



**Oceana fishing opportunities  
recommendations for 2016**

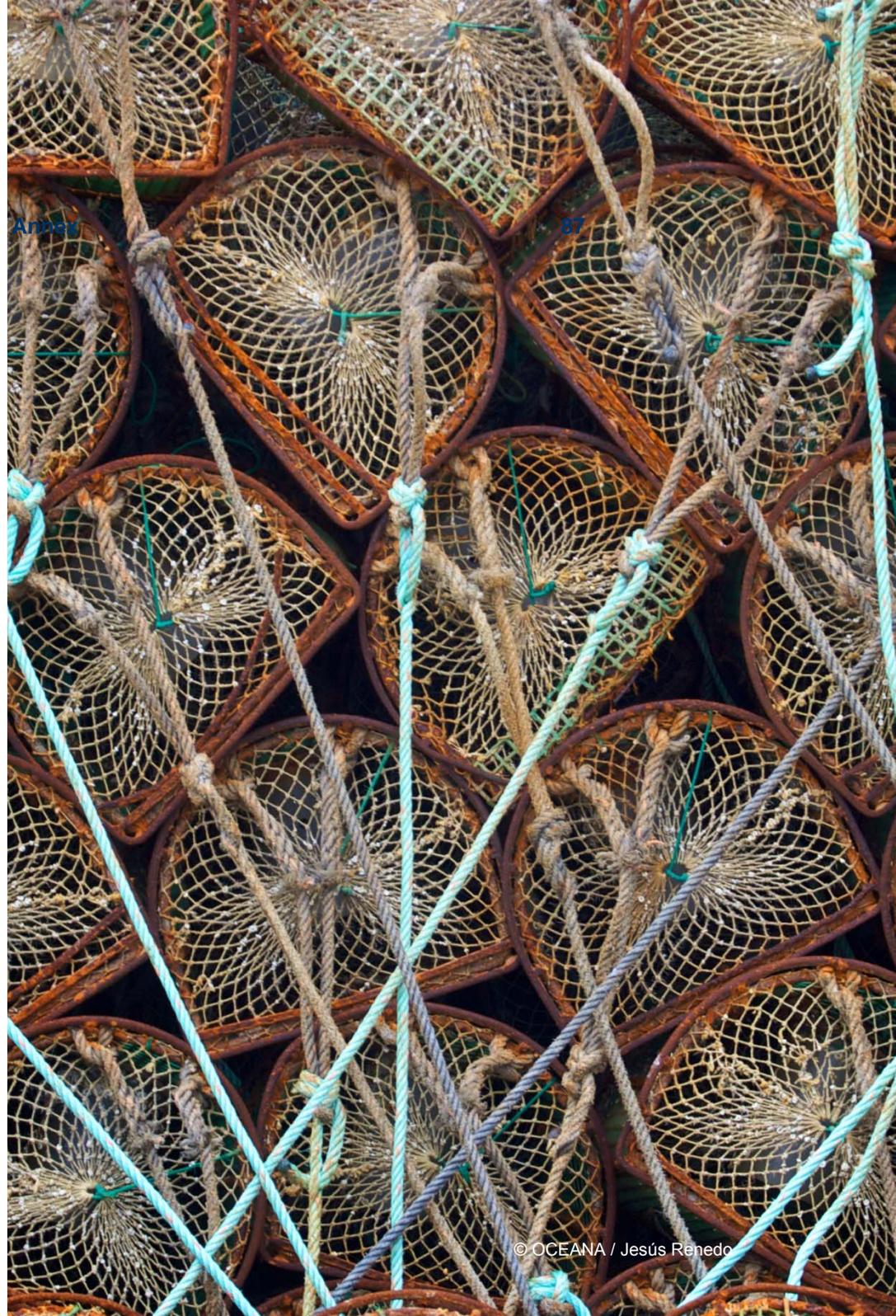
**North East Atlantic stocks**

**OCEANA**



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## INTRODUCTION

The establishment of fishing opportunities is the most important management tool to enable European Union (EU) fisheries to keep fishing mortality rates within sustainable levels. In fact, the state of fish stocks and intensity of fish resource exploitation depends heavily on the fishing opportunities decision.

Although the manner in which fisheries are managed in the Atlantic and Mediterranean is quite different, with no fishing mortality limits applying in the Mediterranean region, the results are still far from considered positive. In both regions, fishing mortality continues to be high and the statuses of fish resources are poor. According to the European Commission consultation document<sup>1</sup>, overexploitation currently affects 48% of Atlantic stocks and 93% of Mediterranean stocks. This condition undermines the objectives and binding commitments of the Common Fisheries Policy (CFP), and in particular seriously affects the fulfilment of CFP Article 2.2 and the 2020 deadline for sustainable fisheries.

The time frame and conditions to phase out overfishing are clearly stated in the CFP. According to the framework regulation, the exploitation rate of marine biological resources should be adapted to maintain populations of harvested stocks at sustainable levels, in particular above levels that can produce the Maximum Sustainable Yield (MSY), by 2015. A later date, with 2020 as an absolute deadline, should only be permitted if reaching those levels by 2015 would seriously jeopardise the social and economic sustainability of the fishing fleets involved. Unfortunately, the 2015 deadline expired with only a minority of stocks known to be exploited according to this approach.

Another commitment of the CFP directly related to the establishment of fishing opportunities is the landing obligation. The fishing opportunities established for the species affected by this provision have to reflect real catches, including previously discarded fish, rather than landings only. This adjustment should not result in an increase to the fishing mortality above

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<sup>1</sup> COM(2015) 239 final. Consultation on the fishing opportunities for 2016 under the Common Fisheries Policy.

scientific advice and exceed the MSY limit. To facilitate the implementation of the landing obligation, a number of provisions, flexibility measures and exemptions are already adopted.

Bringing overfishing to an end is essential not only to guarantee the sustainable exploitation of fish resources and to recover the profitability and social prosperity of fishing activities, but also to achieve the good environmental status (GES) of European Seas - the main goal of the Marine Strategy Framework Directive<sup>2</sup> for which the aim is also achieve it before 2020.

Oceana supports the majority of principles proposed in the Commission consultation document for the establishment of fishing opportunities in 2016. Nevertheless, Oceana believes there is still a significant gap between sustainable fisheries management on paper and the actual management of fisheries in our seas.

[Oceana urges the European Fisheries Council to adopt fishing opportunities that adhere to scientific advice and are consistent with the objectives of the CFP.](#)

### **STATUS OF FISH STOCKS in NE Atlantic: positive trend slows down**

During recent years, the status of fish stocks in the NE Atlantic has shown an overall positive recovery trend. This positive trend is the direct result of the reduction in the fishing mortality rates and the narrowing of the gap between scientific advice and adopted catch limits. The percentage of overfished stocks was reduced from 94% in 2004 to 39% in 2013. Nevertheless, this positive trend has slowed down in recent years and is in fact reversing, putting previous progress at risk:

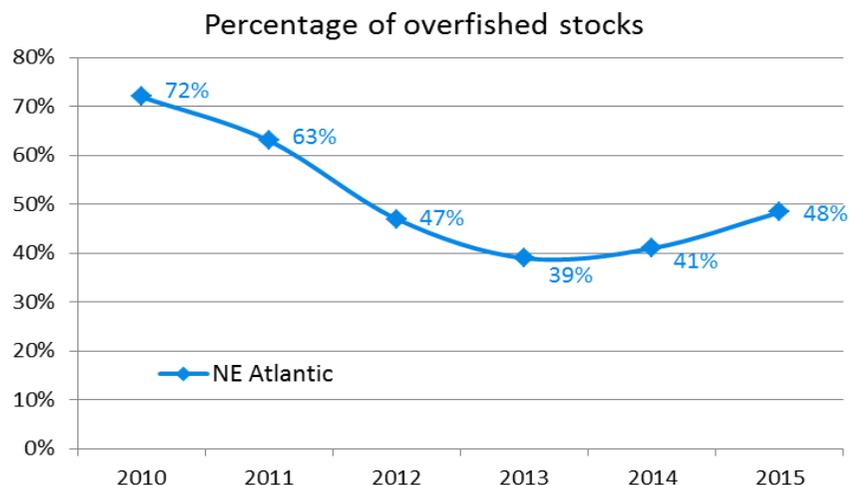
- The percentage of overfished stocks increased from 39% in 2013 to 41% in 2014 and to 48% in 2015.

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<sup>2</sup> Directive 2008/56/EC establishing a framework for community action in the marine environmental policy (Marine Strategy Framework Directive).

- The disparity between established TACs and sustainable catch levels increased from 11% in 2012 to 29% in 2013 and to 35% in 2014<sup>3</sup>.
- The fishing mortality rate (expressed as F/F<sub>msy</sub>) stabilised in 2012 and slightly increased during 2013, the latest available year<sup>4</sup>.
- The number of stocks outside safe biological limits remains high: 14 stocks in 2012, 17 stocks in 2013 and 2014, 16 stocks in 2015.

These figures show a clear backwards step in the fulfilment of fisheries management objectives for NE Atlantic waters. Further efforts and improvements are necessary to reduce the rate of overfishing and to fully recover fish stocks.

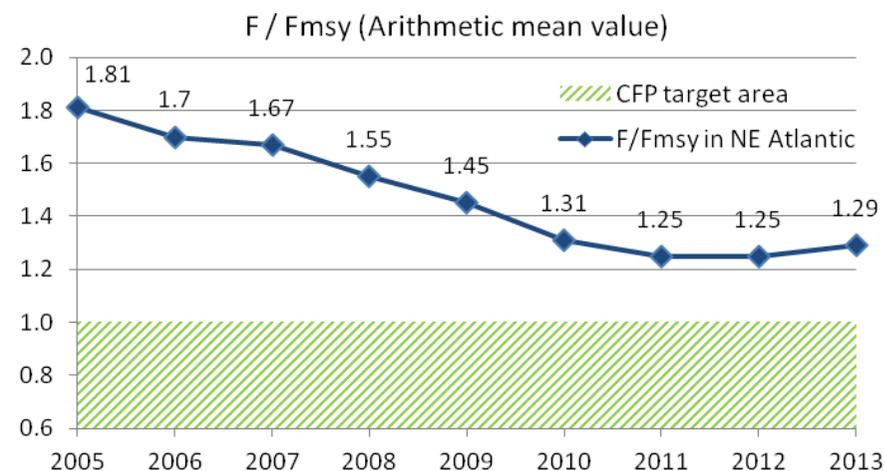


<sup>3</sup> Data from the European Commission communication on fishing opportunities for 2015, COM (2014) 388 final. Data from the European 2015 Commission communication did not provide this data for 2015.

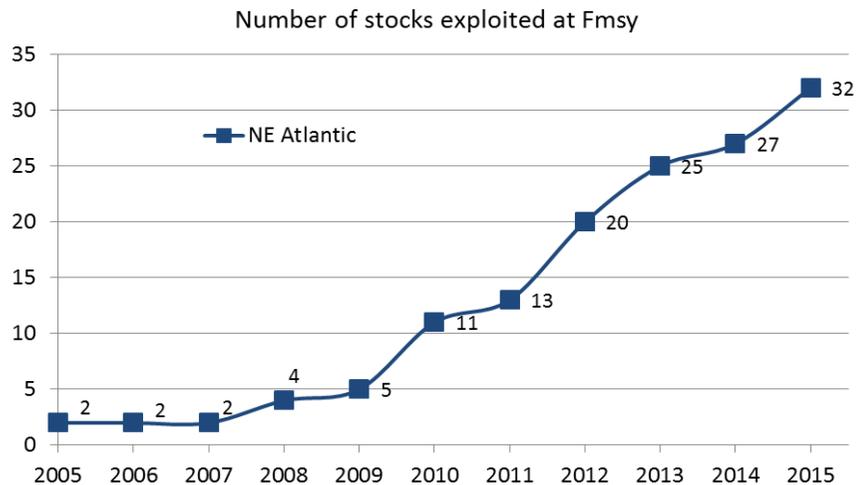
<sup>4</sup> Monitoring the performance of the Common Fisheries Policy. STECF-15-04. 2015. Publications Office of the European Union, Luxembourg, EUR 27152 EN, JRC 95185, 147 pp.

## MAXIMUM SUSTAINABLE YIELD

The binding CFP commitment to restore and maintain fish resources above biomass levels that can produce MSY by 2015 was reinforced by international agreements adopted prior to the CFP. In response to these agreements and the need to reduce the fishing pressure on fish stocks in the NE Atlantic, fishing mortalities have declined during the last 15 years towards F<sub>msy</sub>, although the mean value of the fishing mortalities compared to the F<sub>msy</sub> showed stagnation during 2011 and 2012 and even a slight increase in 2013, the latest available year<sup>5</sup>.



<sup>5</sup> Monitoring the performance of the Common Fisheries Policy. STECF-15-04. 2015. Publications Office of the European Union, Luxembourg, EUR 27152 EN, JRC 95185, 147 pp.



**Oceana recommends:**

- Adopt fishing opportunities in line with achieving MSY by 2016 for all stocks with MSY assessments and MSY proxies where possible.
- In cases that require a delay in reaching the MSY objective beyond 2016, due to socio-economic concerns, two preconditions must be requested in order for the delay to be accepted:
  - Strong evidence confirming whether fishing opportunities according to the MSY by 2016 would seriously jeopardise the social and economic sustainability of the fleets involved, and
  - A detailed action plan with timeframes indicating when MSY shall be achieved.

**PRECAUTIONARY APPROACH, DATA POOR STOCKS AND ROLLOVER RULE**

Due to the lack of data, advice on MSY based on analytical assessments is not available for all of the managed stocks. Other approaches such as the precautionary approach can be used, but in many cases limited data

makes even this difficult. To remedy this and improve the management of these stocks, the International Council for Exploration of the Sea (ICES) introduced the use of alternative methods for data-poor stocks<sup>6</sup> in 2012 to provide quantitative catch recommendations. As a result, the number of stocks with quantitative advice on fishing opportunities has increased significantly.

Oceana welcomes the use of these models as long as they contribute to maintaining or decreasing the Total Allowable Catches (TAC), which will encourage Member States to provide accurate information on fisheries to develop sound assessments.

In a joint statement by the Council and the Commission<sup>7</sup> (2013) a list of 21 stocks with a rollover on catch limits for the following five years was adopted. These stocks are stocks with limited information and of low economic importance, taken only as by-catch, or at low levels of quota uptake. Oceana wants to highlight that this agreement ignores the precautionary and the ecosystem approach (e.g. the function of the species in the ecosystem): although a stock may be fished in small quantities, or caught as by-catch, it does not necessarily imply a low exploitation rate. The rollover rule has been applied strictly over the past two years, even so, more than half of these stocks have been assessed and advice recommended a catch reduction; in some cases up to 60%, such as for Pollack in Subarea VI and Plaice in Division VIIbc.

**Oceana recommends:**

- Fishing opportunities for stocks without MSY analytical assessments should be established according to the precautionary approach, and if not available, according to a data-poor stock assessment.

<sup>6</sup> ICES. 2012. ICES Implementation of advice for data-limited stocks in 2012 in its 2012 advice. ICES CM 2012/ACOM 68. 42pp.

<sup>7</sup> Joint statement by the Council and the Commission" (Council of the European Union Document Doc 5315/13 PECHE 15, 15 January 2013).

- A data-poor stocks assessment should be used preferably to keep or reduce catches.
- Rollover agreement should not be applied.

## LANDING OBLIGATION

2016 will be the second year in which the provisions related to the landing obligation are applied. For the first time these provisions will affect demersal fisheries in certain areas of Atlantic waters. For stocks affected by the landing obligation, fishing opportunities must be established according to real catches instead of landings. To achieve this, estimated potential discards, based on previous landings, must be added to recent TACs. This uplift in the TAC is a necessary adjustment in order to implement the landing obligation properly, as all landings will count against the quota.

It is crucial that the implementation of the landing obligation does not result in an increase in the fishing mortality rate above levels recommended by scientists. The landing obligation should not be used as an argument to exceed the limits proposed by scientists, or lead to an extra quota. To facilitate the implementation of the landing obligation there are already flexibility measures in place such as the inter-annual quota flexibility, inter-species flexibility, or *de minimis* exemptions (on the basis of high survivability, disproportionate costs and difficulties to increase selectivity).

Oceana is concerned about the lack of a sanctioning system enforcing the implementation of the discard ban. Discarding is not considered a serious infringement during the next 2 years, which means fishermen are practically allowed extra fishing opportunities and obtain TACs uplifts, without a strong incentive to comply with the regulation. As the discard plans for demersal species have not yet been adopted, it is not possible to confirm the species and/or fisheries that would be affected by the landing obligation and the possible exceptions. According to the proposed delegated acts by the Commission the implementation of the landing obligation for demersal species will be made on the basis of fleet segments where certain fleet segments will be affected and others not, depending on whether they catch the same stock. The Scientific, Technical and

Economic Committee for Fisheries (STECF) convened to provide guidelines<sup>8</sup> on how to estimate the corresponding uplifts in these cases, as the TAC adjustments are to be made on the basis of the contribution by the fleets under the landing obligation to total catches and discards of the concerned stocks.

### Oceana recommends:

- Uplifts of the catch limits due to discard ban implementation should not imply the adoption of fishing mortality rates above those recommended by scientists.
- For stocks which are partially covered by the landing obligation, i.e., some catches from the same stock must be landed but others can still be discarded, the uplift should correspond only to the fraction of catches affected by the landing obligation, and Member States must guarantee that the uplifts will be allocated to the fisheries affected by the landing obligation.
- No uplift adopted in the case of discards which cannot be quantified and for which scientists cannot provide advice based on real catches.
- For stocks affected by a *de minimis* exemption, the percentage (ranging from 5% to 7%) of authorised discards, should be discounted from the uplift as these discards will not count against the quota according to point 5 of the Art 15 of the CFP.
- For species affected by the high survival exception, no uplift should be adopted. Management according to expected landings should continue as discards of these species will continue to be allowed.

## MULTIANNUAL PLANS

With the adoption of the CFP, the scope, contents and targets of the multiannual plans (MAPs) are more ambitious. While the current plans are updated or new ones adopted, Oceana supports the Commission's proposal, reflected in the wording of the consultation document, which outlines: "*where existing multiannual plans are consistent with MSY, they*

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<sup>8</sup> STECF – TAC adjustments for stocks subject to the landing obligation (STECF 15-17). 2015. Publications Office of the European Union, Luxembourg, 59pp.

*should be applied. Where these plans have become incompatible with the CFP (e.g. because an objective other than MSY is included or has been reached) the Commission intends to adopt proposals for TACs on the basis of MSY"*

**Oceana recommends:**

- Apply the MAPs in establishing TACs only when they are consistent with the CFP objectives, in particular with the MSY objective.
- Adopt fishing opportunities on the basis of MSY, ignoring current MAPs provisions in cases where management objectives are not consistent with the CFP, or are poorly implemented and not providing positive results.



## Oceana TACs proposal (in tonnes) for North East Atlantic stocks

Figures in non-shaded rows refer to weight in landings, and figures in shaded rows refer to weight in catches according to the content of the Commission Delegated Regulations established in the discard plans. Brackets compare TAC difference in % from previous year. Fishing opportunities marked as pm mean *pro memoria* (no proposal has been tabled yet), and fishing opportunities marked as RO mean that the stock is potentially affected by the rollover rule agreed in the joint statement by the Council and the Commission in 2013.

| Species                | Fishing area                                 | TAC 2015     | Stock status according to ICES   | Commission proposal 2016 | Oceana proposal 2016 |
|------------------------|--|--------------|--|--------------------------|----------------------|
| <i>Argentina silus</i> | EU and international waters of I and II      | 90 (0%)      | Unknown (I and II)   | pm RO                    | 90 (0%)              |
| <i>Argentina silus</i> | EU waters of III and IV                      | 1028 (0%)    | Unknown stable (IIIa and IV)   | pm RO                    | 1028 (0%)            |
| <i>Argentina silus</i> | EU and international waters of V, VI and VII | 4316 (0%)    | Unknown uptrend (Va), unknown stable (Vb, VIa, VIb, VII),                  | 3453 (-20%)              | 3453 (-20%)          |
| <i>Brosme brosme</i>   | EU and international waters of I, II and XIV | 21 (0%)      | Unknown uptrend (I, II), unknown but above possible reference points (XIV) | pm RO                    | 21 (0%)              |
| <i>Brosme brosme</i>   | IIIa and EU waters of 22-32                  | 29 (0%)      | Unknown stable (IIIa), completely unknown (22-32)                          | pm RO                    | 29 (0%)              |
| <i>Brosme brosme</i>   | EU waters of IV                              | 235 (0%)     | Unknown stable (IV)  | pm RO                    | 235 (0%)             |
| <i>Brosme brosme</i>   | EU and international waters of V, VI and VII | 937 (0%)     | Unknown stable (Vb, VIa, VIb, VII), unknown (Va),                          | pm                       | 937 (0%)             |
| <i>Brosme brosme</i>   | Norwegian waters of IV                       | 170 (0%)     | Unknown stable (IV)  | pm                       | 170 (0%)             |
| Caproidae              | EU and international waters of VI, VII, VIII | 53296 (-58%) | Unknown stable (VI, VII, VIII)   | 42637 (-20%)             | 42637 (-20%)         |
| <i>Clupea harengus</i> | IIIa   | 37188 (-7%)  | Above PA (IIIa)  | pm                       | 19412 (-47%)         |
| <i>Clupea harengus</i> | Union and Norwegian waters of IV (N 53°03')  | 267197 (-5%) | Above PA (IV)  | pm                       | 309948 (+16%)        |
| <i>Clupea harengus</i> | Norwegian waters south of 62°N               | 1093 (+26%)  | Above PA (IIIa, IV)  | pm                       | 1268 (+16%)          |
| <i>Clupea harengus</i> | By-catches IIIa                              | 6659 (0%)    | Above PA (IIIa)  | pm                       | 4934 (-52%)          |
| <i>Clupea harengus</i> | By-catches IV, VIId and Union waters of IIa  | 15744 (+20%) | Above PA (IV, VIId, IIa)   | pm                       | 12498 (-26%)         |

| Species                       | Fishing area  | TAC 2015     | Stock status according to ICES  | Commission proposal 2016 | Oceana proposal 2016        |
|-------------------------------|---|--------------|---|--------------------------|-----------------------------|
| <i>Clupea harengus</i>        | IVc, VIId   | 48986 (-5%)  | Above PA (IVc, VIId)  | pm                       | pm (+16%?)                  |
| <i>Clupea harengus</i>        | Vb, VIb, VIa (N)  | 22690 (-19%) | Above PA (Vb), completely unknown (VIb), below Blim (VIaN)                          | pm                       | 19286 (-15%)                |
| <i>Clupea harengus</i>        | VIa (S), VIIb, VIIc   | 0 (-100%)    | Below Blim (VIaS, VIIbc)  | pm                       | 0 (0%)                      |
| <i>Clupea harengus</i>        | VI Clyde  | TBE          | ?   | pm                       | pm                          |
| <i>Clupea harengus</i>        | VIIa  | 4854 (-8%)   | Above MSY Btrigger (VIIaN and S)  | 4575 (-6%)               | 4575 (-6%)                  |
| <i>Clupea harengus</i>        | VIIe and VIIf   | 930 (0%)     | Completely unknown (VIIe,f)   | pm RO                    | 791 (-15%)                  |
| <i>Clupea harengus</i>        | VIIg, VIIh, VIIj, VIIk  | 15652 (-30%) | Above MSY Btrigger (VIIg,j,h,k)   | 15442 (-20%)             | 15442 (-1%) or 17228 (+10%) |
| <i>Dicentrarchus labrax</i>   | IVbc, VIIa, VIId-h  | 2656         | Below PA  | 1449 (-46%)              | 541 (-80%) Discards unk     |
| <i>Engraulis encrasicolus</i> | VIII  | 25000        |   | pm                       | pm                          |
| <i>Engraulis encrasicolus</i> | IX, X and CECAF 34.1.1  | 9656 (+10%)  | Unknown, variable without trend (IXa), completely unknown (IXb, X and CECAF 34.1.1) | 9656 (0%)                | 9656 (0%)                   |
| <i>Gadus morhua</i>           | IIIa (West-Skagerrak)   | 4035 (+5%)   | Below PA (IIIa-W)   | pm                       | 4640 (+15%)                 |
| <i>Gadus morhua</i>           | IIIa (East-Kattegat)  | 100 (0%)     | Unknown, uptrend but considered in poor state (IIIa-E)                              | pm                       | 130 (+30%)                  |
| <i>Gadus morhua</i>           | IV, EU waters of IIa, IIIa not covered by Skagerrak & Kattegat            | 24227 (+5%)  | Below PA (IV), unknown (IIa),   | pm                       | 27861 (+15%)                |
| <i>Gadus morhua</i>           | Norwegian Waters S of 62°N  | 382 (0%)     | Below PA (IV, IIIa), unknown (IIa),   | pm                       | 439 (+15%)                  |
| <i>Gadus morhua</i>           | VIb, EU and international waters of Vb (west of 12°W), XII and XIV        | 74 (0%)      | Unknown (VIb, XIV), below Blim (Vb1), completely unknown (XII)                      | pm RO                    | 17 (-77%)                   |
| <i>Gadus morhua</i>           | VIa, EU and international waters of Vb (east of 12°W)                     | 0 (0%)       | Below Blim (VIa), below Blim (Vb1), unknown very low stock size (Vb2)               | 0 (0%)                   | 0 (0%)                      |
| <i>Gadus morhua</i>           | VIIa  | 182 (-20%)   | Below Blim (VIIa)   | 146 (-20%)               | 0 (-100%)                   |
| <i>Gadus morhua</i>           | VIIbc, VIIefghjk, VIII, IX, X, CECAF 34.1.1 (EU)                          | 5072 (-26%)  | Below PA (VIIe-k), completely unknown (VIIbc, VIII, IX, X, CECAF 34.1.1)            | 3569 (-30%)              | 3569 (-30%)                 |
| <i>Gadus morhua</i>           | VIId  | 1701 (+5%)   | Below PA (VIId)   | pm                       | 1956 (+15%)                 |
| <i>Lamna nasus</i>            | I to XIV, FR Guyana, Kattegat, EU waters of Skagerrak, EU waters of CECAF | 0 (0%)       | Threatened species  | 0 (0%)                   | 0 (0%)                      |

| Species   | Fishing area   | TAC 2015     | Stock status according to ICES  | Commission proposal 2016 | Oceana proposal 2016  |
|---|--|--------------|---|--------------------------|---|
| <i>Lepidorhombus spp.</i>                       | EU Waters of IIa and IV  | 2083 (0%)    | Completely Unknown (IIa, IVbc), above MSY Btrigger (IVa)  | 2639 (+27%)              | 2639 (+27%)   |
| <i>Lepidorhombus spp.</i>                       | EU and international waters of Vb,VI<br>international waters of XII and XIV  | 4129 (+1%)   | Above MSY B trigger (VIa), unknown uptrend (VIb), completely unknown (Vb, XII, XIV)                   | 4900 (+19%)              | 4900 (+19%)   |
| <i>Lepidorhombus spp.</i>                       | VII  | 17385 (0%)   | Unknown uptrend (VIIb-k), completely unknown (VIIa)   | pm                       | 16580 (-5%)   |
| <i>Lepidorhombus spp.</i>                       | VIIIab, VIIIde   | 1716 (0%)    | Unknown uptrend (VIIIab), completely unknown (VIIIe)  | pm                       | 1636 (-5%)  |
| <i>Lepidorhombus spp.</i>                       | VIIIc IX, X, CECAF 34.1.1 (EU)   | 1377 (-39%)  | Completely unknown (IXb, X, CECAF 34.1.1), above MSY Btrigger (VIIIc, IXa)                            | 1013 (-55%)              | 1013 (-26%)   |
| <i>Limanda limanda &amp; Platichthys flesus</i> | EU waters of IIa and IV  | 18434 (0%)   | DAB- completely unknown (IIa), unknown (IV) FLE- completely unknown (IIa), unknown (IV)               | 14747 (-20%)             | 10484 (-29%)  |
| Lophiidae                                       | EU Waters of IIa and IV  | 9390 (+20%)  | Unknown uptrend (IV), completely unknown (IIa)  | pm                       | 10308 (+10%)  |
| Lophiidae                                       | Norwegian waters of IV   | 1500 (0%)    | Unknown uptrend (IV)  | pm                       | 1500 (0%)   |
| Lophiidae                                       | VI, EU and international waters of Vb<br>international waters of XII and XIV | 5313 (+20%)  | Unknown uptrend (VI), completely unknown (Vb, XII, XIV)   | pm                       | 5834 (+10%)   |
| Lophiidae                                       | VII  | 33516 (0%)   | Unknown negative trend (VIIb-k), completely unknown (VIIa)  | 29534 (-12%)             | 29534 (-12%)  |
| Lophiidae                                       | VIIIa, VIIIb, VIIIc, VIIIe   | 8980 (0%)    | Unknown negative trend (VIIIab), completely unknown (VIIIe)   | 7913 (-12%)              | 7913 (-12%)   |
| Lophiidae                                       | VIIIc, IX, X, and CECAF34.1.1 (EU)   | 2987 (+14%)  | Unknown but stable trend and above MSY Btrigger (VIIIc, IXa), completely unknown IXb, X, CECAF 34.1.1 | 2413 (-19%)              | 2413 (-19%)   |
| <i>Melanogrammus aeglefinus</i>                 | IIIa, EU waters of IIIb,c,d (22-32)  | 2399 (+6%)   | Above MSY Btrigger (IIIa W), completely unknown (IIIaE,b,c,d)   | pm                       | 2543 + ??<br>(+6% + Uplift)<br>3118 + ??<br>(+30% + Uplift)                           |
| <i>Melanogrammus aeglefinus</i>                 | IV, EU waters of IIa   | 34197 (+7%)  | Above MSY Btrigger (IV, IIa)  | pm                       | 36249 + ??<br>(+6% + Uplift)<br>55201 + ??<br>(+30% + Uplift)                         |
| <i>Melanogrammus aeglefinus</i>                 | Norwegian waters of South 62°  | 707 (0%)     | Above MSY Btrigger (IV, IIIa west)  | pm                       | 707 + ??<br>(0% + Uplift)   |
| <i>Melanogrammus aeglefinus</i>                 | EU and international waters of VIb,<br>XII and XIV                           | 2580 (+113%) | Above MSY Btrigger (VIb), completely unknown (XII, XIV)   | pm                       | 3225 (+8%)  |
| <i>Melanogrammus aeglefinus</i>                 | EU and international waters of Vb,<br>VIa                                    | 4536 (+14%)  | Below Blim (Vb), above MSY Btrigger (VIa)   | pm                       | 5897 <sup>9</sup> + ??<br>(+30% + Uplift)<br>4808 <sup>9</sup> + ??<br>(+6% + Uplift) |

9 Only in the case that Faeroes Grounds (Vb) is close to fishing.

| Species                                 | Fishing area  | TAC 2015     | Stock status according to ICES  | Commission proposal 2016 | Oceana proposal 2016   |
|---|---|--------------|---|--------------------------|--|
| <i>Melanogrammus aeglefinus</i>         | VIIb-k, VIII, IX, X, CECAF 34.1.1 (EU)                                    | 8342 (-12%)  | Above MSY Btrigger (VIIb-k), completely unknown (VIII, IX, X, CECAF 34.1.1)                               | 6078 (-27%)              | 6078 (-27%)  |
| <i>Melanogrammus aeglefinus</i>         | VIIa  | 1181 (0%)    | Unknown uptrend (VIIa)  | pm                       | 1054 (-10%)<br>481 + 573<br>(-59% + Uplift)                  |
| <i>Merlangius merlangius</i>            | IIIa  | 1031 (0%)    | Unknown (IIIa)  | pm                       | 135 (-86%)   |
| <i>Merlangius merlangius</i>            | IV, EU waters of IIa  | 13060 (-14%) | Unknown but above Blim (IV), completely unknown (IIa)   | pm                       | 11101 (-15%)   |
| <i>Merlangius merlangius</i>            | VI EU and international waters of Vb, international waters of XII and XIV | 263 (-10%)   | Below Blim (VIa), unknown (VIb), completely unknown (Vb, XII, XIV)  | 213 (-19%)               | 11 <sup>10</sup> (-96%)                                      |
| <i>Merlangius merlangius</i>            | VIIa  | 80 (0%)      | Below Blim (VIIa)   | 80 (0%)                  | 0 (-100%)  |
| <i>Merlangius merlangius</i>            | VIIb-h, VIIj-k  | 17742 (-14%) | Above MSY (VIIb-c,e-k), unknown above Blim (VIIId)  | pm                       | 16647<br>15395 + 1252<br>(-2%) + Uplift                      |
| <i>Merlangius merlangius</i>            | VIII  | 3175 (0%)    | Unknown (VIII)  | 2540 (-20%)              | 1469 (-53%)  |
| <i>Merlangius merlangius</i>            | IX, X, CECAF (EU)   | TBE          | IXa (unknown), completely unknown (IXb, X, CECAF 34.1.1)  | PT                       | 219 (-X%)  |
| <i>M. erlangius &amp; P. pollachius</i> | Norwegian waters south of 62°N  | 190 (0%)     | WHG- unknown but above Blim (IV), unknown (IIIa), POL- unknown below possible reference points (IIIa, IV) | pm                       | 190 <sup>11</sup> (0%)                                       |
| <i>Merluccius merluccius</i>            | IIIa, EU waters of IIIbcd (22-32)   | 2738 (+11%)  | Possibly above B MSY trigger proxy (IIIa), completely unknown (IIIbcd)                                    | pm                       | 2902 + ??<br>(+6% + Uplift)                                  |
| <i>Merluccius merluccius</i>            | EU waters of IIa and IV   | 3190 (+11%)  | Completely unknown (IIa), possibly above MSY (IV)   | pm                       | 3381 (+6%)<br>3381 + 0<br>(+6% + Uplift)                     |
| <i>Merluccius merluccius</i>            | VI, VII, EU waters of Vb, international waters of XII, XIV                | 50944 (+11%) | Possibly above B MSY trigger proxy (VI, VII), completely unknown (Vb, XII, XIV)                           | pm                       | 54001 + ??<br>(+6% + Uplift)                                 |
| <i>Merluccius merluccius</i>            | VIIIab, VIIIde  | 33977 (+11%) | Possibly above B MSY trigger proxy (VIIIabd), completely unknown (VIIIe)                                  | pm                       | 36016 + ??<br>(+6% + Uplift)                                 |
| <i>Merluccius merluccius</i>            | VIIIc, IX, X, CECAF 34.1.1 (EU)   | 13826 (-15%) | Unknown uptrend (VIIIc, IXa), completely unknown (IXb, X, CECAF 34.1.1)                                   | pm                       | 9560 + ??<br>(-31% + Uplift)<br>5292 + ??<br>(-62% + Uplift) |
| <i>Micromesistius poutassou</i>         | Norwegian waters of II and IV   | 0 (0%)       | Above MSY B trigger (II, IV),   | pm                       | pm   |

<sup>10</sup> No direct fisheries should occur in West of Scotland (VIa).

