



GOBIERNO
DE ESPAÑA

MINISTERIO
DE AGRICULTURA, PESCA
Y ALIMENTACIÓN

ADDITIONAL DOCUMENTS 2019 ANNUAL REPORT ON THE ACTIVITY OF THE SPANISH FISHING FLEET

Article 22 of Council Regulation (EC) No 1380/2013 on the adjustment and management of fishing capacity

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SUMMARY OF INDICATORS BY YEAR 91

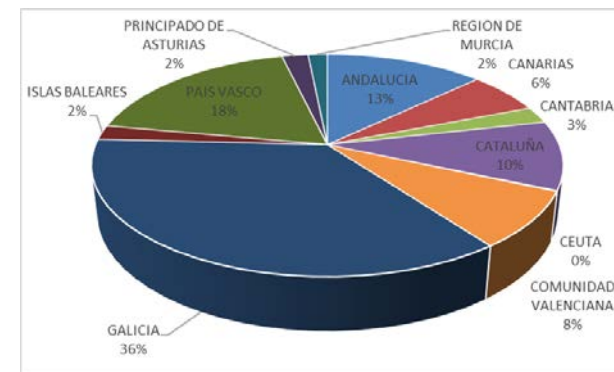
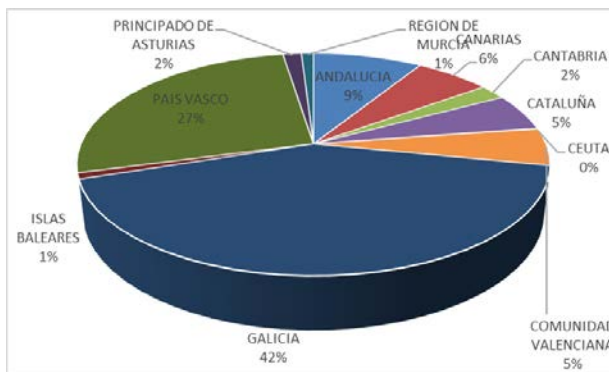
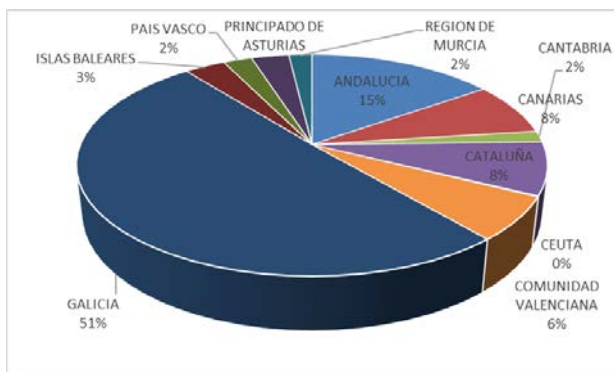
A. ANNEX I: STRUCTURE OF THE FLEET

The fishing fleet register is organised by method and fishing ground where each vessel has its main licence. There may be variations in the type of activity carried out by each vessel throughout the year, requiring authorisations and temporary fishing permits, or temporary changes in fishing method.

CHARACTERISTICS OF THE ACTIVE FLEET (2018) BY REGISTERED METHOD AT 31/12/2018

	REGISTERED ACTIVE VESSELS BY FISHING GROUND	VESSELS	TOT GT	TOT KW	VESSELS (%)	GT (%)	KW (%)	MEAN LENGTH	MEAN AGE
NATIONAL FISHING GROUND	VESSELS USING SMALL-SCALE GEAR (CANARY ISLANDS)	537	1,872.22	15,015.28	91.17%	39.35%	62.39%	7.99	39
	POLE-AND-LINE TUNA-FISHING VESSELS (CANARY ISLANDS)	52	2,886.18	9,051.58	8.83%	60.65%	37.61%	18.53	25
	SUBTOTAL	589	4,758	24,067					
	BOTTOM TRAWLERS (CANTABRIA NW)	73	16,657.96	28,121.39	1.67%	30.37%	14.10%	28.37	18
	VESSELS USING SMALL-SCALE GEAR (CANTABRIA NW)	3,922	11,082.61	94,846.99	89.73%	20.21%	47.54%	6.8	34
	PURSE SEINERS (CANTABRIA NW)	253	20,773.36	60,150.36	5.79%	37.87%	30.15%	22.49	21
	BOTTOM-SET LONGLINERS (CANTABRIA NW)	60	2,628.21	7,500.37	1.37%	4.79%	3.76%	16.45	18
	FIXED GILLNETTERS (CANTABRIA NW)	21	1,020.06	2,874.33	0.48%	1.86%	1.44%	17.25	18
	BOTTOM-SET GILLNETTERS (CANTABRIA NW)	42	2,686.39	6,000.64	0.96%	4.90%	3.01%	18.44	19
	SUBTOTAL	4,371	54,849	199,494					
	BOTTOM TRAWLERS (GULF OF CÁDIZ)	125	5,352.64	19,548.32	19.03%	51.92%	41.33%	18.81	17
	VESSELS USING SMALL-SCALE GEAR (GULF OF CÁDIZ)	457	2,762.48	17,463.79	26.80%	36.92%	36.92%	9.6	25
	PURSE SEINERS (GULF OF CÁDIZ)	75	2,193.98	10,289.59	21.28%	21.75%	21.75%	17.24	19
	SUBTOTAL	657	10,309	47,302					
	BOTTOM TRAWLERS (MEDITERRANEAN)	581	33,638.94	104,313.40	28.45%	69.95%	54.77%	20	24
	VESSELS USING SMALL-SCALE GEAR (MEDITERRANEAN)	1,228	5,336.34	45,258.43	60.14%	11.10%	23.76%	9	32
	PURSE SEINERS TARGETING BLUEFIN TUNA (MEDITERRANEAN)	6	1,613.36	5,845.01	0.29%	3.35%	3.07%	39	16
	PURSE SEINERS (MEDITERRANEAN)	191	7,199.80	32,428.48	9.35%	14.97%	17.03%	18	24
	BOTTOM-SET LONGLINERS (MEDITERRANEAN)	36	303.93	2,615.56	1.76%	0.63%	1.37%	11	29
	SUBTOTAL	2,042	48,092	190,461					
SUBTOTAL FOR NATIONAL FISHING GROUND	7,659	118,008	461,324						
EU FISHING GROUNDS	BOTTOM TRAWLERS (ICES ZONES VB, VI, VII and VIII abde)	29	10,139.06	15,868.80	28.16%	36.21%	34.62%	35.35	15.00
	TRAWLERS (PORTUGUESE WATERS)	14	2,117.87	4,316.52	13.59%	7.56%	9.42%	25.24	16.00

	VESELS USING PASSIVE GEAR (ICES ZONES VB, VI, VII and VIII abde)	56	15,225.72	24,664.44	54.37%	54.38%	53.81%	30.72	16.00
	BOTTOM-SET LONGLINERS UNDER 100 GRT (VIII abde)	4	515.16	984.10	3.88%	1.84%	2.15%	22.75	21.00
	REGISTERED ACTIVE VESSELS BY FISHING GROUND	VESELS	TOT GT	TOT KW	VESELS (%)	GT (%)	KW (%)	MEAN LENGTH	MEAN AGE
	SUBTOTAL FOR EU FISHING GROUNDS	103	27,998	45,834					
[INTERNATIONAL] FISHING GROUNDS	FREEZER TRAWLERS (INTERNATIONAL AND THIRD-COUNTRY WATERS)	54	29,836.95	41,859.45	50.00%	22.43%	23.66%	41	18
	FREEZER TRAWLERS (NAFO)	19	22,156.40	22,774.42	17.59%	16.66%	12.87%	59	23
	FREEZER TUNA SEINERS (ATLANTIC, INDIAN AND PACIFIC OCEANS)	16	35,652.00	51,509.95	14.81%	26.80%	29.11%	79	29
	FREEZER TUNA SEINERS (INDIAN AND PACIFIC OCEANS)	10	34,909.88	48,705.76	9.26%	26.24%	27.53%	99	12
	COD-FISHING VESSELS	5	10,047.00	11,265.26	4.63%	7.55%	6.37%	64	11
	BOTTOM-SET LONGLINERS (INTERNATIONAL AND THIRD-COUNTRY WATERS)	4	416.95	821.55	3.70%	0.31%	0.46%	23	32
	SUBTOTAL FOR INTERNATIONAL FISHING GROUNDS	108	133,019.18	176,936.39					
CRSL	CONSOLIDATED REGISTER OF SURFACE LONGLINERS	180	42,737.71	60,206.39				28	19
	TOTAL ACTIVE SPANISH FLEET, 2018	8,050	321,763	744,300					



Distribución del número de buques por Comunidad Autónoma	Breakdown of fishing vessels by autonomous community
GALICIA	GALICIA
COMUNIDAD VALENCIANA	VALENCIA
CEUTA	CEUTA
CATALUÑA	CATALONIA
CANTABRIA	CANTABRIA
CANARIAS	CANARY ISLANDS
ANDALUCÍA	ANDALUSIA
REGIÓN DE MURCIA	MURCIA
PRINCIPADO DE ASTURIAS	ASTURIAS
PAÍS VASCO	BASQUE COUNTRY
ISLAS BALEARES	BALEARIC ISLANDS

Distribución de Arqueo (GT)	Breakdown of tonnage (GT)
GALICIA	GALICIA
COMUNIDAD VALENCIANA	VALENCIA
CEUTA	CEUTA
CATALUÑA	CATALONIA
CANTABRIA	CANTABRIA
CANARIAS	CANARY ISLANDS
ANDALUCÍA	ANDALUSIA
REGIÓN DE MURCIA	MURCIA
PRINCIPADO DE ASTURIAS	ASTURIAS
PAÍS VASCO	BASQUE COUNTRY
ISLAS BALEARES	BALEARIC ISLANDS

Distribución de potencia (Kw)	Breakdown of power (kW)
GALICIA	GALICIA
COMUNIDAD VALENCIANA	VALENCIA
CEUTA	CEUTA
CATALUÑA	CATALONIA
CANTABRIA	CANTABRIA
CANARIAS	CANARY ISLANDS
ANDALUCÍA	ANDALUSIA
REGIÓN DE MURCIA	MURCIA
PRINCIPADO DE ASTURIAS	ASTURIAS
PAÍS VASCO	BASQUE COUNTRY
ISLAS BALEARES	BALEARIC ISLANDS



		ACTIVE	INACTIVE	REGISTERED	REMOVED	REGISTERED	ACTIVE	INACTIVE	REGISTERED	REMOVED	REGISTERED	ACTIVE	INACTIVE	REGISTERED	REMOVED	REGISTERED	
		VESSELS	VESSELS	VESSELS	END 2018	VESSELS	GT	GT	GT	END 2018	END 2018	KW	KW	KW	END 2018	END 2018	
METHOD		VESSELS	VESSELS	VESSELS	VESSELS	VESSELS	GT	GT	GT	GT	GT	KW	KW	KW	KW	KW	
NATIONAL FISHING GROUND	CANTABRIA NW	BOTTOM TRAWLING (CANTABRIA NW)	73	3	76	1	75	16,657.96	632.48	17,290.44	217.82	17,072.62	28,121.39	882.60	29,003.99	235.36	28,768.63
		SMALL-SCALE GEAR (CANTABRIA NW)	3,922	428	4,350	92	4,258	11,082.61	798.63	11,881.24	290.61	11,590.63	94,846.99	7,428.77	102,275.76	2,257.98	100,017.78
		PURSE-SEINING (CANTABRIA NW)	253	11	264	6	258	20,773.36	1,162.76	21,936.12	468.62	21,467.50	60,150.36	2,908.09	63,058.45	1,237.84	61,820.61
		BOTTOM-SET LONGLINING (CANTABRIA NW)	60	3	63	2	61	2,628.21	111.65	2,739.86	80.65	2,659.21	7,500.37	303.03	7,803.40	222.12	7,581.28
		FIXED GILLNETTING (CANTABRIA NW)	21	3	24	1	23	1,020.06	34.53	1,054.59	17.55	1,037.04	2,874.33	205.20	3,079.53	88.26	2,991.27
		BOTTOM-SET GILLNETTING (CANTABRIA NW)	42	1	43	3	40	2,686.39	36.40	2,722.79	149.49	2,573.30	6,000.64	97.82	6,098.46	434.68	5,663.78
		TOTAL	4,371	449	4,820	105	4,715	54,848.59	2,776.45	57,625.04	1,224.74	56,400.30	199,494.08	11,825.51	211,319.59	4,476.24	206,843.35
	GULF OF CÁDIZ	BOTTOM TRAWLING (GULF OF CÁDIZ)	125	7	132	3	129	5,352.64	273.97	5,626.61	169.75	5,456.86	19,548.32	983.73	20,532.05	487.27	20,044.78
		SMALL-SCALE GEAR (GULF OF CÁDIZ)	457	105	562	7	555	2,762.48	259.72	3,022.20	40.59	2,981.61	17,463.79	2,165.06	19,628.85	222.86	19,405.99
		PURSE-SEINING (GULF OF CÁDIZ)	75	9	84	2	82	2,193.98	214.79	2,408.77	106.91	2,301.86	10,289.59	1,212.09	11,501.68	416.29	11,085.39
		TOTAL	657	121	778	12	766	10,309.10	748.48	11,057.58	317.25	10,740.33	47,301.70	4,360.88	51,662.58	1,126.42	50,536.16
	MEDITERRANEAN	BOTTOM TRAWLING (MEDITERRANEAN)	581	18	599	10	589	33,638.94	1,262.48	34,901.42	757.42	34,144.00	104,313.40	3,794.44	108,107.84	2,231.50	105,876.34
		SMALL-SCALE GEAR (MEDITERRANEAN)	1,228	327	1,555	67	1,488	5,336.34	946.59	6,282.93	250.77	6,032.16	45,258.43	8,860.61	54,119.04	2,061.60	52,057.44
		PURSE-SEINING (MEDITERRANEAN)	191	28	219	12	207	7,199.80	698.10	7,897.90	364.36	7,533.54	32,428.48	3,889.31	36,317.79	1,957.16	34,360.63
		PURSE-SEINING TARGETING BLUEFIN TUNA (MEDITERRANEAN)	6		6		6	1,613.36		1,613.36		1,613.36	5,845.01		5,845.01		5,845.01
		BOTTOM-SET LONGLINING (MEDITERRANEAN)	36	22	58	7	51	303.93	222.27	526.20	67.50	458.70	2,615.56	1,982.17	4,597.73	549.42	4,048.31
		TOTAL	2,042	395	2,437	96	2,341	48,092.37	3,129.44	51,221.81	1,440.05	49,781.76	190,460.88	18,526.53	208,987.41	6,799.68	202,187.73
	CANARY ISLANDS	SMALL-SCALE GEAR (CANARY ISLANDS)	537	150	687	11	676	1,872.22	342.28	2,214.50	34.04	2,180.46	15,015.28	2,792.83	17,808.11	267.72	17,540.39
		POLE-AND-LINE TUNA FISHING (CANARY ISLANDS)	52	3	55		55	2,886.18	77.03	2,963.21		2,963.21	9,051.58	279.49	9,331.07		9,331.07
		TOTAL	589	153	742	11	731	4,758.40	419.31	5,177.71	34.04	5,143.67	24,066.86	3,072.32	27,139.18	267.72	26,871.46
	TOTAL FOR NATIONAL FISHING GROUND		7,659	1,118	8,777	224	8,553	118,008.46	7,073.68	125,082.14	3,016.08	122,066.06	461,323.52	37,785.24	499,108.76	12,670.06	486,438.70

	ACTIVE	INACTIVE	REGISTERED	REMOVED END 2018	REGISTERED END 2018	ACTIVE	INACTIVE	REGISTERED	REMOVED END 2018	REGISTERED END 2018	ACTIVE	INACTIVE	REGISTERED	REMOVED END 2018	REGISTERED END 2018
METHOD	VESSELS	VESSELS	VESSELS	VESSELS	VESSELS	GT	GT	GT	GT	GT	KW	KW	KW	KW	KW
EU															
PORTUGUESE WATERS															
TRAWLING (PORTUGUESE WATERS)	14	2	16	2	14	2,117.87	431.00	2,548.87	431.00	2,117.87	4,316.52	431.00	4,747.52	520.00	4,227.52
ICES ZONES VB, VI, VII and VIII abde															
BOTTOM TRAWLING (ICES ZONES VB, VI, VI)	29	4	33	1	32	10,139.06	1,693.00	11,832.06	387.00	11,445.06	15,868.80	1,693.00	17,561.80	289.79	17,272.01
PASSIVE GEAR (ICES ZONES VB, VI, VII and VIII abd)	56		56		56	15,225.72		15,225.72		15,225.72	24,664.44		24,664.44		24,664.44
ZONES VIII abde															
BOTTOM-SET LONGLINING UNDER 100 GRT (V)	4	1	5	1	4	515.16	387.00	902.16	387.00	515.16	984.10	387.00	1,371.10	367.75	1,003.35
TOTAL FOR EU FISHING GROUNDS	103	7	110	4	106	27,997.81	2,511.00	30,508.81	1,205.00	29,303.81	45,833.86	2,511.00	48,344.86	1,177.54	47,167.32
INTERNATIONAL															
INTERNATIONAL AND THIRD-COUNTRY WATERS															
FREEZER TRAWLING (INTERNATIONAL WATERS)	54	8	62	2	60	29,836.95	3,632.26	33,469.21	1,150.00	32,319.21	41,859.45	5,395.62	47,255.07	1,549.70	45,705.37
BOTTOM-SET LONGLINING (INTERNATIONAL WATERS)	4		4		4	416.95		416.95		416.95	821.55		821.55		821.55
NORTH ATLANTIC															
COD-FISHING	5		5	1	4	10,047.00		10,047.00	2,165.00	7,882.00	11,265.26		11,265.26	3,000.83	8,264.43
FREEZER TRAWLING (NAFO)	19	1	20	1	19	22,156.40	1,638.00	23,794.40	1,638.00	22,156.40	22,774.42	1,619.45	24,393.87	1,619.45	22,774.42
ATLANTIC, INDIAN, PACIFIC															
FREEZER TUNA PURSE-SEINING	16		16		16	35,652.00		35,652.00		35,652.00	51,509.95		51,509.95		51,509.95
INDIAN AND PACIFIC															
FREEZER TUNA PURSE-SEINING	10		10		10	34,909.88		34,909.88		34,909.88	48,705.76		48,705.76		48,705.76
TOTAL INTERNATIONAL WATERS	108	9	117	4	113	133,019.18	5,270.26	138,289.44	4,953.00	133,336.44	176,936.39	7,015.07	183,951.46	6,169.98	177,781.48
CONSOLIDATED REGISTER OF SURFACE LONGLINERS	180	23	203	3	200	42,737.71	4,209.18	46,946.89	195.63	46,751.26	60,206.39	6,556.97	66,763.36	364.07	66,399.29
OVERALL TOTAL	8,050	1,157	9,207	235	8,972	321,763	19,064	340,827	9,370	331,458	744,300	53,868	798,168	20,382	777,787

REGISTERED FLEET AT YEAR END (ACTIVE AND INACTIVE)

	2012	2013	2014	2015	2016	2017	2018	Variation 2012-2013	Variation 2013-2014	Variation 2014-2015	Variation 2015-2016	Variation 2016-2017	Variation 2017-2018
No VESSELS	10,116	9,871	9,635	9,409	9,299	9,146	8,972	-2.42%	-2.39%	-2.35%	-1.17%	-1.65%	-1.90%
KW	871,956.77	846,718.74	821,611.98	799,011.23	789,574.52	782,570.27	777,953.73	-2.89%	-2.97%	-2.75%	-1.18%	-0.89%	-0.59%
GT	384,795.73	372,617.02	357,556.35	342,568.58	337,678.90	333,812.81	331,457.57	-3.16%	-4.04%	-4.19%	-1.43%	-1.14%	0.71%

REGISTERED VESSELS AT YEAR END (2012-2018)

FISHING GROUND	METHOD	2012	2013	2014	2015	2016	2017	2018
NATIONAL FISHING GROUND	TRAWLING	921	909	858	834	825	808	793
	SMALL-SCALE GEAR	7,782	7,602	7,474	7,326	7,216	7,106	6,977
	PURSE SEINING	624	612	601	588	617	563	547
	PURSE SEINING (BLUEFIN TUNA)	6	6	6	6	6	6	6
	POLE-AND-LINE TUNA FISHING						48	55
	BOTTOM-SET LONGLINING	157	153	143	137	130	119	112
	SURFACE LONGLINING	148	146	141				
	FIXED GILLNETTING	32	31	31	26	24	24	23
	BOTTOM-SET GILLNETTING	53	51	50	46	45	43	40
	SUBTOTAL	9,723	9,510	9,304	8,963	8,863	8,717	8,553
EU FISHING GROUNDS	TRAWLING	74	70	58	55	52	51	46
	PASSIVE GEAR	69	66	62	57	55	55	60
	SUBTOTAL	143	136	120	112	107	106	106
INTERNATIONAL FISHING GROUNDS	TRAWLING	108	94	91	89	86	85	83
	FREEZER TUNA PURSE-SEINING	32	32	30	26	26	26	26



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	BOTTOM-SET LONGLINING	3	3	3	3	4	3	4
	SURFACE LONGLINING	94	92	86				
	SUBTOTAL	237	221	210	118	116	114	113
NO ASSIGNED FISHING GROUND	NO ASSIGNED METHOD	13	4	1				
CONSOLIDATED REGISTER OF SURFACE LONGLINERS					216	213	209	200
	TOTAL	10,116	9,871	9,635	9,409	9,299	9,146	8,972



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

2018 FISHERY ACTIVITY BY SUPRA-REGION AND MAIN GEAR

Vessels by segment, length, gear and supra-region

SUPRA-REGION	GEAR	0-10	10-12	12-18	18-24	24-40	> 40	TOTAL
NORTH ATLANTIC	GILLNETS		119	153	31			303
	DREDGES	1,611	16	83				1,710
	TRAWL NETS			63	75	102	15	255
	POTS		77	52				129
	HOOKS		69	73	26	16		184
	SURFACE LONGLINES				9	32		41
	POLYVALENT PASSIVE GEAR					59		59
	POLYVALENT ACTIVE & PASSIVE GEAR	2,106	40	28				2,174
	PURSE SEINES		19	108	97	87		311
Total for NORTH ATLANTIC		3,717	340	560	238	296	15	5,166
NORTH ATLANTIC CANARY ISLANDS	POTS		16					16
	HOOKS		44	30		25		99
	POLYVALENT ACTIVE & PASSIVE GEAR	459						459
	PURSE SEINES			16				16
Total CANARY ISLANDS		459	60	46	0	25	0	590
ATL MA	HOOKS			8				8
Total for MOROCCO		0	0	8	0	0	0	8
MEDITERRANEAN	GILLNETS		89	58				147
	DREDGES		56	13				69
	TRAWL NETS		17	146	292	126		581
	POTS		21	23				44
	HOOKS		36	26				62
	SURFACE LONGLINES			31	21			52
	POLYVALENT ACTIVE & PASSIVE GEAR	100	829	14				943
	PURSE SEINES		16	73	79	26		194
Total for MEDITERRANEAN		100	1,064	384	392	152	0	2,092
RFOS	TRAWL NETS					40	31	71
	HOOKS					14		14
	SURFACE LONGLINES					58	25	83
	PURSE SEINES						26	26
Total for OTHER FISHING REGIONS		0	0	0	0	112	82	194



GOBIERNO
DE ESPAÑA

MINISTERIO
DE AGRICULTURA, PESCA
Y ALIMENTACIÓN

TOTAL ACTIVE FISHING FLEET (2018)	4,276	1,464	998	630	585	97	8,050
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MANAGEMENT OF FISHING ACTIVITY BY THE SPANISH FLEET

1. North Atlantic (NA)

1.1. Management of fishing activity in the North Atlantic national fishing ground (FAO 27.8.c-27.9.a)

In the CNW national fishing ground there were 4,371 vessels in operation (more than 54% of the total active fleet), the majority of which measured less than 12 metres and used polyvalent gear, pots and dredges to fish for molluscs. These were followed by purse seiners with 253 vessels, which fished for chub mackerel, horse mackerel, anchovy and sardine (mainly using pole lines, live bait and trolling lines) in the tuna and mackerel fisheries in zones VII and VIII abd; bottom-set longliners and gillnetters, which fished for mackerel, hake and conger; and bottom trawlers, which fished for blue whiting, horse mackerel, mackerel and hake.

Within the actions aimed at improving fishery management, the distribution of quotas between the different fleet segments has continued.

The CNW bottom-trawling fleet can definitively transfer quotas between vessels. This will enable an orderly restructuring of the fleet, allowing more competitive vessel owners to emerge, with higher quotas for species that, due to the nature of the vessel or the fishing grounds in which they normally operate, will make their activity more profitable. It will also reduce the pressure exerted on resources and thus ensure their sustainability.

There were 657 vessels that fished in the Gulf of Cádiz (7.04% of the total), the majority of which used artisanal methods (gillnets, hooks and traps) and dredges mainly to fish for striped venus. All these species, although they do not provide large catch volumes, are of great socio-economic importance at local level. There were also 125 bottom trawlers (fishing for chub mackerel, mantis shrimp, cuttlefish, shrimp and Southern hake) and 75 purse seiners (fishing for anchovy, sardine, chub mackerel and horse mackerel).

1.2 Management of fishing activity in non-Spanish EU waters

In the ICES EU waters of zones Vb, VI, VII and VIII abde, 89 vessels operated in fisheries for demersal species (hake, anglerfish and megrim) using bottom trawl nets and passive gear (gillnets and bottom-set longlines). In Portuguese waters, 14 trawlers operated in zone 27.9a, primarily fishing for blue whiting and Southern hake.

Quota management continues to be based on individual transferable quotas (known as ITQs), which involve individual quota allocations per vessel, in addition to definitive transfer mechanisms that have long proved to be good instruments in strengthening these fleets.

As a complement to quota management, vessels can exchange quotas (which is called a quota swap) with other Member States in order to adjust their quotas to their interests.

The renewal of the agreement with Portugal, which includes certain unloading limitations and reciprocal compliance with closures for the inland water trawler fleet, could not enter into force in 2018, although an extension was granted for the previous agreement pending the parliamentary processing of the new one.

1.3. Fisheries management in non-EU North Atlantic waters

The distant-water fleet, in addition to benefiting from arrangements with developing countries, has fishing opportunities in three nearby countries with Atlantic waters: Norway, Greenland and the Faeroe Islands. In Norway, the four vessels on the cod-fishing fleet register had fishing opportunities for Arctic cod and redfish under this arrangement, which were modified throughout the year by intra-Community exchanges.

Lastly, Spain had one licence to fish for blue whiting with pelagic trawls in Faeroese waters under the EU/Faeroe Islands fisheries arrangement and the mutual access arrangement.

Until the protocol with Morocco expired, some 50 vessels were licensed. These fished for various species, namely anchovy (*Engraulis encrasicolus*), red seabream (*Pagellus bogaraveo*) and black scabbardfish (*Lepidopus caudatus*). Some of these vessels (demersal trawlers, pole-and-line tuna vessels) combine this activity with fishing under other arrangements.

Fisheries in the NAFO area.

Vessels fishing for demersal species operate in this area. The 2018 freezer-trawler fleet register was made up of 19 vessels and fishing opportunities were established through Council Regulation (EU) 2018/120 of 23 January 2018.

<https://eur-lex.europa.eu/legal-content/es/TXT/?uri=CELEX:32018R0120>

North East Atlantic Fisheries Commission (NEAFC):

Freezer trawlers operate in this regulatory area, fishing for both deep-sea species (primarily roundnose grenadier) and pelagic redfish. There is also sporadic activity by vessels from Community waters (Gran Sol) that fish for hake and associated species.

The threshold of quotas allocated to Spain for species regulated by this organisation was established by the TACs and quotas regulation and by [Regulation \(EU\) 1367/2014](#) fixing the fishing opportunities for Union vessels of certain deep-sea fish stocks.

2. Mediterranean

Mediterranean fishing ground

The Spanish Mediterranean is a mixed and multi-species fishery, in which more than 50% of vessels are artisanal and operate fewer than 90 days per year. This segment is followed by the trawler fleet, with a mean length of about 20 metres (589 vessels), which mainly fishes for mullet, octopus, hake and Aesop shrimp, and the purse seiner fleet (197 vessels), which catches pelagic species, namely anchovy, sardine,

horse mackerel and round sardinella. Within the latter fleet, 6 vessels (the largest) are authorised to fish for bluefin tuna.

3. Other fishing regions

3.1 National fishing ground.

Canary Islands (FAO 34.1.2): This is the oldest fleet (39 years on average for vessels using small-scale gear and 25 years for pole-and-line tuna vessels) and the smallest in number, with over 64% of active vessels fishing fewer than 90 days/year. In 2018, 589 vessels were active: 16 of them used purse seines (for horse mackerel, chub mackerel, round sardinella and sardine), 459 used polyvalent gear, 16 used pots and 92 used hooks (with greater catches of tuna and native species). It is worth highlighting the strong artisanal nature of the fishing activity in the Canary Islands.

3.2 Trawler fleet in international and third-country waters

In 2018, this fleet had 54 active vessels. These operated either in international waters, within the third-country EEZs set up under the EU fisheries arrangements with Mauritania and Guinea Bissau (for hake, crustaceans and cephalopods) or under private licences granted directly to vessel owners. They fished in Central and South-east waters (FAO 34 and 47) and in the South-west Pacific (FAO 81).

3.3 Activity in international waters and in fisheries not covered by fisheries arrangements and regional fisheries organisations

In 2018, Spanish vessels operated in international waters on the Argentine platform, where they fished for seabed species using towed gear. The main species caught were hake (*merluccius australis*), blue grenadier (*Macruronus novaezelandiae*), Argentine shortfin squid (*Illex argentinus*), Patagonian squid (*Loligo gahi*), longtail Southern cod (*Patagonotothen ramsayi*), Patagonian cod (*Salilota australis*), Southern blue whiting (*Micromesistius australis*), pink cusk-eel (*Genypterus blacodes*) and skate (*Raja spp*).

3.4 Bottom-set longlining in international and third-country waters, and hook/live bait gear (area 34)

Four vessels operated with bottom-set longlines for alfonsino; the rest of the fleet primarily operated in various fishing grounds with authorisations for tuna and seabream.

3.5 Freezer tuna fleet

Throughout 2018, this fleet comprised 26 vessels that continue to operate in international waters regulated by regional fisheries organisations covering the Pacific, Indian and Atlantic Oceans and in the EEZs of countries where a Community arrangement exists, or in those for which they have acquired private licences.

In October 2018, a new fisheries arrangement and protocol was signed with Gambia that will provide fishing opportunities for tuna seiners, pole-and-line tuna-fishing vessels and trawlers. Its entry into force will allow the Spanish fleet to return to this fishing ground. It has not been able to operate there as yet, even under private licences, due to an EU agreement with Gambia that has been dormant since 1996.

SURFACE LONGLINER FLEET

This fleet operates in national and international waters of the Atlantic, Indian and Pacific Oceans and in the EEZs of countries with which a Community agreement exists or in those for which it has acquired private licences. It forms part of the Consolidated Register of Surface Longliners, with the majority of its catches comprising swordfish, pelagic sharks and tuna. In 2018, 176 vessels participated in this fishery (16 fewer than the previous year): 41 primarily in North Atlantic waters, 52 in the Mediterranean and 83 in other waters.



C. ANNEX III: TREND IN FLEETS AND FISHERIES

TREND IN LICENCES/AUTHORISATIONS/TFPs

TREND IN LICENCES/AUTHORISATION/TFPs (the number of licences may or may not coincide with the number of active vessels, as one vessel may have more than one licence throughout the year).

NATIONAL FISHING GROUND

		LICENCES									
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
CANARY ISLANDS	SMALL-SCALE GEAR	901	889	872	805	799	771	751	751	805	667
	POLE-AND-LINE TUNA FISHING	14	14	13	13	13	12	12	45	41	47
	Subtotal	915	903	885	818	812	783	763	796	846	714
CANTABRIA NW	BOTTOM TRAWLING	117	111	101	99	99	93	80	81	83	76
	SMALL-SCALE GEAR	4,948	4,885	4,767	4,627	4,546	4,473	4,400	4,265	4,210	4,141
	PURSE SEINING	304	294	284	280	278	272	264	267	266	262
	BOTTOM-SET LONGLINING	86	84	79	79	79	71	68	67	67	63
	FIXED GILLNETTING	33	33	34	32	31	31	26	24	23	21
	BOTTOM-SET GILLNETTING	57	57	54	53	51	50	46	48	47	43
	Subtotal	5,545	5,464	5,319	5,170	5,084	4,990	4,884	4,752	4,696	4,606
GULF OF CÁDIZ	BOTTOM TRAWLING	159	149	147	142	142	139	127	134	132	130
	SMALL-SCALE GEAR	546	582	580	572	578	571	563	556	554	552
	PURSE SEINING	97	92	89	88	87	86	84	86	128	81
	Subtotal	802	823	816	802	807	796	774	776	814	763
MEDITERRANEAN	BOTTOM TRAWLING	797	743	703	680	671	626	617	610	611	597
	SMALL-SCALE GEAR	2,024	1,951	1,871	1,778	1,723	1,658	1,612	1,502	1,780	1,442
	PURSE SEINING	268	260	246	243	239	231	228	222	223	215
	PURSE SEINING (BLUEFIN TUNA)	6	6	6	6	6	6	-	-	-	-
	BOTTOM-SET LONGLINING	104	100	87	78	75	71	69	56	73	45
	Subtotal	3,199	3,060	2,913	2,785	2,714	2,592	2,526	2,390	2,687	2,299
TOTAL		10,461	10,250	9,933	9,575	9,417	9,161	8,947	8,714	9,043	8,382

The licences issued for the small-scale gear method in the Canary Islands are renewed every 5 years. Therefore, a significant decrease was seen in 2018 as there were few renewals that year.

EU FISHING GROUNDS

		LICENCES									
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
PORTUGUESE WATERS	TRAWLING	25	21	14	13	13	14	14	15	15	16
ICES AREAS Vb, VI, VII and VIII abde	BOTTOM TRAWLING AND PASSIVE GEAR (bottom-set gillnets and longlines)	175	170	146	115	114	88	82	87	87	89
ZONES VIII abde	BOTTOM-SET LONGLINING UNDER 100 GRT	25	24	21	15	15	15	11	12	12	9
TOTAL		225	215	181	143	142	117	107	114	114	114

INTERNATIONAL WATERS

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
LONG-DISTANCE TRAWLERS	136	123	124	122	154	148	259	317	220	211
FREEZER TUNA SEINERS	43	33	32	32	31	30	29	38	31	26
POLE-AND-LINE TUNA-FISHING VESSELS									7	7
BOTTOM LONGLINERS	5	4	4	4	7	6	6	7	3	3
TOTAL	184	160	160	158	192	184	294	362	261	247

SURFACE LONGLINERS

	TFPs									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
ZONE 1. MEDITERRANEAN	92	70	92	89	76	75	73	71	52	50
ZONE 2. NATIONAL WATERS UP TO 80 MILES OUT	68	73	63	71	73	72	60	61	73	62
ZONE 3. NATIONAL WATERS BEYOND 80 MILES OUT AND THE ATLANTIC NORTH OF THE 5° N PARALLEL	87	89	78	97	89	82	69	74	80	71
ZONE 4. THE ATLANTIC SOUTH OF THE 5° N PARALLEL	40	43	43	41	34	32	31	27	27	28
ZONE 5. INDIAN OCEAN	16	14	13	17	22	21	19	16	12	12
ZONE 6. PACIFIC OCEAN	32	28	26	31	30	28	25	28	31	28
TOTAL	335	317	315	346	324	310	277	277	275	251



D. ANNEX IV: FISHING EFFORT ADJUSTMENT SCHEMES

LIST OF FISHING EFFORT SCHEMES

Throughout 2018, temporary stoppages were implemented in accordance with the provisions of the European Maritime and Fisheries Fund (EMFF) Regulation; specifically, the temporary stoppages listed below were carried out.

TYPE OF TEMPORARY STOPPAGE
Biological recovery of the artisanal fleet listed in the register of vessels using small-scale gear in the Cantabria NW zone
Temporary closures for the bottom-trawling fleet in the Autonomous Community of Catalonia
Temporary closures for the bottom-trawling fleet in the Autonomous Community of Valencia
Temporary closures for the bottom-trawling fleet in the Autonomous Community of Murcia
Aid due to the temporary cessation of fishing activity owing to the non-renewal of the protocol to the Fisheries Agreement between the EU and Guinea
Aid due to the temporary cessation of fishing activity owing to the non-renewal of the protocol to the Fisheries Agreement between the EU and Morocco (2018)
Management plan for fishing using mechanised dredges or trawl nets on the Mediterranean coast of Andalusia
Management plan for surface longliners operating in the Mediterranean
Temporary closures for the purse seiner fleet in the Autonomous Community of Catalonia
Temporary closures for the purse seiner fleet in the Autonomous Community of Valencia
Temporary closures for bottom trawlers in the Balearic Islands
Management plan for vessels listed in the registers for the national fishing ground in the Gulf of Cádiz
Temporary cessation of fishing activity of the fleet with its home port in the Autonomous Community of the Basque Country affected by the biological recovery period applicable to the artisanal fleet listed in the register of vessels using small-scale gear in the Cantabria NW zone.

Over 2018, a total of 235 vessels were withdrawn from the active fishing fleet register (with 61 vessels subject to aid due to permanent cessation); these withdrawals led to a decline of 3,351.77 GT in the Spanish fleet's capacity and a reduction in power of 12,283.28 kW.



E. ANNEX V: ENTRY/EXIT SCHEME

ADDITIONS TO AND PERMANENT REMOVALS FROM THE 2018 FISHING FLEET REGISTER

WITH DATE OF PERMANENT REMOVAL FROM THE REGISTER IN 2018

STATUS	VESSELS	GT	KW
Reported as deregistered	41	2,412.23	4,813.84
Automatically deregistered	1	1.28	8.83
List change (neither 3rd nor 4th)	3	166.37	442.77
Scrapped	91	1,664.02	7,584.83
Exported/transferred	12	4,608.37	5,502.88
Renewal not requested (5 years)	28	78.52	565.60
Other	3	1.97	36.77
Withdrawal from fishing	46	49.58	387.61
Accident	10	387.37	1,038.52
	235	9,369.71	20,381.66

REGISTER ADDITIONS (THIRD LIST) 2018			
REASON FOR REGISTRATION	VESSELS	GT	KW
Flagging	1	40.21	102.97
Change to third list	4	7.76	124.30
Additional capacity	1	2.15	19.85
Imported	2	4,525.61	4,443.84
New construction	50	1,442.21	3,407.41
	58	6,017.94	8,098.376

FLEET REGISTRATIONS AND DEREGISTRATIONS IN THE LAST 5 YEARS

YEAR OF REMOVAL	AID	ADDITION OF VESSELS TO THE REGISTER			PERMANENT REMOVAL OF VESSELS FROM THE REGISTER BY DATE OF PERMANENT REMOVAL		
		VESSELS	TOT_GT	TOT_KW	VESSELS	TOT_GT	TOT_KW
2014	WITH AID				110	11,002.75	24,117.96
	WITHOUT AID	49	5,992.49	12,133.23	181	10,889.46	21,569.51
		49	5,992.49	12,133.23	291	21,892.21	45,687.47
2015	WITH AID				97	10,093.95	19,794.85
	WITHOUT AID	49	8,328.32	12,456.51	186	15,467.35	25,689.65
		49	8,328.32	12,456.51	283	25,561.30	45,484.50
2016	WITH AID						
	WITHOUT AID	51	1,100.45	3,247.46	135	4,832.42	10,563.64
		51	1,100.45	3,247.46	135	4,832.42	10,563.64
2017	WITH AID				41	2,088.74	6,711.54
	WITHOUT AID	43	2,637.25	5,232.37	165	4,224.20	9,066.40
		43	2,637.25	5,232.37	206	6,312.94	15,777.94



2018	WITH AID				61	1,538.33	6,411.34
	WITHOUT AID	58	6,017.94	8,098.38	174	7,831.38	13,970.31
		58	6,017.94	8,098.38	235	9,369.71	20,381.65



F. ANNEX VI: ADMINISTRATIVE PROCEDURES

LEGISLATION

Law 33/2014 of 26 December 2014 amending Law 3/2001 of 26 March 2001 on State sea fisheries, which aims primarily to step up the deterrence and prevention of illegal fishing by vessels appearing on international lists of IUU fishing, including a more forceful and appropriate legal response to allow action to be taken against the real beneficiaries of illegal fishing, and with a firm commitment to preventing, deterring and prosecuting any Spanish participation or connection to this type of activity.

MANAGEMENT PLANS AND RECOVERY OF SPECIES

- Order APM/264/2017 of 23 March 2017 regulating the bluefin tuna fishery in the Eastern Atlantic and the Mediterranean.
- Decision of 23 March 2018 of the General Secretariat for Fisheries laying down the provisions for the 2018 bluefin tuna season for vessels authorised to fish actively for bluefin tuna in the Canary Island fishing ground according to Order APM/264/2017 of 23 March 2017 regulating the bluefin tuna fishery in the Eastern Atlantic and the Mediterranean.
- Order APM/400/2018 of 17 April 2018 amending Order APM/264/2017 of 23 March 2017 regulating the bluefin tuna fishery in the Eastern Atlantic and the Mediterranean.
- ICCAT recommendation 17-07 amending recommendation 14-04 on bluefin tuna in the Eastern Atlantic and Mediterranean.
- Decision of 23 April 2018 laying down the provisions for the implementation of the 2018 Recovery Plan for Bluefin Tuna in the Eastern Atlantic and the Mediterranean.
- Decision of 21 May 2018 amending the Decision of 23 April 2018.
- Decision of 21 May 2018 of the General Secretariat for Fisheries laying down the provisions for the 2018 bluefin tuna season for artisanal vessels fishing in the Strait.
- Decision of 25 June 2018 of the Director-General of Fisheries Management temporarily prohibiting the fishing, holding on-board and landing of bluefin tuna (*Thunnus thynnus*) for recreational and sport fishing.
- Decision of 6 July 2018 of the General Secretariat for Fisheries laying down the provisions for the 2018 bluefin tuna season for artisanal vessels in the Mediterranean included under heading c) of Article 4.2 of Order APM/400/2018 of 17 April 2018 amending Order APM/264/2017 of 23 March 2017 regulating the bluefin tuna fishery in the Eastern Atlantic and the Mediterranean.
- Decision of 9 October 2018 of the General Secretariat for Fisheries amending the Decision of 23 April 2018 of the General Secretariat for Fisheries laying down the provisions for the implementation of the 2018 Recovery Plan for Bluefin Tuna in the Eastern Atlantic and the Mediterranean.
- Decision of 22 February 2018 of the General Secretariat for Fisheries publishing the updated fleet register of cod-fishing vessels.
- Decision of 22 February 2018 of the General Secretariat for Fisheries publishing the updated fleet register of NAFO freezer trawlers.
- Decision of 22 February 2018 of the General Secretariat for Fisheries publishing updated information on Annexes I, II, III, IV, V, VI, VII, VIII and IX to the Order of 21 December 1999.
- Order APM/453/2018 of 25 April 2018 amending Order AAA/1406/2016 of 18 August 2016 laying down a management plan for vessels on the registers of the Gulf of Cádiz national fishing ground.

- Decision of 16 March 2018 of the General Secretariat for Fisheries publishing the quotas for mackerel, horse mackerel VIII c, horse mackerel VIII b and horse mackerel IX a for vessels on the Cantabria and North-West purse seiner register in 2018.
- Decision of 28 February 2018 of the General Secretariat for Fisheries amending mistakes in the Decision of 16 February 2018 publishing anchovy quotas for vessels on the Gulf of Cádiz purse seiner register in 2018.
- Decision of 16 February 2018 of the General Secretariat for Fisheries publishing the register of vessels using bottom-set longlines authorised to fish for hake in the Cantabria and North-West fishing ground in 2018, as well as the individual hake quota assigned to each vessel.
- Decision of 16 February 2018 of the General Secretariat for Fisheries publishing anchovy quotas for vessels on the Gulf of Cádiz purse seiner register in 2018.
- Decision of 15 February 2018 of the General Secretariat for Fisheries publishing the updated fleet register of bottom trawlers in sub-area IX waters falling under the sovereignty or jurisdiction of Portugal as per the International Council for the Exploration of the Sea.
- Decision of 13 February 2018 of the General Secretariat for Fisheries publishing the individual hake quotas for the register of vessels using bottom-set gillnets that are authorised to fish for hake in the Cantabria and North-West fishing ground in 2018.
- Decision of 13 February 2018 of the General Secretariat for Fisheries laying down the individual fishing opportunities and individual fishing quotas for 2018 for vessels on the bottom trawling register that are authorised to fish in the Cantabria and North-West fishing ground in 2018.
- Decision of 1 February 2018 of the General Secretariat for Fisheries laying down initial quotas for 2018, available by method or register, for the various species included in the management plans for vessels registered in the national fishing grounds of Cantabria and North-West, the Gulf of Cádiz, and bottom trawling vessels fishing in Portuguese waters.
- Decision of 24 January 2018 of the General Secretariat for Fisheries publishing the updated register of high-seas fleets, distant-water fleets, and longliners over and under 100 GRT operating within the geographical limits of the North East Atlantic Fisheries Commission.
- Announcement of the 2018 drawing of lots to harvest red coral.
- Decision of 25 May of the General Secretariat for Fisheries laying down control measures for red coral harvesting and a specific monitoring and control programme.
- Order APA/1186/2018 of 14 November 2018 amending, by the authorisation contained in its second final provision, the closures and catch limits stipulated in Royal Decree 629/2013 of 2 August 2013 regulating red coral harvesting, its first sale and the authorisation procedure to obtain licences to harvest it.



G. ANNEX VII: INDICATORS MEASURING THE BALANCE BETWEEN FISHING CAPACITY AND FISHING OPPORTUNITY

METHODOLOGY TO ESTABLISH ACTIVE POPULATION BY SUPRA-REGION AND MAIN FISHING GEAR; DETERMINATION OF INDICATORS

With regard to **economic indicators**, a distorted picture of the Spanish fleet is produced when only analysing data call information, given that the aggregate economic data at supra-regional level show the same profitability for a NAFO trawler, for example, as for a trawler in the Gulf of Cádiz, which is not accurate. Therefore, we have segmented the population by fishing ground (North Atlantic national fishing ground, rest of North Atlantic, Mediterranean, Canary Islands and other regions) and have obtained data from the economic survey for these segments, thus allowing us to adjust the economic indicator (see the action plan).

In addition, the **SHI** calculations do not provide a clear picture of the current situation facing the fleet — which may have changed considerably — due to the lack of scientific data on fishing mortality (for example, between 2011 and 2013, there are no scientific data on sardines in zone 27.8c, so there are no biological indicators to warn of overexploitation of this stock). In fact, it is difficult to find a stock for which scientific data are available over a continuous period; one year there may be a biological indicator and another year there may not. Therefore, like the STECF, we have used the most recent scientific data for each stock and applied them to every year analysed, with the awareness that, in doing so, the effort to reduce capacity is not really being assessed. Furthermore, in many cases the mortality is not known of stocks that represent more than 40% of the catch value (which is needed for the indicator to be reliable), and that prevents us from knowing if that segment is exerting a high level of pressure on a vulnerable stock.

Also, the **SAR** is considered difficult to calculate as it requires knowledge of the SAR caught by the other fleets (EU, international), which may produce a certain degree of error. We have only used the indicator in the sense that a segment catches 10% of its SAR weight.

As regards the **technical indicator**, there is no clear criterion as to the maximum number of days at sea for the segment (220, 260, real maximum, top 10 vessels, etc.); the results are very different. We have chosen to use the average of the top 10 vessels as recommended in the economic data call, though this may not be adequate either; for example, vessels with authorisations to fish in zone 37.2.2 of the Mediterranean raise the real maximum and make the rest of the fleet seem technically underutilised.

