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Evaluation of Fishing Effort Regimes in European Waters - Part 1 (STECF-14-12)

Edited by Steven Holmes

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Contact information

STECF secretariat

Address: Maritime Affairs Unit, Via Enrico Fermi 2749, 21027Ispra VA, Italy

E-mail: stecf-secretariat@jrc.ec.europa.eu

Tel.: 0039 0332 789343

Fax: 0039 0332 789658

<https://stecf.jrc.ec.europa.eu/home>

<http://ipsc.jrc.ec.europa.eu/>

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**SCIENTIFIC, TECHNICAL AND ECONOMIC COMMITTEE FOR FISHERIES
(STECF)**

EVALUATION OF FISHING EFFORT REGIMES IN EUROPEAN WATERS PART 1 (STECF- 14-12)

**THIS REPORT WAS REVIEWED DURING THE PLENARY MEETING HELD IN
COPENHAGEN, DENMARK, 7-11 July 2014**

Request to the STECF

STECF is requested to review the report of the **EWG-14-06** held during June 9–13, 2014 in Ispra, Italy, evaluate the findings and make any appropriate comments and recommendations.

Introduction

The report of the Expert Working Group on Evaluation of fishing effort regimes in European Waters Part 1 (EWG -14-06) was reviewed by the STECF during its 46th plenary meeting held from 7-11 July 2014, Copenhagen, Denmark.

The following observations, conclusions and recommendations represent the outcomes of the STECF review.

STECF COMMENTS, OBSERVATIONS, AND CONCLUSIONS

STECF notes that the Terms of Reference relating to fishing effort regimes in the following sea areas have been addressed in part by the Report of the EWG 14-06:

1. Eastern and Western Baltic,
2. the Kattegat,
3. the Skagerrak, North Sea, European waters in ICES Div.2 and the Eastern Channel,
4. to the West of Scotland,
5. Irish Sea,
6. Celtic Sea,
7. Atlantic waters off the Iberian Peninsula,
8. Western Channel,
9. Western Waters and Deep Sea
10. Bay of Biscay,

The EWG 14-06 Report provides updated estimates of trends in fishing effort.

STECF notes that the means of data aggregation has been transferred to a new software architecture. There are three motivations for this

1. Greater data security as all data is processed on a secure server.
2. Increased quality assurance through the exclusive use of the dedicated JRC upload facility.
3. Greater transparency of the data input and processing through a documented upload facility and processing algorithm and because of point two.

STECF further notes that data processing time has also been reduced considerably. This is a welcome development as re-submissions are sometimes required during EWG meetings resulting in re-compilation of aggregated data. These benefits are likely to become increasingly apparent as the quantity of data for processing continues to increase.

All data used by the EWG 14-06 was submitted through a revised upload facility that functioned well and all processing was performed on the JRC secure server. Documentation of the processing is in progress and will be available in a flow chart format. Time constraints prevented full testing of the new system. Outstanding software problems when aggregating catch data meant it was not possible for the EWG to review catch data or undertake ToR based on catch data. These ToRs will be dealt with during the forthcoming STECF EWG 14-13 fishing effort regime evaluations part 2 (29 September-03 October 2014, Barza d'Ispra, Italy).

2014 DCF Fishing Effort Data Call

The EWG 14-06 Report is based on data submitted by Member States in response to the 2014 DCF fishing effort data call. STECF notes a general improvement in Member States' submissions with regard to data completeness and quality as well as improved compliance with deadlines. This was probably aided by the fact that the call in 2014 requested the same fields of data as in the 2013 data call, and only 2013 data were requested. Therefore no re-submissions of data were required and only took place if a member state needed to correct data submitted in previous years.

However, the work of the EWG 14-06 was still compromised by delays in some Member States' submissions, incomplete and erroneous data submissions and re-submissions.

STECF notes that tables related to effort for the various fishing effort regimes can be downloaded at the corresponding aggregation level as digital Appendixes to the present report from the EWG 14-06 web page: <http://stecf.jrc.ec.europa.eu/web/stecf/ewg1406>.

Effort regime evaluation for the Baltic

For regulated gears in accordance with Council Regulation (EC) 1097/2007 and unregulated gears combined, the total effort deployed in the Baltic in 2013 was 59% of the 2004 levels but increased by 25% compared to 2012 levels.