<sup>11</sup> No direct fishery for Pollack should be conducted in IIIa and bycatch and discards should be minimized.

| Species                                 | Fishing area  | TAC 2015     | Stock status according to ICES  | Commission proposal 2016 | Oceana proposal 2016                     |
|---|---|--------------|---|--------------------------|--|
| <i>Micromesistius poutassou</i>         | EU and international waters of I, II, III, IV, V, VI, VII, VIIIabde, XII, XIV | 197195 (+6%) | Above MSY B trigger (II, IIIa, IV V, VI, VII, VIIIabde, XII, XI),   | pm                       | 118317 (-40%)                            |
| <i>Micromesistius poutassou</i>         | VIIIc, IX, X, EU waters of CECAF 34.1.1 (EU)                                  | 32287 (+5%)  | Above MSY B trigger (VIIIc, IX), completely unknown (X, CECAF 34.1.1)                                     | pm                       | 19372 (-40%)                             |
| <i>Micromesistius poutassou</i>         | EU waters of II, IVa, V, VI north of 56°30'N and VII west of 12°W             | 0 (0%)       | Above MSY B trigger (II, IVa, V, VI, VIId)  | pm                       | pm                                       |
| <i>Microstomus &amp; Glyptocephalus</i> | EU waters II, IV  | 6391 (0%)    | WHB – Unknown stable (IV), completely unknown (II)<br>WIT – Unknown uptrend (IV), completely unknown (II) | 5848 (-8%)               | 5848 (-8%)                               |
| <i>Molva dypterygia</i>                 | EU waters and international waters Vb, VI, VII                                | 4746 (+112%) | Unknown uptrend (Vb, VI, VII)   | pm                       | 5046 (+6%)                               |
| <i>Molva dypterygia</i>                 | International waters of XII   | 558 (-20%)   | Unknown below possible reference points (international waters of XII)                                     | 446 (-20%)               | 446 (-20%)                               |
| <i>Molva dypterygia</i>                 | EU waters and international waters of II, IV                                  | 53 (0%)      | Unknown below possible reference points (II, IVa), completely unknown (IVbc)                              | pm RO                    | 42 (-20%)                                |
| <i>Molva dypterygia</i>                 | EU waters and international waters of III                                     | 8 (0%)       | Unknown below possible reference points (IIIa), completely unknown (IIIbcd)                               | pm RO                    | 6 (-20%)                                 |
| <i>Molva molva</i>                      | EU and international waters I, II   | 36 (0%)      | Unknown uptrend (I, II)   | pm RO                    | 36 (0%)                                  |
| <i>Molva molva</i>                      | IIIa, EU waters of Subdivisions 22-32 (IIIbcd)                                | 87 (0%)      | Unknown uptrend (IIIa), completely unknown (IIIbcd)   | pm                       | 87 (0%)                                  |
| <i>Molva molva</i>                      | EU waters of IV   | 2428 (0%)    | Unknown uptrend (IVa), completely unknown (IVbc)  | pm                       | 2428 (0%)                                |
| <i>Molva molva</i>                      | EU and international waters of V  | 33 (0%)      | Above MSY B trigger (Va) unknown stable (Vb)  | pm RO                    | 33 (0%)                                  |
| <i>Molva molva</i>                      | EU and international waters of VI, VII, VIII, IX, X, XII, XIV                 | 8464 (0%)    | Unknown uptrend (VI, VII, VIII, IX, XII, XIV), completely unknown (X)                                     | pm                       | 8464 (0%)                                |
| <i>Molva molva</i>                      | Norwegian waters IV   | 1100 (+16%)  | Unknown stable (IVa), completely unknown (IVbc)   | pm                       | 1100 (0%)                                |
| <i>Nephrops norvegicus</i>              | IIIa, EU waters of Subdivision 22-32  | 5318 (+6%)   | Unknown (IIIa), completely unknown (IIIbc, 22-32)   | pm                       | pm                                       |
| <i>Nephrops norvegicus</i>              | EU Waters of IIa and IV   | 17843 (+15%) | Above and below MSY B trigger, unknown (FU of IV), completely unknown (IIa)                               | 14315 (-20%)             | 14333<br>13840 + 493<br>(-11%) + Uplift  |
| <i>Nephrops norvegicus</i>              | Norwegian waters IV   | 1000 (0%)    | Above and below MYS B trigger, unknown (FU of IV),  | pm                       | pm                                       |
| <i>Nephrops norvegicus</i>              | VI, EU and international waters Vb  | 14190 (-7%)  | Above MSY trigger and unknown (VIa), completely unknown (Vb, VIb)   | pm                       | 16501<br>15956 + 545<br>(+8%) + Uplift   |
| <i>Nephrops norvegicus</i>              | VII   | 21619 (+3%)  | Above MSY trigger and unknown (VII)   | pm                       | 19899<br>17719 + 2180<br>(-18%) + Uplift |

| Species                      | Fishing area   | TAC 2015      | Stock status according to ICES   | Commission proposal 2016 | Oceana proposal 2016  |
|------------------------------|--|---------------|--|--------------------------|---|
| <i>Nephrops norvegicus</i>   | VIIIab, VIIIde   | 3899 (0%)     | Unknown (VIIIab), completely unknown (VIIIde)  | pm                       | 3214 (-17%)   |
| <i>Nephrops norvegicus</i>   | VIIIc  | 60 (-10%)     | Below Blim and unknown decreasing (VIIIc)  | pm                       | 0 (-100%)   |
| <i>Nephrops norvegicus</i>   | IX, X, CECAF 34.1.1 (EU)   | 254 (+15%)    | Below Blim and unknown (IXa), completely unknown (IXb, X, CECAF 43.1.1)                        | pm                       | 0 (-100%) or 321 <sup>12</sup> (+45%)                                       |
| <i>Pandalus borealis</i>     | IIIa   | 4074 (+15%)   | Above MSY trigger (IIIa West)  | pm                       | pm  |
| <i>Pandalus borealis</i>     | EU waters of IIa, IV   | 2446 (0%)     | Above MSY trigger (IIa, IVa East), unknown (IVa-Fladen Ground)                                 | pm                       | pm  |
| <i>Pandalus borealis</i>     | Norwegian waters south of 62°00'N  | 480 (0%)      | Above MSY trigger (IIIa West, IVa-Norwegian Deep)  | pm                       | pm  |
| <i>Penaeus spp.</i>          | French Guyana waters   | TBE           | ?  | pm                       | pm  |
| <i>Pleuronectes platessa</i> | IIIa (Skagerrak)   | 9855 (0%)     | Above MSY B trigger (IIIa – Skagerrak))  | pm                       | pm  |
| <i>Pleuronectes platessa</i> | IIIa (Kattegat)  | 2626 (+22%)   | Above MSY B trigger (IIIa – Kattegat)  | pm                       | pm  |
| <i>Pleuronectes platessa</i> | IV, EU waters of IIa, IIIa not covered by Skagerrak and Kattegat           | 119690 (+15%) | Above MSY B trigger (IV), completely unknown (IIa, IIIa not covered by Skagerrak and Kattegat) | pm                       | pm<br>93358 + ??<br>(-22%) (Uplift)<br>pm<br>137643 + ??<br>(+15%) (Uplift) |
| <i>Pleuronectes platessa</i> | VI, EU and international waters of Vb, international waters of XII and XIV | 658 (0%)      | Completely unknown (Vb, VI, XII, XIV)  | pm RO                    | 559 (-15%)  |
| <i>Pleuronectes platessa</i> | VIIa   | 1098 (-10%)   | Unknown possibly above reference points (VIIa)   | 878 (-20%)               | 769 ~ 343<br>(-30%) ~ (-69%)  |
| <i>Pleuronectes platessa</i> | VIIb, VIIc   | 74 (0%)       | Unknown (VIIbc)  | pm RO                    | 30 (-59%)   |
| <i>Pleuronectes platessa</i> | VIIId, VIIe  | 4787 (-10%)   | Unknown increasing (VIIe) above MSY B trigger (VIIId)  | pm                       | 9574 ~ 14247<br>(+100%) ~ (+197)  |
| <i>Pleuronectes platessa</i> | VIIIf, VIIg  | 461 (0%)      | Unknown (VIIIfg)   | 420 (-9%)                | 420 (-9%)   |
| <i>Pleuronectes platessa</i> | VIIIf, VIIj, VIIk  | 135 (0%)      | Unknown (VIIIfjk)  | pm                       | 135 (0%)  |
| <i>Pleuronectes platessa</i> | VIII, IX, X, CECAF 34.1.1 (EU)   | 395 (0%)      | Unknown (VIII, IXa), completely unknown (IXb, X, CECAF 34.1.1)                                 | pm RO                    | 194 (-50%)  |

<sup>12</sup> No direct fisheries should occur in FU26 and FU27.

| Species                             | Fishing area   | TAC 2015     | Stock status according to ICES  | Commission proposal 2016 | Oceana proposal 2016  |
|-------------------------------------|--|--------------|---|--------------------------|---|
| <i>Pollachius pollachius</i>        | VI, EU and international waters of Vb, international waters of XII and XIV | 397 (0%)     | Unknown (VI), completely unknown (Vb, XII, XIV)   | pm RO                    | 149 (-62%)  |
| <i>Pollachius pollachius</i>        | VII  | 13495 (0%)   | Unknown (VII)   | 10796 (-20%)             | 4051 (-62%)   |
| <i>Pollachius pollachius</i>        | VIIIa, VIIIb, VIIIc, VIIIe   | 1482 (0%)    | Unknown (VIIIa, VIIIb, VIIIc, VIIIe)  | 1186 (-20%)              | 977 (-34%)  |
| <i>Pollachius pollachius</i>        | VIIIc  | 231 (0%)     | Unknown (VIIIc)   | pm                       | 152 (-34%)  |
| <i>Pollachius pollachius</i>        | IX, X, CECAF 34.1.1 (EU)   | 282 (0%)     | Unknown (IXa) completely unknown (IXb, X, CECAF 34.1.1)   | pm RO                    | 186 (-34%)  |
| <i>Pollachius virens</i>            | IIIa and IV, EU waters IIa, IIIb, IIIc, Subdivisions 22-32                 | 31383 (-15%) | Below MSY B trigger (IIIa, IV), Completely unknown (IIIbc 22-32), above PA (IIa)                      | pm                       | pm<br>29500 + ??<br>(-6%) (Uplift)<br>pm<br>27617 + ??<br>(-12%) (Uplift) |
| <i>Pollachius virens</i>            | VI, EU and international Vb, XII, XIV                                      | 6348 (-16%)  | Below MSY B trigger (VI) above MSY B trigger (Vb), completely unknown (XII, XIV)                      | pm                       | pm  |
| <i>Pollachius virens</i>            | Norwegian waters south 62°N  | 880 (0%)     | Below PA (IIIa, IV)   | pm                       | pm<br>827 + ??<br>(-6%) (Uplift)<br>pm<br>774 + ??<br>(-12%) (Uplift)     |
| <i>Pollachius virens</i>            | VII, VIII, IX, X, CECAF 34.1.1 (EU)  | 3176 (0%)    | Completely unknown (VII, VIII, IX, X, CECAF 34.1.1)   | pm RO                    | 2700 (-15%)   |
| <i>Psetta &amp; Scopthalmus</i>     | EU waters IIa, IV  | 4642 (0%)    | Turbot: unknown uptrend (IV), completely unknown (IIa), Brill: unknown (IV), completely unknown (IIa) | 4488 (-3%)               | 4488 (-3%)  |
| <i>Rajidae</i>                      | EU waters IIa, IV  | 1382 (+10%)  | Depending on species  | 1005 (-20%)              | 1005 (-20%)   |
| <i>Rajidae</i>                      | EU waters IIIa   | 47 (0%)      | Depending on species  | 38 (-20%)                | 38 (-20%)   |
| <i>Rajidae</i>                      | EU waters VIa, VIb, VIIa-c, VIIe-k   | 8032 (0%)    | Depending on species  | 6426 (-20%)              | 6426 (-20%)   |
| <i>Rajidae</i>                      | EU waters VIII   | 798 (0%)     | Depending on species  | 638 (-20%)               | 638 (-20%)  |
| <i>Rajidae</i>                      | EU waters VIII and IX  | 3420 (0%)    | Depending on species  | 3078 (-10%)              | 2736 (-20%)   |
| <i>Reinhardtius hippoglossoides</i> | EU waters IIa, IV, EU and international waters Vb, VI                      | 1500 (+50%)  | Above PA uptrend (IIa), above PA (Vb, VI), completely unknown (IV)                                    | pm                       | pm  |

| Species                  | Fishing area  | TAC 2015      | Stock status according to ICES  | Commission proposal 2016 | Oceana proposal 2016               |
|--------------------------|---|---------------|---|--------------------------|------------------------------------|
| <i>Scomber scombrus</i>  | IIIa, IV, EU waters IIa, IIIb, IIIc, Subdiv 22-32                       | 36338 (-14%)  | Above MSY trigger (IIIa, IV, IIa, IIIbc)                                | pm                       | 22166 ~ 19622 (-39%) ~ (-46%)      |
| <i>Scomber scombrus</i>  | VI, VII, VIIIab, VIIIde, EU and int waters Vb, int waters IIa, XII, XIV | 420692 (-15%) | Above MSY trigger (VI, VII, VIIIabde), unknown, Vb, IIa, XII, XIV)      | pm                       | 256622 ~ 227139 (-39%) ~ (-46%)    |
| <i>Scomber scombrus</i>  | VIIIc, IX, X, CECAF (EU)  | 48138 (-15%)  | Above MSY trigger (VIIIc, IXa) Unknown (IXb, X, CECAF 34.1.1)           | pm                       | 29364 ~ 25994 (-39%) ~ (-46%)      |
| <i>Scomber scombrus</i>  | Norwegian waters of IIa, IVa  | 16521 (-15%)  | Above MSY trigger (IVa) Unknown (IIa)                                   | pm                       | 10078 ~ 8921 (-39%) ~ (-46%)       |
| <i>Solea solea</i>       | EU waters IIa, IV   | 11890 (0%)    | Above MSY B trigger (IV), completely unknown (II)                       | pm                       | 12378<br>11921 + 457 (0%) + Uplift |
| <i>Solea solea</i>       | IIIa, EU waters of IIIb-d (22-32)                                       | 205 (-42%)    | Below PA (IIIab, 22-24) completely unknown (25-32)                      | pm                       | pm                                 |
| <i>Solea solea</i>       | VI, EU and international waters of Vb, international waters of XII, XIV | 57 (0%)       | Completely unknown (VI, Vb, XII, XIV)                                   | pm RO                    | 48 (-15%)                          |
| <i>Solea solea</i>       | VIIa  | 90 (-5%)      | Below Blim (VIIa)   | 0 (-100%)                | 0 (-100%)                          |
| <i>Solea solea</i>       | VIIb VIIc   | 42 (0%)       | Unknown (VIIbc)   | pm RO                    | 30 (-29%)                          |
| <i>Solea solea</i>       | VIIId   | 3483 (-28%)   | Above MSY B trigger (VIIId)   | pm                       | 2679<br>2376 + 303 (-32%) + Uplift |
| <i>Solea solea</i>       | VIIe  | 851 (+2%)     | Above MSY B trigger (VIIe)  | pm                       | 1226 (+44%)                        |
| <i>Solea solea</i>       | VIIIf VIIg  | 851 (-15%)    | Above MSY B trigger (VIIIfg)  | pm                       | 750<br>745 + 5 (-12%) + Uplift     |
| <i>Solea solea</i>       | VIIh, VIIj and VIIk   | 382 (0%)      | Unknown (VIIh-k)  | pm                       | 205 (-46%)                         |
| <i>Solea solea</i>       | VIIIa and VIIIb   | 3800 (%)      | Below PA (VIIIa,b)  | pm                       | 2393 ~ 2660 (-37%) ~ (-30%)        |
| <i>Solea spp.</i>        | VIIIc, VIIId and VIIIE, IX, X, CECAF 34.1.1 (EU)                        | 1072 (0%)     | Unknown (VIIIc, IXa), completely unknown (VIIIde, IXb, X, CECAF 34.1.1) | pm RO                    | 858 (-20%)                         |
| <i>Sprattus sprattus</i> | VIIId and VIIe  | 5150 (0%)     | Unknown uptrend   | pm RO                    | 4598 (-11%)                        |
| <i>Squalus acanthias</i> | EU waters of IIIa   | 0 (0%)        | Well below sustainable levels   | 0 (0%)                   | 0 (0%)                             |
| <i>Squalus acanthias</i> | EU waters of IIa and IV   | 0 (0%)        | Well below sustainable levels   | 0 (0%)                   | 0 (0%)                             |
| <i>Squalus acanthias</i> | EU and international waters of I, V, VI, VII, VIII, XII, XIV            | 0 (0%)        | Well below sustainable levels   | 0 (0%)                   | 0 (0%)                             |

| Species                                | Fishing area   | TAC 2015      | Stock status according to ICES   | Commission proposal 2016 | Oceana proposal 2016 |
|--|--|---------------|--|--------------------------|----------------------|
| <i>Trachurus spp.</i>                  | VIIIc  | 13572 (-27%)  | Above MSY B trigger  | 17235 (+27%)             | 13572 (0%)           |
| <i>Trachurus spp.</i>                  | IX   | 59500 (+70%)  | Unknown at long term average (IXa), completely unknown (IXb)           | 68583 (+15%)             | 68583 (+15%)         |
| <i>Trachurus spp.</i>                  | X, CECAF 34.1.1 (Azores)   | Portugal      | Unknown stable (Xa2), completely unknown (Xa1, Xb)                     | pm                       | 1098                 |
| <i>Trachurus spp.</i>                  | CECAF 34.1.1 (Madeira)   | Portugal      | Scientific assessment not available at the time of writing this report | pm                       | pm                   |
| <i>Trachurus spp.</i>                  | CECAF 34.1.1 (Canary Islands)  | Spain         | Scientific assessment not available at the time of writing this report | pm                       | pm                   |
| <i>Trachurus spp. &amp; by-catches</i> | EU waters IVb, IVc, VIId   | 11650 (-59%)  | Unknown stable at low level (IVbc, VIId)                               | pm                       | 11650 (0%)           |
| <i>Trachurus spp. &amp; by-catches</i> | EU waters IIa, IVa, VI, VIIa-c, VIIe-k, VIIIa, VIIIb, VIId, VIIIe, EU and international waters Vb, international waters XII, XIV | 84032 (-27%)  | Above MSY B trigger  | pm                       | 84032 (0%)           |
| <i>Trisopterus esmarkis</i>            | IIIa, EU waters IIa, IV  | 128000 (+20%) | Above MSY B trigger (IIIa, IV), completely unknown (IIa)               | pm                       | 160000 (+25%)        |



## Anglerfish (*Lophius spp.*)

### Species description

The two angler species found in the North Atlantic are the angler (*Lophius piscatorius*) and black-bellied angler (*Lophius budegassa*). The species are distributed from the south-west of the Barents Sea to the Straits of Gibraltar and the African coasts, including the Mediterranean and the Black Sea. *L. budegassa* is wider spread in southern waters than *L. piscatorius*. Anglerfish live in soft or muddy bottoms where they bury themselves waiting for prey, mainly fish. Spawning appears to occur largely in deep waters off the edge of the continental shelf, although mature females are rarely encountered.



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### State of the stocks

There are serious data gaps regarding anglerfish stocks, making them considered as data limited stocks. While the state of the stocks of the two target species (*L. piscatorius* and *L. budegassa*) differs, their management do not, and both are caught in the same grounds and by the same fleets. As anglerfish matures at a larger size, a large portion of catches consist of immature fish, making the stock susceptible to recruitment overfishing.

In the **Skagerrak and Kattegat** (IIIa), the **North Sea** (IV), and in **Western Scotland and Rockall** (VI), there is no solid analytical assessment for the stock as a whole, because of major uncertainties concerning catch-at-age and effort data, as well as limited knowledge about population dynamics. The stock status relative to candidate reference points is unknown. Scientists, using industry/science surveys deployed in Division Iva and Subarea VI, indicate that the

average index biomass has increased by more than 20% in the last two years (2014-2015) that the average of the three previous years (2011-2013). This positive trend is considered to continue an even improve if scientific advice is fulfilled, as the dedicated survey for this stock indicated a strong 2013 year class that will be entering the fishery in 2016. Data collection has improved in recent years and previous concerns about under-reporting, which amounted to around 40-60% of cases, are no longer considered, as all catches are assumed to be counted. Accurate growth estimates and ageing parameters are needed to identify reference points, as previous ones are not considered to be valid. This species' susceptibility to overexploitation has recently increased due to the development of fisheries in deeper waters, where spawning areas are located, and because a large proportion of the catch consists of immature fish.

In the **West of Ireland, Porcupine Bank, Eastern and Western English Channel, Bristol Channel, North and South Celtic Sea, and East and West of Southwest of Ireland** (VIIb-k), **North, Central and Bay of Biscay-Offshore** (VIIIa,b,d) there is no analytical assessment of the state of the stocks, the exploitation status is unknown, and there are no reliable estimates of discards that are considered to be non-negligible. There are no reference points defined for these stocks. Improved sampling of length composition and accurate estimates of growth parameters are needed to facilitate the development of analytical assessment. According to the data survey, biomass showed erratic behaviour in a negative trend in the past two years. *L. budegassa* landings represent 30% of the total landings of both species. The majority of anglerfish catches consist of young fish and anglerfish discards of small individuals seem to have increased in recent years.

In the Iberian Peninsula, **south of the Bay of Biscay** (VIIIc) and **west of Portuguese waters** (IXa) the state of anglerfish stocks depends on the species. *L. budegassa* anglerfish stock is in good condition and currently above the Bmsy trigger thanks to a progressive reduction in mortality since 1999, which has been below Fmsy since 2008. *L. piscatorius* stock status is unknown in relation to any potential biomass reference point, but is estimated to be in an

intermittently increasing trend over the last 20 years, in response to a fishing mortality decrease trend since the late 80s, that is currently placed right above Fmsy. Recruitment for *L. piscatorius*, which constitutes around 65% of the total anglerfish landings, has been low in recent years with no evidence of strong year classes since 2001. Discards are known to take place but cannot be quantified. A large proportion of catches include immature fish.

in the **EU and international waters of Faeroes Grounds (Vb), Irish Sea (VIIa), West of Bay of Biscay (VIIIe), West Portuguese Waters (IXb), Azores Grounds (X), international waters of North Azores (XII), international waters of East Greenland (XIV) and CECAF 34.1.1.**

**Oceana proposal**

Stocks of anglerfish will not be affected by the landing obligation in 2016 so adopted TAC should be set according to wanted catches.

Technical measures are required to ensure that sufficient numbers of individuals can reach the spawning size. Oceana proposes setting a minimum landing size linked to the reproductive size. EU Regulation (EC) 2406/96 fixes a minimum weight of 500g for anglerfish to ensure marketing standards, and increases the mesh opening for the nets used for this fishery in accordance with this criteria. The situation endangers the stock’s possible positive evolution by preventing the young individuals that have resulted from the latest good levels of recruitment, from being incorporated into the population.

As both anglerfish species are caught, landed and counted together, they are managed under a common TAC. This situation prevents effective control of the single-species exploitation rates and could potentially lead to overexploitation of either species. The species requires a management plan, based on objective scientific criteria to control its exploitation. The control system also needs to be improved.

For the stock from the **Skagerrak and Kattegat (IIIa) the North Sea (IV), and Western Scotland and Rockall (VI)**, ICES states that based on the precautionary approach, landings should be no more than 17642 tonnes. If discard rates do not change from the average of the last three years (2012-2014) this implies catches of no more than 18435 tonnes. This stock will not be affected by the landing obligation in 2016 and it is considered to be a data limited stock. This implies an increase of total catches of 9% in relation of the last year, as no additional precautionary reduction is needed because the

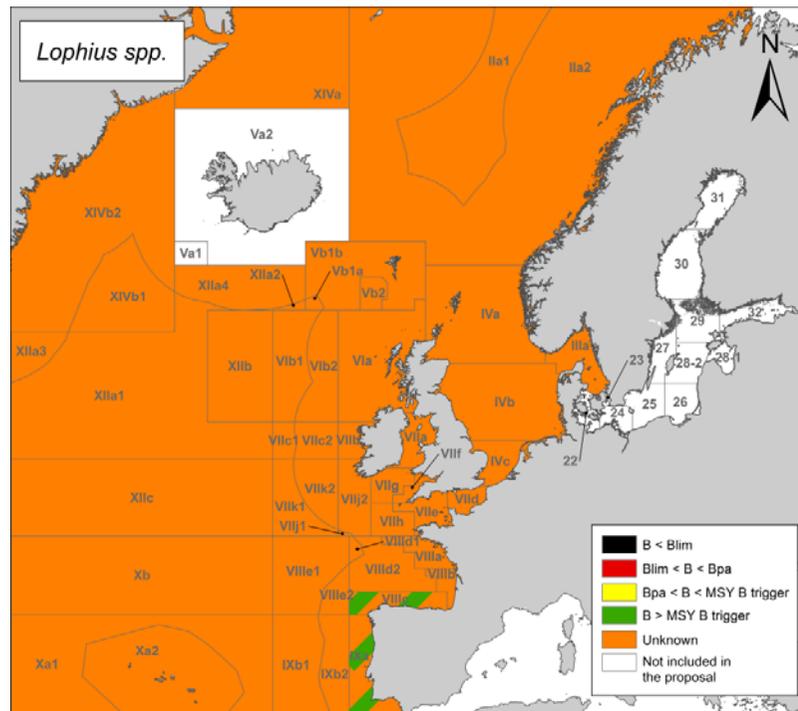


Figure 1. Anglerfish stock status in ICES areas included in the proposal according to spawning biomass.

There are no scientific assessments that provide an evaluation about the status and rate of exploitation for the rest of the managed stocks

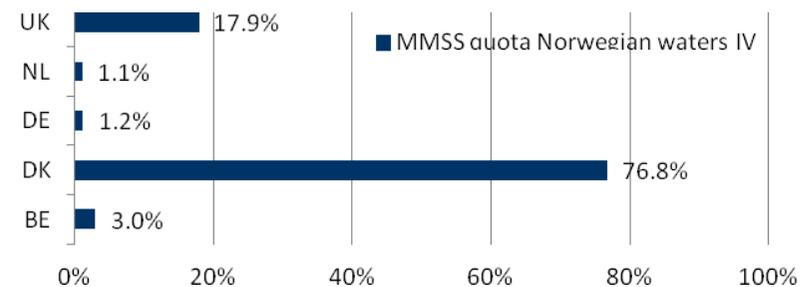
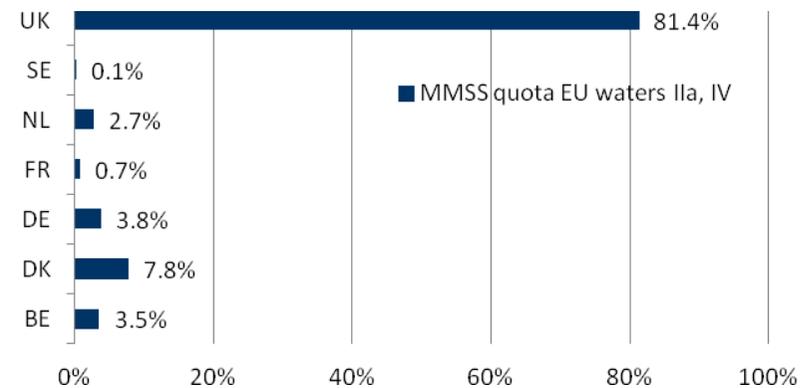
decrease trend in fishing effort over the last decade. Oceana, considering that required technical measures to ensure that sufficient numbers of individuals can reach spawning size are not implemented, suggest a lower increase. ICES also recommends that the management area be consistent with the assessment area.

For stocks from the **West of Ireland, Porcupine Bank, Eastern and Western English Channel, Bristol Channel, North and South Celtic Sea, and East and West of Southwest of Ireland (VIIb-k), North, Central and Offshore of Bay of Biscay (VIIIa,b,d)**, based on the specific assessment of data-limited stocks, ICES advises that landings in 2016 should not exceed 10757 tonnes for *L. budegassa* and 26691 tonnes for *L. piscatorius*, which would result in a combined TAC of 37448 tonnes, i.e., a 12% TAC reduction. This stock will not be affected by the landing obligation in 2016. As there are no reliable estimates of discards, ICES cannot quantify the resulting catches. ICES ensures that management of the two anglerfish species under a combined TAC prevents control of the single-species exploitation rates and could lead to the overexploitation of either species. Therefore Oceana recommends that the combined TAC should under no circumstances be exceeded and a precautionary reduction should be applied in the event that the management of the two species cannot be differentiated. A reduction in TAC is advisable as anglerfish biomass indicators show a downward trend over the last two years.

For the Iberian Peninsula, **South of Bay of Biscay (VIIIc) and West of Portuguese waters (IXa)**, ICES advises that, based on the MSY approach, catches of anglerfish in 2016 should not exceed 2413 tonnes, 1070 tonnes of *L. budegassa* and 1343 tonnes of *L. piscatorius*, which implies a 19% decrease in TAC versus the previous year. Oceana recommends that this advice be followed, as all catches are assumed landed. Furthermore, Oceana suggests a precautionary reduction be applied in the event that the management of the two species cannot be differentiated since the management of the two anglerfish species under a combined TAC could mean less control of the single-species exploitation rates and could lead to the overexploitation of either species.

For the other managed stocks for which there is no information, **EU and international waters of Faeroes Grounds (Vb), Irish Sea (VIIa), West of Bay of Biscay (VIIIe), West Portuguese Waters (IXb), Azores Grounds (X), international waters of North Azores (XII), international waters of East Greenland (XIV), and CECAF 34.1.1**, Oceana proposes applying the scientific advice of the stocks included in the according management area.

### Member States quotas



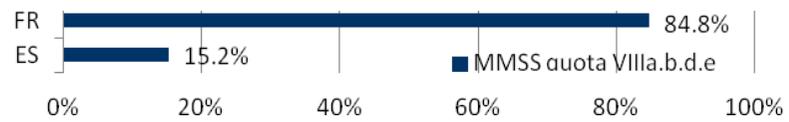
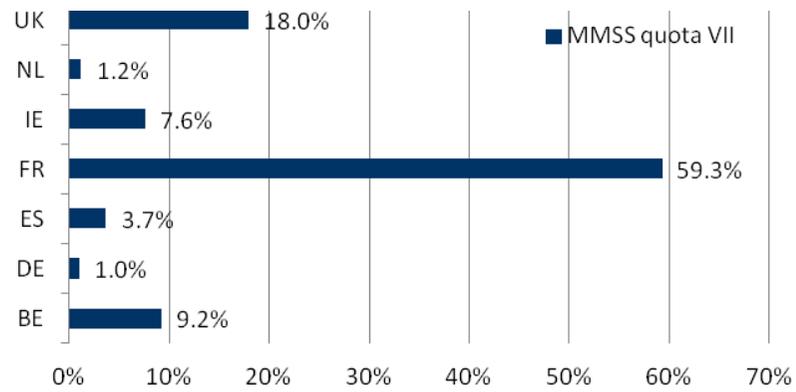
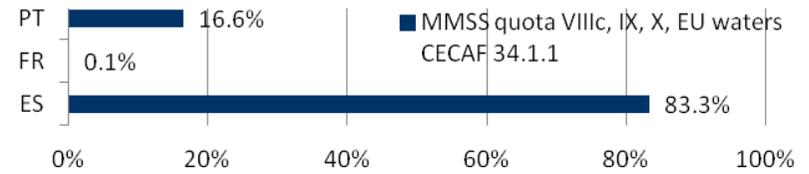
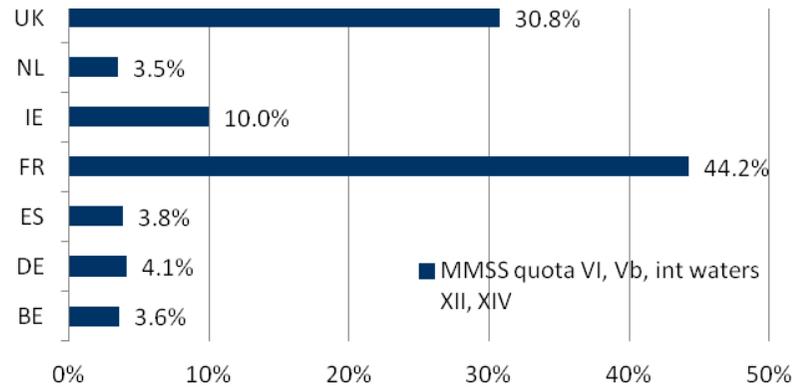


Table 1. Comparative table of Anglerfish TACs (landings in tonnes) in ICES areas registered in the proposal. Brackets compare TAC difference from previous year (in %).

| Fishing area                          | Area name  | TAC 2015    | Stock Status   | Commission proposal 2016 | Oceana proposal 2016 |
|---------------------------------------|--|-------------|--|--------------------------|----------------------|
| EU Waters of IIa and IV               | EU waters of Norwegian Sea and North Sea   | 9390 (+20%) | Unknown uptrend (IV), completely unknown (IIa)   | pm                       | 10308 (+10%)         |
| Norwegian Waters of IV                | Norwegian Waters of North Sea  | 1500 (0%)   | Unknown uptrend (IV)   | pm                       | 1500 (0%)            |
| VI, Vb (EU&IW), XII (IW) and XIV (IW) | Rockall, West of Scotland, EU & international waters of Faeroes Grounds, international waters of North Azores and international waters East Greenland              | 5313 (+20%) | Unknown uptrend (VI), completely unknown (Vb, XII, XIV)  | pm                       | 5834 (+10%)          |
| VII                                   | Irish Sea, West of Ireland, Porcupine Bank, Eastern and Western English Channel, Bristol Channel, Celtic Sea North and South, Southwest of Ireland - East and West | 33516 (0%)  | Unknown negative trend (VIIb-k). Completely unknown (VIIa)   | 29534 (-12%)             | 29534 (-12%)         |
| VIIIa, VIIIb, VIIIc, VIIIe            | Bay of Biscay (north, central, offshore and west)  | 8980 (0%)   | Unknown negative trend (VIIIabd). Completely unknown (VIIIe)   | 7913 (-12%)              | 7913 (-12%)          |
| VIIIc, IX, X, and CECAF34.1.1 (EU)    | Bay of Biscay South, Portuguese waters, Azores Grounds and EU waters of CECAF34.1.1  | 2987 (+14%) | Unknown but stable trend and above MSY B trigger (VIIIc, IXa), completely unknown IXb, X, CECAF 34.1.1 | 2413 (-19%)              | 2413 (-19%)          |

## Blue Whiting (*Micromesistius poutassou*)

### Species description

Blue whiting is found on the North-East and North-West Atlantic coasts. In the North-East Atlantic, this species is found from the Barents Sea and down along the African coast to Cape Bojador. It is found on the continental shelf and slope down to 1000 meters where it feeds mainly on small crustaceans.



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### State of the stocks

It has been deemed likely that there would be more than one stock in the Northeast Atlantic, but ICES has confirmed that there is no scientific evidence supporting multiple stocks with distinct spawning locations or timings, so blue whiting is assessed as one single stock. According to the latest scientific evidence, it seems that the stock can be classified as non-overexploited in North East Atlantic waters.

Although there were recognised shortfalls in the evaluations of this species' stock levels in recent years, these deficiencies are being fixed. The main survey for the adult part of this stock, conducted in 2015, had shown a lower than expected abundance and low numbers of older age groups, although the uncertainty of the assessment is considered higher than in previous years. On the other hand, the survey had high quality coverage of the survey area in space and time.

Spawning stock biomass has been above MSY B trigger and precautionary levels for the past 18 years. Although for 8 years

biomass showed a very worrying downtrend, going from a peak of 7.0 million tonnes in 2003 to 2.5 million tonnes in 2010 and 2011. This trend has now reversed and biomass in 2014 was around 4 million tonnes as clear evidence of the stock recovery. This positive trend is a response to low levels of fishing mortality from 2009 to 2012, in combination with an increase in recruitment, estimated to be above average, since 2010. Unfortunately fishing mortality has increased from a historical low in 2011 (0,04) to above  $F_{msy}$  in 2014. Discards are considered to be negligible as all catches are assumed to be landed.

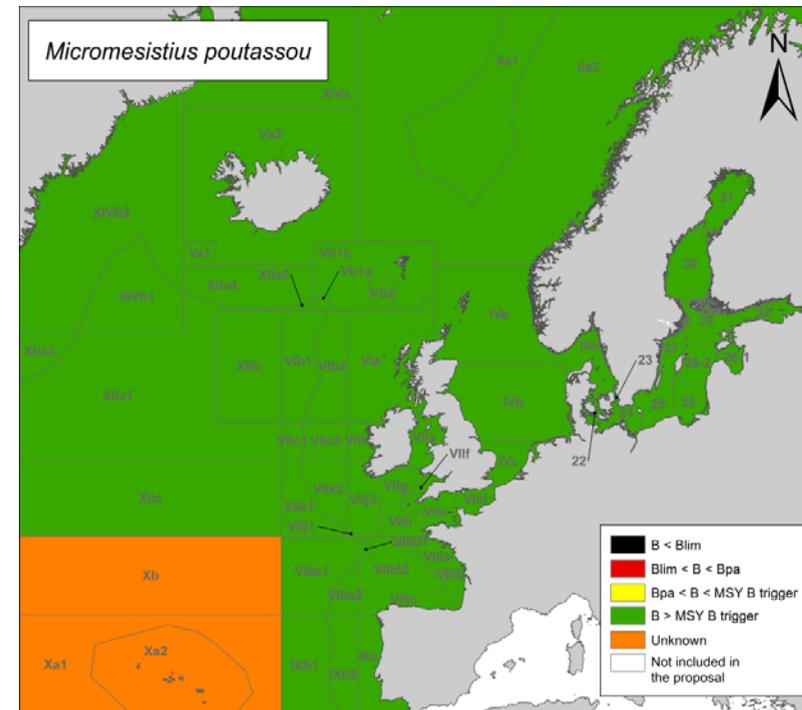


Figure 2. Blue whiting stock status in ICES areas included in the proposal according to spawning biomass.

It is expected that if the status of the stock does not worsen it will have a positive impact on the ecosystem, because the species plays an important role in the pelagic environment not only as a predator, but also as prey for commercial species for which it is an important source of food.

### Oceana proposal

Stocks of blue whiting will be affected by the landing obligation in 2016 so adopted TAC should be set according to total real catches.

TACs and quotas for blue whiting stocks are set during annual negotiations between the EU, Norway, Iceland and the Faroe Islands. The management plan agreed in 2008 by these countries and endorsed by NEAFC is considered to be no longer applicable. During past 2014 year, the setting of TAC according to the management plan has led to significant increases in catches.

ICES advises that when the MSY approach is applied, catches in 2016 should be no more than 776391 tonnes. This represents a reduction by 40% in catches, compared with the estimated catches for 2015, which would lead to an increase in biomass by 6%. Oceana agrees with this advice in order to reduce the fishing mortality to sustainable levels.

On the possibility of increasing the current proportion of catches allowed to be carried over to next year catches, due to the Russian ban on the import of fisheries products, Oceana recommends maintaining the current limit of 10% for blue whiting and not to apply the proposed flexibility (20%-30%). Fishing mortality in 2015 has been well above Fmsy and while an increase in the flexibility would

reduce F in 2015, it would result in an increase in F in 2016 of a similar magnitude to the flexibility (around +20% or 30%) placing F in 2016 well above the MSY approach.

### Member States quotas

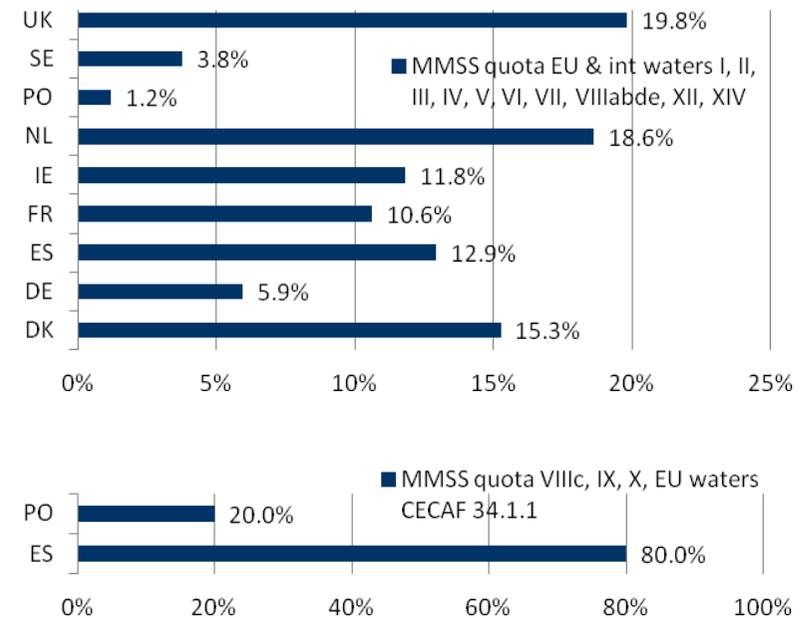


Table 2. Comparative table of Blue whiting TACs (catches in tonnes) in ICES areas registered in the proposal. Brackets compare TAC difference from previous year (in %).

| Fishing area   | Area name  | TAC 2015     | Stock Status  | Commission proposal 2016 | Oceana proposal 2016 |
|--|--|--------------|---|--------------------------|----------------------|
| Norwegian Waters of II and IV  | Norwegian waters of Norwegian Sea and North Sea  | 0 (0%)       | Above MSY B trigger (II, IV),   | pm                       | pm                   |
| EU and international Waters of I, II, III, IV, V, VI, VII, VIIIa,b,d,e, XII, XIV | EU and international Waters of Barents Sea, Norwegian Sea, Spitzbergen and Bear Island, Skagerrak, Kattegat, Sound, Belt Sea, and Baltic Sea, North Sea, Iceland and Faeroes Grounds, Rockall, West of Scotland, Irish Sea, West of Ireland, Porcupine Bank, Eastern and Western English Channel, Bristol Channel, Celtic Sea North and South, and Southwest of Ireland - East and West, Bay of Biscay North Central, Offshore and West, North of Azores, East Greenland | 197195 (+6%) | Above MSY B trigger (II, IIIa, IV V, VI, VII, VIIIabde, XII, XI),     | pm                       | 118317 (-40%)        |
| VIIIc, IX, X, EU waters of CECAF 34.1.1 (EU)                                     | Bay of Biscay South, Portuguese Waters, Azores Grounds, European waters of CECAF 34.1.1  | 32287 (+5%)  | Above MSY B trigger (VIIIc, IX), completely unknown (X, CECAF 34.1.1) | pm                       | 19372 (-40%)         |
| EU waters of II, IVa, V, VI north of 56°30'N and VII west of 12°W                | European waters of Norwegian Sea, Spitzbergen and Bear Island, Northern North Sea, Iceland and Faeroes Grounds, Rockall and West of Scotland north of 56°30'N and Irish Sea, West of Ireland, Porcupine Bank, Eastern and Western English Channel, Bristol Channel, Celtic Sea North and South, and Southwest of Ireland - East and West west of 12°W  | 0 (0%)       | Above MSY B trigger (II, IVa, V, VI, VII)d                            | pm                       | pm                   |

## Atlantic cod (*Gadus morhua*)

### Species description

This epibenthic, pelagic species can be found in a wide variety of habitats, from the coast to the boundaries of the continental shelf. It forms aggregations during the day. Cod is an omnivorous species and its diet consists of invertebrates and fish, including its own juveniles. The largest stocks are found in the Norwegian Arctic, the Barents Sea and Iceland. It is also found in the Baltic Sea, the North Sea and west of Scotland.



