	6	7	30	6	321	251	13	11	8	21	5	309	179	7	6	4	28	6	230	159	5	5	4	23	8	204	146	5	3	2	23	7	186	
Total C	749	61	69	24	217	99	1.219	732	68	67	20	188	102	1.177	677	60	73	4	179	95	1.088	653	68	80	4	165	96	1.066	638	66	85	2	159	93	1.043	
Total active	4.504	1.774	1.185	777	760	116	9.116	4.494	1.707	1.175	737	709	116	8.938	4.484	1.671	1.151	711	668	110	8.795	4.450	1.648	1.139	697	653	106	8.693	4.370	1.621	1.112	673	621	104	8.501	
Total Inactive	1.293	337	59	27	56	12	1.784	1.144	316	65	28	42	11	1.606	952	273	60	22	54	11	1.372	846	231	67	21	51	12	1.228	852	214	53	15	42	9	1.185	
TOTAL	5 797	2 111	1 244	804	816	128	10 900	5 638	2 023	1 240	765	751	127	10 544	5 436	1 944	1 211	733	722	121	10 167	5 296	1 879	1 206	718	704	118	9 921	5 222	1 835	1 165	688	663	113	9 686	

INDICATORS

1.-BIOLOGICAL INDICATORS

1. A. SUSTAINABLE HARVEST INDICATOR (SHI)

This indicator measures the extent to which a fleet segment depends for its income on stocks overexploited to levels greater than MSY.

It requires scientific evaluation of stocks (mortality due to fishing and F_{msy}). When the stocks evaluated do not amount to more than 40% of the total segment catch value/weight, the indicator is not representative. This is the situation for most of the fleet segments in Spain. In particular, there are no mortality studies for multiple species fished in RFOs, for NAFO, CEFAF species, or at GSA level for the Mediterranean.

Furthermore, no study time series are available, because scientific studies sometimes only last for one year. This means that during the year for which data is not available, we do not know the results of the measures applied, and there is no indicator for years that were not studied. For example, WHB in Mediterranean GSA6 rose from 3.2 in 2011 to 9.5 in 2013 without any studies in 2012; if the indicator (with its yearly values) is applied in this way, the resulting interpretation is impossible. For this reason, we applied the mortality rate using the last available data (this is also the practice followed by the STECF; using the example of WHB, 9.5 was applied to the three years of study). However, we are aware that this is incorrect, since if the stock has been becoming more sustainable, by applying the same value every year this will not be detected.

fao	GSA	Species	Year	Fratio	STATUS
37.1.1	6	<i>Micromesistius poutassou</i> WHB	2011	3.28125	OVEREXPLOITED
37.1.1	6	<i>Micromesistius poutassou</i> WHB	2013	9.50	OVEREXPLOITED

CALCULATIONS

We used the data 'CFP-2016 techreport' produced by the STECF in 2016, updated with new Mediterranean ICES, SAC data, or rather for tuna we used the data set out in the International Seafood Sustainability Foundation report (I S S F TUNA STOCK STATUS UPDATE – 2017 Status of the World Fisheries for Tuna). The collected data have been evaluated by the scientists of the Instituto Oceanográfico Español, in order to validate the possible divergences found.

The following pages set out the values used to calculate the indicator value.

We used the following traffic light system:

Less than or equal to 1= green (biological balance)

Greater than 1 and less than 1.2 = amber (slight biological imbalance)



GOBIERNO
DE ESPAÑA

MINISTERIO
DE AGRICULTURA Y PESCA,
ALIMENTACIÓN Y MEDIO AMBIENTE

Greater than or equal to 1.2= red (biological imbalance)

NORTH ATLANTIC STUDY stock

TIPO	FishStock	F_etoile2	stock_over_exploited	AL3	division	TIPO	FishStock	F_etoile2	stock_over_exploited	AL3	division
ATL	cod-347d	1,12	TRUE	COD	27.7.d	ATL	mgb-8c9a	2,14	TRUE	MGB	27.9.a
ATL	cod-7e-k	1,51	TRUE	COD	27.7.e	ATL	MGW-78	1,13	TRUE	MGW	27.7.B
ATL	cod-7e-k	1,51	TRUE	COD	27.7.f	ATL	MGW-78	1,13	TRUE	MGW	27.7.C
ATL	cod-7e-k	1,51	TRUE	COD	27.7.g	ATL	MGW-78	1,13	TRUE	MGW	27.7.D
ATL	cod-7e-k	1,51	TRUE	COD	27.7.h	ATL	MGW-78	1,13	TRUE	MGW	27.7.E
ATL	cod-7e-k	1,51	TRUE	COD	27.7.i	ATL	MGW-78	1,13	TRUE	MGW	27.7.F
ATL	cod-7e-k	1,51	TRUE	COD	27.7.j	ATL	MGW-78	1,13	TRUE	MGW	27.7.G
ATL	cod-7e-k	1,51	TRUE	COD	27.7.k	ATL	MGW-78	1,13	TRUE	MGW	27.7.H
ATL	cod-farp	1,27	TRUE	COD	27.5.b	ATL	MGW-78	1,13	TRUE	MGW	27.7.I
ATL	cod-iris	2,91	TRUE	COD	27.7.a	ATL	MGW-78	1,13	TRUE	MGW	27.7.J
ATL	cod-scow	4,69	TRUE	COD	27.6.a	ATL	MGW-78	1,13	TRUE	MGW	27.7.K
ATL	had-346a	2,14	TRUE	HAD	27.6.a	ATL	MGW-78	1,13	TRUE	MGW	27.8.A
ATL	had-7b-k	1,3	TRUE	HAD	27.7.b	ATL	MGW-78	1,13	TRUE	MGW	27.8.B
ATL	had-7b-k	1,3	TRUE	HAD	27.7.c	ATL	MGW-78	1,13	TRUE	MGW	27.8.D
ATL	had-7b-k	1,3	TRUE	HAD	27.7.e	ATL	mgb-8c9a	1,38	TRUE	MGW	27.8.c
ATL	had-7b-k	1,3	TRUE	HAD	27.7.f	ATL	mgb-8c9a	1,38	TRUE	MGW	27.9.a
ATL	had-7b-k	1,3	TRUE	HAD	27.7.g	ATL	ple-celt	1,85	TRUE	PLE	27.7.f
ATL	had-7b-k	1,3	TRUE	HAD	27.7.h	ATL	ple-celt	1,85	TRUE	PLE	27.7.g
ATL	had-7b-k	1,3	TRUE	HAD	27.7.i	ATL	ple-echw	1,66	TRUE	PLE	27.7.e
ATL	had-7b-k	1,3	TRUE	HAD	27.7.j	ATL	sai-faro	1,81	TRUE	SAI	27.5.b
ATL	had-7b-k	1,3	TRUE	HAD	27.7.k	ATL	sol-bisc	1,34	TRUE	SOL	27.8.a
ATL	had-faro	1	TRUE	HAD	27.5.b	ATL	sol-bisc	1,34	TRUE	SOL	27.8.b
ATL	had-rock	1,07	TRUE	HAD	27.6.b	ATL	sol-celt	1,13	TRUE	SOL	27.7.f
ATL	HAD-SOTH	2,84	TRUE	HAD	27.8.C	ATL	sol-celt	1,13	TRUE	SOL	27.7.g
ATL	HAD-SOTH	2,84	TRUE	HAD	27.9.A	ATL	sol-eche	1,73	TRUE	SOL	27.7.d
ATL	hke-soth	2,1	TRUE	HKE	27.8.c	ATL	usk-icel	1,3	TRUE	USK	27.14
ATL	hke-soth	2,1	TRUE	HKE	27.9.a	ATL	usk-icel	1,3	TRUE	USK	27.5.a
ATL	lin-comb	1,08	TRUE	LIN	27	ATL	whb-comb	1,45	TRUE	WHB	27
ATL	mac-nea	1,31	TRUE	MAC	27	ATL	whg-47d	1,52	TRUE	WHG	27.7.d
ATL	mgb-8c9a	2,14	TRUE	MGB	27.8.c	ATL	whm-27	1,63	TRUE	WHM	27

MEDITERRANEAN AND TUNA STUDY STOCK

TIPO	FishStock	F_etoile2	stock_over_exploited	AL3	division	GSA
MED	anb-gsa05	6,28	TRUE	anb	37.1.1	SA 5
MED	anb-gsa06	4,8	TRUE	anb	37.1.1	SA 6
MED	anb-gsa07	3,34	TRUE	anb	37.1.2	SA 7
MED	ane-gsa01	2,26	TRUE	ane	37.1.1	SA 1
MED	ane-gsa06	0,89	FALSE	ane	37.1.1	SA 6
MED	ank-gsa01	1,6	TRUE	ank	37.1.1	SA 1
MED	ank-gsa05	10,5	TRUE	ank	37.1.1	SA 5
MED	ank-gsa06	6,5	TRUE	ank	37.1.1	SA 6
MED	ank-gsa07	3,3	TRUE	ank	37.1.2	SA 7
MED	ara-gsa01	1,8	TRUE	ara	37.1.1	SA 1
MED	ara-gsa05	1	TRUE	ara	37.1.1	SA 5
MED	ara-gsa06	1,31	TRUE	ara	37.1.1	SA 6
MED	ara-gsa09	1,97	TRUE	ara	37.1.3	
MED	ars-gsa10_11	1,5	TRUE	ars	37.1.3	
MED	CTC-GSA05	1,1	TRUE	CTC	37.1.1	SA 5
MED	dps-gsa01	1,6	TRUE	dps	37.1.1	SA 1
MED	dps-gsa05	1,2	TRUE	dps	37.1.1	SA 5
MED	dps-gsa06	5,48	TRUE	dps	37.1.1	SA 6
MED	gfb-gsa09	3,16	TRUE	gfb	37.1.3	
MED	hke-gsa01	7,5	TRUE	hke	37.1.1	SA 1
MED	hke-gsa05	7,9	TRUE	hke	37.1.1	SA 5
MED	hke-gsa06	7,8	TRUE	hke	37.1.1	SA 6
MED	hke-gsa07	12,8	TRUE	hke	37.1.2	SA 7
MED	hke-gsa09-10-11	5,26	TRUE	hke	37.1.3	
MED	mulbar-gsa01	4,9	TRUE	mut	37.1.1	SA 1
MED	mulbar-gsa05	6,2	TRUE	mut	37.1.1	SA 5
MED	mulbar-gsa06	1,24	TRUE	mut	37.1.1	SA 6
MED	mulbar-gsa07	3,2	TRUE	mut	37.1.2	SA 7
MED	mur-gsa05	3,8	TRUE	mur	37.1.1	SA 5
MED	nep-gsa01	1,6	TRUE	nep	37.1.1	SA 1
MED	nep-gsa05	1,7	TRUE	nep	37.1.1	SA 5
MED	nep-gsa06	3,93	TRUE	nep	37.1.1	SA 6
MED	occ-gsa05	1,5	TRUE	occ	37.1.1	SA 5
MED	pil-gsa01	0,66	FALSE	pil	37.1.1	SA 1
MED	pil-gsa06	1,68	TRUE	pil	37.1.1	SA 6
MED	sbr-gsa01	1,72	TRUE	sbr	37.1.1	SA 1
MED	sop-gsa01	1,65	TRUE	sop	37.1.1	SA 1
MED	sop-gsa05	1,24	TRUE	sop	37.1.1	SA 5
MED	sop-gsa06	5,525	TRUE	sop	37.1.1	SA 6
MED	swo-med	2,97	TRUE	swo	37	
MED	whb-gsa01	4	TRUE	whb	37.1.1	SA 1
MED	whb-gsa06	9,5	TRUE	whb	37.1.1	SA 6
MED	whb-gsa09	1,19	TRUE	whb	37.1.3	



TIPO	FishStock	F_etoile2	stock_over_exploited	AL3	division
TUN	AO-ALB-N	0,54	FALSE	ALB	21
TUN	AO-ALB-N	0,54	FALSE	ALB	27
TUN	AO-ALB-N	0,54	FALSE	ALB	31
TUN	AO-ALB-N	0,54	FALSE	ALB	34
TUN	AO-ALB-S	0,54	FALSE	ALB	41
TUN	AO-ALB-S	0,54	FALSE	ALB	47
TUN	AO-BET	1,28	TRUE	BET	21
TUN	AO-BET	1,28	TRUE	BET	27
TUN	AO-BET	1,28	TRUE	BET	31
TUN	AO-BET	1,28	TRUE	BET	34
TUN	AO-BET	1,28	TRUE	BET	41
TUN	AO-BET	1,28	TRUE	BET	47
TUN	AO-BFT-E	0,4	FALSE	BFT	27
TUN	AO-BFT-E	0,4	FALSE	BFT	34
TUN	AO-BFT-E	0,4	FALSE	BFT	37
TUN	AO-BFT-W	0,88	FALSE	BFT	21
TUN	AO-BFT-W	0,88	FALSE	BFT	31
TUN	AO-BFT-W	0,88	FALSE	BFT	41
TUN	AO-SKJ-W	0,7	FALSE	SKJ	21
TUN	AO-SKJ-W	0,7	FALSE	SKJ	31
TUN	AO-SKJ-W	0,7	FALSE	SKJ	41
TUN	AO-SWO-N	0,21	FALSE	SWO	21
TUN	AO-SWO-N	0,21	FALSE	SWO	27
TUN	AO-SWO-N	0,21	FALSE	SWO	31
TUN	AO-SWO-N	0,21	FALSE	SWO	34
TUN	AO-YFT	0,77	FALSE	YFT	21
TUN	AO-YFT	0,77	FALSE	YFT	27
TUN	AO-YFT	0,77	FALSE	YFT	31
TUN	AO-YFT	0,77	FALSE	YFT	34
TUN	AO-YFT	0,77	FALSE	YFT	41
TUN	AO-YFT	0,77	FALSE	YFT	47
TUN	EPO-BET	0,95	FALSE	BET	77
TUN	EPO-BET	0,95	FALSE	BET	87
TUN	EPO-YFT	0,98	FALSE	YFT	77
TUN	EPO-YFT	0,98	FALSE	YFT	87
TUN	IO-ALB	0,85	FALSE	ALB	51
TUN	IO-ALB	0,85	FALSE	ALB	57
TUN	IO-BET	0,76	FALSE	BET	51
TUN	IO-BET	0,76	FALSE	BET	57
TUN	IO-SKJ	0,62	FALSE	SKJ	51
TUN	IO-SKJ	0,62	FALSE	SKJ	57
TUN	IO-YFT	1,11	TRUE	YFT	51
TUN	IO-YFT	1,11	TRUE	YFT	57
TUN	PO-ALB-N	0,52	FALSE	ALB	61



TIPO	FishStock	F_etoile2	stock_over_exploited	AL3	division
TUN	PO-ALB-N	0,52	FALSE	ALB	67
TUN	PO-ALB-S	0,39	FALSE	ALB	81
TUN	PO-ALB-S	0,39	FALSE	ALB	87
TUN	WPO-BET	1,57	TRUE	BET	71
TUN	WPO-BET	1,57	TRUE	BET	81
TUN	WPO-SKJ	0,45	FALSE	SKJ	71
TUN	WPO-YFT	0,72	FALSE	YFT	71
TUN	WPO-YF	0,72	FALSE	YFT	81

2015 SHI INDICATOR IN NORTH ATLANTIC

FLEET_SEGMENT			capt_assessed_F_2	capt_total	ratio_F2	Fishstock_F2	VALOR_STOCK	F_etoile2	F_ETOILE2XVALOR	stock_over_exploited	SHI
ATLANTICO NORTE	DFN	18-24	8.357.876	13.213.681	63%	AO-ALB-N	4662591,90	0,54	2.517.799,62	FALSE	1,16
						AO-BET	24145,56	1,28	30.906,32	TRUE	
						hke-nrtn	10013,55	0,79	7.910,70	FALSE	
						hke-soth	2991710,34	2,10	6.282.591,71	TRUE	
						lin-comb	390,26	1,08	421,48	TRUE	
						mac-nea	663945,89	1,31	869.769,12	TRUE	
						whb-comb	5078,58	1,45	7.363,94	TRUE	
	DTS	24-40	51.404.879	123.294.587	42%	bli-5b67	64330,34	0,28	18.012,50	FALSE	1,38
						had-346a	10199,81	2,14	21.827,59	TRUE	
						had-7b-k	297,33	1,30	386,53	TRUE	
						hke-nrtn	14457312,51	0,79	11.421.276,88	FALSE	
						hke-soth	10897400,19	2,10	22.884.540,40	TRUE	
						lin-comb	466784,35	1,08	504.127,10	TRUE	
						mac-nea	6047493,56	1,31	7.922.216,56	TRUE	
						NEP-2324	5861,10	0,78	4.571,66	FALSE	
						sol-bisc	49450,22	1,34	66.263,29	TRUE	
						whb-comb	19405749,81	1,45	28.138.337,22	TRUE	
		+40	57.261.118	115.590.139	50%	bli-5b67	72019,80	0,28	20.165,54	FALSE	0,82
						cod-arct	55155396,82	0,84	46.054.756,34	FALSE	
						had-arct	978657,35	0,57	557.834,69	FALSE	
						hke-nrtn	391736,57	0,79	309.471,89	FALSE	
					lin-comb	1149,01	1,08	1.240,93	TRUE		
					mac-nea	560,80	1,31	734,65	TRUE		
					RNG-5B67	641149,04	0,25	160.287,26	FALSE		
					sol-bisc	19132,75	1,34	25.637,89	TRUE		
					whb-comb	1316,32	1,45	1.908,66	TRUE		
HOK	10-12	1.580.555	3.716.895	43%	AO-ALB-N	143830,38	0,54	77.668,41	FALSE	1,65	
					AO-BET	39452,93	1,28	50.499,75	TRUE		
					hke-nrtn	9029,58	0,79	7.133,37	FALSE		
					hke-soth	817198,79	2,10	1.716.117,46	TRUE		