Deployed effort of regulated gears in cod plan areas A (subdivisions 22-24), B (subdivisions 25-28) and C (subdivisions 29-32) declined between 2004 and 2009 but fluctuated without clear trend since.

For small boats <8m LOA, data from Estonia was unavailable and data from Finland could not be used.

STECF undertook a provisional quantitative analysis regarding the estimation of effort deployed in units of days at sea by Member State. For this analysis the maximum number of days at sea available to the Member State was calculated as the product of its ceiling in number of days at sea per vessel and the number of active regulated vessels. For each Member State the total national uptake of days at sea is then expressed as a percentage of the calculated maximum effort available to the Member State. With this approach the individual vessels' uptake cannot be determined, nor whether any individual vessel exceeded the ceiling, but only the average uptake per vessel. From this analysis the average uptake of available days at sea across the Member States over the time period 2008-2013 was in the range of 39-47% for the ceiling in area A, 34-41% for the ceiling in the area B and has risen from 42% to 69% for the ceiling in areas A and B combined. Only one Member State slightly exceeded the allowed limit for regulated gears in areas A and B combined in 2011. No clear trend in average uptake in area A or in area B could be revealed over the observed period. For area A and B combined average uptake is higher in 2011-2013 compared to 2008 but very similar over the years 2011-2013.

According to the information submitted by member States, only Denmark has operated under the fully documented fisheries (FDF) scheme in the Baltic in 2012 but no vessels participated in 2013.

Effort regime evaluation for the Kattegat

In 2013 70% of the total effort was deployed by regulated gears, dominated by the TR2 fishery (demersal trawls and seines with mesh 70-99mm). The effort deployed by regulated gears has decreased steadily from 2003 (by 57% between 2003 and 2013). Total effort in Kattegat has decreased by 46% between 2003 and 2013.

Fisheries in the Kattegat are almost exclusively conducted by Denmark and Sweden. There are three effort derogations in place in Kattegat for TR2, CPart13B, CPart13C and CPart11. All the Danish TR2 effort is under the derogation CPart13C from 2010 onwards.

The Swedish regulated TR2 effort has decreased by 82% since 2003, partly due to a move towards the unregulated CPart11 category (achieves <1.5% cod catch by using a 35mm Nephrops sorting grid; introduced in 2003) which constituted 71% of the Swedish TR2 effort in 2013, and partly to an overall decrease in TR2 effort (38% since 2003).

The effort carried out by unregulated gears, including the Swedish Nephrops sorting grid under the derogation CPart11, has increased 43% between 2003 and 2013. It represents 30% of the total effort in 2013.

In 2013 the nominal effort (kW days at sea) deployed by small vessels (LOA<10m) constituted 13% of the total effort in the area.

STECF notes that information on fully documented fisheries FDF was only provided by Sweden and only for 2010. FDF fishing effort and catches appear negligible and are not evaluated further.

STECF notes that that ICES did not provide an analytical assessment of cod in the Kattegat in 2014. STECF EWG 14-06 is therefore unable to provide analyses dealing with the partial fishing mortalities by fisheries (metiers), the respective correlations between partial fishing mortality and fishing effort and the review of reductions in fishing mortality of the effort regulated gear groups in relation to the cod plan provisions.

Effort regime evaluation for the Skagerrak, North Sea including 2EU and Eastern Channel

STECF notes that in this area, a substantial part of the effort is deployed by Non-European fleets (primarily Norway); this component is not accounted for in this report. Norwegian fishing effort is reported to ICES (ICES, 2013). Catch and effort data including the special conditions of the cod management plan in force since 2009 (CPart11 and CPart13) have been provided by all Member States with significant fishing activity in this area. Additionally, distinction is now provided across the various CPart13 specifications (A, B, or C).

The North Sea (area 3b2) is the main fishing area (79% of the total 2013 regulated effort in area 3b), followed by The English Channel (15%, 3b3), while the Skagerrak represents a smaller component (6%, 3b1).

In all three sub areas, regulated effort has decreased since 2003. The estimated overall reduction in effort (kW days at sea) in 2013 of regulated gears in the entire area 3b amounts to 43% compared to the average of 2004-2006 but was marginally higher (1%) compared to 2012.

Overall, the share of regulated gears to total effort in area 3b has also decreased regularly, down to 61% in 2013 on average (but no more than 45% in Skagerrak). In area 3b2 (North Sea), regulated effort is equally shared between beam trawls and demersal trawls/seines (52% and 43% of total 2013 regulated effort respectively). Small mesh beam trawling (80-119 mm, BT2) and demersal trawls/seines with larger mesh sizes (≥ 100 mm, TR1) are the predominant fisheries. There is an increasing trend for large meshed beam trawls (BT1) in recent years. In the Eastern Channel, demersal trawls/seines are also the main gears (63% of the 2013 regulated effort in the area, mainly smaller mesh size 70-99mm TR2), but with beam trawls and passive gears representing important fisheries as well (20% and 16% of the 2013 regulated effort respectively). The main gears in management area 3b1 (Skagerrak) are demersal trawls/seines (86% of the 2013 regulated effort), with a predominance of TR2. However, there was a strong increase in Danish TR3 effort in 2013 compared to 2012.

The unregulated effort has increased in sub-areas 3b2 and 3b3 in 2013 compared to 2012. This, together with the general decreasing trend of regulated effort, means that unregulated effort now represents almost 40% of the total effort in area 3b. This is despite nearly all French TR1 effort being re-classified from the CPart11 exemption in 2012 back to under article 13B.

From 2003 to 2012 the effort of small boats (LOA<10m) gradually increased from 3% to 9% of the overall effort deployed in the entire area 3b (Skagerrak, North Sea and 2EU, Eastern Channel). Absolute effort has been slowly declining since 2010 however and in 2013, the effort from vessels <10m was 8% of the total effort in this area. Unregulated gears account for 60% of total effort from vessels <10m.

In 2012 and 2013 fully documented fisheries represented a similar proportion of the total effort (5.5% and 5.1% respectively). The importance of FDF in the main cod gear (TR1) also remained static (28.8% in 2012, 28.4% in 2013).

Effort regime evaluation for the West of Scotland

The fishery West of Scotland is primarily an otter trawl fishery; beam trawls and static gears are hardly used. Effort within regulated gears is 58.8% less in 2013 compared to 2003. Regulated effort by trawl and seine gears (TR gears under Coun. Reg. (EC) 1342/2008) shows a long term decrease in effort and fell to its lowest level in the time series in 2011, but was stable between 2011 and 2013 for those nations reporting in both years.

Unregulated effort has been increasing since 2010, and has exceeded regulated effort since 2011 and the difference has increased again in 2013.

Overall effort is 11% higher in 2013 compared to 2003 although it has been relatively stable since 2006. Greatest effort comes from Scottish vessels deploying pots.

Effort regime evaluation for the Irish Sea

For boats LOA \geq 10m there has been a 37% decline in Irish Sea nominal effort (kW*days at sea) since 2000, the majority of which occurred between 2003 and 2009. Since 2009 effort has remained relatively constant.

Irish Sea fisheries are predominantly demersal trawling and seining (TR group). Combined, TR effort mirrors the overall effort trend representing 55-60% of total Irish Sea effort. As part of regulated gears, the TR group accounted for over 70% of all effort from 2003, (over 80% since 2008). Within the TR group, the TR2 category (70-99mm mesh sizes) dominates. The majority of TR2 effort is now carried out under Article 13 of Coun. Reg. 1342/2008. A small amount of effort is reported under Article 11 of the regulation (CPart11) since 2010, 4-9%.

During 2006-2013, small boats' effort (LOA<10m) varied without a clear trend and constituted among 12-15% of the overall effort deployed. The majority of effort by the under 10m vessels is directed at pots and traps.

Effort regime evaluation for the Celtic Sea

The review of trends in fisheries-specific effort and catches in the Celtic Sea is presented at the level of aggregation for the fisheries defined in the multi-annual cod plan, to allow managers to evaluate the data with the view to the potential extension of the cod plan to include the Celtic Sea. The Celtic Sea is defined into two management areas, i.e. ICES Sub-divisions 7bcefghjk and ICES Sub-divisions 7fg.

Analysis of the larger area 7bcefghjk is affected by the fact Spanish data are only included for 2012 and 2013 as no data for earlier periods have been submitted by the Spanish Authorities. Area 7fg is only affected to a minor extent.

In 7bcefghjk in terms of kW*days in 2013 France contributed 37%, Ireland 20%, England and Wales 15%, Spain 8%, the Netherlands 8%, Belgium 5%, Scotland 3%, Germany 2% and Denmark 1%.

The demersal fisheries are dominated by the gears TR1, TR2 and BT2 (26%, 19% and 10% of total Celtic Sea effort respectively). In recent years (since 2008) fishing effort has been relatively stable, with the increase for most gears from 2012 due to the inclusion of Spanish data from 2012. The exception is TR1 effort which has been increasing since 2009.

For “unregulated” gears most of the effort is Dutch, French, Danish and Irish pelagic trawl fisheries (17% of total Celtic Sea effort), with a recent (since 2009) increase of Danish and Irish pelagic boats fishing for boarfish in the Celtic Sea.

The overall effort in 7fg decreased between 2003 and 2013, however, in the last two years the effort showed an increase to levels similar to 2004/2005. This increase is mainly due to an increase in effort by the demersal trawlers (TR). The effort in unregulated gears has been increasing steadily since 2006 until 2012, but in 2013 the unregulated gears effort showed a decrease, mainly due to the reduction of effort using pots.

Effort regime evaluation for southern hake and Norway lobster

STECF notes that the major data deficiency in its analyses is the lack of Spanish data in 2010 and 2011. Furthermore it is important to note that Spanish fishing vessels using regulated gears were not granted fishing effort derogations by the Spanish Authorities in 2012 and 2013 as provided for in Annex IIB to the annual TAC and Quota regulations.

The nominal effort of regulated gears (3a-c) declined by 17% during 2007-2013 and by 12% from 2009 to 2013. Regulated trawl (3a) deploys most effort in the area (62%) with most of it (90%) under effort control in 2012 and 2013. Bottom trawl effort subject to effort regulation decreased by 17% between 2007 and 2013 (but only 1.5% between 2009 and 2013).

Passive gears (3b, 3c and 3t) accounted for approximately 27% of all effort in 2012 and 2013. However, such results have a limited meaning regarding the relative fishing pressure exerted by these fleets, since the unit kW*day does not take into account the number of hooks deployed by longlines or the area covered and soak time of passive nets.

In 2012 and 2013, about 19% of the effort was assigned to non-regulated gears (“3t” and “none” gears), of which trammel nets (“3t”) contribute 8% to the overall effort deployed. Most non-regulated effort is deployed by gears that do not target hake, *Nephrops* or anglerfish.

For small vessels (LOA<10m) Portuguese data do not provide gear or fishery specific information. Spain has provided data for 2012 and 2013 only.

Effort regime evaluation for Western Channel sole

STECF notes the majority of fishing effort deployed in the Western Channel is effort that is not being regulated by the Management plan for sole in Division VIIe. The two regulated gear groups, beam trawls (80mm and above; labelled ‘3a’) and the static nets, (Gill and trammel nets up to 219mm mesh size; labelled ‘3b’) account for only a relatively small proportion (about 15%) of the overall deployed effort.

Effort in the regulated beam trawl fleets (gear 3a) decreased gradually from 2% above the 2004-2006 baseline level in 2004 to 37% below that level in 2009 and thereafter has

fluctuated between 30% and 37% below the 2004-2006 level. Effort in the regulated static gear (gear 3b) dropped substantially from 9% above the 2004-2006 level in 2004 to 77% below the 2004-2006 level in 2013. The effort from the vessels <10m fluctuates between 13% and 25% of the effort deployed by the vessels >10m.

STECF notes that only UK (England and Wales) have had vessels operating under an FDF scheme in the Western Channel (2012 and 2013). In 2013 9 vessels (7 in 2012) were operational in the FDF fisheries using the regulated beam trawl gear (3a) and one vessel (same as 2012) using the unregulated beam trawl gear (mesh size <80mm). The total numbers of English vessels operating such gears are 44 and 2 respectively. The effort of the FDF fisheries to the total deployed effort by the regulated beamers (3a) and unregulated beamers amount to 24% and 5% respectively (17% and 1% in 2012).

STECF estimated the uptake of the permitted fishing effort in units of days at sea per vessel. The results should be interpreted with caution as the estimated ceilings are based on number of active vessels times the number of days allowed. STECF notes that the number of active vessels and their associated days at sea may be overestimated (multiple counted) if they changed regulated gears. For the regulated beam trawl fleet (3a), the English series indicate an increasing uptake (47% - 95%) over time whereas the Belgian and the French regulated beam trawl fleets show a stable uptake at a low (around 10%) and high level (around 65%) respectively. The English regulated static gear (3b) show a slight increase in uptake (20%-45%) over time whereas the French regulated static gear shows a stable uptake of around 50%. However, uptake by both French fleets fell sharply in 2013 to approximately 30% and less than 40% respectively.

National amendments to the effort regulations were granted to the UK in 2012 and to the UK and France in 2013. This has the effect of increasing the maximum permitted fishing effort and lowering the percentage uptake of effort. In 2012 UK beam trawl fleet effort uptake fell from 95% to 75% as a result of the extra days allocated. In 2013 the effect was a change in uptake from 85% to 67%. The changes in French uptake were a reduction from 31% to 29% for the beam trawl fleet and a reduction from 38% to 35% for the passive gears fleet.

STECF concludes that if a fishing effort regime in the Western Channel is to be maintained, it would be appropriate to use an alternative measure of effective unit of fishing effort that takes account of vessel size/power and gear effectiveness.

Effort regime evaluation for the Western Waters and Deep Sea

In accordance with the Terms of reference, the Report presents trends in effort for defined fisheries (major gear groups) for 18 management areas within the convention areas of ICES and CECAF. STECF notes that discard information is often scarce.

Effort within the Deep sea and Western waters has been compiled for kW*days-at-sea, GT*days-at-sea, and numbers of vessels. Within the report the focus is on kW*Days at sea. Information on GT*days at sea and numbers of vessels, landings, discards, CPUE and LPUE is available via the website (electronic appendixes to the report): <http://stecf.jrc.ec.europa.eu/web/stecf/ewg1406> Because of problems with data upload from Portugal effort analysis for areas with significant Portuguese effort was not possible (ICES areas IX and X and CECAF Areas 34.1.1, 34.1.2 and 34.2.0).

Bottom trawl effort is concentrated in ICES Area IVa as well as the Continental shelf and slope to the west and southwest of Ireland and the UK.

Pelagic trawling was concentrated to the west of Ireland, and to the west and north of Scotland in the mid-2000s. This effort decreased greatly between 2007 and 2009, increased in 2010 before reducing again in 2011 and 2012. In 2013 effort increased in Areas IVa and IXa, but decreased in areas VIIIa and VIIIb.

Longline effort was concentrated on the shelf and slope between Shetland and Portugal but has been in decline in recent years.

In the mid-2000s gill net effort was concentrated in the Celtic sea and Porcupine Bank. Due to current restrictions in the use of deepwater gill nets much of this effort is now concentrated in the Celtic sea, with some effort in the North sea, west of Scotland and the Bay of Biscay. In 2013 effort increased in areas VIIg and VIb but decreased in area IVb.

Beam trawling is concentrated in the Celtic sea and the western English Channel. While beam trawls are not a deepwater gear some of the species caught are classified under Annex 2.

Effort regime evaluation for the Bay of Biscay

STECF notes that all the analyses and trends presented in the Report include data from Spain for 2012 and 2013. However, Spain did not provide corresponding data for previous years to the DCF data call for fishing effort regime evaluations. In interpreting the trends in fishing effort and landings, it is important to take into account that data from Spain for years prior to 2102 are not included in the tables and graphs presented in the Report.

STECF notes that the multiannual plan for the sustainable exploitation of the stock of sole in the Bay of Biscay (R (EC) 388/2006) prescribes maximum annual fishing capacity for Member States' vessels that hold a special permit to fish. The Report provides fisheries-specific effort data for the Northern Bay of Biscay (ICES Div. VIIIa) and the southern Bay of Biscay (ICES Div. VIIIb).

In 8a-BoB, 90% of 2013 effort is French, 7% Spain, 1% Belgium and 1% Netherlands. The main French fisheries are otter trawl, trammel and gill net and pelagic trawl. The main Spain fisheries are longline, otter trawl and gill net. In 8b-BoB, 67% of effort in 2013 is French, 25% Spain, 6% