



## **Study of the structure of the full-time fleet**

### **Indicators**

**Action plan for the segments showing an imbalance between fishing capacity and fishing opportunities**

**GENERAL SECRETARIAT FOR FISHERIES**

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

# **2019 ACTION PLAN**

INTRODUCTION .....	2
STUDY OF NATIONAL FISHING GROUNDS.....	8
CANTABRIA AND NORTH-WEST.....	8
TRAWLERS (CNW) .....	8
GILLNETTERS (CNW) .....	10
PURSE SEINERS (CNW).....	12
VESSELS USING HOOKS (CNW).....	13
DREDGERS (CNW) .....	17
VESSELS USING POTS (CNW).....	18
POLYVALENT VESSELS (CNW).....	18
GULF OF CÁDIZ .....	18
TRAWLERS (GC).....	18
PURSE SEINERS (GC) .....	20
GILLNETTERS (GC).....	21
DREDGERS (GC).....	21
POLYVALENT VESSELS (GC) .....	22
MEDITERRANEAN NATIONAL FISHING GROUND .....	22
TRAWLERS (MEDITERRANEAN).....	22
PURSE SEINERS (MEDITERRANEAN).....	31
VESSELS USING HOOKS (MEDITERRANEAN) .....	34
GILLNETTERS (MEDITERRANEAN) .....	36
POLYVALENT VESSELS (MEDITERRANEAN) .....	36
DREDGERS .....	37
VESSELS USING POTS .....	38
SURFACE LONGLINERS (MEDITERRANEAN) .....	38
CANARY ISLANDS.....	40
POLYVALENT VESSELS (CANARY ISLANDS) .....	40
PURSE SEINERS (CANARY ISLANDS) .....	42
VESSELS USING HOOKS (CANARY ISLANDS) .....	42
DETAILED ANALYSIS OF NON-NATIONAL NORTH ATLANTIC SEGMENTS .....	44
TRAWLERS .....	44
VESSELS USING PASSIVE GEAR.....	45
SURFACE LONGLINERS (NORTH ATLANTIC).....	46
DETAILED ANALYSIS OF SEGMENTS IN INTERNATIONAL WATERS .....	47
TRAWLERS .....	47
VESSELS USING HOOKS .....	47
FREEZER TUNA SEINERS.....	48
SURFACE LONGLINERS.....	51
MEASURES DEFINED FOR SEGMENTS WITH AN IMBALANCE WITHIN THE SPANISH OPERATIONAL FISHING FLEET .....	52

## INTRODUCTION

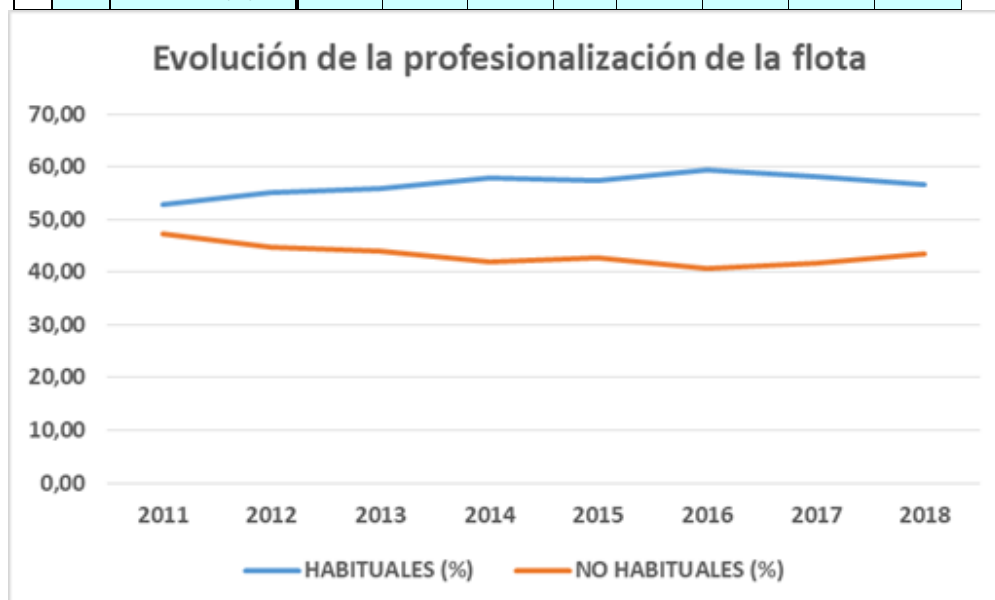
In accordance with Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, if the assessment of the annual capacity of the national fleet clearly demonstrates that fishing capacity is not effectively balanced with fishing opportunities, the Member State shall prepare and include in its annual report an ACTION PLAN for the

fleet segments with a structural overcapacity. The action plan shall set out the adjustment targets and tools to achieve a balance and a clear time-frame for its implementation (Article 22).

## POPULATION

The study population is comprised of the active vessels that operated for more than 90 days in 2018. The rest of the active fleet is not considered to be operating full-time, and is therefore not covered by the action plan since its fishing activity is considered to be part-time.

		2011	2012	2013	2014	2015	2016	2017	2018
<b>REGISTERED VESSELS</b>		<b>10,900</b>	<b>10,544</b>	<b>10,167</b>	<b>9,921</b>	<b>9,686</b>	<b>9,459</b>	<b>9,356</b>	<b>9,207</b>
1	INACTIVE VESSELS	1,784	1,606	1,372	1,228	1,185	1,105	1,061	1,157
2	ACTIVE VESSELS	9,116	8,938	8,795	8,693	8,501	8,354	8,295	8,050
2A	ACTIVE < 90 DAYS	3,359	3,118	3,109	2,938	2,946	2,742	2,849	2,844
2B	ACTIVE > 90 DAYS	5,757	5,820	5,686	5,755	5,555	5,612	5,446	5,206
1+2A	PART-TIME (%)	47.18	44.8	44.07	41.99	42.65%	40.67%	41.79%	43.46%
2B	FULL-TIME (%)	52.82	55.2	55.93	58.01	57.35%	59.33%	58.21%	56.54%



Evolución de la profesionalización de la flota  
HABITUALES (%)  
NO HABITUALES (%)

Fishing fleet professionalisation  
FULL-TIME (%)  
PART-TIME (%)

The table above shows that the number of registered vessels has been decreasing, as has the number of active vessels. We can see that the percentage of vessels that operated for more than 90 days/year decreased this year, primarily due to the application of a temporary closure mainly affecting the Mediterranean as a response to the state of fishery resources and the signing of agreements with Morocco and Guinea-Bissau.

## INDICATORS

These figures have been compiled since 2012, and so we currently have a time series covering six years, which facilitates a more reliable overview of the information obtained. Nevertheless, the volatile

nature of fishing revenue/costs leads to substantial year-on-year fluctuations in economic indicators tracking the fishing industry.

One notable feature of the segmentation of the study population is the combining of the 00-10, 10-12 and 12-18 vessel length classes into a single segment (00-18). This has been done because economic data for the full-time fleet is not broken down to the above extent, and so with a view to maintaining consistency with the series used in the past, the decision was made to adopt a single segment covering all three vessel lengths, especially since these are mainly artisanal vessels that make similar fishing trips exploiting the same stocks.

Additionally, improvements have been made since 2014 to obtain precise data on Spain's various fisheries, which are different to and far more varied than the fisheries of the rest of the EU; consequently, the classification proposed by the EU does not meet the needs of the Spanish fleet.

For this reason, since 2014 **separate data have been made available for the Cantabria and North-West (CNW) and Gulf of Cádiz (GC) fleets**, both of which are classified as 'North Atlantic' by the EU. Therefore, for the years 2012 and 2013 — before this improvement was made — the indicator values for the segments operating in those two fishing grounds are still grouped together. With a view to finding a solution to the situation, a survey was performed of the data on the two fishing grounds for 2012 and 2013, covering the stocks in each segment and the sample used to generate the economic data, which made it possible to attribute the indicator values to one fishing ground or the other (CNW or GC) in most cases.

Another improvement made since 2014 is that the **surface longliner fleet is evaluated separately from other vessels using hooks. Fleets using passive gear in EU waters** (which the EU groups together with the North Atlantic region in general, meaning that data for other fleets using passive gear in national fishing grounds appeared in the same category) are also treated separately. These improvements mean that the data on stocks in some segments are not homogeneous, making the figures difficult to interpret. Nevertheless, in future such improvements will provide a more precise understanding of the areas requiring more decisive action.

## **CALCULATION OF INDICATORS**

The indicators set out in the 2019 Action Plan have been charted using the data available for the years 2012 to 2017.

This document analyses the biological, economic and technical indicators, segment by segment, using data for 2012-2017, taking the improvements made into account as far as is possible and evaluating the data obtained from economic surveys, data on fishing effort and data on dependency on overexploited or high-risk stocks to reach conclusions as to whether there is a balance or imbalance between capacity and opportunities. Following EU guidelines, for each segment we have obtained two economic indicators (CR/BER and RoFTA), one technical indicator (the indicator for inactivity has not been included in the action plan since the study population is vessels that operated for more than 90 days), and two biological indicators (SHI and SAR).

To obtain values that would reflect the fleet's particular situation over 2012-2017, we calculated the weighted average for the period in question for each indicator (CR/BER, RoFTA, SHI and the technical indicator on fleet use). The aim was to give greater weight to recent years than to years past, since we consider that the more recent the data, the more accurate a picture we gain of the situation, with 2017

being assigned a greater weight than 2016, and so on. This allows us to obtain average values for the whole period that still take into account that the most important data are those for the last year.

When calculating the **weighted overall indicator**, we use a weighted average to give greater importance to economic and biological indicators than to the technical indicator. In order to highlight the extent to which an indicator is red, yellow or green we have also assigned a weight to each value depending on its position within the overall distribution for that indicator. The weight assigned is 3 in the case of 'normal' values within the distribution, 2 for atypical values and 1 for extremely atypical values.

This is carried out for each of the four indicators: RoFTA, CR/BER, SHI and TECHNICAL. The overall indicator is obtained using the following formula (weighted average formula):

$$\text{Overall indicator} = \frac{\text{CRInd/BER} * \text{WeightedCR/BER} + \text{RoFTAInd} * \text{WeightedRoFTA} + \text{TechInd} * \text{WeightedTech} + \text{SHIInd} * \text{WeightedSHI}}{\text{WeightedCR/BER} + \text{WeightedROFTA} + \text{WeightedTech} + \text{WeightedSHI}}$$

Since we consider the economic indicators and SHI to be more important than the technical indicator, the last of these will be assigned a weight equal to half. In other words, normal values are weighted at 1.5, atypical values at 1, and extremely atypical values at 0.5.

Once these calculations have been carried out, we apply certain factors depending on whether the fishing segment is one that exploits more than 10% high-risk species (SAR indicator). The results obtained go from red (maximum imbalance) to yellow (imbalance) and green (no imbalance).

The following table provides data on the segments of the **population subject to the 2017 action plan** (latest indicators). We then detail the results obtained for each supra-region and fishing ground, as well as the segments where an imbalance is identified between fishing capacity and fishing opportunities, which therefore require an action plan to balance the fleet.

In 2017, of the 9,356 registered vessels, 8,295 were active, while 1,061 vessels were inactive (11.3%).

	GROUN D	GEAR	LENGTH CLASS						Total
			1	2	3	4	5	6	
NORTH ATLANTIC	NON-NATIONAL	DTS				10	31	11	52
		PGO				10	30		40
		PGP					54		54
	Total non-national					20	115	11	146
	CNW	DFN		84	109	23			216
		DRB	1,058						1,058
		DTS		13			71		84
		FPO		63	47				110
		HOK		37	64	29	25		155
		PMP	866	33	25				924
		PS			63	74	77		214
	Total CNW		1,924	230	308	126	173		2,761
	GC	DFN			31				31
		DRB		14	80				94
		DTS			52	66			118

		PMP	117		17				134	
		PS			37	27			64	
		<b>Total GC</b>	<b>117</b>	<b>14</b>	<b>217</b>	<b>93</b>			<b>441</b>	
<b>NORTH ATLANTIC</b>			<b>2,041</b>	<b>244</b>	<b>525</b>	<b>239</b>	<b>288</b>	<b>11</b>	<b>3,348</b>	
<b>MEDITERRANEAN</b>	<b>MEDITERRANEAN</b>	DFN		77	50				127	
		DRB		16	14				30	
		DTS		16	144	300	129		589	
		FPO			25				25	
		HOK		22	15				37	
		PGO			37	21			58	
		PMP	36	542	28				606	
		PS		14	81	86	20		201	
		<b>Total MED</b>	<b>36</b>	<b>687</b>	<b>394</b>	<b>407</b>	<b>149</b>		<b>1,673</b>	
<b>MEDITERRANEAN</b>			<b>36</b>	<b>687</b>	<b>394</b>	<b>407</b>	<b>149</b>		<b>1,673</b>	
<b>OTHER REGIONS</b>	<b>CANARY ISLANDS</b>	HOK		9	14		22		45	
		PMP	159						159	
		PS			10				10	
			<b>Total CANARY ISLANDS</b>	<b>159</b>	<b>9</b>	<b>24</b>		<b>22</b>		<b>214</b>
	<b>INTERNATIONAL</b>	DTS						39	33	72
		HOK			16			12		28
		PGO						62	23	85
		PS							26	26
			<b>Total INTERNATIONAL</b>			<b>16</b>		<b>113</b>	<b>82</b>	<b>211</b>
	<b>OTHER REGIONS</b>			<b>159</b>	<b>9</b>	<b>40</b>		<b>135</b>	<b>82</b>	<b>425</b>
<b>Overall total</b>			<b>2,236</b>	<b>940</b>	<b>959</b>	<b>646</b>	<b>572</b>	<b>93</b>	<b>5,446</b>	

Of the active vessels, 5,446 fished full-time (operating for more than 90 days/year) and the action plan has been created based on these, which have been grouped into 50 segments. Overall, 1,002 vessels belonging to 13 fleet segments were found to be out of balance and 4,444 belonging to 37 segments were found to be in balance, resulting in 87% of the study population being in balance. Likewise, the indicators show a technical imbalance in the artisanal fleet which, according to STECF guidelines, should not be considered decisive when determining whether there is an imbalance in this fleet.

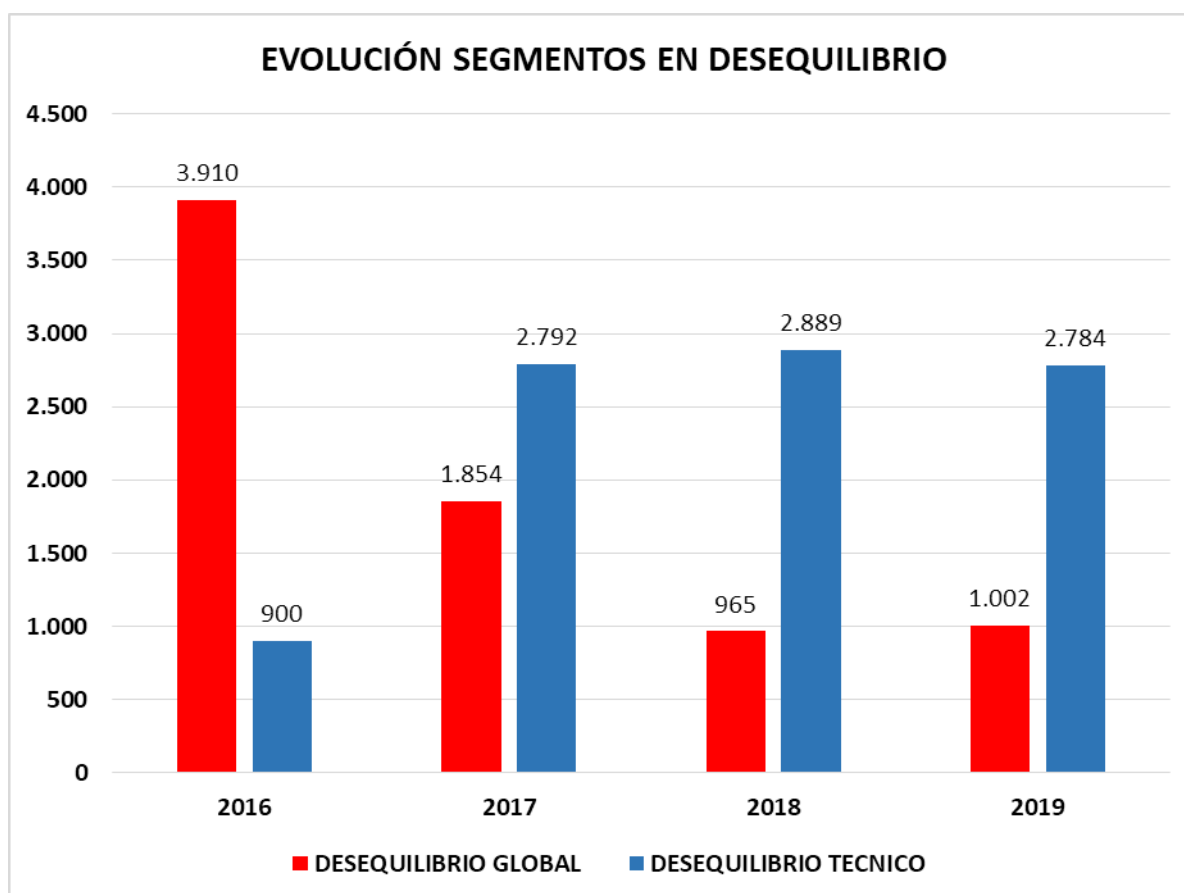
If we apply these data to the active fleet, we can see that 1,073 vessels are operating in segments that are out of balance, while 7,222 are operating in segments that are in balance.

The following table provides data on the segments where an imbalance is identified between fishing capacity and fishing opportunities in this action plan — based on the indicators for 2012-2017 — followed by the results obtained for each supra-region and fishing ground for each indicator and their weighted changes.

2019 ACTION PLAN						
	Gear	Length		VESSELS INCLUDED IN ACTION PLAN	ACTIVE VESSELS	
CNW	Trawl nets	10-24	2	13	14	Biological imbalance
CNW	Trawl nets	24-40	2	71	71	Biological imbalance
CNW	Gillnets	18-40	2	23	24	Biological imbalance
CNW	Purse seines	24-40	2	77	77	Biological imbalance
CNW	Hooks	00-18	2	101	143	Biological imbalance

CNW	Hooks	18-24	2	29	29	Biological imbalance
MED	Trawl nets	18-24	2	300	303	Biological imbalance
MED	Trawl nets	24-40	2	129	132	Biological imbalance
MED	Purse seines	00-18	2	95	102	Biological imbalance
MED	Purse seines	18-24	2	86	88	Biological imbalance
MED	Purse seines	24-40	2	20	26	Biological imbalance
MED	Surface longlines	00-18	2	37	42	Biological imbalance
MED	Surface longlines	18-40	2	21	22	Biological imbalance
RFOs	Hooks	00-24	2			Economic imbalance (2014-2016)
MED	Polyvalent gear	00-40	2			Technical imbalance only
CNW	Dredges	00-18	2			Technical imbalance only
CNW	Polyvalent gear	00-40	2			Technical imbalance only
MED	Hooks	00-40	2			Economic imbalance (2014-2015)
CAN	Polyvalent gear	00-40	2			Technical imbalance only

® 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. The economic indicator for the segment of 00-18 metre vessels using hooks in the Mediterranean was healthy in 2016 following two years (2014 and 2015) of low profits, but given the segment's good long-term profitability and lack of at-risk species in the biological indicator, it is considered to be balanced.



EVOLUCIÓN SEGMENTOS EN DESEQUILIBRIO  
DESEQUILIBRIO GLOBAL  
DESEQUILIBRIO TECNICO

OUT-OF-BALANCE SEGMENTS  
OVERALL IMBALANCE  
TECHNICAL IMBALANCE

# STUDY OF NATIONAL FISHING GROUNDS

## CANTABRIA AND NORTH-WEST

### TRAWLERS (CNW)

During 2017, 84 vessels — mainly trawlers — operated for more than 90 days/year, one vessel more than the previous year.

The **10-24 segment** comprises 13 vessels using small-scale gear (almost all of which measure approximately 12 metres) and 3 trawlers measuring approximately 20 metres. The CNW **24-40 segment** comprises 71 trawlers.

In 2017, the economic indicators for this segment showed strong results, with high short-term profitability, and although long-term profitability was lower than in 2016, it was still satisfactory. In relation to the technical indicator for small-scale vessels, its value of greater than 1 indicates a certain level of overexploitation in the stratum.

Inactivity in the segment was less than 4%, which can be considered a technical balance.

Gear	Length	CR/BER							RoFTA (%)						
		2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
Bottom trawl nets	10-24					3.22	4.96	4.38					210.36	109.91	143.40
	24-40	0.97	0.55	1.34	1.17	3.42	2.82	2.57	-1.06	-23.90	14.40	5.77	72.24	58.40	48.88
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)							SHI						
	10-24					1.15	1.12	1.13					1.83	1.61	1.68
	24-40	0.92	0.90	0.86	0.85	0.89	0.89	0.88			1.78	1.62	1.55	1.49	1.54
		OVERALL INDICATOR													
	10-24					2	2	2							
	24-40	2	2	2	2	2	2	2							

The biological indicator shows that the fleet depends on overexploited stocks, despite a slight improvement

in the indicator in both the 10-24 and 24-40 classes, caused by the improvement in Southern HKE stocks and a sharp decline in catches of this species. In the 10-24 class, we can observe an increasing dependency on blue whiting, despite a reduced dependency on mackerel and Southern hake. In the 24-40 class, we can observe an increasing dependency on mackerel and a lower dependency on Southern hake and blue whiting.

The results obtained suggest that it is advisable that an **action plan be created for this fleet**, based mainly on the biological indicator.



LENGTH	TOT_VAL AT-RISK STOCK	TOT_VAL STRATUM	PER CENT	AV. FISHSTOCK	STOCK VAL	F_etoile2	Overexploited stock	INDICATOR	stock_assess	overexploited
<b>2012 SHI TRAWLERS CNW</b>										
24-40	17,799,678	91,654,423	19.42%	hke-nrtn	10,893	1	FALSE	<b>1.48</b>	<b>6</b>	<b>3</b>
				hke-soth	7,679,609	2.37	TRUE			
				hom-soth	674	0.62	FALSE			
				lin-comb	558	1.08	TRUE			
				mac-nea	3,675,380	1.4	TRUE			
				whb-comb	6,432,564	0.47	FALSE			
<b>2013 SHI TRAWLERS CNW</b>										
24-40	23,604,482	81,856,788	28.84%	hke-nrtn	27,707	1	FALSE	<b>1.34</b>	<b>5</b>	<b>3</b>
				hke-soth	9,180,658	2.37	TRUE			
				lin-comb	272	1.08	TRUE			
				mac-nea	3,462,780	1.4	TRUE			
				whb-comb	10,933,066	0.47	FALSE			
<b>2014 SHI TRAWLERS CNW</b>										
24-40	37,727,376	70,908,760	53.21%	AO-ALB-N	3,128	0.72	FALSE	<b>1.78</b>	<b>6</b>	<b>5</b>
				hke-nrtn	1,394	1.26	TRUE			
				hke-soth	8,825,867	2.84	TRUE			
				lin-comb	158	1.08	TRUE			
				mac-nea	7,874,476	1.54	TRUE			
				whb-comb	21,022,353	1.43	TRUE			
<b>2015 SHI TRAWLERS CNW</b>										
24-40	36,801,367	61,823,325	59.53%	hke-nrtn	1,140	0.79	FALSE	<b>1.62</b>	<b>6</b>	<b>4</b>
				hke-soth	10,940,890	2.10	TRUE			
				lin-comb	618	1.08	TRUE			
				mac-nea	6,185,555	1.31	TRUE			
				NEP-2324	309	0.78	FALSE			
				whb-comb	19,672,854	1.45	TRUE			
<b>2016 SHI TRAWLERS CNW</b>										
10-24	1,142,661	2,521,423	45.32%	AO-ALB-N	77	0.54	FALSE	<b>1.83</b>	<b>4</b>	<b>3</b>
				hke-soth	650,490	2.27	TRUE			
				mac-nea	136,387	1.31	TRUE			
				whb.27.1-91	355,707	1.21	TRUE			
24-40	36,249,296	62,909,772	57.62%	AO-BET	240	1.28	TRUE	<b>1.54</b>	<b>7</b>	<b>4</b>
				hke-nrtn	462	0.96	FALSE			
				hke-soth	10,818,421	2.27	TRUE			
				hom-west	20.2	0.97	FALSE			
				lez.27.4a6a	535	0.35	FALSE			
				mac-nea	7,169,792	1.31	TRUE			
whb.27.1-91	218,259,826	1.21	TRUE							
<b>2017 SHI TRAWLERS CNW</b>										
10-24	1,028,859	2,492,182	41.28%	AO-ALB-N	120	0.54	FALSE	<b>1.61</b>	<b>6</b>	<b>4</b>
				dgs.27.nea	36.28	0.48	FALSE			
				hke-soth	425,862.86	2.1	TRUE			
				mac-nea	69,208.14	1.31	TRUE			

				pil-27.8c9a	3,490.88	1.7	TRUE			
				whb.27.1-91	2,530,140.23	1.26	TRUE			
24-40	34,057,457	39,758,402	56.99%	hke-nrtn	16,741.26	0.79	FALSE	1.49	5	3
				hke-soth	811647.7	2.1	TRUE			
				hom-west	1,075.84	0.97	FALSE			
				mac-nea	8,023,061.3	1.31	TRUE			
				whb.27.1-91	17,204,931	1.26	TRUE			

## GILLNETTERS (CNW)

The **00-18 gillnetter** segment (193 full-time vessels, 9 fewer than the previous year), which in 2013 and 2014 had shown an economic imbalance, began to recover in 2015 and consolidated this recovery with good short- and long-term profitability, despite profitability falling slightly in 2017. There was a slight imbalance in fishing ground exploitation, with 30 vessels active for fewer than 90 days/year. In biological terms, no more than 40% of the catch is surveyed stock, although the fleet mainly fishes overexploited species such as Southern HKE and MAC. It does not fish high-risk species and its weighted indicator for 2017 is balanced.

The **18-40 gillnetter** segment comprises 23 vessels (1 more than the previous year) that mainly use bottom-set gillnets. This segment includes two 24-40 metre vessels (included in the cluster for reasons of statistical confidentiality).

These show improved profitability over the short term, and a more notable improvement over the long term, giving balanced economic indicators mainly due to increased revenue in this stratum, as well as to improved depreciation. In technical terms, fishing ground exploitation is balanced and 23 of the 24 active vessels operate full-time; in biological terms, the segment's dependency on overexploited stocks is still evident, although dependency in the stratum has diminished since there was increased activity in the seasonal coastal fishing of bonito (a change of method for this fishery), a species that displays healthy levels, as well as increased dependency on Northern HKE, resulting in a slight improvement in the biological indicator.

Gear	Length	CR/BER							RoFTA (%)						
		2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
Gillnets	00-18	2.05	0.55	-0.99	1.10	6.29	2.87	3.18	84.77	-15.57	-39.29	3.87	88.58	57.94	50.77
	18-40	0.89	3.00	2.36	1.02	0.98	1.77	1.54	-19.73	52.65	57.66	0.86	-0.86	20.36	15.25
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)							SHI						
	00-18	0.74	0.74	0.76	0.77	0.78	0.76	0.77							
	18-40	0.91	0.89	0.90	0.90	0.92	0.94	0.92	1.38	1.63	1.83	1.16	1.67	1.43	1.49
		OVERALL INDICATOR													
	00-18	3	1	1	2	3	3	3							
	18-40	1	2	2	2	1	2	2							

An action plan is recommended for the 18-40 class based on this

dependency in the biological indicator.

LENGTH	TOT VAL SURVEYED STOCK	TOT VAL STRATUM	PER CENT	FISHSTOCK	STOCK VAL	F_etoile2	overexploited stock	INDICATOR	stock_assess	overexploited
<b>2012 SHI GILLNETTERS CNW</b>										
18-24	5,064,319	10,382,092	48.78%	AO-ALB-N	2,633,885	0.72	FALSE	1.38	6	2
				AO-BET	705	0.95	FALSE			
				AO-YFT	13	0.86	FALSE			
				hke-nrtn	20,691	1	FALSE			
				hke-soth	1,763,899	2.37	TRUE			
				mac-nea	645,127	1.4	TRUE			
<b>2013 SHI GILLNETTERS CNW</b>										
18-24	6,018,360	11,315,342	53.19%	AO-ALB-N	2,555,111	0.72	FALSE	1.63	7	3
				AO-BET	3,373	0.95	FALSE			
				hke-nrtn	3,138	1	FALSE			
				hke-soth	3,261,932	2.37	TRUE			
				lin-comb	920	1.08	TRUE			
				mac-nea	181,298	1.4	TRUE			
				whb-comb	12,587	0.47	FALSE			
<b>2014 SHI GILLNETTERS CNW</b>										
18-24	5,591,691	11,883,034	47.09%	AO-ALB-N	2,328,098	0.72	FALSE	1.83	7	5
				AO-BET	262	0.95	FALSE			
				hke-nrtn	21,454	1.26	TRUE			
				hke-soth	2,706,717	2.84	TRUE			
				lin-comb	1,836	1.08	TRUE			
				mac-nea	510,228	1.54	TRUE			
				whb-comb	23,096	1.43	TRUE			
<b>2015 SHI GILLNETTERS CNW</b>										
18-24	8,357,876	13,071,850	63.94%	AO-ALB-N	4,662,592	0.54	FALSE	1.16	7	5
				AO-BET	24,146	1.28	TRUE			
				hke-nrtn	10,014	0.79	FALSE			
				hke-soth	2,991,710	2.10	TRUE			
				lin-comb	390	1.08	TRUE			
				mac-nea	663,946	1.31	TRUE			
				whb-comb	5,079	1.45	TRUE			
<b>2016 SHI GILLNETTERS CNW</b>										
18-40	4,763,874	8,315,542	57.29%	AO-ALB-N	1,338,219	0.54	FALSE	1.67	6	4
				AO-BET	37,924.75	1.28	TRUE			
				hke-nrtn	24,751.63	0.96	FALSE			
				hke-soth	2,880,654	2.27	TRUE			
				mac-nea	453,328	1.31	TRUE			
				whb.27.1-912	28,996	1.21	TRUE			
<b>2017 SHI GILLNETTERS CNW</b>										
18-40	5,703,936	8,631,203	66.09%	AO-ALB-N	2,086,986.25	0.54	FALSE	1.43	6	4
				AO-BET	43,258.37	1.28	TRUE			
				hke-nrtn	70,214.47	0.79	FALSE			
				hke-soth	2,965,819.09	2.1	TRUE			
				mac-nea	537,295.91	1.31	TRUE			
				whb.27.1-912	361.95	1.26	TRUE			

### ***PURSE SEINERS (CNW)***

In total, 214 vessels fished principally with purse seines, while 18 vessels were not part of the full-time fleet (operating for fewer than 90 days/year) and less than 2% were inactive.

In the **0-18 and 18-24 segments**, the economic indicator worsened slightly compared to the previous year although it remained in balance. Although the technical indicator also worsened compared to the previous year, fishing ground exploitation was unchanged. It was not possible to assess the SHI for these segments since surveyed stocks did not make up more 40% of their catch; they mainly fished for sardine.

The weighted indicator for these segments shows that they are in balance.

Gear	Length	CR/BER							RoFTA (%)							
		2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017	
Purse seines	00-18	1.82	1.18	2.00	2.49	7.37	5.06	4.95	78.11	18.17	37.51	22.88	133.32	136.51	110.30	
	18-24	0.32	0.53	0.70	1.70	5.40	2.89	3.12	-81.00	-15.32	-15.20	51.49	82.08	70.47	60.44	
	24-40	4.09	7.28	3.98	1.87	9.75	4.19	5.39	79.31	48.59	88.90	60.87	146.08	86.05	96.98	
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)							SHI							
	00-18	0.75	0.76	0.83	0.76	0.86	0.84	0.83								
	18-24	0.83	0.82	0.85	0.85	0.93	0.89	0.89								
	24-40	0.84	0.79	0.85	0.91	0.91	0.88	0.88							1.32	1.32
		SAR							OVERALL INDICATOR							
	00-18								3	3	3	3	3	3	3	3
	18-24								1	1	1	3	3	3	3	3
24-40					HOM.27			3	3	3	3	3	3	2	2	

In 2017, a total of 77 vessels operated full-time in the **24-40** segment, 26 more than the previous year, which can be explained by the fact that this fleet alternates between fisheries, adopting hook gear for mackerel and bonito. In 2017, however, purse seines were used more frequently. This may have influenced the slight drop in profitability, although economic performance was nevertheless good overall and fishing ground exploitation homogeneity decreased.

The biological indicator for the 24-40 stratum revealed that surveyed stocks exceeded 40% in this year because new surveys of sardine in zones 8ABD and 8C9A (both of which are overexploited) were included in the calculation. The SHI had a value of 1.32 (out of balance), which meant that the indicator gave a biological imbalance for the segment, therefore recommending an action plan.

LENGTH	TOT VAL SURVEYED STOCK	TOT VAL STRATUM	PER CENT	FISHSTOCK	STOCK VAL	F_etoile2	overexploited stock	INDICATOR	stock_assess	overexploited
<b>2017 SHI PURSE SEINERS CNW</b>										
24-40	40,849,952	78,113,203	52.30%	AO-ALB-N	23,586,440	0.54	FALSE	1.32	7	4
				AO-BET	1,283,232	1.28	TRUE			
				AO-BFT-E	3,828,309	0.34	FALSE			
				hom-west	386,741	0.97	FALSE			
				mac-nea	6,230,247	1.31	TRUE			
				pil-27.8abd	4,404,195	6.34	TRUE			
				pil-27.8c9a	1,130,787	1.7	TRUE			

### VESSELS USING HOOKS (CNW)

The fleet mainly using hooks comprises 155 vessels (employing small-scale gear, fixed and bottom-set gillnets and bottom-set longlines; as well as purse seiners mainly active in coastal fishing for bonito and mackerel with hooks).

Gear	Length	CR/BER							RoFTA (%)						
		2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
Hooks	00-18	1.46	0.45	2.51	2.80	3.90	3.04	3.09	37.53	-16.65	37.69	51.70	68.35	64.13	58.96
	18-24	1.29	0.46	1.86	2.07	1.71	2.06	1.90	14.09	-11.89	23.28	70.06	15.31	43.76	36.33
	24-40	17.00		0.83	0.86	13.14	15.38	11.96	144.34		-14.88	-12.58	253.80	152.18	146.14

	TECHNICAL (MAX = AV. 10 MOST ACTIVE)							SHI						
00-18	0.74	0.72	0.73	0.77	0.75	0.71	0.73	1.43	1.56	2.04	1.38	1.41	1.32	1.41
18-24	0.82	0.79	0.78	0.85	0.83	0.81	0.82	1.13	1.22	1.22	0.84	1.11	1.03	1.05
24-40	0.92		0.93	1.00	0.93	0.91	0.93	0.8		0.92	0.67	0.63	0.81	0.73
	OVERALL INDICATOR													
00-18	2	1	2	2	2	2	2							
18-24	2	1	2	3	2	2	2							
24-40	3		2	2	3	3	3							

**00-18 metres:** The segment comprised 101 full-time vessels (3 fewer than the previous year), mainly using small-scale gear and bottom-set longlines. The economic indicators display improved short- and long-term profitability leading to a consolidated economic balance. The technical indicator shows low exploitation of the fishing ground, with many vessels (42) active for fewer than 90 days (these are not taken into account in the plan), which indicates low efficiency in exploitation of the fishing ground. The biological indicator is out of balance although it has improved since 2016. Nevertheless, this improvement is in some respects fictitious given that dependency on mackerel, Southern hake and bigeye tuna (which are overexploited species) has increased, although FMSY has improved in the case of bigeye tuna, bringing down the SHI value slightly. **Continuing with the action plan is recommended.**

LENGTH	TOT VAL SURVEYED STOCK	TOT VAL STRATUM	PER CENT	FISHSTOCK	STOCK VAL	F_etoile2	overexploited stock	INDICATOR	stock_assess	overexploited
<b>2014 SHI HOOKS CNW</b>										
00-18	6,772,907	11,778,706	57.08%	AO-ALB-N	1,227,978	0.72	FALSE	<b>2.04</b>	<b>8</b>	<b>5</b>
				AO-BET	43,779	0.95	FALSE			
				AO-SWO-N	1,915	0.82	FALSE			
				hke-nrtn	147,695	1.26	TRUE			
				hke-soth	3,437,049	2.84	TRUE			
				lin-comb	493	1.08	TRUE			
				mac-nea	1,850,264	1.54	TRUE			
				whb-comb	13,734	1.43	TRUE			
<b>2015 SHI HOOKS CNW</b>										
00-18	7,014,784	12,922,121	54%	AO-ALB-N	2,371,807	0.54	FALSE	<b>1.38</b>	<b>9</b>	<b>7</b>
				AO-BET	178,481	1.28	TRUE			
				hke-nrtn	49,346	0.79	FALSE			
				hke-soth	2,933,399	2.10	TRUE			
				lin-comb	678	1.08	TRUE			
				mac-nea	1,461,212	1.31	TRUE			
				sol-bisc	31	1.34	TRUE			
				whb-comb	19,805	1.45	TRUE			
				whm-27	25	1.63	TRUE			
<b>2016 SHI HOOKS CNW</b>										
00-18	7,487,175	14,240,156	58.58%	AO-ALB-N	2,529,988	0.54	FALSE	<b>1.41</b>	<b>9</b>	<b>5</b>
				AO-BET	209,606	1.28	TRUE			
				dgs.27.nea	70	0.48	FALSE			
				hke-nrtn	111,045	0.96	FALSE			
				hke-soth	2,888,323	2.27	TRUE			
				hom-west	25	0.97	FALSE			
				mac-nea	1,731,204	1.31	TRUE			
				sol.27.8ab	493	1.1	TRUE			
				whb.27.1-912	16,420	1.21	TRUE			
<b>2017 SHI HOOKS CNW</b>										
00-18	8,4568,778	15,112,388	56.04%	AO-ALB-N	2,847,669	0.54	FALSE	<b>1.32</b>	<b>9</b>	<b>4</b>
				AO-BET	374,424	1.28	TRUE			
				hke-nrtn	121,091	0.79	FALSE			
				hke-soth	3,016,688	2.1	TRUE			
				hom-west	77	0.97	FALSE			
				mac-nea	2,094,802	1.31	TRUE			
				sol.27.8ab	498	0.91	FALSE			
				swo-na	70	0.78	FALSE			
				whb.27.1-912	13,460	1.26	TRUE			

**18-24 metres:** This segment comprises 29 vessels (4 fewer than in 2016), mainly bottom longliners and some purse seiners (4) which fish for bonito in the coastal fishery. The economic indicator shows that both short- and long-term profitability recovered and the overall indicator was balanced. In technical terms, fishing ground exploitation decreased slightly in comparison to 2016, showing a slight imbalance. The biological situation improved in comparison with the previous year, although the indicator continued to

show a slight imbalance with lower dependency on bigeye tuna, blue whiting and Southern hake and increased dependency on mackerel. In relation to dependency on stocks that are not overexploited, there was increased fishing for coastal bonito and Northern hake, species whose stocks are at healthy levels. **Continuing with the action plan is recommended.**

LENGTH	TOT VAL SURVEYED STOCK	TOT VAL STRATUM	PER CENT	FISHSTOCK	STOCK VAL	F_etoile2	overexploited stock	INDICATOR	stock_assess	overexploited
<b>2014 SHI HOOKS CNW</b>										
18-24	7,502,533	9,287,821	80.78%	AO-ALB-N	4,715,825	0.72	FALSE	1.22	7	5
				AO-BET	3,177	0.95	FALSE			
				hke-nrtn	8,418	1.26	TRUE			
				hke-soth	1,134,893	2.84	TRUE			
				lin-comb	64	1.08	TRUE			
				mac-nea	1,631,076	1.54	TRUE			
				whb-comb	9,080	1.43	TRUE			
<b>2015 SHI HOOKS CNW</b>										
18-24	5,959,231	8,068,972	74%	AO-ALB-N	4,274,493	0.54	FALSE	0.84	7	6
				AO-BET	26,381	1.28	TRUE			
				HAD-SOTH	155	2.84	TRUE			
				hke-soth	652,874	2.10	TRUE			
				lin-comb	31	1.08	TRUE			
				mac-nea	996,265	1.31	TRUE			
				whb-comb	9,031	1.45	TRUE			
<b>2016 SHI HOOKS CNW</b>										
18-24	6,876,029	9,398,076	73.16%	AO-ALB-N	3,730,556	0.54	FALSE	1.11	8	4
				AO-BET	112,441	1.28	TRUE			
				AO-BFT-E	1,157	0.34	FALSE			
				AO-YFT	1,759	0.77	FALSE			
				hke-nrtn	551	0.96	FALSE			
				hke-soth	1,560,603	2.27	TRUE			
				mac-nea	1,455,485	1.31	TRUE			
				whb.27.1-912	13,478	1.21	TRUE			
<b>2017 SHI HOOKS CNW</b>										
18-24	7,2264,402	9,216,318	78.82%	AO-ALB-N	4,008,696	0.54	FALSE	1.03	8	5
				AO-BET	81,684	1.28	TRUE			
				hke-nrtn	2,625	0.79	FALSE			
				hke-soth	1,373,204	2.1	TRUE			
				mac-nea	1,782,666	1.31	TRUE			
				pil-27.8c9a	3,491	1.7	TRUE			
				swo-na	28	0.78	FALSE			
				whb.27.1-912	12,007	1.26	TRUE			

**24-40 metres:** This segment comprises 25 vessels using small-scale gear, bottom-set longlines, purse seines, fixed gillnets and bottom-set gillnets. Half of this segment (which in the previous year comprised 50 vessels) has moved into the purse seine segment as the majority of their activity involved this method; consequently, short-term profitability improved this year since there were fewer vessels, and the economic indicators continue to show the segment in balance.

The technical indicators were unchanged in this fleet and its SHI reveals a balanced segment due to its predominant dependency on ALB, a species in balance. **No action plan is required.**



LENGTH	TOT VAL SURVEYED STOCK	TOT VAL STRATUM	PER CENT	FISHSTOCK	STOCK VAL	F_etoile2	Overexploited stock	INDICATOR	stock_assess	overexploited
<b>2014 SHI HOOKS CNW</b>										
24-40	5,142,864	6,646,340	77.38%	AO-ALB-N	3,894,472	0.72	FALSE	<b>0.92</b>	<b>1</b>	<b>0</b>
<b>2015 SHI HOOKS CNW</b>										
24-40	3,459,344	4,546,311	76%	AO-ALB-N	2,898,859	0.54	FALSE	<b>0.67</b>	<b>4</b>	<b>3</b>
				AO-BET	6,458	1.28	TRUE			
				hke-soth	1,651	2.10	TRUE			
				mac-nea	552,375	1.31	TRUE			
<b>2016 SHI HOOKS CNW</b>										
24-40	32,256,044	45,091,566	71.53%	AO-ALB-N	23,511,019	0.54	FALSE	<b>0.63</b>	<b>7</b>	<b>4</b>
				AO-BET	542,125	1.28	TRUE			
				AO-BFT-E	4,222,873	0.34	FALSE			
				hke-soth	317,365	2.27	TRUE			
				hom-west	156,972	0.97	FALSE			
				mac-nea	3,505,476	1.31	TRUE			
				whb.27.1-912	214	1.21	TRUE			
<b>2017 SHI HOOKS CNW</b>										
24-40	15,528,920	20,515,693	75.69%	AO-ALB-N	10,906,735	0.54	FALSE	<b>0.81</b>	<b>8</b>	<b>5</b>
				AO-BET	617,387	1.28	TRUE			
				AO-BFT-E	1,042,829	0.34	FALSE			
				hke-soth	99,097	2.1	TRUE			
				hom-west	9,142	0.97	FALSE			
				mac-nea	2,463,036	1.31	TRUE			
				pil-27.8abd	324,042	6.34	TRUE			
				pil-27.8c9a	66,651.99	1.7	TRUE			

An action plan is recommended based on biological conditions for the 00-18 and 18-24 fleet segments using hooks in CNW due to their dependency on overexploited stocks.

### ***DREDGERS (CNW)***

This segment comprises a total of 1,058 vessels, mainly shellfish harvesters from Galicia, along with another 727 vessels in the segment that do not reach activity levels of 90 days/year. Profitability continues to be balanced despite a sharp drop in short- and long-term profitability caused by a considerable increase in costs compared to revenue. It was not possible to assess the biological indicator due to the lack of scientific surveys of the species caught. The imbalance in this fleet is a technical one caused by low exploitation of the fishing ground. Taking into account the STECF reports that have reiterated since 2015 that low exploitation of fishing grounds by the artisanal fleet cannot be attributed to an imbalance between capacity and opportunities, this segment is considered to be in balance.

Gear	Length	CR/BER					RoFTA (%)				
		2014	2015	2016	2017	2014-2017	2014	2015	2016	2017	2014-2017

Dredges	00-18	-8.14	9.92	11.58	1.33	4.58	-120.73	214.59	93.25	4.28	47.71	
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)						OVERALL INDICATOR				
	00-18	0.70	0.63	0.66	0.69	0.68	1	2	2	2	2	

## VESSELS USING POTS (CNW)

In total, 110 small-scale vessels measuring up to 18 metres fished full-time using pots and traps. Profitability over the short term worsened but there was an improvement in long-term profitability. Exploitation of the fishing ground continues to be slightly out of balance, and in biological terms the segment does not depend on surveyed stocks. As a precautionary measure, in 2015 this segment was classified as out of balance despite economic improvements that have since been consolidated following two years of profitability, which now allows us to conclude that this segment of the fleet is **in balance**.

Gear	Length	CR/BER							RoFTA (%)						
		2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
		Pots	00-18	-0.42	0.34	-0.37	1.73	6.41	4.97	4.35	-72.78	-15.47	-54.37	20.05	36.96
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)							OVERALL INDICATOR						
	00-18	0.76	0.73	0.78	0.77	0.85	0.77	0.79	1	1	1	3	3	3	3

## POLYVALENT VESSELS (CNW)

Of the 1,751 vessels operating in the fishery, 924 were polyvalent (including 7 that were over 18 metres in length but are included in the cluster with those under 18 metres) and operated full-time, revealing the high proportion of fishermen working part-time and very low exploitation of the fishing ground. The economic profitability that began in 2015 was consolidated, resulting in an economic indicator in balance and no dependency on overexploited stocks. Similarly to trawlers, the imbalance in this fleet is a technical one caused by low exploitation of the fishing ground. Taking into account the STECF reports that state that low exploitation cannot be attributed to an imbalance between capacity and opportunities, this segment is **considered to be in balance**.

Gear	Length	CR/BER							RoFTA (%)						
		2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
		Polyvalent	00-40	0.80		-0.67	2.23	2.56	3.38	2.71	-7.29		-33.55	42.22	32.97
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)							OVERALL INDICATOR						
	00-40	0.61		0.66	0.65	0.68	0.68	0.68	1		1	2	2	2	2

## GULF OF CÁDIZ

### TRAWLERS (GC)

This segment comprises 124 vessels, of which 118 operate full-time — 52 in the 00-18 class and 66 in the 18-40 class. The three trawlers measuring around 25 metres have been included in the < 40 metre class.

Gear	Length	CR/BER							RoFTA (%)						
		2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
		T	00-18	4.02	-0.64	0.81	7.38	2.81	3.56	3.55	153.22	-135.95	-7.91	32.80	165.50

18-40	0.46	0.49	0.82	1.28	3.97	2.75	2.64	-44.47	-13.25	-4.78	11.76	258.20	62.41	97.34
	TECHNICAL (MAX = AV. 10 MOST ACTIVE)							OVERALL INDICATOR						
00-18	0.92	0.88	0.91	0.88	0.91	0.88	0.89	3	1	2	3	3	3	3
18-40	0.84	0.85	0.86	0.88	0.89	0.86	0.87	1	1	1	3	3	3	3

The segment's economic performance was good, maintaining the balance observable since 2015 and stable exploitation of the fishing ground. The percentages of surveyed species caught by this fleet did not reach 40%, and so it has not been possible to assess the biological indicator or whether catches of SAR represented more than 10% of the fleet's total catch.

**Both segments are in balance.**

## PURSE SEINERS (GC)

This segment comprises 81 vessels, of which 72 operate full-time — 42 in the 00-18 class and 30 in the 18-40 class. The four trawlers measuring around 25 metres have been included in the < 40 metre class.

		CR/BER					RoFTA (%)					
Gear	Length	2014	2015	2016	2017	2014-2017	2014	2015	2016	2017	2014-2017	
Purse seines	00-18	4.34	3.39	7.25	0.79	3.09	48.04	218.55	132.53	-12.22	61.17	
	18-40	1.60	0.63	6.35	0.72	2.27	18.24	-25.64	97.32	-20.57	12.78	
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)					SAR					
	00-18	0.77	0.84	0.84	0.74	0.78	PIL-27.9.a	PIL-27.9.a	PIL-27.9.a	PIL-27.9.a		
	18-40	0.83	0.98	0.89	0.80	0.85	PIL-27.9.a	PIL-27.9.a	PIL-27.9.a	PIL-27.9.a		
		OVERALL INDICATOR										
			2014	2015	2016	2017	2014-2016	2014-2017				
	00-18		3	3	3	1	3	3				
	18-40		3	2	3	1	3	3				

Economic performance worsened in 2017 in both segments due to a considerable decrease in the fleet's revenue, recorded both in survey data and in the real value of landings, affecting both indicators (short- and long-term profitability), which display a clear imbalance for the first time since 2014.

The technical indicator shows homogeneous fishing ground exploitation, while in biological terms the segment does not reach 40% of surveyed species, although there is a high dependency on Iberian sardine stocks, which are caught in the Gulf of Cádiz, zone IXa, where the situation is classified as high risk (STECF 18-14, Balance Report), a fact that made it necessary for Spain and Portugal to approve a joint management plan.

While the number of vessels in the 00-18 class has decreased year-on-year, we can observe a slight increase in sardine catches in 2017, while in the same year in the 18-40 class there was a substantial decline in PIL catches, although these continued to account for more than 20% of the total catches, which determines the segment's SAR dependency.

PURSE SEINERS' (GC) DEPENDENCY ON SARDINE STOCKS COMPARED TO TOTAL CATCHES											
		2014					2015				
TYPE (CNW/GC)	LENGTH CLASS	VESSELS	TOT_WEIGHT	VESSELS_PIL	WEIGHT_PIL	TOT_WEIGHT_PIL	VESSELS	TOT_WEIGHT	VESSELS_PIL	WEIGHT_PIL	%_WEIGHT_PIL
GC	PS 00-18	51	9,357,310.25	48	3,554,872.47	37.99%	46	8,209,662.14	45	1,678,824.50	20.45%
GC	PS 18-40	27	6,129,907.24	25	1,784,436.24	29.11%	25	7,024,786.27	25	1,884,644.06	26.83%
		2016					2017				
TYPE (CNW/GC)	LENGTH CLASS	VESSELS	TOT_WEIGHT	VESSELS_PIL	WEIGHT_PIL	%_WEIGHT_PIL	VESSELS	TOT_WEIGHT	VESSELS_PIL	WEIGHT_PIL	%_WEIGHT_PIL
GC	PS 00-18	42	7,942,385.20	39	1,581,359.49	19.91%	37	5,118,398.40	36	1,688,085.03	32.98%
GC	PS 18-40	30	9,778,848.66	25	1,812,819.22	18.54%	27	5,943,752.52	25	1,350,335.15	22.72%

Despite the weighted indicator for 2017 being out of balance due to a poor economic situation in 2017 and SAR dependency, the total weight of PIL for this fleet diminished, and the overall indicator for the period analysed is in balance. An action plan is not recommended, although economic performance should be monitored and the sardine management plan continued.

### GILLNETTERS (GC)

In 2017, a total of 32 vessels were active in this segment (mainly using small-scale gear), of which 31 operated for more than 90 days of the year (30 in the 00-18 class, and 1 in the 18-24 class, which was classified in the 00-24 cluster). The segment's economic indicators maintained the good performance of the previous year, resulting in a balanced weighted indicator.

Fishing ground exploitation worsened slightly compared to 2016, although it remained in balance, and the segment does not depend on SAR or at-risk stocks potentially requiring assessment. Consequently, this segment can be considered to maintain a **balance** between capacity and fishing opportunities.

		CR/BER					RoFTA (%)				
Gear	Length	2014	2015	2016	2017	2014-2017	2014	2015	2016	2017	2014-2017
Gillnets	00-24	7.08	-1.22	4.84	5.15	4.34	66.67	-54.61	68.10	98.50	67.86
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)					OVERALL INDICATOR				
	00-24	0.87	0.88	0.85	0.79	0.82	3	1	3	3	3

### DREDGERS (GC)

In 2017, a total of 127 vessels fished mainly with dredges, of which 94 vessels operated full-time, 7 more than the previous year. The economic situation was consolidated, although both short- and long-term profitability fell. In technical terms, there was a decrease in exploitation of the fishing ground resulting in an imbalance in the indicator. There was no dependency on surveyed stocks. **An action plan is not considered necessary** given that the imbalance is slight and is solely technical.

		CR/BER					RoFTA (%)				
Gear	Length	2014	2015	2016	2017	2014-2017	2014	2015	2016	2017	2014-2017
⊙ ⊙ ⊙	00-18	0.82	1.50	4.57	2.54	2.83	-10.71	14.83	46.90	23.24	26.16

		TECHNICAL (MAX = AV. 10 MOST ACTIVE)					OVERALL INDICATOR				
	00-18	0.82	1.00	0.76	0.67	0.75	1	3	3	2	3

### POLYVALENT VESSELS (GC)

Of the 305 registered vessels that do not predominantly make use of one method in particular, only 134 operated full-time, typically in the artisanal fleet. The number of full-time vessels fell by 30 comparison with 2016 and the level of inactivity was higher, a change reflected in a worsening technical situation in terms of exploitation of the fishing ground.

		CR/BER					RoFTA (%)				
Gear	Length	2014	2015	2016	2017	2014-2017	2014	2015	2016	2017	2014-2017
Polyvalent	00-18	1.60	7.71	3.98	3.07	3.83	11.17	127.50	42.72	46.18	53.77
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)					OVERALL INDICATOR				
	00-18	0.72	0.75	0.74	0.66	0.70	3	3	3	2	3

The results for 2017 continue to show a **balance** for this fleet, with very low exploitation of the fishing ground but good profitability and no dependency on overexploited stocks requiring evaluation of the SHI since it is a multi-species fleet.

## MEDITERRANEAN NATIONAL FISHING GROUND

### TRAWLERS (MEDITERRANEAN)

The Mediterranean trawler fleet comprised 600 vessels in 2017, three fewer than the previous year. Of that number, 589 fished full-time. Inactivity in this fleet did not exceed 2%.

		CR/BER							RoFTA (%)						
Gear	Length	2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
Bottom trawl nets	00-18	2.06	1.39	1.64	2.06	5.46	2.53	3.11	80.57	24.64	21.10	38.15	72.61	63.15	58.76
	18-24	0.91	2.02	1.32	1.37	3.75	1.91	2.26	-5.51	13.89	13.15	16.80	47.81	38.86	35.20
	24-40	0.94	-0.50	1.26	1.38	3.19	1.32	1.74	-1.52	-35.52	7.74	14.66	45.30	15.79	20.73
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)							SHI						
	00-18	0.81	0.82	0.82	0.82	0.82	0.82	0.82							
	18-24	0.76	0.75	0.77	0.78	0.77	0.76	0.76	5.24	5.22	5.31	4.28	3.96	4.08	4.21
	24-40	0.81	0.83	0.80	0.82	0.82	0.80	0.81	5.52	5.58	5.66	3.39	4.12	4.25	4.26
		SAR							OVERALL INDICATOR						
	00-18								3	3	3	3	3	3	3
	18-24								1	2	2	2	2	2	2
24-40								1	1	2	2	2	2	2	

**00-18 metres:** From the perspective of economic profitability, both short- and long-term profitability have been very good since 2012, although there was a decline in economic performance in 2017. Operational capability was stable and close to being in balance. In technical terms, of the 165 registered vessels, 160

operate full-time, continuing the downward trend in numbers of years past. Fishing ground exploitation is close to being in balance at 180 days/year, while in biological terms the segment does not show a dependency on overexploited species for more than 40% of its catches, given that many of the species it fishes have not been surveyed. However, the fleet does fish for species such as hake, red mullet and Norway lobster, which are clearly overexploited, although in 2017 there was a decrease in days of fishing effort. Following the indicator guidelines, this **segment is in balance**.

**18-24 segment:** In economic terms, this segment consolidated its economic performance following the improvement that began in 2013, although a slight contraction can be observed compared with the very positive economic figures of 2016. Operational capability was slightly unbalanced, given that it is a segment where the majority of vessels operate full-time (300 full-time vessels of a total of 303 active vessels). The biological indicators show a dependency on overexploited stocks greater than the previous year caused by a worsening F/FMSY ratio of highly overexploited species and an increase in 2017 of catches of deepwater rose shrimp and hake, despite a decrease in Aesop shrimp, giant red shrimp and red mullet.

**Continuing with the action plan is recommended** given this dependency on overexploited species.

### 2015 SHI TRAWLERS MEDITERRANEAN

LENGTH	TOT VAL SURVEYED STOCK	TOT VAL STRATUM	PER CENT	FISHSTOCK	STOCK VAL	F_etoile2	overexploited stock	INDICATOR	stock_assess	overexploited
18-24	61,208,160	98,805,298	61.95%	anb-gsa06	4	4.8	TRUE	4.28	34	32
				ane-gsa01	503	2.26	TRUE			
				ane-gsa06	64,073	0.89	FALSE			
				ank-gsa05	27,878	10.5	TRUE			
				ank-gsa06	112,783	6.5	TRUE			
				ank-gsa07	316	3.3	TRUE			
				ara-gsa01	4,052,217	1.8	TRUE			
				ara-gsa05	2,747,706	1	TRUE			
				ara-gsa06	9,017,867	1.31	TRUE			
				ara-gsa09	89,583	1.97	TRUE			
				ars-gsa10_11	67,308	1.5	TRUE			
				CTC-GSA05	13,857	1.1	TRUE			
				dps-gsa01	1,181,645	1.6	TRUE			
				dps-gsa05	28,657	1.2	TRUE			
				dps-gsa06	25,683,311	5.48	TRUE			
				hke-gsa01	718,430	7.5	TRUE			
				hke-gsa05	393,675	7.9	TRUE			
				hke-gsa06	5,747,470	7.8	TRUE			
				hke-gsa07	552,003	12.8	TRUE			
				mulbar-gsa01	256,363	4.9	TRUE			
				mulbar-gsa05	70,958	6.2	TRUE			
				mulbar-gsa06	2,171,254	1.24	TRUE			
				mulbar-gsa07	106,216	3.2	TRUE			
				mur-gsa05	229,180	3.8	TRUE			
				nep-gsa01	1,031,984	1.6	TRUE			
				nep-gsa05	374,231	1.7	TRUE			
				nep-gsa06	5,127,221	3.93	TRUE			
				occ-gsa05	326,232	1.5	TRUE			
				pil-gsa01	3,030	0.66	FALSE			
				pil-gsa06	51,679	1.68	TRUE			
				sbr-gsa01	48,072	1.72	TRUE			
				swo-med	323	2.97	TRUE			
whb-gsa01	252,118	4	TRUE							
whb-gsa06	660,013	9.5	TRUE							

### 2016 SHI TRAWLERS MEDITERRANEAN



LENGTH	TOT VAL SURVEYED STOCK	TOT VAL STRATUM	PER CENT	FISHSTOCK	STOCK VAL	F_etoile2	overexploited stock	INDICATOR	stock_assess	overexploited
18-24	38,158,763	74,693,756	51.09%	ane-gsa06	70,821	0.89	FALSE	3.96	30	27
				ank-gsa05	13,254	7.63	TRUE			
				ank-gsa06	110,584	6.49	TRUE			
				ara-gsa01	3,617,247	1.87	TRUE			
				ara-gsa05	3,112,547	1.01	TRUE			
				ara-gsa06	7,785,608	2.43	TRUE			
				ara-gsa09	141,445	0.84	FALSE			
				bss-gsa07	462	3.94	TRUE			
				CTC-GSA05	38,752	1.1	TRUE			
				dps-gsa01	1,282,494	0.9	FALSE			
				dps-gsa06	3,844,983	2.29	TRUE			
				hke-gsa01	675,994	7.5	TRUE			
				hke-gsa05	245,541	8.05	TRUE			
				hke-gsa06	5,420,646	7.71	TRUE			
				hke-gsa07	337,833	11.6	TRUE			
				hke-soth	44	2.27	TRUE			
				mon-gsa01_05	2,465,341	2.05	TRUE			
				mur-gsa05	250,333	3.49	TRUE			
				mut-gsa01	356,629	4.84	TRUE			
				mut-gsa06	2,610,528	1.56	TRUE			
				mut-gsa07	94,773	2.26	TRUE			
				nep-gsa05	309,726	1.69	TRUE			
				nep-gsa06	4,282,923	9.49	TRUE			
				occ-gsa05	459,366	1.5	TRUE			
				pil-gsa01	1,677	1.26	TRUE			
				pil-gsa06	31,482	3.71	TRUE			
				sbg-gsa07	10,749	2.37	TRUE			

				sol-gsa07	1,675	7.41	TRUE		
				swo-med	215	1.82	TRUE		
				whb-gsa06	585,093	7.88	TRUE		

2017 SHI TRAWLERS MEDITERRANEAN										
LENGTH	TOT VAL SURVEYED STOCK	TOT VAL STRATUM	PER CENT	FISHSTOCK	STOCK VAL	F_etoile2	overexploited stock	INDICATOR	stock_assess	overexploited
18-24	42,931,561	92,345,461	46.49%	ane-gsa06	51,187	1.19	TRUE	4.08	30	27
				ank-gsa05	15,274	7.63	TRUE			
				ank-gsa06	227,156	6.49	TRUE			
				AO-ALB-M	4	0.83	FALSE			
				ara-gsa01	3,477,435	1.87	TRUE			
				ara-gsa05	3,545,682	1.48	TRUE			
				ara-gsa06	8,840,559	2.43	TRUE			
				ara-gsa09	41,329	0.84	FALSE			
				ars-gsa09_10_	30,661	1.51	TRUE			
				bss-gsa07	106	3.94	TRUE			
				dps-gsa01	1,699,909	0.9	FALSE			
				dps-gsa05	338,195	1.09	TRUE			
				dps-gsa06	5,496,909	2.29	TRUE			
				hke-gsa01	1,223,886	7.95	TRUE			
				hke-gsa05	312,279	8.05	TRUE			
				hke-gsa06	5,924,572	7.8	TRUE			
				hke-gsa07	354,753	12.4	TRUE			
				mon-gsa01_05	2,504,284	2.05	TRUE			
				mur-gsa05	435,230	2.57	TRUE			
				mut-gsa01	422,302	4.84	TRUE			
				mut-gsa06	2,607,940	3.05	TRUE			
				mut-gsa07	117,457	3	TRUE			
				nep-gsa05	322,922	1.69	TRUE			
				nep-gsa06	4,268,331	9.49	TRUE			
				pil-gsa01	3,129	1.26	TRUE			
				pil-gsa06	36,560	2.59	TRUE			
				sbg-gsa07	2,030	2.37	TRUE			
sol-gsa07	1,658	7.41	TRUE							
swo-med	841	1.85	TRUE							
whb-gsa06	628,979	7.88	TRUE							

**24-40 segment:** In economic terms, this segment displayed high profitability as of 2014, although performance worsened in 2017, as in other segments. Operational capability was stable and close to being in balance. Of 132 active vessels, 129 operated full-time and 2 were inactive. We must take into account that this fleet includes vessels that fish in the Mediterranean but outside the national fishing ground, increasing the average for the 10 vessels engaged in the greatest effort. In biological terms, the segment depends on overexploited species. The indicator shows an increasing imbalance as of 2015 with a

dependency on 26 overexploited stocks. Despite a fall in catches of Aesop shrimp and giant red shrimp, catches of hake and deepwater rose shrimp increased.

2015 SHI TRAWLERS MEDITERRANEAN										
LENGTH	TOT VAL SURVEYED STOCK	TOT VAL STRATUM	PER CENT	FISHSTOCK	STOCK VAL	F_etoile2	overexploited stock	INDICATOR	stock_assess	overexploited
24-40	29,390,352	45,378,377	64.77%	ane-gsa01	140.02	2.26	TRUE	3.39	32	30
				ane-gsa06	222,139.87	0.89	FALSE			
				ank-gsa01	79	1.6	TRUE			
				ank-gsa06	92,994	6.5	TRUE			
				ank-gsa07	133	3.3	TRUE			
				ara-gsa01	2,365,835	1.8	TRUE			
				ara-gsa05	1,276,990	1	TRUE			
				ara-gsa06	12,584,440	1.31	TRUE			
				CTC-GSA05	2,111	1.1	TRUE			
				dps-gsa01	289,419	1.6	TRUE			
				dps-gsa05	13,740	1.2	TRUE			
				dps-gsa06	927,768	5.48	TRUE			
				hke-gsa01	299,846	7.5	TRUE			
				hke-gsa05	109,423	7.9	TRUE			
				hke-gsa06	5,099,351	7.8	TRUE			
				hke-gsa07	513,230	12.8	TRUE			
				hke-soth	3	2.1	TRUE			
				mulbar-gsa01	64,622	4.9	TRUE			
				mulbar-gsa05	9,808	6.2	TRUE			
				mulbar-gsa06	1,299,122	1.24	TRUE			
				mulbar-gsa07	84,495	3.2	TRUE			
				mur-gsa05	24,383	3.8	TRUE			
				nep-gsa01	151,241	1.6	TRUE			
				nep-gsa05	91,495	1.7	TRUE			

nep- gsa06	2,911,437.2	3.93	TRUE	
occ- gsa05	15,239	1.5	TRUE	
pil- gsa01	1,474	0.66	FALSE	
pil- gsa06	108,807.54	1.68	TRUE	
sbr- gsa01	23,169	1.72	TRUE	
swo- med	157	2.97	TRUE	
whb- gsa01	47,531.87	4	TRUE	
whb- gsa06	759,729.61	9.5	TRUE	

**2016 SHI TRAWLERS MEDITERRANEAN**

LENGTH	TOT VAL SURVEYED STOCK	TOT VAL STRATUM	PER CENT	FISHSTOCK	STOCK VAL	F_etoile2	overexploited stock	INDICATOR	stock_assess	overexploited
24-40	27,311,422	43,374,652	62.97%	ane-gsa06	56,364	0.89	FALSE	4.12	26	24
				ank-gsa05	360	7.63	TRUE			
				ank-gsa06	116,067	6.49	TRUE			
				ara-gsa01	2,050,838	1.87	TRUE			
				ara-gsa05	853,180	1.01	TRUE			
				ara-gsa06	11,014,140	2.43	TRUE			
				CTC-GSA05	4,738	1.1	TRUE			
				dps-gsa01	191,696	0.9	FALSE			
				dps-gsa06	1,699,456	2.29	TRUE			
				hke-gsa01	188,308	7.5	TRUE			
				hke-gsa05	111,141	8.05	TRUE			
				hke-gsa06	4,510,935	7.71	TRUE			
				hke-gsa07	477,034	11.6	TRUE			
				mon-gsa01_05	1,104,868	2.05	TRUE			
				mur-gsa05	50,026	3.49	TRUE			
				mut-gsa01	10,994	4.84	TRUE			
				mut-gsa06	1,526,209	1.56	TRUE			
				mut-gsa07	77,759	2.26	TRUE			
				nep-gsa05	137,616	1.69	TRUE			
				nep-gsa06	2,440,069	9.49	TRUE			
				occ-gsa05	19,779	1.5	TRUE			
				pil-gsa01	338	1.26	TRUE			
pil-gsa06	20,238	3.71	TRUE							
sbg-gsa07	145	2.37	TRUE							
sol-gsa07	196	7.41	TRUE							
whb-gsa06	648,929	7.88	TRUE							

**2017 SHI TRAWLERS MEDITERRANEAN**

LENGTH	TOT VAL SURVEYED STOCK	TOT VAL STRATUM	PER CENT	FISHSTOCK	STOCK VAL	F_etoile2	overexploited stock	INDICATOR	stock_assess	overexploited
24-40	64,219,995	99,514,545	44.5%	ane-gsa06	60,813	1.19	TRUE	4.25	28	26

			gsa06			
			ank-gsa05	236	7.63	TRUE
			ank-gsa06	184,833	6.49	TRUE
			AO-ALB-M	2	0.83	FALSE
			ara-gsa01	1,600,442	1.87	TRUE
			ara-gsa05	1,335,428	1.48	TRUE
			ara-gsa06	11,600,658	2.43	TRUE
			bss-gsa07	218	3.94	TRUE
			dps-gsa01	239,160	0.9	FALSE
			dps-gsa05	132,391	1.09	TRUE
			dps-gsa06	2,405,963	2.29	TRUE
			hke-gsa01	366,111	7.95	TRUE
			hke-gsa05	66,155	8.05	TRUE
			hke-gsa06	4,992,626	7.8	TRUE
			hke-gsa07	470,307	12.4	TRUE
			mon-gsa01_05	1,133,771	2.05	TRUE
			mur-gsa05	70,595	2.57	TRUE
			mut-gsa01	26,619	4.84	TRUE
			mut-gsa06	1,566,674	3.05	TRUE
			mut-gsa07	78,651	3	TRUE
			nep-gsa05	58,194	1.69	TRUE
			nep-gsa06	2,616,034	9.49	TRUE
			pil-gsa01	406	1.26	TRUE
			pil-gsa06	39,778	2.59	TRUE
			sbg-gsa07	2,103	2.37	TRUE
			sol-gsa07	92	7.41	TRUE
			swo-med	734.78	1.85	TRUE
			whb-gsa06	593,181.44	7.88	TRUE

In relation to the SAR indicator for 2017, the STECF has not identified any species fished by trawlers, and so none has been considered for this year.

Based on this analysis, it would be advisable to **take measures to restore balance** in the **18-24 metre and 24-40 metre** segments.

## PURSE SEINERS (MEDITERRANEAN)

In 2017, the Mediterranean purse seiner fleet comprised 216 vessels, of which 201 operated full-time and just 15 had a low level of activity. This figure includes the 6 bluefin tuna purse seiners not studied in the action plan since they operated for fewer than 90 days/year. Inactivity in this fishing method stood at 6%.

Gear	Length	CR/BER							RoFTA (%)						
		2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
Purse seiners	00-18	9.02	8.71	6.43	3.73	3.88	3.59	4.11	987.07	294.61	137.75	82.11	73.54	69.38	98.11
	18-24	2.18	6.45	3.19	2.68	4.02	2.26	2.95	46.76	73.01	85.67	29.86	49.02	42.97	46.57
	24-40	0.86	0.77	1.22	1.58	2.56	2.78	2.38	-4.24	-8.06	10.51	37.34	100.25	115.34	89.13
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)							SHI						
	00-18	0.79	0.83	0.85	0.81	0.82	0.85	0.84	1.04	1.26	1.10	1.13	1.76	1.56	1.51
	18-24	0.87	0.87	0.88	0.86	0.88	0.87	0.87	1.08	1.22	1.17	1.2	1.67	1.55	1.49
	24-40	0.94	0.94	0.98	0.91	0.95	0.97	0.96	0.89	1	1.03	1.1	1.44	1.38	1.32
		SAR							OVERALL INDICATOR						
	00-18			PIL -gs6	PIL-37.1.1	PIL-GSA6			2	1	2	2	2	2	2
	18-24			PIL -gs6	PIL-37.1.1	PIL-GSA6			2	1	2	2	2	2	2
24-40			PIL -gs6	PIL-37.1.1	PIL-GSA6			2	1	3	3	2	2	2	

In economic terms, the **length class up to 24 metres** displayed consolidated short- and long-term profitability during the period under examination, albeit with a downward trend but always remaining in balance. The **24-40 metre purse seiner** segment (20 vessels), which was clearly out of balance up to 2013, showed good profitability over the short and long term in 2014, with performance increasing year-on-year, including in 2017.

Operational capability was in balance and fairly uniform for all segments during the four years analysed, with a positive trend towards balance in all length classes, with low levels of inactivity or vessels not operating full-time.

In relation to biological indicators, the worst figure from the scientific studies concerns anchovy in zone GSA 06, which became an overexploited species; this is mitigated by the best figure — for sardines in the same zone, GSA 06 — for which the F/FMSY was reduced. This, along with a general reduction in the percentage of dependency on surveyed stocks yielded a slight improvement in the indicators within an overall imbalance.

This fleet does not fish for any of the species identified as being at high risk by the STECF, given that these no longer include sardine in zone GSA 06.

Based on these results, it is advisable to continue with the measures put in place to ensure the recovery of a biological balance in the whole of the Mediterranean purse seiner fleet, while monitoring of anchovy and sardine fishing in the zones GSA 06 and GSA 01 is also recommended.

LENGTH	TOT VAL SURVEYED STOCK	TOT VAL STRATUM	PER CENT	FISHSTOCK	STOCK VAL	F_etoile2	overexploited stock	INDICATOR	stock_assess	overexploited
<b>2015 SHI PURSE SEINERS MEDITERRANEAN</b>										
00-18	15,824,707	23,679,136	66.83%	anb-gsa06	1	4.8	TRUE	<b>1.13</b>	<b>14</b>	<b>11</b>
				ane-gsa01	1,527,997	2.26	TRUE			
				ane-gsa06	5,219,081	0.89	FALSE			
				AO-BFT-E	77,612	0.4	FALSE			
				CTC-GSA05	5	1.1	TRUE			
				hke-gsa01	220	7.5	TRUE			
				hke-gsa05	1,556	7.9	TRUE			
				hke-gsa06	115	7.8	TRUE			
				mulbar-gsa01	519	4.9	TRUE			
				mulbar-gsa06	115	1.24	TRUE			
				pil-gsa01	5,290,191	0.66	FALSE			
				pil-gsa06	3,699,630	1.68	TRUE			
				sbr-gsa01	7,510	1.72	TRUE			
				whb-gsa06	156	9.5	TRUE			
<b>2016 SHI PURSE SEINERS MEDITERRANEAN</b>										
00-18	15,041,906	23,688,282	63.50%	ane-gsa06	6,235,925	0.89	FALSE	<b>1.76</b>	<b>10</b>	<b>7</b>
				AO-ALB-M	2,109	0.83	FALSE			
				AO-BFT-E	339,781	0.34	FALSE			
				hke-gsa01	61	7.5	TRUE			
				hke-gsa06	15	7.71	TRUE			
				mon-gsa01_05	6,568	2.05	TRUE			
				mut-gsa01	1,292	4.84	TRUE			
				mut-gsa06	111	1.56	TRUE			
				pil-gsa01	4,317,615	1.26	TRUE			
				pil-gsa06	4,138,429	3.71	TRUE			
<b>2017 SHI PURSE SEINERS MEDITERRANEAN</b>										
00-18	14,602,785	24,911,462	58.62%	ane-gsa06	6,331,941	1.19	TRUE	<b>1.56</b>	<b>11</b>	<b>9</b>
				AO-ALB-M	21,127	0.83	FALSE			
				AO-BFT-E	91,114	0.34	FALSE			
				hke-gsa01	1,400	7.95	TRUE			



			mac-nea	124	1.31	TRUE		
			mon-gsa01_05	429	2.05	TRUE		
			mut-gsa01	2,094	4.84	TRUE		
			mut-gsa06	86	3.05	TRUE		
			pil-27.8c9a	12,399	1.7	TRUE		
			pil-gsa01	4,478,910	1.26	TRUE		
			pil-gsa06	3,663,162	2.59	TRUE		

LENGTH	TOT VAL SURVEYED STOCK	TOT VAL STRATUM	PER CENT	FISHSTOCK	STOCK VAL	F_etoile2	overexploited stock	INDICATOR	stock_assess	overexploited
<b>2015 SHI PURSE SEINERS MEDITERRANEAN</b>										
18-24	26,396,167	32,378,237	81.52%	ane-gsa01	3,529,221	2.26	TRUE	1.20	6	4
				ane-gsa06	12,516,280	0.89	FALSE			
				pil-gsa01	4,754,014	0.66	FALSE			
				pil-gsa06	5,553,796	1.68	TRUE			
				sbr-gsa01	42,586	1.72	TRUE			
				whb-gsa06	270	9.5	TRUE			
<b>2016 SHI PURSE SEINERS MEDITERRANEAN</b>										
18-24	25,757,666	38,608,984	66.71%	ane-gsa06	15,755,153	0.89	FALSE	1.67	6	5
				hke-gsa06	35	7.71	TRUE			
				mac-nea	17,195	1.31	TRUE			
				pil-gsa01	3,263,364	1.26	TRUE			
				pil-gsa06	6,719,548	3.71	TRUE			
				whb-gsa06	2,370	7.88	TRUE			
<b>2017 SHI PURSE SEINERS MEDITERRANEAN</b>										
18-24	24,494,546	38,921,284	62.93%	ane-gsa06	14,216,707	1.19	TRUE	1.55	9	8
				ank-gsa06	17	6.49	TRUE			
				AO-ALB-M	13,666	0.83	FALSE			
				hke-gsa06	6	7.8	TRUE			
				mon-gsa01_05	9	2.05	TRUE			
				pil-27.8c9a	13,988	1.7	TRUE			

				pil-gsa01	4,076,441	1.26	TRUE			
				pil-gsa06	6,173,478	2.59	TRUE			
				swo-med	234	1.85	TRUE			

LENGTH	TOT VAL SURVEYED STOCK	TOT VAL STRATUM	PER CENT	FISHSTOCK	STOCK VAL	F_etoile2	Overexploited stock	INDICATOR	stock_assess	overexploited
<b>2015 SHI PURSE SEINERS MEDITERRANEAN</b>										
24-40	6,840,976	7,509,427	91.10%	ane-gsa06	5,074,945	0.89	FALSE	1.10	4	3
				hke-gsa06	1,245	7.8	TRUE			
				mulbar-gsa06	607	1.24	TRUE			
				pil-gsa06	1,764,180	1.68	TRUE			
<b>2016 SHI PURSE SEINERS MEDITERRANEAN</b>										
24-40	7,965,895	8,360,622	95.28%	ane-gsa06	6,409,259	0.89	FALSE	1.44	2	1
				pil-gsa06	1,556,636	3.71	TRUE			
<b>2017 SHI PURSE SEINERS MEDITERRANEAN</b>										
24-40	9,842,330	10,362,794	94.98%	ane-gsa06	8,502,880	1.19	TRUE	1.38	2	2
				pil-gsa06	1,339,450	2.59	TRUE			

### ***VESSELS USING HOOKS (MEDITERRANEAN)***

The segment of **0-40 metre vessels using hooks** comprises 70 vessels, of which only 37 operated full-time (there is 1 vessel measuring more than 24 metres included in the 00-40 cluster), 15 fewer than the previous year. The vessels are registered as using small-scale gear or bottom-set longlines.

In the economic indicator, we can see that profitability was poor in 2014 and 2015, possibly due to the severe financial crisis in Spain. Conversely, during the economic recovery in 2016 — when there was a steep decline in fixed costs — profitability was high and remained in balance in 2017, showing profitability in the weighted economic indicator.

Gear	Length	CR/BER							RoFTA (%)						
		2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
Hooks	00-40	0.96	2.02	0.23	0.44	10.13	1.89	3.68	-1.74	24.42	89.06	88.70	91.48	12.74	13.54
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)							SHI						
	00-40	0.74	0.73	0.76	0.76	0.78	0.87	0.82	2	2.08					2.05
		OVERALL INDICATOR													
	00-40	1	2	1	1	3	3	2							

Operational capability: Structural capacity continued to be fairly unstable during the four years analysed and showed a slight imbalance, in particular taking into account the high number of vessels not working full-time and an inactivity level of 27% (19 vessels were inactive).

Biological indicators: In this fleet, which mainly fishes for bluefin tuna, surveyed stocks do not account for 40% of catches, meaning that it is not possible to assess the biological indicator, although catches of species such as ARA and HKE in GSA 06 should be reduced. The weighted indicator gives an imbalance in the figures for 2012 and 2013 because these included surface longliners, resulting in an imbalance in the weighted indicator when these vessels should not be taken into account.

The weighted indicator shows a slight imbalance caused by low profitability in 2014 and 2015, which becomes a balance in 2016 and 2017. Although there is a biological imbalance carried over from 2013 in the surface longliner fleet, the situation can be considered to be in balance.

## ***GILLNETTERS (MEDITERRANEAN)***

This segment mainly comprises vessels in the **00-18** length class using small-scale gear, and some bottom longliners. This fishery grew last year in terms of full-time vessels, and increased again this year to include 127 vessels operating full-time.

Profitability in 2012 and 2013 was good over the short and long term, though it worsened drastically in 2014 and 2015 due to a greater increase in costs than revenue. The fleet then underwent a strong improvement in 2016 that continued to a lesser extent in 2017.

In technical terms, it is a fleet that shows good exploitation of the fishing ground and has a large number of full-time vessels. In biological terms, surveyed species account for less than 6% of catches, meaning that the fleet is not considered to depend on overexploited or high-risk species (no SAR).

Gear	Length	CR/BER							RoFTA (%)						
		2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
Gillnets	00-18	8.68	3.00	-0.44	0.09	2.22	1.57	1.58	72.51	83.59	-	-	44.62	23.36	16.39
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)							OVERALL INDICATOR						
	00-18	0.77	0.76	1.02	0.94	0.89	0.85	0.88	3	3	2	2	3	3	3

The overall weighted indicator is balanced, although it is necessary to monitor the economic performance of this fleet closely.

## ***POLYVALENT VESSELS (MEDITERRANEAN)***

A varying number of vessels using small-scale gear fish in the polyvalent fleet. Numbers vary from year to year, and it is difficult to assess the level of inactivity since some small-scale vessels only ever use one method (gillnets or one-panel gillnets, trammel nets, hooks or lines, trolling lines, and so on) while others do not work with any particular method, and these are all considered to be polyvalent. The 00-18 segment comprises 1,056 active vessels, 36 fewer than the previous year, of which only 606 vessels fish for more than 90 days/year. Inactivity in the small-scale gear fleet is around 23%.

The economic indicators are good, although profitability declined sharply in 2017. In technical terms, exploitation of the fishing ground is low and the percentage of active vessels that operated full-time stands at 57%, a normal rate for the artisanal fleet, which operates part-time, supplementing its income with other activities outside the fishing industry.

		CR/BER							RoFTA (%)						
Gear	Length	2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
Polyvalent	00-40	2.93	0.91	1.18	4.98	7.87	1.59	3.59	27.98	-2.80	8.13	186.26	114.39	23.47	65.50
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)							OVERALL INDICATOR						
	00-40	0.62	0.64	0.63	0.65	0.64	0.66	0.65	2	1	2	2	2	3	2

In biological terms, the fleet does not depend on overexploited or high-risk surveyed stocks, since it is a fleet that fishes for a range of species, although as mentioned when discussing the hook segments, the large quantity of vessels has an impact on the main overexploited species such as hake and sardine in GSA 06.

**Last year**, it was possible to form a segment for vessels over 18 metres, which displayed a dependency on overexploited stocks, mainly due to the fleet's dependency on stocks in GSA 06 and to the fact that an SAR — PIL GSA 06 — accounts for more than 10% of catches. This year, only 4 vessels measuring more than 18 metres operated full-time, meaning that statistical confidentiality prevented the segment from being created and the 4 vessels had to be included in a cluster with 00-18 metre vessels.

Given that the slight imbalance in the weighted indicator is due to the technical indicator, and given that it is a purely artisanal fleet, an **action plan** is not recommended.

## ***DREDGERS***

There was an increase in the number of vessels operating in this fishery, from 32 to 53 active vessels, and there were 30 full-time vessels, compared to 21 in the previous year. The economic indicators show good profitability in the series analysed, although profitability fell in 2017. The fleet does not depend on surveyed species, which would inform us of any dependency on overexploited or at-risk species. Exploitation of the fishing ground is poor, as in the rest of the artisanal fisheries. **No action plan is required.**

		CR/BER							RoFTA (%)						
Gear	Length	2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
Dredges	00-18	2.57	7.47	5.06	1.50	4.24	1.14	2.45	31.79	60.67	98.93	15.36	25.62	3.55	18.97
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)							OVERALL INDICATOR						
	00-18	0.89	0.85	0.87	0.49	0.92	0.83	0.81	3	3	3	2	3	2	3

## VESSELS USING POTS

A total of 31 vessels operated, of which 25 fished full-time, 4 more than the previous year. The economic indicators show good profitability in the series analysed, and good operational capability in the fishing ground. Since the fleet does not depend on surveyed species, the overall indicators are **in balance**.

Gear	Length	CR/BER							RoFTA (%)						
		2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
Pots	00-40	1.03	1.24	2.12	2.37	6.16	1.55	2.84	1.91	10.73	49.99	28.37	318.41	26.38	101.42
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)							OVERALL INDICATOR						
	00-40	1.28	1.22	1.29	1.27	1.27	1.05	1.16	3	3	3	3	3	3	3

## SURFACE LONGLINERS (MEDITERRANEAN)

**00-18 metres:** This segment comprises 42 active vessels, of which 37 operated full-time, as in the previous year. Following poor profitability in 2015, in which revenue did not cover costs, both short- and long-term profitability recovered in 2016, and again to a lesser extent in 2017, resulting in a balanced overall economic indicator.

Operational capability showed a slight imbalance with 7 inactive vessels.

In biological terms, the segment depends mainly on overexploited SWO (although dependency fell sharply, with an increase in catches of tuna, a species in a very healthy situation), which is currently subject to a recovery plan recently approved by the ICCAT, resulting in a biological and technical imbalance in the overall indicator.

Gear	Length	CR/BER							RoFTA (%)						
		2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
Surface longlines	00-18			1.87	-0.64	5.26	1.88	2.44			27.88	-31.74	87.83	41.44	43.15
	18-40	0.62	3.17	1.49	1.52	2.67	1.99	2.09	-22.17	76.97	18.15	29.06	42.13	45.31	40.65
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)							SHI						
	00-18			0.74	0.80	0.75	0.73	0.74			1.71	2.78	1.53	1.58	1.74
	18-40	0.96	0.84	0.89	0.87	0.84	0.83	0.84	1.61	1.69	1.61	2.37	1.69	1.54	1.69
		SAR							OVERALL INDICATOR						
	00-18							SWO-37			2	1	2	2	2
18-40							SWO-37	1	2	2	2	2	2	2	

**18-40 metres:** Overall, 22 vessels fish in this segment, 21 of which operated full-time, 1 more than the previous year, while 2 were inactive. The economic situation shows high profitability, in particular over the long term. The technical indicator shows fishing ground exploitation to be almost in balance. Biologically, the fleet depends on overexploited SWO stock, but dependency decreased this year with inclusion in the assessment of swordfish caught outside of the Mediterranean (in national Atlantic waters, where the stock is not overexploited).

Moreover, this year SWO has been classified as a high-risk species in the Mediterranean by the STECF, and this fleet accounted for more than 105 of the SWO catches.

The **surface longliner segment requires the continuance of the action plan** based on restriction of access in this zone to vessels not demonstrated to be operating full-time in the Mediterranean, as well as a reduction in the number of temporary fishing permits (TFPs) granted and licences for the Mediterranean held by the rest of the vessels included in the Consolidated Register of Surface Longliners.



LENGTH	TOT VAL SURVEYED STOCK	TOT VAL STRATUM	PER CENT	FISHSTOCK	STOCK VAL	F_etoile2	overexploited stock	INDICATOR	stock_assess	overexploited
<b>2014 SHI SURFACE LONGLINERS MEDITERRANEAN</b>										
00-18	5,377,748	6,002,699	89.59%	AO-BFT-E	406,559	0.4	FALSE	1.7	4	2
				AO-SWO-N	20,332	0.82	FALSE			
				sbr-gsa01	177,069	1.72	TRUE			
				swo-med	4,773,788	1.82	TRUE			
18-24	6,223,273	7,617,812	81.69%	AO-ALB-N	814	0.72	FALSE	1.6	7	4
				AO-BET	2,329	0.95	FALSE			
				AO-SWO-N	1,326,942	0.82	FALSE			
				hke-gsa01	346	7.4	TRUE			
				sbr-gsa01	29,980	1.72	TRUE			
				swo-med	4,862,340	1.82	TRUE			
				whm-27	522	1.63	TRUE			
<b>2015 SHI SURFACE LONGLINERS MEDITERRANEAN</b>										
00-18	7,226,568	7,606,261	95.01%	AO-ALB-N	464	0.54	FALSE	2.78	7	4
				AO-BFT-E	434,881	0.40	FALSE			
				AO-SWO-N	39,047	0.21	FALSE			
				hke-gsa06	7	7.80	TRUE			
				mulbar-gsa06	2,355	1.24	TRUE			
				sbr-gsa01	120,317	1.72	TRUE			
				swo-med	6,629,498	2.97	TRUE			
18-24	8,870,864	9,509,145	93.29%	AO-ALB-N	100	0.54	FALSE	2.37	6	3
				AO-BET	6,365	1.28	TRUE			
				AO-BFT-E	130,002	0.40	FALSE			
				AO-SWO-N	1,781,531	0.21	FALSE			
				sbr-gsa01	21,156	1.72	TRUE			
				swo-med	6,931,710	2.97	TRUE			
<b>2016 SHI SURFACE LONGLINERS MEDITERRANEAN</b>										
00-18	6,253,052	6,498,154	96.23%	AO-ALB-M	193,791	0.83	FALSE	1.53	5	3
				AO-BET	320	1.28	TRUE			
				AO-BFT-E	1,075,517	0.34	FALSE			
				hke-gsa06	226	7.71	TRUE			
				swo-med	4,983,198	1.82	TRUE			
18-24	25,312,510	26,822,328	94.37%	AO-ALB-M	51,364	0.83	FALSE	1.69	6	3
				AO-ALB-N	827	0.54	FALSE			
				AO-BET	7,756	1.28	TRUE			
				AO-BFT-E	2,118,364	0.34	FALSE			
				pil-gsa01	223	1.26	TRUE			
swo-med	23,133,976	1.82	TRUE							
<b>2017 SHI SURFACE LONGLINERS MEDITERRANEAN</b>										
00-18	5,984,593	6,283,519	95.24%	AO-ALB-M	572,047	0.83	FALSE	1.58	4	2
				AO-BFT-E	669,330	0.34	FALSE			
				hke-gsa06	268	7.8	TRUE			
				swo-med	4,742,949	1.85	TRUE			
18-40	7,108,078	7,308,422	97.26%	AO-ALB-M	223,224	0.83	FALSE	1.54	5	2
				AO-BET	1,584	1.28	TRUE			
				AO-BFT-E	583,264	0.34	FALSE			
				swo-med	5,255,646	1.85	TRUE			
swo-na	1,044,359	0.78	FALSE							

## CANARY ISLANDS

### POLYVALENT VESSELS (CANARY ISLANDS)

**00-40 segment:** Of the 497 active vessels in this segment of the fleet, 159 operated full-time (all of which measured less than 18 metres, excepting one measuring 33 metres). In total, 142 vessels were totally inactive.



The economic indicators deviate greatly from the data for previous years: the statistics show a sharp increase in revenue compared to 2016 (up 97%), while costs also increased to more than double 2016 levels (rising by 112%). These increases occurred under both non-variable cost headings (fixed costs and depreciation) and under all variable cost headings, particularly staff costs both for salaried and unsalaried workers, which more than doubled. The number of vessels fell from 170 to 159. Staff figures saw an abnormal increase from 350 in 2016 to 471 in 2017, figures that are, to a certain extent, inconsistent with the above. According to an analysis of the value of landings registered in electronic logs and sales notes, fishing revenues increased by 6%, which is consistent with the volume caught, which was practically the same as in 2016. Therefore, this figure is considered to come from a statistical error in the sample, although it is necessary to wait and see how the figures develop in the years to come to assess whether this is a real trend in the stratum or whether the sample selected for the economic survey was less than optimal.

		CR/BER							RoFTA (%)						
Gear	Length	2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
Polyvalent	00-40	0.54	1.20	1.37	2.12	3.22	0.71	1.58	-138.58	9.48	14.11	66.32	34.26	-17.15	7.41
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)							OVERALL INDICATOR						
	00-40	0.64	0.77	0.59	0.59	0.53	0.58	0.58	1	3	2	2	2	1	2

In this fleet, exploitation of the fishing ground is highly out of balance, as reflected in a technical indicator that is one of the lowest in the full-time fleet, which clearly indicates some difficulty in measuring the activity taking place in the Canary Islands. Nevertheless, and as reiterated by the STECF as of 2015, low exploitation of the fishing ground by the artisanal fleet does not indicate an imbalance between capacity and fishing opportunities.

The biological indicator does not show a dependency on overexploited or SAR species.

Given the result obtained in the weighted indicator, the **segment is considered to remain in balance** for the present.

## PURSE SEINERS (CANARY ISLANDS)

A total of 10 vessels continued to fish full-time of a total of 16 vessels active in the segment (2 more than in 2016). Both short- and long-term profitability were good; the results obtained in 2016 were excessive, a situation that may have been caused by undue weight being given to depreciation data for that year.

The match between capacity and the fishing ground and the lack of dependency on at-risk stocks mean that this fleet constitutes a segment **in total balance**.

Gear	Length	CR/BER					RoFTA (%)				
		2014	2015	2016	2017	2014-2017	2014	2015	2016	2017	2014-2017
Purse seines	00-18	1.64	1.57	19.14	2.61	6.81	40.51	19.73	625.42	156.85	255.76
		TECHNICAL (MAX = AV. MOST ACTIVE)					OVERALL INDICATOR				
	00-18	0.96	0.90	0.94	0.95	0.94	3	3	3	3	3

## VESSELS USING HOOKS (CANARY ISLANDS)

The 00-18 segment comprises 70 vessels, of which 23 are full-time and use small-scale or Canarian pole-and-line gear to fish for tuna. In the 18-40 segment (in which all vessels measure more than 24 metres except for 7 vessels included in the cluster), 23 vessels operate full-time, of which 21 are pole-and-line tuna vessels. Both segments show a small reduction in fleet size compared to the previous year.

Gear	Length	CR/BER					RoFTA (%)				
		2014	2015	2016	2017	2014-2017	2014	2015	2016	2017	2014-2017
Hooks	00-18			1.45	6.74	4.98			4.69	143.51	97.24
	18-40	1.18	1.14	3.38	0.60	1.45	7.73	9.20	131.74	-19.04	26.72
		TECHNICAL (MAX = AV. MOST ACTIVE)					SHI				
	00-18			0.87	0.94	0.92			0.66	0.84	0.78
	18-40	1.00	0.98	0.91	0.93	0.94		1.03	0.9	1.02	0.99
		OVERALL INDICATOR									
	00-18			3	3	3					
	18-40	3	3	3	2	3					

In the 00-18 segment there has been a steady increase in the profitability of this fishery, with a capacity in balance with the fishing ground. However, there was increased dependency on the only overexploited species, bigeye tuna, catches of which doubled, meaning that the catches of this fleet will need to be monitored in the future.

The 18-40 segment shows a decrease in profitability, mainly caused by a very steep drop in revenue as reflected in statistical data; this is not consistent with the real value of landings, so the situation should be monitored over the next year to see if this trend continues. Exploitation of the fishing ground is balanced, while the biological indicator has worsened due to a decrease in catches of albacore tuna (a healthy stock) to almost half previous levels.

The weighted indicator shows a balance, and therefore no action plan is required.

LENGTH	TOT VAL SURVEYED STOCK	TOT VAL STRATUM	PER CENT	FISHSTOCK	STOCK VAL	F_etoile2	overexploited stock	INDICATOR	stock_assess	overexploited
<b>2015 SHI HOOKS CANARY ISLANDS</b>										
18-40	3,049,104	3,653,461	83.46%	AO-ALB-N	918,334	0.54	FALSE	<b>1.03</b>	<b>4</b>	<b>1</b>
				AO-BET	2,022,176	1.28	TRUE			
				AO-BFT-E	93,910	0.40	FALSE			
				AO-YFT	14,684	0.77	FALSE			
<b>2016 SHI HOOKS CANARY ISLANDS</b>										
00-18	3,751,528	4,815,086	77.91%	AO-ALB-N	2,933,121	0.54	FALSE	<b>0.66</b>	<b>4</b>	<b>1</b>
				AO-BET	649,383	1.28	TRUE			
				AO-BFT-E	126,941	0.34	FALSE			
				AO-YFT	42,082	0.77	FALSE			
18-40	9,255,974	9,770,078	94.74%	AO-ALB-N	4,583,686	0.54	FALSE	<b>0.90</b>	<b>4</b>	<b>1</b>
				AO-BET	4,480,003	1.28	TRUE			
				AO-BFT-E	68,172	0.34	FALSE			
				AO-YFT	124,114	0.77	FALSE			
<b>2017 SHI HOOKS CANARY ISLANDS</b>										
00-18	2,657,138	3,712,842	71.57%	AO-ALB-N	1,256,458	0.54	FALSE	<b>0.84</b>	<b>4</b>	<b>1</b>
				AO-BET	1,120,962	1.28	TRUE			
				AO-BFT-E	220,382	0.34	FALSE			
				AO-YFT	59,336	0.77	FALSE			
18-40	6,932,811	7,964,144	87.05%	AO-ALB-N	2,157,108	0.54	FALSE	<b>1.02</b>	<b>4</b>	<b>1</b>
				AO-BET	4,501,381	1.28	TRUE			
				AO-BFT-E	112,062	0.34	FALSE			
				AO-YFT	162,261	0.77	FALSE			

## DETAILED ANALYSIS OF NON-NATIONAL NORTH ATLANTIC SEGMENTS

The fleet operating in the non-national North Atlantic comprised 149 active vessels in 2017 (8 fewer than the previous year), of which 146 operated for more than 90 days (7 fewer than in 2016). A further 52 vessels used trawling gear, 54 passive gear in ICES and 40 used surface longlines.

### TRAWLERS

The trawler fleet operating in NEAFC and NAFO waters has been restructured so that the different fishing grounds can be assessed separately.

- The 18-24 segment has been grouped together with the 10 trawlers from Portugal operating in the waters of zone 28.9.a, and shows a balance.
- The 24-40 segment comprises 31 trawlers in NEAFC–EU waters (fleet of 300). This fleet shows good profitability and a good exploitation of the fishing ground, and does not depend on overexploited species, meaning that it is in balance.
- The segment of vessels over 40 metres comprises 13 vessels (11 of which operate full-time), of which most are NAFO trawlers and NEAFC cod-fishing vessels. The segment has performed well in economic terms and exploitation of the fishing ground has improved. The year included studies on mortality of Norway redfish, a highly overexploited species, which affected the results in the biological indicator (SHI), which is in balance but nevertheless is very close to entering into a moderate imbalance.

**None of the trawler fleets requires an action plan.**

Gear	Length	CR/BER							RoFTA (%)						
		2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
Bottom trawl nets	00-24			1.74	1.98	3.62	2.14	2.49			51.03	105.04	120.60	99.08	102.41
	24-40	1.27	-0.18	1.52	1.88	3.48	2.29	2.40	30.43	-111.38	46.96	69.85	111.61	130.76	103.56
	> 40	1.33	1.84	1.87	3.48	3.56	3.07	3.10	37.43	63.02	133.78	456.00	625.05	306.34	383.34
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)							SHI						
	00-24			1.03	1.04	1.01	1.03	1.03							
	24-40	0.82	0.84	0.85	0.89	0.92	0.91	0.90							
	> 40	0.83	0.75	0.84	0.83	0.87	0.91	0.88				0.82	0.81	0.98	0.91
		OVERALL INDICATOR													
	00-24			3	3	3	3	3							
	24-40	3	1	3	3	3	3	3							
> 40	3	3	3	3	3	3	3								

## VESSELS USING PASSIVE GEAR

This segment comprises 47 vessels using passive gear and 7 bottom longliners of less than 100 GRT that fish full-time in NEAFC–EU waters. This fleet is economically profitable, with very uniform exploitation of the fishing ground, and highly dependent on Northern hake, the biological status of which is very good. The stratum maintains the balance of previous years and **does not require an action plan**.

Gear	Length	CR/BER							RoFTA (%)						
		2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
Passive gear	18-40	1.73	1.57	2.10	2.83	3.35	2.19	2.53	64.63	42.64	73.07	136.08	164.86	92.39	113.10
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)							SHI						
	18-40	0.86	0.76	0.81	0.84	0.89	0.93	0.89	0.98	0.98	1.22	0.79	0.96	0.79	0.87
		OVERALL INDICATOR													
	18-40	3	3	2	3	3	3	3							

## BIOLOGICAL INDICATORS FOR 2015-2017 (NORTH ATLANTIC)

GEAR	LENGTH	TOT VAL SURVEYED STOCK	TOT VAL STRATUM	PER CENT	FISHSTOCK	STOCK VAL	F_etoile2	overexploited stock	INDICATOR	stock_assess	overexploited
<b>2015 SHI NON-NATIONAL NORTH ATL.</b>											
TRAWL NETS	> 40	57,261,118	115,590,139	49.54%	bli-5b67	72,020	0.28	FALSE	0.82	9	4
					cod-arct	55,155,397	0.84	FALSE			
					had-arct	978,657	0.57	FALSE			
					hke-nrtn	391,737	0.79	FALSE			
					lin-comb	1,149	1.08	TRUE			
					mac-nea	561	1.31	TRUE			
					RNG-5B67	641,149	0.25	FALSE			
					sol-bisc	19,133	1.34	TRUE			
whb-comb	1,316	1.45	TRUE								
PASSIVE GEAR	24-40	87,756,149	90,629,872	94.62%	AO-ALB-N	3,050,124	0.54	FALSE	0.79	6	3
					AO-BET	4,703	1.28	TRUE			
					bli-5b67	75,917	0.28	FALSE			
					hke-nrtn	80,320,259	0.79	FALSE			
					hke-soth	523	2.10	TRUE			
					lin-comb	2,304,623	1.08	TRUE			
<b>2016 SHI NON-NATIONAL NORTH ATL.</b>											
TRAWL NETS	> 40	39,721,027	88,009,309	45.13%	bli-5b67	48,569	0.28	FALSE	0.81	6	2
					cod.27.1-2	37,619,807	0.83	FALSE			
					ghl.27.561214	168,446	1.1	TRUE			
					had.27.1-2	556,328	0.57	FALSE			
					RNG-5B67	1,326,927	0.25	FALSE			
					whb.27.1-912	949	1.21	TRUE			
PASSIVE GEAR	24-40	100,044,207	107,861,969	92.75%	AO-ALB-N	832,961	0.54	FALSE	0.96	6	3
					AO-BET	13,970	1.28	TRUE			
					bli-5b67	50,887	0.28	FALSE			
					had-7b-k	91	1.69	TRUE			
					hke-nrtn	99,145,580	0.96	FALSE			
					sol.27.8ab	718	1.1	TRUE			
<b>2017 SHI NON-NATIONAL NORTH ATL.</b>											
TRAWL NETS	> 40	40,649,839	82,667,770	49.17%	bli-5b67	52,759	0.28	FALSE	0.98	7	3
					cod.27.1-2	38,054,519	1	TRUE			
					ghl.27.561214	261,426	1.03	TRUE			
					had.27.1-2	399,992	0.57	FALSE			
					POK.27.1-2	125,346	0.74	FALSE			
					reg.27.1-2	167,590	5.8	TRUE			
					RNG-5B67	1,588,206	0.25	FALSE			

PASSIVE GEAR	24-40	101,528,907	110,277,415	92.07%	bli-5b67	83,076	0.28	FALSE	0.79	5	2
					had-7b-k	84	1.69	TRUE			
					hke-nrtn	101,445,611	0.79	FALSE			
					hke-soth	31	2.1	TRUE			
					sol.27.8ab	105	0.91	FALSE			

## ***SURFACE LONGLINERS (NORTH ATLANTIC)***

In this zone, 10 surface longliners in the 12-24 length class operated full-time in 2017 (2 fewer than in 2016), and 30 in the 24-40 length class (3 vessels fewer than in 2016). The fleet shows good profitability, consolidating good performances since 2014. Exploitation of the fishing ground is optimal in both classes. In relation to the biological indicator, we can see that the 00-24 length class displays a low dependency on overexploited stocks, given that it depends on Atlantic SWO. Nevertheless, although the fleet's situation continues to be balanced, its biological indicator worsened in comparison to previous years, since its F etoile value rose from 0.21 to 0.78 and there was a slight increase in bigeye tuna catches. The 24-40 segment does not depend on overexploited species.

Both segments are in balance. **No action plan is required.**

Gear	Length	CR/BER							RoFTA (%)						
		2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
Surface longliners	00-24			1.17	2.66	8.75	10.29	8.25			12.41	99.91	292.50	272.27	237.36
	24-40	1.06	0.49	2.19	2.39	3.95	2.97	2.98	4.09	-22.38	31.17	33.88	60.58	54.31	48.61
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)							SHI						
	00-24			0.93	0.91	1.00	1.02	1.00			0.79	0.52		0.91	0.83
	24-40	0.92	0.94	0.92	0.92	0.88	0.91	0.90	0.83	0.82	0.84	0.35			0.58
		SAR							OVERALL INDICATOR						
00-24											3	3	3	3	
24-48				BSH-27				3	2	3	3	3	3	3	

LENGTH	TOT VAL SURVEYED STOCK	TOT VAL STRATUM	PER CENT	FISHSTOCK	STOCK VAL	F_etoile2	overexploited stock	INDICATOR	stock_assess	overexploited
<b>2014 SHI SURFACE LONGLINERS NON-NATIONAL NORTH ATL.</b>										
00-24	1,903,794	3,828,882	49.72%	AO-ALB-N	752,489	0.72	FALSE	0.78	3	0
				AO-BET	106,414	0.95	FALSE			
				AO-SWO-N	1,044,891	0.82	FALSE			
<b>2015 SHI SURFACE LONGLINERS NON-NATIONAL NORTH ATL.</b>										
00-24	2,744,172	5,317,203	51.61%	AO-ALB-N	585,955	0.54	FALSE	0.52	5	3
				AO-BET	55,777	1.28	TRUE			
				AO-SWO-N	1,886,829	0.21	FALSE			
				Swo-med	215,298	2.97	TRUE			
				Whm-27	314	1.63	TRUE			
<b>2017 SHI SURFACE LONGLINERS NON-NATIONAL NORTH ATL.</b>										
00-24	3,267,101	12,495,340	3.34%	AO-ALB-N	484,292	0.54	FALSE	0.91	4	2

				AO-BET	764,543	1.28	TRUE		
				swo-med	143,023	1.85	TRUE		
				swo-na	1,875,243	0.78	FALSE		

## DETAILED ANALYSIS OF SEGMENTS IN INTERNATIONAL WATERS

### TRAWLERS

**24-40 segment:** The vessels in this segment (39 full-time vessels) are mainly international trawlers and trawlers from third countries — 5 trawlers from Portugal that fish in international waters and 2 CNW trawlers that mainly operate in international waters.

Gear	Length	CR/BER							RoFTA (%)						
		2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
Bottom trawling	24-40	0.38	-0.21	11.74	2.71	2.87	1.01	2.33	-91.00	-168.94	1,538.84	193.20	112.40	0.76	144.36
	> 40	0.08	0.28	3.78	2.15	1.89	2.30	2.17	-50.98	-55.82	262.47	242.72	160.97	198.13	186.42
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)							OVERALL INDICATOR						
	24-40	0.62	0.75	0.82	0.83	0.85	0.84	0.83	1	1	2	3	3	2	3
	> 40	0.88	0.91	0.86	0.85	0.82	0.86	0.85	1	2	3	3	3	3	

In economic terms, the DTS 24-40 stratum's short-term profitability fell (although it remained in balance in 2017). Meanwhile, long-term profitability experienced a sharp decline due to a steep fall in revenue, while costs stayed at similar levels to 2016. In technical terms, the exploitation of the fishing ground displayed a slight imbalance, close to a balance. It does not depend on overexploited surveyed stocks. Given the current situation, **an action plan is not required**, although the fleet's economic performance over the coming years should be monitored.

**Vessels over 40 metres:** In total, 33 vessels fish in this segment (international trawlers and NAFO trawlers operating in the South Atlantic), 3 more than the previous year. Economic profitability improved both over the short and long term. In technical and biological terms, the segment is in balance, and **does not require an action plan**.

### VESSELS USING HOOKS

**00-24 metres:** This segment comprises 19 vessels using small-scale gear (14 full-time vessels compared to 26 the previous year) and mainly fishing outside the national fishing ground in zone 34.1.1, Morocco, primarily for silver scabbardfish, scabbardfish, red seabream and bluefin tuna.

The economic indicator shows improvement over 2016, both in short-term and long-term profitability, possibly due to a decrease in the number of vessels, which influenced the improvement over the short term. Long-term profitability improved in 2017 to reach a balance, but shows an imbalance in the weighted indicator due to the poor performance of previous years. The economic performance of this segment must be monitored to accurately assess whether this improvement will continue into the future.

The indicator on exploitation of the fishing ground is close to being in balance, and the fleet does not depend on more than 40% surveyed species.

In the **24-40 segment**, there were 13 full-time vessels (3 more than in 2016), mainly comprising CNW purse seiners (7), bottom longliners (4), and surface longliners (2) that operate in tuna fisheries, which continued to improve their profitability in 2017. The fleet is almost in balance in the technical indicator.

Gear	Length	CR/BER					RoFTA (%)				
		2014	2015	2016	2017	2014-2017	2014	2015	2016	2017	2014-2017
Hooks	00-24	-0.09	-0.67	1.15	2.02	1.29	-92.62	-75.89	1.58	19.52	-5.46
	> 24	0.72	1.47	3.39	4.78	3.70	-12.30	42.84	133.62	163.75	127.86
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)					SHI				
	00-24	0.85	0.96	1.23	0.87	0.98					
	> 24	0.77	1.02	1.03	0.78	0.88		0.89	0.95	1.01	0.98
		OVERALL INDICATOR									
	00-24	1	2	3	3	2					
	> 24	1	3	3	2	3					

The biological indicator shows a dependency on at-risk species. The fleet depended on three overexploited species (bigeye tuna, Southern hake and blue whiting), and the increase in bigeye tuna catches is what caused the indicator to enter into a slight imbalance. The overall indicator shows that this segment is in balance, and therefore **does not require an action plan**, although it will be necessary to monitor the fleet's situation and catches of bigeye tuna.

LENGTH	TOT VAL SURVEYED STOCK	TOT VAL STRATUM	PER CENT	FISHSTOCK	STOCK VAL	F_etoile2	overexploited stock	INDICATOR	stock_assess	overexploited
<b>2015 SHI HOOKS INTERNATIONAL</b>										
24-40	4,579,611	9,347,675	48.99%	AO-BET	1,014,504	1.28	TRUE	0.89	3	1
				AO-YFT	3,534,832	0.77	FALSE			
				hke-soth	30,276	2.10	TRUE			
<b>2016 SHI HOOKS INTERNATIONAL</b>										
24-40	9,072,678	20,963,322	43.28%	AO-ALB-N	10,039	0.54	FALSE	0.95	3	1
				AO-BET	3,171,778	1.28	TRUE			
				AO-YFT	5,890,862	0.77	FALSE			
<b>2017 SHI HOOKS INTERNATIONAL</b>										
24-40	10,120,474	18,564,394	54.52%	AO-ALB-N	184,925	0.54	FALSE	1.01	5	3
				AO-BET	4,666,101	1.28	TRUE			
				AO-YFT	5,217,449	0.77	FALSE			
				hke-soth	51,968	2.1	TRUE			
				whb.27.1-912	30	1.26	TRUE			

### ***FREEZER TUNA SEINERS***

This fleet comprises 26 vessels, and is highly stable and in balance.



The improving economic trend of the previous year continued in 2017, which highlights that the data for 2015 yielded unreliable results.

The fleet does not depend on overexploited stocks, but the biological indicator worsened in comparison with 2016 because albacore tuna from the Indian Ocean is now classified as an overexploited species. This fact, together with an increase in catches of Atlantic bigeye tuna (an overexploited species), caused the indicator to worsen.

Exploitation of the fishing ground showed a slight imbalance, though it was very close to being in balance. Although the **overall indicator was balanced**, it will be necessary to monitor the economic performance of this fleet and its biological development closely due to increased catches of Atlantic bigeye tuna.

Gear	Length	CR/BER							RoFTA (%)						
		2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
Purse seines	> 40	3.42	2.59	2.28	0.99	2.30	2.32	2.17	116.94	113.52	52.51	-0.64	61.78	100.37	75.39
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)							SHI						
	> 40	0.94	0.90	0.88	0.90	0.95	0.89	0.91	0.71	0.68	0.70	0.99	0.97	0.98	0.95
		OVERALL INDICATOR													
	> 40	3	3	3	2	3	3	3							

LENGTH	TOT VAL SURVEYED STOCK	TOT VAL STRATUM	PER CENT	FISHSTOCK	STOCK VAL	F_etoile2	overexploited stock	INDICATOR	stock_assess	overexploited
<b>2015 SHI PURSE SEINERS INTERNATIONAL</b>										
> 40	369,885,318	392,558,492	94.22%	AO-ALB-N	134,192	0.54	FALSE	0.99	13	3
				AO-BET	23,073,284	1.28	TRUE			
				AO-SKJ-W	82,835	0.70	FALSE			
				AO-YFT	84,738,402	0.77	FALSE			
				EPO-BET	6,331,740	0.95	FALSE			
				EPO-YFT	4,804,281	0.98	FALSE			
				IO-ALB	516,139	0.85	FALSE			
				IO-BET	34,043,214	0.76	FALSE			
				IO-SKJ	10,127,376	0.62	FALSE			
				IO-YFT	204,958,487	1.11	TRUE			
				WPO-BET	185,496	1.57	TRUE			
				WPO-SKJ	511,420	0.45	FALSE			
				WPO-YFT	378,452	0.72	FALSE			
<b>2016 SHI PURSE SEINERS INTERNATIONAL</b>										
> 40	525,794,429	578,585,351	90.88%	AO-BET	25,495,734	1.28	TRUE	0.97	9	3
				AO-YFT	97,934,183	0.77	FALSE			
				blm-io	6,165	2.42	TRUE			
				EPO-BET	22,469,340	0.87	FALSE			
				EPO-YFT	6,318,594	0.97	FALSE			
				IO-ALB	101,855	0.85	FALSE			
				IO-BET	53,105,483	0.76	FALSE			
				IO-SKJ	62,693,296	0.81	FALSE			
				IO-YFT	257,669,779	1.11	TRUE			
<b>2017 SHI PURSE SEINERS INTERNATIONAL</b>										
> 40	437,680,956	473,950,069	92.35%	AO-ALB-N	12,495	0.54	FALSE	0.98	8	4
				AO-BET	31,196,395	1.28	TRUE			
				AO-YFT	68,489,754	0.77	FALSE			
				blm-io	19,384	2.41	TRUE			
				IO-ALB	343,979	1.11	TRUE			
				IO-BET	105,281,263	0.76	FALSE			
				IO-SKJ	8,385,301	0.81	FALSE			
				IO-YFT	223,952,386	1.11	TRUE			

## ***SURFACE LONGLINERS***

A total of 87 vessels belongs to this fleet (62 vessels measuring 18-40 metres and 25 measuring more than 40 metres) operating in the South Atlantic, Indian Ocean and Pacific Ocean.

The economic situation displayed high short-term and long-term profitability although results worsened in comparison with 2016 due to a sharper decline in revenue than other headings.

The good exploitation of the fishing ground, with no vessels with low operational capability or inactive vessels, along with the fact that the segment does not depend on overexploited species leads us to conclude that it is a fleet in balance that **does not require an action plan**.

		CR/BER							RoFTA (%)						
Gear	Length	2012	2013	2014	2015	2016	2017	2012-2017	2012	2013	2014	2015	2016	2017	2012-2017
Surface longlines	18-40	0.32	1.52	1.80	3.54	2.83	2.16	2.43	-33.52	21.93	28.02	145.77	96.66	62.74	76.87
	> 40	-0.13	0.46	2.32	1.95	1.88	2.53	2.17	-90.93	-38.06	74.86	86.07	90.02	65.50	69.16
		TECHNICAL (MAX = AV. 10 MOST ACTIVE)							OVERALL INDICATOR						
	18-40	0.90	0.87	0.91	0.91	0.86	0.90	0.89	2	3	3	3	3	3	3
	> 40	0.95	0.92	0.91	0.92	0.95	0.93	0.93	2	2	3	3	3	3	3

## **MEASURES DEFINED FOR SEGMENTS WITH AN IMBALANCE WITHIN THE SPANISH OPERATIONAL FISHING FLEET**

Details of the action plan for the coming years, which was launched last year, can be found below. As the fisheries industry and related activities fall under different jurisdictions, some of these activities are carried out by the central government and others by the Autonomous Communities.

### **1. Biological resource recovery measures**

- a) Data collection
- b) Ecosystem improvement
- c) Surveillance and control improvements

### **2. Effort reduction measures**

- a) Permanent cessation
- b) Allocation of fishing opportunities
- c) Temporary cessation
- d) Other measures

### **3. Measures aimed at improving profitability in the short-to-medium term**

- a) Sustainable fisheries
- b) Employment
- c) Marketing

### **1. Biological resource recovery measures**

Data collection and control programmes are cross-cutting initiatives that can form the starting point for adopting measures as key tools for monitoring the results achieved.

#### **a) Data collection**

The surveys described below help to improve our understanding of the resources accessed by the majority of the imbalanced segments. To give a greater overview, they are organised by fishing method and ground.

As part of the activities planned under the current national data collection programme, which is governed by the updated Regulation published in June 2017, and as required by the EMFF Operational Programme, work will continue on the various surveys that proved indispensable for the work of different stock evaluation groups. Broken down by fishery, the following surveys are the most important:

International Bottom Trawl Surveys (IBTS) aimed at estimating figures for the main commercial and non-commercial groundfish species, their spatial distribution patterns and hydrological data for the area platform.

Notable among these is the IBTS for Cantabria and Galicia (ICES divisions VIIIc and IXa N) at depths of 70-500 metres, with special sets that increase this scope to 30-800 metres. This survey, performed in September and October, will be complemented by the 'IBTS 1st Quarter ARSA', which seeks the same aims but

takes place in the spring. This will give us more accurate data, laying the groundwork for conducting scientific studies and formulating more exact recommendations.

As the action plan shows an imbalance in the overall indicators for the north-west Cantabrian Sea (CNW) 10-24 m and 24-40 m bottom trawl segments, mainly influenced by their biological indicators, these surveys will help give us a more precise understanding of stock developments so that tailored recommendations can be made.

The 'Mackerel/H. Mackerel eggs survey', a three-year programme consisting of four surveys in which data on the eggs and adult fish of Atlantic mackerel and Atlantic horse mackerel are collected at different times as part of a joint international evaluation of spawning-stock biomass, examining the annual egg production of mackerel stock in the north-west Atlantic and horse mackerel egg production and fertility in the Western stock. Two prestigious research institutes are involved in this survey: the Spanish Institute of Oceanography (*Instituto Español de Oceanografía*) and AZTI. These surveys collect data from ICES divisions VIII a, b, c and d and ICES division IXa N.

There is an imbalance in the biological indicator of the CNW 24-40 m purse seine segment. Of the species targeted by this segment, mackerel is overexploited and the data for horse mackerel indicate that this stock is also close to being overexploited. An analysis of the data obtained in these surveys is therefore essential for a proper assessment of these stocks.

SAREVA: This is a three-year joint Spanish-Portuguese survey to evaluate the sardine stock by monitoring daily egg production, as well as examining the spatial distribution of other species of commercial interest present during the same period, such as Atlantic mackerel, Atlantic horse mackerel, hake and blue whiting. This survey concerns ICES divisions VIII b and c and IXa N.

PELACUS: This survey aims to monitor and assess the pelagic ecosystem, obtaining abundance indices for the main small pelagics of commercial interest and the spatial distribution patterns of higher predators, eggs, fish and ichthyoplankton components. This is an annual survey conducted in divisions VIIIc and IXa. Work also continued on the International Blue Whiting Spawning Stock Survey (IBWSS), which was launched in 2018, completing the areas prospected under the auspices of other Member States, such as the Netherlands and Ireland, focusing on the southern component of this widely distributed stock.

BIOMAN: This is a spring survey on adult anchovies and eggs with a view to estimating biomass and population age data. It may also gather data on other species, such as the sardine.

MEDITS: This survey is conducted in the General Fisheries Commission for the Mediterranean (GFCM) geographical sub-areas 'Northern Alboran Sea', 'Alboran

Island' and 'Northern Spain'. Its aim is to estimate abundance indices (number and biomass) for the main groundfish species of commercial interest at depths of between 30 and 800 m. It also aims to describe the demographic structure of the species affected by fishing activities, establish spatial distribution patterns and assess the fishery's environmental impact. Sizing samples and biological samples will be taken as part of this survey, and the work will include age determination. Given the importance of the information obtained to monitor target stocks, the aim is to continue the historical data series applying the new data collection framework to be approved by the Commission.

MEDIAS: This survey is being conducted in the same GFCM geographical sub-areas listed above but targets the main pelagic species of interest in the Mediterranean (such as the European anchovy and sardine), trophic relationships, oceanographic data, and so on.

As for surveys being conducted under the North East Atlantic Fisheries Commission (NEAFC), work will continue on the IBTS in the Porcupine bank area in Irish waters (ICES divisions VII b and k) between 150 and 800 metres. The aim of this survey is to estimate the abundance of the main commercial and non-commercial groundfish species, spatial distribution patterns and hydrological data for the area platform. It is conducted annually in September on board the *Vizconde de Eza*, a trawler.

In order to obtain the best possible data for the scientific evaluation of the main pelagic species, work continues on the historical series of surveys being conducted under Article 77 of the EMFF since 2014:

BOCADEVA: This is a three-yearly evaluation of anchovy spawning stock using the egg production method conducted in Spanish and Portuguese waters in division IX (South).

JUVENA: This is a study into anchovy recruitment in the Bay of Biscay in order to assess the stock situation. The pelagic ecosystem is monitored and evaluated to obtain juvenile abundance indices and the recruitment rate (conducted annually in ICES divisions VIII a, b, c, d and e).

ECOCADIZ: This survey monitors and assesses the pelagic ecosystem to obtain abundance indices for the small commercial pelagics, as well as spatial distribution patterns for predators, eggs, adult fish and plankton (conducted annually in the Gulf of Cadiz).

ECOCADIZ-recruitment: This survey monitors and assesses the pelagic ecosystem in shallow waters, obtaining anchovy recruitment rates during spawning periods (conducted annually in the Gulf of Cadiz).

Work is also being done to improve our knowledge of certain stocks that are unique and of great importance for the Spanish fleet, such as the Iberian sardine. The IBERAS survey will be repeated in 2019, giving an overall assessment of the whole of division IXa with a single vessel in November, improving our knowledge of the species' actual recruitment rates.

Moreover, sentinel surveys will be carried out on the basis of the ICES recommendation for Norway lobster (*Nephrops norvegicus*) in Functional Units 25 and 30, and observers will board longline vessels to improve our understanding of CNW red seabream stocks.

**FUNDING:** Approximately €1,601,640 will be invested in Mediterranean surveys, namely in the MEDITS (groundfish) and MEDIAS (pelagic) surveys that started in the second half of April and will be completed towards the end of June. They will provide fishery-independent data to complement the information gathered by observers on board commercial vessels, at ports and at fish auctions, and the socio-economic survey results and cross-cutting variables studied under the Control Regulation.

Research surveys at sea and the same tasks listed above for the Mediterranean will also be performed for the CNW area. More specifically, groundfish surveys will be carried out for the trawler segment starting in mid-September for around 40 days, costing approximately €600,000.

As well as the surveys listed above, other specific initiatives will be carried out to improve our understanding of fisheries resources and encourage cooperation between scientists and fishermen (focusing on fisheries co-management as a new model of governance that enables the responsive management of fisheries using a bio-economic and ecosystem-based approach). The specific initiatives being promoted are:

- A multiannual aid scheme to finance cooperation between scientists and fishermen;
- A multiannual fisheries data collection programme, with a monitoring and follow-up project to support the compilation of data by the Catalan fisheries authorities in relation to the management plans, scientific research surveys and other initiatives in the interest of the fishing industry that aid compliance with the CFP.

#### **b) Ecosystem improvement**

Establishing and maintaining **marine reserves**: These reserves serve as breeding grounds for various fish and invertebrate species, helping to maintain their populations both within the reserve itself and in the surrounding area. They also help to preserve marine species and habitats. 'Marine Reserves of Interest to the Fisheries Industry' are also excellent natural laboratories, allowing us to compare the anthropogenic effects (pollution, collection, fishing, etc.) found within and outside the protected areas and study the impact of natural or man-made phenomena such as global warming on the populations of target species.

Several Autonomous Communities have plans to extend their protected areas or improve the management of existing ones.

Other ecosystem restoration measures include establishing other types of

protected area (other than reserves) and limiting fishing to certain areas and periods.

New areas or periods in which fishing is banned or restricted are to be established for the Mediterranean. These measures will focus particularly on spawning and breeding grounds, considering the possibility of restricting access at certain times to fisheries with a direct impact on the resources in question, possibly by amending the regulations to reduce the maximum period of activity.

### **c) Surveillance and control improvements**

Initiatives will be carried out with the aim of characterising discarded catches as reliably as possible as a basis for prioritising measures aimed at ensuring fulfilment of the obligations under the Common Fisheries Policy and improving the competitiveness of the fleet. As the landing obligation is now being implemented in full, initiatives aimed at ensuring compliance with this obligation will be kept in place.

Turning to control strategies, the priorities for the CNW area will be recording catches by all vessels (over- and undersized), measuring nets using an approved mesh gauge, and checking the weighing of 100% of landed catches.

The priorities for the Gulf of Cádiz include checking catches and landings of immature fish in compliance with the landing obligation, preventing those intended for illegal marketing channels, and respecting the closures and seabed bans in place. Work will also continue on monitoring the technical measures in force with regard to the net and mesh gauges used.

Several Atlantic fisheries (blue whiting, Atlantic horse mackerel and Atlantic mackerel) are covered by the Specific Control and Inspection Programme (SCIP) and Joint Deployment Plan (JDP) for Western Waters, with special national measures in place for other species (southern hake).

In the Gulf of Cadiz, control over the octopus fishery will be prioritised, including catch monitoring, proper gear identification and compliance with minimum sizes and established closed seasons/areas.

The use of non-regulatory equipment and the landing of undersized specimens as part of the landing obligation will be priorities for the Mediterranean fishing ground, which features certain representative species, such as bluefin tuna and swordfish, that are subject to separate control initiatives under international recommendations.

## **2. Effort reduction measures**

Article 21 of Regulation (EU) No 1380/2013 lists fishing concession transferability as a way of managing fishing capacity.

In the same vein, Regulation (EU) No 508/2014 establishes two measures



directly aimed at striking a balance between fishing capacity and fishing opportunities: allocation of fishing opportunities and permanent cessation. Both measures have an immediate impact on fishing effort, helping to control and reduce it and lessening the pressure on resources as a result.

National legislation is to be put in place establishing a national fishing opportunities register, and an IT system for managing this register is to be developed. Effort is being reduced in the segments in imbalance through the definitive withdrawal of capacity (vessels) and by reducing the number of days fished by imbalanced fleets in their respective fishing grounds.

#### a) Permanent cessation

In 2018 the final payments were made under permanent cessation grants approved in 2017. Vessels belonging to segments with an imbalance according to the action plan in place when the aid scheme was launched and opened for application were withdrawn from activity to improve the situation in those segments. The permanent withdrawal of these vessels will lead to future improvements in the situation of the segments concerned. The measures taken in the various fishing grounds are analysed below:

**CANTABRIAN AND NORTHWEST:** Aid for permanent cessation was granted to 19 vessels from the segments with an imbalance under the 2018 plan. The withdrawal of these 19 vessels from fishing activity will reduce the capacity using this fishing ground by 793.50 Gt and 2,022.79 kW.

SEGMENT IN IMBALANCE	NUMBER OF VESSELS	GROSS TONNAGE (Gt)	POWER (kW)
CNW trawlers 10-40 metres long	1	251.00	367.65
CNW gillnets 0-18 metres long	6	162.65	462.50
CNW purse seiners 18-24 metres long	1	57.02	161.76
CNW hooks 0-18 metres long	6	191.94	519.85
CNW hooks 18-24 metres long	1	69.00	292.65
CNW polyvalent vessels 0-40 metres long	2	8.85	60.29
CNW pots 0-18 metres long	2	53.04	158.09

**GULF OF CÁDIZ:** This aid has financed the scrapping of four trawlers from this fishing ground, resulting in a decrease of 245.59 Gt and 722.55 kW.

SEGMENT IN IMBALANCE	NUMBER OF VESSELS	GROSS TONNAGE (Gt)	POWER (kW)
Gulf of Cádiz trawlers 0-18 metres long	1	36.39	139.71
Gulf of Cádiz trawlers 18-40 metres long	3	209.20	633.09

**MEDITERRANEAN:** Fleet reduction measures have been taken in the imbalanced segments, with 60 vessels (2,358.30 Gt and 9,246.67 kW) scrapped as a result.

SEGMENT IN IMBALANCE	NUMBER OF VESSELS	GROSS TONNAGE (Gt)	POWER (kW)
Mediterranean trawlers 18-24 metres long	11	822.85	2,775.74
Mediterranean trawlers 24-40 metres long	5	681.67	1,713.24

Mediterranean gillnets 0-18 metres long	5	48.22	333.09
Mediterranean purse seiners 0-18 metres long	11	264.44	1,400.00
Mediterranean purse seiners 18-24 metres long	6	299.08	1,518.38
Mediterranean hooks 0-24 metres long	3	38.81	297.79
Mediterranean surface longliners 0-18 metres long	1	49.13	94.12
Mediterranean polyvalent vessels 0-18 metres long	17	129.42	1,001.84
Mediterranean dredgers 0-18 metres long	1	24.68	109.56

**CANARY ISLANDS:** One vessel has been scrapped with this aid, resulting in the withdrawal of 8.31 Gt and 92.67 kW.

SEGMENT IN IMBALANCE	NUMBER OF VESSELS	GROSS TONNAGE (Gt)	POWER (kW)
Canary Islands polyvalent vessels 0-18 metres long	1	8.31	92.67

### **b) Allocation of fishing opportunities where appropriate**

Under the Fisheries Act (Act 3/2001), Spain's central government is responsible for adopting effort regulation measures and allocating fishing opportunities.

The imbalanced segments currently subject to these measures are species and fleets from the CNW and Gulf of Cádiz national fishing grounds.

CNW fisheries are managed by distributing the quota allocated to Spain in the EU's annual TAC and Quota Regulation by boat, fishing method and fishing ground.

While there are still species and fisheries that are managed on a global basis for all vessels using a given method, with opportunities distributed by calendar quarter, as has been the case since 2011, others use a distribution model based on individual vessel quotas, and this continued in 2017. In the CNW bottom trawling fleet, quota can be definitively transferred between vessels. This has permitted an orderly fleet restructuring, improving shipping companies' competitiveness and allowing larger quotas for certain species where the activity is more profitable due to vessel characteristics or the area of the fishing ground in which they usually operate. This also modulates the pressure on the resource in order to ensure its sustainability. Moreover, since 2018 temporary assignments of quota kilos during the year have been allowed between vessels using different fishing methods, with assignments of hake quota being authorised for exchange between trawlers on the one hand and gillnets and longlines on the other. This will allow the latter two to become re-balanced. Mackerel and horse mackerel quotas have also been assigned between bottom trawlers and purse seiners.

In the medium term, this system allows fishing opportunities to be redistributed towards more efficient vessels, those with higher quotas or those in a better position to capitalise on their quotas.

This system has proved to be very effective in managing fleets that were imbalanced in the past, such as surface longliners in the North Atlantic or the

trawler fleet covered by the Northwest Atlantic Fisheries Organization (NAFO).

As for the imbalanced fleets in the CNW area, work is underway on a new Ministerial Order that should bring greater flexibility to the use of individual fishing quotas so that they can reach the fleets that need them the most. There are also plans to extend the possibility of definitive inter-vessel transfers of fishing opportunities to other fishing methods that already use individual quotas, such as purse seines, bottom-set longlines or bottom-set gillnets. This new Order will help to strike a balance between existing capacity and available fishing opportunities.

Work has continued on initiatives aimed at characterising discarded catches as reliably as possible as a basis for prioritising measures aimed at ensuring fulfilment of the obligations under the Common Fisheries Policy and improving fleet competitiveness, particularly since the entry into force of the landing obligation on 1 January 2019.

Adaptations to reflect the new no-discards policy will be made over the coming years.

Turning to the Gulf of Cádiz, the management plan legislation for vessels registered for this fishing zone was updated in 2016 by Ministerial Order AAA/1406/2016 of 18 August 2016 establishing a management plan for vessels registered for the Gulf of Cadiz national fishing ground. This Order allocated fishing opportunities for species subject to the TAC and quota system based on historical catch consumption data, adjusted to reflect the socio-economic circumstances of the fleets targeting the fisheries in question and the various fleets' dependence on each species. In the case of the anchovy and Norway lobster (*Nephrops norvegicus*) in ICES division IXa, to improve the management of the quotas allocated to Spain and ensure that the fishing fleet is able to operate throughout the year, individual fishing opportunities for this species should be allocated on a vessel-by-vessel basis. Aside from the species subject to TAC and quotas, management measures for Iberian sardine continued in 2018. These measures are based on an exploitation rule, which determines a catch ceiling for the Spanish and Portuguese fleets and has been developed jointly by the two countries.

Ministerial Order AAA/1406/2016 was amended in 2018 and now distributes the Gulf of Cádiz Iberian sardine quota from stocks VIIIc and IXa on an individual basis, using the criteria laid down in Article 27 of Act 3/2001 and taking into account the provisions of Article 17 of Regulation 1380/2013, in order to prevent this fishery from having to close down early in the future. Options for optimising fleet operation must be taken into account when determining the distribution criteria. A new rule on allocating sardine fishing opportunities has also been introduced: 20% is now inversely proportional to each vessel's anchovy quota. The aim here is none other than to balance the quotas for purse seine vessels, which primarily target two species: sardine and anchovy. The Order also establishes the possibility of catch limits or daily or weekly landing ceilings, with the amounts of these to be laid down in a decision by Secretary-General for Fisheries.

A new management plan is to be published for the Mediterranean to reflect the updates contained in the new Multiannual Plan for Demersal Fisheries in the Western Mediterranean, published in June 2019, which regulates fishing effort for the bottom trawl fleet based on fishing days and reduces activity by 10% in 2020, rising to a maximum reduction of 30% in the subsequent four years. It also requires the establishment of area and season closures with the aim of ensuring a young hake survival rate of at least 20%. In order to implement these new developments, Spain will need to amend its Royal Decree 1440/1999 on trawling in the Mediterranean, as well as the different Ministerial Orders

regulating this activity. This does not just apply to trawling but also to purse seiners and small-scale gear, which will be subject to a revision of their technical measures, minimum sizes and closed seasons, plus catch ceilings for purse seiners.

The aim here is to achieve suitable biological and management objectives and bring fishing mortality back to within recommendable limits for the sustainable exploitation of the stocks of these main species before the end of their period of validity.

On the basis of the above and for the purse seine segment in particular, the possibility of establishing quantitative limitations for anchovy and sardine or other overexploited species on a GSA (geographical sub-area) basis is being studied.

Shellfish and internal waters fall within the respective jurisdictions of the Autonomous Communities, which are developing their own management plans including measures to regulate effort and other technical aspects (one example is the Valencia's Council Decree 59/2017 of 5 May 2017 regulating small-scale octopus fishing in the Autonomous Community of Valencia).

- c) Temporary cessation of fishing activities:** An agreement on the temporary cessation of fishing activities eligible for financing under the European maritime and fisheries fund during 2019 was agreed with the Autonomous Community governments at the Inter-Authority Industry Meeting.

In the Gulf of Cádiz fishing ground, purse seiners and trawlers may be awarded aid for temporary cessation. For the 2019 fishing season, any purse seiner that receives this temporary cessation aid must be inactive for 30 days between December 2019 and January 2020 (the closure period laid down in the management plan), while any trawler that receives aid must be inactive for 30 days between 16 September and 31 October (the closure period laid down in

the management plan).

The CNW ground has a 30-day temporary cessation in place for the small-scale gear fleet (from 15 January to 15 February).

In the Mediterranean, aid may be granted to purse seiners and trawlers whose main activity in the two years prior to the aid application date consisted of using the fishing method covered by the aid scheme in the Mediterranean fishing ground. The compulsory biological cessation for the purse seine fleet can take place in December, January or February, and biological cessations for the trawler fleet take place between January and August. Purse seiners or trawlers receiving this aid must complete 30 days of mandatory inactivity.

Following the recommendations of the International Commission for the Conservation of Atlantic Tunas (ICCAT), the surface longline fleet is subject to a mandatory three-month closure in January, February and March to aid the recovery of the swordfish stock.

The financing required for this measure has been estimated at €15,117,377.

#### **d) Other measures**

Changes to home ports (i.e. the port where most of a vessel's landings are made and catches are first sold) are now regulated by Royal Decree 1035/2017 of 15 December 2017 on establishing and changing fishing vessels' home ports and amending Royal Decree 1549/2009 of 9 October 2009 on fishing industry regulation and the adaptation to the European Fisheries Fund. This improves coherence between the three essential effort management mechanisms — allocation of possibilities, definitive withdrawal and reduction of activity days — so that the impact of these measures is not countered by the arrival of new vessels at fishing grounds where overexploited or high-risk species are targeted.

A management plan is being drawn up for the Mediterranean, regulating,

among other things, changes to a vessel's home port, aiming to restrict movement towards GSAs that are home to more overexploited or high-risk species.

Moreover, consideration is being given to the potential impact of not authorising temporary method changes involving a switch to an imbalanced segment, always bearing in mind the principle of freedom of establishment of economic activity.

### **Measures aimed at improving imbalanced segments' profitability in the short-to-medium term**

Within the framework of the European Maritime and Fisheries Fund, priority is given to the following measures with the aim of improving the situation of imbalanced fleet segments:

#### **à Measures aimed at promoting sustainable and resource-efficient fisheries — specific objectives:**

- Reduction of the impact of fisheries on the marine environment, including the avoidance and reduction, as far as possible, of unwanted catches;
- Protection and restoration of aquatic biodiversity and ecosystems;
- Enhancement of the competitiveness and viability of fisheries enterprises, including of small-scale coastal fleet, and the improvement of safety and working conditions;
- Provision of support to strengthen technological development and innovation, including increasing energy efficiency, and knowledge transfer;
- Development of professional training, new professional skills and lifelong learning;

- Professional advisory services;
- Investments on board;
- Added value, product quality and use of unwanted catches;
- Diversification.

In 2018, 355 aid applications were approved for these purposes, with a total investment of around €9,786,256.

**h) Measures aimed at increasing employment and territorial cohesion — specific objectives:**

- Promoting economic growth and social inclusion;
- Diversifying the range of activities carried out in the fisheries industry.

In 2018, 211 aid applications were approved for these purposes, with a total investment of around €5,898,671.

**ç) Measures aimed at improving the marketing and processing of fishery products, seeking out new markets — specific objectives:**

- Designing production and marketing plans;
- Storage aid;
- Marketing measures;
- Processing of fishery products;
- Labelling local species;
- Promoting species of limited commercial value;
- Local product promotion campaigns.

In 2018, 239 aid applications were approved for these purposes, with a total investment of €28,660,891.