



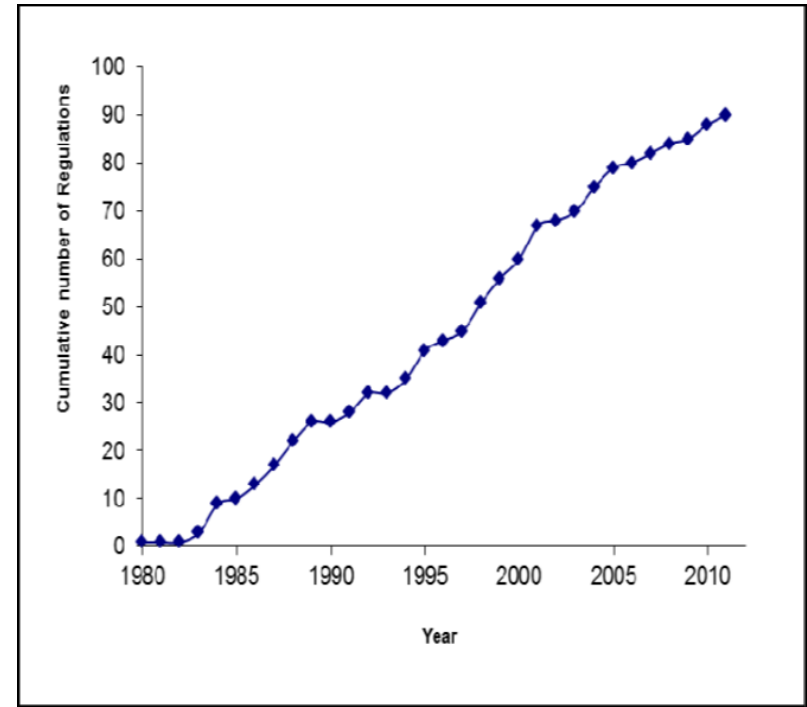
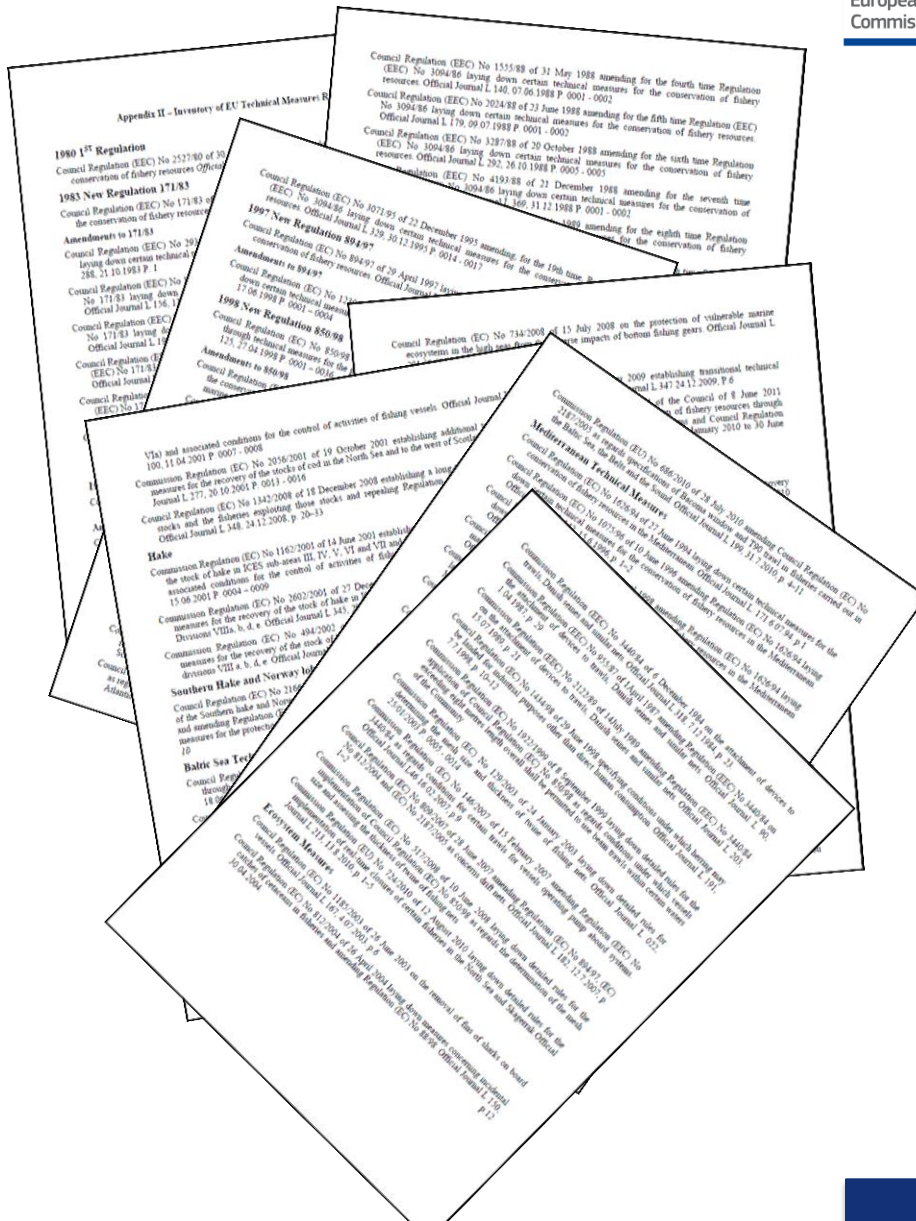
# Technical Measures Proposal

Proposal for a Regulation of the European Parliament and of the Council on the conservation of fishery resources and the protection of marine ecosystems through technical measures, amending Council Regulations (EC) No 1967/2006, (EC) No 1098/2007, (EC) No 1224/2009 and Regulations (EU) No 1343/2011 and (EU) No 1380/2013 of the European Parliament and of the Council, and repealing Council Regulations (EC) No 894/97, (EC) No 850/98, (EC) No 2549/2000, (EC) No 254/2002, (EC) No 812/2004 and (EC) No 2187/2005



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# 90 regulations since 1980



- *Sub-optimal performance*
- *Difficult to measure effectiveness*
- *Prescriptive and complex*
- *Lack of flexibility*
- *Lack of "buy-in"*

# Lack of Clear Objectives & Targets

## *Qualitative objectives:*

*"ensure the protection of .... resources and the balanced exploitation of fishery resources "*

*"reducing the capture of juveniles"*

*"protecting nursery and spawning areas"*

## *How to measure success?*

No quantitative metrics

TCMs part of broader input/output controls

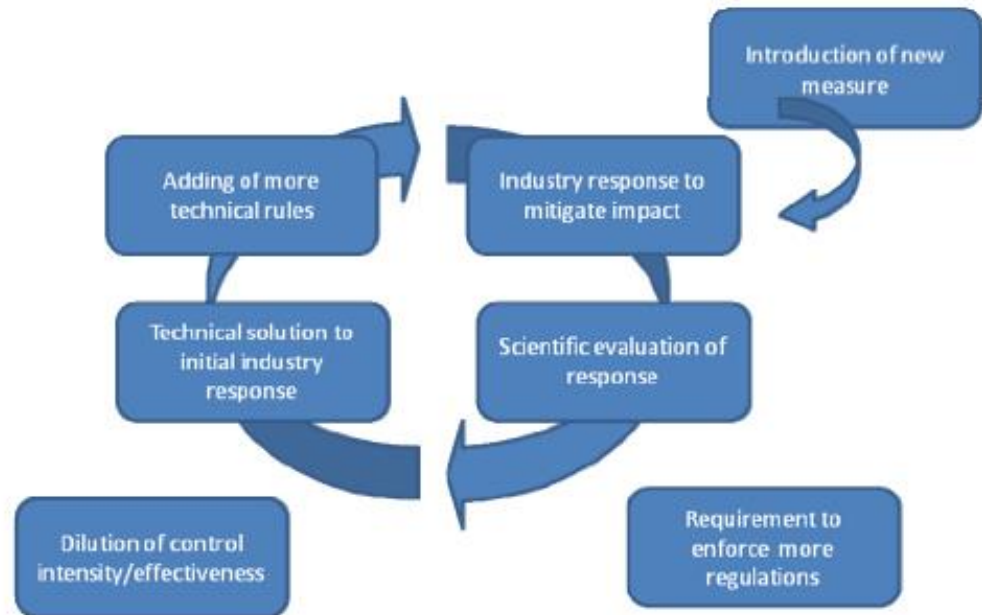
Not possible to disentangle effects

# Lack of Incentive

*Incentive to mitigate regulations not unwanted catches*

*Additional rules added:*

*Technological and legislative arms race*





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# Prescriptive and complex

2. By way of derogation from Article 2(6) of Regulation (EC) No 2549/2000, it shall be prohibited to carry on board or deploy any beam trawl of mesh size equal to, or greater than, 80 mm unless the entire upper half of the anterior part of such a net consists of a panel of diamond-meshed netting material of which no individual mesh is of mesh size less than 180 mm attached directly to the headline or to no more than three rows of netting material of any mesh size attached directly to the headline.

The panel of netting shall extend towards the headline for at least the number of meshes

- (a) dividing the length in metres of the net by the mesh size;
- (b) multiplying the result obtained in (a) by 100;
- (c) dividing the result obtained in (b) by the number of meshes in the net; and
- (d) ignoring any decimals or other fractions in the result obtained in (c).

(iii) of mesh size range 70 to 99 mm unless the upper half of such a net consists of a panel of netting material attached directly to the headline of the net or to no more than three rows of netting material of any mesh size attached directly to the headline, extending towards the posterior of the net for at least 15 meshes and constructed of diamond-meshed netting material of which no individual mesh is of mesh size less than 140 mm;

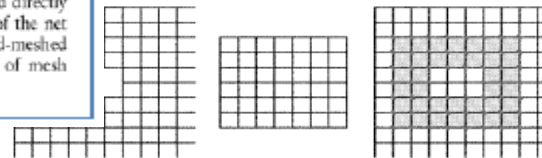
## 2. Conditions for the repair of square mesh panels

### (a) General conditions

- (i) The use of a square mesh BACOMA cut window which has 10% or more meshes repaired shall be prohibited.
- (ii) Square meshes which have been damaged shall be repaired according to the prescribed method.

It is any mesh where the mesh opening is reduced by a repair of damaged meshes or by the pieces of knotless square mesh netting.

The damaged meshes in the BACOMA cut window



### (b) Clean the hole.

(i) Count the meshes to be replaced. Prepare a patch using knotless braided single twine that is the same material, diameter and strength of the net needing to be patched.

(ii) The patch should be no more than two meshes larger in each direction than the cleaned-up hole to provide sufficient netting to overlap the edges of the hole.

(iii) Lay the patch over the hole and lace it to the existing netting using braided twine, as shown in the illustration.

(iv) Make sure to lace the crosses of the netting together.

(v) Continue lacing around the hole so that you have at least two rows of lacing around the patch.

(vi) The patched hole will resemble the above illustration when finished.

# Impact Assessment: consultation

public consultation (2014)  
internet contributions  
continued consultation of key stakeholders (2011-2015)

main conclusions/recommendations/needs identified:

- results-based management
- accountability of fishermen for catches
- simplification, but safeguard level playing field
- regionalization
- framework approach – overarching objectives, common standards, safeguards
- incentive structures for selectivity

# impact assessment: comparing options

|                        | options   | baseline scenario | option 1 - consolidation | option 2 framework       |                            | option 3 – elimination |
|------------------------|---|-------------------|--------------------------|--------------------------|----------------------------|------------------------|
|                        |   |                   |                          | with baselines standards | without baseline standards |                        |
| general                | All European fisheries to MSY by 2015 or 2020 at the latest   | 0                 | 0                        | +                        | -/+                        | -/+                    |
|                        | Reduce unwanted catches and eliminate discards by 2019  |                   |                          |                          |                            |                        |
|                        | Achieve of GES by 2020, as established under the MSFD   |                   |                          |                          |                            |                        |
| specific objectives    | Improvement in the effectiveness of technical measures;   | 0                 | 0                        | +                        | +/-                        | +/-                    |
|                        | Defines clear objectives and success criteria   | 0                 | +                        | +                        | +                          | 0                      |
|                        | Eliminates over-regulation and simplifies   | 0                 | +                        | ++                       | ++                         | ++                     |
|                        | Flexible legal framework for TM, vehicle for regionalisation  | 0                 | 0                        | +                        | +                          | +/-                    |
|                        | Promotes a transparent and participatory approach to the definition and specification of technical measures.  | 0                 | 0                        | +                        | +                          | 0                      |
| operational objectives | Establish incentive structures linked to the added flexibility offered by regionalisation and rewarding of "responsible fishing"                    | 0                 | 0                        | +                        | +/-                        | +/-                    |
|                        | Establish clear targets   | 0                 | 0                        | +                        | +                          | 0                      |
|                        | Establish indicators to measure success   | 0                 | 0                        | +                        | +                          | 0                      |
|                        | Delete redundant rules and simplify other rules to make them understandable and controllable;   | 0                 | +                        | ++                       | ++                         | ++                     |
|                        | Manage the transition to regionisation in the period up to 2020 by defining baseline standards  | 0                 | 0                        | +                        | -                          | -                      |
|                        | Establish the necessary legal architecture to allow deviation from these baseline standards and provide for the development of alternative measures | 0                 | 0                        | ++                       | +                          | 0                      |
|                        | Establish linkages with the CFP to allow for stakeholder involvement in the development of technical measures                                       | 0                 | 0                        | +                        | +                          | 0                      |



# new technical measures: key elements

focus on governance and managing the transition to 2019/2020

1. general structure for future technical measures – agreed with long-term perspective (co-decision)
2. baseline measures by sea basin – in absence of measures adopted under regionalization (COM regulations)

no fundamental changes to existing rules and provisions

Scope - all EU waters

review of closures and area restrictions based on scientific advice – NATURA 2000 unaffected;

simplification for mesh size regulations

shift of detail to COM acts

existing conservation/selectivity standards retained

New Element - Specific targets (co-decision)

catches of species below minimum size shall not exceed 5%

catches of marine mammals, reptiles and seabirds do not exceed specified levels (e.g. ASCOBANS 1.7%)

Ensure environmental impacts do not exceed levels required for good environmental status (MSFD)

# architecture

co-decided

## **general provisions (chapter I):**

objectives  
scope  
targets  
definitions

co-decided

## **common technical rules (chapter II):**

prohibited gears/methods  
species/habitats  
general minimum conservation sizes  
measures to reduce discarding

co-decided but  
provisions to  
amend  
annexes under  
regionalisation

## **Regionalisation (chapter III) :**

species & size selectivity  
closed/restricted areas  
minimum conservation reference sizes  
real-time closures and moving on  
innovative fishing gears  
nature conservation measures

annexes  
under  
regionalisation

North Sea

North  
Western  
Waters

South  
western  
Waters

Baltic Sea

Mediterran  
-ean

Black Sea

## annexes

- I prohibited species (art. 11)  
COM empowerment for delegated act
- II closed areas for protection of sensitive habitats (art. 13)  
COM empowerment for delegated act
- III species prohibited for capture with driftnets (art. 10)
- IV measurement of the size of a marine organism (art. 14)
- V – XI regionalization

# **Annexes – Regional details**

## **(North Sea as an Example)**



**ANNEX V**

**North Sea**

**Part A**

**Minimum conservation reference sizes**

| Species   | North Sea  |
|---|--|
| Cod ( <i>Gadus morhua</i> )                         | 35 cm  |
| Haddock ( <i>Melanogrammus aeglefinus</i> )         | 30 cm  |
| Saithe ( <i>Pollachius virens</i> )                 | 35 cm  |
| Pollack ( <i>Pollachius pollachius</i> )            | 30 cm  |
| Hake ( <i>Merluccius merluccius</i> )               | 27 cm  |
| Magrin ( <i>Lepidorhombus</i> spp.)                 | 20 cm  |
| Sole ( <i>Solea</i> spp.)                           | 24 cm  |
| Plaice ( <i>Pleuronectes platessa</i> )             | 27 cm  |
| Whiting ( <i>Merlangius merlangus</i> )             | 27 cm  |
| Ling ( <i>Molva molva</i> )                         | 63 cm  |
| Blue ling ( <i>Molva dypterygia</i> )               | 70 cm  |
| Norway lobster ( <i>Nephrops norvegicus</i> )       | Total length 85 mm,<br>Carapace length 25 mm<br>Norway lobster tails 46 mm |
| Mackerel ( <i>Scomber</i> spp.)                     | 20 cm  |
| Herring ( <i>Clupea harengus</i> )                  | 20 cm  |
| Horse mackerel ( <i>Trachurus</i> spp.)             | 15 cm  |
| Anchovy ( <i>Engraulis encrasicolus</i> )           | 12 cm or 90 individuals per kilo   |
| Bass ( <i>Dicentrarchus labrax</i> )                | 42 cm  |
| Sardine ( <i>Sardinia pilchardus</i> )              | 11 cm  |
| Lobster ( <i>Homarus gammarus</i> )                 | 87 mm  |
| Spinous spider crab ( <i>Mais spinada</i> )         | 120 mm   |
| Queen scallop ( <i>Chlamys</i> spp.)                | 40 mm  |
| Grooved carpetshell ( <i>Ruditapes decussatus</i> ) | 40 mm  |

|   |                         |
|---|-------------------------|
| Carpetshell ( <i>Venerupis pullastra</i> )                | 38 mm                   |
| Short-necked clam ( <i>Venerupis philippinarum</i> )      | 35 mm                   |
| Clam ( <i>Tresus verrucosa</i> )                          | 40 mm                   |
| Hard clam ( <i>Callista chione</i> )                      | 6 cm                    |
| Razor clam ( <i>Saxidomus</i> spp.)                       | 10 cm                   |
| Surf clam ( <i>Spridula solidus</i> )                     | 25 mm                   |
| Donax clam ( <i>Donax</i> spp.)                           | 25 mm                   |
| Bean sole ( <i>Parus legumen</i> )                        | 65 mm                   |
| Whelk ( <i>Buccinum undatum</i> )                         | 45 mm                   |
| Octopus ( <i>Octopus vulgaris</i> )                       | 750 grammes             |
| Crowfish ( <i>Palaemon</i> spp.)                          | 95 mm                   |
| Deepwater rose shrimp ( <i>Parapenaeus longirostris</i> ) | 22mm (carapace length)  |
| Edible crab ( <i>Cancer pagurus</i> )                     | 140 mm <sup>1,2,3</sup> |
| Scallop ( <i>Pecten marinus</i> )                         | 100 mm                  |

| Species                                       | Sikarrrak/Kattgat                          |
|---|--|
| Cod ( <i>Gadus morhua</i> )                   | 30 cm                                      |
| Haddock ( <i>Melanogrammus aeglefinus</i> )   | 27 cm                                      |
| Saithe ( <i>Pollachius virens</i> )           | 30 cm                                      |
| Pollack ( <i>Pollachius pollachius</i> )      | -  |
| Hake ( <i>Merluccius merluccius</i> )         | 30 cm                                      |
| Magrin ( <i>Lepidorhombus</i> spp.)           | 25 cm                                      |
| Sole ( <i>Solea</i> spp.)                     | 24 cm                                      |
| Plaice ( <i>Pleuronectes platessa</i> )       | 27 cm                                      |
| Whiting ( <i>Merlangius merlangus</i> )       | 23 cm                                      |
| Ling ( <i>Molva molva</i> )                   | -  |
| Blue ling ( <i>Molva dypterygia</i> )         | -  |
| Norway lobster ( <i>Nephrops norvegicus</i> ) | Total length 105mm<br>Carapace length 32mm |

|   |  |
|---|--|
| Mackerel ( <i>Scomber</i> spp.)         | 20 cm                                      |
| Herring ( <i>Clupea harengus</i> )      | 18 cm                                      |
| Horse mackerel ( <i>Trachurus</i> spp.) | 15 cm                                      |
| Lobster ( <i>Homarus gammarus</i> )     | Total length 220mm<br>Carapace length 78mm |

<sup>1</sup> In Union waters in ICES division IVa

<sup>2</sup> In an area in ICES divisions IVb, c limited by a point at 53°28'22"N, 0°09'24"E, on the coast of England, a straight line joining this point with 53°28'22"N, 0°22'24"E, the 6 mile boundary of the United Kingdom, and a straight line connecting a point at 51°54'06"N, 1°30'30"E, with a point on the coast of England at 51°55'48"N, 1°17'00"E, a minimum conservation reference size of 115 mm shall apply.

<sup>3</sup> For edible crabs caught in pots or creels, a maximum of 1% by weight of the total catch of edible crab may consist of detached claws. For edible crabs caught with any other fishing gear, a maximum of 75kg of detached crab claws may be landed.

#### Part B Mesh sizes

##### 1. Baseline mesh sizes for towed gears

The following codend mesh sizes shall apply in the North Sea and Skagerrak/Kattegat.

| Codend Mesh Size | Geographical Areas                                       | Conditions   |
|------------------|--|--|
| At least 120mm   | Whole area   | None   |
| At least 80mm    | Whole area   | Directed fishing for <i>Nephrops norvegicus</i> or species not covered by catch limits. A square mesh panel of at least 120mm or sorting grid with a maximum bar spacing of 35mm or equivalent selectivity device shall be fitted.   |
| At least 80mm    | ICES Division IVb south of 54°30'N and ICES Division IVc | Directed fishing for sole with beam trawls or (Pulse trawls). A panel with a mesh size of at least 180mm fitted in the upper half of the anterior part of the net.   |
| At least 32mm    | Whole area   | Directed fishing for <i>Pandalus borealis</i> . A sorting grid with a minimum bar spacing of 19mm or equivalent selectivity device shall be fitted.  |
| At least 16mm    | Whole area   | Directed fishing for small pelagic species<br>Directed fishing for Norway post. A sorting grid with a bar spacing of 22mm in the Norway Post fishery shall be fitted.<br>Directed fishery for <i>Crangon crangon</i> . A sorting grid, sieve net or equivalent selectivity device shall be fitted. |
| Less than        | Whole area   | Directed fishing for sandeel   |

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|      |  |  |
|------|--|--|
| 16mm |  |  |
|------|--|--|

##### 2. Baseline mesh sizes for static nets

The following mesh sizes for static nets shall apply in the North Sea and Skagerrak/Kattegat.

| Mesh Size      | Geographical Areas | Conditions   |
|----------------|--------------------|--|
| At least 120mm | Whole area         | None   |
| At least 100mm | Whole area         | Directed fishing for sole or species not subject to catch limits |
| At least 50mm  | Whole area         | Directed fishing for small pelagic species                       |

#### Part C

##### Closed or restricted areas

##### 1. Closure of an area to protect sandeel in ICES divisions IVa and IVb

1.1 Fishing for sandeels with any towed gear with a codend mesh size less than 80mm or any static net with a mesh size of less than 100mm shall be prohibited within the geographical area bounded by the east coast of England and Scotland, and enclosed by sequentially joining with rhumb lines the following coordinates, which shall be measured according to the WGS84 system:

- the east coast of England at latitude 55°30' N
- 55°30' N, 01°00' W
- 58°00' N, 01°00' W
- 58°00' N, 02°00' W
- the east coast of Scotland at longitude 02°00' W.

1.2 Fisheries for scientific investigation shall be allowed in order to monitor the sandeel stock in the area and the effects of the closure.

##### 2. Closure of an area to protect juvenile plaice in ICES subarea IV

2.1 Vessels exceeding 8 metres length overall shall be prohibited from using any demersal trawl, Danish seine or similar towed gear within the geographical areas enclosed by sequentially joining with rhumb lines the following coordinates, which shall be measured according to the WGS84:

- (a) the area within 12 nautical miles of the coasts of France, north of latitude 51°00' N, Belgium, and the Netherlands up to latitude 53°00' N, measured from the baselines;
- (b) the area bounded by a line joining the following coordinates:
- (c) a point on the west coast of Denmark at latitude 57°00' N,
  - 57°00' N, 7°15' E

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- 55°00' N, 7°15' E
- 55°00' N, 7°00' E
- 54°30' N, 7°00' E
- 54°30' N, 7°30' E
- 54°00' N, 7°30' E
- 54°00' N, 6°00' E
- 53°50' N, 6°00' E
- 53°50' N, 5°00' E
- 53°30' N, 5°00' E
- 53°30' N, 4°15' E
- 53°00' N, 4°15' E
- a point on the coast of the Netherlands at latitude 53°00'N
- the area within 12 nautical miles of the west coast of Denmark from 57°00'N as far north as the Hirtshals Lighthouse, measured from the baselines.

**2.2** The following vessels are permitted to fish in the area referred to in point 2.1:

- vessels whose engine power does not exceed 221kW using demersal trawls or Danish seines;
- paired vessels whose combined engine power does not exceed 221kW at any time using demersal pair trawls;
- vessels whose engine power exceeds 221kW shall be permitted to use demersal trawls or Danish seines, and paired vessels whose combined engine power exceeds 221kW shall be permitted to use demersal pair trawls provided that such vessels do not engage in directed fishing for plaice and sole and respect the relevant mesh size rules contained in Part B of this Annex.

**3. Restrictions on the use of beam trawls within 12 miles of the coast of the United Kingdom**

**3.1** Vessels shall be prohibited from using any beam trawl inside the areas within 12 miles of the coasts of the United Kingdom, measured from the baselines of the territorial waters.

**3.2** By way of derogation from point 3.1, fishing with beam trawls within the specified area shall be permitted provided that:

- The engine power of the vessels does not exceed 221Kw and overall length does not exceed 24 metres; and
- The beam length or aggregated beam length, measured as the sum of each beam is no more than 9 metres, or cannot be extended to a length greater than 9 metres, except when directed fishing for *Crangon crangon* with a minimum mesh size of less than 31 mm.

**4. Restrictions on fishing for sprat to protect herring in ICES division IVb**

Fishing with any towed gears with a codend mesh size of less than 80mm or static nets less than 100mm mesh size shall be prohibited within the geographical areas enclosed by

sequentially joining with rhumb lines the following coordinates, which shall be measured according to the WGS84 and during the following periods mentioned:

- from 1 January to 31 March, and from 1 October to 31 December, within ICES statistical area 39E8. For the purpose of this Regulation, that ICES area shall be the area bounded by a line due east from the United Kingdom east coast along latitude 55°00' N to a point at longitude 1°00' W, from there due north to a point at latitude 55°30' N and from there due west to the United Kingdom coast;
- from 1 January to 31 March, and from 1 October to 31 December, within the inner waters of the Moray Firth west of longitude 3°30' W, and in the inner waters of the Firth of Forth west of longitude 3° 00' W;
- from 1 July to 31 October, within the geographical area bounded by the following coordinates:
  - the west coast of Denmark at latitude 55°30' N
  - latitude 55°30' N, longitude 7°00' E
  - latitude 57°00' N, longitude 7°00' E
  - the west coast of Denmark at latitude 57°00' N

**5. Specific provisions for the Skagerrak and Kattegat in ICES division IIIa**

**5.1** It shall be prohibited to fish with beam trawls in the Kattegat.

**5.2** It shall be prohibited for Union vessels to fish for, to retain on board, to tranship, to land, store, sell and display or offer for sale salmon and sea trout. When accidentally caught within any part of the Skagerrak and Kattegat situated outside the four-mile limit measured from Member States' baselines they shall be returned immediately to the sea.

**5.3** It shall be prohibited to deploy towed gears with a codend mesh size of less than 32mm from 1 July to 15 September in the waters situated within three nautical miles of the baselines in the Skagerrak and Kattegat unless carrying out directed fishing for *Pandalus borealis*, or for the directed fishing for eelpout (*Zoarces viviparus*), gobies (*Gobiidae*) or scorpion fish (*Cottus spp.*) for use as bait.

**6. Use of static nets in ICES division IVa**

**6.1** It shall be permitted to use the following gears in waters with a charted depth of less than 600 metres:

- Bottom set gillnets used for directed fishing for hake of a mesh size of at least 100mm and no more than 100 meshes deep, where the total length of all nets deployed does not exceed 25km per vessel and the maximum soak time is 24 hours;
- Entangling nets used for directed fishing for anglerfish of a mesh size of at least 250mm and no more than 15 meshes deep, where the total length of all nets deployed does not exceed 100km and the maximum soak time is 72 hours.



6.2 Directed fishing for deepwater sharks as listed in Annex I of Regulation (EC) No 2347/2002<sup>1</sup> in charted depths of less than 600 metres shall be prohibited. When accidentally caught deepwater sharks shall be retained on board. Such catches shall be landed and counted against quotas. Where accidental catches of deepwater sharks by the vessels of any Member State exceed 10 tonnes then those vessels may no longer avail of the derogations set out in point 6.1.

#### Part D

##### Mitigation measures for sensitive species

###### Measures to reduce incidental catches of cetaceans in ICES division IIIa and sub-area IV

1. It shall be prohibited for vessels of 12 metres or over in overall length to deploy static nets in ICES sub-area IV and ICES division IIIa, without the simultaneous use of active acoustic deterrent devices.
2. Point 1 shall not apply to fishing operations conducted solely for the purpose of scientific investigation which are carried out with the authorisation and under the authority of the Member States or Member States concerned and which aim at developing new technical measures to reduce the incidental capture or killing of cetaceans.
3. Member States shall monitor and assess, by means of scientific studies or pilot projects, the effectiveness of the mitigation devices as described in point 1 in the fisheries and areas concerned.

#### Part E

##### Innovative fishing methods

###### The use of electric pulse trawls in ICES divisions IVb and IVc

Notwithstanding Article 13, fishing with an electric pulse trawl shall be allowed in ICES divisions IVb and IVc under conditions defined in accordance with the second indent of paragraph 1 of Article 27 of this Regulation, regarding the characteristics of the pulse used and control monitoring measures in place south of a rhumb line joined by the following points, which shall be measured according to the WGS84 coordinate system:

- a point on east coast of the United Kingdom at latitude 55°N
- east to latitude 55°N, longitude 5°E
- north to latitude 56°N
- east to a point on the west coast of Denmark at latitude 56°N

<sup>1</sup> Council Regulation (EC) No 2347/2002 of 16 December 2002 establishing specific access requirements and associated conditions applicable to fishing for deep-sea stocks OJ L 351, 28.12.2002, p. 6