FLEET_SEGMENT			capt_assessed_F_2	capt_total	ratio_F2	Fishstock_F2	VALOR_STOCK	F_etoile2	F_ETOILE2XVALOR	stock_over_exploited	SHI
						lin-comb	369,38	1,08	398,93	TRUE	1,32
						mac-nea	565229,64	1,31	740.450,83	TRUE	
						sol-bisc	30,54	1,34	40,92	TRUE	
						whb-comb	5402,87	1,45	7.834,16	TRUE	
						whm-27	10,62	1,63	17,31	TRUE	
	12-18	6.088.556	10.164.141	60%	AO-ALB-N	2297554,31	0,54	1.240.679,33	FALSE	1,32	
					AO-BET	144246,73	1,28	184.635,81	TRUE		
					hke-nrtn	40683,85	0,79	32.140,24	FALSE		
					hke-soth	2384187,30	2,10	5.006.793,33	TRUE		
					lin-comb	366,15	1,08	395,44	TRUE		
					mac-nea	1206653,42	1,31	1.580.715,98	TRUE		
					whb-comb	14839,23	1,45	21.516,88	TRUE		
	whm-27	24,51	1,63	39,95	TRUE						
	18-24	5.959.231	8.069.223	74%	AO-ALB-N	4274493,29	0,54	2.308.226,38	FALSE	0,84	
					AO-BET	26381,20	1,28	33.767,94	TRUE		
					HAD-SOTH	154,75	2,84	439,49	TRUE		
					hke-soth	652874,36	2,10	1.371.036,16	TRUE		
					lin-comb	31,27	1,08	33,77	TRUE		
					mac-nea	996265,44	1,31	1.305.107,73	TRUE		
					whb-comb	9030,73	1,45	13.094,56	TRUE		
	24-40	3.459.344	4.546.311	76%	AO-ALB-N	2898859,30	0,54	1.565.384,02	FALSE	0,67	
					AO-BET	6457,73	1,28	8.265,89	TRUE		
					hke-soth	1651,39	2,10	3.467,92	TRUE		
					mac-nea	552375,13	1,31	723.611,42	TRUE		
	PGO	18-24	2.744.172	52%	5.317.203	AO-ALB-N	585954,67	0,54	316.415,52	FALSE	0,52
AO-BET					55776,64	1,28	71.394,10	TRUE			
AO-SWO-N					1886829,08	0,21	396.234,11	FALSE			
swo-med					215297,81	2,97	639.434,50	TRUE			
whm-27					314,23	1,63	512,19	TRUE			
PGO	24-40	20.371.315	46%	44.363.607	AO-ALB-N	1574231,32	0,54	850.084,91	FALSE	0,34	
				AO-BET	2052887,27	1,28	2.627.695,71	TRUE			
				AO-SWO-N	16743991,05	0,21	3.516.238,12	FALSE			
				AO-YFT	194,64	0,77	149,87	FALSE			
				whm-27	10,39	1,63	16,94	TRUE			
PGP	24-40	86.079.046	95%	90.954.272	AO-ALB-N	3050123,88	0,54	1.647.066,90	FALSE	0,79	
				AO-BET	4702,69	1,28	6.019,44	TRUE			
				bli-5b67	75917,21	0,28	21.256,82	FALSE			
				hke-nrtn	80640956,51	0,79	63.706.355,64	FALSE			
				hke-soth	522,99	2,10	1.098,28	TRUE			
				lin-comb	2306822,34	1,08	2.491.368,12	TRUE			
PMP	12-18	3.130.864	44%	7.129.973	AO-ALB-N	1687437,16	0,54	911.216,07	FALSE	0,96	
				AO-BET	85409,13	1,28	109.323,69	TRUE			



FLEET_SEGMENT			capt_assessed_F_2	capt_total	ratio_F2	Fishstock_F2	VALOR_STOCK	F_etoile2	F_ETOILE2XVALOR	stock_over_exploited	SHI
						AO-BFT-E	1694,11	0,40	677,64	FALSE	
						HAD-SOTH	345,43	2,84	981,02	TRUE	
						hke-nrtn	80070,19	0,79	63.255,45	FALSE	
						hke-soth	325255,08	2,10	683.035,67	TRUE	
						lin-comb	35,21	1,08	38,03	TRUE	
						mac-nea	946171,74	1,31	1.239.484,98	TRUE	
						sol-bisc	3323,68	1,34	4.453,73	TRUE	
						whb-comb	1122,24	1,45	1.627,25	TRUE	

ANALYSIS OF SUSTAINABLE HARVEST INDICATOR IN THE NORTH ATLANTIC

GEAR	LENGTH	2011	2012	2013	2014	2015	2015 VESSELS
DFN	18-24		1,40	1,64	1,82	1,16	36
	24-40		1,01				
DTS	24-40					1,38	126
	>40					0,82	18
HOK	10-12		1,53		2,04	1,65	62
	12-18	1,36	1,32	1,44	2,01	1,32	75
	18-24		1,02	1,10	1,24	0,84	29
	24-40	0,82	0,93	0,82	0,92	0,67	9
PGO	18-24				0,92	0,52	14
	24-40				0,83	0,34	38
PGP	12-18	1,12					
	18-24	0,90		0,87			
	24-40	0,99		0,99	1,22	0,79	61
PMP	10-12	0,85					95
	12-18				1,25	0,96	68

In general, we observe that the Spanish fleet is less dependent in 2015 on overexploited stocks, improving its biological indicator in practically all the strata, except the 24-40 trawl that for the first time depends economically on overexploited stocks.

SEGMENTS DEPENDENT ON STOCKS AT RISK:

- the 18-24 gillnets (bottom-set gillnet fishing gear), dependent on the stock of southern hake, having improved their imbalance with respect to 2014, in the 24-40 length, did not reach 40 % of catches of evaluated stock
- the 24-40 trawls (mainly CNW bottom trawls), showing a high dependence on overexploited stocks (blue whiting and southern hake), in the length >40 (mainly NAFO freezer trawlers) do not rely on overexploited stocks, since their biological indicator is balanced.



- Hooks measuring 10-18 in length, mainly made up of vessels using small-scale gear fishing overexploited stocks (southern hake and mackerel), have decreased their dependency on such stock when compared to 2014, the 18-24 lengths improved their situation in relation to the previous year, are not economically dependent on overexploited stocks, the hooks measuring 24-40 in length are dependent on tuna (ALB, BET), which have an indeterminate mortality rate or are not overexploited, meaning that the latter segment is not financially dependent on overexploited stocks.
- Surface longline vessels fishing in waters of the North Atlantic, show little dependency on overexploited species because they fish for species with balanced mortality rates based on studies (ALB-N,BET, SWO-N), meaning that their biological indicator is balanced, thus improving in relation to 2014.
- Fixed gear PGP 24-40 (longliners of less than 100 GRT and gillnets fishing in EU ICES area waters) regain the balance shown in 2013, and are mainly dependent on the northern HKE stock, the assessment of which shows a non-overexploited stock (AO-ALB-N)

SHI INDICATOR IN THE MEDITERRANEAN

FLEET_SEGMENT			capt_assessed_F_2	capt_totale	ratio_F_2	Fishstock_F2	VALOR_STOCK	F_etoile2	F_ETOILE2XVALOR	stock_over_exploited	SHI
MEDITERRANEO	DTS	18-24	37.338.377	75.089.081	50%	anb-gsa06	3,52	4,8	16,89	TRUE	3,52
						ane-gsa01	502,58	2,26	1.135,83	TRUE	
						ane-gsa06	64.088,11	0,89	57.038,42	FALSE	
						ank-gsa05	27.877,70	10,5	292.715,85	TRUE	
						ank-gsa06	112.783,45	6,5	733.092,43	TRUE	
						ank-gsa07	316,21	3,3	1.043,49	TRUE	
						ara-gsa01	4.057.378,58	1,8	7.303.281,44	TRUE	
						ara-gsa05	2.747.705,94	1	2.747.705,94	TRUE	
						ara-gsa06	9.018.625,69	1,31	11.814.399,65	TRUE	
						ara-gsa09	89.583,02	1,97	176.478,55	TRUE	
						ars-gsa10_11	67.307,69	1,5	100.961,54	TRUE	
						CTC-GSA05	13.856,63	1,1	15.242,29	TRUE	
						dps-gsa01	1.181.941,76	1,6	1.891.106,82	TRUE	
						dps-gsa05	28.657,46	1,2	34.388,95	TRUE	
						dps-gsa06	1.776.642,53	5,48	9.736.001,06	TRUE	
						hke-gsa01	718.969,79	7,5	5.392.273,43	TRUE	
						hke-gsa05	393.675,41	7,9	3.110.035,74	TRUE	
						hke-gsa06	5.760.190,69	7,8	44.929.487,38	TRUE	
						hke-gsa07	552.003,09	12,8	7.065.639,55	TRUE	
						mulbar-gsa01	256.709,35	4,9	1.257.875,82	TRUE	
mulbar-gsa05	70.957,83	6,2	439.938,55	TRUE							
mulbar-gsa06	2.183.435,25	1,24	2.707.459,71	TRUE							
mulbar-gsa07	106.215,89	3,2	339.890,85	TRUE							



						mur-gsa05	229.179,69	3,8	870.882,82	TRUE	
						nep-gsa01	1.032.803,96	1,6	1.652.486,34	TRUE	
						nep-gsa05	374.231,37	1,7	636.193,33	TRUE	
						nep-gsa06	5.131.000,46	3,93	20.164.831,81	TRUE	
						occ-gsa05	326.231,59	1,5	489.347,39	TRUE	
						pil-gsa01	3.030,42	0,66	2.000,08	FALSE	
						pil-gsa06	51.679,37	1,68	86.821,34	TRUE	
						sbr-gsa01	48.072,35	1,72	82.684,44	TRUE	
						swo-med	322,84	2,97	958,83	TRUE	
						whb-gsa01	252.300,88	4	1.009.203,52	TRUE	
						whb-gsa06	660.095,88	9,5	6.270.910,86	TRUE	
						ane-gsa01	140,02	2,26	316,45	TRUE	3,39
						ane-gsa06	222.139,87	0,89	197.704,48	FALSE	
						ank-gsa01	78,97	1,6	126,35	TRUE	
						ank-gsa06	92.994,49	6,5	604.464,19	TRUE	
						ank-gsa07	132,80	3,3	438,24	TRUE	
						ara-gsa01	2.365.835,19	1,8	4.258.503,34	TRUE	
						ara-gsa05	1.276.989,74	1	1.276.989,74	TRUE	
						ara-gsa06	12.584.439,53	1,31	16.485.615,78	TRUE	
						CTC-GSA05	2.111,03	1,1	2.322,13	TRUE	
						dps-gsa01	289.418,58	1,6	463.069,73	TRUE	
						dps-gsa05	13.740,15	1,2	16.488,18	TRUE	
						dps-gsa06	927.767,60	5,48	5.084.166,45	TRUE	
						hke-gsa01	299.846,45	7,5	2.248.848,38	TRUE	
						hke-gsa05	109.422,60	7,9	864.438,54	TRUE	
						hke-gsa06	5.099.351,35	7,8	39.774.940,55	TRUE	
						hke-gsa07	513.229,72	12,8	6.569.340,42	TRUE	
						hke-soth	3,06	2,1	6,43	TRUE	
						mulbar-gsa01	64.621,66	4,9	316.646,13	TRUE	
						mulbar-gsa05	9.807,66	6,2	60.807,49	TRUE	
						mulbar-gsa06	1.299.121,79	1,24	1.610.911,02	TRUE	
						mulbar-gsa07	84.494,62	3,2	270.382,78	TRUE	
						mur-gsa05	24.383,31	3,8	92.656,58	TRUE	
						nep-gsa01	151.241,46	1,6	241.986,34	TRUE	
						nep-gsa05	91.495,42	1,7	155.542,21	TRUE	
						nep-gsa06	2.911.437,21	3,93	11.441.948,24	TRUE	
						occ-gsa05	15.238,80	1,5	22.858,20	TRUE	
						pil-gsa01	1.473,79	0,66	972,7	FALSE	
						pil-gsa06	108.807,54	1,68	182.796,67	TRUE	
						sbr-gsa01	23.169,43	1,72	39.851,42	TRUE	
						swo-med	156,75	2,97	465,55	TRUE	
						whb-gsa01	47.531,87	4	190.127,48	TRUE	



PGO	12-18	7.530.271	7.921.049	95%	whb-gsa06	759.729,61	9,5	7.217.431,29	TRUE	2,79	
					AO-ALB-N	463,69	0,54	250,39	FALSE		
					AO-BFT-E	434.880,51	0,4	173.952,20	FALSE		
					AO-SWO-N	39.046,87	0,21	8.199,84	FALSE		
					hke-gsa06	7,00	7,8	54,6	TRUE		
					mulbar-gsa06	2.355,32	1,24	2.920,60	TRUE		
					sbr-gsa01	120.316,82	1,72	206.944,93	TRUE		
	sw0-med	6.933.200,63	2,97	20.591.605,87	TRUE						
	18-24	9.083.083	9.723.216	93%	AO-ALB-N	99,65	0,54	53,81	FALSE	2,39	
					AO-BET	6.364,59	1,28	8.146,68	TRUE		
					AO-BFT-E	130.002,12	0,4	52.000,85	FALSE		
					AO-SWO-N	1.781.531,11	0,21	374.121,53	FALSE		
					sbr-gsa01	21.156,29	1,72	36.388,82	TRUE		
					sw0-med	7.143.929,60	2,97	21.217.470,91	TRUE		
	PS	12-18	15.217.240	21.631.562	70%	anb-gsa06	1,27	4,8	6,11	TRUE	1,13
						ane-gsa01	1.455.199,40	2,26	3.288.750,64	TRUE	
						ane-gsa06	5.143.503,95	0,89	4.577.718,52	FALSE	
						AO-BFT-E	77.612,25	0,4	31.044,90	FALSE	
						hke-gsa01	120,72	7,5	905,4	TRUE	
						hke-gsa06	114,81	7,8	895,52	TRUE	
						mulbar-gsa01	366,02	4,9	1.793,50	TRUE	
mulbar-gsa06						14,25	1,24	17,67	TRUE		
pil-gsa01						5.004.668,04	0,66	3.303.080,91	FALSE		
pil-gsa06						3.498.212,26	1,68	5.876.996,60	TRUE		
sbr-gsa01						37.271,32	1,72	64.106,67	TRUE		
whb-gsa06		155,55	9,5	1.477,73	TRUE						
18-24		26.396.587	32.379.321	82%	ane-gsa01	3.529.220,77	2,26	7.976.038,93	TRUE	1,2	
					ane-gsa06	12.516.279,78	0,89	11.139.489,00	FALSE		
	pil-gsa01				4.754.434,26	0,66	3.137.926,61	FALSE			
	pil-gsa06				5.553.795,52	1,68	9.330.376,47	TRUE			
	sbr-gsa01				42.586,25	1,72	73.248,35	TRUE			
whb-gsa06	270,39	9,5	2.568,71	TRUE							
24-40	18.181.788	18.850.238	96%	ane-gsa06	5.074.944,94	0,89	4.516.701,00	FALSE	0,66		
				AO-BFT-E	11.340.811,65	0,4	4.536.324,66	FALSE			
				hke-gsa06	1.244,51	7,8	9.707,18	TRUE			
				mulbar-gsa06	607,04	1,24	752,73	TRUE			
					pil-gsa06	1.764.179,69	1,68	2.963.821,88	TRUE		

**ANALYSIS OF SUSTAINABLE HARVEST INDICATOR IN THE MEDITERRANEAN**

GEAR	LENGTH	2011	2012	2013	2014	2015	2015 VESSELS
DTS	18-24	5,47	5,25	5,22	5,30	3,52	307
	24-40	5,91	5,52	5,58	5,65	3,39	135
HOK	6-12	2,98	2,30	2,30			
	12-18	2,06	1,84	2,00	3,98		
	18-24	1,79	1,60	1,69			
PGO	12-18				1,71	2,79	45
	18-24				1,62	2,39	24
PGP	12-18	1,36					
PS	12-18	1,07	1,04	1,25	1,10	1,13	90
	18-24	1,12	1,08	1,22	1,17	1,20	89
	24-40	0,75	0,59	0,67	0,65	0,66	25

Imbalance is observed with financial dependency on overexploited stock:

- Trawlers in the 18-24 and 24-40 length; this fleet has declined by 31 vessels (20 ships with 18-24 length, 11 ships with 24-40 length); an increase in the captures of the overexploited stocks NEP GSA06, DPS-GSA06, ARA GSA06, ARA GSA05, ARA GSA01, MULBAR GSA 06 is noted making these trawlers highly dependent on overexploited species.
- Because catches by 12-24 m surface longliners amounted to more than 80 % of SWO (they increased in terms of both segments in relation to 2014), due to the overexploited status assigned by ICCAT for swordfish, both segments are imbalanced.
- Purse seiners of 12-24; there is a certain improvement in the situation, with decreases in all catches of overexploited stocks, those with 18-24 length show a clear deterioration, due to the increase of catches of common seabream in GSA01 and blue whiting in the GSA06, the stratum of 24-40 length is composed of 25 vessels, including the 6 bluefin tuna purse seiners, showing a good situation. This segment is highly dependent on BFT –E, not overexploited stock, although there high catches of PIL GSA06 are made, highly overexploited (despite a decrease in the total volume of catches compared to 2014, it is still a fleet dependent on such stock).

SHI INDICATOR IN OTHER WATERS



FLEET_SEGMENT		capt_assessed_F_2	capt_tota_1	ratio_F_2	Fishstock_F_2	VALOR_STOC_K	F_etoile_2	F_ETOILE2XVALOR	stock_over_exploited	SHI	
OTHER FISHING REGIONS	HOK	10-12	1.448.201	3.186.755	45%	AO-ALB-N	1005974,86	0,54	543.226,42	FALSE	0,61
						AO-BET	128836,47	1,28	164.910,68	TRUE	
						AO-BFT-E	268697,83	0,40	107.479,13	FALSE	
						AO-YFT	16459,35	0,77	12.673,70	FALSE	
						sbr-gsa01	28232,34	1,72	48.559,62	TRUE	
	HOK	12-18	1.946.421	4.312.349	45%	AO-ALB-N	1099139,48	0,54	593.535,32	FALSE	0,83
						AO-BET	209767,17	1,28	268.501,98	TRUE	
						AO-BFT-E	260590,27	0,40	104.236,11	FALSE	
						AO-YFT	1012,28	0,77	779,46	FALSE	
						sbr-gsa01	375912,06	1,72	646.568,74	TRUE	
	HOK	24-40	7.049.011	12.338.626	57%	AO-ALB-N	540820,32	0,54	292.042,97	FALSE	0,97
						AO-BET	2897020,81	1,28	3.708.186,64	TRUE	
						AO-BFT-E	32503,61	0,40	13.001,44	FALSE	
						AO-YFT	3548390,40	0,77	2.732.260,61	FALSE	
						hke-soth	30276,33	2,10	63.580,29	TRUE	
	PMP	12-18	1.426.352	1.718.953	83%	AO-ALB-N	872306,73	0,54	471.045,63	FALSE	0,78
						AO-BET	472543,12	1,28	604.855,19	TRUE	
						AO-BFT-E	79496,24	0,40	31.798,50	FALSE	
						AO-SWO-N	1094,53	0,21	229,85	FALSE	
						AO-YFT	911,04	0,77	701,50	FALSE	
	PMP	24-40	3.596.753	3.795.589	95%	AO-ALB-N	1852129,09	0,54	1.000.149,71	FALSE	0,89
						AO-BET	1701413,73	1,28	2.177.809,57	TRUE	
						AO-BFT-E	42920,24	0,40	17.168,10	FALSE	
						AO-YFT	290,08	0,77	223,36	FALSE	
	PS	+40	371.022.868	393.696.042	94%	AO-ALB-N	134191,61	0,54	72.463,47	FALSE	0,99
						AO-BET	23073284,43	1,28	29.533.804,07	TRUE	
						AO-SKJ-W	82834,84	0,70	57.984,39	FALSE	
						AO-YFT	85875951,98	0,77	66.124.483,02	FALSE	
EPO-BET						6331739,90	0,95	6.015.152,91	FALSE		
EPO-YFT						4804281,34	0,98	4.708.195,71	FALSE		
IO-ALB						516138,89	0,85	438.718,06	FALSE		
IO-BET						34043213,79	0,76	25.872.842,48	FALSE		
IO-SKJ						10127376,06	0,62	6.278.973,16	FALSE		
IO-YFT						204958487,20	1,11	227.503.920,79	TRUE		
WPO-BET						185495,51	1,57	291.227,95	TRUE		
WPO-SKJ						511419,97	0,45	230.138,99	FALSE		
WPO-YFT	378452,20	0,72	272.485,58	FALSE							

CALCULATING SHI INDICATORS FOR OTHER REGIONS							
GEAR	LENGTH	2011	2012	2013	2014	2015	2015 VESSELS
HOK	10-12			0,72		0,61	42
	12-18		0,75	1,37		0,83	31
	18-24	1,24				0,97	21
PMP	12-18			0,77	0,78	0,78	17
	24-40	0,90		0,88	0,86	0,89	14
PS	>40	0,72	0,71	0,68	0,70	0,99	30

Hooks measuring 10-24 in length are in biological balance, although the stratum 18-24 shows a fragile balance, mainly due to the catches of bigeye tuna, stock that is overexploited.