To classify the active population by supra-regions and fishing gear — where fleets have carried out the most activity and primarily with a certain gear — the following studies are carried out for each vessel:

- For vessels of more than 10 metres' length overall (or those of less than 10 metres with the required data), a detailed study is performed on their SMC/VMS positions (to know the number of days at sea and vessel position while fishing/sailing) and on the databases of declared catches according to the fishing gear used on most days.
- For vessels of less than 10 metres' length, a supra-region is assigned by registered method. The fishing gear is derived from the registered method, and PMP is assigned if small-scale gear is used (PGP was assigned before 2014, but we have reserved this for vessels using passive gear and fishing

in EU waters with gillnets and bottom-set longlines). Regarding fishing days, as they are vessels of less than 10 metres' length that make one-day trips, they have been assigned one fishing day per sales note. This is the minimum, however, as previous studies have found that one sales note may equal 2.5 days at sea, so the activity estimated for the artisanal fleet is the minimum that is actually carried out. Vessels that primarily had sales notes on which molluscs made up over 50% of their weight are classified as DRB (dredges).

From 2014, and in order to study the **surface longliner** fleet independently and separate it from the rest of the hook gears, all vessels that primarily fish with surface longlines have been classified as **PGO**. This will allow us to study the biological, economic and technical indicators of the surface longliner fleet and separate it from bottom-set longliners, trolling liners, pole liners, etc.

Furthermore, as the Spanish fleet is highly active and operates in many different fishing grounds, it has been segmented in more detail. Among the vessels operating in the North Atlantic, a distinction has been made between those in the national fishing ground (in 2014, those that fished in the Cantabria and North-West fishery were separated from those that fished in the Gulf of Cádiz) and those in EU waters (to that end, those that fish in ICES waters with passive gear — gillnets and bottom longlines — have been classified as PGP); and ICES trawlers in zone VIII abde were separated from those fishing in NEAFC/NAFO waters (mainly by length).

This segmentation, which is increasingly more detailed, has resulted in a lack of continuity in many segments throughout the years studied, and if a detailed interpretation is not made, **INCONSISTENCIAS** can be seen in the populations.

To determine the indicators, the data available on the Spanish fleet have been taken into account, with the following exceptions summarised below:

- For 2008, 2009 and 2010, it was not possible to calculate the real activity figures (effort, catches) per vessel, as required by the economic data call segmentation, without a margin of error. For this reason, we only have the socio-economic indicators as provided in the statistical survey (no technical or biological indicators are available for these years).
- Until 2011, the population was segmented according to the licences and fishing authorisations held by each vessel. From 2012, a detailed analysis of the real activity of each vessel has been made, which is based on catch declarations, logbooks, sales notes and VMS positions. Hence the difference between the 2008-2010 populations and the segmentation of the following years; in order to have 2011 data, the population was re-segmented based on real activity, not licences, which is why the 2011 data have been modified.
- As the Spanish fleet operates in many different fisheries and in numerous fishing grounds, its segmentation into only three supra-regions — as per the economic data call — does not provide the information needed to establish a balance between capacity and opportunity. Given that only three supra-regions are defined (North Atlantic, Mediterranean and other fishing regions), the economic indicators obtained for the trawler fleet in the North Atlantic, for example, include

fisheries as distinct as NEAFC cod-fishing vessels or NAFO trawlers, which have nothing in common with trawlers operating in the national fishing ground. For this reason, more detailed studies of the Spanish fleet have been carried out, which are presented and analysed in the action plan. This report presents the data for the supra-regions as defined by the economic data call.

- Each year we try to establish a segmentation that allows us to provide more accurate and detailed data to make a clearer distinction between the different fisheries in which the Spanish fleet operates.

Therefore, from 2013 (and in 2011, the year the population was recalculated) the criteria for classifying the gear used, based on catch declarations, have improved; thus vessels over 24 metres in length that, in 2012, used gillnets and hooks were classified as PGP or PMP in 2011 and 2013, as the number of days they used the main gear (HOK and DFN) did not qualify them to be classified as such, and thus they were switched to the corresponding polyvalent gear.

- In 2014, in order to obtain some indicators for the surface longliner fleet (fishing primarily for swordfish and other migratory species), this type of vessel was classified as PGO so it could be differentiated from the other hook gears (HOK: bottom-set longlines, trolling lines, pole lines, etc.). That is why PGO appeared for the first time in 2014 and why vessels classified as HOK logically decreased.

INDICATORS

1. BIOLOGICAL INDICATORS

1. A. SUSTAINABLE HARVEST INDICATOR (SHI)

This indicator measures how much a fleet segment's revenue depends on overexploited stocks at levels above MSY.

It requires a scientifically based assessment of stocks (fishing mortality rate and F_{msy}). When the assessed stocks represent less than 40% of the total value/weight of the segment's catch, the indicator is not representative. Most of the Spanish fleet segments are in this situation; specifically, there are no mortality studies for multiple species fished in RFOs, for NAFO species, in CECAF zones, etc. or in the different Mediterranean GSAs.

CALCULATIONS

The data used have been taken from the application http://sirs.agrocampus-ouest.fr/stecf_balance_2018/, published by the STECF in 2019, and the data collected have been evaluated by scientists from the Spanish Institute of Oceanography to validate any possible discrepancies.

The following pages include the values we have used to evaluate the indicator.

The traffic light system applied was as follows:

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

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

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

Stock (NORTH ATLANTIC SURVEYS)

Type	Stock	F etoile2	stock_overexploited	AL3	DIVISION
ATL	ANB_8C9A	0.52	FALSE	ANB	27.8.C
ATL	ANB_8C9A	0.52	FALSE	ANB	27.9.A
ATL	bli-5b67	0.28	FALSE	bli	27.6
ATL	bli-5b67	0.28	FALSE	bli	27.7
ATL	bli-5b67	0.28	FALSE	bli	27.5.b
ATL	cod.27.1-2	1.00	TRUE	COD	27.1
ATL	cod.27.1-2	1.00	TRUE	COD	27.2
ATL	dgs.27.nea	0.48	FALSE	DGS	27
ATL	ghl.27.561214	1.03	TRUE	GHL	27.12
ATL	ghl.27.561214	1.03	TRUE	GHL	27.14
ATL	ghl.27.561214	1.03	TRUE	GHL	27.5
ATL	ghl.27.561214	1.03	TRUE	GHL	27.6
ATL	had.27.1-2	0.57	FALSE	HAD	27.1
ATL	had.27.1-2	0.57	FALSE	HAD	27.2
ATL	had.27.46a20	1.30	TRUE	HAD	27.4
ATL	had.27.46a20	1.30	TRUE	HAD	27.6.A
ATL	had.27.5b	1.38	TRUE	HAD	27.5.b
ATL	had-7b-k	1.69	TRUE	HAD	27.7.b
ATL	had-7b-k	1.69	TRUE	HAD	27.7.c
ATL	had-7b-k	1.69	TRUE	HAD	27.7.e
ATL	had-7b-k	1.69	TRUE	HAD	27.7.f
ATL	had-7b-k	1.69	TRUE	HAD	27.7.g
ATL	had-7b-k	1.69	TRUE	HAD	27.7.h
ATL	had-7b-k	1.69	TRUE	HAD	27.7.i
ATL	had-7b-k	1.69	TRUE	HAD	27.7.j
ATL	had-7b-k	1.69	TRUE	HAD	27.7.k
ATL	hke-nrtn	0.79	FALSE	HKE	27.6
ATL	hke-nrtn	0.79	FALSE	HKE	27.7
ATL	hke-nrtn	0.79	FALSE	HKE	27.8.a
ATL	hke-nrtn	0.79	FALSE	HKE	27.8.b
ATL	hke-nrtn	0.79	FALSE	HKE	27.8.d
ATL	hke-soth	2.10	TRUE	HKE	27.8.c
ATL	hke-soth	2.10	TRUE	HKE	27.9.a
ATL	hom-soth	0.40	FALSE	HOM	27.9.a
ATL	hom-west	0.97	FALSE	HOM	27.8

ATL	hom-west	0.97	FALSE	HOM	27.2.a
ATL	hom-west	0.97	FALSE	HOM	27.5.b
ATL	hom-west	0.97	FALSE	HOM	27.6.a
ATL	hom-west	0.97	FALSE	HOM	27.7.a
ATL	hom-west	0.97	FALSE	HOM	27.7.b
ATL	hom-west	0.97	FALSE	HOM	27.7.c
ATL	hom-west	0.97	FALSE	HOM	27.7.e
ATL	hom-west	0.97	FALSE	HOM	27.7.f
ATL	hom-west	0.97	FALSE	HOM	27.7.g
ATL	hom-west	0.97	FALSE	HOM	27.7.h
ATL	hom-west	0.97	FALSE	HOM	27.7.i
ATL	hom-west	0.97	FALSE	HOM	27.7.j
ATL	hom-west	0.97	FALSE	HOM	27.7.k
ATL	lez.27.4a6a	0.33	FALSE	LEZ	27.4.A
ATL	lez.27.4a6a	0.33	FALSE	LEZ	27.6.A
ATL	lin.27.5a	0.85	FALSE	LIN	27.5.A
ATL	mac-nea	1.31	TRUE	MAC	27
ATL	nep.fu.16	0.90	FALSE	nep	27.7.c
ATL	nep.fu.16	0.90	FALSE	nep	27.7.k
ATL	nep.fu.16, 19, 22	1.16	TRUE	nep	27.7.j
ATL	NEP.FU.19, 2021, 22	1.13	TRUE	nep	27.7.g
ATL	nep.fu.2829	0.45	FALSE	nep	27.9.a
ATL	NEP-2324	0.78	FALSE	NEP	27.8.A
ATL	NEP-2324	0.78	FALSE	NEP	27.8.B
ATL	pil-27.8abd	6.34	TRUE	pil	27.8.a
ATL	pil-27.8abd	6.34	TRUE	pil	27.8.b
ATL	pil-27.8abd	6.34	TRUE	pil	27.8.d
ATL	pil-27.8c9a	1.70	TRUE	pil	27.8.c
ATL	pil-27.8c9a	1.70	TRUE	pil	27.9.a
ATL	POK.27.1-2	0.74	FALSE	POK	27.1
ATL	POK.27.1-2	0.74	FALSE	POK	27.2
ATL	reg.27.1-2	5.80	TRUE	reg	27.1
ATL	reg.27.1-2	5.80	TRUE	reg	27.2
ATL	RNG-5B67	0.25	FALSE	RNG	27.6
ATL	RNG-5B67	0.25	FALSE	RNG	27.7
ATL	RNG-5B67	0.25	FALSE	RNG	27.12.B
ATL	RNG-5B67	0.25	FALSE	RNG	27.5.B

ATL	sol.27.8ab	0.91	FALSE	SOL	27.8.a
ATL	sol.27.8ab	0.91	FALSE	SOL	27.8.b
ATL	whb.27.1-91214	1.26	TRUE	WHB	27

Stock (MEDITERRANEAN AND TUNA SURVEYS)

Type	Stock	F etoile2	stock_overexploited	AL3	DIVISION	GSA
MED	ane-gsa06	1.19	TRUE	ane	37.1.1	SA 6
MED	ank-gsa05	7.63	TRUE	ank	37.1.1	SA 5
MED	ank-gsa06	6.49	TRUE	ank	37.1.1	SA 6
MED	ara-gsa01	1.87	TRUE	ara	37.1.1	SA 1
MED	ara-gsa05	1.48	TRUE	ara	37.1.1	SA 5
MED	ara-gsa06	2.43	TRUE	ara	37.1.1	SA 6
MED	ara-gsa09	0.84	FALSE	ara	37.1.3	
MED	ars-gsa09_10_11	1.51	TRUE	ARS	37.1.3	
MED	bss-gsa07	3.94	TRUE	BSS	37.1.2	SA 7
MED	dps-gsa01	0.9	FALSE	dps	37.1.1	SA 1
MED	dps-gsa05	1.09	TRUE	dps	37.1.1	SA 5
Type	Stock	F etoile2	stock_overexploited	AL3	DIVISION	GSA
MED	dps-gsa06	2.29	TRUE	dps	37.1.1	SA 6
MED	hke-gsa01	7.95	TRUE	hke	37.1.1	SA 1
MED	hke-gsa05	8.05	TRUE	hke	37.1.1	SA 5
MED	hke-gsa06	7.8	TRUE	hke	37.1.1	SA 6
MED	hke-gsa07	12.4	TRUE	hke	37.1.2	SA 7
MED	hke-gsa09_10_11	5.25	TRUE	hke	37.1.3	
MED	mongsa01_05_06_07	2.05	TRUE	MON	37.1.1	SA 1
MED	mongsa01_05_06_07	2.05	TRUE	MON	37.1.1	SA 5
MED	mongsa01_05_06_07	2.05	TRUE	MON	37.1.1	SA 6
MED	mongsa01_05_06_07	2.05	TRUE	MON	37.1.2	SA 7
MED	mur-gsa05	2.57	TRUE	mur	37.1.1	SA 5
MED	mut-gsa01	4.84	TRUE	mut	37.1.1	SA 1
MED	mut-gsa06	3.05	TRUE	mut	37.1.1	SA 6
MED	mut-gsa07	3	TRUE	mut	37.1.2	SA 7
MED	nep-gsa05	1.69	TRUE	nep	37.1.1	SA 5
MED	nep-gsa06	9.49	TRUE	nep	37.1.1	SA 6
MED	pil-gsa01	1.26	TRUE	pil	37.1.1	SA 1
MED	pil-gsa06	2.59	TRUE	pil	37.1.1	SA 6
med	sbg-gsa07	2.37	TRUE	sbg	37.1.2	SA 7
med	sol-gsa07	7.41	TRUE	SOL	37.1.2	SA 7

MED	swo-med	1.85	TRUE	swo	37	
MED	whb-gsa06	7.88	TRUE	whb	37.1.1	SA 6

Type	FishStock	F_etoile2	stock_overexploited	AL3	DIVISION	GSA
TUN	AO-ALB-M	0.83	FALSE	ALB	37	
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	IO-ALB	1.11	TRUE	ALB	51	
TUN	IO-ALB	1.11	TRUE	ALB	57	
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	IO-BET	0.76	FALSE	BET	51	
TUN	IO-BET	0.76	FALSE	BET	57	
TUN	AO-BFT-E	0.34	FALSE	BFT	27	
TUN	AO-BFT-E	0.34	FALSE	BFT	34	

Type	FishStock	F_etoile2	stock_overexploited	AL3	DIVISION	GSA
TUN	AO-BFT-E	0.34	FALSE	BFT	37	
TUN	AO-BFT-W	0.56	FALSE	BFT	21	
TUN	AO-BFT-W	0.56	FALSE	BFT	31	
TUN	AO-BFT-W	0.56	FALSE	BFT	41	
TUN	IO-SKJ	0.81	FALSE	SKJ	51	
TUN	IO-SKJ	0.81	FALSE	SKJ	57	
TUN	swo-io	0.79	FALSE	swo	51	
TUN	swo-io	0.79	FALSE	swo	57	
TUN	swo-na	0.78	FALSE	swo	21	
TUN	swo-na	0.78	FALSE	swo	27	
TUN	swo-na	0.78	FALSE	swo	31	
TUN	swo-na	0.78	FALSE	swo	34	

TUN	swo-sa	0.98	FALSE	swo	41	
TUN	swo-sa	0.98	FALSE	swo	47	
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	IO-YFT	1.11	TRUE	YFT	51	
TUN	IO-YFT	1.11	TRUE	YFT	57	

Stock (INDIAN OCEAN SURVEYS)

Type	FishStock	F_etoile2	stock_overexploited	AL3	DIVISION
IO	blm-io	2.41	TRUE	BLM	51
IO	blm-io	2.41	TRUE	BLM	57
IO	bum-io	1.18	TRUE	BUM	51
IO	bum-io	1.18	TRUE	BUM	57
IO	mls-io	2.18	TRUE	MLS	51
IO	mls-io	2.18	TRUE	MLS	57
INDICATOR	sfa-io	1.04	TRUE	sfa	51
INDICATOR	sfa-io	1.04	TRUE	sfa	57

SHI IN THE NORTH ATLANTIC, 2017

SEGMENT		TOT_VAL AT-RISK STOCK	TOT VAL STRATUM	PERCENT	FISHSTOCK	VALUE_STOCK	F_etoile2	F_ETOILE2XVALOR	stock_overexploited	SHI	
NORTH ATLANTIC	DFN	18-24	5,777,102.43	8,858,722.73	65%	AO-ALB-N	2,086,986.25	0.54	1,126,972.58	FALSE	1.44
						AO-BET	43,258.37	1.28	55,370.71	TRUE	
						hke-nrtn	70,214.47	0.79	55,469.43	FALSE	
						hke-soth	3,038,985.48	2.1	6,381,869.51	TRUE	
						mac-nea	537,295.91	1.31	703,857.64	TRUE	
						whb.27.191214	361.95	1.26	456.06	TRUE	
	DTS	24-40	58,111,501.54	138,376,488.14	42%	bli-5b67	71,416.15	0.28	19,996.52	FALSE	1.21
						had.27.46a20	16,276.30	1.3	21,159.19	TRUE	
						hke-nrtn	21,038,386.01	0.79	16,620,324.95	FALSE	
						hke-soth	9,310,440.50	2.1	19,551,925.05	TRUE	
						hom-west	1,075.84	0.97	1,043.56	FALSE	
						lez.27.4a6a	1,288,316.78	0.33	425,144.54	FALSE	
						mac-nea	8,229,414.11	1.31	10,780,532.48	TRUE	
						NEP-2324	873.93	0.78	681.67	FALSE	
						nep.fu.16	509,334.94	0.9011	458,976.50	FALSE	
						nep.fu.16, 19, 22	155,965.61	1.1644	181,613.29	TRUE	
						NEP.FU.19, 2021, 22	10,553.99	1.1251	11,873.96	TRUE	
						nep.fu.2829	56,033.76	0.45	25,215.19	FALSE	
						sol.27.8ab	56,410.98	0.91	51,333.99	FALSE	
						whb.27.191214	17,367,002.64	1.26	21,882,423.33	TRUE	
	DTS	> 40	41,467,530.76	86,313,916.26	48%	bli-5b67	52,759.35	0.28	14,772.62	FALSE	0.98
						cod.27.1-2	38,054,519.21	1	38,054,519.21	TRUE	
						ghl.27.561214	261,426.38	1.03	269,269.17	TRUE	
						had.27.1-2	399,992.19	0.57	227,995.55	FALSE	
						hke-nrtn	708,719.04	0.79	559,888.04	FALSE	
						hke-soth	418.21	2.1	878.24	TRUE	
						mac-nea	77,687.47	1.31	101,770.59	TRUE	
						POK.27.1-2	125,346.42	0.74	92,756.35	FALSE	
						reg.27.1-2	167,590.16	5.8	972,022.92	TRUE	
						RNG-5B67	1,588,205.70	0.25	397,051.43	FALSE	
						sol.27.8ab	25,422.10	0.91	23,134.11	FALSE	
	whb.27.191214	5,444.53	1.26	6,860.11	TRUE						
	HOK	10-12	2,327,689.88	4,688,165.66	50%	AO-ALB-N	422,591.14	0.54	228,199.22	FALSE	1.40
AO-BET						29,516.33	1.28	37,780.90	TRUE		
dgs.27.nea						90.10	0.48	43.25	FALSE		
hke-nrtn						75,540.98	0.79	59,677.37	FALSE		

SEGMENT	TOT_VAL AT-RISK STOCK	TOT VAL STRATUM	PERCENT	FISHSTOCK	VALUE_STOCK	F_etoile2	F_ETOILE2XVAL OR	stock_overexploited	SHI	
				hke-soth	728,792.77	2.1	1,530,464.82	TRUE	1.27	
				hom-west	70.71	0.97	68.59	FALSE		
				mac-nea	1,068,000.09	1.31	1,399,080.12	TRUE		
				sol.27.8ab	236.20	0.91	214.94	FALSE		
				swo-na	70.25	0.78	54.80	FALSE		
				whb.27.191214	2,781.31	1.26	3,504.45	TRUE		
	12-18	7,760,087.98	12,595,506.70	62%	AO-ALB-N	2,897,857.84	0.54	1,564,843.23		FALSE
					AO-BET	355,657.21	1.28	455,241.23		TRUE
					hke-nrtn	50,896.62	0.79	40,208.33		FALSE
					hke-soth	2,436,266.45	2.1	5,116,159.54		TRUE
					hom-west	6.62	0.97	6.42		FALSE
					mac-nea	2,008,415.99	1.31	2,631,024.95		TRUE
					sol.27.8ab	261.48	0.91	237.95		FALSE
					whb.27.191214	10,725.77	1.26	13,514.47		TRUE
	18-24	7,264,401.93	9,216,317.90	79%	AO-ALB-N	4,008,695.93	0.54	2,164,695.80		FALSE
					AO-BET	81,684.45	1.28	104,556.10		TRUE
					hke-nrtn	2,625.06	0.79	2,073.80		FALSE
					hke-soth	1,373,204.26	2.1	2,883,728.95		TRUE
					mac-nea	1,782,665.64	1.31	2,335,291.99		TRUE
					pil-27.8c9a	3,491.39	1.7	5,935.36		TRUE
					swo-na	28.49	0.78	22.22		FALSE
	whb.27.191214	12,006.71	1.26	15,128.45	TRUE					
	24-40	15,528,919.58	20,515,692.69	76%	AO-ALB-N	10,906,734.50	0.54	5,889,636.63		FALSE
					AO-BET	617,386.64	1.28	790,254.90		TRUE
					AO-BFT-E	1,042,829.12	0.34	354,561.90		FALSE
					hke-soth	99,097.22	2.1	208,104.16		TRUE
					hom-west	9,142.09	0.97	8,867.83		FALSE
					mac-nea	2,463,036.23	1.31	3,226,577.46		TRUE
pil-27.8abd					324,041.79	6.34	2,054,424.95	TRUE		
pil-27.8c9a					66,651.99	1.7	113,308.38	TRUE		
PGO	18-24	3,267,232.86	53%	AO-ALB-N	484,292.48	0.54	261,517.94	FALSE		
				AO-BET	764,542.67	1.28	978,614.62	TRUE		
				swo-med	143,023.27	1.85	264,593.05	TRUE		
				swo-na	1,875,374.44	0.78	1,462,792.06	FALSE		
PGP	24-40	101,813,908.37	92%	bli-5b67	83,075.60	0.28	23,261.17	FALSE		
				had-7b-k	84.45	1.69	142.72	TRUE		
				hke-nrtn	101,730,612.82	0.79	80,367,184.13	FALSE		
				hke-soth	30.90	2.1	64.89	TRUE		
				sol.27.8ab	104.59	0.91	95.18	FALSE		
PMP	12-18	4.029.62	6.145.02	66%	AO-ALB-N	1,983,945.44	0.54	1,071,330.54	FALSE	1.07

SEGMENT		TOT_VAL AT-RISK STOCK	TOT VAL STRATUM	PERCENT	FISHSTOCK	VALUE_STOCK	F_etoile2	F_ETOILE2XVAL OR	stock_overexploited	SHI
					AO-BET	280,623.53	1.28	359,198.12	TRUE	1.32
					hke-soth	729,300.08	2.1	1,531,530.17	TRUE	
					mac-nea	1,031,770.08	1.31	1,351,618.80	TRUE	
					pil-27.8c9a	3,403.48	1.7	5,785.92	TRUE	
					sol.27.8ab	156.89	0.91	142.77	FALSE	
					whb.27.191214	428.52	1.26	539.94	TRUE	
					AO-ALB-N	23,586,439.86	0.54	12,736,677.52	FALSE	
PS	24-40	40,987,086.32	80,050,688.87	51%	AO-BET	1,283,231.98	1.28	1,642,536.93	TRUE	
					AO-BFT-E	3,828,309.46	0.34	1,301,625.22	FALSE	
					hom-west	386,741.27	0.97	375,139.03	FALSE	
					mac-nea	6,238,553.68	1.31	8,172,505.32	TRUE	
					pil-27.8abd	4,404,194.73	6.34	27,922,594.59	TRUE	
					pil-27.8c9a	1,259,615.34	1.7	2,141,346.08	TRUE	

ANALYSIS OF THE SUSTAINABLE HARVEST INDICATOR IN THE NORTH ATLANTIC

GEAR	LENGTH	2011	2012	2013	2014	2015	2016	2017	VESSELS (2017)
DFN	18-24		1.40	1.64	1.82	1.16	1.64	1.44	25
	24-40		1.01						
DTS	24-40					1.38	1.35	1.21	108
	> 40					0.82	0.81	0.98	13
PS	24-40							1.32	81
HOK	10-12		1.53		2.04	1.65		1.40	63
	12-18	1.36	1.32	1.44	2.01	1.32	1.36	1.27	81
	18-24		1.02	1.10	1.24	0.84	1.11	1.03	29
	24-40	0.82	0.93	0.82	0.92	0.67	0.63	0.81	25
PGO	18-24				0.92	0.52		0.91	11
	24-40				0.83	0.34			
PGP	12-18	1.12							
	18-24	0.90		0.87					
	24-40	0.99		0.99	1.22	0.79	0.96	0.79	55
PMP	10-12	0.85							
	12-18				1.25	0.96	1.11	1.07	42

The Spanish fleet, in general, shows a similar dependence on overexploited stocks as it did in 2016. There is greater dependence on overexploited stocks in the following strata: gillnetters (18-24 m), purse-seiners/trawlers (24-40 m), purse seiners (24-40 m) and vessels using hooks (10-12 m and 12-18 m).

SEGMENTS THAT DEPEND ON STOCKS AT RISK:

- Vessels using bottom-set gillnets (18-24 m) are dependent on Southern hake stock. The situation of this stock has improved slightly. Since 2016, dependence on blue whiting has decreased and dependence on non-overexploited stocks (ALB) has increased. The general indicator for this segment improved over the previous year, as the 24-40 m fleet did not reach 40% of surveyed stock catches.
- Trawlers in the 24-40 segment (primarily CNW bottom trawlers) show a high dependence on overexploited stocks (blue whiting, Southern hake and mackerel). The general indicator for the stratum has improved slightly, although it remains out of balance. Vessels over 40 metres (mainly NAFO freezer trawlers) do not depend on overexploited stocks, and thus their biological indicator is balanced.
- The 10-12 m fleet using hooks had an imbalanced biological indicator this year due to its dependence on Southern hake and mackerel. The 12-18 segment fished overexploited stocks (Southern hake and mackerel), showing an increased dependence on them with respect to 2015. The 18-24 segment improved from the previous year, with a decreased dependency on bigeye tuna and Southern hake, though its dependence on mackerel increased. The situation worsened for the 24-40 segment, as its dependence on non-overexploited stocks (ALB) decreased and its dependence on overexploited stocks increased.
- Surface longliners (18-24 m) had a balanced indicator as they depend mainly on SWO-na stock, which is not overexploited.
- The 24-40 m PGP segment (longliners under 100 GRT and gillnetters operating in ICES zones of EU waters) has a balanced indicator as it depends mainly on Northern HKE, which is not overexploited (AO-ALB-N).
- The situation has improved somewhat for the polyvalent segment (12-18 m) since 2016. It still shows a slight biological imbalance as it depends on Southern hake and mackerel (overexploited stocks), yet it has increased its dependence on albacore tuna (a healthy species).
- The purse seiner fleet (24-40 m) was out of balance this year as the value of surveyed stocks surpassed 40%. This resulted from the inclusion of new surveys for sardines in zones 8abd and 8c9a (both overexploited). The SHI thus shows a value of 1.32 (imbalanced).

SHI IN THE NORTH ATLANTIC / CANARY ISLANDS

SEGMENT			TOT_VAL AT-RISK STOCK	TOT VAL STRATUM	PERCENT	FISHSTOCK	VALUE_STOCK	F_etoile2	F_ETOILE2XVAL	stock_overexploited	SHI	
NORTH ATLANTIC	HOK	10-12	1,905,231.94	3,173,189.32	60%	AO-ALB-N	1,007,695.02	0.54	544,155.31	FALSE	0.71	
						AO-BET	474,829.38	1.28	607,781.61	TRUE		
						AO-BFT-E	311,930.97	0.34	106,056.53	FALSE		
						AO-YFT	110,776.57	0.77	85,297.96	FALSE		
		12-18	3,193,993	3,889,619	82%	AO-ALB-N	1,630,840.94	0.54	880,654.11	FALSE		
						AO-BET	1,281,818.47	1.28	1,640,727.64	TRUE		
	AO-BFT-E					229,206.70	0.34	77,930.28	FALSE			
	24-40	6,621,439	7,640,487	87%	AO-ALB-N	2,134,968.05	0.54	1,152,882.75	FALSE	1.02		
					AO-BET	4,260,045.25	1.28	5,452,857.92	TRUE			
					AO-BFT-E	112,062.05	0.34	38,101.10	FALSE			
	SEGMENT			TOT_VAL AT-RISK STOCK	TOT VAL STRATUM	PERCENT	FISHSTOCK	VALUE_STOCK	F_etoile2	F_ETOILE2XVAL	stock_overexploited	SHI
							AO-YFT	114,363.20	0.77	88,059.66	FALSE	
	PMP	10-12	321,345.31	547,547.752	59%	AO-ALB-N	79,470.15	0.54	42,913.88	FALSE	1.00	
AO-BET						182,683.90	1.28	233,835.39	TRUE			
AO-BFT-E						6,691.22	0.34	2,275.01	FALSE			
AO-YFT						4,035.38	0.77	3,107.24	FALSE			
swo-na						48,465.06	0.78	37,802.75	FALSE			

ANALYSIS OF THE SUSTAINABLE HARVEST INDICATOR IN THE NORTH ATLANTIC / CANARY ISLANDS

GEAR	LENGTH	2011	2012	2013	2014	2015	2016	2017	VESSELS (2017)
HOK	10-12			0.72		0.61	0.63	0.71	43
	12-18		0.75	1.37		0.83	0.63	0.83	27
	24-40						0.93	1.02	22
PMP	10-12						0.73	1.00	20

Although still in balance, the situation worsened for the HOK 12-18 segment, above all due to its increased dependency on bigeye tuna (an overexploited stock).

The situation of the HOK 24-40 segment also worsened, as it showed less dependence on healthy stocks (mainly yellowfin tuna).

SHI IN THE MEDITERRANEAN

SEGMENT			TOT_VAL AT-RISK STOCK	TOT VAL STRATUM	PERCENT	FISHSTOCK	VALUE_STOCK	F_etoile2	F_ETOILE2XVALOR	stock_overexploited	SHI
MEDITERRANEAN	DTS	18-24	43,006,826.46	92,586,839.03	46%	ane-gsa06	51,231.78	1.19	60,965.82	TRUE	4.08
						ank-gsa05	15,273.68	7.63	116,538.18	TRUE	
						ank-gsa06	236,132.04	6.49	1,532,496.94	TRUE	
						AO-ALB-M	3.88	0.83	3.22	FALSE	
						ara-gsa01	3,477,434.55	1.87	6,502,802.61	TRUE	
						ara-gsa05	3,545,682.15	1.48	5,247,609.58	TRUE	
						ara-gsa06	8,844,387.46	2.43	21,491,861.53	TRUE	
						ara-gsa09	41,328.83	0.84	34,716.22	FALSE	
						arsgsa09_10_11	30,661.36	1.51	46,298.65	TRUE	
						bss-gsa07	106.33	3.94	418.94	TRUE	
						dps-gsa01	1,699,909.39	0.9	1,529,918.45	FALSE	
						dps-gsa05	338,195.20	1.09	368,632.77	TRUE	

SEGMENT			TOT_VAL AT-RISK STOCK	TOT VAL STRATUM	PERCENT	FISHSTOCK	VALUE_STOCK	F_etoile2	F_ETOILE2XVALOR	stock_overexploited	SHI
						dps-gsa06	5,500,283.04	2.29	12,595,648.16	TRUE	4.08
						hke-gsa01	1,223,886.29	7.95	9,729,896.01	TRUE	
						hke-gsa05	312,279.29	8.05	2,513,848.28	TRUE	
						hke-gsa06	5,958,042.47	7.8	46,472,731.27	TRUE	
						hke-gsa07	354,753.32	12.4	4,398,941.17	TRUE	
						mongsa01_05_06_07	2,508,696.68	2.05	5,142,828.19	TRUE	
						mur-gsa05	435,230.27	2.57	1,118,541.79	TRUE	
						mut-gsa01	422,301.75	4.84	2,043,940.47	TRUE	
						mut-gsa06	2,626,418.74	3.05	8,010,577.16	TRUE	
						mut-gsa07	117,457.05	3	352,371.15	TRUE	
						nep-gsa05	322,922.27	1.69	545,738.64	TRUE	
						nep-gsa06	4,270,974.79	9.49	40,531,550.76	TRUE	
						pil-gsa01	3,129.36	1.26	3,942.99	TRUE	
						pil-gsa06	36,567.05	2.59	94,708.66	TRUE	



24-40	29,811,860.10	46,296,459.85	64%	sbg-gsa07	2,030.22	2.37	4,811.62	TRUE	4.25
				sol-gsa07	1,658.21	7.41	12,287.34	TRUE	
				swo-med	841.36	1.85	1,556.52	TRUE	
				whb-gsa06	629,007.65	7.88	4,956,580.28	TRUE	
				ane-gsa06	60,863.64	1.19	72,427.73	TRUE	
				ank-gsa05	235.99	7.63	1,800.60	TRUE	
				ank-gsa06	184,957.14	6.49	1,200,371.84	TRUE	
				AO-ALB-M	1.76	0.83	1.46	FALSE	
				ara-gsa01	1,600,442.43	1.87	2,992,827.34	TRUE	
				ara-gsa05	1,346,215.43	1.48	1,992,398.84	TRUE	
				ara-gsa06	11,600,657.84	2.43	28,189,598.55	TRUE	
				bss-gsa07	217.99	3.94	858.88	TRUE	
				dps-gsa01	239,159.68	0.9	215,243.71	FALSE	
				dps-gsa05	154,071.56	1.09	167,938.00	TRUE	
				dps-gsa06	2,423,224.58	2.29	5,549,184.29	TRUE	
				hke-gsa01	366,111.39	7.95	2,910,585.55	TRUE	
				hke-gsa05	84,748.96	8.05	682,229.13	TRUE	
				hke-gsa06	5,037,878.90	7.8	39,295,455.42	TRUE	
				hke-gsa07	470,306.78	12.4	5,831,804.07	TRUE	
				mongsa01_05_06_07	1,144,569.57	2.05	2,346,367.62	TRUE	
				mur-gsa05	70,594.93	2.57	181,428.97	TRUE	
				mut-gsa01	26,619.42	4.84	128,837.99	TRUE	
				mut-gsa06	1,586,663.90	3.05	4,839,324.90	TRUE	
				mut-gsa07	78,651.16	3	235,953.48	TRUE	
nep-gsa05	70,949.01	1.69	119,903.83	TRUE					
nep-gsa06	2,626,361.67	9.49	24,924,172.25	TRUE					

SEGMENT	TOT_VAL_SAR	TOT_VAL_STRATUM	PERCENT	FISHSTOCK	VALUE_STOCK	F_etoile2	F_ETOILE2XVALOR	stock_overexploited	SHI
				pil-gsa01	405.83	1.26	511.35	TRUE	4.25
				pil-gsa06	39,778.45	2.59	103,026.19	TRUE	
				sbg-gsa07	2,103.27	2.37	4,984.75	TRUE	
				sol-gsa07	91.90	7.41	680.98	TRUE	
				swo-med	734.78	1.85	1,359.34	TRUE	
				whb-gsa06	595,242.14	7.88	4,690,508.06	TRUE	



HOK	12-18	1,065,463.44	2,220,664.31	48%	ane-gsa06	335.40	1.19	399.13	TRUE	2.09
					ank-gsa06	966.62	6.49	6,273.36	TRUE	
					AO-ALB-M	816.39	0.83	677.60	FALSE	
					AO-BFT-E	708,122.66	0.34	240,761.70	FALSE	
					ara-gsa06	165,199.79	2.43	401,435.49	TRUE	
					dps-gsa06	10,900.56	2.29	24,962.28	TRUE	
					hke-gsa06	72,456.09	7.8	565,157.50	TRUE	
					hke-gsa07	49,670.44	12.4	615,913.46	TRUE	
					hkegsa09_10_11	4,248.59	5.25	22,305.10	TRUE	
					mac-nea	4,351.98	1.31	5,701.09	TRUE	
					mongsa01_05_06_07	9,661.00	2.05	19,805.05	TRUE	
					mut-gsa06	689.78	3.05	2,103.83	TRUE	
					nep-gsa06	15,666.56	9.49	148,675.65	TRUE	
					pil-gsa06	587.29	2.59	1,521.08	TRUE	
swo-med	104.12	1.85	192.62	TRUE						
whb-gsa06	21,686.17	7.88	170,887.02	TRUE						
PGO	12-18	6,481,165	6,805,948	95%	AO-ALB-M	572,229.27	0.83	474,950.29	FALSE	1.60
					AO-BFT-E	669,329.93	0.34	227,572.18	FALSE	
					hke-gsa06	267.89	7.8	2,089.54	TRUE	
					swo-med	5,239,338.63	1.85	9,692,776.47	TRUE	
	18-24	7,293,993.46	7,494,337.84	97%	AO-ALB-M	223,223.51	0.83	185,275.51	FALSE	1.54
					AO-BET	1,584.28	1.28	2,027.88	TRUE	
					AO-BFT-E	583,264.38	0.34	198,309.89	FALSE	
					swo-med	5,441,561.99	1.85	10,066,889.68	TRUE	
swo-na	1,044,359.30	0.78	814,600.25	FALSE						
PMP	12-18	1,814,800.19	4,442,656.79	41%	ane-gsa06	661,014.99	1.19	786,607.84	TRUE	3.57
					ank-gsa06	8,633.33	6.49	56,030.31	TRUE	
					AO-ALB-M	842.21	0.83	699.03	FALSE	
					AO-BFT-E	48,706.66	0.34	16,560.26	FALSE	
					ara-gsa06	13,709.07	2.43	33,313.04	TRUE	
					dps-gsa06	188,578.51	2.29	431,844.79	TRUE	
					hke-gsa01	291.61	7.95	2,318.30	TRUE	
					hke-gsa06	425,078.86	7.8	3,315,615.11	TRUE	



SEGMENT	TOT_VAL AT-RISK STOCK	TOT_VAL STRATUM	PERCENT	FISHSTOCK	VALUE_STOCK	F_etoile2	F_ETOILE2XVALOR	stock_overexploited	SHI
				mongsa01_05_06_07	32,220.45	2.05	66,051.92	TRUE	
				mut-gsa06	52,345.18	3.05	159,652.80	TRUE	
				nep-gsa06	55,437.02	9.49	526,097.32	TRUE	
				pil-gsa06	282,969.66	2.59	732,891.42	TRUE	
				sbg-gsa07	456.64	2.37	1,082.24	TRUE	
				swo-med	314.25	1.85	581.36	TRUE	
				whb-gsa06	44,201.75	7.88	348,309.79	TRUE	
PS	12-18	14,480,635.20	60%	ane-gsa06	6,719,743.44	1.19	7,996,494.69	TRUE	1.54
				AO-ALB-M	21,126.99	0.83	17,535.40	FALSE	
				AO-BFT-E	91,113.80	0.34	30,978.69	FALSE	
				hke-gsa01	1,397.81	7.95	11,112.59	TRUE	
				mac-nea	123.64	1.31	161.97	TRUE	
				mongsa01_05_06_07	412.61	2.05	845.85	TRUE	
	mut-gsa01	987.33	4.84	4,778.68	TRUE				
	mut-gsa06	85.61	3.05	261.11	TRUE				
	pil-27.8c9a	10,789.21	1.7	18,341.66	TRUE				
	pil-gsa01	4,128,177.36	1.26	5,201,503.47	TRUE				
	pil-gsa06	3,506,677.40	2.59	9,082,294.47	TRUE				
18-24	24,547,491.56	38,975,787.68	63%	ane-gsa06	14,253,146.02	1.19	16,961,243.76	TRUE	1.55
				ank-gsa06	17.48	6.49	113.45	TRUE	
				AO-ALB-M	13,666.17	0.83	11,342.92	FALSE	
				hke-gsa06	5.59	7.8	43.60	TRUE	
				mongsa01_05_06_07	9.36	2.05	19.19	TRUE	
				pil-27.8c9a	13,988.13	1.7	23,779.82	TRUE	
				pil-gsa01	4,076,440.95	1.26	5,136,315.60	TRUE	
				pil-gsa06	6,189,984.00	2.59	16,032,058.56	TRUE	
swo-med	233.86	1.85	432.64	TRUE					
24-40	21,017,806	21,538,269	98%	ane-gsa06	8,502,879.76	1.19	10,118,426.91	TRUE	0.83
				AO-BFT-E	11,175,475.74	0.34	3,799,661.75	FALSE	
				pil-gsa06	1,339,450.14	2.59	3,469,175.86	TRUE	

ANALYSIS OF THE SUSTAINABLE HARVEST INDICATOR IN THE MEDITERRANEAN

GEAR	LENGTH	2011	2012	2013	2014	2015	2016	2017	VESSELS (2017)
DTS	18-24	5.47	5.25	5.22	5.30	4.28	3.96	4.08	303
	24-40	5.91	5.52	5.58	5.65	3.39	4.12	4.25	132
HOK	6-12	2.98	2.30	2.30					
	12-18	2.06	1.84	2.00	3.98			2.09	23
	18-24	1.79	1.60	1.69					
PGO	12-18				1.71	2.79	1.55	1.60	42
	18-24				1.62	2.39	1.66	1.54	22
PMP	12-18	1.36					3.21	3.57	34
PS	12-18	1.07	1.04	1.25	1.10	1.13	1.74	1.54	84
	18-24	1.12	1.08	1.22	1.17	1.20	1.67	1.55	88
	24-40	0.75	0.59	0.67	0.65	0.66	0.96	0.83	26

The indicator is out of balance due to economic dependence on overexploited stocks.

- There were four fewer trawlers in the 18-24 and 24-40 segments (two 18-24 m vessels and two 24-40 m vessels). They are particularly dependent on overexploited species in zone GSA 06, such as HKE GSA 06, NEP GSA 06, ARA GSA 06, DPS GSA 06, and WHB. In zone GSA 01, this fleet shows greatest dependence on ARA GSA 01, HKE GSA 01, MON GSA 01/05/06/07. Its situation has slightly worsened.
- The indicator for the 12-18 segment using hooks is out of balance, as it depends on overexploited stocks like blue whiting and hake from GSA 06, and on hake from GSA 07.
- Surface longliners in the 12-18 and 18-24 segments continue to be out of balance due the overexploitation of swordfish.
- The indicator for the 12-18 m polyvalent fleet (trawlers, vessels using small-scale gear and purse seiners) is out of balance due to its dependence on overexploited stocks, mainly HKE GSA 06, PIL GSA 06 and ANE GSA 06.
- The situation of the purse-seiner fleet (12-24 m) has improved slightly, showing a decrease in all overexploited stock catches. The 24-40 segment comprises 16 vessels (among which are 6 bluefin tuna purse seiners) and it is in a good situation as it is highly dependent on BFT-E (a non-overexploited stock). Catches fell for PIL GSA 06, which has shown a slight improvement in its biological indicator despite a decrease in total catch volume with respect to 2016. This fleet is still dependent on this stock.

SHI IN OTHER WATERS

SEGMENT			TOT_VAL AT-RISK STOCK	TOT VAL STRATUM	PERCENT	FISHSTOCK	VALUE_STOCK	F_et oile2	F_ETOILE2XVAL OR	stock_overexploited	SHI
OTHER FISHING REGIONS	HOK	24-40	10,379,848	16,747,706	62%	AO-ALB-N	207,065.00	0.54	111,815.10	FALSE	1.01
						AO-BET	4,907,436.49	1.28	6,281,518.70	TRUE	
						AO-YFT	5,265,346.94	0.77	4,054,317.14	FALSE	
	PS	> 40	437,680,956.06	473,950,069.08	92%	AO-ALB-N	12,494.89	0.54	6,747.24	FALSE	0.98
						AO-BET	31,196,394.94	1.28	39,931,385.52	TRUE	
						AO-YFT	68,489,753.89	0.77	52,737,110.49	FALSE	
						blm-io	19,383.60	2.41	46,714.48	TRUE	
						IO-ALB	343,978.82	1.11	381,816.49	TRUE	
						IO-BET	105,281,263.32	0.76	80,013,760.12	FALSE	
						IO-SKJ	8,385,300.83	0.81	6,792,093.67	FALSE	
IO-YFT	223,952,385.78	1.11	248,587,148.22	TRUE							

ANALYSIS OF THE SUSTAINABLE HARVEST INDICATOR IN OTHER WATERS

GEAR	LENGTH	2011	2012	2013	2014	2015	2016	2017	VESSELS (2017)
HOK	24-40						0.93	1.01	12
PS	> 40	0.72	0.71	0.68	0.70	0.99	0.97	0.98	26

The indicator for the 24-40 m fleet using hooks reflects a slight biological imbalance. This segment is highly dependent on bigeye tuna (an overexploited stock), although catches have decreased since 2016. The biological indicator has worsened, becoming slightly imbalanced due to a significant decrease in catches of healthy stock (particularly albacore tuna).

Although the situation of large-scale freezer purse-seiners is in balance, it worsened somewhat with respect to 2016, with an increase in catches of stocks at risk (AO-BET) and a decrease in catches of healthy stock (IO-YFT).

1.B. INDICATOR FOR STOCKS AT RISK (SAR)

ANNEX V: SAR STOCK SELECTION

For this indicator, the species considered to be at high risk are those included in the *STECF 14-09 Balance indicators all tables_JRC90403* report for each year surveyed (2011, 2012, 2013 and 2014). A segment is considered to be out of balance when 10% of its catches comprise high-risk stocks.

The list of at-risk species has been adjusted to reflect the SAR species on pages 186 to 189 of the following document:

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).

SAR STOCKS FOR WHICH SPAIN REPORTED CATCHES, 2017

AL3	NAME	DIVISION	GSA	SAR_STOCK
BLI	Blue ling	27.12		BLI.NEA
BLI	Blue ling	27.8		BLI.NEA
BLI	Blue ling	27.9		BLI.NEA
BSK	Basking shark	37		BSK.37
CCT	Sand tiger shark	34.1.1		CCT-37-34
CCT	Sand tiger shark	34.1.2		CCT-37-34
CCT	Sand tiger shark	37		CCT-37-34
COD	Atlantic cod	27.1		COD-27.1-27.2
COD	Atlantic cod	27.2		COD-27.1-27.2
CWO	Leafscale gulper shark	37		CWO-GEN
CYO	Portuguese dogfish	27		CYO.27.NEA
DGS	Picked dogfish	27		DGS-27
ELE	European eel	37		ELE-MED
ELE	European eel	27		ELE.2737.NEA
ETX	Velvet belly	37		ETX-GEN
GAM	Mouse catshark	37		GAM-ALL_WATERS
GPW	White grouper	34.3		GPW-34.3
GUC	Cape bonnetmouth	27		GUC-27
HER	Autumn-spawning herring	27.6.a		HER.6A7BC
HER	Autumn-spawning herring	27.7.b		HER.6A7BC
HER	Autumn-spawning herring	27.7.c		HER.6A7BC



MLS	Striped marlin	51		MLS-51-57
MLS	Striped marlin	57		MLS-51-57
MPO	Bull ray	27.9		MPO-27-34-37
MPO	Bull ray	37		MPO-27-34-37
NEP	Norway lobster	27.8.C		NEP-2531
NEP	Norway lobster	27.9.A		NEP-2627
ORY	Orange roughy	47		ORY-SEA
ORY	Orange roughy	27		ORY.COM
PIL	European pilchard (sardine)	27.8.c		SAR-SOTH
PIL	European pilchard (sardine)	27.9.a		SAR-SOTH
PLA	American plaice	21.3.M		PLA-21-3M
POR	Porbeagle	27		POR.NEA-NWA-SEA-SWA-MED
POR	Porbeagle	37		POR.NEA-NWA-SEA-SWA-MED
REB	Redfish	27.14		REB.27.14
RED	Redfish	27.14		REB.27.14
AL3	NAME	DIVISION	GSA	SAR_STOCK
RGL	Butterfly ray	37		RGL-37
RJU	Undulate ray	27.8.C		RJU_278C
RJU	Undulate ray	27.9.A		RJU_279A
SAW	Sawfish	27		SAW-ALL-WATERS
SAW	Sawfish	37		SAW-ALL-WATERS
SBL	Bluntnose sixgill shark	27		SBL-
SBL	Bluntnose sixgill shark	37		SBL-
SBR	Red seabream	27.6		SBR-678
SBR	Red seabream	27.7		SBR-678
SBR	Red seabream	27.8		SBR-678
SOL	Sole	27.8.C		SOL-27_8C_9A
SOL	Sole	27.9.A		SOL-27_8C_9A
SUA	Sawback angelshark	37		SUA-
SWO	Swordfish	37		SWO-37
SYR	Knifetooth dogfish	37		SYR-

No consideration has been given as to whether more than 10% of this total stock is fished for by fleets from other countries, as that information cannot be fully known until the STECF tables (which contain this data for other Member States) are published. These tables would still be incomplete, though, as they would not reflect the data for non-EU countries.

SAR RESULTS, 2011-2017

	SUPRA-REGION	GEAR	LENGTH	FISHSTOCK_SHAR	TOT_WEIGHT	TOTAL_WEIGHT_STRAT	PERCENT	
2011	N ATLANTIC	PS	10-12	PIL-27.9.A	207,058.50	1,395,580.34	14.84%	
			12-18	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	N ATLANTIC	PS	12-18	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	N ATLANTIC	DFN	10-12	MAC-27.8	377,535.25	1,970,406.26	19.16%	
			12-18	MAC-27.8	1,380,464.20	6,060,991.12	22.78%	
		FPO	12-18	MAC-27.8	86,939.30	864,103.24	10.06%	
		HOK	10-12	MAC-27.8	540,896.77	1,619,824.24	33.39%	
			12-18	MAC-27.8	910,867.61	3,606,694.90	25.25%	
		PGP	10-12	MAC-27.8	459,122.20	997,428.15	46.03%	
			12-18	MAC-27.8	303,713.02	1,331,069.41	22.82%	
			18-24	MAC-27.8	362,778.31	2,173,063.49	16.69%	
		PS	12-18	PIL-27.9.A	6,309,866.76	23,562,255.00	26.78%	
	SUPRA-REGION	GEAR	LENGTH	FISHSTOCK_SHAR	TOT_WEIGHT	TOTAL_WEIGHT_STRAT	PERCENT	
	MED	DTS	18-24	PIL-27.9.A	4,573,678.83	34,262,041.87	13.35%	
			24-40	HKE-37.1.1-SA 6	1,051,521.39	6,524,303.59	16.12%	
			PS	12-18	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	10-12	MAC-27.8	1,305,284.51	2,760,011.76	47.29%	
			12-18	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	12-18	MAC-27.8	158,522.40	943,175.36	16.81%
		HOK	10-12	MAC-27.8	1,324,907.66	2,267,746.37	58.42%
			12-18	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%
			00-10	MAC-27.8	1,801,533.66	9,259,929.34	19.46%
		PMP	10-12	MAC-27.8	660,339.70	1,860,990.48	35.48%
			12-18	MAC-27.8	1,294,830.27	3,201,498.26	40.44%
			12-18	PIL-27.9.a	4,217,748.38	27,810,734.10	15.17%
		PS	24-40	MAC-27.8	7,167,460.70	51,822,974.99	13.83%
	DTS		24-40	HKE-37.1.1-SA 6	853,528.27	5,364,565.70	15.91%
	MED	PS	12-18	PIL-37.1.1-SA 6	2,354,507.49	18,252,661.42	12.90%
			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%
	N ATL		PGO	18-24	BSH-27	2,191,127.68	2,787,149.14
		24-40		BSH-27	8,357,084.60	25,588,902.80	32.66%
2015	MED	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%
2016	N ATL	PS	10-12	HOM.27.2A4A5B6A7A-CE-K8	481,364.40	2,226,804.27	21.62%
			24-40	HOM.27.2A4A5B6A7A-CE-K8	5,769,747.14	34,961,229.76	16.50%
	MEDITERRANEAN	DTS	24-40	HKE-37	708,296.30	5,647,283.31	12.54%
		PMP	12-18	PIL-GSA6	458,309.20	2,132,473.50	21.49%
		PS	12-18	PIL-GSA6	2,652,242.67	14,262,216.77	18.60%
			18-24	PIL-GSA6	4,513,012.71	23,353,172.71	19.33%
24-40	PIL-GSA6		1,045,475.15	5,595,168.72	18.69%		
2017	NORTH ATLANTIC	DTS	> 40	COD-27.1-27.2	14,325,259.85	34,169,352.31	41.92%
	MEDITERRANEAN	PGO	12-18	SWO-37	727,009.27	1,087,853.14	66.83%
			18-24	SWO-37	754,125.48	1,157,553.98	65.15%

2. FLEET OPERATIONAL CAPABILITY INDICATORS

2. A. INACTIVITY INDICATOR

This indicator refers to vessels that have not fished a single day throughout the year. They are classified by length and supra-region according to their registered method, which is the closest estimate to where they would have fished had they been active. Under normal conditions, it can be expected that 20% of the registered fleet may be inactive due to repairs, conversions, pending sale, etc. If more than 20% is inactive, it indicates a possible imbalance.

2008		0-10	10-12	12-18	18-24	24-40	> 40	TOTAL	TOTAL GT	TOTAL KW	
NORTH ATLANTIC	Subtotal active	3,555	421	718	311	509	42	5,556	199,707.00	435,620.00	
	INACTIVE	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	
MEDITERRANEAN	Subtotal active	246	1,506	547	613	209		3,121	78,219.00	302,923.00	
	INACTIVE	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	Subtotal active	697	69	48	18	187	107	1,126	181,171.00	277,354.00	
	INACTIVE	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
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NORTH ATLANTIC	Subtotal active	3,532	420	708	351	436	41	5,488	194,639.44	422,867.11
	INACTIVE	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	Subtotal active	236	1,495	539	582	227		3,079	76,746.62	294,562.72
	INACTIVE	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	Subtotal active	695	61	64	23	177	96	1,116	178,868.87	273,524.58
	INACTIVE	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	Subtotal active	4,353	431	712	269	454	34	6,253	176,274.49	402,325.36
	INACTIVE	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	Subtotal active	239	1,483	516	532	209		2,979	70,644.03	274,756.67
	INACTIVE	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	Subtotal active	681	65	64	10	205	98	1,123	184,767.64	281,760.70
	INACTIVE	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, there was noticeable inactivity among the artisanal fleet of less than 10 metres' length in all regions. This remained stable, albeit with a slight improvement, in 2009. In 2010, the Mediterranean artisanal fleet was the only one to exceed 20% inactivity.

INACTIVITY 2011-2017

From 2011, the population reflects real active vessels (in previous years, it was based on licences and not on the activity declared through sales notes, catches or landings).

Starting in 2017, the data for the Canary Islands and Morocco have been separated from those for 'other waters'.

2011		0-10	10-12	12-18	18-24	24-40	> 40	TOTAL	TOTAL GT	TOTAL KW
NORTH ATLANTIC	Subtotal active	3,898	424	673	271	387	23	5,676	148,992.71	360,300.21
	INACTIVE	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	Subtotal active	120	1,298	449	489	186		2,542	63,151.42	247,538.49
	INACTIVE	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	Subtotal active	486	52	63	17	187	93	898	173,139.88	258,327.62
	INACTIVE	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 (%)	54.18	16.97	5.29	2.81	5.52		15.60	4.56	7.06
OTHER WATERS	Subtotal active	498	53	67		151	89	858	165,142.19	244,159.12
	INACTIVE	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	Subtotal active	3,838	380	619	257	341	18	5,453	129,001.80	330,246.41
	INACTIVE	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	Subtotal active	118	1,205	445	439	171		2,378	57,855.23	225,218.27
	INACTIVE	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	Subtotal active	494	63	75		142	88	862	166,253.73	248,922.51
	INACTIVE	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	Subtotal active	3,767	367	608	253	325	18	5,338	126,723.09	329,290.47
	INACTIVE	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
MEDITERRANEAN	Subtotal active	111	1,193	422	420	160		2,306	54,624.23	214,790.87
	INACTIVE	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	Subtotal active	492	61	82		136	86	857	164,291.73	244,956.33
	INACTIVE	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	Subtotal active	3,774	345	588	241	303	17	5,268	118,051.00	316,124.28
	INACTIVE	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
MEDITERRANEAN	Subtotal active	109	1,144	421	408	155		2,237	53,551.04	208,832.66
	INACTIVE	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										
OTHER WATERS	Subtotal active	488	85	57	11	129	79	849	153,875.98	228,711.73
	INACTIVE	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

2017		0-10	10-12	12-18	18-24	24-40	> 40	TOTAL	TOTAL GT	TOTAL KW
NORTH ATLANTIC	Subtotal active	3,768	341	582	241	299	13	5,244	113,234.68	313,062.11
	INACTIVE	504	15	26	3	13	1	562	5,971.43	16,244.98
	TOTAL	4,272	356	608	244	312	14	5,806	119,206.11	329,307.09
	Inactive (%)	11.80	4.21	4.28	1.23	4.17	7.14	9.68	5.01	4.93
CANARY ISLANDS	Subtotal active	465	75	43		22		605	4,788.47	24,328.27
	INACTIVE	134	5	3	2			144	347.65	2,638.69
	TOTAL	599	80	46	2	22		749	5,136.12	26,966.96
	Inactive (%)	22.37	6.25	6.52	100.00	0.00		19.23	6.77	9.78
MOROCCO	Subtotal active			19				19	432.05	1,755.89
	INACTIVE							0		
	TOTAL			19				19	432.05	1,755.89
	Inactive (%)			0.00				0.00	0.00	0.00
MED	Subtotal active	109	1,120	428	413	158		2,228	54,100.03	210,248.55
	INACTIVE	86	202	39	6	2		335	1,812.13	12,252.89

	TOTAL	195	1,322	467	419	160		2,563	55,912.16	222,501.44
	Inactive (%)	44.10	15.28	8.35	1.43	1.25		13.07	3.24	5.51
OTHER WATERS	Subtotal active					115	84	199	152,394.07	207,522.45
	INACTIVE				2	14	4	20	7,960.26	11,615.47
	TOTAL				2	129	88	219	160,354.33	219,137.92
	Inactive (%)				100.00	10.85	4.55	9.13	4.96	5.30
	INACTIVE	724	222	68	13	29	5	1,061	16,091	42,752
	TOTAL	5,066	1,758	1,140	667	623	102	9,356	341,041	799,669
	Inactive (%)	14.29	12.63	5.96	1.95	4.65	4.90	11.34	4.72	5.35
							Active	8,295	324,949.30	756,917.27
							Inactive	1,061	16,091.47	42,752.03
							TOTAL	9,356	341,040.77	799,669.30

2018		0-10	10-12	12-18	18-24	24-40	> 40	TOTAL	TOTAL GT	TOTAL KW
NORTH ATLANTIC	Subtotal active	3,717	340	560	238	296	15	5,166	116,717.43	317,701.93
	INACTIVE	495	24	36		23		578	7,673.93	20,483.79
	TOTAL	4,212	364	596	238	319	15	5,744	124,391.36	338,185.72
	Inactive (%)	11.75	6.59	6.04	0.00	7.21	0.00	10.06	6.17	6.06
CANARY ISLANDS	Subtotal active	459	60	46		25		590	4,886.40	24,366.95
	INACTIVE	135	18					153	419.31	3,072.32
	TOTAL	594	78	46		25		743	5,305.71	27,439.27
	Inactive (%)	22.73	23.08	0.00		0.00		20.59	7.90	11.20
MOROCCO	Subtotal active			8				8	107.82	728.14
	INACTIVE							0		
	TOTAL			8				8	107.82	728.14
	Inactive (%)			0.00				0.00	0.00	0.00

MEDITERRANEAN	Subtotal active	100	1,064	384	392	152		2,092	50,802.05	196,222.63
	INACTIVE	78	252	54	22			406	3,357.27	19,474.58
	TOTAL	178	1,316	438	414	152		2,498	54,159.32	215,697.21
	Inactive (%)	43.82	19.15	12.33	5.31	0.00		16.25	6.20	9.03
OTHER WATERS	Subtotal active					112	82	194	149,249.46	205,280.50
	INACTIVE					20		20	7,613.61	11,004.53
	TOTAL					132	82	214	156,863.07	216,285.03
	Inactive (%)					15.15	0.00	9.35	4.85	5.09
	INACTIVE	708	294	90	22	43	0	1,157	19,064	54,035
	TOTAL	4,984	1,758	1,088	652	628	97	9,207	340,719	797,607
	Inactive (%)	14.21	16.72	8.27	3.37	6.85	0.00	12.57	5.60	6.77
							Active	8,050	321,763.16	744,300.15
							Inactive	1,157	19,064.12	54,035.22
							TOTAL	9,207	340,827.28	798,335.37

CHANGE (%) IN INACTIVE VESSELS, 2011-2018

	NORTH ATLANTIC								
	2011	2012	2013	2014	2015	2016	2017	2018	
0-10	16.80	15.00	13.92	12.55	13.54	12.15	11.80	11.75	
10-12	4.07	4.50	3.89	4.28	3.67	3.63	4.21	6.59	
12-18	4.13	4.22	4.36	4.77	3.65	4.39	4.28	6.04	
18-24	3.21	3.40	1.88	1.15	1.56	0.41	1.23	0.00	
24-40	5.38	4.75	4.42	6.32	3.85	5.90	4.17	7.21	
> 40	20.69	24.00	19.23	18.18	10.00	0.00	7.14	0.00	
TOTAL	13.30	12.08	11.18	10.34	10.80	9.95	9.68	10.06	
	MEDITERRANEAN								
	2011	2012	2013	2014	2015	2016	2017	2018	
0-6	66.94	63.00	54.18	53.54	51.10	48.10	44.10	43.82	
6-12	19.28	18.53	16.97	14.78	14.05	15.13	15.28	19.15	
12-18	5.07	5.15	5.29	6.51	6.01	9.07	8.35	12.33	
18-24	2.20	2.29	2.81	3.09	2.10	1.92	1.43	5.31	
24-40	2.11	1.63	5.52	2.84	3.61	1.90	1.25	0.00	
> 40									
TOTAL	18.89	17.58	15.60	14.24	13.28	13.80	13.07	16.25	
	OTHER REGIONS								
	2011	2012	2013	2014	2015	2016	2017	2018	
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	100.00	15.15
24-40	13.82	11.17	15.64	13.94	14.47	12.24	10.85	0.00
> 40	6.06	4.90	6.32	8.33	7.53	7.06	4.55	
TOTAL	26.33	26.25	21.14	19.14	17.83	16.27	9.13	9.35
	CANARY ISLANDS							
	2017	2018						
0-10	22.37	22.73						
10-12	6.25	23.08						
12-18	6.52	0.00						
18-24	100.00	0.00						
24-40	0.00	0.00						
> 40								
TOTAL	19.55	20.59						
	TOTAL FLEET							
	2011	2012	2013	2014	2015	2016	2017	2018
0-10	22.30	20.29	17.51	15.97	16.32	14.66	14.29	14.21
10-12	15.96	15.62	14.04	12.29	11.66	12.41	12.63	16.72
12-18	4.74	5.24	4.95	5.56	4.55	6.49	5.96	8.27
18-24	3.36	3.66	3.00	2.93	2.17	1.64	1.95	3.37
24-40	6.86	5.59	7.48	7.23	6.35	6.38	4.65	6.85
> 40	9.38	8.66	9.09	10.17	7.96	5.88	4.90	0.00
TOTAL	16.37	15.23	13.49	12.38	12.23	11.68	11.34	12.57

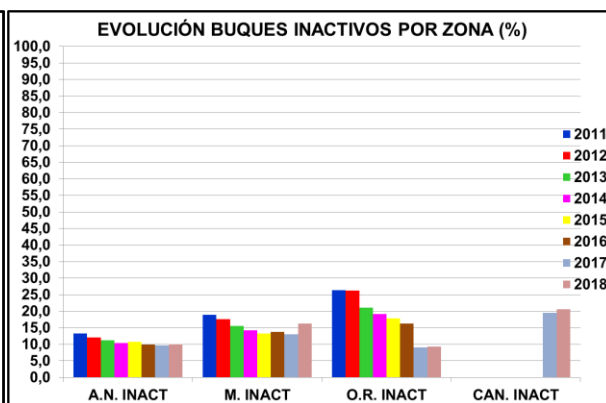
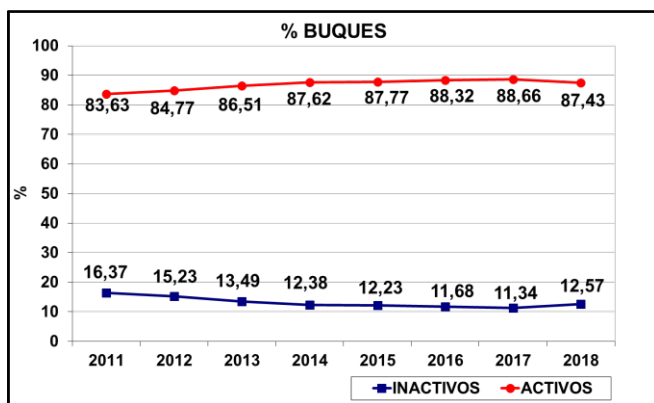
During the eight-year period from 2011-2018, fleet operational capability worsened. The same can be seen when analysing vessel length: inactivity increased in all categories except for that of vessels under 10 metres (which remained stable) and that of vessels over 40 metres (in which all were active). The same thing occurs when observing the data on inactivity by supra-region, with inactivity increasing to a greater extent in the Mediterranean.

There are three [*sic*] segments in which inactivity exceeds 20%: small vessels (0-6 m) operating in the Mediterranean and the artisanal fleet (0-12 m) operating in the Canary Islands. Their inactivity also exceeded 20% in 2017, except for the 10-12 m segment in the Canary Islands, in which vessel inactivity increased from 6.25% in 2017 to 23.08% in 2018.

In Morocco, an area that was studied separately for the first time this year (using data for 2017 and 2018), no inactivity was reported; all vessels were in operation in 2017 and 2018.

In 2018, 0% inactivity was recorded among vessels in the North Atlantic (18-24 m and > 40 m), in the Mediterranean (> 40 m), in other regions (> 40 m), and in the Canary Islands (12-18 m and 24-40 m).

The following graphs show fleet inactivity.



% BUQUES	VESSELS (%)
INACTIVOS	INACTIVE
ACTIVOS	ACTIVE

EVOLUCIÓN BUQUES INACTIVOS POR ZONA (%)	CHANGE (%) IN INACTIVE VESSELS BY AREA
A. N. INACT	NA INACT
M. INACT	M INACT
O. R. INACT	OR INACT
CAN. INACT	CAN INACT

2.B. FLEET UTILISATION INDICATOR

This indicator measures the ratio between a fleet's potential maximum effort and that which it actually carries out. It provides an assessment of fishing capacity in prevailing circumstances. If the mean activity level for a fleet segment is less than 70%, it shows technical inefficiency (red), and an indicator above 0.9 reflects homogeneous activity in the segment.

To calculate the technical indicator, the data on days at sea for each vessel over 12-15 metres' length with a blue box was obtained from the fisheries monitoring centre. Therefore, the survey accounts not only for effective fishing days but also for the days after a vessel leaves port, as this is considered fishing activity according to the 2012 guidelines.

For vessels not required to carry a blue box, the number of fishing days was calculated by using the days with catch declarations (when available) or by sales notes (this is mainly for vessels of less than 10 metres' length operating in the national fishing ground, which have one note per day as they make trips of less than 24 hours). Although this calculation is not exact, given that a single sales note may correspond to two or three fishing days, it is the most precise figure that could be produced for the artisanal fleet.

Several options have been proposed to calculate the maximum effort. One is to use the actual maximum effort exerted by the vessel in each segment with the most recorded fishing days. The ratio between average effort and actual maximum effort results in the **technical indicator for actual maximum effort**.

In Spain, many fleets have limits on fishing days, as is the case for the majority of fleets operating in the national fishing ground (five days per week). Furthermore, these fleets (like others that operate in international fishing grounds) are subject to temporary stoppages and biological closures, forcing the fleet to remain in port for a fixed period of time that may or may not coincide with workers' days off. There is also a varying number of days on which the fleet must remain in port due to climatic conditions, and this varies by year, fishing ground and port.

In calculating actual maximum effort, it became clear that the value for actual maximum days was not representative for a large part of the strata, rather, it was an outlying figure; therefore, it did not seem appropriate to use it to determine the effort that the fleet should exert.

For these two reasons, the **technical indicator for the top ten most active vessels** was calculated, for which the distribution of days at sea by stratum is used to obtain the maximum effort. To calculate this theoretical maximum, the recommendations given by the JRC on calculating the maximum number of days were followed, using data from the Data Collection Framework, which suggests taking the average of the ten vessels with the most activity.

As such, we calculated the maximum number of days for the six-year period from 2011 to 2017. However, we did not use this value to calculate the indicator; we used a variation of it. To prevent occasional outliers from distorting the results, and as we already have a time series with a representative number of years of observations, we calculated the maximum number of days as an average of the six maximums and used that same value for the period.

This minimises the effect of specific events that may have occurred and are unrelated to fleet activity. In addition, using the same maximum number of days for five years provides a better time comparison.

We must bear in mind that the population for 2008-2010 was derived from licences, not declared activity. Moreover, until 2010 dredges were included in the polyvalent segment; therefore, we cannot calculate the number of days of fishing effort for these two gears during that period.

As a result, to analyse the trend we used two periods: 2008-2010 and 2011-2017. In addition, another indicator was obtained by using 220 as the maximum number of days, which is the same figure used by STECF.

We believe that the most representative indicator is that which uses the **top ten most active vessels**, as considering ten vessels and not only one prevents exceptional and unrealistic cases from presenting a distorted picture of the activity in a segment.

However, the table below also shows the indicator that uses 220 as the maximum number of days, which was the one produced by STECF for previous years.

To interpret the results, indicator values **greater than or equal to 0.9** represent fleets with a highly homogeneous level of activity. Values **below 0.7** indicate an inefficient fleet, as the fishing effort deployed is significantly below the maximum effort it could exert. Therefore, values between **0.7 and 0.9** reflect a moderately homogeneous fleet, becoming more homogeneous as the indicator increases.

The indicators calculated for 2008-2017 are shown in the following table:

				INDICATOR FOR MAXIMUM DAYS = AVERAGE MAXIMUM DAYS									
	Stratum	Gear	Length	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
North Atlantic	DTS	Bottom trawl nets	3	0.71	0.77	0.93	0.77	0.82	0.86	0.88	0.86	0.88	0.86
			4	0.73	0.80	0.88	0.80	0.78	0.83	0.78	0.86	0.88	0.82
			5	0.70	0.68	0.76	0.73	0.79	0.80	0.76	0.78	0.82	0.81
			6	0.69	0.65	0.74	0.71	0.76	0.68	0.74	0.76	0.71	0.83
	PS	Purse seines	2	0.82	0.74	0.72	0.63	0.81	0.78	0.74	0.62	0.78	0.74
			3	0.66	0.71	0.70	0.69	0.73	0.73	0.67	0.65	0.72	0.66
			4	0.76	0.80	0.82	0.88	0.83	0.84	0.77	0.80	0.85	0.79
			5	0.57	0.62	0.66	0.86	0.87	0.81	0.79	0.85	0.84	0.83



	DFN		2	0.81	0.84		0.62	0.71	0.71	0.70	0.71	0.72	0.69	
Mediterranean	Gillnets		3	0.77	0.84	0.78	0.65	0.75	0.74	0.74	0.75	0.76	0.74	
			4	0.85	0.86	0.89	0.83	0.92	0.86	0.87	0.88	0.90	0.90	
			5	1.02	0.86	0.89		0.85						
	HOK	Hooks		1	0.49	0.60	0.62		1.12					
				2	0.62	0.67	0.66	0.57	0.68	0.68	0.66	0.71	0.68	0.61
				3	0.68	0.74	0.75	0.65	0.70	0.71	0.68	0.73	0.70	0.63
				4	0.72	0.72	0.79	0.85	0.81	0.80	0.68	0.74	0.77	0.76
				5	0.87	0.83	0.86	0.90	0.93	1.08	0.59	0.69	0.69	0.70
	PGO	Surface longlines		4							0.93	0.91	1.00	0.99
				5							1.08	1.04	0.97	0.98
	FPO	Pots		2				0.65	0.72	0.68	0.78	0.76	0.83	0.75
				3				0.72	0.76	0.72	0.76	0.74	0.88	0.77
	DRB	Dredges		1				0.50	0.50	0.44	0.47	0.44	0.48	0.52
				2				0.37	0.91	1.18	1.01	1.08	0.85	0.74
				3				0.43	0.92	1.02	0.88	1.09	0.77	0.63
	Polyvalent gear			1	0.44	0.45	0.45	0.41	0.45	0.38	0.39	0.39	0.44	0.44
				2	0.56	0.59	0.62	0.86	0.54	0.62	0.62	0.60	0.64	0.58
				3	0.64	0.67	0.50	0.77	0.67	0.73	0.78	0.76	0.83	0.82
				4	1.03			0.81		0.78				
				5		0.83	1.21	0.95		0.80	0.83	0.83	0.90	0.95
Mediterranean	DTS	Bottom trawl nets		2	0.82	0.84	0.83	0.83	0.78	0.86	0.86	0.87	0.82	0.69
				3	0.76	0.78	0.81	0.78	0.79	0.80	0.80	0.79	0.81	0.80
				4	0.72	0.74	0.76	0.74	0.75	0.74	0.76	0.78	0.77	0.75
				5	0.79	0.82	0.81	0.78	0.78	0.81	0.79	0.84	0.83	0.79
	PS	Purse seines		2	0.58	0.66	0.80	0.53	0.65	0.86	0.79	0.92	0.80	0.76
				3	0.67	0.73	0.74	0.71	0.75	0.78	0.84	0.81	0.83	0.85
				4	0.77	0.87	0.88	0.85	0.86	0.87	0.87	0.86	0.89	0.87
				5	0.48	0.48	0.57	0.55	0.49	0.47	0.49	0.46	0.48	0.51
	DFN	Gillnets		2				0.65	0.71	0.70	0.76	0.69	0.71	0.71
				3				0.79	0.79	0.80	0.84	0.78	0.81	0.80
	HOK	Hooks		2	0.48	0.64	0.68	0.57	0.56	0.55	0.65	0.67	0.62	0.51
				3	0.57	0.63	0.60	0.60	0.63	0.69	0.66	0.59	0.68	0.68
				4	1.01	0.77	0.73	0.85	0.92	0.78				
	PGO	Surface longlines		3							0.72	0.75	0.71	0.70
				4							0.86	0.86	0.82	0.82



Outer regions	FPO	Pots	2				1.02	0.80						
			3					1.28	1.18	1.29	1.28	1.24	1.02	
	DRB	Dredges	2				0.57	0.71	0.69	0.63	0.83	0.65	0.67	
			3				0.93	1.00	0.94	0.96		0.99	0.89	
	Polyvalent gear		1	0.32	0.32	0.32	0.31	0.33	0.36	0.42	0.38	0.38	0.38	
			2	0.48	0.51	0.51	0.47	0.48	0.49	0.52	0.51	0.49	0.51	
			3	0.76	0.78	0.84	1.05	0.67	0.77	0.66	0.73	0.90	0.83	
	DTS	Bottom trawl nets	5	0.73	0.73	0.81	0.81	0.58	0.65	0.83	0.84	0.85	0.81	
			6	0.80	0.87	0.89	0.86	0.87	0.85	0.88	0.87	0.84	0.88	
	PS	Purse seines	3		0.81	1.32	0.53	0.78	0.83	0.89	0.80	0.91		
	Canary Islands			6	0.94	0.93	0.91	0.94	0.92	0.90	0.81	0.87	0.96	0.89
		HOK	Hooks	2		0.74	0.92	0.57	0.72	0.52	0.66	0.62	0.64	
3					0.85	0.73	0.60	0.92	0.65	0.55	0.67	0.71		
4				0.82	0.84	0.83	0.95	0.94				0.89		
5				0.87	0.84	0.89	0.98	0.94	0.92	0.68	0.78	0.79	0.72	
6				0.88	0.89	0.90	0.93	0.90	0.92					
PGO		Surface longlines	5							0.87	0.89	0.86	0.90	
			6							0.91	0.92	0.95	0.88	
FPO		Pots	2									0.82		
			3				0.69	0.86		0.86	0.83			
Polyvalent gear		1	0.25	0.28	0.27	0.28	0.28	0.31	0.32	0.32	0.33			
		2	0.56	0.38	0.56	0.37	0.78	0.61	0.55	0.52	0.61			
		3	0.62	0.63	0.73			0.78	0.74	0.76				
		5	0.91		0.90	0.91		0.89	0.88	0.95				
Canary Islands		PS	Purse seines	3									0.68	
	HOK	Hooks	2									0.58		
			3								0.70			
			5								0.92			
	PMP	Polyvalent active & passive gear	1									0.32		
			2									1.00		
	FPO	Pots	2									0.92		
MA	HOK	Hooks	3									1.12		

				INDICATOR FOR MAXIMUM DAYS = 220										
	Stratum	Gear	Length	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
North Atlantic	DTS	Bottom trawl nets	3	0.58	0.63	0.76	0.71	0.76	0.79	0.81	0.80	0.82	0.80	
			4	0.68	0.74	0.81	0.79	0.77	0.82	0.77	0.84	0.88	0.83	
			5	1.09	1.06	1.18	1.07	1.16	1.18	1.11	1.15	1.19	1.18	
			6	0.94	0.89	1.01	0.96	1.03	0.92	1.00	1.03	0.95	1.09	
	PS	Purse seines	2	0.51	0.46	0.45	0.37	0.47	0.46	0.44	0.37	0.45	0.43	
			3	0.63	0.68	0.67	0.68	0.71	0.72	0.66	0.64	0.71	0.65	
			4	0.75	0.79	0.81	0.90	0.84	0.86	0.78	0.82	0.87	0.81	
	DFN	Gillnets	5	0.73	0.79	0.84	0.86	0.88	0.82	0.80	0.86	0.84	0.84	0.83
			2	0.47	0.49		0.61	0.69	0.69	0.68	0.69	0.71	0.68	
			3	0.74	0.81	0.76	0.72	0.84	0.82	0.83	0.84	0.84	0.82	
			4	0.87	0.88	0.90	0.93	1.03	0.97	0.98	0.99	1.01	1.01	
	HOK	Hooks	5	1.20	1.02	1.05		1.16						
			1	0.34	0.41	0.43		0.39						
			2	0.50	0.55	0.54	0.42	0.51	0.51	0.49	0.53	0.51	0.47	
			3	0.66	0.72	0.74	0.70	0.75	0.77	0.73	0.78	0.75	0.68	
			4	0.90	0.90	0.99	0.98	0.94	0.92	0.78	0.85	0.89	0.86	
PGO	Surface longlines	5	1.25	1.20	1.25	1.14	1.18	1.38	0.76	0.81	0.79	0.77		
		4							0.93	0.90	1.00	0.99		
Mediterranean	FPO	Pots	5							1.40	1.36	1.33	1.38	
			2				0.60	0.67	0.63	0.72	0.70	0.77	0.71	
	DRB	Dredges	3				0.63	0.66	0.63	0.66	0.64	0.78	0.69	
			1				0.51	0.52	0.46	0.49	0.46	0.50	0.54	
			2				0.24	0.59	0.76	0.65	0.70	0.54	0.47	
	Polyvalent gear		3				0.32	0.69	0.77	0.66	0.82	0.57	0.47	
			1	0.46	0.47	0.49	0.48	0.46	0.44	0.46	0.46	0.50	0.46	
			2	0.61	0.64	0.65	0.71	0.43	0.51	0.51	0.50	0.52	0.48	
			3	0.67	0.70	0.69	0.75	0.63	0.71	0.75	0.73	0.82	0.81	
			4	0.77			0.84		0.81					
DTS	Bottom trawl nets	5		1.14	1.27	1.29		1.09	1.13	1.12	1.23	1.31		
		2	0.74	0.76	0.75	0.74	0.68	0.76	0.76	0.77	0.73	0.60		
		3	0.79	0.81	0.84	0.83	0.85	0.86	0.86	0.84	0.86	0.85		
		4	0.84	0.86	0.88	0.90	0.90	0.89	0.91	0.94	0.92	0.91		
		5	0.90	0.94	0.92	0.90	0.90	0.93	0.91	0.97	0.95	0.91		



	PS	Purse seines	2	0.38	0.44	0.53	0.47	0.57	0.76	0.70	0.82	0.72	0.68
			3	0.71	0.78	0.80	0.84	0.88	0.92	0.99	0.96	0.97	1.00
			4	0.85	0.96	0.97	1.00	1.02	1.03	1.03	1.02	1.06	1.04
			5	0.47	0.47	0.55	0.59	0.52	0.50	0.52	0.49	0.51	0.55
	DFN	Gillnets	2				0.62	0.68	0.68	0.73	0.66	0.69	0.68
			3				0.77	0.77	0.78	0.82	0.76	0.79	0.77
	HOK	Hooks	2	0.42	0.57	0.61	0.50	0.49	0.47	0.56	0.58	0.54	0.44
			3	0.54	0.59	0.56	0.51	0.54	0.59	0.57	0.50	0.58	0.57
			4	1.11	0.85	0.80	0.81	0.87	0.74				
	PGO	Surface longlines	3							0.71	0.74	0.68	0.66
			4							0.87	0.87	0.81	0.80
	FPO	Pots	2				0.82	0.64					
3							1.18	1.09	1.19	1.18	1.14	0.98	
DRB	Dredges	2				0.39	0.48	0.47	0.43	0.56	0.43	0.44	
		3				0.80	0.85	0.80	0.82		0.88	0.77	
Polyvalent gear		1	0.26	0.26	0.26	0.26	0.28	0.31	0.35	0.32	0.33	0.34	
		2	0.49	0.52	0.52	0.49	0.50	0.50	0.54	0.53	0.51	0.50	
		3	0.84	0.86	0.93	0.98	0.62	0.72	0.62	0.68	0.86	0.80	
Other regions	DTS	Bottom trawl nets	5	1.17	1.17	1.30	1.23	0.88	0.99	1.26	1.27	1.30	1.24
			6	1.13	1.22	1.25	1.27	1.28	1.26	1.30	1.28	1.24	1.30
	PS	Purse seines	3		0.76	1.24	0.42	0.62	0.66	0.70	0.63	0.74	
			6	1.43	1.41	1.39	1.43	1.40	1.37	1.23	1.33	1.46	1.36
	HOK	Hooks	2		0.39	0.49	0.31	0.40	0.28	0.36	0.34	0.36	
			3		0.66	0.56	0.45	0.70	0.49	0.41	0.51	0.54	
			4	0.92	0.94	0.93	1.21	1.21				1.06	
			5	1.37	1.32	1.40	1.42	1.36	1.33	0.98	1.14	1.12	1.01
			6	1.39	1.41	1.43	1.46	1.41	1.43				
	PGO	Surface longlines	5							1.40	1.43	1.38	1.45
			6							1.45	1.48	1.52	1.41
	FPO	Pots	2									0.44	
3						0.37	0.46		0.46	0.44			
Polyvalent gear		1	0.27	0.30	0.30	0.30	0.31	0.34	0.35	0.35	0.36		
		2	0.33	0.23	0.33	0.20	0.42	0.33	0.29	0.28	0.32		
		3	0.55	0.55	0.64			0.69	0.66	0.67			
		5	0.95		0.93	0.91		0.89	0.88	0.96			
-	PS	Purse	3									0.60	

		seines											
			2										0.29
	HOK	Hooks	3										0.60
			5										0.90
			1										0.35
	PMP	Polyvalent active & passive gear	2										0.46
	FPO	Pots	2										0.45
MA	HOK	Hooks	3										0.88

3. ECONOMIC INDICATORS

3. A. CR/BER

This indicator measures short-term economic profitability. It compares current revenue (CR) with break-even revenue (BER), which is the revenue needed to cover the fixed and variable costs incurred in carrying out the activity.

If the value is greater than **one (green indicator)**, sufficient revenue was generated to cover costs. The greater the value, the more profitable the sector will be. Conversely, the stratum is not economically sustainable if the value is **less than one (red indicator)**, as it indicates that insufficient revenue was generated to cover the costs incurred. These cases are marked in dark red. If the value of the indicator is negative, it means that variable costs exceeded generated revenue. **Indicator values close to one (0.9-1.0)**, indicate a certain degree of economic balance. These are marked in yellow.

The indicator was determined for 2008-2017.

It was calculated as follows:

$$\text{CR} = \text{current revenue} = \text{income from fishing activity} + \text{income from other vessel operations}$$

$$\text{BER} = \text{fixed costs} / (1 - (\text{variable costs} / \text{current revenue}))$$

Where:

- **Fixed costs** = depreciation + non-variable costs + opportunity costs

Opportunity cost of capital is not included for the calculation as it assesses long-term profitability, which is already assessed in the RoFTA.

- **Variable costs** = crew wages and salaries + unpaid labour + repair and maintenance costs + energy costs + other variable costs.

The following data are needed:

- Current revenue (not including subsidies), which is comprised of:
 - o Income from fishing activity
 - o Income from other vessel operations, such as tourism, recreational fishing, etc.
- Fixed costs, which are divided into:
 - o Annual depreciation or amortisation
 - o Non-variable costs, including:
 - Machinery and equipment rental
 - Insurance premiums
 - Repair and maintenance of fixed tangible assets on land
 - Water, gas, electricity (land)
 - Commissions (land)
 - Transport and freight (land)
 - Office material (land)
 - Communications (land)
 - Legal and accounting advice, IT, advertising (land)
 - Guild and/or associations fees
 - Travel and subsistence allowances for land-based personnel
 - Other land expenses
 - Other taxes on production
 - Total cost of land-based salaried personnel
- Variable costs, which comprise:
 - o Crew wages and salaries
 - o Unpaid labour (imputed value of unpaid labour)
 - o Costs of spare parts, vessel repair and maintenance
 - o Energy costs (fuel)
 - o Other variable costs, which include:
 - Bait, salt, ice, containers and packaging
 - Supplies
 - Fishing gear
 - Lubricants

- Communications
- Transport and freight
- Travel and subsistence allowances
- Port charges
- Port fees
- Guild and/or association fees
- Licences
- Other vessel expenses

All these variables are taken directly from the Economic Survey of Marine Fisheries (which is produced by the Ministry of Agriculture, Food and the Environment) except for one: **imputed value of unpaid labour**. The statistics team calculates this value by comparing the hours of non-salaried labour to the mean hours of salaried workers.

Special cases

The following difficulties were encountered when calculating the indicators:

- Inability to calculate the indicator due to lack of population in the stratum. This made it impossible to analyse the trend in certain strata, and the only conclusion that can be drawn is whether the result obtained for that year is acceptable or not. This is the case, for example, with stratum APS1, which only has an indicator for 2009; stratum CPS1, which only has data for 2009 and 2010; stratum BHOK5, which only has data for 2009 and 2010; etc. For this reason, these strata have been removed from the analysis, with the understanding that the year in which that stratum appears is not the last in the series.
- Presence of strata that were missing certain data, which distorted the value obtained and even made it impossible to calculate. These data were depreciation and non-variable costs. To avoid eliminating these strata from the study, this value was imputed as the average of the other years. This was done for the following strata:
 - 2008: depreciation was imputed for BPS2, BHOK2 and CPMP2. In the case of BHOK2, non-variable costs also had to be calculated.
 - 2009: depreciation was imputed for ADTS3 and AHOK1.
 - 2010: depreciation had to be imputed for the following strata: APS2, APS4, AHOK1, AHOK3, APMP3, BHOK3, CHOK2, CPMP1, CPMP2 and CPMP3. In addition, non-variable costs had to be calculated for CPS1.
 - 2011: depreciation had to be calculated for AFPO2, BDTS2, BPS2, BHOK2, BPGP3, BDRB2, CPGP2 and CFPO3. Non-variable costs were imputed for ADRB2, BPGP3 and BDRB2.

- 2012: data on depreciation were missing for ADTS3, ADFN2, ADFN3, AHOK2, BPS2, BDFN3, BPGP1, BFPO2, CPS3, CHOK2, CPGP1, CPGP2 and CFPO3, so were therefore imputed. In addition, non-variable costs were calculated for CPS3 and CPGP2.
 - 2013: depreciation was imputed for ADFN2, APMP2, BPS2, BDFN2, BPGP1, BFPO3, BDRB2 and CPGP2, and non-variable costs were imputed for APMP2 and BPGP1.
 - 2014: depreciation was imputed for ADTS3, AHOK5, APMP2, AFPO2, AFOP3, BDTS2, BPS2, BPMP1, BDRB2 and CPMP2. Non-variable costs were also imputed for BDRB2. In this case, as both figures were missing (fixed costs and depreciation), the indicator could not be calculated.
 - 2015: depreciation had to be imputed for six strata: AHOK5, BHOK2, BPMP1, CPS3, CPMP1 and CPMP2.
 - 2016: depreciation was imputed for APS2, ADFN4, APMP1, APMP2, BPS2, BDFN2, BDFN3, BPMP1, BDRB2 and CFPO2. Variable costs also had to be imputed for CFPO2. For this stratum, as the figure for fixed costs (non-variable costs + depreciation) was missing, the indicator could not be calculated.
 - 2017: depreciation was imputed for DFN12-18 and HOK06-12 (both Mediterranean).
- Several strata are missing data on personnel costs. Specifically, the value of unpaid personnel. No value has been imputed in these cases, as significant variation has been observed in the personnel involved in a stratum throughout the years, not only in the number of people and type (paid and unpaid) but also in costs. Moreover, they are few cases and the absence of this data does not mean that the indicator cannot be calculated. Therefore, we consider it best not to impute this variable. This has not happened since 2015.
 - With respect to negative results, they are due to variable costs being higher than current revenue. This may result from current revenue being too low or because one of the components of variable costs is too high.
Analysis of the data shows that, in our case, these negative data are mainly due to low revenue and high values of unpaid labour. Only one stratum has a negative indicator this year: CFPO2. We have confirmed that fishing with pots in this region consistently has a negative indicator due to low revenue.
 - The fleet report last year identified one stratum for both indicators that reflected an exponential rise over 2013. The stratum in question was CDT5 and we verified that it was due to a high increase in revenue. Revenue fell this year and, although higher than in 2013, it follows a more reasonable trend, which seems to indicate that either the 2014 data are incorrect or an unusual event occurred that year that led to the surge in revenue.
This stratum will be studied further. The data for next year will help confirm the real trend.
 - There was no indicator for BDRB3 in 2015, which had not happened since 2011. This is because the population of this stratum in 2015 was under ten vessels and, for reasons of statistical confidentiality, it was combined with BDRB2.
 - From 2011, when these two strata began to be studied separately, we can see how in other regions vessels using pots always appeared in length class 3, while this year they are in length class 2. The reason is that this year, unlike the rest, the largest number of vessels is in this category, where all

vessels have been grouped together for reasons of statistical confidentiality. Nevertheless, it was confirmed that it is the same population.

Below are the indicators for 2008-2017.

				CR/BER									
	Stratum	Gear	Length	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
North Atlantic	DTS	Bottom trawl nets	3	-0.65	0.61	0.43	1.87	4.45	-0.25	0.58	5.44	2.81	3.99
			4	1.40	1.55	0.74	0.96	0.44	1.29	1.12	1.42	4.01	2.76
			5	0.21	0.57	0.94	1.04	1.54	0.44	1.42	1.61	3.42	2.40
			6	0.78	0.87	1.62	1.04	1.45	1.79	1.87	3.48	3.56	3.07
	PS	Purse seines	2	-0.54	2.05	-3.69	1.62	0.16	1.81	6.15	4.59	5.08	-1.42
			3	0.91	3.56	7.87	1.38	2.64	1.36	2.39	3.15	7.23	3.00
			4	0.82	1.39	1.08	1.31	1.49	0.54	0.86	1.53	5.40	1.96
	DFN	Gillnets	5	-0.37	0.27	3.08	1.55	2.96	4.26	3.97	1.87	9.75	4.12
			2	0.60	-0.66		1.37	-1.27	0.64	-4.94	2.85	16.01	0.66
			3	0.39	0.82	1.42	3.25	-0.70	-0.82	1.00	0.37	3.89	4.33
			4	1.57	1.26	0.81	2.12	0.99	3.32	2.35	1.02	0.79	1.82
	HOK	Hooks	5	0.22	0.65	-0.24		1.47					
			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	3.74	1.08
			3	1.70	0.66	-0.83	-0.44	0.88	1.56	2.61	2.63	4.12	3.58
			4	1.45	1.11	1.21	0.66	1.05	0.84	1.86	2.07	1.71	2.06
	PGO	Surface longlines	5	0.83	1.86	1.68	0.82	2.40	0.92	0.83	0.86	13.14	15.38
			4							1.17	2.66	8.75	10.29
	FPO	Pots	5							2.19	2.39	3.95	2.97
			2				0.98	-1.47	-2.21	-0.81	2.16	7.35	3.44
DRB	Dredges	3				0.08	-0.19	-0.05	0.00	1.66	5.43	6.40	
		1				8.15	-7.80	0.87	-6.42	9.25	11.56	1.96	
		2				0.47	0.68	3.47	4.47	0.20	14.45	2.69	
Polyvalent gear		3				-0.04	2.52	1.31	0.65	1.93	4.12	2.24	
		1	0.10	1.08	-0.75	-0.42	1.80	-1.18	-1.74	3.19	2.52	3.10	
		2	0.18	1.27	1.30	0.04	0.50	-0.09	7.28	1.79	1.97	6.20	
		3	0.45	9.11	1.43	12.67	0.02	3.16	0.87	1.56	6.44	2.59	
		4	1.76			4.89		0.83					
Mediterranean	DTS	Bottom trawl nets	5		0.30	1.31	3.56		2.93	2.10	2.83	3.35	2.19
			2	0.29	0.91	2.51	2.58	2.60	2.35	3.16	3.13	9.14	1.85
			3	0.76	1.16	0.12	0.23	1.43	0.78	1.59	1.97	5.38	2.57
			4	0.02	0.62	0.45	0.88	0.94	2.05	1.32	1.37	3.75	1.91
	PS	Purse seines	5	0.43	0.33	0.37	0.14	0.82	-0.47	1.26	1.38	3.19	1.32
			2	3.99	1.62	7.15	11.34	7.23	20.64	13.31	6.28	9.11	30.89
			3	1.14	4.11	1.27	3.75	3.70	6.93	6.43	3.65	3.65	3.25
			4	0.74	0.69	0.73	1.46	1.63	6.53	3.19	2.68	4.02	2.26

			5	1.16	0.30	1.25	1.38	2.90	1.98	1.36	2.11	2.56	2.78	
	DFN	Gillnets	2				3.13	4.92	6.87	-2.12	6.66	3.54	1.28	
			3				0.18	0.85	1.31	0.62	-1.06	1.41	1.55	
	HOK	Hooks	2	0.21	2.71	1.16	0.02	0.15	0.94	-2.72	1.06	13.17	-0.49	
			3	0.16	0.77	-1.57	0.07	5.45	0.65	0.35	1.31	3.52	3.80	
			4	0.65	0.33	0.59	1.19	1.04	3.44					
				CR/BER										
Stratum	Gear	Length		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
	PGO	Surface longlines	3							1.86	-0.60	5.26	1.88	
			4							1.48	1.52	2.67	1.99	
	FPO	Pots	2				6.49	0.35						
			3					0.61	0.65	2.13	2.37	6.16	1.55	
	DRB	Dredges	2				0.35	-1.38	-0.66	0.61	1.88	1.11	1.16	
			3				3.26	3.24	4.64	9.38		3.01	1.11	
	Polyvalent gear		1	-11.76	-10.65		0.54	-1.20	6.10	7.98	0.91	3.31	15.51	
			2	-1.30	1.01	2.43	0.10	0.20	0.87	0.76	5.61	8.69	1.32	
			3	1.29	0.13	-0.92	3.12	2.51	0.65	0.65	3.98	3.22	1.77	
	Other regions	DTS	Bottom trawl nets	5	0.02	0.19	0.18	4.26	0.80	0.53	11.74	2.71	2.87	1.01
6				0.26	1.17	1.50	2.26	0.67	1.23	3.78	2.15	1.89	2.30	
PS		Purse seines	3		0.43	0.40	3.50	-0.40	1.04	1.73	1.47	19.14		
			6	1.47	0.59	1.82	2.47	3.97	3.26	2.28	0.99	2.30	2.32	
HOK		Hooks	2		5.93	2.24	2.05	0.19	0.19	3.69	2.34	4.73		
			3		-0.55	-0.79	0.59	2.55	0.10	0.42	2.28	0.28		
			4	-0.62	0.24	-0.51	3.99	-0.62				3.89		
			5	0.36	0.93	1.32	1.69	0.53	3.43	0.89	1.26	3.03	4.78	
			6	0.72	1.04	1.15	1.58	0.74	0.10					
PGO		Surface longlines	5								1.79	3.54	2.83	2.16
			6								2.32	1.95	1.88	2.53
FPO		Pots	2										-2.27	
			3				-1.88	12.57			-4.35	-17.94		
Polyvalent gear			1	-1.18	-10.47	-0.96	-17.40	-6.26	-23.06	-0.08	2.62	5.33		
			2	0.51	-0.79	1.09	-1.59	-1.54	-0.97	1.92	-0.87	0.45		
	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			
Canary Islands	PS	Purse seines	3										2.61	
	HOK	Hooks	2										7.24	
			3										6.60	
			5										0.36	
PMP	Polyvalent	1										0.91		

		active & passive gear	2																		0.13	
	FPO	Pots	2																			0.45
MA	HOK	Hooks	3																			4.06

B. RoFTA (%)

This indicator measures the long-term economic profitability of the sector. It compares the return on investment with the return that would have been gained if the investment had been made at a long-term risk-free interest rate (TRP). As a comparison, we used ten-year government bonds with convergence criteria, taken from the Bank of Spain Statistical Bulletin. To avoid fluctuations (due mainly to the financial crisis), instead of using the value of the bond in a given year, the arithmetic mean of the five years prior to the year of study was used. Below is the TRP obtained for the five years under study:

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
TRP	3.94	3.99	3.97	4.14	4.47	4.78	4.82	4.56	4.06	3.25

The sector is deemed profitable (green indicator) when the RoFTA is higher than this interest rate, indicating that a greater return is being generated by the fishing activity than would have been obtained by investing the capital.

The RoFTA indicator is red when the result shows a negative value. This happens when revenue is less than total costs, thus resulting in a negative net profit.

There are some cases (yellow indicator) in which the RoFTA is positive yet lower than the TRP. These strata do make a profit but are not as profitable as the TRP.

It 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 income from vessel operations) - (crew wages and salaries + unpaid labour + energy costs + repair and maintenance costs + other variable costs + non-variable costs + depreciation)
- **Current revenue** (net of subsidies) = revenue from fishing activity + other income from vessel operations

All the variables used to calculate these two indicators are taken directly from the Economic Survey of Marine Fisheries (which is produced by the Ministry of Agriculture, Food and the Environment), except for

one: **capital value**. The statistics team calculates this value by following the perpetual inventory method (PIM) proposed in the capital evaluation report from study No FISH/2005/03.

Special cases:

As we are using the same data to calculate both economic indicators, the strata with missing data are the same as those explained in the CR/BER indicator. This is also the case as regards their imputation. In this instance, although this lack of data does not make it impossible to calculate the indicator, it does distort it, resulting in a figure that is higher than its real value.

The following table shows the indicators obtained for 2008-2017:

				RoFTA (%)									
	Stratum	Gear	Length	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Atlanti	DTS	Bottom trawl nets	3	-24.73	-16.40	-48.57	51.86	133.95	-24.23	-21.42	31.88	165.50	39.93
			4	10.59	14.95	-12.79	-3.66	-35.85	15.13	3.76	16.52	303.37	81.37
			5	-30.54	-25.50	-2.05	1.67	28.63	-34.70	23.74	33.23	72.24	73.59

				RoFTA (%)									
	Stratum	Gear	Length	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	PS	Purse seines	6	-5.45	-8.29	74.21	4.12	40.79	60.61	133.67	456.00	625.05	306.34
			2	-58.59	37.88	-222.45	62.09	-53.68	37.04	89.12	41.85	129.58	-84.68
			3	-0.47	87.13	122.48	24.66	64.29	28.58	39.58	77.17	132.38	85.42
			4	-4.79	12.36	3.66	26.84	23.01	-22.60	-6.72	38.77	82.08	48.16
			5	-45.68	-18.93	78.86	59.29	72.19	35.62	85.25	60.11	146.08	82.53
	DFN	Gillnets	2	-10.37	-62.08		15.95	-77.55	-11.06	-87.46	70.90	169.75	-12.24
			3	-27.90	-13.56	18.52	64.41	-53.77	-52.68	0.00	-21.42	54.88	92.99
			4	38.67	18.71	-12.60	83.11	-0.92	78.32	55.66	0.81	-10.36	21.07
			5	-27.77	-35.99	-41.52		57.07					
	HOK	Hooks	1	-3.12	45.78	-679.53		49.24					
			2	-24.11	-33.63	-131.05	4.45	-140.7	-66.54	77.18	73.72	145.65	2.38
			3	40.34	-6.05	-50.47	-78.75	-7.90	16.13	25.94	41.64	41.19	81.07
			4	21.88	3.72	9.06	-22.71	2.30	-4.43	23.28	70.06	15.31	43.76
			5	-7.10	37.43	32.11	-22.66	76.22	-2.82	-14.88	-11.15	253.80	152.18
	PGO	Surface longlines	4							12.41	99.91	292.50	272.27
			5							31.17	33.24	60.58	54.31
	FPO	Pots	2				-0.30	-30.26	-102.4	-71.39	28.41	51.40	60.43
3						-96.39	-50.65	-15.09	-49.37	16.75	26.14	65.07	
DRB	Dredges	1				77.29	-168.2	-1.46	-120.80	143.24	93.28	12.69	

Mediterranean	Polyvalent gear	2						-59.85	-97.55	417.46	285.74	-79.92	89.83	27.85
		3						-42.43	27.47	32.87	-19.52	22.92	42.87	18.30
		1	-14.82	1.69	-26.55	-90.34	26.01	-77.41	-46.73	55.40	32.57	41.46		
		2	-15.65	6.33	12.63	-6.38	-8.32	-41.46	131.87	23.24	18.56	199.13		
		3	-11.61	98.74	-1.38	102.56	-55.07	96.99	-2.20	10.46	51.37	41.88		
	4	92.51			167.29		-8.18							
	5		-37.43	4.88	29.38		75.43	73.07	134.06	164.86	92.39			
	DTS	Bottom trawl nets	2	-82.02	-9.28	88.19	94.91	229.15	91.43	72.53	91.46	62.63	41.88	
	3	-7.37	6.66	-39.88	-34.15	18.29	-11.06	19.23	33.44	73.14	64.12			
	4	-37.72	-18.07	-20.92	-5.48	-3.79	12.82	13.15	16.34	47.81	38.86			
5	-11.93	-17.21	-8.21	-34.27	-4.26	-35.57	7.74	14.66	45.30	15.79				
PS	Purse seines	2	135.78	37.75	55.16	155.78	483.00	395.60	36.82	74.28	107.68	194.05		
3	4.31	74.71	10.88	46.33	54.50	156.66	142.33	80.41	70.70	62.72				
4	-6.47	-11.57	-14.38	5.65	38.23	99.91	85.67	29.31	49.02	42.97				
5	2.09	-9.26	4.42	16.45	132.49	62.12	21.94	67.12	100.25	115.34				
DFN	Gillnets	2				110.22	106.46	177.41	-191.21	100.01	64.24	10.57		
3					-60.48	-7.98	11.43	-26.31	-95.26	21.20	27.85			
HOK	Hooks	2	-91.55	111.21	13.01	-180.8	-94.66	-9.24	-43.42	6.92	221.16	-57.99		
3	-41.08	-9.76	-151.08	-51.14	45.17	-11.70	-126.00	6.43	12.79	40.66				
4	-5.02	-27.09	-12.19	7.65	1.20	95.90								
PGO	Surface longlines	3							27.55	-30.56	87.83	41.44		
4									17.69	28.44	42.13	45.31		
FPO	Pots	2				192.57	-33.41							

				RoFTA (%)									
	Stratum	Gear	Length	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Other regions	DRB	Dredges	3					-24.25	-19.32	49.83	27.75	318.41	26.17
			2				-21.75	-122.5	-73.36	-20.13	17.69	3.19	7.66
			3				54.84	39.88	31.39	144.71		22.93	1.74
	Polyvalent gear	1	-27.95	-	1,373.46	-10.78	-111.8	152.83	834.35	-6.65	32.64	267.14	
		2	-62.31	0.52	343.51	-30.90	-18.65	-6.11	-12.11	152.16	126.67	15.29	
		3	9.97	-456.94	-53.85	42.80	29.59	-18.64	-6.43	162.07	52.49	11.59	
	DTS	Bottom trawl nets	5	-78.69	-69.30	-381.93	72.30	-36.54	-34.50	1,538.84	193.20	112.40	0.76
	6	-25.79	8.54	34.09	97.63	-17.32	14.61	262.47	242.72	160.97	198.13		
	PS	Purse seines	3		-27.78	-153.91	90.26	-95.52	4.93	45.11	14.59	625.42	
	6	406.54	-14.69	4,134.32	77.09	138.72	163.35	52.51	-0.63	61.78	100.37		
HOK	Hooks	2		117.24	10.77	169.29	-43.13	-22.77	119.83	23.68	36.45		
3		-60.04	-12.78	-79.19	66.41	-22.10	-41.47	39.96	-7.61				

			4	-3.37	-101.03	-229.79	238.24	-134.7				376.89		
			5	-17.52	-3.96	376.36	42.02	-25.11	59.63	-4.45	19.64	79.86	170.63	
			6	-86.07	1.65	7.34	28.76	-24.60	-36.73					
	PGO	Surface longlines	5								27.30	142.74	96.66	
			6								74.86	86.07	90.02	
	FPO	Pots	2										-55.20	
			3					-22.95	115.94			-82.13	-93.67	
	Polyvalent gear		1	-201.5	-100.24	-9.63	-804.1	-46.23	-236.0	-46.73	42.39	45.10	62.74	
			2	-9.85	-56.44	1.86	-171.0	-91.29	-128.4	54.81	-118.5	-62.12	65.50	
			3	-32.73	96.62	-415.84				27.70	206.64	-749.7		
			5	-0.32		-100.47	-70.28			-30.75	-51.01	-19.13		
Canary Islands	PS	Purse seines	3										156.85	
	HOK	Hooks	2										173.10	
			3									136.16		
			5										-30.42	
	PMP	Polyvalent active & passive gear	1											-4.50
			2											-89.62
FPO	Pots	2											-39.56	
MA	HOK	Hooks	3										29.18	

C. NVA/FTE

This indicator reflects net value added, or unit produced per worker. In other words, it is the approximate contribution to the sector per full-time employee. It therefore measures the competitiveness of the sector. It can also be interpreted as an indicator of the workers' standard of living or social well-being if it can be confirmed that an increase in productivity is accompanied by a wage increase.

An increase in its value may result from one of the following two situations, or from a combination of both:

- When the number of FTE workers remains stable and there is an increase in revenue and/or a decrease in production costs.
- When both revenue and costs remain stable and there is a decrease in number of workers.

Both situations are valid from an economic perspective; however, from a social perspective, if a company increases its profits by reducing the number of employees, it implies an increased workload for the employees, who must make a greater effort (due to the decrease in personnel) to obtain the same profit.

Therefore, both this indicator and its trend should be studied carefully, while analysing the FTE value at the same time.

It is calculated in the following way:

NVA = (revenue from fishing activity + other income from vessel operations) - (energy costs + repair and maintenance costs + other variable costs + non-variable costs + depreciation)

FTE is the unit of work that a full-time employee carries out in one year.

Special cases:

As we are using the same data as when calculating the aforementioned economic indicators, the strata with missing data are the same. This is also the case as regards their imputation. In this instance, although this lack of data does not make it impossible to calculate the indicator, it does distort it, resulting in a figure that is higher than its real value.

Below are the indicators for 2008-2017.

				NVA/FTE									
	Stratum	Gear	Length	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
North Atlantic	DTS	Bottom trawl nets	3	6,107	16,445	6,074	12,668	19,905	13,718	23,329	18,274	42,227	19,049
			4	17,382	28,470	12,832	13,183	3,675	14,294	21,906	15,863	50,571	29,449
			5	10,339	19,527	24,014	30,600	38,461	22,847	36,449	39,028	63,466	60,264
			6	15,313	32,049	62,045	38,138	67,209	66,761	85,010	119,677	115,513	126,079
	PS	Purse seines	2	15,398	12,246	12,217	22,663	6,731	12,518	23,320	14,149	14,760	15,411
			3	4,012	29,427	34,994	8,649	23,608	20,222	28,027	20,761	26,389	25,336
			4	13,824	16,973	24,863	27,289	10,359	16,528	20,163	24,822	28,601	27,801
			5	4,168	14,366	21,808	22,320	35,299	25,100	32,609	30,925	50,251	41,842
	DFN	Gillnets	2	9,553	8,359		13,214	5,728	12,490	9,643	19,069	20,933	11,788
			3	10,640	22,335	16,147	24,685	2,363	12,642	10,176	10,277	20,313	26,225
			4	19,986	23,114	8,930	40,087	21,623	31,582	29,593	18,312	18,095	23,449
			5	10,667	14,788	29,454		36,742					
	HOK	Hooks	1	6,948	21,060	17,140		14,646					
			2	3,450	7,980	11,756	15,801	12,954	22,055	18,063	25,500	24,113	10,787
			3	10,393	15,828	7,042	11,737	14,556	22,491	25,262	17,646	18,364	31,435
			4	31,507	27,763	28,429	15,409	23,755	16,973	18,890	27,156	20,456	24,822
			5	13,254	20,660	24,146	32,947	40,309	15,434	18,329	10,701	35,696	40,501
PGO		4							19,346	32,867	50,410	54,419	

				NVA/FTE									
Stratum	Gear	Length	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	

		Surface longlines	5							30,419	36,486	37,763	39,539		
	FPO	Pots	2				7,823	8,207	1,701	18,391	11,752	18,457	23,751		
			3				6,924	8,698	12,730	7,460	11,222	17,009	34,271		
	DRB	Dredges	1				19,384	11,837	10,646	12,135	20,621	12,813	18,523		
			2				-5,218	20,915	38,478	39,977	17,163	41,097	11,953		
			3				-7,474	19,928	27,569	35,253	29,931	17,483	16,688		
	Polyvalent gear			1	10,038	14,644	13,233	10,149	12,617	12,379	10,189	15,306	16,181	15,588	
				2	8,667	11,684	15,983	6,526	14,790	7,086	16,473	13,983	12,863	47,990	
				3	8,788	28,944	16,221	22,112	13,307	26,422	18,293	23,963	21,730	24,969	
				4	21,946			39,274		19,850					
				5		16,907	44,504	23,519		58,757	48,202	61,235	68,603	61,009	
	Mediterranean	DTS	Bottom trawl nets	2	11,283	31,213	22,151	24,239	22,580	24,910	20,891	17,650	31,567	30,099	
				3	12,152	25,092	14,369	10,130	29,698	17,020	17,468	23,946	34,593	29,691	
				4	6,805	16,934	10,159	16,032	12,200	20,019	20,956	21,148	29,068	29,889	
				5	13,874	18,499	31,753	7,983	19,222	5,238	23,022	23,702	38,761	28,519	
PS		Purse seines	2	6,306	19,847	4,580	21,158	19,690	23,791	17,210	11,032	15,141	16,895		
			3	8,810	17,941	18,857	14,762	14,281	26,615	28,345	21,469	18,869	19,334		
			4	15,501	20,665	8,796	17,140	16,361	29,866	33,803	20,049	19,322	23,599		
			5	72,622	29,401	30,468	37,761	64,662	96,752	54,235	52,022	67,629	73,282		
DFN		Gillnets	2				19,29	24,554	13,000	36,199	15,174	23,468	18,933		
			3				7 9,670	21,524	24,325	22,870	-987	16,942	15,294		
HOK		Hooks	2	-1,102	29,615	15,553	12,604	7,147	21,516	19,860	13,446	39,146	11,857		
			3	10,539	27,159	-4,130	10,564	21,936	8,584	8,775	21,081	28,640	27,985		
			4	10,459	8,736	18,046	23,559	12,618	33,059						
PGO		Surface longlines	3							18,459	16,501	24,102	24,386		
			4							17,892	17,937	25,459	43,045		
FPO	Pots	2				15,824	9,027								
		3					16,690	11,206	22,467	25,542	40,038	26,151			
DRB	Dredges	2				5,698	3,874	6,839	7,025	18,152	22,166	14,563			
		3				16,807	16,772	20,412	38,176		29,110	15,593			
Polyvalent gear			1	5,720	41,241		5,556	22,259	10,481	32,043	21,018	19,071	11,131		
			2	9,238	19,593	17,444	16,626	16,054	13,473	18,601	26,885	22,353	22,970		
			3	12,058	44,957	21,945	12,484	31,562	16,802	10,494	31,727	32,863	19,456		
Other regions	DTS	Bottom trawl nets	5	-3,288	6,093	2,908	21,023	13,922	11,391	120,008	24,388	21,133	14,088		
			6	11,536	29,114	30,703	64,333	30,422	48,837	101,012	60,324	43,052	47,646		
	PS	Purse seines	3				15,305	5,413	29,001	18,300	21,827	39,887			
			6		8,037	5,474	80,963	117,689	166,200	72,468	30,075	94,305	119,866		
	HOK	Hooks	2				25,051	12,191	17,311	23,870	20,518	22,423			
			3		12,270	4,471	12,299	42,665	12,312	16,565	23,510	22,880			
4				9,858	2,520										

				5	5,647	4,936	-2,579	38,483	8,602			49,426		
					6,737	12,770	23,580	21,539	13,918	22,826	10,409	18,307	43,818	30,736
				NVA/FTE										
	Stratum	Gear	Length	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
	PGO	Surface longlines	6	10,959	9,930	18,137	20,434	6,245	-336					
			5							19,384	35,597	31,746	28,493	
			6							33,910	30,783	26,553	39,144	
	FPO	Pots	2										15,038	
			3				810	18,542			17,100	4,143		
	Polyvalent gear			1	4,192	4,287	-4,957	-1,715	8,499	15,527	16,372	16,481	17,792	
				2	6,256	1,348	10,645	845	-121	7,595	16,813	11,297	8,410	
				3	4,208	28,744	10,166			20,889	48,835	-39,629		
				5	3,733		3,789	13,972		21,630	11,063	18,897		
	Canary Islands	PS	Purse seines	3										46,640
HOK		Hooks	2										46,397	
			3									32,291		
			5									19,480		
PMP		Polyvalent active & passive gear	1										26,698	
	2											10,310		
FPO	Pots	2										5,744		
MA	HOK	Hooks	3										24,035	

2017 FINAL INDICATOR

	Gear	Length	CR/BER	RoFTA (%)	NVA/FTE	TECHNICAL INDICATOR	SHI	SAR	OVERALL INDICATOR	No of vessels 2017 ¹
NAO	DTS	3	3.99	39.93	19,049	0.80	< 40%	null	3	66
		4	2.76	81.37	29,449	0.83	< 40%	null	3	75
		5	2.40	73.59	60,264	1.18	1.21	null	2	108
					126,079		0.98	COD-27.1-27.2	3	13
		6	3.07	306.34		1.09			3	
	PS	2	-1.42	-84.68	15,411	0.43	< 40%	null	1	18
		3	3.00	85.42	25,336	0.65	< 40%	null	2	112
		4	1.96	48.16	27,801	0.81	< 40%	null	3	101
		5	4.12	82.53	41,842	0.83	1.32	null	2	81
	DFN	2	0.66	-12.24	11,788	0.68	< 40%	null	1	115
		3	4.33	92.99	26,225	0.82	< 40%	null	3	139
		4	1.82	21.07	23,449	1.01	1.44	null	2	25
	HOK	2	1.08	2.38	10,787	0.47	1.40	null	2	63
		3	3.58	81.07	31,435	0.68	1.27	null	2	81
		4	2.06	43.76	24,822	0.86	1.03	null	2	29
		5	15.38	152.18	40,501	0.77	0.81	null	3	25
	PGO	4	10.29	272.27	54,419	0.99	0.91	null	3	11
5		2.97	54.31	39,539	1.38	< 40%	null	3	30	
PGP	5	2.19	92.39	61,009	1.31	0.79	null	3	55	
PMP	1	3.10	41.46	15,588	0.46	< 40%	null	2	1,954	
	2	6.20	199.13	47,990	0.48	< 40%	null	2	60	
	3	2.59	41.88	24,969	0.81	1.07	null	2	42	
FPO	2	3.44	60.43	23,751	0.71	< 40%	null	3	71	
	3	6.40	65.07	34,271	0.69	< 40%	null	2	58	
DRB	1	1.96	12.69	18,523	0.54	< 40%	null	2	1,814	
	2	2.69	27.85	11,953	0.47	< 40%	null	2	14	
	3	2.24	18.30	16,688	0.47	< 40%	null	2	84	
MBS	DTS	2	1.85	41.88	30,099	0.60	< 40%	null	2	18
		3	2.57	64.12	29,691	0.85	< 40%	null	3	147
		4	1.91	38.86	29,889	0.91	4.08	null	3	303
					28,519		0.91	4.25	3	132
		5	1.32	15.79					3	

¹ Registered for the entire year.

	Gear	Length	CR/BER	RoFTA (%)	NVA/FTE	TECHNICAL INDICATOR	SHI	SAR	OVERALL INDICATOR	No of vessels 2017 ¹
	PS	2	30.89	194.05	16,895	0.68	< 40%	null	2	18
		3	3.25	62.72	19,334	1.00	1.54	null	2	84
		4	2.26	42.97	23,599	1.04	1.55	null	2	88
		5	2.78	115.34	73,282	0.55	0.83	null	2	26
	DFN	2	1.28	10.57	18,933	0.68	< 40%	null	2	85
		3	1.55	27.85	15,294	0.77	< 40%	null	3	53
	HOK	2	-0.49	-57.99	11,857	0.44	< 40%	null	1	47
		3	3.80	40.66	27,985	0.57	2.09	null	2	23
	PGO	3	1.88	41.44	24,386	0.66	1.60	SWO-37	2	42
		4	1.99	45.31	43,045	0.80	1.54	SWO-37	2	22
	PMP	1	15.51	267.14	11,131	0.34	< 40%	null	2	109
		2	1.32	15.29	22,970	0.50	< 40%	null	2	913
		3	1.77	11.59	19,456	0.80	3.57	null	2	34
	FPO	3	1.55	26.17	26,151	0.98	< 40%	null	3	31
	DRB	2	1.16	7.66	14,563	0.44	< 40%	null	2	39
		3	1.11	1.74	15,593	0.77	< 40%	null	2	14
OFR	DTS	5	1.01	0.76	14,088	1.24	< 40%	null	3	41
		6	2.30	198.13	47,646	1.30	< 40%	null	3	33
	PS	6	2.32	100.37	119,866	1.36	0.98	null	3	26
	HOK	5	4.78	170.63	30,736	1.01	1.01	null	3	12
	PGO	5	2.16	62.74	28,493	1.45	< 40%	null	3	62
		6	2.53	65.50	39,144	1.41	< 40%	null	3	25
					46,640					
IC	PS	3	2.61	156.85		0.60	< 40%	null	2	16
	HOK	2	7.24	173.10	46,397	0.29	0.71	null	2	43
		3	6.60	136.16	32,291	0.60	0.83	null	2	27
		5	0.36	-30.42	19,480	0.90	1.02	null	2	22
	PMP	1	0.91	-4.50	26,698	0.35	< 40%	null	1	465
		2	0.13	-89.62	10,310	0.46	1.00	null	1	20
FPO	2	0.45	-39.56	5,744	0.45	< 40%	null	1	12	
MA	HOK	3	4.06	29.18	24,035	0.88	< 40%	null	3	19



H. ANNEX VIII: SUMMARY OF INDICATORS OVER 2011-2017. OVERALL INDICATORS

OVERALL INDICATOR

For an overall view of the sector, we calculated a single indicator that integrated the four main indicators: CR/BER, RoFTA (%), SHI and the technical indicator.

As they were not measured on the same scale, they first had to be standardised. We assigned the same value to all four according to the colour of the indicator:

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

And lastly, to obtain the final indicator, we calculated the average of these values. However, instead of using an arithmetic mean, we calculated a weighted average. This allowed us to account for the magnitude of the red, yellow or green indicator.

We used a box plot to obtain the weighted average. This type of graph places the various values of a distribution along a real line, showing the dispersal of the entire distribution and the location of specific values in relation to the central point.

To prepare it, we calculated the required parameters: median (Me), first quartile (Q1), third quartile (Q3) and interquartile range (IQR, i.e. Q3 - Q1). Thus, all the values are divided into three segments:

- $(Q_1 - 1.5 \cdot IQR, Q_3 + 1.5 \cdot IQR)$. The values in this interval are concentrated around the central point of the distribution. We assigned them a value of 3.
- $(Q_3 + 1.5 \cdot IQR, Q_3 + 3 \cdot IQR)$ and $(Q_1 - 3 \cdot IQR, Q_1 - 1.5 \cdot IQR)$. The mild outliers are located in these intervals; in other words, the values that stray from the central point of the distribution but are accounted for in the study. We assigned them a value of 2.
- $(> Q_3 + 3 \cdot IQR$ and $< Q_1 - 3 \cdot IQR)$. Extreme outliers are located in these sections, which are those values that deviate significantly from the centre of the distribution and must be analysed extensively and, if necessary, eliminated from the study. We assigned them a value of 1. However, few indicators are found in these extremes because they have been previously analysed and mostly eliminated due to the fact that they distort the results.

We carried out this process three times for each indicator (i.e. for the strata with red, green and yellow indicators).

We repeated the process for the four indicators that make up the final indicator.

Once the weighted values were obtained, the overall indicator was calculated by multiplying the value assigned to each indicator (according to its previous colour classification) by its corresponding weighted value. These four values were added together and divided by the sum of the weighted values:

$$\text{Overall indicator} = \frac{\text{CRInd/BER} * \text{WeightedCR/BER} + \text{RoFTAInd} * \text{WeightedRoFTA} + \text{TechInd} * \text{WeightedTech} + \text{BioInd} * \text{WeightedBio}}{\text{CR/BER weighted value} + \text{RoFTA weighted value} + \text{Tech weighted value} + \text{Bio weighted value}}$$

Thus, a single indicator was obtained that we could evaluate and classify according to the resulting value: green if the result was 3, yellow if it was 2, red if it was 1.

® Taking into account the range of indicators and the changes they show — along with the STECF reports that have reiterated since 2015 that low fishing ground exploitation (technical imbalance) by the artisanal fleet cannot be attributed to an imbalance between capacity and opportunities in the green segments marked with a '2' — these are considered to be in balance.

We have calculated the indicator starting from 2011, when dredges and pots began to be studied separately.

Below are the indicators for 2011-2017.

				OVERALL INDICATOR						
	Stratum	Gear	Length	2011	2012	2013	2014	2015	2016	2017
North Atlantic	DTS	Bottom trawl nets	3	3	3	1	1	3	3	3
			4	2	1	3	2	3	3	3
			5	2	3	1	3	2	2	2
			6	2	3	2	3	3	3	3
	PS	Purse seines	2	2	1	3	3	2	3	1
			3	2	2	2	2	2	3	2
			4	2	2	1	1	3	3	3
			5	3	3	3	3	3	3	2
	DFN	Gillnets	2	2	1	1	1	3	3	1
			3	2	1	1	2	1	3	3
			4	3	2	2	2	2	1	2
			5		3					
	HOK	Hooks	1		3					
			2	2	1	1	2	2	2	2
			3	1	1	2	2	2	2	2
			4	1	2	2	2	3	2	2
			5	2	3	2	1	1	2	3
	PGO	Surface longlines	4				3	3	3	3
			5				3	3	3	3
	FPO	Pots	2	1	1	1	1	3	3	3
			3	1	1	1	1	3	3	2
	DRB	Dredges	1	2	1	1	1	2	2	2
			2	1	2	3	3	2	3	2
			3	1	3	3	1	3	3	2
	Polyvalent gear		1	1	2	1	1	2	2	2
			2	2	1	1	2	2	2	2
			3	2	1	3	1	3	2	2
			4	3		2				

		5	3		3	2	3	3	3
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				OVERALL INDICATOR						
	Stratum	Gear	Length	2011	2012	2013	2014	2015	2016	2017
Mediterranean	DTS	Bottom trawl nets	2	3	3	3	3	3	3	2
			3	1	3	1	3	3	3	3
			4	1	2	2	2	2	2	3
			5	1	1	1	2	2	2	3
	PS	Purse seines	2	2	2	2	3	3	3	2
			3	2	2	1	2	2	2	2
			4	2	2	1	2	2	2	2
			5	3	3	2	2	2	2	2
	DFN	Gillnets	2	2	3	3	1	2	3	2
			3	1	1	3	1	1	3	3
	HOK	Hooks	2	1	1	1	1	2	2	1
			3	1	2	1	1	2	2	2
	PGO	Surface longlines	3				2	1	2	2
			4				2	2	2	2
	FPO	Pots	2	3	1					
			3		1	1	3	3	3	3
	DRB	Dredges	2	1	1	1	1	3	2	2
			3	3	3	3	3		3	2
	Polyvalent gear		1	1	1	3	2	1	2	2
			2	1	1	1	1	2	2	2
			3	1	2	1	1	3	2	2
DTS	Bottom trawl nets	5	3	1	1	3	3	3	3	
		6	3	1	3	3	3	3	3	
PS	Purse seines	3	2	1	3	3	3	3		
		6	3	3	3	3	2	3	3	
HOK	Hooks	2	2	1	2	2	2	2		
		3	1	3	1	1	2	2		
		4	2	2				3		
		5	3	2	3	1	3	3	3	
		6	3	2	2					
PGO	Surface longlines	5				3	3	3	3	
		6				3	3	3	3	
FPO	Pots	2						1		
		3	1	3		1	1			
Polyvalent gear		1	1	1	1	1	2	2		
		2	1	1	1	2	1	1		

			3			3	3	2		
			5	2		2	1	2		
Canary Islands	PS	Purse seines	3							2
	HOK	Hooks	2							2
			3						2	
			5						2	
OVERALL INDICATOR										
	Stratum	Gear	Length	2011	2012	2013	2014	2015	2016	2017
	PMP	Polyvalent active & passive gear	1							1
			2						1	
	FPO	Pots	2							1
MA	HOK	Hooks	3							3

SUMMARY OF INDICATORS BY YEAR

2011

	Stratum	Gear	Length	CR/BER	RoFTA (%)	NVA/FTE	TECHNICAL INDICATOR	SHI	SAR	OVERALL INDICATOR
North Atlantic	ADTS	Bottom trawl nets	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 seines	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	

Iveiter ranean			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
	Polyvalent gear		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
	BDTS	Bottom trawl nets	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
	Stratum	Gear	Length	CR/BER	RoFTA (%)	NVA/FTE	TECHNICAL INDICATOR	SHI	SAR	OVERALL INDICATOR
Outer regions			5	0.14	-34.27	7,983.12	0.78	5.91	HKE-37.1.1-SA 6	1
	BPS	Purse seines	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
	Polyvalent gear		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	
CDTS	Bottom trawl nets	5	4.26	72.30	21,022.58	0.81			3	
		6	2.26	97.63	64,332.55	0.86			3	
CPS	Purse seines	3	3.50	90.26	15,304.96	0.53			2	

CHOK	Hooks	6	2.47	77.09	80,962.58	0.94	0.72	3	
		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
	Polyvalent gear		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

2012

	Stratum	Gear	Length	CR/BER	RoFTA (%)	NVA/FTE	TECHNICAL INDICATOR	SHI	SAR	OVERALL INDICATOR
North Atlantic	ADTS	Bottom trawl nets	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 seines	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
						1	2.62	49.24	14,646.36	1.12
	AHOK	Hooks	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
						2	-1.47	-30.26	8,207.47	0.72
	AFPO	Pots	3	-0.19	-50.65	8,698.26	0.76			1
						1	-7.80	-168.25	11,836.68	0.50
ADRB	Dredges	1	-7.80	-168.25	11,836.68	0.50			1	

Mediterranean	Polyvalent	2	0.68	-97.55	20,914.91	0.91			2	
		3	2.52	27.47	19,928.29	0.92			3	
		1	1.80	26.01	12,616.76	0.45			2	
	Polyvalent	2	0.50	-8.32	14,790.32	0.54			1	
		3	0.02	-55.07	13,307.24	0.67			1	
		2	2.60	229.15	22,580.07	0.78			3	
	BDTS	Bottom trawl nets	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
			2	7.23	483.00	19,689.90	0.65			2
BPS	Purse seines	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	
		2	4.92	106.46	24,554.23	0.71			3	
BDFN	Gillnets	3	0.85	-7.98	21,523.71	0.79			1	
		2	0.15	-94.66	7,147.07	0.56	2.30		1	
BHOK	Hooks	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	
		2	0.35	-33.41	9,026.96	0.80			1	
BFPO	Pots	3	0.61	-24.25	16,689.88	1.28			1	
		2	-1.38	-122.51	3,873.92	0.71			1	
BDRB	Dredges	3	3.24	39.88	16,772.04	1.00			3	
		1	-0.52	-177.82	19,697.86	0.33			1	
		2	0.20	-18.65	16,054.15	0.48			1	
Polyvalent	Polyvalent	3	2.51	29.59	31,561.90	0.67			2	
		5	0.80	-36.54	13,921.73	0.58			1	
		6	0.67	-17.32	30,422.36	0.87			1	
Other regions	CDTS	Bottom trawl nets	3	-0.40	-95.52	5,412.81	0.78			1
			6	3.97	138.72	117,689.43	0.92	0.71		3
	CPS	Purse seines	2	0.19	-43.13	12,191.21	0.72			1
			3	2.55	66.41	42,664.74	0.92	0.75		3
CHOK	Hooks	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
Polyvalent		1	-3.38	-51.65	8,322.35	0.28			1
		2	-1.62	-89.48	107.58	0.78			1

2013

	Stratum	Gear	Length	CR/BER	RoFTA (%)	NVA/FTE	TECHNICAL INDICATOR	SHI	SAR	OVERALL INDICATOR
North Atlantic	ADTS	Bottom trawl nets	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 seines	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
Polyvalent gear		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	DTS	Bottom trawl nets	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

	BPS	Purse seines	5	-0.47	-35.57	5,238.27	0.81	5.58	HKE-37.1.1-SA 6	1	
			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	
			5	1.98	62.12	96,752.31	0.47	0.67	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	2.30		1	
			3	0.65	-11.70	8,583.68	0.69	2.00		1	
			4	3.44	95.90	33,059.33	0.78	1.69		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	
	Polyvalent gear		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 trawl nets	5	0.53	-34.50	11,391.17	0.65			1
				6	1.23	14.61	48,837.27	0.85			3
		CPS	Purse seines	3	1.04	4.93	29,001.04	0.83			3
				6	3.26	163.35	166,199.64	0.90	0.68		3
CHOK		Hooks	2	0.19	-22.77	17,311.43	0.52	0.72		2	
			3	0.10	-22.10	12,312.45	0.65	1.37		1	
			5	3.43	59.63	22,826.12 - 336.20	0.92			3	
			6	0.10	-36.73		0.92			2	
Polyvalent gear			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	0.77		3	
			5	0.65	-30.75	21,630.44	0.89	0.88		2	

2014

	Stratum	Gear	Length	CR/BER	RoFTA (%)	NVA/FTE	TECHNICAL INDICATOR	SHI	SAR	OVERALL INDICATOR
NORUN Atlantic	ADTS	Bottom trawl nets	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



Mediterranean			6	1.87	133.67	85,010.43	0.74			3
	APS	Purse seines	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		2	-4.94	-87.46	9,642.67	0.70			1
		Gillnets	3	1.00	0.00	10,175.67	0.74			2
			4	2.35	55.66	29,593.11	0.87	1.82		2
	AHOK	Hooks	2	2.34	77.18	18,062.58	0.66	2.04		2
			3	2.61	25.94	25,261.84	0.68	2.01		2
			4	1.86	23.28	18,889.66	0.68	1.24		2
			5	0.83	-14.88	18,329.28	0.59	0.92		1
	APGO	Surface longlines	4	1.17	12.41	19,345.64	0.93	0.92		3
			5	2.19	31.17	30,418.85	1.08	0.83		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
		Polyvalent gear	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	1.25		1
5			2.10	73.07	48,202.22	0.83	1.22		2	
BDTS	Bottom trawl nets	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	5.30		2	
		5	1.26	7.74	23,021.62	0.79	5.65	HKE-37.1.1-SA 6	2	
	BPS	Purse seines	2	13.31	36.82	17,209.83	0.79			3
			3	6.43	142.33	28,344.59	0.84	1.1	PIL-37.1.1-SA 6	2
			4	3.19	85.67	33,802.62	0.87	1.17	PIL-37.1.1-SA 6	2
			5	1.36	21.94	54,235.30	0.49	0.65	PIL-37.1.1-SA 6	2
	BDFN	Gillnets	2	-2.12	-191.21	36,199.45	0.76			1



Other regions	BHOK	Hooks	3	0.62	-26.31	22,870.19	0.84			1	
			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 longlines	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	
	Polyvalent gear		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	
	Other regions	CDTS	Bottom trawl nets	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 seines	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 longlines	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	
Polyvalent gear			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		

	Stratum	Gear	Length	CR/BER	RoFTA (%)	NVA/FTE	TECHNICAL INDICATOR	SHI	SAR	OVERALL INDICATOR
North Atlantic	ADTS	Bottom trawl nets	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 seines	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 longlines	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
	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	
Polyvalent gear		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	
		5	2.83	134.06	61,234.61	0.83	0.79		3	
Mediterranean	BDTS	Bottom trawl nets	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 seines	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

Other regions			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 longlines	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	
	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	
	Polyvalent gear			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
	CDTS	Bottom trawl nets		5	2.71	193.20	24,387.75	0.84			3
				6	2.15	242.72	60,324.33	0.87			3
	CPS	Purse seines		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 longlines		5	3.54	142.74	35,597.33	0.89			3
				6	1.95	86.07	30,783.14	0.92			3
	CFPO	Pots	3	-17.94	-93.67	4,143.24	0.83			1	
	Polyvalent gear			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	

2016

	Stratum	Gear	Length	CR/BER	RoFTA (%)	NVA/FTE	TECHNICAL INDICATOR	SHI	SAR	OVERALL INDICATOR
North Atlantic	ADTS	Bottom trawl nets	3	2.81	165.50	42,226.94	0.88			3
			4	4.01	303.37	50,571.49	0.88			3
			5	3.42	72.24	63,465.60	0.82	1.35		2
			6	3.56	625.05	115,513.31	0.71	0.81		3
	APS	Purse seines	2	5.08	129.58	14,759.89	0.78		HOM 27	3
			3	7.23	132.38	26,389.45	0.72			3
			4	5.40	82.08	28,601.50	0.85			3
			5	9.75	146.08	50,250.83	0.84		HOM 27	3
	ADFN	Gillnets	2	16.01	169.75	20,932.61	0.72			3

			3	3.89	54.88	20,313.13	0.76			3	
			4	0.79	-10.36	18,095.26	0.90	1.64		1	
Mediterranean	AHOK	Hooks	2	3.74	145.65	24,113.07	0.68			2	
			3	4.12	41.19	18,363.53	0.70	1.36		2	
			4	1.71	15.31	20,455.63	0.77	1.11		2	
			5	13.14	253.80	35,695.97	0.69	0.63		2	
	APGO	Surface longlines	4	8.75	292.50	50,410.41	1.00			3	
			5	3.95	60.58	37,763.11	0.97			3	
	APGP	Polyvalent passive gear	5	3.35	164.86	68,603.42	0.90	0.96		3	
	APMP	Polyvalent active & passive gear	1	2.52	32.57	16,180.82	0.49			2	
			2	1.97	18.56	12,862.90	0.64			2	
			3	6.44	51.37	21,730.38	0.84	1.11		2	
	AFPO	Pots	2	7.35	51.40	18,456.77	0.83			3	
			3	5.43	26.14	17,008.60	0.88			3	
	ADRB	Dredges	1	11.56	93.28	12,812.53	0.48			2	
			2	14.45	89.83	41,097.18	0.85			3	
			3	4.12	42.87	17,483.14	0.77			3	
	Mediterranean	BDTS	Bottom trawl nets	2	9.14	62.63	31,566.58	0.82			3
				3	5.38	73.14	34,592.70	0.81			3
				4	3.75	47.81	29,067.84	0.77	3.96		2
5				3.19	45.30	38,761.40	0.83	4.12	HKE-37	2	
BPS		Purse seines	2	9.11	107.68	15,140.96	0.80			3	
			3	3.65	70.70	18,868.95	0.83	1.74	PIL-GSA6	2	
			4	4.02	49.02	19,322.38	0.89	1.67	PIL-GSA6	2	
			5	2.56	100.25	67,629.47	0.48	0.96	PIL-GSA6	2	
BDFN		Gillnets	2	3.54	64.24	23,468.36	0.71			3	
			3	1.41	21.20	16,941.65	0.81			3	
BHOK		Hooks	2	13.17	221.16	39,145.80	0.62			2	
			3	3.52	12.79	28,639.96	0.68			2	
BPGO	Surface longlines	3	5.26	87.83	24,102.40	0.71	1.55		2		
		4	2.67	42.13	25,459.07	0.82	1.66		2		
BPMP	Polyvalent active & passive gear	1	3.31	32.64	19,071.32	0.37			2		
		2	8.69	126.67	22,352.93	0.53			2		
		3	3.22	52.49	32,862.50	0.91	3.21	PIL-GSA6	2		

	BFPO	Pots	3	6.16	318.41	40,037.69	1.24			3
		BDRB	Dredges	2	1.11	3.19	22,166.39	0.65		
3				3.01	22.93	29,109.55	0.99			3
Other regions	CDTS	Bottom trawl nets	5	2.87	112.40	21,133.38	0.85			3
			6	1.89	160.97	43,052.36	0.84			3
	CPS	Purse seines	3	19.14	625.42	39,886.68	0.91			3
			6	2.30	61.78	94,305.26	0.96	0.97		3
	CHOK	Hooks	2	4.73	36.45	22,422.86	0.64	0.63		2
			3	0.28	-7.61	22,880.05	0.71	0.63		2
			4	3.89	376.89	49,425.51	0.89			3
			5	3.03	79.86	43,818.02	0.79	0.93		3
	CPGO		5	2.83	96.66	31,746.22	0.86			3
		Surface longlines	6	1.88	90.02	26,553.45	0.95			3
	CPMP	Polyvalent active & passive gear	1	5.33	45.10	17,791.92	0.31			2
			2	0.45	-62.12	8,410.02	0.67	0.73		1
	CFPO	Pots	2	-2.27	-55.20	15,038.14	0.82			1

2017

	Gear	Length	CR/BER	RoFTA (%)	NVA/FTE	TECHNICAL INDICATOR	SHI	SAR	OVERALL INDICATOR	No of vessels 2017
NAO	DTS	3	3.99	39.93	19,049	0.80	< 40%	null	3	66
		4	2.76	81.37	29,449	0.83	< 40%	null	3	75
		5	2.40	73.59	60,264	1.18	1.21	null	2	108
		6	3.07	306.34	126,079	1.09	0.98	COD-27.1-27.2	3	13
	PS	2	-1.42	-84.68	15,411	0.43	< 40%	null	1	18
		3	3.00	85.42	25,336	0.65	< 40%	null	2	112
		4	1.96	48.16	27,801	0.81	< 40%	null	3	101
		5	4.12	82.53	41,842	0.83	1.32	null	2	81
	DFN	2	0.66	-12.24	11,788	0.68	< 40%	null	1	115
		3	4.33	92.99	26,225	0.82	< 40%	null	3	139
		4	1.82	21.07	23,449	1.01	1.44	null	2	25
	HOK	2	1.08	2.38	10,787	0.47	1.40	null	2	63



		3	3.58	81.07	31,435	0.68	1.27	null	2	81	
		4	2.06	43.76	24,822	0.86	1.03	null	2	29	
		5	15.38	152.18	40,501	0.77	0.81	null	3	25	
	PGO	4	10.29	272.27	54,419	0.99	0.91	null	3	11	
		5	2.97	54.31	39,539	1.38	< 40%	null	3	30	
	PGP	5	2.19	92.39	61,009	1.31	0.79	null	3	55	
	PMP	1	3.10	41.46	15,588	0.46	< 40%	null	2	1,954	
		2	6.20	199.13	47,990	0.48	< 40%	null	2	60	
		3	2.59	41.88	24,969	0.81	1.07	null	2	42	
	FPO	2	3.44	60.43	23,751	0.71	< 40%	null	3	71	
		3	6.40	65.07	34,271	0.69	< 40%	null	2	58	
	DRB	1	1.96	12.69	18,523	0.54	< 40%	null	2	1,814	
		2	2.69	27.85	11,953	0.47	< 40%	null	2	14	
		3	2.24	18.30	16,688	0.47	< 40%	null	2	84	
	MBS	DTS	2	1.85	41.88	30,099	0.60	< 40%	null	2	18
			3	2.57	64.12	29,691	0.85	< 40%	null	3	147
			4	1.91	38.86	29,889	0.91	4.08	null	3	303
			5	1.32	15.79	28,519	0.91	4.25	null	3	132
		PS	2	30.89	194.05	16,895	0.68	< 40%	null	2	18
			3	3.25	62.72	19,334	1.00	1.54	null	2	84
			4	2.26	42.97	23,599	1.04	1.55	null	2	88
5			2.78	115.34	73,282	0.55	0.83	null	2	26	
DFN		2	1.28	10.57	18,933	0.68	< 40%	null	2	85	
		3	1.55	27.85	15,294	0.77	< 40%	null	3	53	
HOK		2	-0.49	-57.99	11,857	0.44	< 40%	null	1	47	
		3	3.80	40.66	27,985	0.57	2.09	null	2	23	
PGO		3	1.88	41.44	24,386	0.66	1.60	SWO-37	2	42	
		4	1.99	45.31	43,045	0.80	1.54	SWO-37	2	22	
PMP		1	15.51	267.14	11,131	0.34	< 40%	null	2	109	
		2	1.32	15.29	22,970	0.50	< 40%	null	2	913	
		3	1.77	11.59	19,456	0.80	3.57	null	2	34	
FPO		3	1.55	26.17	26,151	0.98	< 40%	null	3	31	
DRB		2	1.16	7.66	14,563	0.44	< 40%	null	2	39	
		3	1.11	1.74	15,593	0.77	< 40%	null	2	14	
F		DTS	5	1.01	0.76	14,088	1.24	< 40%	null	3	41



		6	2.30	198.13	47,646	1.30	< 40%	null	3	33
	PS	6	2.32	100.37	119,866	1.36	0.98	null	3	26
	HOK	5	4.78	170.63	30,736	1.01	1.01	null	3	12
	PGO	5	2.16	62.74	28,493	1.45	< 40%	null	3	62
		6	2.53	65.50	39,144	1.41	< 40%	null	3	25
				46,640						
IC	PS	3	2.61	156.85		0.60	< 40%	null	2	16
	HOK	2	7.24	173.10	46,397	0.29	0.71	null	2	43
		3	6.60	136.16	32,291	0.60	0.83	null	2	27
		5	0.36	-30.42	19,480	0.90	1.02	null	2	22
	PMP	1	0.91	-4.50	26,698	0.35	< 40%	null	1	465
		2	0.13	-89.62	10,310	0.46	1.00	null	1	20
FPO	2	0.45	-39.56	5,744	0.45	< 40%	null	1	12	
MA	HOK	3	4.06	29.18	24,035	0.88	< 40%	null	3	19