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### State of the stocks

Cod stocks in European waters are in a poor state, the species has been subject to successive management plans, and the species is still showing no solid signs of recovery. Furthermore, some of the stocks continue to collapse with biomasses below the safe biological and precautionary limits.

Despite the low abundance of the species, it is still possible to find areas of high cod density due to its hyper-aggregating behaviour. This can lead to high catches in specific places causing high mortality on damaged stocks. Rising sea temperature has been shown to have a negative impact on cod recruitment in warmer waters of the species' range distribution.

**Kattegat** (IIIa, East): although no reference points are defined for this stock and the assessment is indicative of trends, new data obtained in a new survey has improved the quality of the assessment changing the perception of the stock status. After a period of collapse with biomass levels at a historical low in 2009, spawning-stock biomass has increased constantly since then. Despite this positive trend the stock is still considered to be in a poor state. Fishing mortality is uncertain and cannot be reliably estimated as reported landings and discard estimates do not represent total removals; in any case, the mortality indicator has shown a decreasing trend since 2008. Recruitment in recent years has improved and the 2012-year class was among the highest in the time-series contributing to the recovery of the stock. Discard data from on-board observers indicates an increase since 2009. Existing management measures have not been effective in reducing discards, in fact discard rate for the last years is the highest of the whole time series. The EU agreed a multi-annual plan in 2008. Fishing mortality has been the major driver of long-term stock dynamics, more than the effects of environmental and climate change.

In the **North Sea** (IV), **Eastern Channel** (VIId) and **Skagerrak** (IIIa West), the stock has gradually increased since its historical low in 2006 and for the first time in 17 years it is above Blim, confirming that a recovery trend is taking place, but it remains low, below the precautionary level and MSY B trigger. Fishing mortality has decreased since 2000 and it is now at around 0.4, still above Fmsy proxy (0.33). Recruitment has been poor since 1998. The stock is managed through the EU management plan (Regulation (EC) 1342/2008) and the EU–Norway long-term management plan. Both plans are in accordance with the precautionary approach, according to ICES, but only if properly implemented and enforced. Changes to the stock assessment and reference points in 2015 imply a need to re-evaluate the management strategy to ascertain if it can still be considered precautionary under the new stock perception. Until such an evaluation can be conducted, the ICES advice is based on the MSY approach.

**Rockall (VIb):** There are no new data available that change the perception of the stock. Reliable information is lacking to evaluate the status of this stock, and current landing levels are 20 times lower than those documented ten years ago, having gone from 2000 tonnes in 1985 to less than 100 in the last 13 years. Although there are doubts on the accuracy of the reported landings, as these are reported by vessels operating in both divisions VIa and VIb, the strong downtrend in landings could proof of stock depletion and that catches and fishing efforts are not sustainable.

**West of Scotland (VIa):** this stock is completely collapsed with a biomass level that has been below Blim since 1997, and has remained very low, well below Blim since 2006t. The management plan (Regulation (EC) 1342/2008) has yet to be implemented and enforced adequately. It has therefore failed to reduce fishing mortality to the required levels and fishing mortality has been above Flim for most of the time-series and more than three times higher than MSY fishing rate. The fishery is also managed by a combination of by-catch restrictions, area closures and technical measures. Recruitment has been estimated to be low since 2001 and is considered impaired. In 2013 catches were nine times greater than the reported landings and estimated mortality is increasingly due to discarding. Discard information is imprecise compared to landing data because of lower sampling coverage. The proportion of the total catch that is discarded has increased since 2006 and discards now account for around 80% of the total catch, roughly four times greater than landings.

**Irish Sea (VIIa):** all available evidence points to a severely depleted stock. Spawning stock biomass has declined since the late 1980s and, despite the faint biomass increase trend since 2010, it is well below safe biological limits, reducing reproductive and recovery capacity. Recruitment has been below average for the past 22 years and eight of the last ten years showed recruitment levels among the lowest on record due to low spawning stock biomass and poor environmental conditions. Scientists have spent 14 years, including 2015, unsuccessfully recommending the closure of this fishery. The management plan is not enforced adequately or showing any positive results in the short term. After evaluating the plan, ICES considers that it is not in accordance with the precautionary approach. Discards are highly variable between trips and gears and the by-catch of cod in this area by fisheries targeting nephrops and whitefish can be relevant.

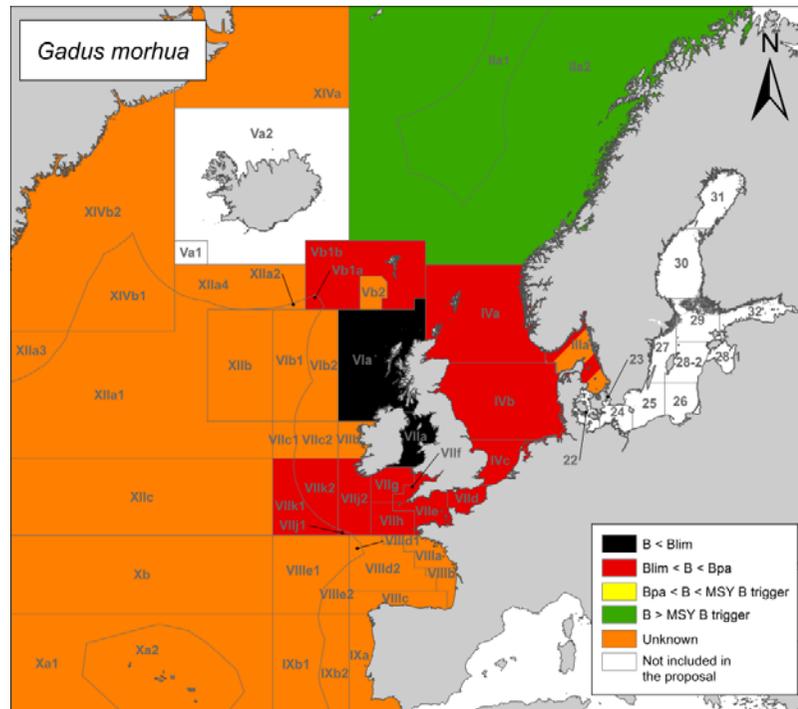


Figure 3. Cod stock status in ICES areas included in the proposal according to spawning biomass.

**W English Channel (VIIe), Bristol Channel (VIIf), N&S Celtic Sea (VIIg,h), Great Sole (VIIj), W Great Sole (VIIk):** spawning-stock biomass has sharply declined during the last years, from above MSY B trigger to close to Blim in 2014 and 2015. Fishing mortality has been high and fluctuating in recent years between precautionary and Flim. Recruitment has been highly variable over time with occasional

very high recruitment. The 2011 and 2012 year classes are estimated well below the average of the time-series, but the 2013-year class is above average. Although Celtic Sea cod is known to have higher growth rates and to mature earlier than other cod stocks, this is not expected to lead to an optimistic situation, as the recruitment is lower than other cod stocks.

For the rest of the managed stocks, in the **West of Ireland and Porcupine Bank** (VIIbc), **Bay of Biscay** (VIII), **Portuguese waters** (IX), **Azores Grounds** (X), **international waters of North Azores** (XII) and EU waters of **CECAF 34.1.1** there is no scientific assessment basis to provide an evaluation about its status and its exploitation rate.

### **Oceana proposal**

Stocks of cod will not be affected by the landing obligation in 2016 so adopted TAC should be established according to wanted catches.

Bearing in mind the worrying state of conservation and development of most of the Atlantic cod stocks, Oceana urges the Council to propose TAC reductions, including fisheries' closures, to guarantee that populations recover above precautionary biomass levels as quickly as possible. An improvement on data collection is also desirable to amend fishing parameters and get better assessments.

As NE Atlantic demersal fisheries are mixed fisheries harvesting a wide range of commercial species, including cod, a multi-species management plan is being developed to consider the fisheries and species interaction. Regarding cod, this plan would allow the reduction of the recurring cod TAC overshoot due to by-catch in other fisheries. The scope of the new multi-species plan would include the North Sea, Skagerrak and the Eastern Channel. Oceana believes that the future plan will contribute to improve the management of these species.

**Kattegat** (IIIa, East): There is no directed cod fishery in Kattegat; cod is mainly taken as by-catch in the Nephrops fishery. ICES recommends that catches in 2016 be no more than 536 tonnes when

the precautionary approach is applied. If discard rates do not change from 2014, this implies landings of no more than 130 tonnes. As this stock will not be affected by the landing obligation in 2016 the agreed TAC should be based on landings. The agreed multi-annual plan is not used as basis for the recommendation as in a situation of high unaccounted removals as estimated by the assessment model is not expected to be realistic. The application of the plan would correspond to a 15% decrease in the TAC and a 15% reduction in the maximum allowable fishing effort for the relevant effort groups. Oceana considers that there should be no direct fisheries and that by-catches need to be kept below 130 tonnes. Oceana also recommends imposing conservation measures to reduce catches of juvenile cod to promote stock recovery, and minimizing the fishing effort in the area to avoid over-catching. Oceana points out that only fisheries that can demonstrate a close to zero catch of cod are allowed in this area. Additional measures to decrease the discard rates should be implemented urgently.

For the **North Sea** (IV), **Eastern Channel** (VIId) and **Skagerrak** (IIIa, West), ICES advises that when the MSY approach is applied catches in 2016 should be no more than 49259 tonnes, if discard rates do not change from 2014 this implies landings of no more than 40419 tonnes, a 15% TAC increase. The current EU-Norway management plan is out of date and reference points are no longer valid, a revision should be considered. In any event, combined catches in 2016 according to the plan, which limits annual TAC variations to 20%, should be no more than 51,165 tonnes, resulting in a 20% increase. If discards rates do not change compared to recent years this implies landings of no more than 42,073 tonnes. Oceana supports establishing fishing opportunities according to the MSY approach and without consideration of the management plan, to ensure the effective recovery of the stock in the short term. Cod are also caught as part of mixed fisheries catching haddock, whiting, nephrops, plaice, and sole, as such a TAC of cod may be exhausted before the TAC of other species.

The apparent northerly shift in the distribution of cod in the North Sea in combination with the relative stability criteria may create problems in managing the fisheries. Some areas could be fully used while in

other areas, the quota may be exhausted prematurely and increase the incentive to discarding.

**Rockall (VIb):** This stock will be partially affected by the landing obligation. There is no new data that change the perception of the stocks. Despite the lack of sound knowledge about the rate of exploitation and stock trends, ICES advises based limited stock assessment data and the precautionary approach that catches in 2016 should be no more than 17 tonnes. As the discards in the Rockall cod fisheries are considered to be negligible Oceana supports the ICES advice.

**West of Scotland (VIa)** stocks will be partially affected by the landing obligation in 2016. According to the management plan, which has not been evaluated by ICES, effort should be reduced by 25%, which according to the last ICES forecast is not enough to recover the stock. The plan however, also suggests that if the stock is failing to recover properly, which it is the case, a higher reduction could be considered. ICES advises, on the basis of the MSY approach, that there should be no direct fishing and by-catch should be minimized during next two years. Oceana agrees with the zero catch advice and requests the closure of the fishery. Because of critical low biomass and recruitment over last decade it is impossible to identify any catch compatible with the precautionary approach or with the MSY approach. Scientists have spent 13 years unsuccessfully recommending the closure of this fishery. It is necessary to recover the stock above Bpa as quickly as possible. Any allowable catch will generate the same or higher amount of discards, something that the stock cannot afford. Measures to reduce the high discard rates are recommended.

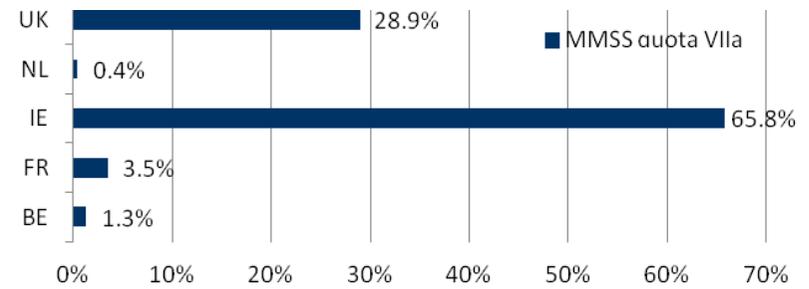
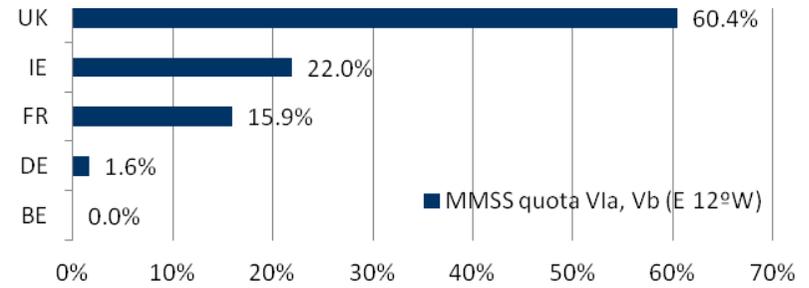
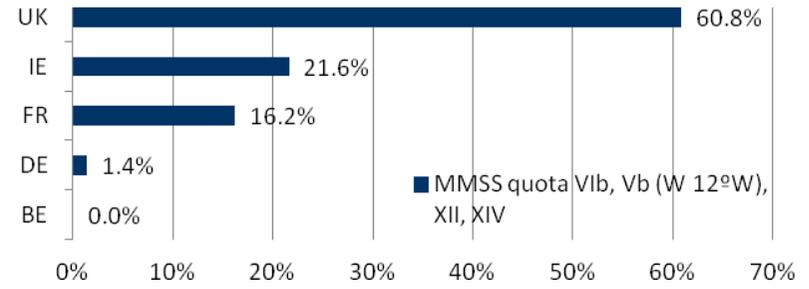
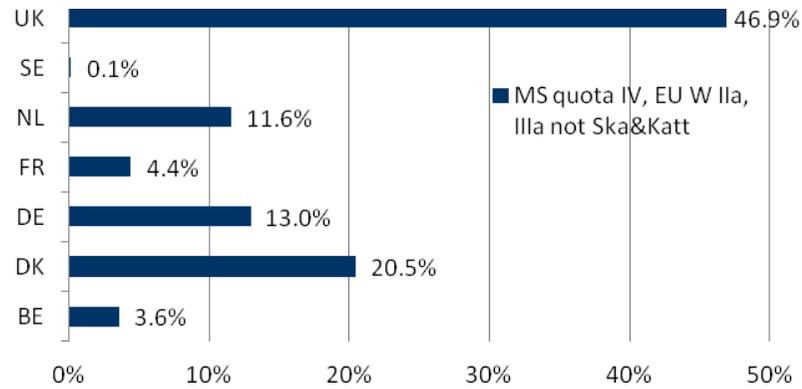
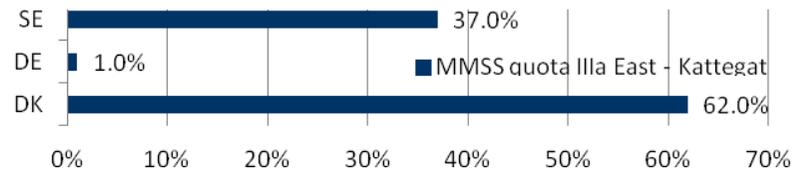
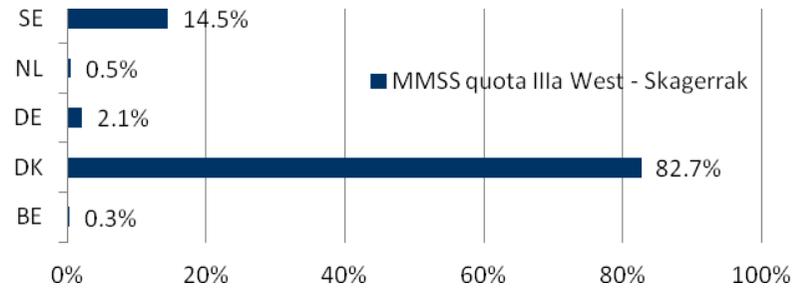
**Irish Sea (VIIa):** ICES has warned that the current management plan is not in accordance with the precautionary approach so it makes no sense to continue setting TACs this way. According to the non-precautionary management plan, the TAC should be reduced by at least 25%. On the other hand ICES advises on the basis of the MSY and precautionary approaches that there should be no direct fisheries in 2016 and cod by-catch in the area should be minimized. Oceana supports this advice due to the stock's deplorable state and

recommends closing the fishery based on precautionary considerations, and only allowing other fisheries in the area that can demonstrate a close to zero by-catch of cod. TAC reductions are not enough to guarantee that the stocks recover above Blim quickly. The stock has been harvested unsustainably since the late 1980s. Oceana is of the opinion that the use of selective gears should be made mandatory in this area, e.g. the use of the eliminator trawl in fisheries targeting whitefish and sorting grids in trawls targeting nephrops.

**West English Channel (VIIe), Bristol Channel (VIIf), North & South Celtic Sea (VIIg,h), Great Sole (VIIj), West Great Sole (VIIk)** ICES advises, based on the MSY approach, that wanted catch in 2016 should be no more than 3569 tonnes with a 0.31 mortality rate. This TAC will lead to a biomass decrease of 30%. ICES cannot quantify the corresponding total catches because of the variable discard rate in the recent past. Oceana agrees with this advice as it will recover the stock over precautionary levels and it is "compatible" with the mixed fisheries scenarios. In recent years, the agreed TAC was not fully caught so they have not been restrictive. Discard rates (mainly minimum landing size and high-grading) normally represent around 10% of total catches by weight, but discard rates in recent years have fluctuated substantially due to variable recruitment. Cod in the Celtic Sea are mainly caught together with whiting and haddock.

For the rest of the managed stocks **West of Ireland and Porcupine Bank (VIIbc), Bay of Biscay (VIII), Portuguese waters (IX), Azores Grounds (X), international waters of North Azores (XII)** and EU waters of **CECAF 34.1.1**, Oceana proposes, in line with the precautionary approach, a minimal reduction in catches of 15% for those stocks which are not managed together with other stocks for which there is a scientific advice.

### Member States quotas



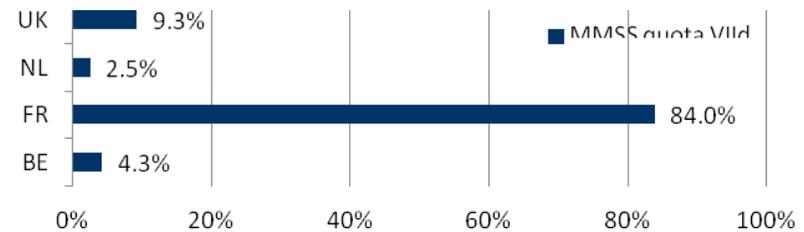
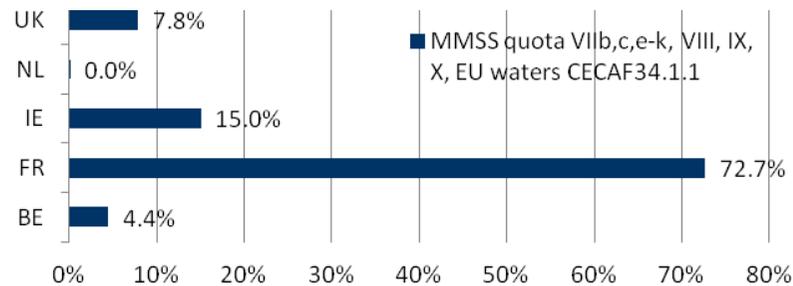


Table 3. Comparative table of Anglerfish TACs (landings in tonnes) in ICES areas registered in the proposal. Brackets compare TAC difference from previous year (in %).

| Fishing area   | Area name   | TAC 2015    | Stock Status   | Commission proposal 2016 | Oceana proposal 2016 |
|--|---|-------------|--|--------------------------|----------------------|
| IIIa (West)  | Skagerrak   | 4035 (+5%)  | Below PA (IIIa-W)  | pm                       | 4640 (+15%)          |
| IIIa (East)  | Kattegat  | 100 (0%)    | Unknown, uptrend but considered in poor state (IIIa-E)                   | pm                       | 130 (+30%)           |
| IV, EU waters of IIa, IIIa not covered by Ska y Kat                            | North Sea, EU waters of Norwegian Sea, transition area to Baltic not covered by Ska y Kat   | 24227 (+5%) | Below PA (IV), unknown (IIa),  | pm                       | 27861 (+15%)         |
| Norwegian Waters S of 62°N   | Norwegian waters South of 62°N  | 382 (0%)    | Below PA (IV, IIIa), unknown (IIa),                                      | pm                       | 439 (+15%)           |
| VIIb, EU and internat Waters of Vb (west of 12°W), XII and XIV                 | Rockall, EU and int water of Faeroes West of 12°W, North Azores and East Greenland  | 74 (0%)     | Unknown (VIIb, XIV), Below Blim (Vb1), completely unknown (XII)          | pm RO                    | 17 (-77%)            |
| VIa, EU and internat Waters of Vb (east of 12°W)                               | West of Scotland and EU and int water of Faeroes East of 12°W   | 0 (0%)      | Below Blim (VIa), Below Blim (Vb1), unknown very low stock size (Vb2)    | 0 (0%)                   | 0 (0%)               |
| VIIa   | Irish Sea   | 182 (-20%)  | Below Blim (VIIa)  | 146 (-20%)               | 0 (-100%)            |
| VIIb, VIIc, VIle, VIIf, VIIf, VIIh, VIIj, VIIk, VIII, IX, X, CECAF 34.1.1 (EU) | W of Ireland, Porcupine Bank, Western English Channel, Bristol Channel, Celtic Sea N, Celtic Sea S, SW of Ireland / East, SW of Ireland – W Bay of Biscay, Portuguese Waters, Azores Grounds, EU waters of CECAF 34.1.1 | 5072 (-26%) | Below PA (VIIe-k), completely unknown (VIIbc, VIII, IX, X, CECAF 34.1.1) | 3569 (-30%)              | 3569 (-30%)          |
| VIIId  | Eastern English Channel   | 1701 (+5%)  | Below PA (VIIId)   | pm                       | 1956 (+15%)          |

## Haddock (*Melanogrammus aeglefinus*)

### Species description

Haddock is found in the North-East Atlantic, from the Bay of Biscay to the Barents Sea. It is also found in the North-West Atlantic. Adults are found between 80 and 200 meters depth, on rocky, sandy or gravel bottoms. The species feeds on benthic organisms including crustaceans, molluscs, equinoderms and fish.



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### State of the stocks

The state of haddock stocks in European waters is very heterogeneous: some stocks are in a deplorable situation while others are at MSY B trigger levels. Threats in different areas stem from problems caused by unsustainable exploitation, discards and undeclared catches.

Haddock in the Northern Shelf were previously assessed as two separate stocks: **North Sea** and **Skagerrak** (IV, IIIa west) and **West of Scotland** (VIa). There was strong evidence that the stocks were not biologically distinct and they should therefore be assessed as a single stock. Stocks are in good condition and exploited according to the MSY approach. Spawning stock biomass has surpassed the MSY B trigger since 2001 (except in 2007) and fishing mortality rates have been below Fmsy since 2008. Recruitment over the last ten years has been poor, except in 2004 and 2008 when year classes were a higher but below the long-term average. Discards are highly variable but appear to be declining in recent years, Discard rates in 2012 and 2014 are the lowest observed in the time-series and appear to be linked to low recruitment.

Haddock biomass in **Faeroes Grounds** (Vb) has decreased since 2003 and is estimated to be below safe biological limits since 2010 at its lowest record in the time-series. Fishing mortality has been oscillating between precautionary and safe biological limit, it is currently slightly above precautionary and MSY levels. Since the mid-1970s, recruitment has fluctuated from 1 to 3 strong year classes followed by several weak ones. Year classes from 2003 onwards have all been well below the long-term average. Given the low biomass, poor recruitment and slow growth, stock recovery would remain compromised unless drastic measures are taken. Discards are assumed negligible.

In the **Rockall** (VIb) spawning stock biomass has increased from the lowest observed in 2014 and is estimated to be above MSY B trigger. Fishing mortality has declined in recent years but increased to above Fmsy and Fpa in 2014. Recruitment has improved since the extremely weak recruitment 2008-2012 period, but it is still lower than the values estimated at the beginning of the time-series. Discard ratio in recent years was reduced, from around 34% in the period 1999-2009 to 7% and 2% in last two years, 2011 and 2012 respectively, as a result of the minimal presence of young undersize individuals in the population, but it increased dramatically during 2013, 58% by weight and 87% in numbers. An improved time-series of landings and discards is needed to provide an accurate assessment of the stock. A management plan is under development.

Biomass for stocks of **West of Ireland** (VIIb), **Porcupine Bank** (VIIc), **East & West English Channel** (VIId-e), **Bristol Channel** (VIIf), **Celtic Sea North & South** (VIIg-h), **Southwest of Ireland East & West** (VIIj-k), has showed an increasing trend over the last time-series, particularly in 2011 when it increased significantly due to exceptional recruitment in 2009-year class. Unfortunately, during the next three years, it showed a worryingly decreasing trend that has been fixed. Currently the SSB is placed above MSY B trigger. Fishing mortality has been above Fmsy for the entire time-series and has remained relatively stable during the last 6 years. Recruitment is highly variable, lowest value in the time-series in 2012 and above average in 2013. This situation seriously compromises future catches

and biomass as they are highly dependent on the strength of incoming year classes. Discards, representing 56%, 53%, 36% and 12% of total catches in 2010, 2011, 2012 and 2013 respectively, the downward trend is mainly due to weaker incoming recruitment and the introduction of square mesh panels during 2012 in order to reduce discards.

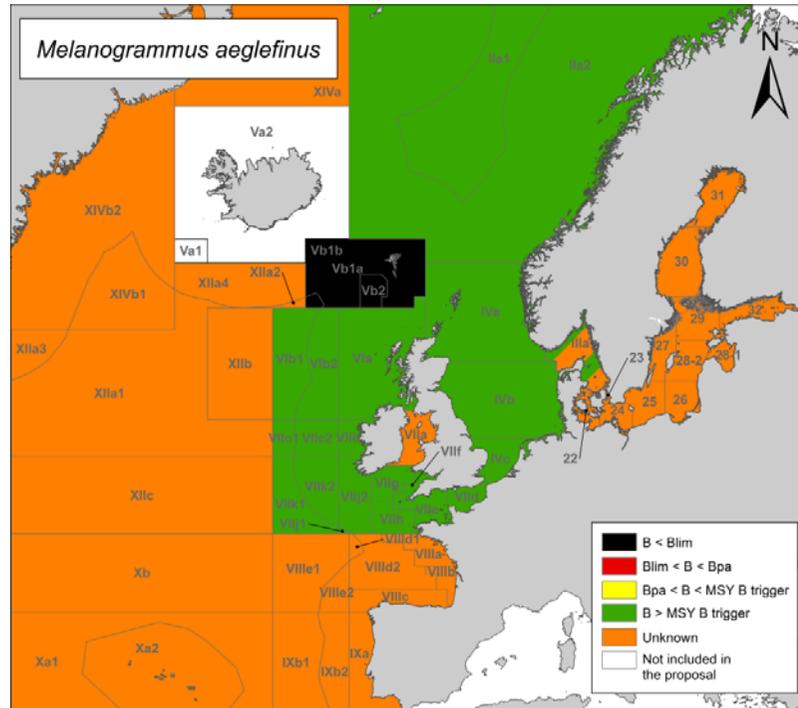


Figure 4. Haddock stock status in ICES areas included in the proposal according to spawning biomass<sup>13</sup>.

Haddock status in the **Irish Sea** (VIIa) is unknown as there is no sound data on the fishery, so the assessment is only indicative of trends. Biological indicator trends show that, after worrying decline,

<sup>13</sup> Stock status based on trends for VIIa

the average of the biomass indicator in the last two years (2013-2014) is more than 50% higher than the average of the three previous years (2010-2012). Recruitment is very variable, relative recruitment estimated for age 1 in 2014 is among the highest in the time-series. Spawning-stock biomass fluctuations depends on the incoming years classes. Discards in this area are high, average of 55% of total catches in the last three years 2012-2014, and represent a serious problem for this stock.

For the rest of the managed stocks, in the **Kattegat** (IIIa East), **Sound** (IIIb), **Belt Sea** (IIIc), **Baltic Sea** (24-32), **Bay of Biscay** (VIII), **Portuguese waters** (IX), **Azores Grounds** (X), **international waters of North Azores** (XII), **East Greenland** (XIV) and **CECAF 34.1.1** (EU), there is no scientific assessment basis to provide an evaluation about its status and exploitation rate.

#### Oceana proposal

Stocks of haddock in the North Western waters area and North Sea area will be partially affected by the landing obligation. Oceana has provided TAC adjustments for those stocks, shown in the table below, based on the STECF 15-17 report when reliable data was available.

Due to the lack of control over real catches and the high levels of haddock discards, the regulation of its exploitation using only a TAC is not suitable. Management measures must be urgently introduced to improve fishing selectivity. These measures must guarantee the reduction of current discard levels, with the aim of maximising additional recruits to the breeding stock biomass and future catches.

For the **North Sea** (IV), **Skagerrak** (IIIa west) and **West of Scotland** (VIa), ICES advises on the basis of the MSY approach that catches should be no more than 74,584 tonnes in 2016. If discard rates and industrial by-catch do not change compared to the average of the last three years (2012-2014) this implies landings of 61,930 tonnes. In any event, the ICES advice represents a 30% TAC increase. This stock will be partially affected by the landing obligation in 2016. The EU and Norway agreed a management plan in 2008 for North Sea and Skagerrak areas. ICES has provisionally assessed the plan and

concludes it can be accepted as precautionary. According to the management plan, ICES advises that landings in 2016 be no more than 50691 tonnes; if it is assumed that discards have not changed versus the previous 3 years, this implies catches of 61233 tonnes, which represents a 6% increase in catches and fishing at the target rate of 0,3. This last recommendation also follows the MSY framework. Taking into consideration the ICES mixed-fisheries advice for this zone and the implications of the exploitation of haddock on other sensitive stocks like whiting and cod, Oceana recommends not increasing the TAC by more than 6%.

For **Faeroes Grounds** (Vb), ICES advises, based on the MSY and the precautionary approach, that there should be no directed fishery for haddock in 2016 and bycatch should be minimized. It is the 8<sup>th</sup> consecutive year that scientists recommend closing the fishery. ICES has warned that it is necessary to put measures in place to minimize haddock by-catch in other fisheries and to develop a recovery plan as a prerequisite to reopening the directed fishery. Oceana agrees with ICES advice to ensure the stock's recovery over safe biological and precautionary limits as quickly as possible. Only a zero fishing mortality in 2016 will result in getting the stock above safe biological limits in 2017.

For the **Rockall** stock (VIb), ICES advises that based on the MSY framework landings should be no more than 3225 tonnes in 2016. If discard rates do not change from the average of the last 9 years, this implies catches of no more than 3932 tonnes. This stock will not be affected by the landing obligation next year. Oceana suggests following the scientific advice that represents an increase by 8% in the TAC. Oceana also recommends further management measures to minimize the by-catch of small haddock to maximize their contribution to the recovery of the stock.

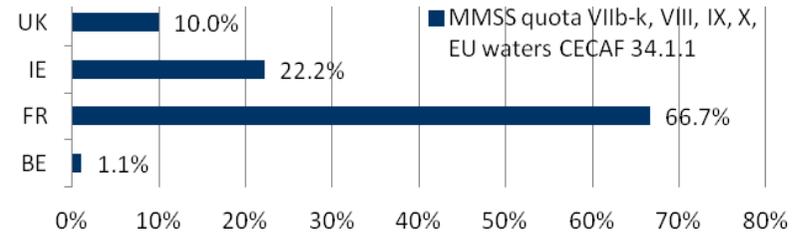
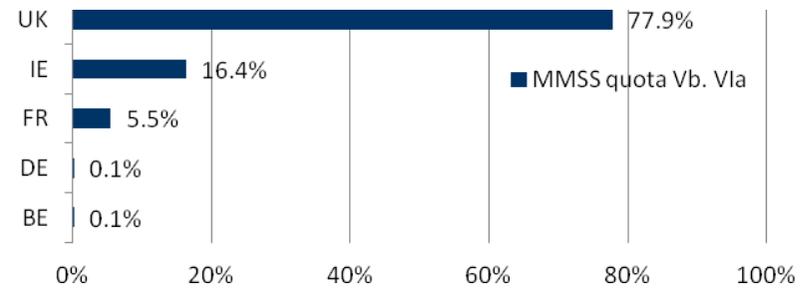
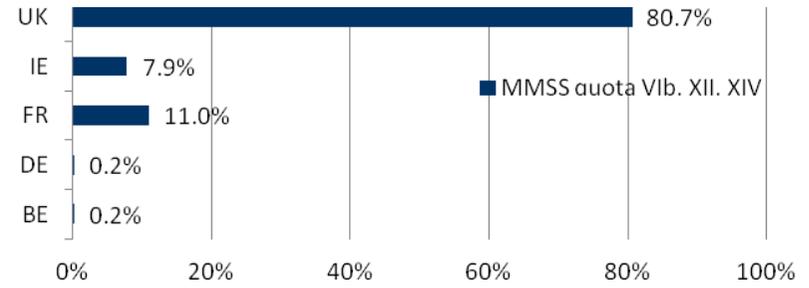
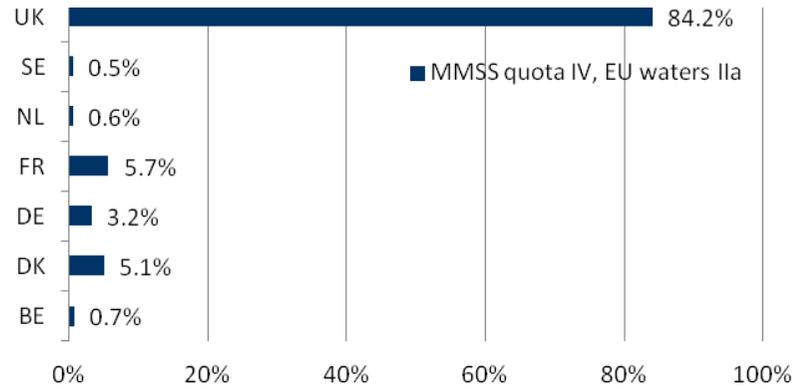
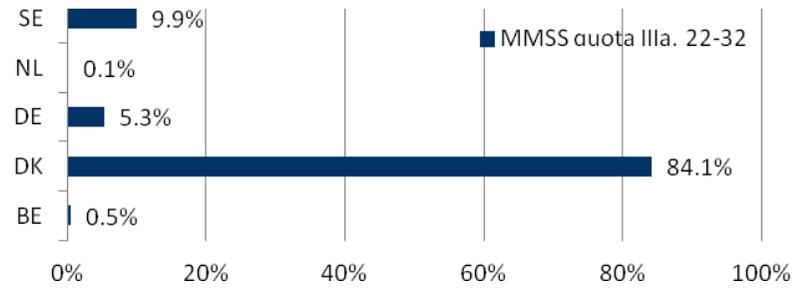
F For the **West of Ireland** (VIIb), **Porcupine Bank** (VIIc), **E&W English Channel** (VIId-e), **Bristol Channel** (VIIf), **Celtic Sea N&S** (VIIg-h), **Southwest of Ireland E&W** (VIIj-k), ICES advises based on the MSY approach that landings should be no more than 6078 tonnes, which represents a TAC reduction of 27%. This implies catches of no more than 8590 tonnes, if discard rates do not change

compared to the average of the last 12 years. This stock will not be affected by the landing obligation in 2016. Oceana agrees with this advice and requests that the Council follow the MSY approach despite the fact that the proposed reduction poses a risk of overshooting the TAC for cod in the area. This situation is largely due to scientific advice having been disregarded in recent years. Haddock are caught in mixed fisheries together with cod and whiting and management should take this into account. The rate of discards puts the stock at risk, and therefore the technical measures that have been introduced should be fully implemented and evaluated in order to reduce discards and improve recruitment. Further technical measures to reduce discards, like increasing the mesh size, should be considered. Official landings from Sub-areas VIII, IX, and X, managed together with Division VIIb-k, have made up less than 2% of all landings in the TAC area since 1973.

The haddock in the **Irish Sea** (VIIa) is a data limited stock that will be affected by the landing obligation in 2016. ICES advises that, based on the data-limited stock approach and precautionary approach, catches should be no more than 1072 tonnes in 2015. If discard rates do not change from average of the last three years (2012-2014), landings should be no more than 481 tonnes. This implies a 59% decrease in the TAC. Oceana bears in mind that previous TACs did not seem to be restrictive for the landings, that relative fishing mortality for this stock is above average time series, and the high discard rate, around 68% in 2012, 52% in 2013 and 48% in 2014, recommends to follow the scientific advice. Technical measures like an increase in mesh size (large square meshes) or sorting grids should be widely implemented to reduce the haddock discard ratios, in particular in nephrops and cod fisheries.

For the rest of the managed stocks in the **Kattegat** (IIIa East), **Sound** (IIIb), **Belt Sea** (IIIc), **Baltic Sea** (24-32), **Bay of Biscay** (VIII), **Portuguese Waters** (IX), **Azores Grounds** (X), **international waters of North Azores** (XII), **east Greenland** (XIV) and **CECAF 34.1.1** (EU), Oceana, according to the precautionary approach, proposes a minimal reduction in catches of 15% for those stocks which are not managed together with other stocks for which there is scientific advice.

### Member States quotas



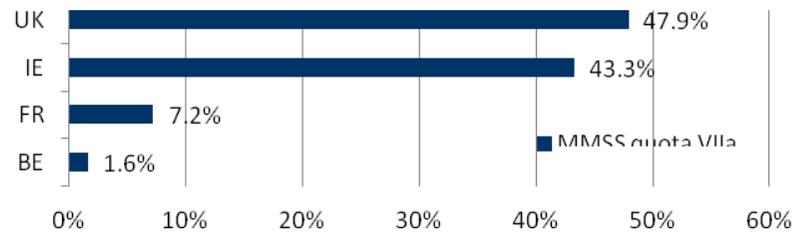


Table 4. Comparative table of Haddock TACs (in tonnes) in ICES areas registered in the proposal. Figures in non-shaded rows refer to weight in catches, in shaded rows refer to weight in landings. Brackets compare TAC difference from previous year (in %).

| Fishing area                               | Area name  | TAC 2015     | Stock Status   | Commission proposal 2016 | Oceana proposal 2016  |
|--|--|--------------|--|--------------------------|---|
| IIIa, EU waters of IIIb,c,d (22-32)        | Skagerrak, Kattegat, Sound, Belt Sea, and Baltic Sea   | 2399 (+6%)   | Above MSY Btrigger (IIIa W), Completely unknown (IIIaE,b,c,d)              | pm                       | 2543 + ??<br>(+6% + Uplift)<br>3118 + ??<br>(+30% + Uplift)   |
| IV, EU Waters of IIa                       | North Sea, EU Waters of Norwegian Sea  | 34197 (+7%)  | Above MSY Btrigger (IV, IIa)   | pm                       | 36249 + ??<br>(+6% + Uplift)<br>55201 + ??<br>(+30% + Uplift) |
| Norwegian waters of South 62°              | Norwegian waters South of 62°  | 707 (0%)     | Above MSY Btrigger (IV, IIIa west)   | pm                       | 707 + ??<br>(0% + Uplift)                                     |
| EU and Internat Waters of VIb, XII and XIV | EU and International waters of Rockall, North of Azores, East Greenland  | 2580 (+113%) | Above MSY B trigger (VIb), Completely unknown (XII, XIV)                   | pm                       | 3225 (+8%)  |
| Vb, VIa                                    | EU and International waters of Faeroes Grounds, West of Scotland   | 4536 (+14%)  | Below Blim (Vb) Above MSY Btrigger (VIa)                                   | pm                       | 5897* + ??<br>(+30% + Uplift)<br>4808* + ??<br>(+6% + Uplift) |
| VIIb-k, VIII, IX, X, CEEAF 34.1.1 (EU)     | West of Ireland, Porcupine Bank, E&W English Channel, Bristol Channel, Celtic Sea N&S, Southwest of Ireland E&W, Bay of Biscay, Portuguese Waters, Azores Grounds , CEEAF 34.1.1 | 8342 (-12%)  | Above MSY Btrigger (VIIb-k) Completely unknown (VIII, IX, X, CEEAF 34.1.1) | 6078 (-27%)              | 6078 (-27%)   |
| VIIa                                       | Irish Sea  | 1181 (0%)    | Unknown uptrend (VIIa)   | pm                       | 1054 (-10%)<br>481 + 573<br>(-59% + Uplift)                   |

\* Only in the case that Faeroes Grounds (Vb) is close to fishing.

## European hake (*Merluccius merluccius*)

### Species description

European hake (*Merluccius merluccius*) is widely distributed throughout the North-East Atlantic, from Norway and Iceland down to southern Mauritania. This demersal species is found on bottoms between 70 and 370 meters depth where it feeds on crustaceans during its juvenile stage and on fish during its adult stage.



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### State of the stocks

A distinction is made in the management of hake in European waters between two major stocks that are managed differently: the northern and the southern stocks. These stocks have similar biology, and despite the fact that their degree of mixing is unknown, there is no biological basis for the current ICES stock definition of northern and southern hake. After years of overexploitation the state of both stocks is clearly improving. These populations are managed through management plans which should be updated.

For the northern stock of **Skagerrak and Kattegat** (IIIa), **North Sea** (IV), **Rockall and West of Scotland** (VI), **Irish Sea, West of Ireland, Porcupine Bank, Eastern and Western English Channel, Bristol Channel, Celtic Sea North and South**, and **Southwest of Ireland** (VII) and **North, Central and Offshore Bay of Biscay** (VIIIa,b,d), spawning stock biomass has been increasing significantly since 2006. This trend has placed the biomass at a record high above any reference point. Equally positive is the fishing mortality trend, while still above Fmsy, which decreased sharply from 2005 to 2010 and has been stable close to Fmsy during recent years

Recruitment fluctuations appear to show no substantial trend over the whole series: after low recruitments in 2009, 2010 and 2011, the 2012 and 2013 are estimated among the highest in the time-series. There is still uncertainty concerning the total number of catches due to the amount of undeclared discards. Landings far exceeded the TACs during previous years. The new status of the stock, which was subjected to high levels of exploitation from the late 1980s to the mid-2000s, requires a new management plan according to new management objectives as the current ones are based on reference points that are no longer appropriate. Overall, stock discards have increased in the last years, in some cases because of quota restrictions, but, in particular for some gears in subareas IV, VI, VII and VIII. Discards of juvenile hake can be substantial in some areas and fleets. By reducing the mortality of small fish, the SSB and the long-term yield can be substantially improved.

In the southern hake stock of **South of Bay of Biscay** (VIIIc) and **East of Portuguese waters** (IXa), there is no known biomass reference point. Biomass has been improving since 1998, when spawning biomass was at historic lows, and it is considered to be around the average in 2014 and well above Blim. Fishing mortality has decreased in recent years but it is still well above MSY mortality, more than two times higher. Most recruitments have been above the historical average in 2005 to 2009 but it is currently close to historical mean, which has helped the stocks recovery in recent years. Catch levels and landings have far exceeded the approved TACs in past years due to a lack of control by Member States and commitment from the fleets. There is no match between minimum landing size and the trawl mesh size currently enforced, resulting in high discard rates. Discards occur mainly in the trawl fisheries that target smaller fish than gillnetters and longliners

For the rest of the managed stocks, in the **Sound** (IIIb), **Belt Sea** (IIIc), **Baltic Sea** (24-32), **European waters of Norwegian Sea** (EU waters of IIa), **EU and international waters of Faeroes Grounds** (Vb), **int waters of North Azores** (XII), **East Greenland** (XIV), **West of Bay of Biscay** (VIIIe), **West Portuguese Waters** (IXb), **Azores Grounds** (X) and **CECAF 34.1.1** (EU), there is no scientific

assessment basis to provide an evaluation about its status and rate of exploitation.

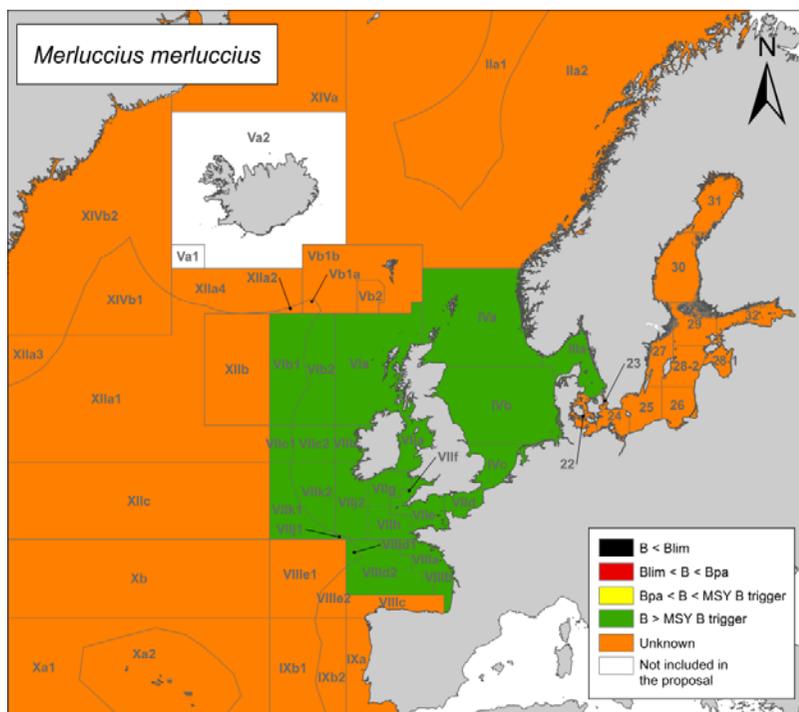


Figure 5. Hake stock status in ICES areas included in the proposal according to spawning biomass<sup>14</sup>.

### Oceana proposal

Stocks of hake in the North Western waters, North Sea area, and South Western Waters area will be partially affected by the landing

<sup>14</sup>Stock status based on trends for IIIa, IV, VI, VII, VIIIab

obligation. Oceana has provided TAC adjustments for these stocks in the table below on the basis of the STECF 15-17 report when reliable data were available.

Because of the new perspective on assessments and CFP objectives, the current existing management plans should no longer be used. Oceana suggests the implementation of TACs according to the MSY framework instead of the corresponding recovery plans.

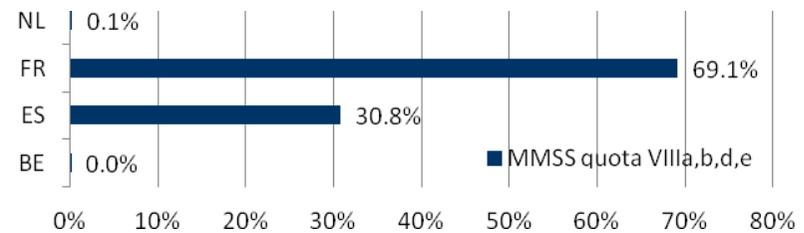
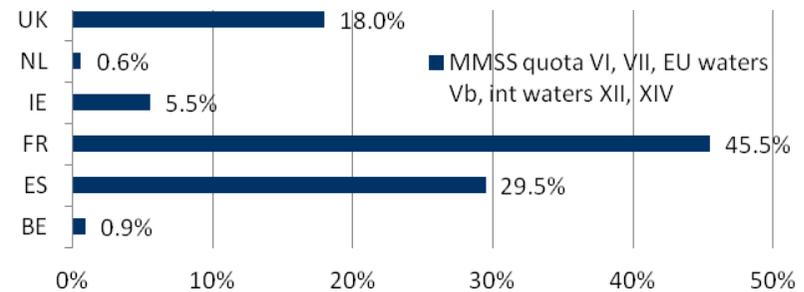
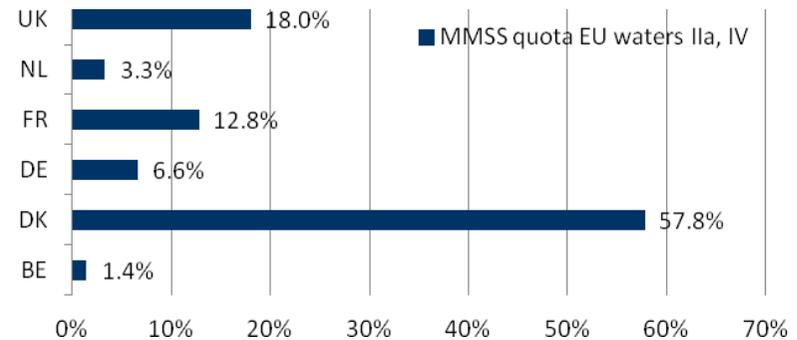
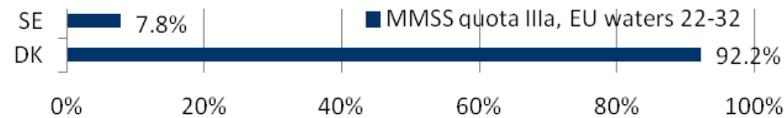
For the northern stock, **Skagerrak and Kattegat** (IIIa), and **North, Central and Offshore Bay of Biscay** (VIIIa,b,d), ICES advises on the basis of the MSY approach, that landings in 2016, if discard rates do not change compared to the average of the last three years (2012-2014), be no more than 96651 tonnes. This stock will be partially affected by the landing obligation in 2016. In the case that the stock is fully affected by the landing obligation ICES advises that catches should be no more than 109592 tonnes, a 6% increase from the 2015 TAC. Oceana also recommends updating the current management plan as ICES has stated that target values based on precautionary reference points are no longer appropriate. An important increase in catches has occurred in the northern part of the distribution area (Division IIIa, and Subareas IV and VI) in recent years. Spawning biomass and the long-term yield can be substantially improved by reducing small fish mortality through technical measures.

For the Southern stock, **South of Bay of Biscay** (VIIIc) and **East of Portuguese waters** (IXa), ICES advises, on the basis of the MSY approach, that landings be no more than 5292 tonnes in 2016, which implies a reduction in TAC by 62%, and catches of no more than 6078 tonnes if discard rates do not change from the average of the years 2012-2014. Oceana considers that if there is evidence of the socio economic impact of such a reduction, a lower reduction with lower impact on sustainability could also be acceptable, between 30% ~ 62%. The existing management plan (Regulation (EC) N° 2166/2005) means a 10% reduction in fishing mortality and a 15% constraint on TAC changes between years; this would lead to a TAC of 11752 tonnes (landings) or 13603 tonnes (catches) in 2016. The aim of the plan is to rebuild the spawning-stock biomass above

35000 tonnes by 2016, and to reduce fishing mortality to 0.2. To meet the plan target, a reduction of around 85% in catches would be necessary. It is worth remembering that although ICES has not carried out an in-depth assessment of the management plan, it stated that the plan's reference points are no longer appropriate. Due to the uncertainty regarding the management plan, Oceana supports fixing a TAC according to the MSY approach.

For the rest of the managed stocks **Sound** (IIIb), **Belt Sea** (IIIc), **Baltic Sea** (24-32), **European waters of Norwegian Sea** (EU waters of IIa), **EU and international waters of Faeroes Grounds** (Vb), **international waters of North Azores** (XII), **East Greenland** (XIV), **West of Bay of Biscay** (VIIIe), **West Portuguese waters** (IXb), **Azores Grounds** (X), and **CECAF 34.1.1** (EU), scientists cannot provide assessments because fishing parameters are lacking. For those stocks, Oceana, according to the precautionary approach, proposes a minimal reduction in catches of 15% for those stocks which are not managed with other stocks for which there is a scientific advice.

### Member States quotas



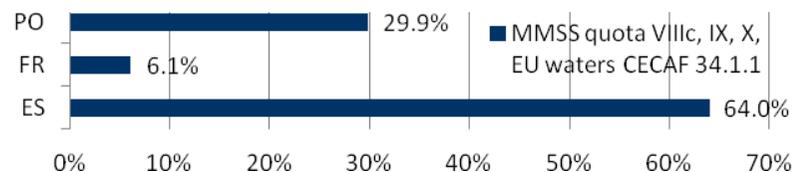


Table 5. Comparative table of Hake TACs (catches in tonnes) in ICES areas registered in the proposal. Brackets compare difference from previous year in %.

| Fishing area                                     | Area name   | TAC 2015     | Stock Status   | Commission proposal 2016 | Oceana proposal 2016   |
|--|---|--------------|--|--------------------------|--|
| IIIa, EU waters of IIIb and IIIc, III d (22-32)  | Skagerrak, Kattegat, EU waters of Sound, Belt Sea, and Baltic Sea   | 2738 (+11%)  | Possibly above B MSY trigger proxy (IIIa) & Completely unknown (IIIbcd)          | pm                       | 2902 + ??<br>(+6% + Uplift)                                  |
| EU waters of IIa and IV                          | European Waters of Norwegian Sea and North Sea  | 3190 (+11%)  | Completely unknown (IIa) & Possibly above MSY (IV)                               | pm                       | 3381 (+6%)<br>3381 + 0<br>(+6% + Uplift)                     |
| VI, VII, EU waters of Vb, int waters of XII, XIV | Rockall, West of Scotland, Irish Sea, West of Ireland, Porcupine Bank, Eastern and Western English Channel, Bristol Channel, Celtic Sea North and South, and Southwest of Ireland, EU waters of Faeroes Grounds, int waters of North Azores, East Greenland . | 50944 (+11%) | Possibly above B MSY trigger proxy (VI, VII) & Completely unknown (Vb, XII, XIV) | pm                       | 54001 + ??<br>(+6% + Uplift)                                 |
| VIIIa, VIIIb, VIII d, VIII e                     | Bay of Biscay (North), Bay of Biscay (Central), Bay of Biscay (Offshore), West of Bay of Biscay   | 33977 (+11%) | Possibly above B MSY trigger proxy (VIIIabd) & Completely unknown (VIII e)       | pm                       | 36016 + ??<br>(+6% + Uplift)                                 |
| VIIIc, IX, X, CECAF 34.1.1 (EU)                  | Bay of Biscay (South), Portuguese Waters, Azores Grounds  | 13826 (-15%) | Unknown uptrend (VIIIc, IXa), Completely unknown (IXb, X, CECAF 34.1.1)          | pm                       | 9560 + ??<br>(-31% + Uplift)<br>5292 + ??<br>(-62% + Uplift) |

## Atlantic herring (*Clupea harengus*)

### Species description

Herring is found throughout the North Atlantic. In the North-East Atlantic, the species is distributed from the Bay of Biscay up to Iceland and southern Greenland, including the Baltic Sea. The species forms schools in coastal waters and feeds on small pelagic copepods.



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### State of the stocks

In 2008, the EU approved a multi-annual plan for fisheries exploiting herring<sup>15</sup>, in waters of Faeroes Grounds (Vb), Rockall (VIb), and part of Western of Scotland (VIa), which ICES has assessed as being in compliance with the precautionary approach. There are also proposals of new management plans for other stocks. The species, and in particular juveniles, is usually caught as by-catch by industrial fisheries. ICES advises, under precautionary considerations, that activities that have a negative impact on the spawning habitat of herring should not occur, unless the effects of these activities have been assessed and shown not to be detrimental.

In the Herring North Sea autumn spawners, **Skagerrak** (IIIa West), **Kattegat** (IIIa East), **North Sea** (IV) and the **Eastern English Channel** (VIId), the stock looks in good condition, nevertheless, MSY biomass reference point has not been defined yet. Biomass has been increasing since 2007 and it is currently well above Bpa. The stock suffered several years of collapse between mid-60s to mid-80s with

lowest time-series biomass. A new management plan was agreed by the EU and Norway in 2014, which has not been evaluated by ICES. Fishing mortality has been low for the past five years and since 1996 is below MSY. Recruitment has been below average between 2003 and 2013. Recruitment in 2014 is estimated to be strong, above the long-term geometric mean, although the 2015 recruitment is estimated to be low. ICES considers the stock to be in a low productivity phase, as the survival ratio between newly hatched larvae and recruits is still much lower than prior to 2001. All catches are assumed to be landed.

For stocks in the **West of Scotland-South** (VIa), **West of Ireland** (VIIb) and **Porcupine Bank** (VIIc) ICES assessment, that combines for the first time two previously separate assessments, shows that biomass has been declining since 2004 and is currently at the lowest observed level in the time-series, below safe biological limits. This indicates that stocks are in a state of overexploitation. Fishing mortality has been below Fmsy since the late 1990s but the stock is not showing signs of recovery. Recruitment information is uncertain but it has been very low, at the lowest in the time-series for the past three years, limiting a possible change in trend or recovery in the short term. Discards are considered to be low. A rebuilding plan is necessary for proper management of this stock; a formal proposal made by the Pelagic RAC currently exists.

In the **Irish Sea-North** (VIIa North) spawning stock biomass has been progressively increasing since 2003 and above MSY B trigger since 2006. Fishing mortality has decreased since 2003 and has been fluctuating around MSY in recent years with the lowest values in the time-series. Recruitment has increased during the last decade and it is estimated to be above the average of the time-series since 2006. All catches are assumed to be landed therefore discards are considered to be low. Spawning and nursery areas are sensitive and vulnerable to anthropogenic influences, so under precautionary considerations ICES advises that activities that have a negative impact on these areas should not occur.

<sup>15</sup> Council Regulation (EC) 1300/2008

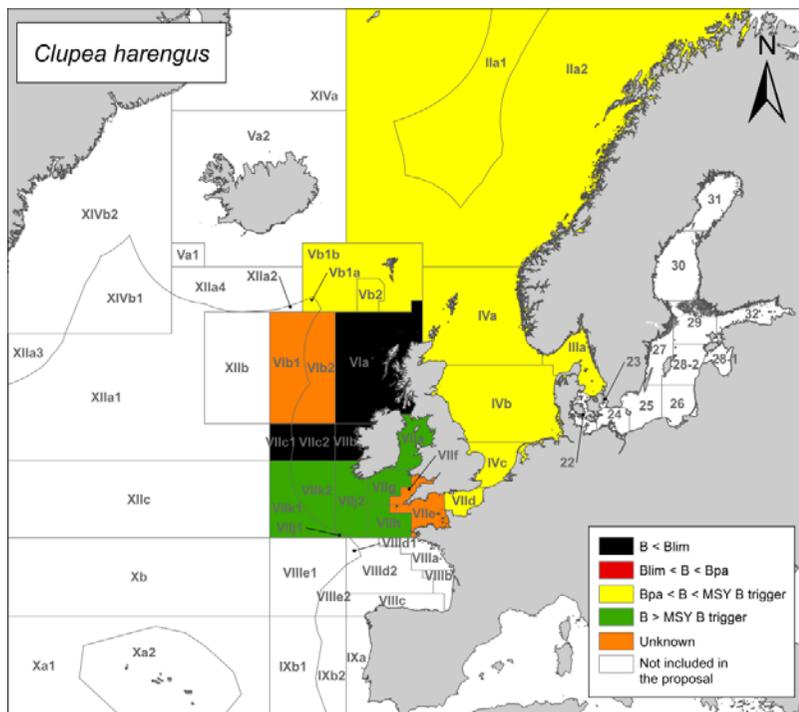


Figure 6. Herring stock status in ICES areas included in the proposal according to spawning biomass.

Stocks from **Irish Sea-South** (VIIa South), **Celtic Sea** (VIIg,h) and **Southwest of Ireland** (VIIj,k) are in a good state and are exploited in a sustainable way, although during recent years have shown a worrying trend. Spawning stock biomass increased from 2005 to 2012, moreover during the last 4 years it has shown a downward trend although it is currently still above  $B_{msy}$  trigger, and at its full reproductive capacity. Fishing mortality has been below  $F_{msy}$  since 2007, although it has increased since 2009. Year classes over the past years are above average, in particular from 2009-2013 year classes. All catches are assumed landed, therefore, discards are considered to be low. Spawning and nursery areas are sensitive and

vulnerable to anthropogenic influences. A long-term management plan was agreed by the Pelagic RAC in 2011, and has been used by managers since 2012.

For the rest of the managed stocks, in the **EU waters of Norwegian Sea** (IIa), **Faeroes Grounds** (Vb), **Rockall** (VIb), **Western English Channel** (VIIe) and **Bristol Channel** (VIIf) there is no scientific assessment basis to provide an evaluation of its status and rate of exploitation.

### Oceana proposal

Stocks of herring will be affected by the landing obligation in 2016 so adopted TAC should be established according to total real catches.

Given the importance of gravel substrate as an important fish habitat for herring spawning, activities that have a negative impact on this habitat, such as the extraction of marine aggregates and marine construction on spawning grounds, should not occur.

For the stocks of **Skagerrak** (IIIa West), **Kattegat** (IIIa East), **North Sea** (IV) and the **Eastern English Channel** (VIIId) ICES advises, on the basis of the 2008 EU-Norway management plan, that total catches in 2016 be no more than 555086 tonnes, including 518242 tonnes for the A-fleet (Direct herring fisheries in the North Sea). The 2008 management plan is considered to be consistent with the precautionary approach and the MSY by ICES, the 2014 management plan has not been yet evaluated. ICES also advises that according to the MSY approach, catches in 2016 be no more than 626760 tonnes, including 589360 tonnes for the A-fleet. Oceana therefore agrees with both TAC proposals.

For the **West of Scotland-South** (VIa), **West of Ireland** (VIIb) and **Porcupine Bank** (VIIc), ICES has recommended on the basis of the precautionary considerations and the MSY approach, that there should be no catches in 2016. It is the first time ICES provides the assessment combining VIaN and VIaS/VIIbc areas as it is not possible to segregate the areas in commercial catches or surveys. It is the seventh time in nine years that scientists have recommended

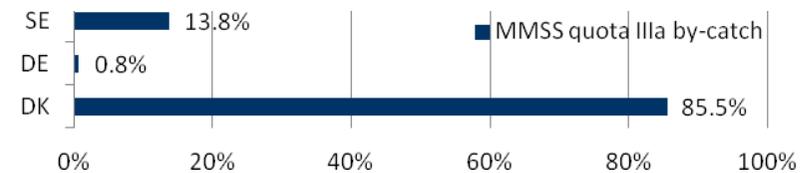
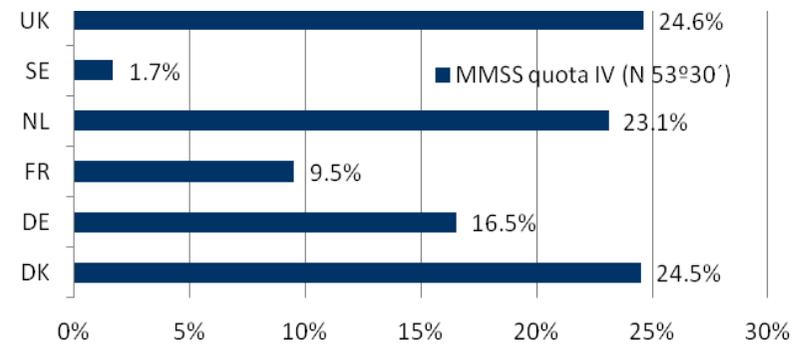
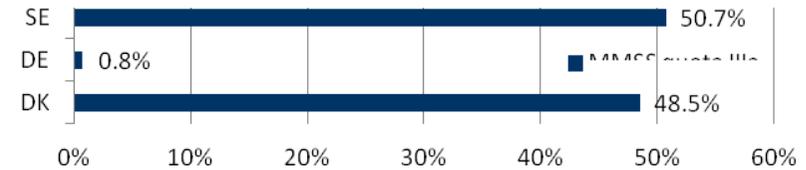
the closure of the VIaS and VIIbc fishery. Due to the poor stock situation, Oceana agrees that the closure, adopted last year, must be kept to enable this stock to recover. Even the closure of the fishery would lead to a decrease in SSB by 14% during next year. A rebuilding plan should be developed for this stock as soon as possible.

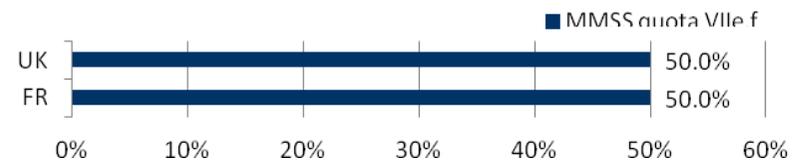
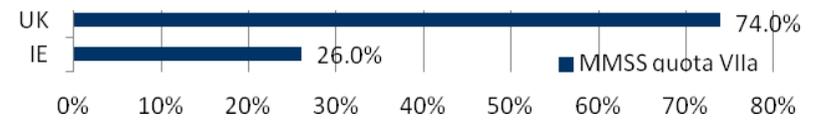
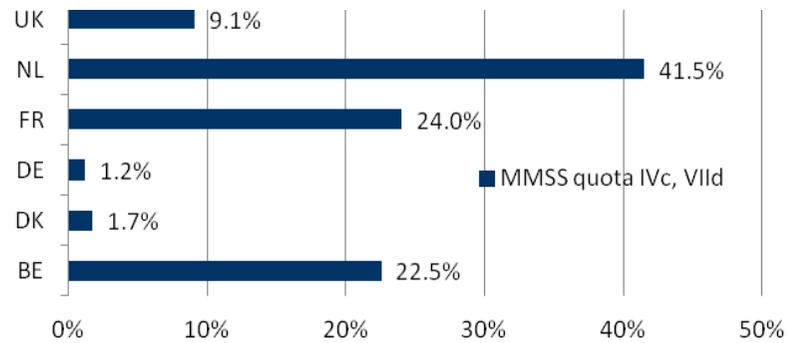
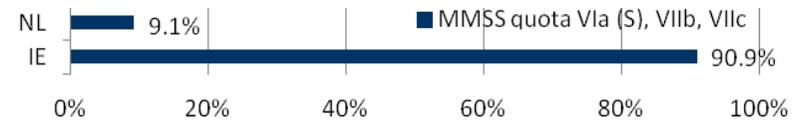
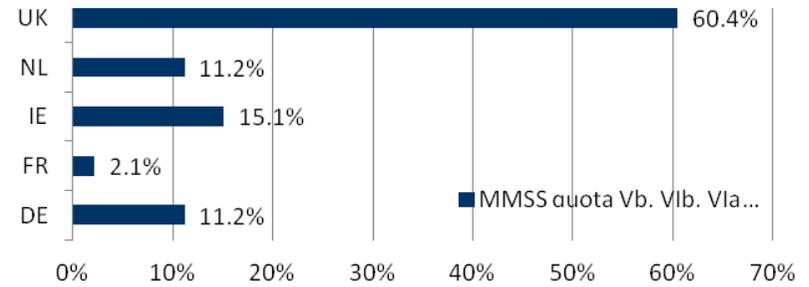
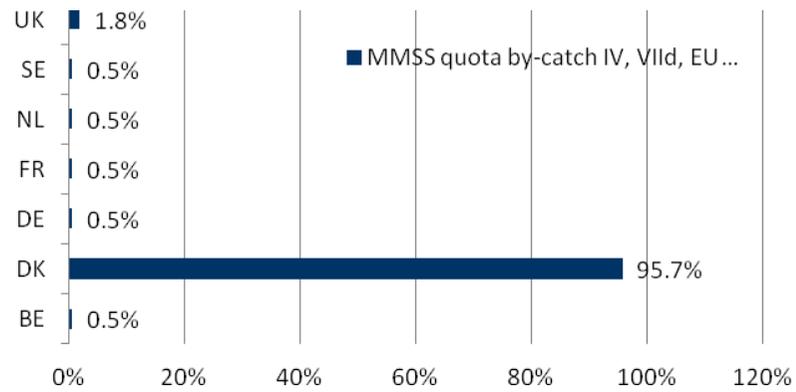
For the **Irish Sea North** (VIIa North) ICES advises on the basis of the MSY approach, that catches in 2016 should be no more than 4575 tonnes, which represents a 6% decrease of catches and a fishing mortality at 0.26. Oceana recommends setting a TAC according to the MSY framework despite this reduction in catches, by 6%, implies a reduction on biomass by 9% in 2016. This stock is managed together with VIIa South.

For the **Irish Sea South** (VIIa South), **Celtic Sea** (VIIg,h) and **Southwest of Ireland** (VIIj,k) stocks, ICES advises on the basis of the MSY approach, that catches in 2016 should be no more than 17228 tonnes, which implies a 10% TAC increase. According to the management plan agreed by the Pelagic RAC and evaluated by the Irish Marine Institute and ICES as precautionary, the TAC in 2016 should be set at 15442 tonnes, a 1% TAC decrease. Both proposed TACs are precautionary, but Oceana recommends the 1% reduction of the TAC to stop the biomass reduction trend.

For the rest of managed stocks **EU waters of Norwegian Sea** (IIa), **Faeroes Grounds** (Vb), **Rockall** (VIb), **Western English Channel** (VIIe) and **Bristol Channel** (VIIf), Oceana, according to the precautionary approach, proposes a minimal reduction in catches of 15% for stocks that are not managed together with other stocks for which there is a scientific advice.

### Member States quotas





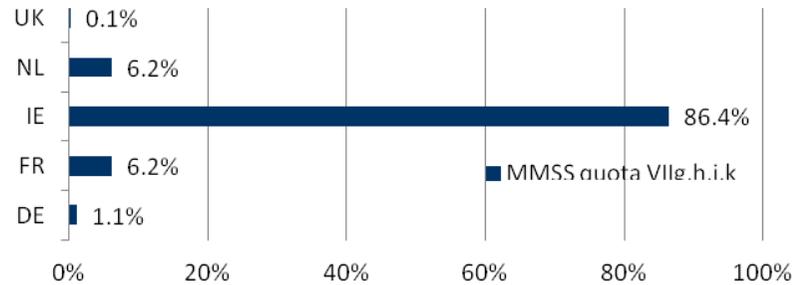


Table 6. Comparative table of Herring TACs (catches in tonnes) in ICES areas registered in the proposal. Brackets compare difference from previous year in %.

| Fishing area                                | Area name   | TAC 2015     | Stock Status   | Commission proposal 2016 | Oceana proposal 2016        |
|---|---|--------------|--|--------------------------|-----------------------------|
| IIIa  | Skagerrak and Kattegat  | 37188 (-7%)  | Above PA (IIIa)  | pm                       | 19412 (-47%)                |
| Union and Norwegian waters of IV (N 53°03') | EU and Norwegian waters of North Sea (north of 53°30')                                    | 267197 (-5%) | Above PA (IV)  | pm                       | 309948 (+16%)               |
| Norwegian waters south of 62°N              | Norwegian waters south of 62° (Sweden)  | 1093 (+26%)  | Above PA (IIIa, IV)  | pm                       | 1268 (+16%)                 |
| By-catches IIIa                             | bycatches in Skagerrak and Kattegat   | 6659 (0%)    | Above PA (IIIa)  | pm                       | 4934 (-52%)                 |
| By-catches IV, VIId and Union waters of IIa | bycatches in North Sea, Eastern English Channel and EU waters of Norwegian waters         | 15744 (+20%) | Above PA (IV, VIId, IIa)                                   | pm                       | 12498 (-26%)                |
| IVc, VIId                                   | Southern North Sea and Eastern English Channel  | 48986 (-5%)  | Above PA (IVc, VIId)                                       | pm                       | pm (+16%?)                  |
| Vb, VIb, VIa (N)                            | EU and international waters of Faeroes Grounds, Rockall and north of west of Scotland (N) | 22690 (-19%) | Above PA (Vb), completely unknown (VIb), below Blim (VIaN) | pm                       | 19286 (-15%)                |
| VIa (S), VIIf, VIIf                         | West of Scotland (S), West of Ireland, Porcupine Bank                                     | 0 (-100%)    | Below Blim (VIaS, VIIf)                                    | pm                       | 0 (0%)                      |
| VI Clyde                                    |   | TBE          | ?  | pm                       | ?                           |
| VIIa (South & North)                        | Irish Sea   | 4854 (-8%)   | Above MSY B trigger (VIIaN and S)                          | 4575 (-6%)               | 4575 (-6%)                  |
| VIIe and VIIf                               | Western English Channel and Bristol Channel   | 930 (0%)     | Completely unknown (VIIe,f)                                | pm RO                    | 791 (-15%)                  |
| VIIg, VIIh, VIIj, VIIk                      | Celtic Sea North and South, Southwest of Ireland East and West                            | 15652 (-30%) | Above MSY B trigger (VIIg,j,h,k)                           | 15442 (-20%)             | 15442 (-1%) or 17228 (+10%) |

## Atlantic mackerel (*Scomber scombrus*)

### Species description

Atlantic mackerel is present throughout the North Atlantic, although it is more abundant around the continental shelf, in cold or temperate waters. Mackerel form large schools and feed on zooplankton and small fish.



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### State of the stocks

Mackerel in the NE Atlantic comprises 3 spawning stocks areas that are widely spread. These are the western (VI, VII, VIIIa,b,d,e), southern (VIIIc, IXa) and North Sea (IV, IIIa) spawning components. Only the North Sea component could be considered as a separate spawning component. The combined NE Atlantic mackerel is assessed as one stock.

There are uncertainties in previous catches reports and unaccounted mortality, restricted to the period before 2005, which indicates that the assessment model used until 2012 underestimated the stock size. So ICES states that potential catch for this stock had been underestimated in the recent past and that the previous stock assessment method was no longer appropriate. Catches of mackerel have been increasing since 2005 and have been around 900 Kt since 2009 when the exploitation agreement between was broken. Fortunately, the stock's status does not seem to be affected; survey results and estimates of mortality based on catch give indications that there has been an increase in stock size, so it seems that recent levels of catch and landings did not pose a threat to the stock.

Fishing mortality has been declining since the mid-2000s, including a slight increase during last two years, but still remains well above Fpa and Fmsy. Fishing mortality was above Flim during the early 2000s. SSB has increased since 2004 and remains high, above Bpa and MSY B trigger since 2009. The 2002 and 2006 year classes were the strongest in the time series, and the 2011 year classes is estimated to be above average in contrast recruitment for 2013 appears to be the lowest since 2003.

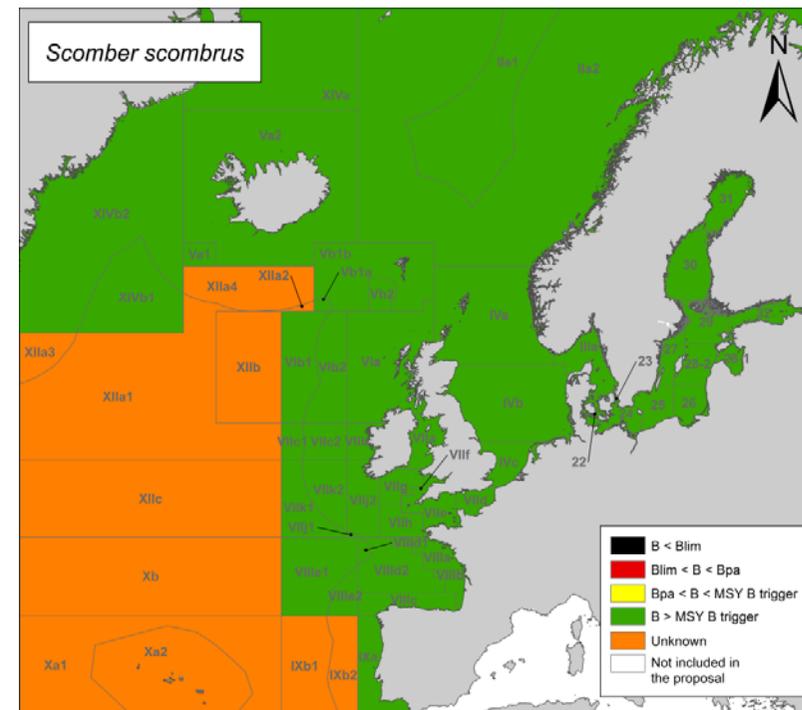


Figure 7. Mackerel stock status in ICES areas included in the proposal according to spawning biomass.

## Oceana proposal

Stocks of mackerel will be affected by the landing obligation in 2016 therefore adopted TAC should be established according to total real catches.

A management plan was agreed last October by Norway, the Faroe Islands and the EU, to replace previous agreements reached in 1999 and 2008. Iceland continues outside the agreement. Under the agreed plan, stability mechanisms have been introduced to limit the TAC fluctuation, no greater than 15% for 2016 and 20% for 2017. Therefore, according to the plan, catches in 2016 should be no more than 895900 tonnes. In contrast, ICES advises that when the MSY is applied, catches in 2016 should be no more than 667385 tonnes. This corresponds to a catch decrease by 46% compared to the agreed catch in 2015. Such a TAC would lead to a reduction in SSB in 2017 by 3%. Oceana considers that establishing the TAC according to the management plan is not enough to ensure the rational exploitation of the stocks and urges NEAFC Contracting Parties, including the EU, to adopt a larger reduction alongside the MSY approach. If there is evidence that such a reduction will jeopardize the socioeconomic sustainability of the fleets, a lesser reduction of up to 39% that corresponds to the precautionary approach, could be also supported by Oceana.

On the possibility of increasing the current proportion of catches allowed to be carried over to next year's catches, due to the Russian ban on the import of fisheries products, Oceana recommends maintaining the current limit of 10% for mackerel and not applying the proposed flexibility (20%-30%). ICES has expressed that for Northeast Atlantic mackerel, fishing mortality is already too high and needs to be reduced. Fishing mortality in 2015 has been well above  $F_{msy}$  and while an increase in the flexibility would reduce  $F$  in 2015 it would result in an increase in  $F$  in 2016 of a similar magnitude to the flexibility (around +20% or 30%) placing  $F$  in 2016 well above the MSY approach. It should be noted that there has not been an international agreement on TACs since 2009, when several countries decided to increase their catch quotas unilaterally by more than 200%. This situation endangers coordinated resource exploitation,

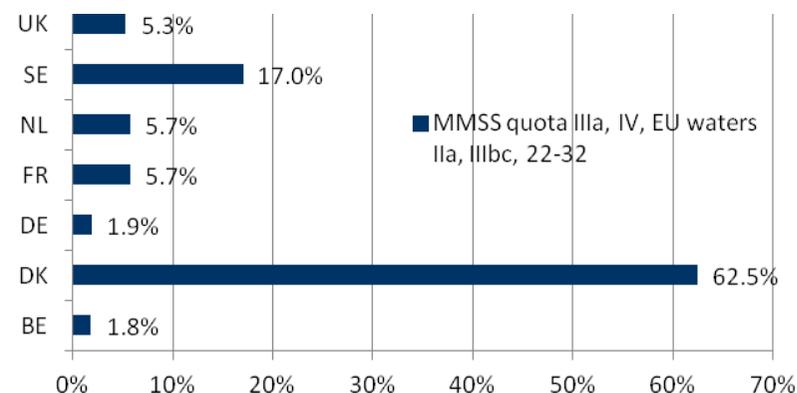
with unpredictable biological consequences, as well as risking other fishing agreements. Oceana urges the countries involved in the exploitation of mackerel to seek a consensus, which will enable sustainable exploitation of common fishery resources.