It is observed that large freezer seiners, although their situation is balanced, by 2015 increased their catches of stocks at risk considerably, mainly because the stocks AO-BET and IO-YFT are overexploited this year, therefore the indicator is at the limit of biological balance.

Multipurpose segments of the Canary Islands are balanced, although their situation is deteriorating, since they are dependent on AO-BET, overexploited stock.

1.B. STOCK AT RISK (SAR) INDICATOR

For this indicator, we considered high risk species to be those included in the STECF report 14-09 Balance indicators all tables_JRC90403 for each study year (2011-2012-2013-2014). We considered that a segment is imbalanced when 10 % of its catches are of a high-risk stock; WE ALSO TOOK INTO ACCOUNT THE OVEREXPLOITATION DETERMINED BY ICES 2014 OF PIL STOCK IN 27.8C and 9A. In 2013, many strata that owe 10 % of their catches to MAC in 27-8, were evaluated as high-risk stock until 2014. However, in 2015, ICES rectified its assessment of this stock and does not consider it high risk;

For the Mediterranean, we considered species that, in our customary catch areas (GSA 1, 5,6 and 7), have a fish mortality/FMSY >5 to be high risk in addition to those determined by the STECF and CITES species.

The list of species at Risk has been corrected with the SAR species included on pages 186 to 189 of the 'Assessment of balance indicators for key fleet segments and review of national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities (STECF-16-18)'



AL3	NAME	DIVISION	GSA	STOCK_SHAR
AGN	Angel shark	27		AGN-27
ANE	Anchovy	37.1.2	SA 7	ANE-37.1.2
BLI	Blue ling	27.8		BLI-27.8
BLI	Blue ling	27.9		BLI-27.9
BSH	BLUE SHARK	27		BSH-27
BSH	BLUE SHARK	37		BSH-37
CCT	SAND TIGER SHARK	37		CCT-37
DGS	Spurdog/dogfish	27.8		DGS-27.8
ELE	European eel	27		ELE-27
ELE	European eel	37		ELE-37
GAG	CAZON	27.8		GAG-27.8
GAG	CAZON	27.9		GAG-27.9
GUN	PIPER GURNARD	27		GUC-27
HAD	Haddock	27.6.A		HAD-27.6.A
HKE	European hake	37.1.1	SA 6	HKE-37.1.1-SA 6
HKE	European hake	37.1.2	SA 7	HKE-37.1.2
HKE	European hake	37.1.3		HKE-37.1.3
MPO	BULL RAY	27.9		MPO-27.9
NEP	NORWAY LOBSTER	27.8.C		NEP-27.8.C
NEP	NORWAY LOBSTER	27.9.A		NEP-27.9.A
ORY	Orange roughy	27		ORY-27
ORY	Orange roughy	47		ORY-47
PIL	European sardine	27.8.c		PIL-27.8.c
PIL	European sardine	27.9.a		PIL-27.9.a
PIL	European sardine	37.1.1	SA 6	PIL-37.1.1-SA 6
POR	Porbeagle	27		POR-27
POR	Porbeagle	37		POR-37
REB	Redfish	27.2		REB-27.2
RGL	Butterfly ray	37		RGL-37
SBR	RED SEABREAM	27.7		SBR-27.7
SBR	RED SEABREAM	27.8		SBR-27.8
SOL	Common sole	27.8.b		SOL-27.8.b
SUA	SAWBACK ANGELSHARK	27.9		SUA-27.9

We did not consider whether more than 10 % of the entire stock was fished by fleets from other countries, because we do not actually have this information until the STECF tables evaluating the data for the other Member States are published (and the information would be incomplete, because we do not know the stocks fished by other non-EU countries).

2011-2015 SAR RESULTS



	SUPRA	GEAR	LENGTH	FISHSTOCK_SHAR	TOT_WEIGHT	TOT_STRATUM_WEIGHT	PERCENT
2011	NORTH ATL	PS	10-dic	PIL-27.9.A	207.058,50	1.395.580,34	14,84%
			dic-18	PIL-27.9.A	6.027.086,25	20.385.387,42	29,57%
			18-24	PIL-27.9.A	7.309.375,95	38.371.859,20	19,05%
	MED	DTS	24-40	HKE-37.1.1-SA 6	1.201.313,53	7.454.258,85	16,12%
2012	NORTH ATL	PS	dic-18	PIL-27.9.A	5.023.190,61	21.999.621,55	22,83%
			18-24	PIL-27.8.C	3.766.398,36	35.877.226,03	10,50%
			18-24	PIL-27.9.A	4.423.488,14	35.877.226,03	12,33%
2013	NORTH ATL	DFN	10-dic	MAC-27.8	377.535,25	1.970.406,26	19,16%
			dic-18	MAC-27.8	1.380.464,20	6.060.991,12	22,78%
		FPO	dic-18	MAC-27.8	86.939,30	864.103,24	10,06%
		HOK	10-dic	MAC-27.8	540.896,77	1.619.824,24	33,39%
			dic-18	MAC-27.8	910.867,61	3.606.694,90	25,25%
		PGP	10-dic	MAC-27.8	459.122,20	997.428,15	46,03%
	dic-18		MAC-27.8	303.713,02	1.331.069,41	22,82%	
	MED	PS	dic-18	PIL-27.9.A	6.309.866,76	23.562.255,00	26,78%
			18-24	PIL-27.9.A	4.573.678,83	34.262.041,87	13,35%
		DTS	24-40	HKE-37.1.1-SA 6	1.051.521,39	6.524.303,59	16,12%
		PS	dic-18	PIL-37.1.1-SA 6	2.114.120,97	17.418.419,18	12,14%
			18-24	PIL-37.1.1-SA 6	3.751.962,89	23.656.968,35	15,86%
24-40			PIL-37.1.1-SA 6	1.321.386,04	5.883.973,12	22,46%	
2014	NORTH ATLANTIC	DFN	10-dic	MAC-27.8	1.305.284,51	2.760.011,76	47,29%
			dic-18	MAC-27.8	2.559.571,82	6.985.928,80	36,64%
			18-24	MAC-27.8	665.168,06	4.192.947,60	15,86%
		DTS	24-40	MAC-27.8	9.761.074,95	75.162.119,01	12,99%
		FPO	dic-18	MAC-27.8	158.522,40	943.175,36	16,81%
		HOK	10-dic	MAC-27.8	1.324.907,66	2.267.746,37	58,42%
			dic-18	MAC-27.8	1.940.181,35	4.232.491,74	45,84%
			18-24	MAC-27.8	2.120.428,77	4.451.417,54	47,63%
			24-40	MAC-27.8	1.484.724,20	3.679.643,61	40,35%
		PMP	00-10	MAC-27.8	1.801.533,66	9.259.929,34	19,46%
			10-dic	MAC-27.8	660.339,70	1.860.990,48	35,48%
			dic-18	MAC-27.8	1.294.830,27	3.201.498,26	40,44%
	PS	dic-18	PIL-27.9.a	4.217.748,38	27.810.734,10	15,17%	
		24-40	MAC-27.8	7.167.460,70	51.822.974,99	13,83%	
	MEDITERRANEAN	DTS	24-40	HKE-37.1.1-SA 6	853.528,27	5.364.565,70	15,91%
dic-18			PIL-37.1.1-SA 6	2.354.507,49	18.252.661,42	12,90%	
PS		18-24	PIL-37.1.1-SA 6	3.951.798,35	22.563.771,22	17,51%	
		24-40	PIL-37.1.1-SA 6	1.475.405,51	5.906.032,08	24,98%	



2015	NORTH ATLANTIC	PGO	18-24	BSH-27	2.191.127,68	2.787.149,14	78,62%
			24-40	BSH-27	8.357.084,60	25.588.902,80	32,66%
	MEDITERRANEAN	DTS	24-40	HKE-37.1.1-SA 6	655.589,45	5.987.364,34	10,95%
		PS	12-18	PIL-37.1.1-SA 6	1.817.150,38	15.056.163,81	12,07%
		PS	18-24	PIL-37.1.1-SA 6	2.884.925,33	21.535.923,50	13,40%
		PS	24-40	PIL-37.1.1-SA 6	916.405,10	5.973.536,50	15,34%

For 2015, it is observed that in the NORTH ATLANTIC, surface longliners (lengths 18-40) fish more than 10 % of BSH stock at risk. On the other hand, there is a decreasing tendency of PIL catches in 27.9.1, where no stratum reaches 10 %, which is contributing decisively to the recovery of the stock (from 7 391 tonnes in 2014 to 4 994 tonnes in 2015).

With regard to the MEDITERRANEAN, the situation also improved due to a reduction in HKE from gsa06 as well as PIL in the same GSA (from 7 781 tonnes in 2014 to 5 618 tonnes in 2015)

2- FLEET OPERABILITY INDICATORS

2. A--INACTIVITY INDICATOR

This is calculated using vessels that did not operate for any days during the year. They were classified by length segments and supraregions according to the census method, which is most approximate to where they would have carried out their activities if they had fished. Under normal conditions, 20 % of the current fleet may have been expected to be inactive for repairs, conversions, pending sales and so on; if more than 20 % is inactive, this reveals a possible imbalance.

2008		0-10	10-12	12-18	18-24	24-40	> 40	TOTAL	TOTAL GT	TOTAL KW	
NORTH ATLANTIC	active subtotal	3.555	421	718	311	509	42	5.556	199.707,00	435.620,00	
	INAC	2.267	37	47	2	8	1	2.362	5.611,57	26.928,01	
	TOTAL	5.822	458	765	313	517	43	7.918	205.318,57	462.548,01	
	% inactive	38,94	8,08	6,14	0,64	1,55	2,33	29,83	2,73	5,82	
MEDITERRANEA	active subtotal	246	1.506	547	613	209		3.121	78.219,00	302.923,00	
	INAC	383	282	32	20	5		722	3.273,79	18.690,35	
	TOTAL	629	1.788	579	633	214		3.843	81.492,79	321.613,35	
	% inactive	60,89	15,77	5,53	3,16	2,34		18,79	4,02	5,81	
OTHER WATERS	active subtotal	697	69	48	18	187	107	1.126	181.171,00	277.354,00	
	INAC	204	10	8	2	3	1	228	2.099,67	6.339,82	
	TOTAL	901	79	56	20	190	108	1.354	183.270,67	283.693,82	
	% inactive	22,64	12,66	14,29	10,00	1,58	0,93	16,84	1,15	2,23	
INACTIVE		2.854	329	87	24	16	2	3.312	10.985,03	51.958,18	
TOTAL		7.352	2.325	1.400	966	921	151	13.115	470.082,03	1.067.855,18	
% inactive		38,82	14,15	6,21	2,48	1,74	1,32	25,25	2,34	4,87	
								Active	9.803	459.097,00	1.015.897,00
								Inactive	3.312	10.985,03	51.958,18
								TOTAL	13.115	470.082,03	1.067.855,18



2009		0-10	10-12	12-18	18-24	24-40	> 40	TOTAL	TOTAL GT	TOTAL KW		
NORTH ATLANTIC	active subtotal	3.532	420	708	351	436	41	5.488	194.639,44	422.867,11		
	INAC	1.238	26	26	1	3	3	1.297	5.014,40	19.801,93		
	TOTAL	4.770	446	734	352	439	44	6.785	199.653,84	442.669,04		
	% inactive	25,95	5,83	3,54	0,28	0,68	6,82	19,12	2,51	4,47		
MEDITERRANEAN	active subtotal	236	1.495	539	582	227		3.079	76.746,62	294.562,72		
	INAC	167	205	16	7	2		397	1.478,33	10.052,10		
	TOTAL	403	1.700	555	589	229		3.476	78.224,95	304.614,82		
	% inactive	41,44	12,06	2,88	1,19	0,87		11,42	1,89	3,30		
OTHER WATERS	active subtotal	695	61	64	23	177	96	1.116	178.868,87	273.524,58		
	INAC	104	8	4	1	6	1	124	2.717,06	6.445,97		
	TOTAL	799	69	68	24	183	97	1.240	181.585,93	279.970,55		
	% inactive	13,02	11,59	5,88	4,17	3,28	1,03	10,00	1,50	2,30		
INACTIVE		1.509	239	46	9	11	4	1.818	9.209,79	36.300,00		
TOTAL		5.972	2.215	1.357	965	851	141	11.501	459.464,72	1.027.254,41		
% inactive		25,27	10,79	3,39	0,93	1,29	2,84	15,81	2,00	3,53		
		Active	9.683								450.254,93	990.954,41
		Inactive	1.818								9.209,79	36.300,00
		TOTAL	11.501								459.464,72	1.027.254,41

2010		0-10	10-12	12-18	18-24	24-40	> 40	TOTAL	TOTAL GT	TOTAL KW		
NORTH ATLANTIC	active subtotal	4.353	431	712	269	454	34	6.253	176.274,49	402.325,36		
	INAC	400	4	14	4	5	3	430	4.502,83	11.783,10		
	TOTAL	4.753	435	726	273	459	37	6.683	180.777,32	414.108,46		
	% inactive	8,42	0,92	1,93	1,47	1,09	8,11	6,43	2,49	2,85		
MEDITERRANEAN	active subtotal	239	1.483	516	532	209		2.979	70.644,03	274.756,67		
	INAC	148	156	8	7	1		320	1.191,66	7.482,28		
	TOTAL	387	1.639	524	539	210		3.299	71.835,69	282.238,95		
	% inactive	38,24	9,52	1,53	1,30	0,48		9,70	1,66	2,65		
OTHER WATERS	active subtotal	681	65	64	10	205	98	1.123	184.767,64	281.760,70		
	INAC	89	4	3		1	7	104	2.341,25	5.123,97		
	TOTAL	770	69	67	10	206	105	1.227	187.108,89	286.884,67		
	% inactive	11,56	5,80	4,48	0,00	0,49	6,67	8,48	1,25	1,79		
INACTIVE		637	164	25	11	7	10	854	8.035,74	24.389,35		
TOTAL		5.910	2.143	1.317	822	875	142	11.209	439.721,90	983.232,08		
% inactive		10,78	7,65	1,90	1,34	0,80	7,04	7,62	1,83	2,48		
		Active	10.355								431.686,16	958.842,73
		Inactive	854								8.035,74	24.389,35
		TOTAL	11.209								439.721,90	983.232,08

In 2008, clear inactivity was observed for the artisanal fleet in the 0 to 10 metre length segment, in all regions where this is maintained, with an improvement in 2009 and in 2010. Only the Mediterranean artisanal fleet showed an inactivity index greater than 20 %.

2011-2016 INACTIVITY

In 2011 and from this year, the population is the actually active population (the previous years were based on licences and not on activity declared by sales notes, catches or landings).

2011		0-10	10-12	12-18	18-24	24-40	> 40	TOTAL	TOTAL GT	TOTAL KW
NORTH ATLANTIC	active subtotal	3.898	424	673	271	387	23	5.676	148.992,71	360.300,21
	INAC	787	18	29	9	22	6	871	13.479,75	28.837,69
	TOTAL	4.685	442	702	280	409	29	6.547	162.472,46	389.137,90
	% inactive	16,80	4,07	4,13	3,21	5,38	20,69	13,30	8,30	7,41
MEDITERRANEAN	active subtotal	120	1.298	449	489	186		2.542	63.151,42	247.538,49
	INAC	243	310	24	11	4		592	2.443,65	15.739,40
	TOTAL	363	1.608	473	500	190		3.134	65.595,07	263.277,89
	% inactive	66,94	19,28	5,07	2,20	2,11		18,89	3,73	5,98
OTHER WATERS	active subtotal	486	52	63	17	187	93	898	173.139,88	258.327,62
	INAC	263	9	6	7	30	6	321	14.165,02	26.955,04
	TOTAL	749	61	69	24	217	99	1.219	187.304,90	285.282,66
	% inactive	35,11	14,75	8,70	29,17	13,82	6,06	26,33	7,56	9,45
INACTIVE		1.293	337	59	27	56	12	1.784	30.088,42	71.532,13
TOTAL		5.797	2.111	1.244	804	816	128	10.900	415.372,43	937.698,45
% inactive		22,30	15,96	4,74	3,36	6,86	9,38	16,37	7,24	7,63
Active								9.116	385.284,01	866.166,32
Inactive								1.784	30.088,42	71.532,13
TOTAL								10.900	415.372,43	937.698,45

2012		0-10	10-12	12-18	18-24	24-40	> 40	TOTAL	TOTAL GT	TOTAL KW
NORTH ATLANTIC	active subtotal	3.892	403	659	256	361	19	5.590	136.935,00	338.304,00
	INAC	687	19	29	9	18	6	768	10.917,19	27.489,98
	TOTAL	4.579	422	688	265	379	25	6.358	147.852,19	365.793,98
	% inactive	15,00	4,50	4,22	3,40	4,75	24,00	12,08	7,38	7,52
MEDITERRANEAN	active subtotal	121	1.249	460	469	181		2.480	60.881,00	238.702,00
	INAC	206	284	25	11	3		529	2.354,06	14.929,54
	TOTAL	327	1.533	485	480	184		3.009	63.235,06	253.631,54
	% inactive	63,00	18,53	5,15	2,29	1,63		17,58	3,72	5,89
OTHER WATERS	active subtotal	481	55	56	12	167	97	868	177.407,00	260.205,00
	INAC	251	13	11	8	21	5	309	11.646,53	24.015,17
	TOTAL	732	68	67	20	188	102	1.177	189.053,53	284.220,17
	% inactive	34,29	19,12	16,42	40,00	11,17	4,90	26,25	6,16	8,45
INACTIVE		1.144	316	65	28	42	11	1.606	24.917,78	66.434,69
TOTAL		5.638	2.023	1.240	765	751	127	10.544	400.140,78	903.645,69
% inactive		20,29	15,62	5,24	3,66	5,59	8,66	15,23	6,23	7,35
Active								8.938	375.223,00	837.211,00
Inactive								1.606	24.917,78	66.434,69
TOTAL								10.544	400.140,78	903.645,69



2013		0-10	10-12	12-18	18-24	24-40	> 40	TOTAL	TOTAL GT	TOTAL KW	
NORTH ATLANTIC	active subtotal	3.860	395	636	261	346	21	5.519	136.066,58	335.162,37	
	INAC	624	16	29	5	16	5	695	9.352,29	24.747,05	
	TOTAL	4.484	411	665	266	362	26	6.214	145.418,87	359.909,42	
	% inactive	13,92	3,89	4,36	1,88	4,42	19,23	11,18	6,43	6,88	
MEDITERRANEAN	active subtotal	126	1.223	448	450	171		2.418	58.287,01	228.215,06	
	INAC	149	250	25	13	10		447	2.785,76	17.336,47	
	TOTAL	275	1.473	473	463	181		2.865	61.072,77	245.551,53	
	% inactive	54,18	16,97	5,29	2,81	5,52		15,60	4,56	7,06	
OTHER WATERS	active subtotal	498	53	67		151	89	858	165.142,19	244.159,12	
	INAC	179	7	6	4	28	6	230	13.289,97	24.281,33	
	TOTAL	677	60	73	4	179	95	1.088	178.432,16	268.440,45	
	% inactive	26,44	11,67	8,22	100,00	15,64	6,32	21,14	7,45	9,05	
INACTIVE		952	273	60	22	54	11	1.372	25.428,02	66.364,85	
TOTAL		5.436	1.944	1.211	733	722	121	10.167	384.923,80	873.901,40	
% inactive		17,51	14,04	4,95	3,00	7,48	9,09	13,49	6,61	7,59	
								Active	8.795	359.495,78	807.536,55
								Inactive	1.372	25.428,02	66.364,85
								TOTAL	10.167	384.923,80	873.901,40

2014		0-10	10-12	12-18	18-24	24-40	> 40	TOTAL	TOTAL GT	TOTAL KW	
NORTH ATLANTIC	active subtotal	3.838	380	619	257	341	18	5.453	129.001,80	330.246,41	
	INAC	551	17	31	3	23	4	629	11.040,10	25.463,42	
	TOTAL	4.389	397	650	260	364	22	6.082	140.041,90	355.709,83	
	% inactive	12,55	4,28	4,77	1,15	6,32	18,18	10,34	7,88	7,16	
MEDITERRANEAN	active subtotal	118	1.205	445	439	171		2.378	57.855,23	225.218,27	
	INAC	136	209	31	14	5		395	2.389,28	14.376,98	
	TOTAL	254	1.414	476	453	176		2.773	60.244,51	239.595,25	
	% inactive	53,54	14,78	6,51	3,09	2,84		14,24	3,97	6,00	
OTHER WATERS	active subtotal	494	63	75		142	88	862	166.253,73	248.922,51	
	INAC	159	5	5	4	23	8	204	12.591,36	22.284,13	
	TOTAL	653	68	80	4	165	96	1.066	178.845,09	271.206,64	
	% inactive	24,35	7,35	6,25	100,00	13,94	8,33	19,14	7,04	8,22	
INACTIVE		846	231	67	21	51	12	1.228	26.020,74	62.124,53	
TOTAL		5.296	1.879	1.206	717	705	118	9.921	379.131,50	866.511,72	
% inactive		15,97	12,29	5,56	2,93	7,23	10,17	12,38	6,86	7,17	
								Active	8.693	353.110,76	804.387,19
								Inactive	1.228	26.020,74	62.124,53
								TOTAL	9.921	379.131,50	866.511,72



2015		0-10	10-12	12-18	18-24	24-40	> 40	TOTAL	TOTAL GT	TOTAL KW
NORTH ATLANTIC	active subtotal	3.767	367	608	253	325	18	5.338	126.723,09	329.290,47
	INAC	590	14	23	4	13	2	646	6.349,34	19.269,21
	TOTAL	4.357	381	631	257	338	20	5.984	133.072,43	348.559,68
	% inactive	13,54	3,67	3,65	1,56	3,85	10,00	10,80	4,77	5,53
MEDITERRANEA	active subtotal	111	1.193	422	420	160		2.306	54.624,23	214.790,87
	INAC	116	195	27	9	6		353	2.089,15	12.970,42
	TOTAL	227	1.388	449	429	166		2.659	56.713,38	227.761,29
	% inactive	51,10	14,05	6,01	2,10	3,61		13,28	3,68	5,69
OTHER WATERS	active subtotal	492	61	82		136	86	857	164.291,73	244.956,33
	INAC	146	5	3	2	23	7	186	12.632,18	20.773,26
	TOTAL	638	66	85	2	159	93	1.043	176.923,91	265.729,59
	% inactive	22,88	7,58	3,53	100,00	14,47	7,53	17,83	7,14	7,82
INACTIVE		852	214	53	15	42	9	1.185	21.070,67	53.012,89
TOTAL		5.222	1.835	1.165	688	663	113	9.686	366.709,72	842.050,56
% inactive		16,32	11,66	4,55	2,18	6,33	7,96	12,23	5,75	6,30
Active								8.501	345.639,05	789.037,67
Inactive								1.185	21.070,67	53.012,89
TOTAL								9.686	366.709,72	842.050,56

2016		0-10	10-12	12-18	18-24	24-40	> 40	TOTAL	TOTAL GT	TOTAL KW
NORTH ATLANTIC	active subtotal	3.774	345	588	241	303	17	5.268	118.051,00	316.124,28
	INAC	522	13	27	1	19		582	6.362,89	17.650,40
	TOTAL	4.296	358	615	242	322	17	5.850	124.413,89	333.774,68
	% inactive	12,15	3,63	4,39	0,41	5,90	0,00	9,95	5,11	5,29
MEDITERRANEA	active subtotal	109	1.144	421	408	155		2.237	53.551,04	208.832,66
	INAC	101	204	42	8	3		358	2.116,11	13.981,21
	TOTAL	210	1.348	463	416	158		2.595	55.667,15	222.813,87
	% inactive	48,10	15,13	9,07	1,92	1,90		13,80	3,80	6,27
OTHER WATERS	active subtotal	488	85	57	11	129	79	849	153.875,98	228.711,73
	INAC	128	6	5	2	18	6	165	9.971,67	17.460,36
	TOTAL	616	91	62	13	147	85	1.014	163.847,65	246.172,09
	% inactive	20,78	6,59	8,06	15,38	12,24	7,06	16,27	6,09	7,09
INACTIVE		751	223	74	11	40	6	1.105	18.450,67	49.091,97
TOTAL		5.122	1.797	1.140	671	627	102	9.459	343.928,69	802.760,64
% inactive		14,66	12,41	6,49	1,64	6,38	5,88	11,68	5,36	6,12
Active								8.354	325.478,02	753.668,67
Inactive								1.105	18.450,67	49.091,97
TOTAL								9.459	343.928,69	802.760,64



TREND % INACTIVE PERIOD 2011-2016

NORTH ATLANTIC						
	2011	2012	2013	2014	2015	2016
0-10	16,80	15,00	13,92	12,55	13,54	12,15
10-12	4,07	4,50	3,89	4,28	3,67	3,63
12-18	4,13	4,22	4,36	4,77	3,65	4,39
18-24	3,21	3,40	1,88	1,15	1,56	0,41
24-40	5,38	4,75	4,42	6,32	3,85	5,90
more than 40	20,69	24,00	19,23	18,18	10,00	
TOTAL	13,30	12,08	11,18	10,34	10,80	9,95

MEDITERRANEAN						
	2011	2012	2013	2014	2015	2016
0-10	66,94	63,00	54,18	53,54	51,10	48,10
10-12	19,28	18,53	16,97	14,78	14,05	15,13
12-18	5,07	5,15	5,29	6,51	6,01	9,07
18-24	2,20	2,29	2,81	3,09	2,10	1,92
24-40	2,11	1,63	5,52	2,84	3,61	1,90
more than 40						
TOTAL	18,89	17,58	15,60	14,24	13,28	13,80

OTHER REGIONS						
	2011	2012	2013	2014	2015	2016
0-10	35,11	34,29	26,44	24,35	22,88	20,78
10-12	14,75	19,12	11,67	7,35	7,58	6,59
12-18	8,70	16,42	8,22	6,25	3,53	8,06
18-24	29,17	40,00	100,00	100,00	100,00	15,38
24-40	13,82	11,17	15,64	13,94	14,47	12,24
more than 40	6,06	4,90	6,32	8,33	7,53	7,06
TOTAL	26,33	26,25	21,14	19,14	17,83	16,27

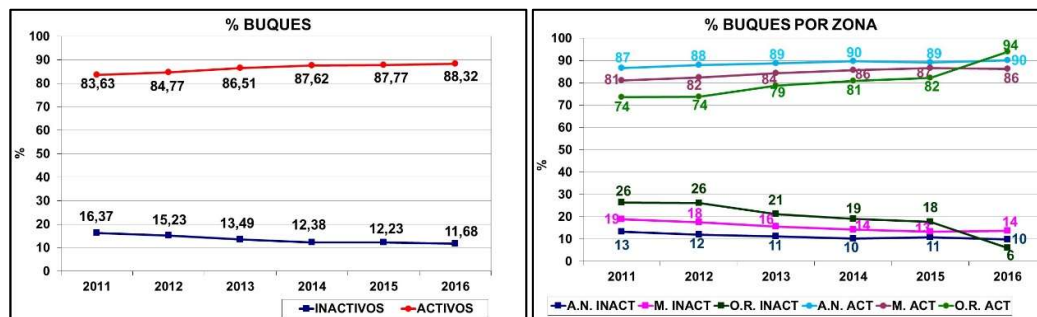
TOTAL FLEET						
	2011	2012	2013	2014	2015	2016
0-10	22,30	20,29	17,51	15,97	16,32	14,66
10-12	15,96	15,62	14,04	12,29	11,66	12,41
12-18	4,74	5,24	4,95	5,56	4,55	6,49
18-24	3,36	3,66	3,00	2,93	2,17	1,64
24-40	6,86	5,59	7,48	7,23	6,35	6,38
more than 40	9,38	8,66	9,09	10,17	7,96	5,88
TOTAL	16,37	15,23	13,49	12,38	12,23	11,68

The six-year trend (11-16) showed an improvement in fleet operability, including that of the artisanal fleet (0-12 metres), which was slightly imbalanced due to inactivity during 2011-2012. Levels were adjusted during 2013-16. However, if we observe inactivity data by supregion, technical inefficiency is still observed in Mediterranean segment 0-6 and slightly in other regions (Canary Island fleet), even though it improved from 2011.

OBSERVATIONS: North Atlantic > 40: no vessels are inactive

Other regions 18-24: in the period 2011-2015 there were no active vessels, which is why it reaches 100 %. In 2015 there were 5 that had a length of 5. In 2016 there are 11 allowed in this length.

Graphs are included showing fleet inactivity.



2. B- FLEET UTILISATION INDICATOR

This indicator measures the ratio between the maximum effect that may be exercised by the fleet and the actual effort deployed. It can be used to provide the potential fishing capacity under actual circumstances. If the average activity for a fleet segment is less than 70 %, it expresses technical inefficiency (red). Above 0.9, it demonstrates segment uniformity.

In order to calculate the technical indicator, the Fishing Monitoring Centre (CSP) was required to calculate the days at sea for each vessel 12-15 metres in length, using a 'blue box'. The study therefore took into account the number of days of actual fishing as well as the days from when the vessel left port, as this is considered 'fishing activity' as stated in the 2012 guidelines.

For vessels not obliged to keep a blue box, we calculated the days of fishing by days with declared catches when available, or by sales note (most of the vessels in this category are under 10 m in length, in Spanish fishing grounds, with one note per day, because the vessels make trips of under 24 hours). Although this calculation is not accurate because the vessels may spend two or three days fishing that correspond to only one sales note day, it is the most accurate possible method for the artisanal fleet.

Various options are available for obtaining maximum effort. Firstly, the actual maximum effort made by the vessel in each segment that has spent the most days at sea. The ratio between average effort and actual maximum effort is calculated to obtain the **actual maximum technical indicator**.

In Spain, many fleets are subject to a limitation in days of fishing effort, as is the case for most fleets operating in Spanish fishing grounds (five days/week). Furthermore, these fleets, as for others operating in international waters, are subject to temporary halts and biological close seasons that make it necessary to moor the fleet for a definite time period, which may or may not coincide with workers' holiday periods. The fleet also remains moored for a variable number of days due to weather conditions, which vary year on year and for different fishing grounds and ports.

When the actual maximum was obtained, it was established that, in most strata, the actual maximum day is not significant because it is an outlier of the strata distribution curve. It does not therefore appear to be an appropriate means of establishing the effort to be made by the fleet.

For these two reasons, we calculated the **maximum technical indicator for the top-ten**, where the distribution of days at sea by stratum is considered to obtain the maximum effort. This theoretical maximum is calculated by following recommendations given by the JRC for calculating the maximum Data

Collection day, where it is suggested that this should be obtained by taking the average for the 10 vessels showing the greatest activity.

In this way, we calculated the maximum day for the six-year period 2011-2016. However, this was not the maximum day that we used to calculate the indicator: instead we introduced a variation. To prevent specific foreign data from contaminating the results and given that we already had a provisional series representing the number of years of observations, we calculated the maximum day as the average of the six maximums obtained and we used the same day for this period.

This made it possible to 'relativise' specific events foreign to the activity that could have arisen. Furthermore, using the same maximum day for all five years allowed a better time comparison.

We must take into account that the population for the 2008-2010 period was obtained using licences and not based on declared activity. Until 2010, the dredges and trawlers were included within the multipurpose segment. For this reason, we were unable to extract days of effort for these two types of gear during the 2008-2010 period.

In order to analyse the trend, we therefore subdivided to obtain two periods. 2008-2010 and 2011-2016. We also obtained another indicator using 220 as the maximum day, as the STECF does.

We considered that the most representative indicator is the one based on the 'top ten maximum', because by taking into account ten vessels and not merely one vessel, this goes some way to prevent exceptional circumstances that do not reflect the actual situation from giving a distorted view of activity for the stratum.

However, the table included also gives the indicator that uses 220 as the maximum day, which is the one obtained by STECF in previous years.

For the trend, we will consider that indicator values greater than or equivalent to 0.9 represent a highly uniform fleet. If this value is less than 0.7, the fleet is inefficient because the effort deployed is significantly lower than the maximum effort that could be made. Therefore, values included in the interval [0.7, 0.9] correspond to a largely uniform fleet, with a level of uniformity directly proportional to the indicator.

Indicators obtained for the period 2008-2016 are shown in the following table:

Stratum	Gear	Length	MAXIMUM DAY INDICATOR= MAXIMUM AVERAGE										MAXIMUM DAY INDICATOR=220									
			2008	2009	2010	2011	2012	2013	2014	2015	2016	2008	2009	2010	2011	2012	2013	2014	2015	2016		
North Atlantic	ADTS	Bottom trawling	3	0,71	0,77	0,93	0,77	0,82	0,86	0,88	0,86	0,89	0,58	0,63	0,76	0,71	0,76	0,79	0,81	0,80	0,82	
			4	0,73	0,80	0,88	0,80	0,78	0,83	0,78	0,86	0,89	0,68	0,74	0,81	0,79	0,77	0,82	0,77	0,84	0,88	
			5	0,70	0,68	0,76	0,73	0,79	0,80	0,76	0,78	0,81	1,09	1,06	1,18	1,07	1,16	1,18	1,11	1,15	1,19	
			6	0,69	0,65	0,74	0,71	0,76	0,68	0,74	0,76	0,70	0,94	0,89	1,01	0,96	1,03	0,92	1,00	1,03	0,95	
	APS	Purse seine	2	0,82	0,74	0,72	0,63	0,81	0,78	0,74	0,62	0,77	0,51	0,46	0,45	0,37	0,47	0,46	0,44	0,37	0,45	
			3	0,66	0,71	0,70	0,69	0,73	0,73	0,67	0,65	0,72	0,63	0,68	0,67	0,68	0,71	0,72	0,66	0,64	0,71	
			4	0,76	0,80	0,82	0,88	0,83	0,84	0,77	0,80	0,85	0,75	0,79	0,81	0,90	0,84	0,86	0,78	0,82	0,87	
			5	0,57	0,62	0,66	0,86	0,87	0,81	0,79	0,85	0,84	0,73	0,79	0,84	0,86	0,88	0,82	0,80	0,86	0,84	
	ADFN	Gillnets	2	0,81	0,84		0,62	0,71	0,71	0,70	0,71	0,73	0,47	0,49		0,61	0,69	0,69	0,68	0,69	0,71	
			3	0,77	0,84	0,78	0,65	0,75	0,74	0,74	0,75	0,75	0,74	0,81	0,76	0,72	0,84	0,82	0,83	0,84	0,84	
			4	0,85	0,86	0,89	0,83	0,92	0,86	0,87	0,88	0,90	0,87	0,88	0,90	0,93	1,03	0,97	0,98	0,99	1,01	
			5	1,02	0,86	0,89		0,85					1,20	1,02	1,05		1,16					
	AHOK	Hooks	1	0,49	0,60	0,62		1,12					0,34	0,41	0,43		0,39					
			2	0,62	0,67	0,66	0,57	0,68	0,68	0,66	0,71	0,68	0,50	0,55	0,54	0,42	0,51	0,51	0,49	0,53	0,51	
			3	0,68	0,74	0,75	0,65	0,70	0,71	0,68	0,73	0,70	0,66	0,72	0,74	0,70	0,75	0,77	0,73	0,78	0,75	
			4	0,72	0,72	0,79	0,85	0,81	0,80	0,68	0,74	0,77	0,90	0,90	0,99	0,98	0,94	0,92	0,78	0,85	0,89	



Mediterranean	APGO	Surface longliners	5	0,87	0,83	0,86	0,90	0,93	1,08	0,59	0,69	0,67	1,25	1,20	1,25	1,14	1,18	1,38	0,76	0,81	0,79				
			4							0,93	0,91	1,00								0,93	0,90	1,00			
			5							1,08	1,04	1,03								1,40	1,36	1,33			
	AFPO	Pots	2				0,65	0,72	0,68	0,78	0,76	0,84							0,60	0,67	0,63	0,72	0,70	0,77	
			3				0,72	0,76	0,72	0,76	0,74	0,90							0,63	0,66	0,63	0,66	0,64	0,78	
	ADRB	Dredges	1				0,50	0,50	0,44	0,47	0,44	0,48								0,51	0,52	0,46	0,49	0,46	0,50
			2				0,37	0,91	1,18	1,01	1,08	0,84								0,24	0,59	0,76	0,65	0,70	0,54
			3				0,43	0,92	1,02	0,88	1,09	0,76								0,32	0,69	0,77	0,66	0,82	0,57
	Multipurpose			1	0,44	0,45	0,45	0,41	0,45	0,38	0,39	0,39	0,43	0,46	0,47	0,49	0,48	0,46	0,44	0,46	0,46	0,46	0,50		
				2	0,56	0,59	0,62	0,86	0,54	0,62	0,62	0,60	0,64	0,61	0,64	0,65	0,71	0,43	0,51	0,51	0,50	0,52			
				3	0,64	0,67	0,50	0,77	0,67	0,73	0,78	0,76	0,84	0,67	0,70	0,69	0,75	0,63	0,71	0,75	0,73	0,82			
				4	1,03			0,81		0,78				0,77			0,84				0,81				
				5		0,83	1,21	0,95		0,80	0,83	0,83	0,91		1,14	1,27	1,29		1,09	1,13	1,12	1,23			
	BDTS	Bottom trawling	2	0,82	0,84	0,83	0,83	0,78	0,86	0,86	0,87	0,82	0,74	0,76	0,75	0,74	0,68	0,76	0,76	0,77	0,73				
			3	0,76	0,78	0,81	0,78	0,79	0,80	0,80	0,79	0,80	0,79	0,81	0,84	0,83	0,85	0,86	0,86	0,86	0,84	0,86			
			4	0,72	0,74	0,76	0,74	0,75	0,74	0,76	0,78	0,77	0,84	0,86	0,88	0,90	0,90	0,89	0,91	0,94	0,92				
			5	0,79	0,82	0,81	0,78	0,78	0,81	0,79	0,84	0,82	0,90	0,94	0,92	0,90	0,90	0,93	0,91	0,97	0,95				
	BPS	Purse seine	2	0,58	0,66	0,80	0,53	0,65	0,86	0,79	0,92	0,81	0,38	0,44	0,53	0,47	0,57	0,76	0,70	0,82	0,72				
			3	0,67	0,73	0,74	0,71	0,75	0,78	0,84	0,81	0,82	0,71	0,78	0,80	0,84	0,88	0,92	0,99	0,96	0,97				
			4	0,77	0,87	0,88	0,85	0,86	0,87	0,87	0,86	0,89	0,85	0,96	0,97	1,00	1,02	1,03	1,03	1,02	1,06				
5			0,48	0,48	0,57	0,55	0,49	0,47	0,49	0,46	0,48	0,47	0,47	0,55	0,59	0,52	0,50	0,52	0,49	0,51					
BDFN	Gillnets	2				0,65	0,71	0,70	0,76	0,69	0,71							0,62	0,68	0,68	0,73	0,66	0,69		
		3				0,79	0,79	0,80	0,84	0,78	0,81							0,77	0,77	0,78	0,82	0,76	0,79		
BHOK	Hooks	2	0,48	0,64	0,68	0,57	0,56	0,55	0,65	0,67	0,62	0,42	0,57	0,61	0,50	0,49	0,47	0,56	0,58	0,54					
		3	0,57	0,63	0,60	0,60	0,63	0,69	0,66	0,59	0,68	0,54	0,59	0,56	0,51	0,54	0,59	0,57	0,50	0,58					
		4	1,01	0,77	0,73	0,85	0,92	0,78				1,11	0,85	0,80	0,81	0,87	0,74								
BPGO	Surface longliners	3							0,72	0,75	0,69								0,71	0,74	0,68				
		4							0,86	0,86	0,80								0,87	0,87	0,81				
BFPO	Pots	2				1,02	0,80									0,82	0,64								
		3					1,28	1,18	1,29	1,28	1,24						1,18	1,09	1,19	1,18	1,14				
BDRB	Dredges	2				0,57	0,71	0,69	0,63	0,83	0,63					0,39	0,48	0,47	0,43	0,56	0,43				
		3				0,93	1,00	0,94	0,96		1,03					0,80	0,85	0,80	0,82		0,88				
Multipurpose			1	0,32	0,32	0,32	0,31	0,33	0,36	0,42	0,38	0,39	0,26	0,26	0,26	0,26	0,28	0,31	0,35	0,32	0,33				
			2	0,48	0,51	0,51	0,47	0,48	0,49	0,52	0,51	0,49	0,49	0,52	0,52	0,49	0,50	0,50	0,54	0,53	0,51				
			3	0,76	0,78	0,84	1,05	0,67	0,77	0,66	0,73	0,92	0,84	0,86	0,93	0,98	0,62	0,72	0,62	0,68	0,86				
Other reg	CDTS	Bottom trawling	5	0,73	0,73	0,81	0,81	0,58	0,65	0,83	0,84	0,85	1,17	1,17	1,30	1,23	0,88	0,99	1,26	1,27	1,30				
			6	0,80	0,87	0,89	0,86	0,87	0,85	0,88	0,87	0,84	1,13	1,22	1,25	1,27	1,28	1,26	1,30	1,28	1,24				
	CPS	Purse seine	3		0,81	1,32	0,53	0,78	0,83	0,89	0,80	0,93		0,76	1,24	0,42	0,62	0,66	0,70	0,63	0,74				
			6	0,94	0,93	0,91	0,94	0,92	0,90	0,81	0,87	0,96	1,43	1,41	1,39	1,43	1,40	1,37	1,23	1,33	1,46				
	CHOK	Hooks	2		0,74	0,92	0,57	0,72	0,52	0,66	0,62	0,64		0,39	0,49	0,31	0,40	0,28	0,36	0,34	0,36				
			3		0,85	0,73	0,60	0,92	0,65	0,55	0,67	0,72		0,66	0,56	0,45	0,70	0,49	0,41	0,51	0,54				
			4	0,82	0,84	0,83	0,95	0,94				0,83	0,92	0,94	0,93	1,21	1,21					1,06			
			5	0,87	0,84	0,89	0,98	0,94	0,92	0,68	0,78	0,78	1,37	1,32	1,40	1,42	1,36	1,33	0,98	1,14	1,12				
			6	0,88	0,89	0,90	0,93	0,90	0,92				1,39	1,41	1,43	1,46	1,41	1,43							
	CPGO	Surface longliners	5							0,87	0,89	0,86								1,40	1,43	1,38			
			6							0,91	0,92	0,95								1,45	1,48	1,52			
	CFPO	Pots	3				0,69	0,86		0,86	0,83	0,82				0,37	0,46		0,46	0,44	0,44				
Multipurpose			1	0,25	0,28	0,27	0,28	0,28	0,31	0,32	0,32	0,33	0,27	0,30	0,30	0,30	0,31	0,34	0,35	0,35	0,36				
			2	0,56	0,38	0,56	0,37	0,78	0,61	0,55	0,52	0,60	0,33	0,23	0,33	0,20	0,42	0,33	0,29	0,28	0,32				
			3	0,62	0,63	0,73			0,78	0,74	0,76		0,55	0,55	0,64				0,69	0,66	0,67				
			5	0,91		0,90	0,91		0,89	0,88	0,95		0,95		0,93	0,91			0,89	0,88	0,96				

3- ECONOMIC INDICATORS

3. A- CR/BER

This is a measure of short-term financial profitability. It compares current revenue (CR) with break-even revenue (BER), which is the revenue necessary to cover fixed and variable costs incurred for carrying out the activity.

If the indicator is **greater than one (green indicator)**, sufficient revenue has been generated to cover costs. The higher this is, the more profitable the sector. On the contrary, the stratum is not financially sustainable if the indicator is **less than one (red indicator)**, because the revenue obtained will not be able to cover the costs incurred. In this case, the indicator is classified as dark red. When the result is a negative indicator, this is because the variable costs have exceeded the revenue obtained. Indicator values close to 1 **([0.9, 1.0])**, indicate a degree of financial balance. These are classified as amber.

The indicator for the period 2008-2014 was obtained.

This was calculated as follows:

CR = Current revenue = Revenue from fishing activity + Other revenue from use of the vessel

BER = Fixed costs / (1- (Variable costs/ Current revenue))

Where:

- **Fixed costs** = Depreciation + Non-variable costs + Opportunity costs

For the calculation, the capital cost opportunity is omitted because if it is included we would be evaluating the long-term profitability, which has already been evaluated in the ROFTA.

- **Variable costs** = Crew wages and salaries + Unremunerated work + Repair and maintenance costs + Energy costs + Other variable costs.

The data necessary for this calculation are:

- Current revenue (not including subsidies) made up of:
 - o Revenue due to fishing activity
 - o Other revenue from the use of the boat, such as tourism activities, recreational fishing and so on
- Fixed costs divided into
 - o Annual depreciation or amortisation
 - o Non-variable costs, including:
 - Renting of other machinery and equipment
 - Insurance premiums
 - Repair and maintenance of tangible property on land

- Water, gas, electricity (land)
 - Commissions (land)
 - Transport and freight (land)
 - Workshop material (land)
 - Communications (land)
 - Legal and accounting advice, computers, advertising (land)
 - Fees for trade organisations and/or associations
 - Travel and subsistence for land staff
 - Other land costs
 - Other taxes on production
 - Total cost of paid land staff
- Variable costs, including:
- Wages and salaries of crew
 - Unpaid labour (imputed value of unpaid labour)
 - Cost of vessel parts, repairs and maintenance
 - Costs of energy (fuel)
 - Other variable costs, including:
 - Bait, salt, ice and packaging
 - Supplies
 - Fishing tackle
 - Lubricants
 - Communications
 - Transport and freight
 - Travel and subsistence
 - Port expenses
 - Port taxes
 - Fees for trade organisations and/or associations
 - Licences
 - Other vessel expenses

All these variables are obtained directly from the Sea Fishing Economic Survey conducted by the Ministry of Agriculture, Food and Environment, apart from one: **Imputed value of unpaid labour**. This value is calculated by the statistics team by equating hours of unpaid work to the average value of paid hours.

Special cases

We found some difficulty when calculating the indicators:

- We were unable to calculate the indicator because the stratum did not contain any population. This meant that in some cases it was impossible to analyse the trend in a stratum and we were only able to conclude whether the result obtained for the year was acceptable or not. This was the case, for example, for the stratum APS1, for which we only have an indicator for 2009, for the stratum CPS1 where data are only available for 2009 and 2010, for the stratum BHOK5, for which data are only available for 2009 and 2010, etc. For this reason, these strata were removed from the analysis, also taking into account that the year in which this stratum appears is not the latest in the series, in other words 2013.
- The presence of some strata that did not contain any data. This made the value obtained unreliable and also made it impossible to calculate. The data in question were depreciation and non-variable costs. In order not to eliminate these strata from the study, we imported this value by taking the average for other years. Such values were input for the following strata:
 - 2008: we obtained the depreciation from BPS2, BHOK2 and CPMP2. In the case of BHOK2, we also had to calculate the non-variable costs.
 - 2009: we input the depreciation in strata ADTS3 and AHOK1.
 - 2010: in strata APS2, APS4, AHOK1, AHOK3, APMP3, BHOK3, CHOK2, CPMP1, CPMP2 and CPMP3, it was necessary to input the depreciation. Furthermore, for stratum CPS1 we also obtained the non-variable costs.
 - 2011: it was necessary to calculate the depreciation in strata AFPO2, BDTS2, BPS2, BHOK2, BPGP3, BDRB2, CPGP2 and CFPO3. For strata ADRB2, BPGP3 and BDRB2, we input non-variable costs.
 - 2012: because depreciation data were not completed for strata ADTS3, ADFN2, ADFN3, AHOK2, BPS2, BDFN3, BPGP1, BFPO2, CPS3, CHOK2, CPGP1, CPGP2, CFPO3, we entered them. Non-variable costs were also calculated for strata CPS3 and CPGP2.
 - 2013: we entered the depreciation for strata ADFN2, APMP2, BPS2, BDFN2, BPGP1, BFPO3, BDRB2 and CPGP2. We also entered the non-variable costs for strata APMP2 and BPGP1.
 - 2014: we entered the depreciation in strata ADTS3, AHOK5, APMP2, AFPO2, AFOP3, BDTS2, BPS2, BPMP1, BDRB2 and CPMP2. For stratum BDRB2, we also input non-variable costs. In this case, it was not possible to obtain the indicator because both data (fixed costs and depreciation) were missing.
 - 2015: this year it has been necessary to attribute depreciation in 6 strata: AHOK5, BHOK2, BPMP1, CPS3, CPMP1 and CPMP2.
- Staff costs are not available for various strata. This particularly concerned the unpaid staff value. In these cases, we did not enter any value because we established that there was great variability with regard to staff for these strata throughout other years both with regard to the number of people and type (paid

and unpaid) as well as with regard to costs. There were also only a few cases, and the missing data did not prevent us from calculating the indicator. For this reason, we considered it appropriate to continue not entering this variable. This is not the case for the 2015 indicators.

- Negative results arose when the variable costs exceeded current revenue. This can arise when current revenue is excessively low or when some of the variable cost components are too high.

After carrying out an analysis of the data, it was established that in our case these negative data are mainly due to low revenue and high unpaid labour values. In 2015, where this occurs only in five strata, it is mainly due to a drop in income in a proportion greater than that suffered by the costs.

- Last year's fleet report detected a stratum for both indicators experiencing an exponential rise compared to 2013. This is CDT55 and it was found to be due to a high increase in revenue. This year, revenues have decreased and, even though they are higher than those of 2013, they follow a more reasonable trend, which seems to indicate that either the data for 2014 are not correct or else that an extraordinary event occurred in that year leading to such an increase in income. This stratum will be examined. Next year's data will help to verify the real trend.
- In 2015, the BDRB3 stratum does not present an indicator for the first time since 2011. This is because the population of this stratum in 2015 is less than 10 vessels and for statistical secrecy they have joined the cluster BDRB2.

- Indicators obtained for the period 2008-2015 are:

				CR/BER							
	Stratum	Gear	Length	2008	2009	2010	2011	2012	2013	2014	2015
North Atlantic	ADTS	Bottom trawling	3	-0,65	0,61	0,43	1,87	4,45	-0,25	0,58	5,44
			4	1,40	1,55	0,74	0,96	0,44	1,29	1,12	1,42
			5	0,21	0,57	0,94	1,04	1,54	0,44	1,42	1,61
			6	0,78	0,87	1,62	1,04	1,45	1,79	1,87	3,48
	APS	Purse seine	2	-0,54	2,05	-3,69	1,62	0,16	1,81	6,15	4,59
			3	0,91	3,56	7,87	1,38	2,64	1,36	2,39	3,15
			4	0,82	1,39	1,08	1,31	1,49	0,54	0,86	1,53
			5	-0,37	0,27	3,08	1,55	2,96	4,26	3,97	1,87
	ADFN	Gillnets	2	0,60	-0,66		1,37	-1,27	0,64	-4,94	2,85
			3	0,39	0,82	1,42	3,25	-0,70	-0,82	1,00	0,37
			4	1,57	1,26	0,81	2,12	0,99	3,32	2,35	1,02
			5	0,22	0,65	-0,24		1,47			
	AHOK	Hooks	1	0,49	3,66	-22,77		2,62			
			2	-1,69	-1,09	-2,36	1,04	-2,95	-2,59	2,34	3,27
			3	1,70	0,66	-0,83	-0,44	0,88	1,56	2,61	2,63
			4	1,45	1,11	1,21	0,66	1,05	0,84	1,86	2,07
			5	0,83	1,86	1,68	0,82	2,40	0,92	0,83	0,86
	APGO	Surface	4							1,17	2,66

Mediterranean	longliners	5								2,19	2,39	
		AFPO	Pots	2				0,98	-1,47	-2,21	-0,81	2,16
	3						0,08	-0,19	-0,05	0,00	1,66	
	ADRB	Dredges	1				8,15	-7,80	0,87	-6,42	9,25	
			2				0,47	0,68	3,47	4,47	0,20	
			3				-0,04	2,52	1,31	0,65	1,93	
	Multipurpose		1	0,10	1,08	-0,75	-0,42	1,80	-1,18	-1,74	3,19	
			2	0,18	1,27	1,30	0,04	0,50	-0,09	7,28	1,79	
			3	0,45	9,11	1,43	12,67	0,02	3,16	0,87	1,56	
			4	1,76			4,89		0,83			
			5		0,30	1,31	3,56		2,93	2,10	2,83	
	Mediterranean	BDTS	Bottom trawling	2	0,29	0,91	2,51	2,58	2,60	2,35	3,16	3,13
				3	0,76	1,16	0,12	0,23	1,43	0,78	1,59	1,97
				4	0,02	0,62	0,45	0,88	0,94	2,05	1,32	1,37
				5	0,43	0,33	0,37	0,14	0,82	-0,47	1,26	1,38
BPS		Purse seine	2	3,99	1,62	7,15	11,34	7,23	20,64	13,31	6,28	
			3	1,14	4,11	1,27	3,75	3,70	6,93	6,43	3,65	
			4	0,74	0,69	0,73	1,46	1,63	6,53	3,19	2,68	
			5	1,16	0,30	1,25	1,38	2,90	1,98	1,36	2,11	
BDFN		Gillnets	2				3,13	4,92	6,87	-2,12	6,66	
			3				0,18	0,85	1,31	0,62	-1,06	
BHOK		Hooks	2	0,21	2,71	1,16	0,02	0,15	0,94	-2,72	1,06	
			3	0,16	0,77	-1,57	0,07	5,45	0,65	0,35	1,31	
			4	0,65	0,33	0,59	1,19	1,04	3,44			
BPGO		Surface longliners	3							1,86	-0,60	
			4							1,48	1,52	
BFPO	Pots	2				6,49	0,35					
		3					0,61	0,65	2,13	2,37		
BDRB	Dredges	2				0,35	-1,38	-0,66	0,61	1,88		
		3				3,26	3,24	4,64	9,38			
Multipurpose		1	-11,76	-10,65		0,54	-1,20	6,10	7,98	0,91		
		2	-1,30	1,01	2,43	0,10	0,20	0,87	0,76	5,61		
		3	1,29	0,13	-0,92	3,12	2,51	0,65	0,65	3,98		
Other regions	CDTS	Bottom trawling	5	0,02	0,19	0,18	4,26	0,80	0,53	11,74	2,71	
			6	0,26	1,17	1,50	2,26	0,67	1,23	3,78	2,15	
	CPS	Purse seine	3		0,43	0,40	3,50	-0,40	1,04	1,73	1,47	
			6	1,47	0,59	1,82	2,47	3,97	3,26	2,28	0,99	
	CHOK	Hooks	2		5,93	2,24	2,05	0,19	0,19	3,69	2,34	
			3		-0,55	-0,79	0,59	2,55	0,10	0,42	2,28	
			4	-0,62	0,24	-0,51	3,99	-0,62				
			5	0,36	0,93	1,32	1,69	0,53	3,43	0,89	1,26	
	CPGO	Surface longliners	5							1,79	3,54	
			6							2,32	1,95	

CFPO	Pots	3					-1,88	12,57		-4,35	-17,94
Multipurpose		1	-1,18	-10,47	-0,96	-17,40	-6,26	-23,06	-0,08	2,62	
		2	0,51	-0,79	1,09	-1,59	-1,54	-0,97	1,92	-0,87	
		3	-1,17	2,76	-4,23				1,88	6,63	-0,04
		5	-0,54		0,00	0,52			0,65	0,17	0,72

B- ROFTA (%)

This measures the long-term financial profitability of the sector. It compares the profits obtained through investment made with benefits that would have been obtained if the investment had been made at a rate of interest free of long-term risk (TRP). As a comparison, we used 10-year government bonds with a convergence criterion, obtained from the Statistical Bulletin of the Bank of Spain. To avoid fluctuations, due mainly to the economic crisis, instead of using the bond value for a given year, we used the average for the five years preceding the year of study. The TRP obtained for the five-year study is:

	2008	2009	2010	2011	2012	2013	2014	2015
TRP	3'94	3'99	3'97	4'14	4'47	4'78	4,82	4,56

The sector is considered to be profitable (green indicator) when the ROFTA is higher than this interest, this indicates that extra benefits are obtained through the fishing activity that would not have been obtained by investing the capital.

The ROFTA is red when the result is negative. This occurs when the net profit is negative because revenue is less than total costs.

In some cases (amber indicator) even though the ROFTA is positive, it is less than the TRP. These strata achieve profits but they are not as profitable as the TRP.

This year, for the first time, ROFTA has been calculated for the series 2008-2015. In the previous report, ROFTA was only obtained for the years after 2011-2014, since the variable 'capital value' was not available for previous years. Net Profit (%) was calculated for the latter. In order to send the data calculated during this year, this variable was already provided for the entire period 2008-2015.

This was calculated as follows:

$$\text{ROFTA (\%)} = (\text{Net profit} / \text{Capital value}) * 100$$

$$\text{Net Profit (\%)} = (\text{Net profit} / \text{Current revenue}) * 100$$

Where:

- **Net profit** = (Revenue from fishing activity + Other revenue from using the vessel) - (Crew wages and salaries + Unpaid work + Energy costs + Repair and maintenance costs + Other variable costs + Non-variable costs + Depreciation)

- **Current revenue** (net of subsidies) = Revenue from fishing activity + Other revenue from use of the vessel

All the variables used to calculate both indicators are obtained directly from the Sea Fishing Economic Survey conducted by the Ministry of Agriculture, Food and Environment, apart from one: **Capital value**. This value is calculated by the statistics team using the permanent inventory method (PIM) proposed in the capital valuation report of Study No FISH/2005/03.

Special cases:

Given that we use the same data as a basis for calculating both financial indicators, the strata with missing data are the same as those described for the CR/BER indicator. This also applies to the inputting. In this case, although the missing data do not prevent the indicator from being calculated, they make it unreliable and produce a value higher than the actual value.

The following data show indicators obtained for the period 2008-2015:

				ROFTA (%)							
Stratum	Gear	Length		2008	2009	2010	2011	2012	2013	2014	2015
North Atlantic	ADTS	Bottom trawling	3	-24,73	-16,40	-48,57	51,86	133,95	-24,23	-21,42	31,88
			4	10,59	14,95	-12,79	-3,66	-35,85	15,13	3,76	16,52
			5	-30,54	-25,50	-2,05	1,67	28,63	-34,70	23,74	33,23
			6	-5,45	-8,29	74,21	4,12	40,79	60,61	133,67	456,00
	APS	Purse seine	2	-58,59	37,88	-222,45	62,09	-53,68	37,04	89,12	41,85
			3	-0,47	87,13	122,48	24,66	64,29	28,58	39,58	77,17
			4	-4,79	12,36	3,66	26,84	23,01	-22,60	-6,72	38,77
			5	-45,68	-18,93	78,86	59,29	72,19	35,62	85,25	60,11
	ADFN	Gillnets	2	-10,37	-62,08		15,95	-77,55	-11,06	-87,46	70,90
			3	-27,90	-13,56	18,52	64,41	-53,77	-52,68	0,00	-21,42
			4	38,67	18,71	-12,60	83,11	-0,92	78,32	55,66	0,81
			5	-27,77	-35,99	-41,52		57,07			
	AHOK	Hooks	1	-3,12	45,78	-679,53		49,24			
			2	-24,11	-33,63	-131,05	4,45	-140,70	-66,54	77,18	73,72
			3	40,34	-6,05	-50,47	-78,75	-7,90	16,13	25,94	41,64
			4	21,88	3,72	9,06	-22,71	2,30	-4,43	23,28	70,06
			5	-7,10	37,43	32,11	-22,66	76,22	-2,82	-14,88	-11,15
	APGO	Surface longliners	4							12,41	99,91
			5							31,17	33,24
	AFPO	Pots	2				-0,30	-30,26	-102,45	-71,39	28,41
3						-96,39	-50,65	-15,09	-49,37	16,75	
ADRB	Dredges	1				77,29	-168,25	-1,46	-120,80	143,24	
		2				-59,85	-97,55	417,46	285,74	-79,92	
		3				-42,43	27,47	32,87	-19,52	22,92	
Multipurpose		1	-14,82	1,69	-26,55	-90,34	26,01	-77,41	-46,73	55,40	
		2	-15,65	6,33	12,63	-6,38	-8,32	-41,46	131,87	23,24	
		3	-11,61	98,74	-1,38	102,56	-55,07	96,99	-2,20	10,46	
		4	92,51			167,29		-8,18			

		5		-37,43	4,88	29,38		75,43	73,07	134,06		
Mediterranean	BDTS	Bottom trawling	2	-82,02	-9,28	88,19	94,91	229,15	91,43	72,53	91,46	
			3	-7,37	6,66	-39,88	-34,15	18,29	-11,06	19,23	33,44	
			4	-37,72	-18,07	-20,92	-5,48	-3,79	12,82	13,15	16,34	
			5	-11,93	-17,21	-8,21	-34,27	-4,26	-35,57	7,74	14,66	
	BPS	Purse seine	2	135,78	37,75	55,16	155,78	483,00	395,60	36,82	74,28	
			3	4,31	74,71	10,88	46,33	54,50	156,66	142,33	80,41	
			4	-6,47	-11,57	-14,38	5,65	38,23	99,91	85,67	29,31	
			5	2,09	-9,26	4,42	16,45	132,49	62,12	21,94	67,12	
	BDFN	Gillnets	2				110,22	106,46	177,41	-191,21	100,01	
			3				-60,48	-7,98	11,43	-26,31	-95,26	
	BHOK	Hooks	2	-91,55	111,21	13,01	-180,80	-94,66	-9,24	-43,42	6,92	
			3	-41,08	-9,76	-151,08	-51,14	45,17	-11,70	-126,00	6,43	
			4	-5,02	-27,09	-12,19	7,65	1,20	95,90			
	BPGO	Surface longliners	3							27,55	-30,56	
			4							17,69	28,44	
	BFPO	Pots	2				192,57	-33,41				
			3					-24,25	-19,32	49,83	27,75	
	BDRB	Dredges	2				-21,75	-122,51	-73,36	-20,13	17,69	
			3				54,84	39,88	31,39	144,71		
Multipurpose		1	-27,95	1.373,46		-10,78	-111,84	152,83	834,35	-6,65		
		2	-62,31	0,52	343,51	-30,90	-18,65	-6,11	-12,11	152,16		
		3	9,97	-456,94	-53,85	42,80	29,59	-18,64	-6,43	162,07		
Other regions	CDTS	Bottom trawling	5	-78,69	-69,30	-381,93	72,30	-36,54	-34,50	1.538,84	193,20	
			6	-25,79	8,54	34,09	97,63	-17,32	14,61	262,47	242,72	
	CPS	Purse seine	3		-27,78	-153,91	90,26	-95,52	4,93	45,11	14,59	
			6	406,54	-14,69	4.134,32	77,09	138,72	163,35	52,51	-0,63	
	CHOK	Hooks	2		117,24	10,77	169,29	-43,13	-22,77	119,83	23,68	
			3		-60,04	-12,78	-79,19	66,41	-22,10	-41,47	39,96	
			4	-3,37	-101,03	-229,79	238,24	-134,72				
			5	-17,52	-3,96	376,36	42,02	-25,11	59,63	-4,45	19,64	
			6	-86,07	1,65	7,34	28,76	-24,60	-36,73			
	CPGO	Surface longliners	5							27,30	142,74	
			6							74,86	86,07	
	CFPO	Pots	3				-22,95	115,94		-82,13	-93,67	
	Multipurpose		1	-	201,56	-100,24	-9,63	-804,17	-46,23	-236,02	-46,73	42,39
			2		-9,85	-56,44	1,86	-171,05	-91,29	-128,42	54,81	-118,50
			3		-32,73	96,62	-415,84			27,70	206,64	-749,73
			5		-0,32		-100,47	-70,28		-30,75	-51,01	-19,13

When the analysis is carried out throughout the period (2012, 2013 and 2014) for vessels from length segments 1,2 and 3 (0-10, 10-12 and 12-18 in the case of the Atlantic and Other Fishing Regions, 0-6, 6-12 and 12-18 for vessels operating in the Mediterranean), and gear DRB, FPO, PGP and PMP, it may be seen that these strata are particularly dependent on the sample taken because the results are very dependent on activity. Therefore, when the selected sample contains a high percentage of vessels active for under 90 days, the indicators are particularly affected.

We are carrying out a detailed study of these strata with the aim of being able to analyse the data obtained correctly.

		2012			2013			2014			2015													
		LENGTHS			LENGTHS			LENGTHS			LENGTHS													
SUPRA	GEAR	ACTIV_90	1 (1865)[1]	2 (12)	3(83)	GEAR	ACTIV_90	1 (1830)	2 (12)	3 (83)	GEAR	ACTIV_90	1(1845)	2 (10)	3 (81)	GEAR	ACTIV_90	1(1751)	2 (14)	3 (81)				
A	DRB	NO	14	2		DRB	NO	13			DRB	NO	27		1	DRB	NO	19		1				
		YES	23	2	4		YES	24	4	4		YES	32	5	4		YES	20	5	3				
	Total DRB			37	4	4	Total DRB			37	4	4	Total DRB			59	5	5	Total DRB			39	5	4
	INDICATORS	CR/BER	-7,8	0,68	2,52	INDICATORS	CR/BER	0,87	3,47	1,31	INDICATORS	CR/BER	-6,42	4,47	0,65	INDICATORS	CR/BER	9,25	0,2	1,93				
		ROFTA (%)	-168,25	-97,55	27,47		ROFTA (%)	-1,46	417,46	32,87		ROFTA (%)	-120,8	285,74	-19,52		ROFTA (%)	143,24	-79,92	22,92				
	GEAR	ACTIV_90		2(97)	3(75)	GEAR	ACTIV_90		2(60)	3(49)	GEAR	ACTIV_90		2(65)	3(56)	GEAR	ACTIV_90		2(56)	3(49)				
	FPO	NO		1		FPO	NO		1	2	FPO	NO		4	1	FPO	NO		4	1				
		YES		3	4		YES		3	2		YES		6	9		YES		3	6				
	Total FPO			4	4	Total FPO			4	4	Total FPO			10	10	Total FPO			7	7				
	INDICATORS	CR/BER		-1,47	-0,19	INDICATORS	CR/BER		-2,21	-0,05	INDICATORS	CR/BER		-0,81	0	INDICATORS	CR/BER		2,16	1,66				
		ROFTA (%)		-30,26	-50,65		ROFTA (%)		102,45	-15,09		ROFTA (%)		-71,39	-49,37		ROFTA (%)		28,41	16,75				
	GEAR	ACTIV_90	1(2017)	2(45)	3(35)	GEAR	ACTIV_90	1(2030)	2(87)	3(50)	GEAR	ACTIV_90	1	2	3	GEAR	ACTIV_90	1	2	3				
	PGP	NO	15	3	1	PGP	NO	20	2		PGP	NO				PGP	NO							
		YES	25	1	5		YES	21	2	4		YES					YES							
	Total PGP			40	4	6	Total PGP			41	4	4	Total PGP				Total PGP							
	INDICATORS	CR/BER	1,8	0,5	0,02	INDICATORS	CR/BER	-1,18	-0,11	-0,41	INDICATORS	CR/BER				INDICATORS	CR/BER							
		ROFTA (%)	26,01	-8,32	-55,07		ROFTA (%)	-77,41	-53,33	-83,42		ROFTA (%)					ROFTA (%)							
	GEAR	ACTIV_90				GEAR	ACTIV_90	1	2(30)	3(29)	GEAR	ACTIV_90	1(1993)	2(96)	3(64)	GEAR	ACTIV_90	1(2016)	2(95)	3(68)				
PMP	NO				PMP	NO			1	PMP	NO	30	4	3	PMP	NO	29	2	2					
	YES					YES		4	3		YES	30	6	18		YES	32	4	5					
Total PMP					Total PMP			4	4	Total PMP			60	10	21	Total PMP			61	6	7			
INDICATORS	CR/BER				INDICATORS	CR/BER		0,11	7,8	INDICATORS	CR/BER	-1,74	7,28	0,87	INDICATORS	CR/BER	3,19	1,79	1,56					
	ROFTA (%)					ROFTA (%)		-23,77	232,31		ROFTA (%)	-46,73	131,87	-2,2		ROFTA (%)	55,4	23,24	10,46					



Total A			77	12	14			78	16	16			119	25	36			100	18	18	
	GEAR	ACTIV_90		2(55)	3(14)	GEAR	ACTIV_90	1	2(35)	3(10)	GEAR	ACTIV_90	1	2(26)	3(12)	GEAR	ACTIV_90	1	2(33)	3	
B	DRB	NO		3		DRB	NO		2		DRB	NO		3		DRB	NO		3		
		YES		1	4		YES		2	4		YES		2	5		YES		4		
	Total DRB			4	4	Total DRB			4	4	Total DRB			5	5	Total DRB			7		
	INDICATORS	CR/BER		-1,38	3,24	INDICATORS	CR/BER		-0,66	4,64	INDICATORS	CR/BER		0,61	9,38	INDICATORS	CR/BER		1,88		
		ROFTA (%)		-	122,51		39,88	ROFTA (%)		-73,36		31,39	ROFTA (%)		-20,13		144,71	ROFTA (%)		17,69	
	GEAR	ACTIV_90		2(19)	3(15)	GEAR	ACTIV_90	1		3(17)	GEAR	ACTIV_90			3(21)	GEAR	ACTIV_90				3(20)
	FPO	NO		1	1	FPO	NO			1	FPO	NO			2	FPO	NO				2
		YES		3	4		YES			4		YES			10		YES				6
	Total FPO			4	5	Total FPO				5	Total FPO				12	Total FPO					8
	INDICATORS	CR/BER		0,35	0,61	INDICATORS	CR/BER			0,65	INDICATORS	CR/BER			2,13	INDICATORS	CR/BER				2,37
		ROFTA (%)		-33,41	-24,25		ROFTA (%)			-19,32		ROFTA (%)					49,83	ROFTA (%)		27,75	
	GEAR	ACTIV_90	1(121)	2(944)	3(14)	GEAR	ACTIV_90	1(126)	2(977)	3(23)	GEAR	ACTIV_90	1	2	3	GEAR	ACTIV_90	1	2	3	
	PGP	NO		3	9	PGP	NO		3	7	PGP	NO				PGP	NO				
		YES		1	10	4	YES		1	13	4	YES				YES					
Total PGP			4	19	4	Total PGP		4	20	4	Total PGP					Total PGP					
INDICATORS	CR/BER		-1,2	0,2	2,51	INDICATORS	CR/BER	6,1	1	-1,5	INDICATORS	CR/BER			INDICATORS	CR/BER					
	ROFTA (%)		-111,84	-18,65	29,59		ROFTA (%)	152,83	0,03	-71,17		ROFTA (%)					ROFTA (%)				
GEAR	ACTIV_90				GEAR	ACTIV_90		2(29)	3(13)	GEAR	ACTIV_90	1(118)	2(999)	3(27)	GEAR	ACTIV_90	1(111)	2(1032)	3(52)		
PMP	NO				PMP	NO		1	2	PMP	NO	3	11	2	PMP	NO	2	8	1		
	YES					YES		3	2		YES	2	19	4		YES	1	14	2		
Total PMP					Total PMP			4	4	Total PMP		5	30	6	Total PMP		3	22	3		
INDICATORS	CR/BER				INDICATORS	CR/BER		-1,63	1,87	INDICATORS	CR/BER	7,98	0,76	0,65	INDICATORS	CR/BER	0,91	5,61	3,98		
	ROFTA (%)					ROFTA (%)		-	121,83		92,9	ROFTA (%)	834,35	-12,11		-6,43	ROFTA (%)	-6,65	152,16	162,07	
Total B			4	27	13			4	28	17			5	35	23			3	29	11	
	GEAR	ACTIV_90			3(15)	GEAR	ACTIV_90				GEAR	ACTIV_90			3(10)	GEAR	ACTIV_90			3(16)	
C	FPO	NO			2	FPO	NO				FPO	NO			5	FPO	NO			2	

	YES			2	YES				3	YES				7
Total FPO				4	Total FPO				8	Total FPO				9
INDICATORS	CR/BER			12,57	INDICATORS	CR/BER			-4,35	INDICATORS	CR/BER			-17,94
	ROFTA (%)			115,94		ROFTA (%)					-82,13	ROFTA (%)		
GEAR	ACTIV_90	1(481)	2(25)		GEAR	ACTIV_90	1(498)	2(30)	3(30)	GEAR	ACTIV_90	1	2	3
PGP	NO	7	3		PGP	NO	7	5	3	PGP	NO			
	YES	3	1			YES	4	2	4		YES			
Total PGP		10	4		Total PGP		11	7	7	Total PGP				
INDICATORS	CR/BER	-6,26	-1,54		INDICATORS	CR/BER	6,1	1	-1,5	INDICATORS	CR/BER			
	ROFTA (%)	-46,23	-91,29			ROFTA (%)	152,83	0,03	-71,17		ROFTA (%)			
GEAR	ACTIV_90				GEAR	ACTIV_90				GEAR	ACTIV_90	1(494)	2(26)	3(19)
PMP	NO				PMP	NO				PMP	NO	10	3	2
	YES					YES					YES		5	2
Total PMP					Total PMP					Total PMP		15	5	5
INDICATORS	CR/BER				INDICATORS	CR/BER				INDICATORS	CR/BER	-0,08	1,92	6,63
	ROFTA (%)					ROFTA (%)					ROFTA (%)		2,62	-0,87
INDICATORS	ROFTA (%)				INDICATORS	ROFTA (%)				INDICATORS	ROFTA (%)	-46,73	54,81	206,64
	ROFTA (%)					ROFTA (%)					ROFTA (%)		42,39	-118,5
Total C		10	4	4		11	7	7			15	5	13	

[1\[1\]The population corresponding to each stratum/length per year is indicated in parenthesis.](#)

C- NVA/ FTE

This represents the net added value or unit produced per worker, in other words the approximate contribution to the sector by a full-time employee. It is therefore a measure of the competitiveness of the sector.

It may also be seen as an indicator of the worker's standard of living or social welfare if it is established that an increase in productivity is accompanied by wage increases.

An increase in value may be due to two main circumstances, or a combination of both:

- Maintaining the number of FTE workers, an increase takes place in revenue and/or a drop in production costs.
- The number of workers falls while both revenue and costs remain stable.

From a financial viewpoint, both options are considered valid. However, from a social viewpoint, the fact that a company increases its profits at the cost of reducing the number of employees implies an increase in labour pressure on employees, who have to expend a greater effort (due to a decrease in the hired staff) in order to obtain the same profit. Therefore, this indicator and its trend must be studied with caution, analysing the FTE value in parallel.

The calculation is carried out as follows:

NVA = (Revenue from fishing activity + Other revenue from using the vessel) – (Energy costs + Repair and maintenance costs + Other variable costs + Non-variable costs + Depreciation)

FTE is the unit of work performed by a full-time employee throughout one year (=UTA).

Special cases:

Since we start with the same data used for the calculation of the economic indicators previously described, the strata which lack some data are the same, as well as their allocation. In this case, although the lack of such data does not prevent the calculation of the indicator, it distorts it and leads to a result higher than the actual one.

Indicators obtained for the period 2008-2015 are:

				NVA/FTE							
	Stratum	Gear	Length	2008	2009	2010	2011	2012	2013	2014	2015
North Atlantic	ADTS	Bottom trawling	3	6.106,94	16.445,47	6.073,58	12.668,12	19.905,18	13.717,72	23.328,94	18.274,38
			4	17.381,86	28.469,93	12.832,11	13.182,87	3.674,51	14.294,03	21.906,36	15.862,92
			5	10.338,84	19.526,67	24.013,99	30.599,73	38.461,13	22.847,03	36.448,86	39.028,06
			6	15.312,97	32.048,54	62.044,61	38.137,51	67.208,55	66.760,64	85.010,43	119.676,63
	APS	Purse seine	2	15.397,56	12.246,09	12.216,70	22.662,90	6.730,82	12.518,32	23.319,89	14.148,53
			3	4.012,42	29.426,56	34.994,13	8.649,18	23.607,52	20.221,66	28.027,36	20.760,64
			4	13.823,7	16.972,7	24.863,2	27.288,7	10.359,16	16.527,57	20.162,73	24.821,66



			1	6	4	1					
			5	4.168,03	14.366,36	21.807,66	22.320,42	35.299,25	25.099,54	32.608,63	30.924,67
ADFN	Gillnets	2	9.553,11	8.358,55		13.213,55	5.728,27	12.490,38	9.642,67	19.069,10	
		3	10.639,90	22.335,31	16.146,87	24.684,65	2.362,63	12.641,76	10.175,67	10.276,61	
		4	19.986,06	23.114,47	8.930,30	40.087,44	21.622,58	31.581,85	29.593,11	18.312,08	
		5	10.667,13	14.787,86	29.454,32		36.742,16				
AHOK	Hooks	1	6.947,76	21.060,12	17.140,38		14.646,36				
		2	3.450,49	7.980,22	11.755,53	15.801,27	12.954,36	22.054,66	18.062,58	25.499,94	
		3	10.392,79	15.827,59	7.042,05	11.736,56	14.556,47	22.491,30	25.261,84	17.646,39	
		4	31.507,30	27.763,44	28.429,31	15.409,01	23.754,51	16.972,90	18.889,66	27.156,12	
		5	13.254,37	20.659,60	24.145,58	32.947,12	40.309,06	15.434,04	18.329,28	10.700,85	
APGO	Surface longliners	4							19.345,64	32.867,37	
		5							30.418,85	36.486,31	
AFPO	Pots	2				7.822,55	8.207,47	1.701,31	18.391,33	11.752,50	
		3				6.924,21	8.698,26	12.730,10	7.459,62	11.221,79	
ADRB	Dredges	1				19.384,17	11.836,68	10.645,54	12.135,40	20.621,23	
		2				-5.218,31	20.914,91	38.478,11	39.976,69	17.163,24	
		3				-7.473,76	19.928,29	27.568,75	35.253,28	29.930,75	
Multipurpose		1	10.037,99	14.644,40	13.232,75	10.148,75	12.616,76	12.378,89	10.188,61	15.305,58	
		2	8.667,18	11.683,59	15.982,85	6.526,17	14.790,32	7.085,64	16.472,88	13.983,12	
		3	8.788,03	28.944,42	16.220,71	22.111,61	13.307,24	26.421,98	18.293,15	23.963,27	
		4	21.946,15			39.274,06		19.850,36			
		5		16.906,83	44.503,87	23.519,10		58.756,59	48.202,22	61.234,61	
Mediterranean	BDTS	Bottom trawling	2	11.283,09	31.213,00	22.150,98	24.239,41	22.580,07	24.910,11	20.890,71	17.649,70
			3	12.151,89	25.091,56	14.368,70	10.130,10	29.698,18	17.020,18	17.468,27	23.946,09
			4	6.805,27	16.933,58	10.159,08	16.032,02	12.200,00	20.019,38	20.955,76	21.147,51
			5	13.874,01	18.498,71	31.752,59	7.983,12	19.222,36	5.238,27	23.021,62	23.702,20
	BPS	Purse seine	2	6.306,10	19.847,44	4.579,90	21.157,79	19.689,90	23.791,33	17.209,83	11.031,99
			3	8.809,80	17.940,96	18.856,76	14.762,41	14.280,99	26.614,86	28.344,59	21.468,81
			4	15.501,29	20.665,08	8.796,48	17.140,28	16.361,29	29.865,71	33.802,62	20.048,59
			5	72.621,93	29.401,02	30.468,33	37.761,17	64.661,57	96.752,31	54.235,30	52.021,54
	BDFN	Gillnets	2				19.297,02	24.554,23	13.000,45	36.199,45	15.174,20
			3				9.670,36	21.523,71	24.325,12	22.870,19	-987,46



Other regions	BHOK	Hooks	2	-1.102,25	29.615,35	15.553,04	12.604,10	7.147,07	21.516,00	19.860,44	13.445,79
			3	10.538,67	27.159,15	-4.129,76	10.563,51	21.935,78	8.583,68	8.774,63	21.080,73
			4	10.459,07	8.736,27	18.046,11	23.559,38	12.617,62	33.059,33		
	BPGO	Surface longliners	3							18.459,21	16.500,53
			4							17.892,25	17.937,09
	BFPO	Pots	2				15.823,71	9.026,96			
			3					16.689,88	11.206,49	22.466,60	25.542,19
	BDRB	Dredges	2				5.697,62	3.873,92	6.839,14	7.025,31	18.152,45
			3				16.806,58	16.772,04	20.411,64	38.176,23	
	Multipurpose		1	5.719,59	41.241,15		5.556,17	22.258,70	10.481,10	32.042,76	21.018,30
			2	9.238,35	19.592,98	17.444,35	16.626,48	16.054,15	13.472,67	18.601,41	26.884,56
			3	12.057,86	44.957,35	21.944,96	12.483,66	31.561,90	16.802,38	10.493,59	31.727,11
	CDTS	Bottom trawling	5	-3.287,55	6.093,21	2.907,85	21.022,58	13.921,73	11.391,17	120.007,69	24.387,75
			6	11.536,24	29.114,48	30.702,52	64.332,55	30.422,36	48.837,27	101.012,31	60.324,33
	CPS	Purse seine	3		8.036,66	5.473,55	15.304,96	5.412,81	29.001,04	18.299,68	21.827,33
			6	39.337,54	10.407,67	41.825,15	80.962,58	117.689,43	166.199,64	72.468,44	30.075,43
	CHOK	Hooks	2		12.270,24	4.471,45	25.051,13	12.191,21	17.311,43	23.870,40	20.517,74
			3		9.858,47	2.520,48	12.298,69	42.664,74	12.312,45	16.564,96	23.509,53
4			5.647,25	4.935,93	-2.579,38	38.482,69	8.602,24				
5			6.737,11	12.770,18	23.580,01	21.538,65	13.918,26	22.826,12	10.408,57	18.307,30	
6			10.959,40	9.930,09	18.136,51	20.434,30	6.244,67	-336,20			
CPGO	Surface longliners	5							19.384,13	35.597,33	
		6							33.910,26	30.783,14	
CFPO	Pots	3				810,32	18.542,12		17.099,76	4.143,24	
Multipurpose		1	4.191,77	4.287,37	-4.956,64	-1.714,94	8.499,06	15.527,25	16.371,97	16.480,91	
		2	6.255,75	1.347,60	10.645,20	844,71	-121,36	7.595,39	16.812,82	11.296,86	
		3	4.207,54	28.744,38	10.165,61			20.889,45	48.835,19	-39.629,02	
		5	3.733,20		3.789,09	13.971,75		21.630,44	11.062,56	18.897,43	



FINAL 2015 INDICATOR

	Stratum	Gear	Length	CR/BE R	ROFTA (%)	NVA/FTE	TECHNICAL INDICATOR	SHI	SAR	OVERALL INDICATOR
North Atlantic	ADTS	Bottom trawling	3	5,44	31,88	18.274,38	0,86			3
			4	1,42	16,52	15.862,92	0,86			3
			5	1,61	33,23	39.028,06	0,78	1,38		2
			6	3,48	456,00	119.676,63	0,76	0,82		3
	APS	Purse seine	2	4,59	41,85	14.148,53	0,62			2
			3	3,15	77,17	20.760,64	0,65			2
			4	1,53	38,77	24.821,66	0,80			3
			5	1,87	60,11	30.924,67	0,85			3
	ADFN	Gillnets	2	2,85	70,90	19.069,10	0,71			3
			3	0,37	-21,42	10.276,61	0,75			1
			4	1,02	0,81	18.312,08	0,88	1,16		2
	AHOK	Hooks	2	3,27	73,72	25.499,94	0,71	1,65		2
			3	2,63	41,64	17.646,39	0,73	1,32		2
			4	2,07	70,06	27.156,12	0,74	0,84		3
			5	0,86	-11,15	10.700,85	0,69	0,67		1
	APGO	Surface longliners	4	2,66	99,91	32.867,37	0,91	0,52	BSH-27	3
			5	2,39	33,24	36.486,31	1,04	0,34	BSH-27	3
	APGP	Passive multipurpose	5	2,83	134,06	61.234,61	0,83	0,79		3
	APMP	Mobile and passive multipurpose	1	3,19	55,40	15.305,58	0,45			2
			2	1,79	23,24	13.983,12	0,61			2
3			1,56	10,46	23.963,27	0,77	0,96		3	
AFPO	Pots	2	2,16	28,41	11.752,50	0,76			3	
		3	1,66	16,75	11.221,79	0,74			3	
ADRB	Dredges	1	9,25	143,24	20.621,23	0,44			2	
		2	0,20	-79,92	17.163,24	1,08			2	
		3	1,93	22,92	29.930,75	1,09			3	
Mediterranean	BDTS	Bottom trawling	2	3,13	91,46	17.649,70	0,87			3
			3	1,97	33,44	23.946,09	0,79			3
			4	1,37	16,34	21.147,51	0,78	4,28		2
			5	1,38	14,66	23.702,20	0,84	3,39	HKE-37.1.1-SA 6	2
	BPS	Purse seine	2	6,28	74,28	11.031,99	0,92			3
			3	3,65	80,41	21.468,81	0,81	1,13	PIL-37.1.1-SA 6	2
			4	2,68	29,31	20.048,59	0,86	1,20	PIL-37.1.1-SA	2



	BDFN	Gillnets	5	2,11	67,12	52.021,54	0,46	0,66	6 PIL-37.1.1-SA 6	2
			2	6,66	100,01	15.174,20	0,69			2
			3	-1,06	-95,26	-987,46	0,78			1
	BHOK	Hooks	2	1,06	6,92	13.445,79	0,67		2	
			3	1,31	6,43	21.080,73	0,59		2	
	BPGO	Surface longliners	3	-0,60	-30,56	16.500,53	0,75	2,79	1	
			4	1,52	28,44	17.937,09	0,86	2,39	2	
	BPMP	Mobile and passive multipurpose	1	0,91	-6,65	21.018,30	0,37		1	
			2	5,61	152,16	26.884,56	0,56		2	
			3	3,98	162,07	31.727,11	0,76		3	
BFPO	Pots	3	2,37	27,75	25.542,19	1,28		3		
BDRB	Dredges	2	1,88	17,69	18.152,45	0,83		3		
Other regions	CDTS	Bottom trawling	5	2,71	193,20	24.387,75	0,84		3	
			6	2,15	242,72	60.324,33	0,87		3	
	CPS	Purse seine	3	1,47	14,59	21.827,33	0,80		3	
			6	0,99	-0,63	30.075,43	0,87	0,99	2	
	CHOK	Hooks	2	2,34	23,68	20.517,74	0,62	0,61	2	
			3	2,28	39,96	23.509,53	0,67	0,83	2	
			5	1,26	19,64	18.307,30	0,78	0,97	3	
	CPGO	Surface longliners	5	3,54	142,74	35.597,33	0,89		3	
			6	1,95	86,07	30.783,14	0,92		3	
	CPMP	Mobile and passive multipurpose	1	2,62	42,39	16.480,91	0,30		2	
2			-0,87	-118,50	11.296,86	0,57		1		
3			-0,04	-749,73	39.629,02	0,80	0,78	2		
5			0,72	-19,13	18.897,43	1,00	0,89	2		
CFPO	Pots	3	-17,94	-93,67	4.143,24	0,83		1		



H. ANNEX VIII: SUMMARY OF **2011-2014 INDICATORS.** **OVERALL INDICATORS**

OVERALL INDICATOR

To obtain an overview, we calculated a single indicator as a combination of the four main indicators: CR/BER, ROFTA (%), SHI and technical indicator.

Because these are not measured on the same scale, the first thing we did was to standardise them. To do this, we allocated the same value to all four, based on whether the indicator was green, amber or red:

- We assigned a value of 1 to red indicators
- We assigned a value of 2 to amber indicators
- We assigned a value of 3 to green indicators

And lastly, we calculated the average of these values in order to obtain a final indicator. Instead of using the arithmetic average, we calculated an adjusted average. This made it possible to allow for the extent to which the indicator was green, amber or red.

We used a box plot to carry out the adjustment. This graph plots the different values of a distribution along an actual straight line. This reveals the combined dispersion of the entire distribution and the status of specific values in relation to a central point.

We calculated the parameters necessary to draw the plot: median (Me), first quartile (Q1), third quartile (Q3) and inter-quartile range (Q3 – Q1). In this way, all the values were divided into three segments:

- $[Q_1 - 1.5*IC, Q_3 + 1.5*IC]$ values concentrated around the central value of the distribution are located in this range. In our case, we assigned them a value of 3.
- $(Q_3 + 1.5*IC, Q_3 + 3*IC)$ and $[Q_1 - 3*IC, Q_1 - 1.5*IC]$ The average outliers are located in these ranges, in other words values that lie far away from the central point of the distribution but are taken into account in the study. In our case, we assigned them a value of 2.
- $> Q_3 + 3*IC$ and $< Q_1 - 3*IC$. The extreme outliers (which are the values that are a significant distance from the centre of the distribution and must be thoroughly analysed and, if necessary, removed from the study) are located in these segments of the actual straight-line plot. In our case, we assigned them a value of 1. However, few indicators are located at these extremes because we previously analysed them and eliminated most of them as they made the results unreliable.

We carried out this process three times for each indicator: for strata that were red, for those that were green and for those that were amber.

We repeated this process for the four indicators to be used to make up the final indicator.

Once we had obtained the adjustments, the overall indicator was obtained by multiplying the value allocated to each indicator according to its previous classification by colour by the corresponding adjustment factor. We added the four values obtained and divided by the sum of the adjustment factors:

$$\text{Final indicator} = \frac{\text{IndCR/BER} * \text{PondCR/BER} + \text{IndROFTA} * \text{PondROFTA} + \text{IndTecn} * \text{PondTecn} + \text{IndBiol} * \text{PondBiol}}{\text{PondCR/BER} + \text{PondROFTA} + \text{PondTecn} + \text{PondBiol}}$$

We therefore obtained a single indicator for evaluation, which we also classified according to the value obtained: Green if the result was 3, Amber if it was 2, Red if it was 1.

We calculate the indicator starting from 2011, which is when the separate study of trawls and pots commenced.

Indicators obtained for the period 2011-2015 are:

				OVERALL INDICATOR				
	Stratum	Gear	Length	2011	2012	2013	2014	2015
North Atlantic	ADTS	Bottom trawling	3	3	3	1	1	3
			4	2	1	3	2	3
			5	2	3	1	3	2
			6	2	3	2	3	3
	APS	Purse seine	2	2	1	3	3	2
			3	2	2	2	2	2
			4	2	2	1	1	3
			5	3	3	3	3	3
	ADFN	Gillnets	2	2	1	1	1	3
			3	2	1	1	2	1
			4	3	2	2	2	2
			5		3			
	AHOK	Hooks	1		3			
			2	2	1	1	2	2
			3	1	1	2	2	2
			4	1	2	2	2	3
			5	2	3	2	1	1
	APGO	Surface longliners	4				3	3
			5				3	3
	AFPO	Pots	2	1	1	1	1	3
			3	1	1	1	1	3
	ADRB	Dredges	1	2	1	1	1	2
			2	1	2	3	3	2
			3	1	3	3	1	3
	Multipurpose		1	1	2	1	1	2
2			2	1	1	2	2	
3			2	1	3	1	3	
4			3		2			
5			3		3	2	3	



SUMMARY OF INDICATORS PER YEAR

YEAR 2011

	Stratum	Gear	Length	CR/BE R	ROFTA (%)	NVA/FT E	TECHNICAL INDICATOR	SHI	SAR	OVERALL INDICATOR
North Atlantic	ADTS	Bottom trawling	3	1,87	51,86	12.668,12	0,77			3
			4	0,96	-3,66	13.182,87	0,80			2
			5	1,04	1,67	30.599,73	0,73			2
			6	1,04	4,12	38.137,51	0,71			2
	APS	Purse seine	2	1,62	62,09	22.662,90	0,63		PIL-27.9.A	2
			3	1,38	24,66	8.649,18	0,69		PIL-27.9.A	2
			4	1,31	26,84	27.288,71	0,88		PIL-27.9.A	2
			5	1,55	59,29	22.320,42	0,86			3
	ADFN	Gillnets	2	1,37	15,95	13.213,55	0,62			2
			3	3,25	64,41	24.684,65	0,65			2
			4	2,12	83,11	40.087,44	0,83			3
	AHOK	Hooks	2	1,04	4,45	15.801,27	0,57			2
			3	-0,44	-78,75	11.736,56	0,65	1,36		1
			4	0,66	-22,71	15.409,01	0,85			1
			5	0,82	-22,66	32.947,12	0,90	0,82		2
	AFPO	Pots	2	0,98	-0,30	7.822,55	0,65			1
			3	0,08	-96,39	6.924,21	0,72			1
	ADRB	Dredges	1	8,15	77,29	19.384,17	0,50			2
			2	0,47	-59,85	-5.218,31	0,37			1
			3	-0,04	-42,43	-7.473,76	0,43			1
	Multipurpose		1	-0,42	-90,34	10.148,75	0,41			1
2			0,04	-6,38	6.526,17	0,86	0,85		2	
3			12,67	102,56	22.111,61	0,77	1.12		2	



			4	4,89	167,29	39.274,06	0,81	0,90		3
			5	3,56	29,38	23.519,10	0,95	0,99		3
Mediterranean	BDTS	Bottom trawling	2	2,58	94,91	24.239,41	0,83			3
			3	0,23	-34,15	10.130,10	0,78			1
			4	0,88	-5,48	16.032,02	0,74	5,47		1
			5	0,14	-34,27	7.983,12	0,78	5,91	HKE-37.1.1-SA 6	1
	BPS	Purse seine	2	11,34	155,78	21.157,79	0,53			2
			3	3,75	46,33	14.762,41	0,71	1,07		2
			4	1,46	5,65	17.140,28	0,85	1,12		2
			5	1,38	16,45	37.761,17	0,55	0,75		3
	BDFN	Gillnets	2	3,13	110,22	19.297,02	0,65			2
			3	0,18	-60,48	9.670,36	0,79			1
	BHOK	Hooks	2	0,02	-180,80	12.604,10	0,57	2,98		1
			3	0,07	-51,14	10.563,51	0,60	2,06		1
			4	1,19	7,65	23.559,38	0,85	1,79		2
	BFPO	Pots	2	6,49	192,57	15.823,71	1,02			3
	BDRB	Dredges	2	0,35	-21,75	5.697,62	0,57			1
			3	3,26	54,84	16.806,58	0,93			3
	Multipurpose		1	0,54	-10,78	5.556,17	0,31			1
			2	0,10	-30,90	16.626,48	0,47			1
			3	0,53	-56,09	16.359,20	1,05	1,36		1
Other reg	CDTS	Bottom trawling	5	4,26	72,30	21.022,58	0,81			3
			6	2,26	97,63	64.332,55	0,86			3
	CPS	Purse seine	3	3,50	90,26	15.304,96	0,53			2
			6	2,47	77,09	80.962,58	0,94	0,72		3
	CHOK	Hooks	2	2,05	169,29	25.051,13	0,57			2



			3	0,59	-79,19	12.298,69	0,60			1
			4	3,99	238,24	38.482,69	0,95	1,24		2
			5	1,69	42,02	21.538,65	0,98			3
			6	1,58	28,76	20.434,30	0,93			3
	CFPO	Pots	3	-1,88	-22,95	810,32	0,69			1
	Multipurpose		1	-17,40	-804,17	-1.714,94	0,28			1
			2	-1,59	-171,05	844,71	0,37			1
			5	0,52	-70,28	13.971,75	0,91	0,9		2



YEAR 2012

	Stratum	Gear	Length	CR/BER	ROFTA (%)	NVA/FTE	TECHNICAL INDICATOR	SHI	SAR	OVERALL INDICATOR
North Atlantic	ADTS	Bottom trawling	3	4,45	133,95	19.905,18	0,82			3
			4	0,44	-35,85	3.674,51	0,78			1
			5	1,54	28,63	38.461,13	0,79			3
			6	1,45	40,79	67.208,55	0,76			3
	APS	Purse seine	2	0,16	-53,68	6.730,82	0,81			1
			3	2,64	64,29	23.607,52	0,73		PIL-27.9.A	2
			4	1,49	23,01	10.359,16	0,83		PIL-27.8.C PIL-27.9.A	2
			5	2,96	72,19	35.299,25	0,87			3
	ADFN	Gillnets	2	-1,27	-77,55	5.728,27	0,71			1
			3	-0,70	-53,77	2.362,63	0,75			1
			4	0,99	-0,92	21.622,58	0,92	1,40		2
			5	1,47	57,07	36.742,16	0,85	1,01		3
	AHOK	Hooks	1	2,62	49,24	14.646,36	1,12			3
			2	-2,95	-140,70	12.954,36	0,68	1,53		1
			3	0,88	-7,90	14.556,47	0,70	1,32		1
			4	1,05	2,30	23.754,51	0,81	1,02		2
			5	2,40	76,22	40.309,06	0,93	0,93		3
	AFPO	Pots	2	-1,47	-30,26	8.207,47	0,72			1
			3	-0,19	-50,65	8.698,26	0,76			1
	ADRB	Dredges	1	-7,80	-168,25	11.836,68	0,50			1
			2	0,68	-97,55	20.914,91	0,91			2
3			2,52	27,47	19.928,29	0,92			3	
Multipurpose		1	1,80	26,01	12.616,76	0,45			2	
		2	0,50	-8,32	14.790,32	0,54			1	
		3	0,02	-55,07	13.307,24	0,67			1	
Mediterranean	BDTS	Bottom trawling	2	2,60	229,15	22.580,07	0,78			3
			3	1,43	18,29	29.698,18	0,79			3
			4	0,94	-3,79	12.200,00	0,75	5,25		2
			5	0,82	-4,26	19.222,36	0,78	5,52		1
	BPS	Purse seine	2	7,23	483,00	19.689,90	0,65			2
			3	3,70	54,50	14.280,99	0,75	1,04		2
			4	1,63	38,23	16.361,29	0,86	1,08		2
			5	2,90	132,49	64.661,57	0,49	0,59		3
	BDFN	Gillnets	2	4,92	106,46	24.554,23	0,71			3
			3	0,85	-7,98	21.523,71	0,79			1
	BHOK	Hooks	2	0,15	-94,66	7.147,07	0,56	2,30		1
			3	5,45	45,17	21.935,78	0,63	1,84		2
			4	1,04	1,20	12.617,62	0,92	1,60		2
	BFPO	Pots	2	0,35	-33,41	9.026,96	0,80			1



Other regions	BDRB	Dredges	3	0,61	-24,25	16.689,88	1,28		1	
			2	-1,38	-122,51	3.873,92	0,71		1	
			3	3,24	39,88	16.772,04	1,00		3	
	Multipurpose			1	-0,52	-177,82	19.697,86	0,33		1
				2	0,20	-18,65	16.054,15	0,48		1
				3	2,51	29,59	31.561,90	0,67		2
	CDTS	Bottom trawling		5	0,80	-36,54	13.921,73	0,58		1
				6	0,67	-17,32	30.422,36	0,87		1
	CPS	Purse seine		3	-0,40	-95,52	5.412,81	0,78		1
				6	3,97	138,72	117.689,43	0,92	0,71	3
	CHOK	Hooks		2	0,19	-43,13	12.191,21	0,72		1
				3	2,55	66,41	42.664,74	0,92	0,75	3
				4	-0,62	-134,72	8.602,24	0,94		2
				5	0,53	-25,11	13.918,26	0,94		2
				6	0,74	-24,60	6.244,67	0,90		2
CFPO	Pots		3	12,57	115,94	18.542,12	0,86		3	
Multipurpose			1	-3,38	-51,65	8.322,35	0,28		1	
			2	-1,62	-89,48	107,58	0,78		1	

YEAR 2013

	Stratum	Gear	Length	CR/BE R	ROFTA (%)	NVA/FTE	TECHNICAL INDICATOR	SHI	SAR	OVERALL INDICATOR
North Atlantic	ADTS	Bottom trawling	3	-0,25	-24,23	13.717,72	0,86			1
			4	1,29	15,13	14.294,03	0,83			3
			5	0,44	-34,70	22.847,03	0,80			1
			6	1,79	60,61	66.760,64	0,68			2
	APS	Purse seine	2	1,81	37,04	12.518,32	0,78			3
			3	1,36	28,58	20.221,66	0,73		PIL-27.9.A	2
			4	0,54	-22,60	16.527,57	0,84		PIL-27.9.A	1
			5	4,26	35,62	25.099,54	0,81			3
	ADFN	Gillnets	2	0,64	-11,06	12.490,38	0,71			1
			3	-0,82	-52,68	12.641,76	0,74			1
			4	3,32	78,32	31.581,85	0,86	1,64		2
	AHOK	Hooks	2	-2,59	-66,54	22.054,66	0,68			1
			3	1,56	16,13	22.491,30	0,71	1,44		2
			4	0,84	-4,43	16.972,90	0,80	1,1		2
			5	0,92	-2,82	15.434,04	1,08	0,82		2
	AFPO	Pots	2	-2,21	-102,45	1.701,31	0,68			1
			3	-0,05	-15,09	12.730,10	0,72			1
	ADRB	Dredges	1	0,87	-1,46	10.645,54	0,44			1
			2	3,47	417,46	38.478,11	1,18			3
			3	1,31	32,87	27.568,75	1,02			3
Multipurpose		1	-1,18	-77,41	12.378,89	0,38			1	
		2	-0,09	-41,46	7.085,64	0,62			1	
		3	3,16	96,99	26.421,98	0,73			3	
		4	0,83	-8,18	19.850,36	0,78	0,87		2	
		5	2,93	75,43	58.756,59	0,80	0,99		3	
Mediterranean	BDTS	Bottom trawling	2	2,35	91,43	24.910,11	0,86			3
			3	0,78	-11,06	17.020,18	0,80			1
			4	2,05	12,82	20.019,38	0,74	5,22		2
			5	-0,47	-35,57	5.238,27	0,81	5,58	HKE-37.1.1-SA 6	1
	BPS	Purse seine	2	20,64	395,60	23.791,33	0,86			2
			3	6,93	156,66	26.614,86	0,78	1,25	PIL-37.1.1-SA 6	1 (*)
			4	6,53	99,91	29.865,71	0,87	1,22	PIL-37.1.1-SA 6	1 (*)



Other regions			5	1,98	62,12	96.752,31	0,47	0,6 7	PIL-37.1.1-SA 6	2 (*)	
	BDFN	Gillnets	2	6,87	177,41	13.000,45	0,70			3	
			3	1,31	11,43	24.325,12	0,80			3	
	BHOK	Hooks	2	0,94	-9,24	21.516,00	0,55	2,3 0		1	
			3	0,65	-11,70	8.583,68	0,69	2,0 0		1	
			4	3,44	95,90	33.059,33	0,78	1,6 9		2	
	BFPO	Pots	3	0,65	-19,32	11.206,49	1,18			1	
	BDRB	Dredges	2	-0,66	-73,36	6.839,14	0,69			1	
			3	4,64	31,39	20.411,64	0,94			3	
	Multipurpose		1	2,01	91,77	6.293,43	0,36			3	
			2	0,87	-6,11	13.472,67	0,49			1	
			3	0,65	-18,64	16.802,38	0,77			1	
	Other regions	CDTS	Bottom trawling	5	0,53	-34,50	11.391,17	0,65			1
				6	1,23	14,61	48.837,27	0,85			3
		CPS	Purse seine	3	1,04	4,93	29.001,04	0,83			3
6				3,26	163,35	166.199,6 4	0,90	0,6 8		3	
CHOK		Hooks	2	0,19	-22,77	17.311,43	0,52	0,7 2		2	
			3	0,10	-22,10	12.312,45	0,65	1,3 7		1	
			5	3,43	59,63	22.826,12	0,92			3	
			6	0,10	-36,73	-336,20	0,92			2	
Multipurpose			1	-23,06	-236,02	15.527,25	0,31			1	
			2	-0,97	-128,42	7.595,39	0,61			1	
	3		1,88	27,70	20.889,45	0,78	0,7 7		3		
	5		0,65	-30,75	21.630,44	0,89	0,8 8		2		

* BPS3 and BPS4 were amber and BPS5 green without taking into account the biological SAR.

They change to red (BPS3 and BPS44) and yellow (BPS5) to include the effect of this indicator.

It is already included in other strata where the SAR appears.



YEAR 2014

	Stratum	Gear	Length	CR/BE R	ROFTA (%)	NVA/FTE	TECHNICAL INDICATOR	SHI	SAR	OVERALL INDICATOR
North Atlantic	ADTS	Bottom trawling	3	0,58	-21,42	23.328,94	0,88			1
			4	1,12	3,76	21.906,36	0,78			2
			5	1,42	23,74	36.448,86	0,76			3
			6	1,87	133,67	85.010,43	0,74			3
	APS	Purse seine	2	6,15	89,12	23.319,89	0,74			3
			3	2,39	39,58	28.027,36	0,67		PIL-27.9.a	2
			4	0,86	-6,72	20.162,73	0,77			1
			5	3,97	85,25	32.608,63	0,79			3
	ADFN	Gillnets	2	-4,94	-87,46	9.642,67	0,70			1
			3	1,00	0,00	10.175,67	0,74			2
			4	2,35	55,66	29.593,11	0,87	1,8 2		2
	AHOK	Hooks	2	2,34	77,18	18.062,58	0,66	2,0 4		2
			3	2,61	25,94	25.261,84	0,68	2,0 1		2
			4	1,86	23,28	18.889,66	0,68	1,2 4		2
			5	0,83	-14,88	18.329,28	0,59	0,9 2		1
	APGO	Surface longliners	4	1,17	12,41	19.345,64	0,93	0,9 2		3
			5	2,19	31,17	30.418,85	1,08	0,8 3		3
	AFPO	Pots	2	-0,81	-71,39	18.391,33	0,78			1
			3	0,00	-49,37	7.459,62	0,76			1
	ADRB	Dredges	1	-6,42	-120,80	12.135,40	0,47			1
2			4,47	285,74	39.976,69	1,01			3	
3			0,65	-19,52	35.253,28	0,88			1	
Multipurpose		1	-1,74	-46,73	10.188,61	0,39			1	
		2	7,28	131,87	16.292,00	0,62			2	
		3	0,87	-2,20	18.293,15	0,78	1,2 5		1	
		5	2,10	73,07	48.202,22	0,83	1,2 2		2	
Mediterranean	BDTS	Bottom trawling	2	3,16	72,53	20.890,71	0,86			3
			3	1,59	19,23	17.468,27	0,80			3
			4	1,32	13,15	20.955,76	0,76	5,3 0		2
			5	1,26	7,74	23.021,62	0,79	5,6 5	HKE-37.1.1-SA 6	2
	BPS	Purse	2	13,31	36,82	17.209,83	0,79			3



	seine	3	6,43	142,33	28.344,59	0,84	1,10	PIL-37.1.1-SA6	2	
		4	3,19	85,67	33.802,62	0,87	1,17	PIL-37.1.1-SA6	2	
		5	1,36	21,94	54.235,30	0,49	0,65	PIL-37.1.1-SA6	2 (*)	
	BDFN	Gillnets	2	-2,12	-191,21	36.199,45	0,76			1
			3	0,62	-26,31	22.870,19	0,84			1
	BHOK	Hooks	2	-2,72	-43,42	19.860,44	0,65			1
			3	0,35	-126,00	8.774,63	0,66	3,98		1
	BPGO	Surface longliners	3	1,86	27,55	18.459,21	0,72	1,71		2
			4	1,48	17,69	17.892,25	0,86	1,62		2
	BFPO	Pots	3	2,13	49,83	22.466,60	1,29			3
	BDRB	Dredges	2	0,61	-20,13	7.025,31	0,63			1
			3	9,38	144,71	38.176,23	0,96			3
	Other regions	Multipurpose	1	7,98	834,35	33.208,85	0,42			2
			2	0,76	-12,11	18.601,41	0,52			1
			3	0,65	-6,43	10.493,59	0,66			1
CDTS	Bottom trawling	5	11,74	1.538,84	120.007,69	0,83			3	
		6	3,78	262,47	101.012,31	0,88			3	
CPS	Purse seine	3	1,73	45,11	18.299,68	0,89			3	
		6	2,28	52,51	72.468,44	0,81	0,7		3	
CHOK	Hooks	2	3,69	119,83	23.870,40	0,66			2	
		3	0,42	-41,47	16.564,96	0,55			1	
		5	0,89	-4,45	10.408,57	0,68			1	
CPGO	Surface longliners	5	1,79	27,30	19.384,13	0,87			3	
		6	2,32	74,86	33.910,26	0,91			3	
CFPO	Pots	3	-4,35	-82,13	17.099,76	0,86			1	
Other regions	Multipurpose	1	-0,08	-46,73	16.371,97	0,32			1	
		2	1,92	54,81	16.812,82	0,55	0,78		2	
		3	6,63	206,64	48.835,19	0,74	0,86		3	
		5	0,17	-51,01	11.062,56	0,88			1	

* BPS5 is green regardless of the biological SAR.

They change to red (BPS3 and BPS44) and yellow (BPS5) to include the effect of this indicator.

It is already included in other strata where the SAR appears.



YEAR 2015

	Stratum	Gear	Length	CR/BE R	ROFTA (%)	NVA/FTE	TECHNICAL INDICATOR	SHI	SAR	OVERALL INDICATOR
North Atlantic	ADTS	Bottom trawling	3	5,44	31,88	18.274,38	0,86			3
			4	1,42	16,52	15.862,92	0,86			3
			5	1,61	33,23	39.028,06	0,78	1,38		2
			6	3,48	456,00	119.676,63	0,76	0,82		3
	APS	Purse seine	2	4,59	41,85	14.148,53	0,62			2
			3	3,15	77,17	20.760,64	0,65			2
			4	1,53	38,77	24.821,66	0,80			3
			5	1,87	60,11	30.924,67	0,85			3
	ADFN	Gillnets	2	2,85	70,90	19.069,10	0,71			3
			3	0,37	-21,42	10.276,61	0,75			1
			4	1,02	0,81	18.312,08	0,88	1,16		2
	AHOK	Hooks	2	3,27	73,72	25.499,94	0,71	1,65		2
			3	2,63	41,64	17.646,39	0,73	1,32		2
			4	2,07	70,06	27.156,12	0,74	0,84		3
			5	0,86	-11,15	10.700,85	0,69	0,67		1
	APGO	Surface longliners	4	2,66	99,91	32.867,37	0,91	0,52	BSH-27	3
			5	2,39	33,24	36.486,31	1,04	0,34	BSH-27	3
	APGP	Passive multipurpose	5	2,83	134,06	61.234,61	0,83	0,79		3
	APMP	Mobile and passive multipurpose	1	3,19	55,40	15.305,58	0,45			2
			2	1,79	23,24	13.983,12	0,61			2
3			1,56	10,46	23.963,27	0,77	0,96		3	
AFPO	Pots	2	2,16	28,41	11.752,50	0,76			3	
		3	1,66	16,75	11.221,79	0,74			3	
ADRB	Dredges	1	9,25	143,24	20.621,23	0,44			2	
		2	0,20	-79,92	17.163,24	1,08			2	
		3	1,93	22,92	29.930,75	1,09			3	
erran	BDTS	Bottom trawling	2	3,13	91,46	17.649,70	0,87			3
			3	1,97	33,44	23.946,09	0,79			3



Other regions			4	1,37	16,34	21.147,51	0,78	4,28		2
			5	1,38	14,66	23.702,20	0,84	3,39	HKE-37.1.1-SA 6	2
	BPS	Purse seine	2	6,28	74,28	11.031,99	0,92			3
			3	3,65	80,41	21.468,81	0,81	1,13	PIL-37.1.1-SA 6	2
			4	2,68	29,31	20.048,59	0,86	1,20	PIL-37.1.1-SA 6	2
			5	2,11	67,12	52.021,54	0,46	0,66	PIL-37.1.1-SA 6	2
	BDFN	Gillnets	2	6,66	100,01	15.174,20	0,69			2
			3	-1,06	-95,26	-987,46	0,78			1
	BHOK	Hooks	2	1,06	6,92	13.445,79	0,67			2
			3	1,31	6,43	21.080,73	0,59			2
	BPGO	Surface longliners	3	-0,60	-30,56	16.500,53	0,75	2,79		1
			4	1,52	28,44	17.937,09	0,86	2,39		2
	BPMP	Mobile and passive multipurpose	1	0,91	-6,65	21.018,30	0,37			1
			2	5,61	152,16	26.884,56	0,56			2
			3	3,98	162,07	31.727,11	0,76			3
	BFPO	Pots	3	2,37	27,75	25.542,19	1,28			3
	BDRB	Dredges	2	1,88	17,69	18.152,45	0,83			3
	CDTS	Bottom trawling	5	2,71	193,20	24.387,75	0,84			3
			6	2,15	242,72	60.324,33	0,87			3
	CPS	Purse seine	3	1,47	14,59	21.827,33	0,80			3
		6	0,99	-0,63	30.075,43	0,87	0,99		2	
CHOK	Hooks	2	2,34	23,68	20.517,74	0,62	0,61		2	
		3	2,28	39,96	23.509,53	0,67	0,83		2	
		5	1,26	19,64	18.307,30	0,78	0,97		3	
CPGO	Surface longliners	5	3,54	142,74	35.597,33	0,89			3	
		6	1,95	86,07	30.783,14	0,92			3	
CPMP	Mobile and passive multipurpose	1	2,62	42,39	16.480,91	0,30			2	
		2	-0,87	118,50	11.296,86	0,57			1	
		3	-0,04	749,73	-39.629,02	0,80	0,78		2	
		5	0,72	-19,13	18.897,43	1,00	0,89		2	



GOBIERNO
DE ESPAÑA

MINISTERIO
DE AGRICULTURA Y PESCA,
ALIMENTACIÓN Y MEDIO AMBIENTE

CFPO	Pots	3	-17,94	-93,67	4.143,24	0,83		1
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