It should be added that ICES advises that the existing measures to protect the North Sea spawning component should remain in place. These measures are the following:

- There should be no mackerel fishing in Divisions IIIa and IVb,c at any time of the year;
- There should be no mackerel fishing in Division IVa during the period 15 February–31 July, and
- The 30 cm minimum landing size currently in force in Subarea IV should be maintained.

Controlling excess catches continues to be a problem for this species. This lack of control leads to mortality rates which seriously threaten the stock development.

## Member States quotas



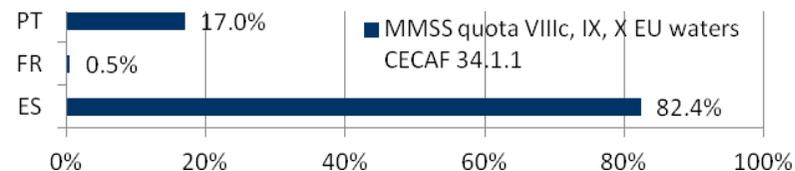
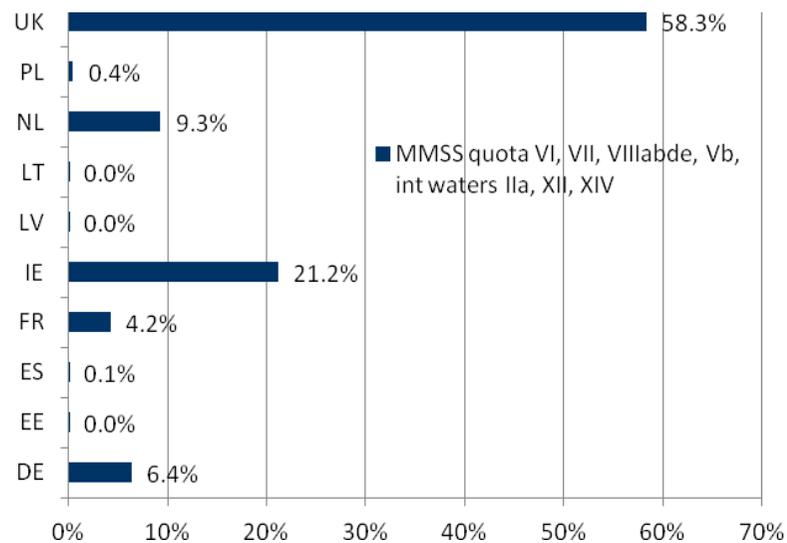


Table 7. Comparative table of Mackerel TACs (catches in tonnes) in ICES areas registered in the proposal. Brackets compare TAC difference from previous year (in %).

| Fishing area   | Area name   | TAC 2015      | Stock Status   | Commission proposal 2016 | Oceana proposal 2016          |
|--|---|---------------|--|--------------------------|-------------------------------|
| IIIa, IV, EU waters of IIa, IIIb, IIIc, 22-32                                  | Skagerrak and Kattegat, North Sea, European waters of Norwegian Sea, Sound and Belt Sea, and Baltic Sea   | 36338 (-14%)  | Above MSY trigger (IIIa, IV, IIa, IIIbc)                           | pm                       | 22166 ~ 19622 (-39%) ~ (-46%) |
| VI, VII, VIIIa,b,d,e, EU and internat waters Vb, internat waters IIa, XII, XIV | Rockall and West of Scotland, Irish Sea, West of Ireland, Porcupine Bank, Eastern and Western English Channel, Bristol Channel, Celtic Sea North and South, and Southwest of Ireland - East and West, Bay of Biscay North, Central, Offshore, West, European and international waters of Faeroes Grounds, international waters of Norwegian Sea, North of Azores and East Greenland | 420692 (-15%) | Above MSY trigger (VI, VII, VIIIabde), unknown, Vb, IIa, XII, XIV) | pm                       | 256622~227139 (-39%) ~ (-46%) |
| VIIIc, IX, X, CEEAF 34.1.1 (EU)  | Bay of Biscay South, Portuguese waters, Azores Grounds and European waters of CEEAF 34.1.1  | 48138 (-15%)  | Above MSY trigger (VIIIc, IXa) Unknown (IXb, X, CEEAF 34.1.1)      | pm                       | 29364 ~ 25994 (-39%) ~ (-46%) |
| Norwegian waters of IIa and IVa  | Norwegian waters of Norwegian Sea and Northern North Sea  | 16521 (-15%)  | Above MSY trigger (IVa), unknown (IIa)                             | pm                       | 10078 ~ 8921 (-39%) ~ (-46%)  |

## Megrim (*Lepidorhombus* spp.)

### Species description

The two species of megrim found in the North-East Atlantic are *Lepidorhombus whiffiagonis* and *Lepidorhombus boscii*. Widely distributed, these species are found from Icelandic waters to the African coasts of the Western Sahara on soft bottoms and at depths ranging between 288 and 700 meters where they feed on small demersal fish, cephalopods and crustaceans.



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### State of the stocks

Despite the fact that the two species are widely distributed and exploited, the state of most stocks is still uncertain despite years of management. *L. whiffiagonis*, which makes up around 20% of the total catches, is the species in the poorest state of conservation in terms of biomass.

In the **Northern North Sea** (IVa) and **West of Scotland** (VIa) new data (catch and surveys) available for this stock do not change the perception of the stocks. The stocks are in a good state and exploited in a sustainable way. Spawning stock biomass is fluctuating well above MSY B trigger and has steadily increased since 2005 setting the highest record for the past 2 decades in 2013. Fishing mortality has declined since the late 1990s and since then it has been maintained at levels below Fmsy. Information about discards is imprecise but it is estimated to have declined from 30% in the beginning of the time series to 15% in 2012.

In the **Rockall** (VIb) although there is no analytical assessment for this stock because of the lack of basic data, the survey indices show an increase in biomass over the last time-series, with two declines in 2011 and 2013. The biomass average of the stock in the last two years 2013–2014 is 33% higher than the average of the three previous years. On the other hand harvest ratio has been at a low and relatively stable level since 2007. There has been a substantial reduction in effort associated with the Scotland and Irish fleet in recent years. No reference points have been defined for this stock. Discards are known to take place but are not quantified.

In the **West of Ireland** (VIIb), **Porcupine Bank** (VIIc), **Eastern and Western English Channel** (VIId,e) **Bristol Channel** (VIIf), **Celtic Sea North and South**, (VIIg,h) and **Southwest of Ireland** (VIIj,k) and **North, Central and Offshore Bay of Biscay** (VIIIa,b,d), new data available for this stock does not change its perception. The state of the stock and exploitation rate is uncertain and the analytical assessment should only be considered as indicative of trends. Trends in biomass indicated an increase of 32% in the last two years 2013–2014 compared to the three previous years (2010-2012), when the stock was below its long term average. Fishing mortality in the last decade has decreased in a positive trend. Previous defined reference points are no longer valid and no new points have been defined yet. Recruitment has been relatively stable over the time-series. The discard rate is estimated to be substantial, around 25%, consisting mainly of undersized megrims and high-grading.

In the Iberian Peninsula, **South of Bay of Biscay** (VIIIc) and **East of Portuguese waters** (IXa) the ICES stock assessment differentiates the two species caught. The *L. boscii* biomass continues increasing in an upward trend since 2001, when it was at its lowest recorded level, and it is in a record high in 2014 above MSY trigger. Fishing mortality has been declining throughout the time-series but has been increasing considerably in the last two years and it is currently well above Fmsy. Recruitment has been around average since 2000, with the exception of a record high in 2009 and 2012. The range of discards is substantial and estimated between 39-63% (in numbers) although this is considered to be an underestimation.

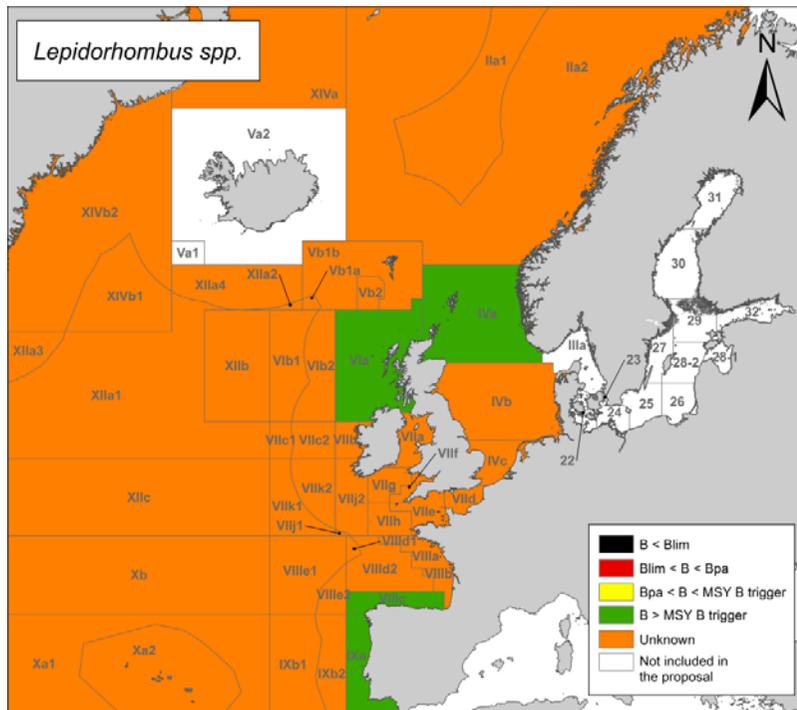


Figure 8. Megrim stock status in ICES areas included in the proposal according to spawning biomass.

In the case of *L. whiffiagonis*, biomass has increased from a minimum observed in 2009 and is considered to be now above MSY B trigger, including a reduction trend during last year. Fishing mortality has been fluctuating during time-series into a down trend up to 2010, since then it has increased and according to the latest available data it is above Fmsy. Recruitment has been low for over a decade with the exception of the last four years when it has been close to the long-term average. The range of discards for both species is estimated between 10-45% (in numbers), although, as in the case of *L. boschii*, this is considered to be an underestimation.

For the rest of the managed stocks, in the **Norwegian Sea** (IIa), **Central and South North Sea** (IVb,c), **Faeroes Grounds** (Vb), **Irish Sea** (VIIa), **West of Bay of Biscay** (VIIIe), **North Azores** (XII), **East Greenland** (XIV), **West Portuguese waters** (IXb), **Azores Grounds** (X) and **CECAF 34.1.1** there is no scientific assessment basis to provide an evaluation about its status and rate of exploitation.

### Oceana proposal

Stocks of megrims will not be affected by the landing obligation in 2016 so adopted TAC should be established according to wanted catches.

The poor information on the stocks in some areas, and the uncertainty about their evolution in others makes it necessary to improve data collection systems and, consequently, the assessment of this species.

Management of the stocks is set for the two species of megrim since they are caught and recorded together in landings. The advice on TACs should be based on the stock that is in the poorest condition.

For the **Northern North Sea** (IVa) and **West of Scotland** (VIa) ICES advises that on the basis of the MSY approach, landings should be no more than 7539 tonnes. If discard rates do not change compared to the average of the last three years, this implies catches of no more than 8567 tonnes. Imprecise and missing age data hinders the ICES in its ability to carry out an age-based assessment for this stock. In order to improve the assessment, depth and sex-stratified age data from the surveys would be required. Oceana recommends that the Council adopt this TAC, as the probability of the biomass falling below the MSY B trigger is very low <1%.

For the **Rockall** (VIb) stock, stock, ICES advises, on the basis of the precautionary approach, that landings in 2016 should be no more than 314 tonnes. As discards cannot be quantified, total catches cannot be calculated. Although harvest ratio is low, the substantial increase in biomass, according to the survey indices, makes Oceana to agree with the precautionary approach presented by ICES.

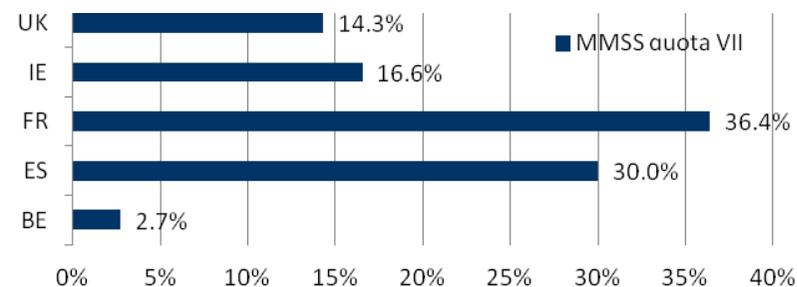
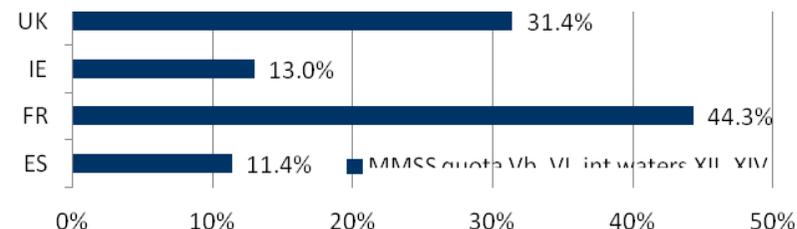
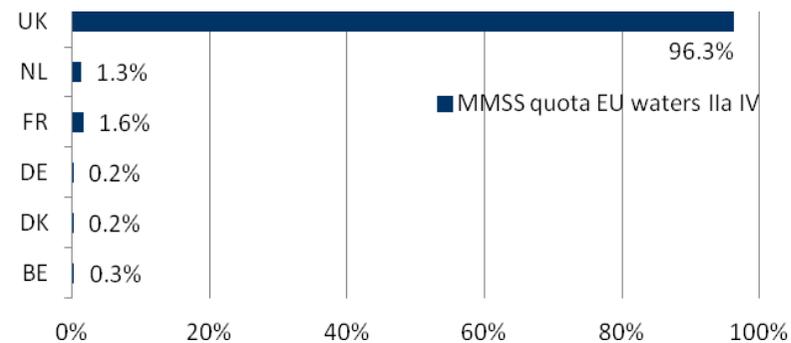
Despite this increase recommendation, landings are well below the established TAC so a roll over in the TAC could be also considered. Scientists recommend that management area should be the same as the assessment area, so megrim in Rockall should be managed as a single separate stock.

In the **West of Ireland (VIIb)**, **Porcupine Bank (VIIc)**, **Eastern and Western English Channel (VIId,e)** **Bristol Channel (VIIf)**, **Celtic Sea North and South**, (VIIg,h) and **Southwest of Ireland (VIIj.k)** and **North, Central and Offshore Bay of Biscay (VIIIa,b,d)**, ICES advises, on the basis of the precautionary approach (biomass index available), that landings should be no more than 18216 tonnes in 2016. Oceana considering that the effort in the main fishery has steadily decreased, agrees with this recommendation that means a decrease in landings by 5% in relation to last year adopted TAC for the two management areas.

For the stocks of the Iberian Peninsula, **South of Bay of Biscay (VIIIc)** and **East of Portuguese waters (IXa)**, ICES advises on the basis of the MSY approach, that combined landings of megrims should be no more than 1013 tonnes in 2016 (841 tonnes of *L. boschii* plus 172 tonnes of *L. whiffiagonis*). If discard rates do not change compared to the average of the last 5 years this implies catches of no more than 1259 tonnes, which represents a 26% TAC decrease. Oceana agrees with this advice, as it is necessary to reduce fishing mortality to the MSY framework and stop the biomass red trend observed last year. Oceana regrets the strong variations in catch limits between years (86% increase in 2014, 36% decrease in 2015) in order to provide progressive stability in fishing opportunities.

For the rest of the managed stocks **Norwegian Sea (IIa)**, **Central and South North Sea (IVb,c)**, **Faeroes Grounds (Vb)**, **Irish Sea (VIIa)**, **West of Bay of Biscay (VIIIe)**, **North Azores (XII)**, **East Greenland (XIV)**, **West Portuguese waters (IXb)**, **Azores Grounds (X)** and **CECAF 34.1.1**, according to the precautionary approach, Oceana proposes a minimal reduction in catches of 15% for those stocks that are not managed together with other stocks for which there is a scientific advice.

### Member States quotas



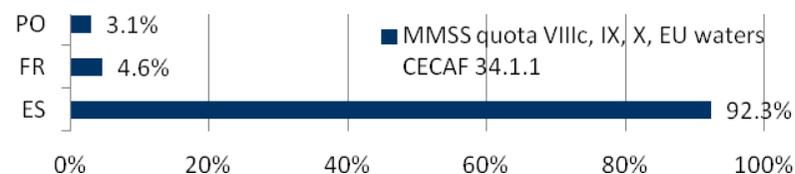
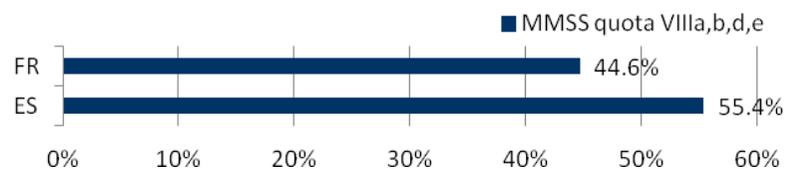


Table 8. Comparative table of Megrim TACs (landings in tonnes) in ICES areas registered in the proposal. Brackets compare TAC difference from previous year (in %).

| Fishing area  | Area name  | TAC 2015    | Stock Status  | Commission proposal 2016 | Oceana proposal 2016 |
|---|--|-------------|---|--------------------------|----------------------|
| EU Waters of IIa and IV   | EU waters of Norwegian Sea and North Sea   | 2083 (0%)   | Completely Unknown (IIa, IVbc), above MSY Btrigger (IVa)                            | 2639 (+27%)              | 2639 (+27%)          |
| VI, EU and international waters of Vb, intern waters of XII and XIV | Rockall, West of Scotland, EU and international waters of Faeroes Grounds, international waters of North of Azores and East Greenland                                  | 4129 (+1%)  | Above MSY B trigger (VIa), unknown uptrend (VIb), completely unknown (Vb, XII, XIV) | 4900 (+19%)              | 4900 (+19%)          |
| VII   | Irish Sea, West of Ireland, Porcupine Bank, Eastern and Western English Channel, Bristol Channel, Celtic Sea North and South, and Southwest of Ireland - East and West | 17385 (0%)  | Unknown uptrend (VIIb-k), completely unknown (VIIa)                                 | pm                       | 16580 (-5%)          |
| VIIIa, VIIIb, VIIIc, VIIIe  | North, central, offshore and West Bay of Biscay  | 1716 (0%)   | Unknown uptrend (VIIIabd), completely unknown (VIIIe)                               | pm                       | 1636 (-5%)           |
| VIIIc IX, X, CECAF 34.1.1 (EU)                                      | South Bay of Biscay, Portuguese waters, Azores Grounds, CECAF 34.1.1   | 1377 (-39%) | Completely unknown (IXb, X, CECAF 34.1.1), above MSY Btrigger (VIIIc, IXa)          | 1013 (-55%)              | 1013 (-26%)          |

## Norway lobster (*Nephrops norvegicus*)

### Species description

Norway lobster occurs throughout the continental shelf and the East Atlantic slope, from Iceland to the Atlantic coast of Morocco. It is present in muddy bottoms between 20 and 800 meters depth. The species feeds on detritus, crustaceans and annelids.



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### State of the stocks

*Nephrops* are limited to muddy habitats. This means that the distribution of suitable sediment defines the species distribution and stocks are therefore assessed as separate functional units inside the same area. ICES provides specific information on the state of the stocks in functional units. The general state of the stocks is not unfavourable, with several Functional Units (FU) exploited at the MSY B trigger. However, problems persist for stocks which are in a worse condition, such as those in the north and west areas of the Iberian Peninsula.

In **Skagerrak** and **Kattegat** (IIIa), there are two functional units, Skagerrak (FU3) and Kattegat (FU4), which are assessed together as one stock. Although there is no sound information, estimates of absolute abundance available for 2011, 2012, 2013 and 2014, based on biological underwater surveys, are considered to be stable. Otherwise estimated harvest ratios suggest that the stock is exploited sustainably and that the fishing mortality is currently below  $F_{msy}$ . It

must be stressed that discards in number present an average rate of 62,6% for the period 2012-2014.

In the **North Sea** (IV) *nephrops* stocks are assessed as nine separate functional units, and for several of them, no reference points have been defined. Overall, catches grew constantly until 2006, doubling in a period of ten years. Since then, catches have slowly started to decline. Landings in the North Sea were around 21209, 17214, 13722 and 10829 tonnes from 2010 to 2013.

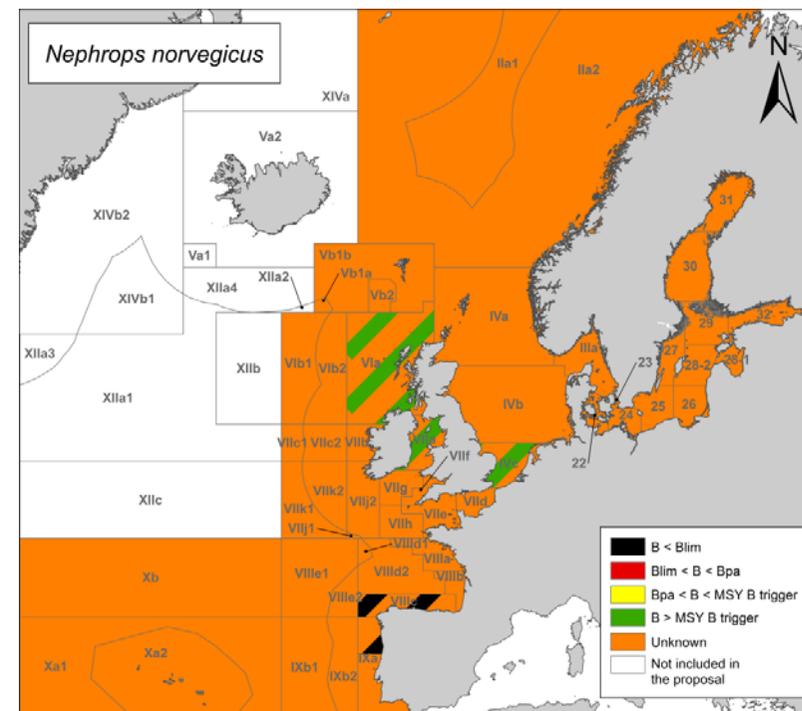


Figure 9. Norway lobster stock status in ICES areas included in the proposal according to spawning biomass.

The current management of the Norway lobster in the North Sea, both in terms of TAC and effort, does not offer enough guarantees to be sustainable. Few of the units are in “good” condition: Botney Gut-Silver Pit (FU5-IVbc), Firth of Forth (FU8-IVb), Moray Firth (FU9-IVa). For the rest of the functional units, Farn Deep (FU6-IVb), Fladen Ground (FU7-IVa), Off Horn’s Reef (FU33-IVb), Devil’s Hole (FU34-IVb), the group of other areas or rectangles, Noup (FU10-IVa), and Norwegian Deep (FU32-IVa), the status is overexploited or unknown. For the FU5, FU7, FU10 and FU32 fishing mortality indicator seems to be below possible reference points. Despite the use of more selective gears trawling for nephrops results in by-catch and discards of other species, including cod, haddock and whiting that can be high due to the mesh size. This is particularly problematic for the various North Sea cod stocks, which are in poor condition. Nephrops discards are also high for several FUs.

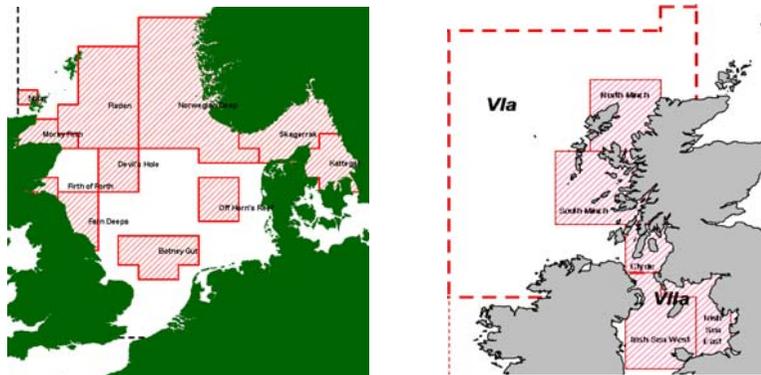


Figure 9.1 Nephrops functional units in the North Sea and Skagerrak-Kattegat (left) and in the West of Scotland (right). Source: ICES.

In the **West of Scotland (Vla)** there are three functional units: North Minch (FU11), South Minch (FU12) and Firth of Clyde+Sound of Jura (FU13) that are in good shape. All functional units, excepting the area of Sound of Jura (for which F is slightly higher than

recommended), are above the sustainable proxy biomass indicators and below fishing mortality rates indicators. For the rest of the rectangle outside FUs there is no information available on the trend in the stock or its exploitation status. For some fleets, high rates of discard of haddock and whiting have been observed in recent years. In Subdivisions of **Subarea VII**, stocks are assessed as seven separate functional units belonging to different regions: FU14 and FU15 (Irish Sea-VIIa), FU16 (West of Ireland-VIIb, Porcupine Bank-VIIc, South West of Ireland-VIIjk), FU17 (West of Ireland-VIIb), FU19 (Irish Sea VIIa, Celtic Sea North VIIg, South West of Ireland East VIIj) FU20, FU21,22 (Celtic Sea- VIIgh), FU18 and other rectangles outside the FU. Most of the functional units are monitored by underwater TV surveys (UWTV). The state of the stocks varies among functional units, for FU20 and FU21 stock size is increasing, for FU15 and FU17 decreasing, for FU16, FU19 and FU22 stable, and no clear trend for FU14, FU18 and other rectangles outside the FU. Most of the catches, around 52% of total catches of the area, are taken in the FU15 followed by the FU22 with around 24%. There are also small catches from areas outside these functional units and FU18, which are not formally assessed. Trawling for nephrops results in high by-catch and discards of other commercial species including; cod, haddock, whiting, hake, monkfish and megrim.

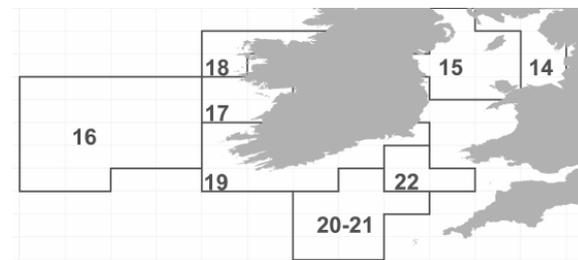


Figure 9.2 Nephrops functional units in the Subarea VII. Source: ICES.

In the **North and Central Bay of Biscay (VIIIab)**, two functional units (FU23) and (FU24) are assessed together. The stocks are defined as

a data-limited stock, its condition is not well known. Trends in biomass indicate an increase in the last two years (2013 and 2014), by 14% with respect to the biomass average of the three previous years (2010-2012). Anyway biomass index from 2006-2013 shows no clear trend. Fishing mortality has been declining in recent years and recruitment has shown a downwards trend also in recent years.

In the **South of Bay of Biscay** (VIIIc) the stocks are assessed as two separate functional units: North Galicia (FU25) and Cantabrian Sea (FU31). New information indicates that the stocks in both FUs are at a very low level and in a poor state. Annual TAC reductions of 10%, according to the management plan (EC N°2166/2005), have been ineffective in reducing fishing mortality. Landings are well below the established TAC. In 2012 and 2013 only around 17% of the agreed TAC was landed. This situation is clear evidence of the stock overexploitation. There is no evidence that the current management of nephrops ensures that effort is sufficiently limited to avoid depletion in the functional units. A high proportion of the catches are taken outside of the two FUs.

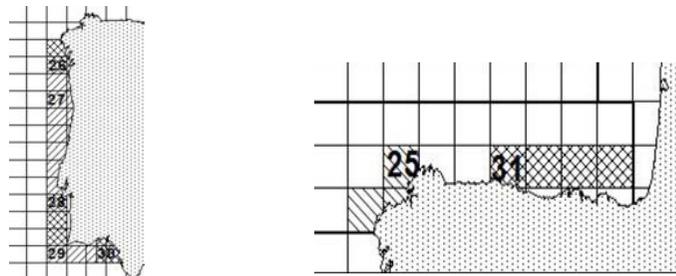


Figure 9.3 Nephrops functional units in the Subarea (VIIIc) and East of Portuguese Waters (IXa). Source: ICES.

In the **East of Portuguese waters** (IXa), stocks are assessed as five separate functional units, West Galicia (FU26), North Portugal (FU27), Southwest Portugal (FU28), South Portugal (FU29), Gulf of Cadiz (FU30). After many years of management under a recovery plan (Regulation EC N°2166/2005) several FUs continue to decrease

and to be overexploited with extremely low biomass levels. Oceana is deeply worried about the status and downtrend of FUs 26 and 27. Biomass indicator for FUs 28 and 29 suggests that there has been no substantial change in the biomass over the time period and for the case of FU 30 indicates that there may be some recovery in the stock in recent years. A high proportion of the nephrops catches are allocated into areas outside of the FUs.

For the rest of managed stocks, in the **Norwegian Sea** (IIa), **Belt, Sound and Baltic Sea** (Subdivisions 22-32), **Faeroes Grounds** (Vb), **Rockall** (VIb), **Offshore and West of Bay of Biscay** (VIII d,e), **West Portuguese waters** (IXb), **Azores Grounds** (X) and **CECAF 34.1,1** there is no scientific assessment basis to provide an evaluation about their status and rate of exploitation.

### Oceana proposal

Stocks of nephrops in the North Western waters, North Sea area, and South Western Waters area will be partially affected by the landing obligation. In cases where a survivability exemption has been proposed TACs according to wanted catches have been proposed. Oceana has provided TAC adjustments for these stocks in the table below on the basis of the STECF 15-17 report when reliable data were available.

For years ICES has recommended a change in the geographical scope of the management of Norway lobster; ICES has requested management based on functional units for the North Sea (IV), the West of Scotland (VIa), Subarea VII and the waters of the Iberian Peninsula (VIIIc and IXa). These units, which are smaller in size than the ICES areas, are defined on the basis of the actual differentiated distribution of the species.

Nephrops management according to ICES areas does not provide adequate safeguards to ensure that local effort is sufficiently limited to avoid depletion of the resource in the FU. Management at the functional unit level should ensure that catch opportunities and effort are compatible and in line with the scale of the resources in each of the stocks defined by the functional units.

Currently, the same TAC covers different functional units and vessels are free to move between grounds, allowing effort to develop on some grounds in a largely uncontrolled way. This has historically resulted in inappropriate harvest rates from some units.

The volume of discards in this fishery is significant. Furthermore, the type of fishing gear used in this fishery causes a significant amount of by-catch and discards of other species, such as cod, haddock and whiting. Scientists have repeatedly signalled the need to introduce improvements in the selectivity of the gear. Scientific studies recommend an increase in mesh size and the use of square mesh panels as an appropriate method for reducing these catches.

Nephrops individuals have a survival rate after discarding of about 25%, so the application of the future discard ban, from 2016 to 2018, will have potential implications in setting management measures and catch limits, as they will have to be landed in the future. A potential TAC reduction is expected to correct this situation.

The potential recovery of main predators of nephrops such as cod could be associated with a reduction in nephrops abundance, therefore it may be expected a reduction in fishing opportunities when these species recover.

For **Skagerrak** and **Kattegat** (IIIa), ICES advises on the basis of the MSY approach that landings in 2016 should be no more than 7827 tonnes, which implies catches of about 11793 tonnes if discard rates do not change from average past three years (2012-2014). Although harvest rate values are considered preliminary and may be modified following further data exploration and analysis Oceana agrees with this TAC proposal. Nephrops fisheries in Skagerrak and Kattegat are heavily influenced by the management of cod. Despite the efforts to reduce discard through the use of selective gears, more efforts are still needed, the main reason for the high amount of discards (67% in numbers in 2013) is the lack of connection between the minimum landing size and the net mesh size. Cod in the Kattegat is in a particularly dire situation and Oceana therefore recommends that only fisheries that are demonstrating a near zero by-catch of cod are allowed.

For the **North Sea** (IV) nephrops survivability exemption from the landing obligation will apply to catches of pots that represent less than 1% of the discards in the area. ICES does not provide a single recommendation for the whole group of FUs. ICES advises, on the basis of the MSY and data limited stocks approaches, the following catches/landings limits: Firth of Forth FU8 (2040/1866 t), Moray Firth FU9 (943/923 t), Fladen Ground FU7 (6856/6847 t), Farn Deeps FU6 (738/680 t), Noup FU10 (33/32 t), Norwegian Deeps FU32 (642/554 t), Devil's Hole FU34 (410/383 t), Botney Gut-Silver Pit FU5 (1159/1043 t), Off Horn's Reef FU33 (1136 t - landings) and the case of other areas or rectangles not defined as FUs (376 t – landings). For the sum of total FUs, on the basis of single stock advice, ICES advises landings be set at 18324 tonnes.

There are a couple of drawbacks for this advice: on one hand if catch limits cannot be adapted by functional units, this sum can lead to nephrops local depletion; on the other hand if this sum is directly applied, it also leads to cod catches being potentially higher than allowed under the cod management plan. Other species taken as by-catch by trawling, like haddock or whiting should also be considered. In addition, official landings are usually much lower than the agreed TAC so the TAC is not restrictive for the fishery. For these reasons and due to the overexploitation situation of cod, Oceana based on mixed fisheries approach to cod recommends, setting the TAC at 5776 tonnes or at least a 15% TAC reduction.

For the **West of Scotland** (VIa), survivability exemption from the landing obligation will apply to catches of pots, traps and creel that represent less than 1% of the discards in the area. ICES advises, on the basis of the MSY and data limited stocks approaches, the following catches/landings limits: 3770/3677 t for FU11, 6163/6073 t for FU12, 6568/6206 t for FU13, for the rest of the rectangles outside the FUs ICES advises that wanted catches (landings) should be no more than 326 tonnes. Oceana suggest to adapt management by functional units to avoid nephrops potential depletion.

For Subdivisions of **Subarea VII**, survivability exemption from the landing obligation will apply to catches of pots, traps and creel that represent less than 1% of the discards in the area and affected gears

represent around 96% of previous discards. Landings in the time-series were always well below agreed TACs, and as such, TAC has never been restrictive. ICES advises, on the basis of the MSY and data limited stocks approaches, the following catches/landings limits: FU14 (1272/1213 t), FU16 (1859 t), FU22 (3027/2778 t), FU15 (8682/7577 t), FU19 (793/618 t), FU17 (991/948 t), FU20-FU21 (3045/2500 t), and finally for FU18 and other areas outside the units (235 t – landings) for which there is no information available on stock trends or exploitation status. As all functional units are still managed together, excepting a specific catch limit for FU16, Oceana recommends to apply a precautionary reduction to the sum of previous figures since several FU require reductions.

For the **North and Central Bay of Biscay** (VIIIab) survivability exemption from the landing obligation will apply to catches of the fishing gears that represent 99% of the previous discards in the area, therefore a management based on landings should continue. ICES advises that landings be no more than 3214 tonnes based on the ICES approach for data-limited stocks. This corresponds to removals of no more than 4224 tonnes, assuming that discards rate do not change from the average of the last three years (2011-2013). Oceana agrees with this approach and recommends the Council follows this TAC advice, which implies a reduction in catches of 17% for 2014.

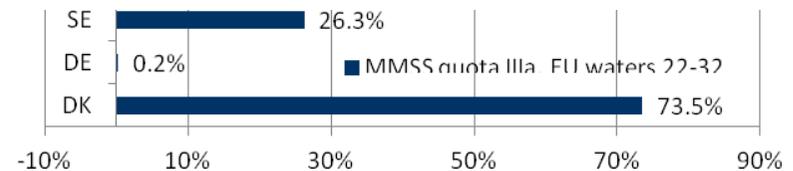
For the **South of Bay of Biscay** (VIIIc) survivability exemption from the landing obligation will apply to catches of the fishing gears that represent 99% of the previous discards in the area, therefore a management based on landings should continue. After years under the management plan, instead of recovering, the stocks are still stable at low or declining. The perpetual state of overexploitation is why this year is the 14<sup>h</sup> in a row that scientists advise zero catches for the FUs of the fishery. Oceana, according to the precautionary approach, urges the Council to obviate the management plan and propose a 0 TAC.

For **East Portuguese waters** (IXa), survivability exemption from the landing obligation will apply to catches of the fishing gears that represent 99% of the previous discards in the area, therefore a

management based on landings should continue. The state of the stocks has led scientists to recommend the closure of the West Galicia (FU26) and North Portugal (FU27), and increase for the rest of functional units. Oceana, according to ICES advice agrees with the closure of West Galicia (FU26) and North Portugal (FU27) and recommends a 226 tonnes TAC for the Southwest (FU 28) and South Portugal (FU29), and a 95 tonnes TAC for the Gulf of Cadiz (FU30) on the basis of precautionary considerations. If management cannot be adapted by functional units Oceana recommends ignoring the management plan and setting a zero TAC for 2014. Control at landing should be improved as in several previous years the TAC was overshoot.

For the rest of the managed stocks **Norwegian Sea** (IIa), **Belt, Sound and Baltic Sea** (Subdivisions 22-32), **Faeroes Grounds** (Vb), **Rockall** (VIb), **Offshore and West of Bay of Biscay** (VIII d,e), **West Portuguese Waters** (IXb), **Azores Grounds** (X) and **CECAF 34.1,1** according to the precautionary approach, Oceana proposes a minimal reduction in catches of 15% for those stocks that are not managed with other stocks for which there is a scientific advice.

### Member States quotas



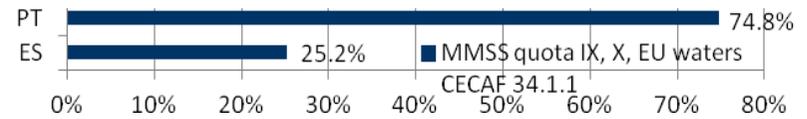
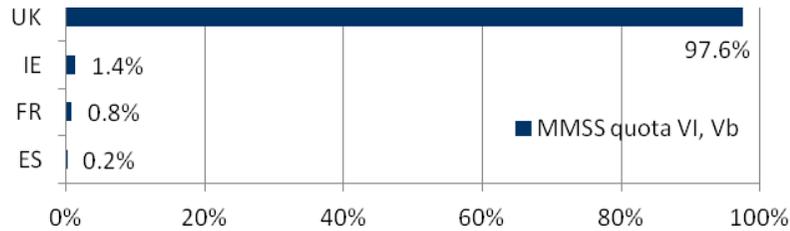
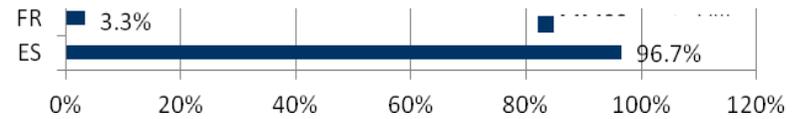
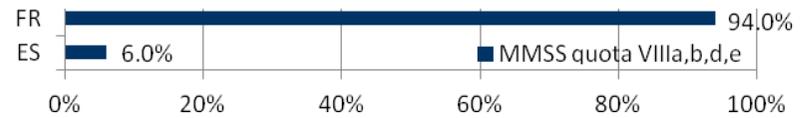
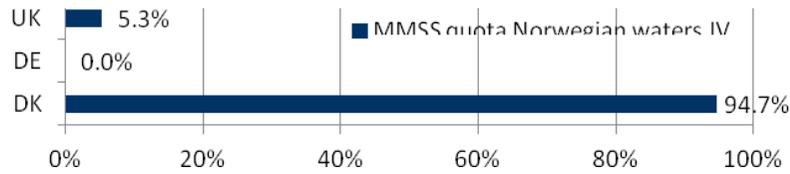
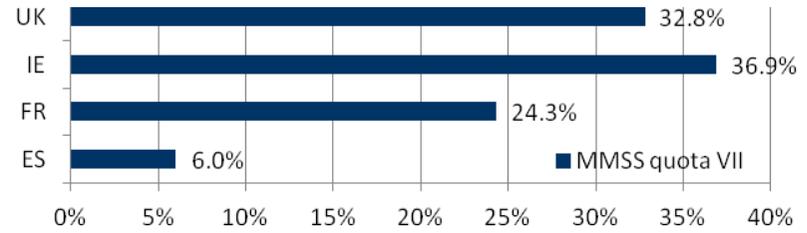
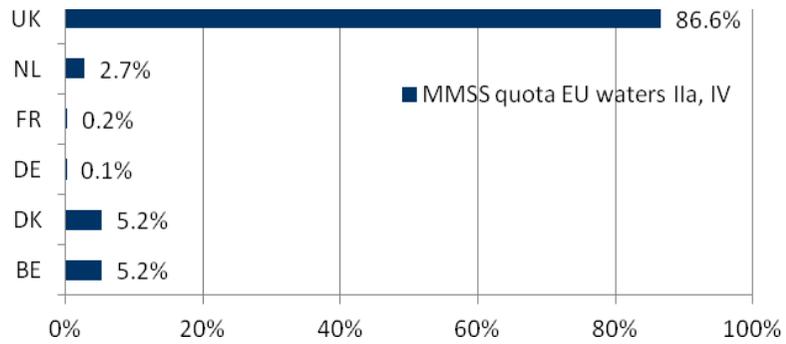


Table 9. Comparative table of Norway lobster TACs (in tonnes) in ICES areas registered in the proposal. Figures in non-shaded rows refer to weight in catches, in shaded rows refer to weight in landings. Brackets compare TAC difference from previous year (in %).

| Fishing area                         | Area name  | TAC 2015     | Stock Status  | Commission proposal 2016 | Oceana proposal 2016                     |
|--------------------------------------|--|--------------|---|--------------------------|--|
| IIIa, EU waters of Subdivision 22-32 | Skagerrak (West) and Kattegat (East), EU waters of Belt Sea – Sound, and Baltic waters   | 5019 (-3%)   | Unknown (IIIa), completely unknown (IIIbc, 22-32)                           | pm                       | pm                                       |
| EU Waters of IIa and IV              | EU Waters of North Sea and Norwegian waters  | 15499 (-10%) | Above and below MSY Btrigger & Unknown (FU of IV), completely unknown (IIa) | 14315 (-20%)             | 14333<br>13840 + 493<br>(-11%) + Uplift  |
| Norwegian waters IV                  | Norwegian waters of North Sea  | 1000 (0%)    | Above and below MYS B trigger & unknown (FU of IV)                          | pm                       | pm                                       |
| VI, EU and internat waters Vb        | Rockall, West of Scotland, EU and international waters of Faeroes Grounds  | 15287 (-8%)  | Above MSY trigger and unknown (VIa), completely unknown (Vb, VIb)           | pm                       | 16501<br>15956 + 545<br>(+8%) + Uplift   |
| VII                                  | Irish Sea, West of Ireland, Porcupine Bank, Eastern and Western English Channel, Bristol Channel, Celtic Sea North and South, and Southwest of Ireland - East and West | 20989 (-9%)  | Above MSY trigger and unknown (VII)   | pm                       | 19899<br>17719 + 2180<br>(-18%) + Uplift |
| VIIIa,b,d,e                          | Bay of Biscay (North, central, offshore West)  | 3899 (0%)    | Unknown (VIIIab), completely unknown (VIIIde)                               | pm                       | 3214 (-17%)                              |
| VIIIc                                | Bay of Biscay (South)  | 67 (-9%)     | Below Blim and unknown decreasing (VIIIc)                                   | pm                       | 0 (-100%)                                |
| IX, X, CECAF 34.1.1 (EU)             | Portuguese waters, Azores Grounds and EU waters of CECAF 34.1.1  | 221 (-10%)   | Below Blim and unknown (IXa), completely unknown (IXb, X, CECAF 43.1.1)     | pm                       | 0 (-100%) or<br>321* (+45%)              |

\* If there are guarantees that FU26 and FU27 nephrops fisheries are closed.

## European plaice (*Pleuronectes platessa*)

### Species description

European plaice is the most important flat fish in European fisheries. It is distributed throughout the North-East Atlantic, from Greenland and Norway to Morocco. The distribution of the species in the water column depends on its age, where older specimens tend to migrate to greater depths. The species feeds on molluscs and polychaete worms.



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### State of the stocks

The state of plaice stocks varies between areas, but all are plagued by high discard rates, which compromise the responsible exploitation of the stocks. Some fisheries have discard rates of 80%, due to an imbalance between minimum landing size and fishing gear mesh size.

For **Skagerrak** (IIIa subdivision 20) and **North Sea** (IV) plaice stocks ICES provides a combined assessment for the first time as a large proportion of the catch in the western Skagerrak is considered to originate from the North Sea component of the stock. Spawning stock biomass of the combined stock has increased during the past ten years and has reached a record high well above MSY B trigger. Fishing mortality has reduced since 2000 from above precautionary levels to below the MSY, at the historic low, and below the target

specified in the management plan. The EU management plan for plaice and sole in the North Sea (Council regulation (EC) No 676/2007) seems to be yielding good results. Recruitment in recent years has been around the long-term average from 2007 onwards. Although in the total fleet discard ratio has gradually decreased since 2000, it is still high and discards represent a substantial part of the total catch, as the mesh size is smaller than the minimum landing size. For 2010, 2011, 2012, 2013 and 2014 discards represented 43%, 37%, 44%, 33% and 40% respectively of the total catches.

In **Kattegat** (IIIa subdivision 21) Spawning stock biomass has increased since 2009 and has been above Bpa since 2012 and currently it is at a record high. This positive trend is in response to the decrease in fishing mortality since 2000 that has been below Fmsy since 2011. Recruitment has decreased in recent years. Kattegat plaice is assessed together with the Belts and Sound place

In the **Irish Sea** (VIIa) there is no sound information and assessments are only indicative of trends. No reference points are defined for this stock, and previous precautionary reference points are no longer considered appropriate. The surveys and biomass (SSB) trends indicate an increase in stock size since the mid-1990s, which has subsequently stabilised since 2003. Fishing mortality has shown a downward trend since the beginning of the 1990s and since 2000 it seems to be established in low values, as the estimates of total catch (landings and discards) since 2006 are only around 15% and 20% of the AEPM (annual egg production method) estimates of SSB over this period. Although the assessment method has improve compared to two years ago, there are still difficulties regarding data interpretation. Nevertheless, indicators suggest that fishing mortality is below possible reference points. A very high proportion of the catch is discarded; average of discard rate for the period 2012-2014 is 72%.

In the **West of Ireland** (VIIb) and **Porcupine Bank** (VIIc) new data available for these stocks do not change the perception of the stock. The state of the stock is unknown because information is lacking to evaluate it and available catch statistics are not considered reliable enough to estimate trends in abundance. Catches in this area are too

low to support the collection of the necessary information for assessment of the stock status. Discards are known to take place but are unquantified. No reference points are defined for these stocks, nor is there any evidence that the current level of exploitation is appropriate for the stock.

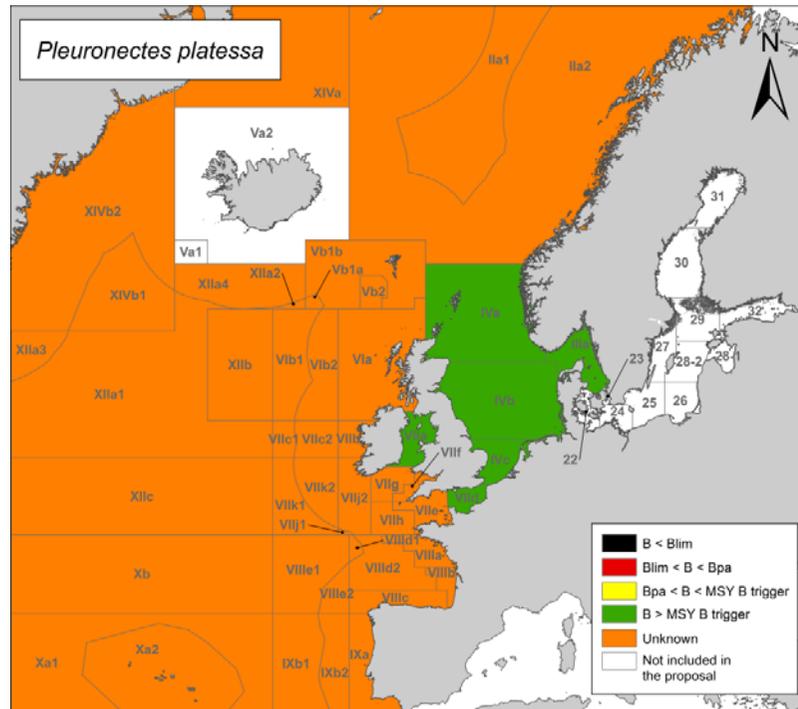


Figure 10. Plaice stock status in ICES areas included in the proposal according to spawning biomass<sup>16</sup>.

<sup>16</sup> Stock status based on trends for VIIa, VIIfg.

In the **Eastern English Channel (VIIId)**, both the stock status and rate of exploitation are unknown; therefore assessments are indicative of trends only. No reference points are defined for these stocks. The surveys and biological trends indicate that spawning stock biomass has been declining continuously since mid-1990s to a record low (2003-2008), and has since 2003 increased and is currently around the highest level. Fishing mortality has declined since 2002 and is currently below average and among the lowest in the time-series. The recruitment trend during last years is uncertain. Survey information indicates that discard rates are unknown, although in the last 3 years it has been estimated to be in the order of 30-40% in weight depending on the specific outing and on fishing practices. There is uncertainty about the landings statistics of VIIId plaice because of migration between this area and the North Sea and the western channel. In many cases, the mesh size does not match the minimum landing size for Plaice (27cm).

In the **Western English Channel (VIIe)**, assessment is indicative of trends. Spawning stock biomass has increased since 2008 and is currently at the time-series maximum due to the above-average recruitment since 2010. Fishing mortality increased slightly until 2007, and has decreased since then, especially during 2009. Discarding in the Western Channel is high, about 20%, but much lower than for other plaice stocks.

In the **Bristol Channel (VIIIf)** and **Celtic Sea (VIIg)** previous reference points are no longer considered appropriate by ICES and new reference points have not been defined for these stocks. The assessment is only indicative of trends. The average of the stock size indicator (SSB from the survey) has shown an increasing trend since the mid-2000s, reaching its highest level in 2013, but declines in 2014. Landings have been relatively stable at a low level since 2004. Discards have been increasing since 2004 and are very high in the fishery; discard rate average for 2012-2'14 is 72%. Discards are in excess of landings, more than double the landings in 2011-2013. Data landings suggest that for 2012 and 2013 total landings were 17% and 11% above the agreed TAC.

In the **Celtic Sea South** (VIIh), **Southwest of Ireland East & West** (VIIj,k) no reference points are defined for this stock since the analysis for this assessment area is only based on landings and does not take discards in to account even when they are considered to be substantial. New assessment available for this stock does not change the perception of the stock. Available indicators suggest that spawning stock biomass has decreased significantly since 1990s and it has remained low and stable since 2005. Fishing mortality has been variable without showing a long-term trend. Discard rates are too high to maintain a sustainable exploitation of the resource; in 2012 and 2013, 30% and 36% of the Plaice in weight were discarded, although it had been on average over 60% of the catch in weight in past years. Data landings were above agreed TAC by 14% in 2012.

In the **Bay of Biscay** (VIII) and **East of Portuguese Waters** (IXa), there is not enough information to evaluate stock trends and exploitation status. New landings data available for this stock shows that landings have been relatively stable over the time period but do not change the perception of the stock; therefore plaice status in the region is unknown and it is considered a data-limited stock. No reference points are defined for the stocks.

For the rest of the managed stocks, in the **Norwegian Sea** (IIa), **Faeroes Grounds** (Vb), **Rockall, West of Scotland** (VI), **West Portuguese waters** (IXb), **Azores Grounds** (X), **North of Azores** (XII), **East Greenland** (XIV) and **CECAF 34.1.1**, there is no scientific assessment basis to provide an evaluation about its status and rate of exploitation.

### **Oceana proposal**

Stocks of plaice in the North Sea area and South Western Waters area will be partially affected by the landing obligation. Oceana has provided TAC adjustments for these stocks in the table below on the basis of the STECF 15-17 report when reliable data was available.

Any measure which leads to a reduction in discards will favour an increase in future productivity of the fishery. More efforts and

technical measures should be introduced to reduce unsustainable discard rates.

For **Skagerrak** (IIIa, subdivision 20) and the **North Sea** (IV) stock, ICES advises on the basis of the agreed management plan that catches in 2016 should be no more than 216345 tonnes, resulting in a 15% TAC increase. If discard rates do not change compared to the average of the last three years (2012-2014) this implies landings of no more than 159197 tonnes. Otherwise the MSY framework results in a 22% TAC decrease. Due to the stocks' exceptionally good status and rate of exploitation, Oceana agrees with both proposals although because of possible overshoot of by-catch species, also recommends the adoption of a rollover TAC. Technical measures should be introduced to reduce discard rates and transitional arrangements should be established for the second stage of the management plan.

For **Kattegat** (IIIa, subdivision 21), ICES advises that when the MSY approach is applied, catches in 2016 should be no more than 8639 tonnes. It should be noted that Kattegat plaice is assessed together with the Belts and Sound plaice, if discard rate does not change versus the 2014 ratio, this implies landings of no more than 4642. Oceana agrees with the scientific recommendation, which is supported by the upward trend of plaice abundance indicators, although it should be noted that almost half of the increase in catches will be discarded.

For the **Irish Sea** (VIIa), ICES advises, based on an assessment of data-limited stocks and the precautionary approach, that landings should be no more than 394 tonnes, a 69% TAC decrease, which implies catches of no more than 1244 if discard rates do not change compared to the average of the past three years (2012-2014). It should be added that the TAC is not restrictive and landings are far below the agreed TAC, in any case due to the positive trend of the relative SSB a lower reduction could be considered, ranging from -30% to -69%, depending on the socio-economic implications of the TAC reduction in the fleet. Oceana is deeply worried about the high discard rate, the 2012-2014 average was 72%, due to the discrepancy between the minimum landing size and the mesh size of

the gear being used. Because of these reasons technical measures should be introduced urgently to reduce the high discard rates, as previous measures have had little effect. Efforts to reduce plaice by-catch in nephrops fisheries, like the introduction of grids, are expected to have positive results in the reduction of discards in the area.

For the **West of Ireland** (VIIb) and **Porcupine Bank** (VIIc), ICES advises, based on an assessment of data limited stocks and the precautionary approach that wanted catches (landings) should be no more than 30 tonnes. The advice is based on a precautionary reduction of catches because of missing or non-representative data. ICES cannot quantify the corresponding total catches. In the last ten years, TACs were 2-5 times larger than landings. It should be noted that the average landings over the last four years, 24.5 tonnes, is lower than the ICES recommendation. Although this stock is listed in the joint statement of the Commission and Council (Doc 5315/13 PECH 15) that provides the possibility to maintain the 2013 TAC, Oceana, due to the precautionary approach and based on ICES data-limited approach recommends fixing a TAC of 30 tonnes.

For the **Eastern English Channel** (VIId), ICES advises on the basis of the MSY approach that landings in 2016 should be no more than 11096 tonnes. If discard rates do not change from the average of the last three years (2012-2014) this implies catches of no more than 17250. A proportion of the Division VIIe and Subarea IV plaice stocks is taken in Division VIId, so ICES assuming the same proportion of catches from these areas as during 2003-2014 advises that landings of plaice in Division VIId should be no more than 12789. Scientific recommendations concerning catch levels have been consistently ignored for decades. Both English Channel stocks (VIId and VIIe) are managed together, so the management measures implemented must be effective in controlling mortality for both stocks. Resulted TAC imply an increase of 197%, although Oceana could consider this advice as sustainable, Oceana recommends a lower increase, of 100%, in order to provide progressive stability in fishing opportunities during next years. Technical measures should be introduced urgently to reduce the high discard rates, in particular to improve the matching of the mesh size with the minimum landing size.

For the **Western English Channel** (VIIe), ICES advises on the basis of the MSY approach, that landings in 2016 should be no more than 1697 tonnes. If discard rates do not change from the average of the last three years (2012-2014) this implies catches of no more than 2,262. Due to migration patterns catches of this stock also occur in Division VIId, so assuming that the same proportion, as during 2001-2014, of catches from Division VIIe will be taken in VIId during 2016, ICES recommends that landings in Division VIIe should be no more than 1458 tonnes. Both English Channel stocks (VIId and VIIe) are managed together, so the management measures implemented must be effective in controlling mortality for both stocks. The resulting TAC implies an increase of 197%, although Oceana could consider this advice as sustainable, Oceana recommends a lower increase, of 100%, in order to provide progressive stability in fishing opportunities during next years. Oceana recommends establishing fishing opportunities variation according to these criteria.

For the **Bristol Channel** (VIIf) and **Celtic Sea** (VIIg) stocks, ICES advises, on the basis of assessment for data limited stocks and the precautionary approach, that landing be no more than 420 tonnes. If discard rates do not change from the average of the previous three years (2012-2014), this implies catches of no more than 1500 tonnes. Oceana recommends applying this advice and urgently implementing discard mitigation measures, like the use of larger mesh size gear, to reduce discards in mixed fishery, stemming from a mismatch between mesh size and the minimum landing size. Alternatively, Oceana recommends a larger reduction, because of the high discard rates that exceed landings.

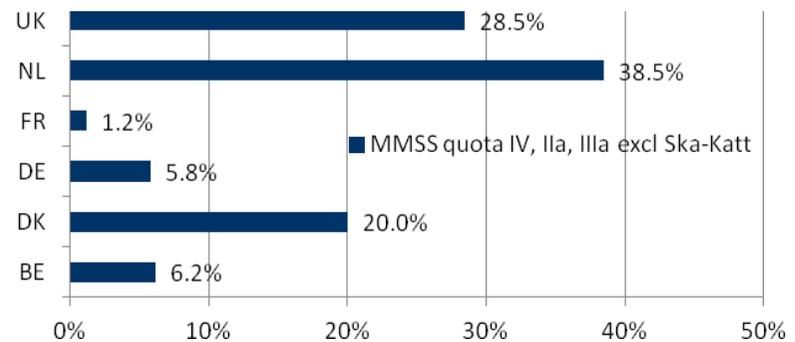
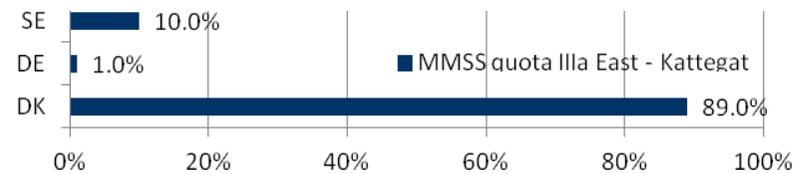
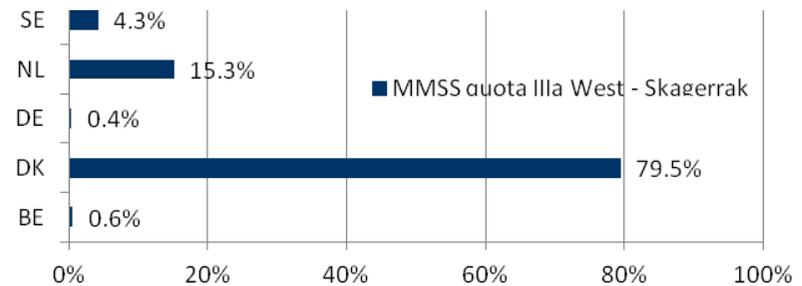
In the **South Celtic Sea** (VIIh), and **Southwest of Ireland East & West** (VIIj,k) ICES advises on the basis of the precautionary approach that wanted catch (landings) in 2016 should be no more than 135 tonnes, which implies no changes in catches since 2014. As discards, which are known to occur, cannot be quantified, total catches cannot be calculated. TACs established have not been restrictive during many years. Plaice catches in Division VIIk are negligible. Considering that the stock is estimated to be overexploited and that the biomass level is unknown, Oceana recommends also

considering a precautionary reduction of the TAC by 15%. By-catch. Discards should be also urgently reduced.

For stocks in the **Bay of Biscay** (VIII) and **East of Portuguese waters** (IXa) ICES advises, based on the data limited stock assessments and the precautionary approach, that wanted catches (landings) should be no more than 194 tonnes, decrease by 50% in the TAC. ICES does not provide total catch figures due to the uncertainty in the landing data. Although this stock is listed in the joint statement of the Commission and Council (Doc 5315/13 PECHE 15) which provides the possibility to maintain the 2013 TAC, Oceana asks for a reduction of 50%. This is especially important given that these stocks are managed under the same TAC as other stocks for which status is completely unknown. Furthermore, agreed TACs have been more 20%, higher, than official landings during past decade. It is unclear whether there should be more than one management unit for these stocks.

For the rest of the managed stocks, for which there is no information **Norwegian Sea** (IIa), **Faeroes Grounds** (Vb), **Rockall, West of Scotland** (VI), **West Portuguese waters** (IXb), **Azores Grounds** (X), **North of Azores** (XII), **East Greenland** (XIV) and **CECAF 34.1.1**, Oceana, according to the precautionary approach, proposes a minimal reduction in catches of 15% for those stocks that are not managed together with other stocks for which there is a scientific advice.

### Member States quotas



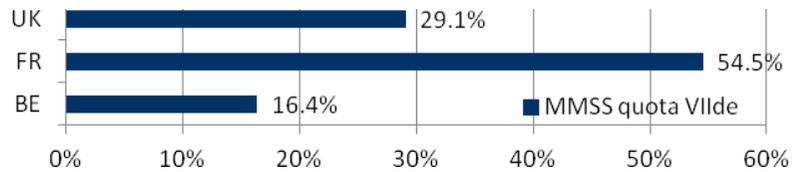
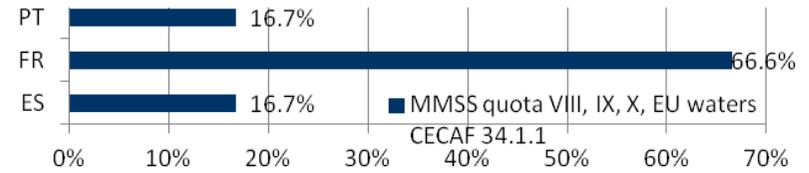
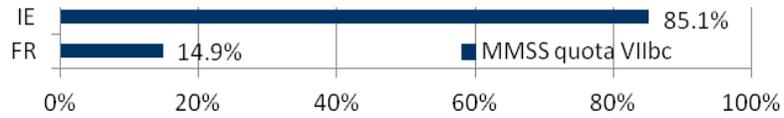
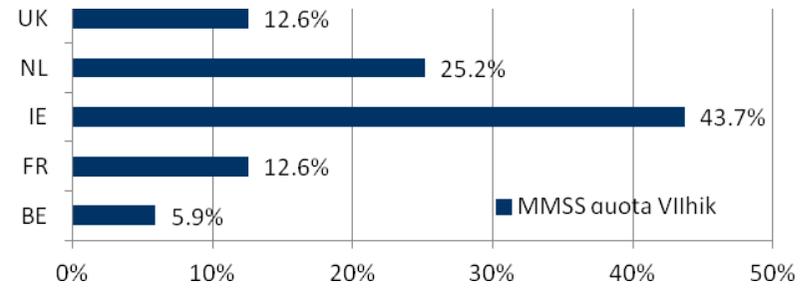
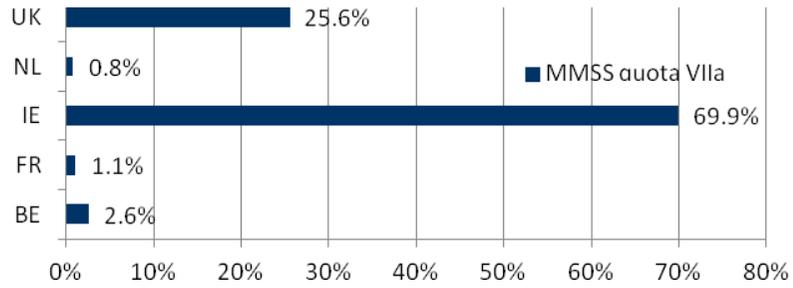
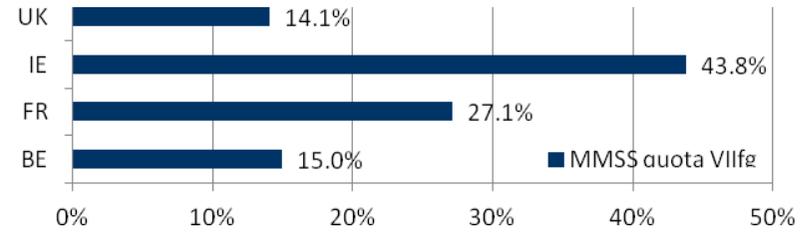
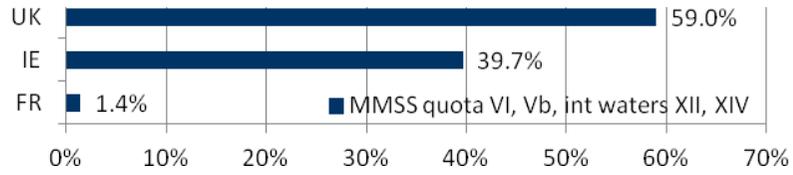


Table 10. Comparative table of plaice TACs (in tonnes) in ICES areas registered in the proposal. Figures in non-shaded rows refer to weight in catches, in shaded rows refer to weight in landings. Brackets compare TAC difference from previous year (in %).

| Fishing area   | Area name   | TAC 2015      | Stock Status   | Commission proposal 2016 | Oceana proposal 2016  |
|--|---|---------------|--|--------------------------|---|
| IIIa (Skagerrak)   | Skagerrak (West)  | 9855 (0%)     | Above MSY Btrigger (IIIa – Skagerrak))   | pm                       | pm  |
| IIIa (Kattegat)  | Kattegat (East)   | 2626 (+22%)   | Above MSY Btrigger (IIIa – Kattegat)   | pm                       | *pm   |
| IV, EU waters of IIa, IIIa not covered by Skagerrak and Kattegat | EU Waters of Norwegian Sea and North Sea, and waters not covered by Skagerrak & Kattegat  | 119690 (+15%) | Above MSY B trigger (IV), completely unknown (IIa, IIIa not covered by Skagerrak and Kattegat) | pm                       | pm<br>93358 + ??<br>(-22%) (Uplift)<br>pm<br>137643 + ??<br>(+15%) (Uplift) |
| VI, EU and internat waters of Vb, internat waters of XII and XIV | Rockall, West of Scotland, EU and international waters of Faeroes Grounds, international waters of North of Azores and East Greenland | 658 (0%)      | Completely unknown (Vb, VI, XII, XIV)  | pm RO                    | 559 (-15%)  |
| VIIa   | Irish Sea   | 1098 (-10%)   | Unknown possibly above reference points (VIIa)   | 878 (-20%)               | 769 ~ 343<br>(-30%) ~ (-69%)  |
| VIIb and VIIc  | West of Ireland and Porcupine Bank  | 74 (0%)       | Unknown (VIIbc)  | pm RO                    | 30 (-59%)   |
| VIIId VIIe   | English Channel   | 4787 (-10%)   | Unknown increasing (VIIe), above MSY B trigger (VIIId)   | pm                       | 9574 ~ 14247<br>(+100%) ~ (+197%)   |
| VIIIf and VIIg   | Bristol Channel and Celtic Sea North  | 461 (0%)      | Unknown (VIIIfg)   | 420 (-9%)                | 420 (-9%)   |
| VIIh, VIIj and VIIk  | Celtic Sea South, Southwest of Ireland East & West  | 135 (0%)      | Unknown (VIIhjk)   | pm                       | 135 (0%)  |
| VIII, IX, X, CECAF 34.1.1 (EU)                                   | Bay of Biscay, Portuguese waters, Azores Grounds and EU waters of CECAF 34.1.1  | 395 (0%)      | Unknown (VIII, IXa), completely unknown (IXb, X, CECAF 34.1.1)                                 | pm RO                    | 194 (-50%)  |

\*Note that figure provided by ICES also includes catches in the Belts and Sound.

## Pollack (*Pollachius pollachius*)

### Species description

Pollack is a marine benthopelagic species distributed throughout the North East Atlantic, from Iceland and Norway to the Bay of Biscay – and in the southern Baltic Sea-, in areas with hard bottoms at 40-100m depths (but they can be found as deep as -200 m). Juveniles are pelagic, spending two to three years near the coast, in rocky areas, kelp beds, sandy shores and estuaries. Larger individuals move to the open sea and are often found around rocky areas.



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### State of the stocks

Information is very limited for pollack fisheries and therefore both the state of the population and its rate of exploitation are unknown. TACs are not restrictive for the fishery as they are higher than official landings, which have decreased during the past decades. This can be interpreted as an overexploitation sign. The management of the species in European waters lacks sustainability guarantees.

In the **Rockall and West of Scotland (VI)**, and **Irish Sea, West of Ireland, Porcupine Bank, Eastern and Western English Channel, Bristol Channel, Celtic Sea North and South, Southwest of Ireland (VII)** new data available for this stock do not change the perception of the stock,. Available information is insufficient to evaluate the exploitation and trends in the Celtic Sea. Catch and landing figures are incomplete and erratic and further scrutiny of available information is required. No reference points have been defined for this stock. TACs are not restrictive for the fishery, although quotas can be restrictive for some countries. There are

indications of high catches by recreational fisheries on a local scale but these cannot be quantified.

Available information is insufficient to evaluate stock trends and exploitation status in **Bay of Biscay (VIII)**, and **Portuguese waters East (IXa)** ecoregions. No reference points have been defined for the fishery. TACs are set higher than landings, so they are not restrictive. Landings decreased towards the end of the 1980s and have stably remained at low levels over the past two decades. Recreational fisheries are an important component of the catch.

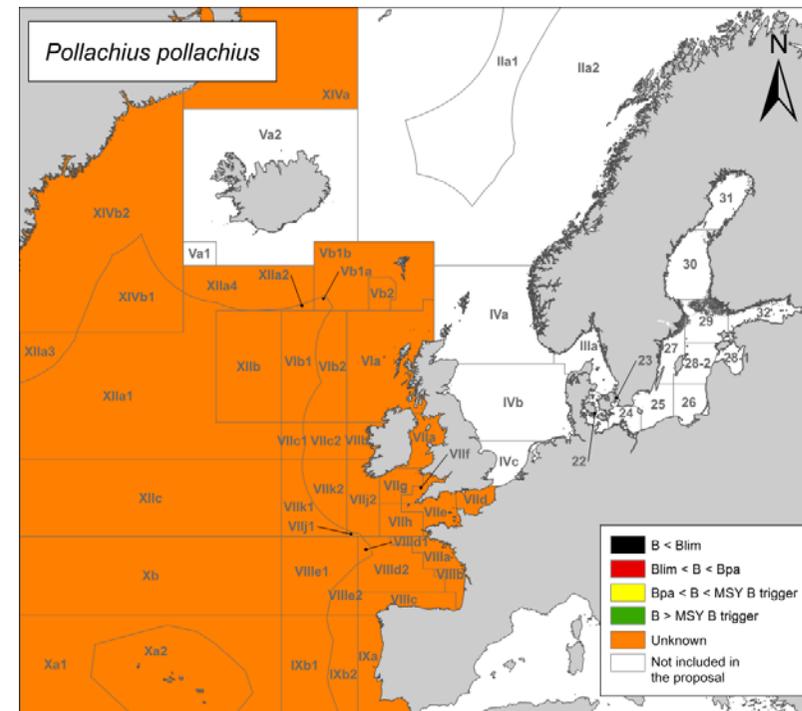


Figure 11. Pollack stock status in ICES areas included in the proposal according to spawning biomass.

For the rest of the managed stocks, in the **Faeroes Grounds (Vb)**, **Portuguese waters West (IXb)**, **Azores Grounds (X) North of Azores (XII)**, **East Greenland (XIV)**, and **CECAF 34.1.1**, there is no scientific assessment basis to provide an evaluation about its status and rate of exploitation.

### Oceana proposal

Stocks of pollack will not be affected by the landing obligation in 2016 therefore adopted TAC should be established according to wanted catches.

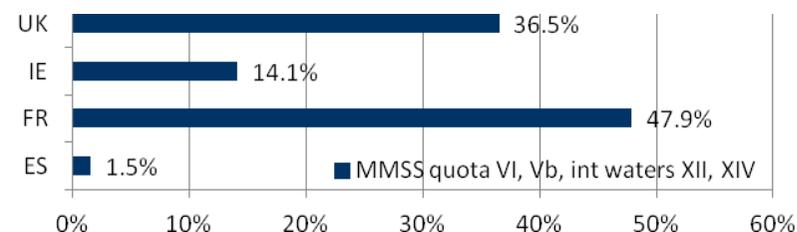
In order to ensure the sustainable exploitation of pollack and avoid potential risks, Oceana recommends improving data collection and scientific assessments.

For the **Rockall and West of Scotland (VI)**, and **Irish Sea, West of Ireland, Porcupine Bank, Eastern and Western English Channel, Bristol Channel, Celtic Sea North and South, Southwest of Ireland (VII)**, ICES advises, based on assessment methods for data-limited stocks, that when the precautionary approach is applied, commercial catches should be no more than 4200 tonnes in 2016. All commercial catches are assumed to be landed so this advice can be applied to landings. Although this advice represents a TAC reduction of 69%, actually it implies a landings reduction of 10% compared with the average over the last three years. The advice is based on estimates from the Depletion-Corrected Average Catch (DCAC) method, which uses historical catch data and estimates of stock depletion over the catch time series to estimate sustainable yields. This method is considered to be as an approximation to MSY by ICES. The stock in Subarea VI is listed in the joint statement of the Commission and Council (Doc 5315/13 PECHÉ 15) that suggests maintaining the 2013 TAC. Oceana, due to precautionary approach and based on ICES data limited approach recommends fixing a TAC of 4200 tonnes (50 tonnes for VI, and 4150 for VII) instead 2013 TAC. It should be noted that fixed TACs are 3-8 times higher than official landings: for example the combined TAC approved in 2013 was 13892 tonnes when the official landings were 4833 tonnes.

For the **Bay of Biscay (VIII)**, and **Portuguese waters East (IXa)** ICES advises, based on assessment methods for data limited stocks, that when the precautionary approach is applied, commercial landings should be no more than 1316 tonnes, which represents a decrease by 34% respect 2015 TAC and by 20% in landings in relation to the average of the last three years. Due to the uncertainty of the discards data, ICES is not able to quantify the resulting catches. Although this stock is listed in the joint statement of the Commission and Council (Doc 5315/13 PECHÉ 15) that suggests maintaining the 2013 TAC, Oceana recommends the precautionary reduction suggested by scientist unless there is ancillary information clearly indicating that the current level of exploitation is appropriate for the stock.

For the rest of the managed stocks **Faeroes Grounds (Vb)**, **Portuguese waters West (IXb)**, **Azores Grounds (X) North of Azores (XII)**, **East Greenland (XIV)**, and **CECAF 34.1.1**, Oceana, according to the precautionary approach, proposes a minimal reduction in catches of 15% for those stocks that are not managed together with other stocks for which there is a scientific advice.

### Member States quotas



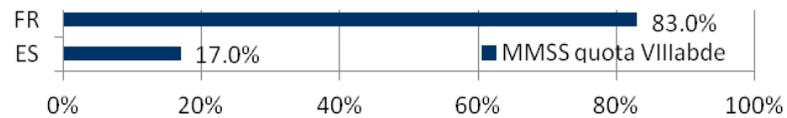
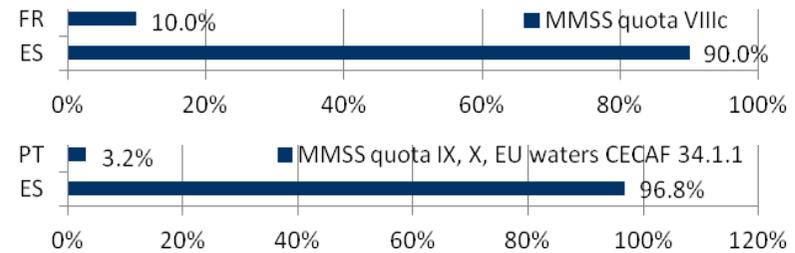
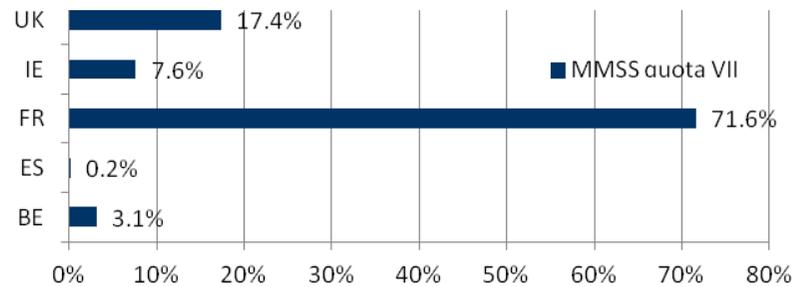


Table 11. Comparative table of Pollack TACs (landings in tonnes) in ICES areas registered in the proposal. Brackets compare TAC difference from previous year (in %).

| Fishing area   | Area name  | TAC 2015   | Stock Status  | Commission proposal 2016 | Oceana proposal 2016 |
|--|--|------------|---|--------------------------|----------------------|
| VI, EU and international waters of Vb, international waters of XII and XIV | VI, EU and international waters of Vb, international waters of XII and XIV | 397 (0%)   | Unknown (VI) completely unknown (Vb, XII, XIV)          | pm RO                    | 149 (-62%)           |
| VII  | VII  | 13495 (0%) | Unknown (VII)   | 10796 (-20%)             | 4051 (-62%)          |
| VIIIa, VIIIb, VIIIc, VIIIe   | VIIIa, VIIIb, VIIIc, VIIIe   | 1482 (0%)  | Unknown (VIIIa, VIIIb, VIIIc, VIIIe)                    | 1186 (-20%)              | 977 (-34%)           |
| VIIIc  | VIIIc  | 231 (0%)   | Unknown (VIIIc)   | pm                       | 152 (-34%)           |
| IX, X, CECAF 34.1.1 (EU)   | IX, X, CECAF 34.1.1 (EU)   | 282 (0%)   | Unknown (IXa) completely unknown (IXb, X, CECAF 34.1.1) | pm RO                    | 186 (-34%)           |

## Sole (*Solea solea*)

### Species description

The sole is distributed throughout the East Atlantic, from the Norwegian Sea -including the Baltic Sea and the North Sea- down to Senegal. The species is non-gregarious, lives buried in sandy or muddy bottoms and its diet consists of molluscs, annelids and small crustaceans. Sole is a nocturnal predator and therefore more susceptible to be captured at night than in daylight.



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### State of the stocks

The general state of sole stocks is slowly improving from last decade's dismal scenario, with several areas currently exploited in accordance with the MSY framework. However, problems continue for other stocks, such as those in the Irish Sea, Skagerrak, Kattegat, Sound and Belts, which present evidence of overexploitation.

In **Skagerrak, Kattegat** (IIIa), and **Subdivisions 22-24**, the spawning stock biomass has decreased since 2006 and has been below the MSY framework since 2007, and below safe biological limits since 2013, showing a worrying trend. Fishing mortality have been fluctuating above Fmsy since 2005. Recruitment has decreased during the last 11 years and currently it is at historical low. Discard rates are moderate or low, so most of the catches are assumed to be

landed. It should be noted that cod in the Kattegat is depleted which is taken as by-catch in the sole fishery.

In the **North Sea** (IV) the spawning stock biomass has fluctuated between Blim and Bpa for the last decade but since 2007 it has increased and currently it is above MSY B trigger. Fishing mortality has shown a declining trend since 1997 and it is estimated to be right above Fmsy in 2014. The North Sea is the most northern border of this species distribution. There are indications that in recent years sole discarding has increased.

In the **Irish Sea** (VIIa) the stock is clearly overexploited with a worrying trend and no sign of recovery in the short term. Biomass has continuously declined in the period 2001-2009, and is so far below safe biological limits since 2005, the stock is currently at its lowest level and in danger of collapse. Catch reductions from previous years were much lower than those recommended by scientists, and have not been able to reverse the biomass downtrend. Fishing mortality has been high for more than 40 years it has shown a steady but slight reduction since mid-1980s and dropped from Fpa to just above Fmsy in 2013. During past year it was the first time that fishing mortality was placed below Fmsy. In addition, recruitment over the past eight years has been at its lowest, marked by its lowest point in the 2011 time series. Information from observer trips indicates that sole discards make up around 7% of the total weight in 2015, although rates for other species can be considerable.

In the **West of Ireland** (VIIb) and **Porcupine Bank** (VIIc) there is not enough information to evaluate the stocks status and rate of exploitation as catches in this area are too low to support the collection of necessary information for an assessment. The new data available do not change the perception of the stock. No reference points are defined for the stock. Landings have been low for several decades.

In the **Eastern English Channel** (VIId), the spawning stock biomass has been fluctuating without trend above precautionary and MSY B trigger levels for most of the time series. For the last 16 years, fishing

mortality has fluctuated between precautionary and safe biological limits, above Fpa since 2005, it has increased in 2013 and 2014 and it is now at Flim, therefore well above MSY framework. This is a clear indicator that the stock is harvested in an unsustainable way. Recruitment has been above average for the last decade, but recruitment on 2012 and 2013 are the lowest of the time series. Most of the catches are assumed to be landed, discards are known to take place, in the order of 10% in previous years (2011-2013).

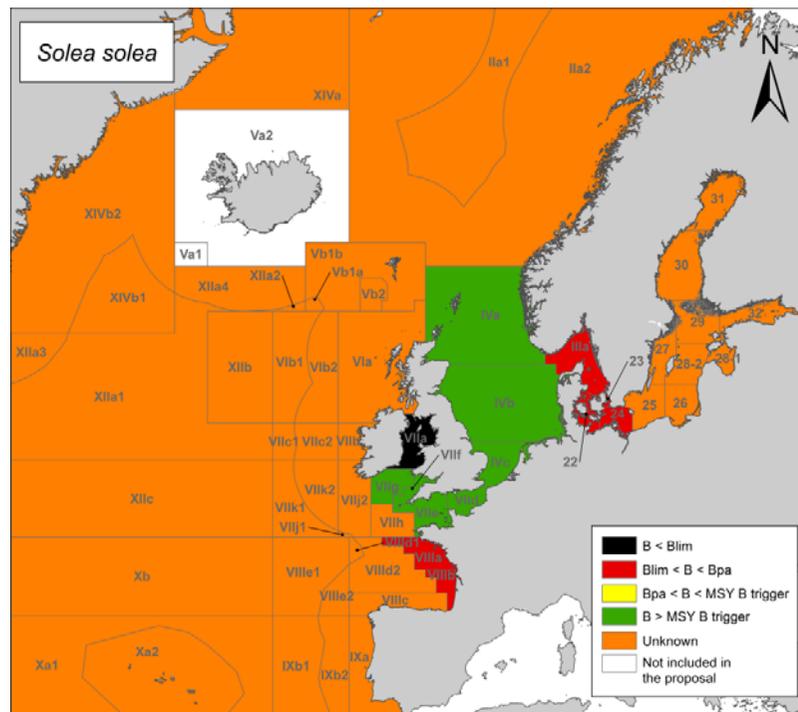


Figure 12. Sole stock status in ICES areas included in the proposal according to spawning biomass<sup>17</sup>.

<sup>17</sup> Stock status based on trends for IIIa, 22-24, VIIe.

In the **Western English Channel** (VIIe), stock assessments are favourable. Spawning stock biomass has been fluctuating around the MSY B trigger framework for about two decades with an increase since 2009. Fishing mortality has been over the MSY framework since the early 1990s and after a significant reduction in 2009 it is now below it. Recruitment is fluctuating without trend, but the 2010 to 2013 year classes are estimated to be below average. All catches are assumed to be landed so discards are considered to be low.

The stock in the **Bristol Channel** (VIIIf) and **Celtic Sea North** (VIIg, North) is in good condition although fishing mortality has dramatically increased during last 5 years putting in risk the sustainability of the fishery. Spawning stock biomass has been fluctuating around the MSY B trigger framework since 1987 and above this reference point since 2001 but it is declining since 2011. Fishing mortality has decreased from Flim in 2003 to Fmsy in 2005 and remained there until 2011. In 2012 it increased to above Fpa and it continues increasing in a very worrying trend. Recruitment is fluctuating without a clear trend around average except in 2010 when it was the lowest of the time series. All catches are assumed to be landed so discards are considered to be negligible.

In the **Celtic Sea South** (VIIh) **South West of Ireland** (VIIj, VIIk), the status of the stock is unknown and no reliable assessment can be presented. No reference points are defined for this stock. However, a qualitative evaluation of fishing mortality suggests that it has decreased over the period 2003-2006 and since 2007 it seems to remain stable below possible reference points. In response of this trend biomass indicator was progressively increasing since 2005, and currently it keeps stable, so the average SSB in the last two years (2012-2013) is the same than the average of the three previous years (2009-2011). Recruitment is estimated to have been low in the last three years. All catches are assumed to be landed.

In the **North** and **Central Bay of Biscay** (VIIlab), the stock biomass appears to have recovered from its lowest point in the time series, in 2003, but has been decreasing since 2011 and is currently below MSY B trigger. After years of excessive fishing mortality it has declined since 2003 and fluctuated around the precautionary

reference point, but during 2012 and 2013, in a worrying trend, it increased and it is again over the precautionary reference point and over the MSY framework. Recruitment values since 2004 are the lowest in the time-series, in particular 2012 and 2013 recruitments and with the exception of the 2009 and 2014 recruitment. Most of the catches are assumed to be landed.

In the Iberian Peninsula waters, which comprise the areas **South of Bay of Biscay** (VIIIc) and **East of Portuguese waters** (IXa), the stocks state and their rate of exploitation are unknown because available information is insufficient to evaluate them. New landings available do not change the perception of the stock. Sole is poorly suited for monitoring by the surveys carried out in this area. Therefore, no reference points are defined for these stocks. Landings, which are incomplete and erratic, are mainly taken from Division IXa, have declined significantly since the late 1980s and are much lower than agreed TACs, which are therefore not restrictive.

For the rest of the managed stocks, in the **Norway waters** (IIa), **Baltic Sea** (25-32) **Rockall**, **West of Scotland** (VI), **Faeroes Grounds** (Vb), **Offshore and West of Bay of Biscay** (VIIIde), **Portuguese waters West** (IXb), **Azores Grounds** (X) **North of Azores** (XII), **East Greenland** (XIV), and **CECAF 34.1.1**, there is no scientific assessment basis to provide an evaluation about its status and rate of exploitation.

### **Oceana proposal**

Stocks of sole in the North Western waters, North Sea area, and South Western Waters area will be partially affected by the landing obligation. Oceana has provided TAC adjustments for these stocks in the table below on the basis of the STECF 15-17 report when reliable data were available.

For **Skagerrak**, **Kattegat** (IIIa) and **Sound, Belt Sea** (22-24), ICES advises, on the basis of the MSY approach, that landings in 2015 should be no more than 205 tonnes, resulting in a -42% TAC reduction, which implies catches of no more than 211 tonnes if discard rates do not change from last year (2013). Oceana

recommends following this advice in order to move to the MSY framework and stabilise the status of the stock in the area. A higher TAC would prevent the proper recovery of the stock. Note that catches and by-catch of cod, which is depleted in the Kattegat, should be avoided.

In the **North Sea** (IV), ICES advises on the basis of stage two of the EU management plan (Regulation (EC) N° 676/2007) and the MSY approach that catches in 2016 should be no more than 12835 tonnes. If this stock is not under the EU landing obligation in 2016 and discard rates do not change from the average (2012–2014), this implies landings of no more than 11921 tonnes. The TAC for sole was not fully utilized in 2010, 2011, 2012 and 2013. Oceana suggests that the 2016 TAC should follow the management plan and the MSY approach.

In the **Irish Sea** (VIIa), ICES advises, based on the precautionary and MSY approaches, that there should be no direct fisheries in 2016 and that by-catch and discards should be minimised. This is expected to lead to a biomass of 1351 tonnes in 2017, which is still below Blim. However, considering the low SSB and low recruitment since 2000, ICES recognizes that it is not possible to identify any non-zero catch which would be compatible with the MSY or precautionary approaches. Oceana considers that, given the stock status and trends, a zero TAC is the only suitable option to guarantee the population recovery above safe limits as quickly as possible, even if it will leave the stock below safe biological limits in 2017.

For the **West of Ireland** (VIIb) and **Porcupine Bank** (VIIc), ICES advises, based on assessment methods for data limited stocks and the precautionary approach that catches should be no more than 30 tonnes in 2016. The advice is based on a precautionary reduction of catches of 20% in relation to the average landings of the last three years due to missing or non-representative data. Although this stock is listed in the joint statement of the Commission and Council (Doc 5315/13 PECH 15) that recommends maintaining the 2013 TAC, Oceana considers that a precautionary reduction of catches like the one proposed by ICES be implemented unless there other information indicates that the current exploitation is sustainable.

For the **Eastern English Channel** (VIId), ICES advises, based on the MSY approach that catches in 2016 be no more than 2685 tonnes, which lead to a 32% TAC decrease. If the stock is not under the landing obligation and discard rates do not change from 2014, this implies landings of no more than 2376 tonnes. This proposal represents a 19% increase in biomass, and a reduction of fishing mortality that will stop the biomass reduction trend. Oceana agrees with this advice and is confident that this proposal would help reduce the high mortality rate.

For the **Western English Channel** (VIle) ICES advises, based on the MSY approach, that catches in 2016 be no more than 1226 tonnes, which means a 44% TAC increase. All catches are assumed to be landed. This advice is well above the level of catches and fishing mortality corresponding to the management plan (Regulation (EC) N° 509/2007), which was not assessed by ICES and implies a 15% increase in catches. Oceana agrees with both proposals. Landings during last years exceeded the agreed TAC.

For the **Bristol Channel** (VIIf) and the **Celtic Sea North** (VIlg) stocks, ICES advises, based on the MSY approach, that catches in 2016 be no more than 760 tonnes, which represents a -12% TAC decrease. Most of the catches are assumed to be landed, in fact if the stock is not under the landing obligation and discard rates do not change from the average of the last three years (2012-2014), this implies landings of no more than 745 tonnes. Oceana agrees with this proposal as it would slightly increase the current level of biomass by 2% and reduce the fishing mortality.

For the **Celtic Sea South** (VIIf) **South West of Ireland** (VIIf, VIIfk), ICES advises, based on assessment methods for data limited stocks and the precautionary approach that catches be no more than 205 tonnes in 2016. Discards are considered to be negligible. Oceana agrees with this precautionary approach and suggests that the Council follow ICES advice. Landings in recent years have been much lower, around half, than the agreed TAC, so the TAC is not restrictive, except for a few countries. Oceana recommends implementing restrictions in fishing effort to limit landings. Furthermore, based on the state of plaice in this area, technical

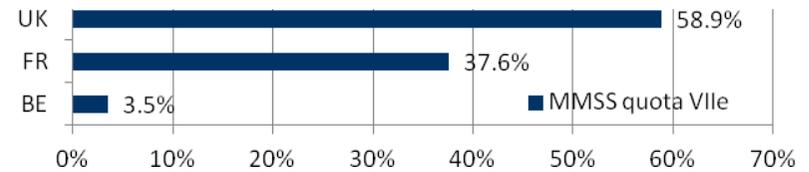
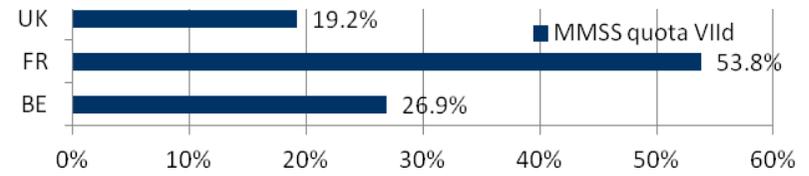
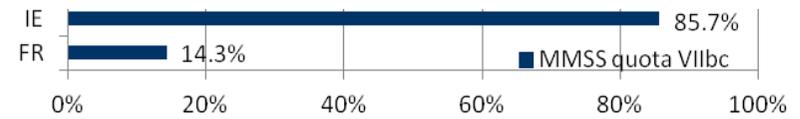
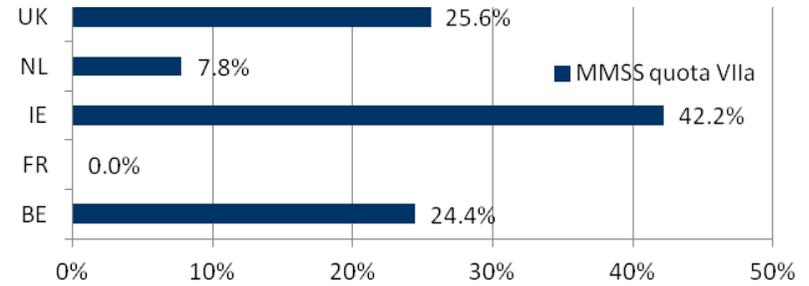
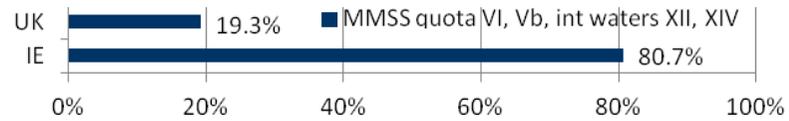
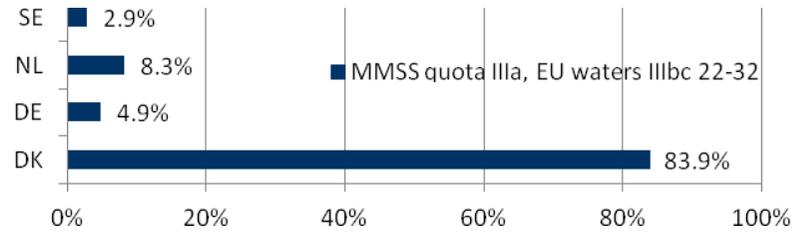
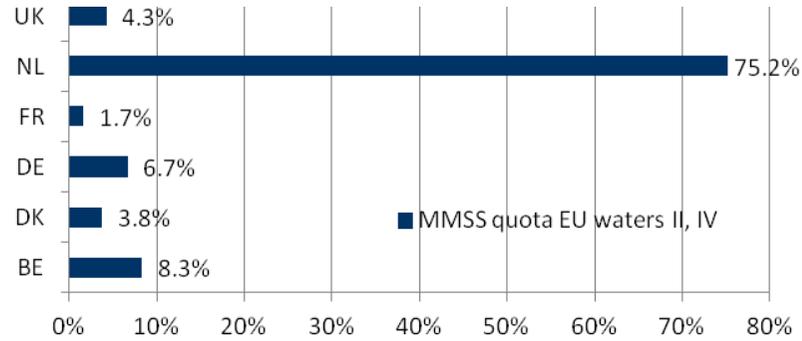
measures should be implemented to reduce plaice by-catch and discards.

In the **North** and **Central Bay of Biscay** (VIIIab) ICES advises, based on the MSY approach, that catches in 2016 be no more than 2393 tonnes, which implies a 37% TAC reduction. All catches are assumed to be landed. This proposal also implies a fishing mortality reduction to 0.26. Oceana supports this proposal to stabilise the recovery of the stock and reduce the fishing mortality although if there are evidences that such reduction will jeopardize the socioeconomic sustainability of the fleets a lower reduction up to 30% could be also supported. It is worth noting that the multiannual plan for sole in the Bay of Biscay (Regulation (EC) No 388/2006) the target of which is estimated to be achieved, does not provide any basis for TAC advice for 2016.

For the Iberian Peninsula, **South of Bay of Biscay** (VIIIc) and **East of Portuguese Waters** (IXa) ICES advises, based on the assessment method to data limited stocks and the precautionary approach that catches should decrease by 20% in relation to the average catch of 2009-2011. Due to uncertainty in landing information, ICES is not able to quantify the resulting TAC for 2016. Oceana, following the precautionary approach and stock trends of landings, asks for a 20% TAC reduction for 2016 to bring the TAC closer to total landings. It is unclear whether there should be more than one management unit in this area.

For the rest of the managed stocks, for which there is no information **Baltic Sea** (25-32), **Rockall, West of Scotland** (VI) **Faeroes Grounds** (Vb), **Offshore and West of Bay of Biscay** (VIIIde), **Portuguese waters West** (IXb), **Azores Grounds** (X) **North of Azores** (XII), **East Greenland** (XIV), and **CECAF 34.1.1**, Oceana, following the precautionary approach, proposes a reduction in catches of at least 15% for those stocks that are not managed together with other stocks for which there is a scientific advice.

### Member States quotas



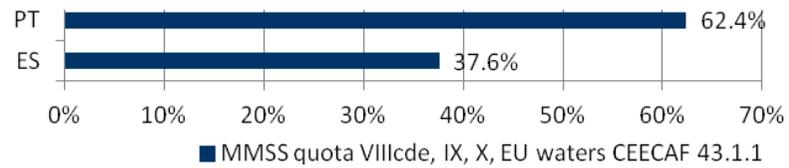
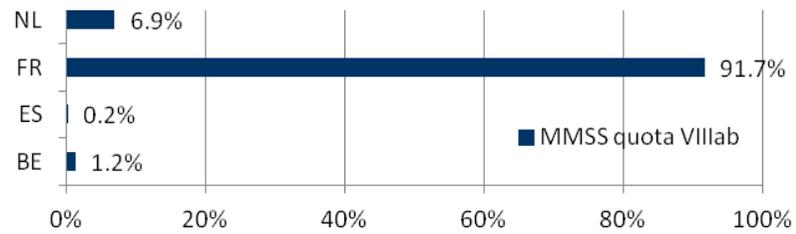
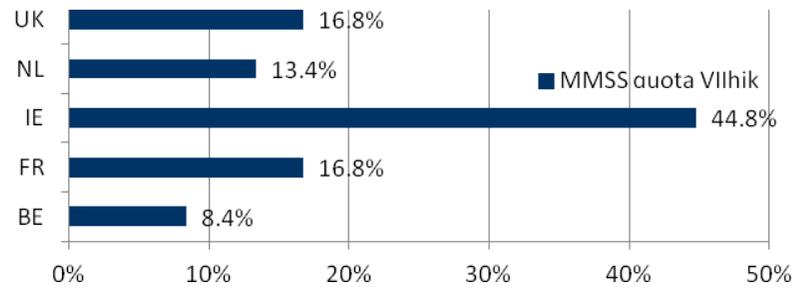
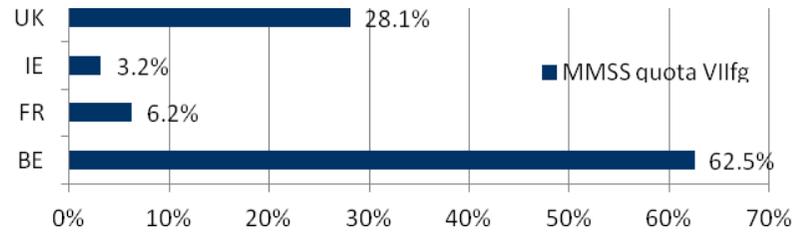


Table 12. Comparative table of sole TACs (in tonnes) in ICES areas registered in the proposal. Figures in non-shaded rows refer to weight in catches, in shaded rows refer to weight in landings. Brackets compare TAC difference from previous year (in %).

| Fishing area   | Area name   | TAC 2015    | Stock Status  | Commission proposal 2016 | Oceana proposal 2016                  |
|--|---|-------------|---|--------------------------|---------------------------------------|
| EU waters II, IV   | EU Waters of Norwegian Sea and North Sea  | 11890 (0%)  | Above MSY Btrigger (IV), completely unknown (II)                        | pm                       | 12378<br>11921 + 457<br>(0%) + Uplift |
| IIIa, EU waters of IIIb-d (22-32)                                  | Skagerrak, Kattegat, EU waters of Sound, Belt Sea, and Baltic Sea,  | 205 (-42%)  | Below PA (IIIab, 22-24), completely unknown (25-32)                     | pm                       | pm                                    |
| VI, EU and international waters of Vb, internat Waters of XII, XIV | Rockall, West of Scotland, EU and international waters of Faeroes Grounds, international waters of North of Azores and East Greenland | 57 (0%)     | Completely unknown (VI, Vb, XII, XIV)                                   | pm RO                    | 48 (-15%)                             |
| VIIa   | Irish Sea   | 90 (-5%)    | Below Blim (VIIa)   | 0 (-100%)                | 0 (-100%)                             |
| VIIb VIIc  | West of Ireland, Porcupine Bank   | 42 (0%)     | Unknown (VIIbc)   | pm RO                    | 30 (-29%)                             |
| VIIId  | Eastern English Channel   | 3483 (-28%) | Above MSY Btrigger (VIIId)  | pm                       | 2679<br>2376 + 303<br>(-32%) + Uplift |
| VIIe   | Western English Channel   | 851 (+2%)   | Above MSY Btrigger (VIIe)   | pm                       | 1226 (+44%)                           |
| VIIIf VIIg   | Bristol Channel and Celtic Sea North  | 851 (-15%)  | Above MSY Btrigger (VIIIfg)   | pm                       | 750<br>745 + 5<br>(-12%) + Uplift     |
| VIIh, VIIj and VIIk  | Celtic Sea South, Southwest of Ireland East and West  | 382 (0%)    | Unknown (VIIh-k)  | pm                       | 205 (-46%)                            |
| VIIIa and VIIIb  | Bay of Biscay North and Central   | 3800 (%)    | Below PA (VIIIa,b)  | pm                       | 2393 ~ 2660<br>(-37%) ~ (-30%)        |
| VIIIc, VIIId and VIIIE, IX, X, CECAF 34.1.1 (EU)                   | Bay of Biscay South, Offshore and West, Portuguese Waters, Azores Grounds and CECAF 34.1.1  | 1072 (0%)   | Unknown (VIIIc, IXa), completely unknown (VIIIde, IXb, X, CECAF 34.1.1) | pm RO                    | 858 (-20%)                            |

## Whiting (*Merlangius merlangus*)

### Species description

Whiting occurs in the North-East Atlantic, from the south-western Barents Sea and Iceland down to Portugal. The species lives mainly on muddy and gravel bottoms between 30 and 100 meters depth, although it can also be found on rocky and sandy bottoms. Its diet consists of crustaceans, molluscs, polychaetes and small fish.



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### State of the stocks

Although the whiting stocks status varies among the different fishing grounds, decline in landings and high discard ratios due to its low market value, are common to most stocks. Most catches are by-catch in fisheries using fine mesh.

In **Skagerrak and Kattegat** (IIIa) there are no new data available that change the perception of the stock, available information is insufficient information to provide a reliable assessment on stock status and rate of exploitation. No reference points are defined for the stock. Available survey indices show a lack of internal consistency. A better understanding of population structure and connectivity is desirable. Landing statistics do not represent catches as discard rates are very high: for example, only 8% of total catches in 2011 was landed while the rest of the catches was either discarded (88%) or industrial by-catch (4%). The major part of the catch is taken as by-catch in demersal fisheries. Landings have decreased dramatically from 19400 tonnes in 1990 to 160 tonnes in 2013.

In the **North Sea** (IV) and the **Eastern English Channel** (VIIId), although the stock abundance perception has improved, its status is unknown and PA and MSY reference points have not been defined. Spawning stock biomass has shown a downward trend in the time-series but it remains above Blim and it is close to the minimum value of the time-series. Fishing mortality has remained stable over the last eight years after a reduction trend period. Recruitment has been low since 2003, with recruitment in 2008, 2009 and 2015 on the average of the time-series. Discards appear to have decreased since 2003, but they are still high.

In the **West of Scotland** (VIa) despite that spawning stock biomass has been slightly increasing since 2006 the stock status is clearly deplorable. Spawning stock biomass remains very low compared to the historical estimates and keeps below safe biological limits since 2000. Fishing mortality has decreased since 2000 and it is now at historically low levels. It is therefore expected that the biomass will increase in abundance if recruitment does not continue to be very weak since 2002, at historically low levels, although there are signs that recruitment has increased in 2009, 2011 and 2013. The proportion of whiting discards is very high, more than half of the annual catch weight, and appears to have increased in recent years with levels as high as 74%, 60% 70%, 81% and 63% in 2010, 2011, 2012, 2013 and 2015 respectively. Approximately 80% of these discards come from the Nephrops (TR2) fishery.

In **Rockall** (VIb) there is not enough information to evaluate the status of the stock and its rate of exploitation. There are no new data available that change last year perception of the stock. No reference points are defined. There are doubts on the accuracy of the reported landings as these are reported by vessels operation in both Divisions VIa and VIb. Landings in Rockall seem to have decreased dramatically from 105 tonnes in 2006 to a negligible 1 ton in 2012. This reduction is not a consequence of the TAC reduction as landings are only around <5% of allowed catches, but is a sound example of the unsustainable rate of exploitation implemented during decades.

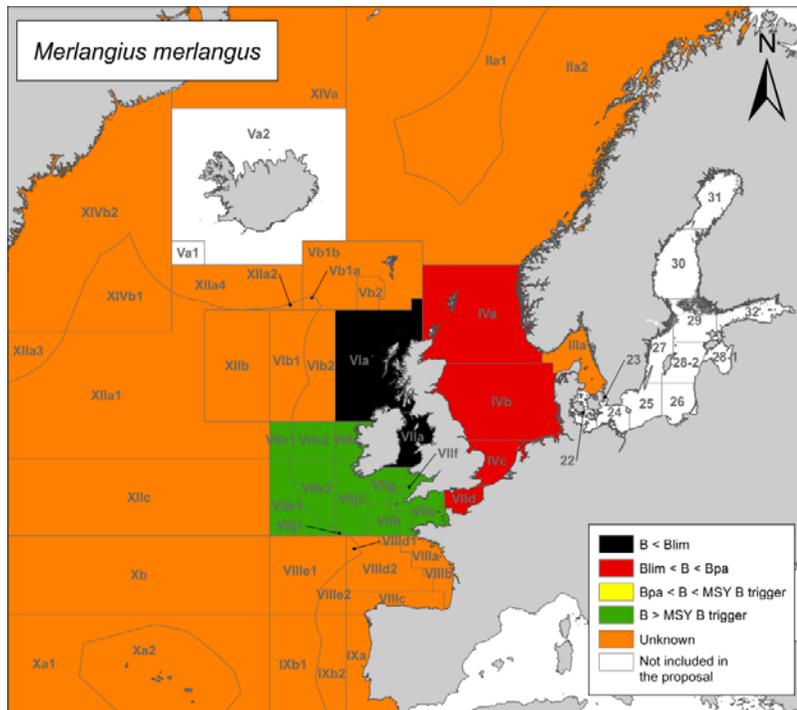


Figure 13. Whiting stock status in ICES areas included in the proposal according to spawning biomass<sup>18</sup>.

In the **Irish Sea** (VIIa) new data does not change the perception of the stock. Since 2003, low landing levels have resulted in poor sampling coverage. The presented assessment is only indicative of trends. Information on historical yields and catch composition indicate that the present stock size is extremely low. Although no reference points are defined, qualitative evaluation indicates that biomass and fishing mortality are below and above any possible reference points respectively and obviously far from possible MSY targets. Landings

<sup>18</sup> Stock status based on trends for VIIa.

have shown a worrying decline from around 12000 tonnes in the 80's to 100 tonnes this decade and there is no remaining targeted whiting fishery in the Irish Sea. Whiting is caught as by-catch in other Irish Sea fisheries and almost all the catches are discarded, particularly the one of smaller size. Discard estimates are available for the main fleets but are imprecise: it is estimated that more than 1000 tonnes of whiting are discarded annually since 2007.

In the **West of Ireland** (VIIb) **Porcupine bank** (VIIc) **Western English Channel** (VIIe), **Bristol Channel** (VIIf) **Celtic Sea North and South** (VIIgh), and **Southwest of Ireland - East and West** (VIIjk), the status of whiting has improved in the past few years and is in good shape. Spawning stock biomass has been increasing since 2008, after a strong decline from the mid-1990s, and remains over the MSY B trigger. Fishing mortality has shown a declining trend since 2007 and was below Fmsy during 2011-2013 and is at Fmsy in 2014. Recruitment between 2010 and 2012 was estimated to be below average whereas the 2013 year class is estimated to be the second highest in the series. Good recruitment in 2008 and 2009 entered the fishery and are contributing to the spawning stock. Discard rates are high and variable due to the low market value, particularly for smaller individuals. This is especially worrying as spawning stock biomass is highly dependent on incoming recruitment.

In the **Bay of Biscay** (VIII) and **East of Portuguese waters** (IXa) there is not enough information to assess the status of the stock and its rate of exploitation, therefore the state of whiting in the area is unknown. There is no reference points defined for this stock. Fishing statistics are currently being compiled. The stock unit definition in this area is not clear and further work is required. Landings have been relatively stable over the time period below agreed TAC.

For the rest of the managed stocks, in the **Norwegian Sea** (IIa), **Faeroes Grounds** (Vb), **West Portuguese waters** (IXb), **Azores Grounds** (X), **North Azores** (XII), **East Greenland** (XIV), and **CECAF 34.1.1**, there is no scientific assessment basis to provide an evaluation about its status and rate of exploitation.

### **Oceana proposal**

Stocks of whiting in the North Western waters will be partially affected by the landing obligation. Oceana has provided TAC adjustments for these stocks in the table below on the basis of the STECF 15-17 report when reliable data were available.

In **Skagerrak and Kattegat** (IIIa) ICES advises, based on the approach for data limited stocks, that catches be no more than 500 tonnes. If discard rates do not change from the average of last three years, this implies landings of no more than 135 tonnes. In previous years, TACs were set high, up to 15 times higher than catches. Oceana requests that the TAC for 2015 be reduced by more than 50%, based on landing trends, unknown stock status, and precautionary considerations.

For the **North Sea** (IV) and **Eastern English Channel** (VIId), ICES advises on the basis of the EU-Norway plan that combined catches be no more than 25000 tonnes in 2016, a 15% TAC decrease. If this stock is not under the EU landing obligation in 2016 and discard and industrial by-catch rates do not change from the average (2012–2014), this implies landings of no more than 13957 tonnes. According to ICES, the plan is considered as precautionary. In the absence of MSY reference points, Oceana agrees with the proposed TAC as it is expected to lead to an 8% increase in biomass in 2017. Management for Division VIId should be separated from the rest of Subarea VII.

For the **West of Scotland** (VIa), ICES advises based on precautionary considerations that there should not be directed fishery and by-catch should be minimized in 2016. Given the low biomass and recruitment in recent years it is not possible to identify any non-zero catch, which would be compatible with the precautionary approach. Even a zero TAC would not recover the stock over precautionary limits in 2017. Oceana urges a fishery closure and the establishment of a minimal by-catch TAC. Measures to reduce whiting discards in the nephrops fishery should be implemented urgently, taking advantage of the strong 2009, 2011 and 2013 recruitments and accelerate stock recovery.

For **Rockall** (VIb), ICES advises based on assessment methods for data limited stocks and the precautionary approach, that catches in 2016 be no more than 11 tonnes. As this stock is managed together with Division VIa (West of Scotland), the worrying downtrend in landings, and the TAC undershoot, Oceana also requests setting an 11 tonne limit for by-catch in the area.

For the **Irish Sea** (VIIa), after years of having recommended the closure of the fisheries, ICES has advised, based on precautionary considerations, that there should be no direct fishery and all catches (by-catch) should be minimized in 2016. As there is no direct whiting fishery in the area and all whiting catches are by-catch of other fisheries Oceana agrees with the zero TAC to avoid any incentive to catch this species. Oceana values the efforts made to reduce the high rates of discards of juveniles through the implementation of mandatory technical measures (such as the square mesh panel, grids, separator trawls...).

For the **West of Ireland** (VIIb) **Porcupine Bank** (VIIc) **Western English Channel** (VIIe), **Bristol Channel** (VIIf) **Celtic Sea North and South** (VIIgh), and **Southwest of Ireland - East and West** (VIIjk), ICES advises, based on the MSY approach that catches in 2016 be no more than 19076 tonnes, a 2% TAC reduction. If this stock is not under the EU landing obligation in 2016 and discard rates do not change from the average of the last three years (2012–2014), this implies landings of no more than 15 395 tonnes. Additional technical measures should be urgently introduced to reduce discards rates of whiting and haddock.

For the **Bay of Biscay** (VIII) and **East of Portuguese waters** (IXa) ICES advises that, based on the assessment method for data limited stocks and the precautionary approach, landings in 2016 should be no more than 1688 tonnes. Due to uncertainty in the landing data, the resulting catch could not be quantified by ICES. For years, landings have been much lower than the agreed TAC: on average, landings hardly represented 40% of the agreed TAC during 2009-2012 periods. Oceana considers that a precautionary reduction of catches should be implemented until enough information is available

to guarantee that the exploitation is sustainable. It is still not clear whether there should be one or more management units.

For the rest of the managed stocks, for which there is no information **Norwegian Sea (IIa)**, **Faeroes Grounds (Vb)**, **West Portuguese waters (IXb)**, **Azores Grounds (X)**, **North Azores (XII)**, **East Greenland (XIV)** and **CECAF 34.1.1 Oceania**, according to the precautionary approach, proposes a reduction in catches of at least 15% for those stocks that are not managed with other stocks for which there is a scientific advice.

### Member States quotas

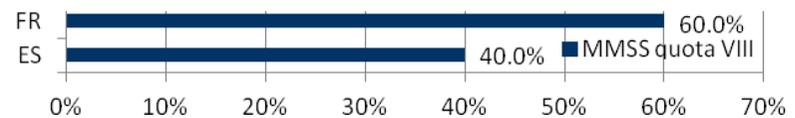
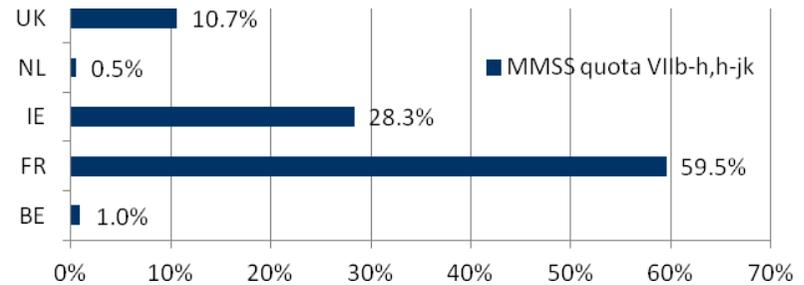
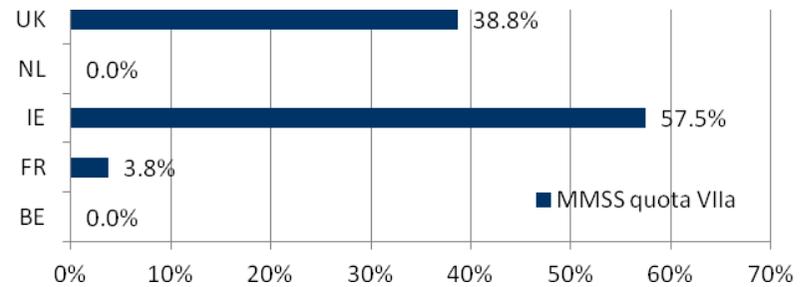
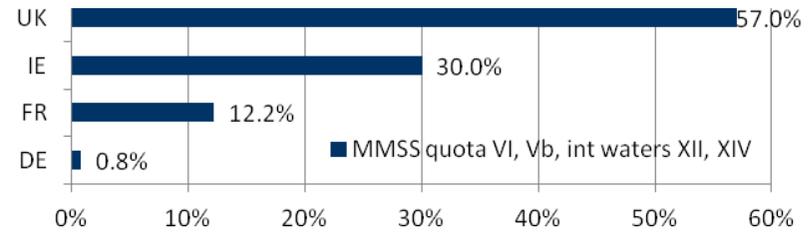
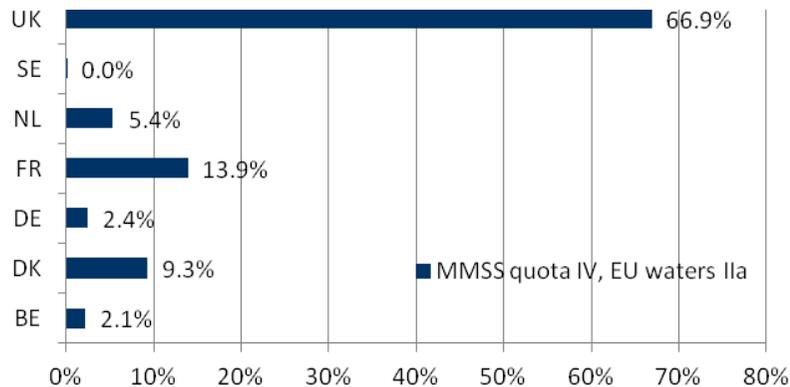
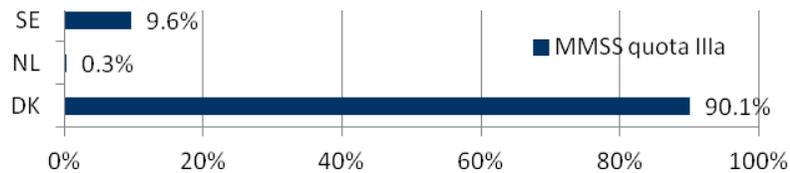


Table 13. Comparative table of whiting TACs (in tonnes) in ICES areas registered in the proposal. Figures in non-shaded rows refer to weight in catches, in shaded rows refer to weight in landings. Brackets compare TAC difference from previous year (in %).

| Fishing area  | Area name   | TAC 2015     | Stock Status   | Commission proposal 2016 | Oceana proposal 2016                    |
|---|---|--------------|--|--------------------------|---|
| IIIa  | Skagerrak (West) and Kattegat (East)  | 1031 (0%)    | Unknown (IIIa)   | pm                       | 135 (-86%)                              |
| IV, EU waters of IIa  | North Sea and EU Waters of Norwegian Sea  | 13060 (-14%) | Unknown but above Blim (IV), completely unknown (IIa)              | pm                       | 11101 (-15%)                            |
| VI EU and international waters of Vb, international waters of XII and XIV | Rockall, West of Scotland, EU and international waters of Faeroes Grounds, international waters of North Azores and East Greenland                          | 263 (-10%)   | Below Blim (VIa), unknown (VIb), completely unknown (Vb, XII, XIV) | 234 (-20%)               | 11* (-96%)                              |
| VIIa  | Irish Sea   | 80 (0%)      | Below Blim (VIIa)  | 80 (0%)                  | 0 (-100%)                               |
| VIIb-h, VIIj-k  | West of Ireland, Porcupine Bank, Eastern and Western English Channel, Bristol Channel, Celtic Sea North and South, and Southwest of Ireland (East and West) | 17742 (-14%) | Above MSY (VIIb-c,e-k), unknown above Blim (VIIId)                 | pm                       | 16647<br>15395 + 1252<br>(-2%) + Uplift |
| VIII  | Bay of Biscay   | 3175 (0%)    | Unknown (VIII)   | 2540 (-20%)              | 1469 (-53%)                             |
| IX, X,CECAF (EU)  | Portuguese Waters, Azores Grounds and EU Waters of CECAF  | TBE          | IXa (unknown), completely unknown (IXb, X, CECAF 34.1.1)           | PT                       | 219 (-x%)                               |

\* No direct fisheries should occur in VIa

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## Acknowledgements

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Most of the species descriptions in this document have been taken from FishBase ([www.fishbase.org](http://www.fishbase.org)).

## Acronyms

**MSY** - Is the optimal catch that may be taken from a fishing stock year after year without endangering its capacity to regenerate for the future (<http://ec.europa.eu/fisheries>).

**CFP** - Is a set of rules for managing European fishing fleets and for conserving fish stocks. The CFP aims to ensure that fishing and aquaculture are environmentally, economically and socially sustainable and that they provide a source of healthy food for EU citizens (<http://ec.europa.eu/fisheries>).

**TAC** - Total allowable catches (TACs), or fishing opportunities, are catch limits (expressed in tonnes or numbers) that are set for most commercial fish stocks (<http://ec.europa.eu/fisheries>).

**ICES** - The International Council for the Exploration of the Sea is a global organization that develops science and advice to support the sustainable use of the oceans ([www.ices.dk](http://www.ices.dk)). The European Commission prepares the fishing opportunities proposals, based on scientific advice on the stock status from advisory bodies such as ICES.

**STECF** – The Scientific, Technical and Economic Committee for Fisheries was established to provide the EC with highly qualified scientific personnel, particularly in the fields of marine biology, marine ecology, fisheries science, fishing gear technology and fishery economics (<http://ec.europa.eu/fisheries>).

**SSB** - Spawning stock biomass. The total weight of all sexually mature fish in the stock ([www.ices.dk](http://www.ices.dk)).

**Blim** - Limit reference point for spawning stock biomass (SSB). Below it, there is a high risk that recruitment will 'be impaired'

(seriously decline) and on average be significantly lower than at higher SSB ([www.ices.dk](http://www.ices.dk)).

**F** - Instantaneous Rate of Fishing Mortality ([www.ices.dk](http://www.ices.dk)). The direct impact of fisheries on fishing stock.

**FMSY** - Fishing mortality consistent with achieving Maximum Sustainable Yield (MSY) ([www.ices.dk](http://www.ices.dk)).

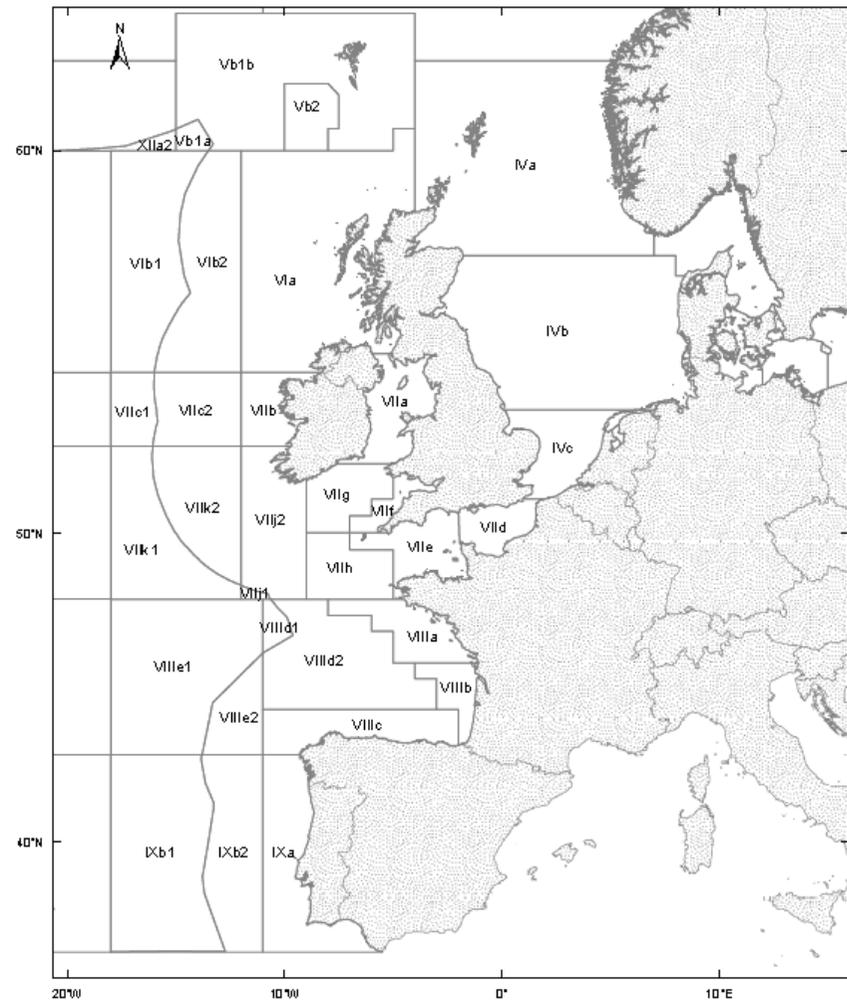
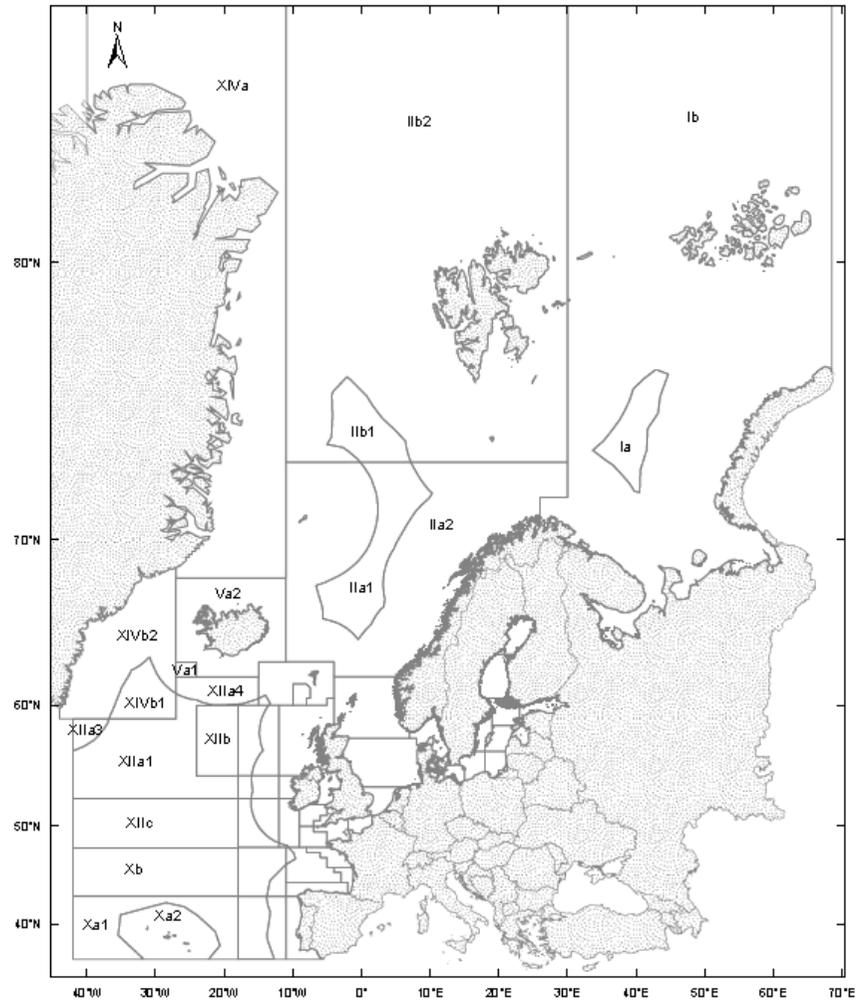
**MSFD** - The aim of the European Union's ambitious Marine Strategy Framework Directive is to protect the marine environment more effectively across Europe (Directive 2008/56/EC) (<http://ec.europa.eu/>).

**GES** – Good Environmental Status, the main goal of the Marine Strategy Framework Directive. It is defined as “the environmental status of marine waters where these provide ecologically diverse and dynamic oceans and seas which are clean, healthy and productive” (<http://ec.europa.eu/>).

## Description of ICES areas

| Subarea            | Division        | Subdivision     | Description  |
|--------------------|-----------------|-----------------|--|
| <b>Subarea I</b>   |                 |                 | Barents Sea  |
| <b>Subarea II</b>  |                 |                 | Norwegian Sea, Spitzbergen, and Bear Island  |
|                    | Division IIa    |                 | Norwegian Sea  |
|                    | Division IIb    |                 | Spitzbergen and Bear Island  |
| <b>Subarea III</b> |                 |                 | Skagerrak, Kattegat, Sound, Belt Sea, and Baltic Sea, the Sound and Belt together known also as the Transition Area                            |
|                    | Division IIIa   |                 | Skagerrak (West) and Kattegat (East)   |
|                    | Division IIIb,c |                 | Sound and Belt Sea or the Transition Area  |
|                    |                 | Subdivision 22  | Belt Sea   |
|                    |                 | Subdivision 23  | Sound  |
|                    | Division IIId   |                 | Baltic Sea   |
|                    |                 | Subdivision 24  | Baltic West of Bornholm  |
|                    |                 | Subdivision 25  | Southern Central Baltic – West   |
|                    |                 | Subdivision 26  | Southern Central Baltic - East   |
|                    |                 | Subdivision 27  | West of Gotland  |
|                    |                 | Subdivision 28  | East of Gotland or Gulf of Riga  |
|                    |                 | Subdivision 29  | Archipelago Sea  |
|                    |                 | Subdivision 30  | Bothnian Sea   |
|                    |                 | Subdivision 31  | Bothnian Bay   |
|                    |                 | Subdivision 32  | Gulf of Finland  |
| <b>Subarea IV</b>  |                 |                 | North Sea  |
|                    | Division IVa    |                 | Northern North Sea   |
|                    | Division IVb    |                 | Central North Sea  |
|                    | Division IVc    |                 | Southern North Sea   |
| <b>Subarea V</b>   |                 |                 | Iceland and Faeroes Grounds  |
|                    | Division Va     |                 | Iceland Grounds  |
|                    | Division Vb     |                 | Faeroes Grounds  |
|                    |                 | Subdivision Vb1 | Faeroe Plateau   |
|                    |                 | Subdivision Vb2 | Faeroe Bank  |
| <b>Subarea VI</b>  |                 |                 | Rockall, Northwest Coast of Scotland and North Ireland, (the Northwest Coast of Scotland and North Ireland also known as the West of Scotland) |
|                    | Division VIa    |                 | Northwest Coast of Scotland and North Ireland, or as the West of Scotland  |
|                    | Division VIb    |                 | Rockall  |

| Subarea             | Division       | Subdivision       | Description  |
|---------------------|----------------|-------------------|--|
| <b>Subarea VII</b>  |                |                   | Irish Sea, West of Ireland, Porcupine Bank, Eastern and Western English Channel, Bristol Channel, Celtic Sea North and South, and Southwest of Ireland - East and West |
|                     | Division VIIa  |                   | Irish Sea  |
|                     | Division VIIb  |                   | West of Ireland  |
|                     | Division VIIc  |                   | Porcupine Bank   |
|                     | Division VIId  |                   | Eastern English Channel  |
|                     | Division VIIe  |                   | Western English Channel  |
|                     | Division VIIf  |                   | Bristol Channel  |
|                     | Division VIIg  |                   | Celtic Sea North   |
|                     | Division VIIh  |                   | Celtic Sea South   |
|                     | Division VIIj  |                   | Southwest of Ireland / East  |
|                     | Division VIIk  |                   | Southwest of Ireland - West  |
| <b>Subarea VIII</b> |                |                   | Bay of Biscay  |
|                     | Division VIIIa |                   | Bay of Biscay / North  |
|                     | Division VIIIb |                   | Bay of Biscay / Central  |
|                     | Division VIIIc |                   | Bay of Biscay / South  |
|                     | Division VIId  |                   | Bay of Biscay / Offshore   |
|                     | Division VIIIe |                   | West of Bay of Biscay  |
| <b>Subarea IX</b>   |                |                   | Portuguese Waters  |
|                     | Division IXa   |                   | Portuguese Waters / East   |
|                     | Division IXb   |                   | Portuguese Waters / West   |
| <b>Subarea X</b>    |                |                   | Azores Grounds   |
|                     | Division Xa    |                   | Azores Grounds   |
|                     | Division Xb    |                   | Northeast Atlantic South   |
| <b>Subarea XI</b>   |                |                   |  |
| <b>Subarea XII</b>  |                |                   | North of Azores  |
|                     | Division XIIa  |                   | Southern mid-Atlantic Ridge (Southern Reykjanes Ridge south to Charlie-Gibbs Fracture Zone)  |
|                     | Division XIIb  |                   | Western Hatton Bank  |
|                     | Division XIIc  |                   | Central Northeast Atlantic - South   |
| <b>Subarea XIII</b> |                |                   | East Greenland   |
| <b>Subarea XIV</b>  |                |                   | Northeast Greenland  |
|                     | Division XIVa  |                   | Southeast Greenland  |
|                     | Division XIVb  |                   | Southeast Greenland - Parts of NEAFC Regulatory Area   |
|                     |                | Subdivision XIVb1 | NEAFC Regulatory Area  |
|                     |                | Subdivision XIVb1 | Southeast Greenland - Non-NEAFC Regulatory Area  |



## Stocks affected by the landing obligation in 2016

| Species                         | ICES zone  | Comments and exemptions   |
|---------------------------------|--|---|
| <i>Ammodytes spp.</i>           | IIIa and IV                                      | – Landing obligations only affects to industrial purpose fisheries.   |
| <i>Argentina silus</i>          | IIIa and IV                                      | – Mid-water otter trawl and mid-water pair trawl in ICES zone IV  |
|                                 | Vb, VI, VII                                      | – Otter trawls (mid-water and bottom) in ICES zones Vb, Via, VIb  |
| <i>Caproidae</i>                | Vb, VI, VII                                      | – up to a maximum of 1 % in 2015 and 0,75 % in 2016 of the TAC of boarfish ( <i>Caproidae</i> ) in the fishery targeting horse mackerel ( <i>Trachurus spp.</i> ) with pelagic freezer trawlers using midwater trawls in ICES zones VI and VII, may be discarded.   |
| <i>Clupea harengus</i>          | IIIa and IV                                      | – Landing obligation shall not apply to purse seine fisheries in ICES area IV that release that catch before 90% of the purse seine is closed. When the surrounded school consists of a mixture of herring and mackerel the point of retrieval shall be 80 % closure of the purse seine.<br>– up to a maximum of 3 % in 2015 and 2 % for 2016 of the total annual catches of herring in the pelagic fishery with pelagic trawlers up to 25 metres in length overall, using mid-water trawl (OTM), targeting mackerel, horse mackerel and herring in ICES areas IV b and IVc south of 54 degrees north, may be discarded.  |
|                                 | Vb, VI, VII                                      | – Landing obligation shall not apply to purse seine fisheries in ICES area VI that release that catch before 90% of the purse seine is closed. When the surrounded school consists of a mixture of herring and mackerel the point of retrieval shall be 80 % closure of the purse seine.<br>– up to a maximum of 3 % in 2015 and 2 % for 2016 of the total annual catches of herring ( <i>Clupea harengus</i> ) in the pelagic fishery with pelagic trawlers up to 25 metres in length overall, using mid-water trawl (OTM), targeting mackerel, horse mackerel and herring in ICES zone VIId, may be discarded.  |
| <i>Engraulis encrasicolus</i>   | VIII, IX, X and CECAF 34.1.1, 34.1.2. and 34.2.0 | – Landing obligation shall not apply to catches of anchovy in artisanal purse seine fisheries. All such catches may be released, provided that the net is not fully taken on board.<br>– up to a maximum of 5 % in 2015 and 2016, and 4 % in 2017, of the total annual catches in the pelagic trawl fishery for anchovy ( <i>Engraulis encrasicolus</i> ) in ICES zone VIII, may be discarded.<br>– up to a maximum of 2 % in 2015 and 2016, and 1 % in 2017, of the total annual catches of anchovy ( <i>Engraulis encrasicolus</i> ) in the purse seine fishery in ICES zones VIII, IX and X and in CECAF areas 34.1.1, 34.1.2 and 34.2.0 targeting the referred species, may be discarded. |
| <i>Merlangius merlangus</i>     | IIIa and IV                                      | – up to a maximum of 3 % in 2015 and 2 % for 2016 of the total annual catches of whiting in the pelagic fishery with pelagic trawlers up to 25 metres in length overall, using mid-water trawl (OTM), targeting mackerel, horse mackerel and herring in ICES areas IV b and IVc south of 54 degrees north, may be discarded.  |
|                                 | VIId   | – up to a maximum of 3 % in 2015 and 2 % for 2016 of the total annual catches of whiting ( <i>Merlangius merlangus</i> ) in the pelagic fishery with pelagic trawlers up to 25 metres in length overall, using mid-water trawl (OTM), targeting mackerel, horse mackerel and herring in ICES zone VIId, may be discarded.   |
| <i>Micromesistius poutassou</i> | IIIa and IV                                      |   |
|                                 | Vb, VI, VII                                      | – up to a maximum of 7 % in 2015 and 2016, and 6 % in 2017, of the total annual catches in industrial pelagic trawler fishery targeting blue whiting in ICES areas Vb, VI and VII, and processing that species on board to obtain surimi base, may be discarded.  |
|                                 | VIII, IX, X and CECAF 34.1.1, 34.1.2. and 34.2.0 | – up to a maximum of 7 % in 2015 and 2016, and 6 % in 2017, of the total annual catches in the industrial pelagic trawler fishery targeting blue whiting in ICES zone VIII and processing that species on board to obtain surimi base, may be discarded.  |
| <i>Scomber scombrus</i>         | IIIa and IV                                      | – Landing obligation shall not apply to purse seine fisheries in ICES area IV that release that catch before 80% of the purse seine is closed.<br>– up to a maximum of 3 % in 2015 and 2 % for 2016 of the total annual catches of mackerel in the pelagic fishery with pelagic trawlers up to 25 metres in length overall, using mid-water trawl (OTM), targeting mackerel, horse mackerel and herring in ICES areas IV b and IVc south of 54 degrees north, may be discarded.   |

| Species                     | ICES zone  | Comments and exemptions  |
|-----------------------------|--|--|
|                             | Vb, VI, VII                                      | <ul style="list-style-type: none"> <li>– Landing obligation shall not apply to purse seine fisheries in ICES area VI that release that catch before 80% of the purse seine is closed.</li> <li>– up to a maximum of 3 % in 2015 and 2 % for 2016 of the total annual catches of mackerel (<i>Scomber scombrus</i>), in the pelagic fishery with pelagic trawlers up to 25 metres in length overall, using mid-water trawl (OTM), targeting mackerel, horse mackerel and herring in ICES zone VIId, may be discarded.</li> </ul>  |
|                             | VIII, IX, X and CECAF 34.1.1, 34.1.2. and 34.2.0 | <ul style="list-style-type: none"> <li>– Landing obligation shall not apply to catches of mackerel in artisanal purse seine fisheries. All such catches may be released, provided that the net is not fully taken on board.</li> <li>– up to a maximum of 5 % in 2015 and 2016, and 4 % in 2017, of the total annual catches in the pelagic trawl fishery for mackerel (<i>Scomber scombrus</i>) in ICES zone VIII, may be discarded.</li> <li>– up to a maximum of 5 % in 2015 and 2016, and 4 % in 2017, of the total annual catches of mackerel (<i>Scomber scombrus</i>) in the purse seine fishery in ICES zones VIII, IX and X and in CECAF areas 34.1.1, 34.1.2 and 34.2.0 targeting the referred species, may be discarded.</li> </ul>               |
| <i>Sprattus sprattus</i>    | IIIa and IV                                      | <ul style="list-style-type: none"> <li>– Mid-water trawl and mid-water pair trawl, purse seiner, bottom otter and bottom pair trawl, for human consumption in ICES zone IIIa. Mid-water otter trawl and mid-water pair trawl for human consumption in ICES zone IV.</li> </ul>   |
|                             | Vb, VI, VII                                      | <ul style="list-style-type: none"> <li>– Otter trawls in ICES zones VIId and VIle</li> </ul>   |
|                             | VIII, IX, X and CECAF 34.1.1, 34.1.2. and 34.2.0 | <ul style="list-style-type: none"> <li>– Purse seines in ICES zone VIII,</li> </ul>  |
| <i>Trachurus spp</i>        | IIIa and IV                                      | <ul style="list-style-type: none"> <li>– up to a maximum of 3 % in 2015 and 2 % for 2016 of the total annual catches of horse mackerel in the pelagic fishery with pelagic trawlers up to 25 metres in length overall, using mid-water trawl (OTM), targeting mackerel, horse mackerel and herring in ICES areas IV b and IVc south of 54 degrees north, may be discarded.</li> </ul>  |
|                             | Vb, VI, VII                                      | <ul style="list-style-type: none"> <li>– up to a maximum of 3 % in 2015 and 2 % for 2016 of the total annual catches of horse mackerel (<i>Trachurus spp.</i>), in the pelagic fishery with pelagic trawlers up to 25 metres in length overall, using mid-water trawl (OTM), targeting mackerel, horse mackerel and herring in ICES zone VIId, may be discarded.</li> </ul>  |
|                             | VIII, IX, X and CECAF 34.1.1, 34.1.2. and 34.2.0 | <ul style="list-style-type: none"> <li>– Landing obligation shall not apply to catches of horse mackerel in artisanal purse seine fisheries. All such catches may be released, provided that the net is not fully taken on board.</li> <li>– up to a maximum of 5 % in 2015 and 2016, and 4 % in 2017, of the total annual catches in the pelagic trawl fishery for horse mackerel (<i>Trachurus spp.</i>) in ICES zone VIII, may be discarded.</li> <li>– up to a maximum of 5 % in 2015 and 2016, and 4 % in 2017, of the total annual catches of horse mackerel (<i>Trachurus spp.</i>) in the purse seine fishery in ICES zones VIII, IX and X and in CECAF areas 34.1.1, 34.1.2 and 34.2.0 targeting the referred species, may be discarded.</li> </ul> |
| <i>Trachurus murphyi</i>    | VIII, IX, X and CECAF 34.1.1, 34.1.2. and 34.2.0 | <ul style="list-style-type: none"> <li>– Landing obligation shall not apply to catches of jack mackerel in artisanal purse seine fisheries. All such catches may be released, provided that the net is not fully taken on board.</li> </ul>  |
| <i>Thunnus alalunga</i>     | Vb, VI, VII                                      | <ul style="list-style-type: none"> <li>– up to a maximum of 7 % in 2015 and 2016, and 6 % in 2017 of the total annual catches in the albacore tuna directed fisheries using mid-water pair trawls (PTM) in ICES area VII, may be discarded.</li> </ul>   |
|                             | VIII, IX, X and CECAF 34.1.1, 34.1.2. and 34.2.0 | <ul style="list-style-type: none"> <li>– up to a maximum of 7 % in 2015 and 2016, and 6 % in 2017 of the total annual catches in the albacore tuna directed fisheries using mid-water pair trawls (PTM) in ICES zone VIII, may be discarded.</li> </ul>  |
| <i>Trisopterus esmarkii</i> | IIIa and IV                                      | <ul style="list-style-type: none"> <li>– Landing obligations only affects to industrial purpose fisheries.</li> </ul>  |

## Demersal stocks and fleet segments proposed to be affected by the landing obligation in 2016

| Species                         | ICES zone                    | Comments and exemptions  |
|---------------------------------|------------------------------|--|
| <i>Merlangius merlangus</i>     | VII d                        | – Trawls and Seines. Where total landings per vessel of all species in 2013 and 2014 consist of more than 25% of the following gadoids: cod, haddock, whiting and saithe combined, the landing obligation shall apply to whiting.  |
|                                 | VII b, VII c, VII e, VII f-k | – Trawls and Seines. Where total landings per vessel of all species in 2013 and 2014 consist of more than 25% of the following gadoids: cod, haddock, whiting and saithe combined, the landing obligation shall apply to whiting.  |
|                                 | Exemptions VII               | <ul style="list-style-type: none"> <li>– up to a maximum of 7% in 2016 and 2017 and up to a maximum of 6% in 2018 of the total annual catches of this species by vessels using bottom trawls of less than 100 mm to catch whiting in ICES divisions VII d and VII e</li> <li>– up to a maximum of 7% in 2016 and 2017 and up to a maximum of 6% in 2018 of the total annual catches of this species by vessels using bottom trawls of not less than 100mm to catch whiting in ICES divisions VII b – VII j.</li> <li>– up to a maximum of 7% in 2016 and 2017 and up to a maximum of 6% in 2018 of the total annual catches of this species by vessels using bottom trawls of less than 100 mm to catch whiting in ICES subarea VII, except divisions VII a, d and e.</li> </ul> |
| <i>Merluccius merluccius</i>    | III a, IV, EU II a           | – Hooks and lines. All catches of hake shall be subject to the landing obligation  |
|                                 | VI, VII, UE V b              | <ul style="list-style-type: none"> <li>– Trawls and Seines. Where the total landings per vessel of all species in 2013 and 2014 consist of more than 30% of hake, the landing obligation shall apply to hake.</li> <li>– All Gill Nets and long lines. All catches of hake shall be subject to the landing obligation.</li> </ul>  |
|                                 | VIII abde                    | <ul style="list-style-type: none"> <li>– All bottom trawls, seines and gill nets with mesh size larger or equal to 100mm wide. All catches of hake are subject to the landing obligation.</li> <li>– All long lines. All catches of hake are subject to the landing obligation.</li> </ul>   |
|                                 | VIII c, IX a                 | – All bottom trawls and seines (with mesh size larger or equal to 70mm), all gill nets (with mesh size between 80-99mm wide) and all long lines (Hook size bigger than 3,85+/-1,15 length and 1,6+/- 0,4 width), with total hake landings in the period 2013/2014 consist of more than 10% of all landed species and more than 10 metric tons, all catches of hake are subject to the landing obligation.  |
|                                 | Exemptions VIII, IX          | – up to a maximum of 7% in 2016 and 2017 and up to 6% in 2018 of the total annual catches of this species by vessels using trawls (gear codes: OTT, OTB, PTB, OT, PT, TBN, TBS, TX, SSC, SPR, TB, SDN, SX and SV) targeting this species in ICES subareas VIII and IX  |
| <i>Melanogrammus aeglefinus</i> | III a, IV, EU II a           | <ul style="list-style-type: none"> <li>– Trawls with mesh size larger <math>\geq 100</math>mm. All catches of haddock are subject to the landing obligation.</li> <li>– Trawls with mesh between 80-99mm in Subarea IV and EU waters of II a, and trawls with mesh size between 70-99mm. All catches of haddock in Division III a are subject to the landing obligation</li> </ul>   |
|                                 | Exemptions III a             | – up to a maximum of 2% of the total annual catches of haddock in the fishery for Norway lobster by vessels using bottom trawls (OTB, TBN) of mesh size equal to or larger than 70 mm equipped with a species selective grid with bar spacing of maximum 35mm in ICES Division III a   |
|                                 | V b, VII a                   | – Trawls and Seines. Where total landings per vessel of all species in 2013 and 2014 consist of more than 10% of the following gadoids: cod, haddock, whiting and saithe combined, the landing obligation shall apply to haddock.  |

| Species                      | ICES zone   | Comments and exemptions  |
|------------------------------|---|--|
| <i>Nephrops norvegicus</i>   | IIIa, IV, EU IIa  | <ul style="list-style-type: none"> <li>– Trawls with mesh between 80-99mm in Subarea IV and EU waters of IIa, and trawls with mesh size between 70-99mm.</li> <li>– Traps. All catches of Norway lobster are subject to the landing obligation.</li> <li>– Landing obligation shall not apply to catches of Norway lobster (<i>Nephrops norvegicus</i>) caught with pots (FPO) in IIIa and IV, and bottom trawls (OTB, TBN) with a mesh size of at least 90mm equipped with a maximum 35 mm selective grid or top panels (270mm diamond mesh size or 140mm square mesh size) in Division IIIa,</li> </ul>  |
|                              | Exemption IIIa, IV,   | <ul style="list-style-type: none"> <li>– up to a maximum of 2% of the total annual catches of Norway lobster in the fishery for Norway lobster by vessels using bottom trawls (OTB, TBN) of mesh size equal to or larger than 70 mm equipped with a species selective grid with bar spacing of maximum 35mm in ICES Division IIIa.</li> <li>– for Norway lobster below minimum conservation reference size, up to a maximum of 6% of the total annual catches of this species by vessels using bottom trawls (OTB, TBN, OTT, TB) of mesh size equal to or larger than 80 mm and less than 99 mm in ICES Subarea IV and Union waters of ICES Division IIa.</li> </ul>   |
|                              | Vb  | – Trawls, Seines, Pots, Traps & Creels. Where the total landings per vessel of all species in 2013 and 2014 consist of more than 30% of Norway lobster, the landing obligation shall apply to Norway lobster.  |
|                              | VII   | – Trawls, Seines, Pots, Traps & Creels. Where the total landings per vessel of all species in 2013 and 2014 consist of more than 30% of Norway lobster, the landing obligation shall apply to Norway lobster.  |
|                              | Exemptions VIa, VII   | <ul style="list-style-type: none"> <li>– Landing obligation shall not apply to catches of Norway lobster (<i>Nephrops norvegicus</i>) caught in pots, traps or creels (Gear codes3 FPO and FIX) in ICES division VIa and subarea VII</li> <li>– up to a maximum of 7% in 2016 and 2017 and up to a maximum of 6% in 2018 of the total annual catches of this species by vessels obliged to land Norway lobster in ICES subarea VII</li> <li>– up to a maximum of 7% in 2016 and 2017 and up to a maximum of 6% in 2018 of the total annual catches of this species by vessels obliged to land Norway lobster in ICES division VIa</li> </ul>   |
|                              | VIIIabde  | – All bottom trawls with mesh size larger or equal to 70mm. All catches of Norway lobster are subject to the landing obligation.   |
| VIIIc, IXa                   | – All bottom trawls with mesh size larger or equal to 70mm. All catches of Norway lobster are subject to the landing obligation.  |  |
| Exemptions VIII, IX          | – Landing obligation shall not apply in 2016 to catches of Norway lobster ( <i>Nephrops norvegicus</i> ) caught in ICES subareas VIII and IX by trawls (gear codes: OTB, OTT, PTB, TBN, TBS, TB, OT, PT and TX) |  |
| <i>Pandalus borealis</i>     | IIIa, IV, EU IIa  | <ul style="list-style-type: none"> <li>– Trawls with mesh size <math>\geq 100</math>mm and beam trawls with mesh size <math>\geq 120</math>mm. All by-catches of Northern prawn are subject to the landing obligation.</li> <li>– Beam trawls with mesh size between 80-119mm. Any by-catch of Northern prawn are subject to the landing obligation.</li> <li>– Trawls with mesh between 80-99mm in Subarea IV and EU waters of IIa, and trawls with mesh size between 70-99mm. All by-catches of Northern prawn are subject to the landing obligation.</li> <li>– Trawls with mesh between 32-69mm. All catches of Northern prawn are subject to the landing obligation .</li> <li>– Gillnets, trammel nets and entangling nets. All by-catches of Northern prawn are subject to the landing obligation.</li> <li>– Hooks, lines and traps. All by-catch of Northern prawn is subject to the landing obligation.</li> </ul> |
|                              |   |  |
|                              |   |  |
|                              |   |  |
|                              |   |  |
| <i>Pleuronectes platessa</i> | IIIa, IV, EU IIa  | – Trawls with mesh size larger $\geq 100$ mm and beam trawls with mesh size $\geq 120$ mm. All catches of plaice are subject to the landing obligation.  |
|                              | IXa   | – All trammel nets and gill nets with mesh size larger or equal to 100mm. All catches of common sole are subject to the landing  |

| Species                  | ICES zone                   | Comments and exemptions obligation.   |
|--------------------------|-----------------------------|---|
| <i>Pollachius virens</i> | IIIa, IV, EU IIa            | <ul style="list-style-type: none"> <li>Trawls with mesh size larger <math>\geq 100</math>mm. All catches of saithe are subject to the landing obligation if when using trawls with mesh size <math>&gt; 100</math>mm, they have had annual average landings of saithe of <math>&gt; 50\%</math> of all landings by the vessel taken in both EU and third country zone of the North Sea over the period of x-4 to x-2 where x is the year of application; i.e. 2012-2014 for 2016 and 2013-2015 for 2017.</li> </ul>   |
| <i>Solea solea</i>       | IIIa, IV, EU IIa            | <ul style="list-style-type: none"> <li>Trawls with mesh between 80-99mm in Subarea IV and EU waters of IIa, and trawls with mesh size between 70-99mm. Except in ICES division IIIa when fishing with trawls with a mesh size of at least 90mm equipped with a top panel of at least 270mm mesh size (diamond mesh) or at least 140mm mesh size (square mesh) or 120mm square mesh panel placed 6 to 9 meters from the cod-end.</li> <li>Beam trawls with mesh size between 80-119mm. All catches of common sole are subject to the landing obligation.</li> <li>Gillnets, trammel nets and entangling nets. All catches of common sole are subject to the landing obligation.</li> </ul>   |
|                          | Exemptions IIIa, IV, EU IIa | <ul style="list-style-type: none"> <li>up to a maximum of 2% of the total annual catches of common sole in the fishery for Norway lobster by vessels using bottom trawls (OTB, TBN) of mesh size equal to or larger than 70 mm equipped with a species selective grid with bar spacing of maximum 35mm in ICES Division IIIa.</li> <li>up to a maximum of 3% of the total annual catches of this species by vessels using trammel nets and gill nets (GN, GNS, GND, GNC, GTN, GTR, GEN, GNF) in the ICES Division IIIa, Subarea IV and Union waters of ICES Division IIa.</li> <li>For common sole smaller than 19cm, up to a maximum of 3.7% of the total annual catches of this species by vessels using beam trawls (TBB) of mesh size 80-90mm in the southern part of the North Sea ( ICES Subarea IV South of 55/56oN);</li> <li>for common sole below minimum conservation reference size, up to a maximum of 7% of the total annual catches of this species by vessels using beam trawl (TBB) of mesh size equal to or larger than 80 and less than 119 mm with increased mesh size in the extension of the beam trawl in ICES Subarea IV</li> </ul> |
|                          | VIIId                       | <ul style="list-style-type: none"> <li>All beam trawls, trammel nets and gill nets. All catches of common sole are subject to the landing obligation.</li> <li>Trawls with mesh size <math>&lt; 100</math>mm. Where the total landings per vessel of all species in 2013 and 2014 consist of more than 5% of common sole, the landing obligation shall apply to common sole.</li> </ul>   |
|                          | VIIe                        | <ul style="list-style-type: none"> <li>All beam trawls. Where the total landings per vessel of all species in 2013 and 2014 consist of more than 10% of common sole, the landing obligation shall apply to common sole.</li> <li>All trammel nets and gill nets. All catches of common sole shall be subject to the landing obligation.</li> </ul>  |
|                          | VIIb, VIIc, VIIf-VIIk       | <ul style="list-style-type: none"> <li>All beam trawls. Where the total landings per vessel of all species in 2013 and 2014 consist of more than 5% of common sole, the landing obligation shall apply to common sole.</li> <li>All trammel nets and gill nets. All catches of common sole shall be subject to the landing obligation.</li> </ul>   |
|                          | Exemptions - VII            | <ul style="list-style-type: none"> <li>up to a maximum of 3% in 2016, 2017 and 2018 of the total annual catches of this species by vessels using trammel and gill nets to catch common sole in ICES divisions VIIId, VIIe, VIIf and VIIg</li> <li>up to a maximum of 3% in 2016, 2017 and 2018 of the total annual catches of this species by vessels using gear with increased selectivity (TBB gear with mesh size of 80-199mm) in ICES divisions VIIId, VIIe, VIIf and VIIg.</li> </ul>  |
|                          | VIIIabde                    | <ul style="list-style-type: none"> <li>All bottom trawls and beam trawls, with mesh size between 70-100mm wide. All catches of common sole are subject to the landing obligation.</li> <li>All trammel nets and gill nets with mesh size larger or equal to 100mm wide. All catches of common sole are subject to the landing obligation.</li> </ul>  |

| Species | ICES zone         | Comments and exemptions  |
|---------|-------------------|--|
|         | IXa               | – All trammel nets and gill nets with mesh size larger or equal to 100mm. All catches of common sole are subject to the landing obligation.  |
|         | Exemptions VIIIab | <ul style="list-style-type: none"> <li>– up to a maximum of 5% of the total annual catches of this species by vessels using beam trawl (gear code: TBB) and bottom trawls (gear codes: OTB, OTT, PTB, TBN, TBS, TB, OT, PT and TX) targeting this species in ICES divisions VIIIa and VIIIb;</li> <li>– up to a maximum of 3% of the total annual catches of this species by vessels using trammel nets and gillnets (gear codes: GNS, GN, GND, GNC, GTN, GTR and GEN) targeting this species in ICES divisions VIIIa and VIIIb</li> </ul> |

Plaza España-Leganitos 47  
28013 Madrid, Spain  
**Ph.:** + 34 911 440 880  
**Fax:** + 34 911 440 890

Rue Montoyer 39  
1000 Brussels, Belgium  
**Ph.:**+32 (0) 2 513 22 42  
**E-mail:** [europa@oceana.org](mailto:europa@oceana.org)

Nyhavn 16, 4 sal  
1051 Copenhagen, Denmark  
**Ph.:**+45 33151160  
**Web:** [www.oceana.org](http://www.oceana.org)



*Oceana campaigns to protect and restore the world's oceans. Our team of marine scientists, economists, lawyers and other collaborators are achieving specific changes in the legislation to reduce pollution and prevent the irreversible collapse of fish stocks, protect marine mammals and other forms of marine life. With a global perspective and devoted to conservation, Oceana has offices in Europe, North America, South America and Central America. Over 300,000 collaborators and cyber activists in 150 countries have already joined Oceana. For more information, visit [www.oceana.org](http://www.oceana.org)*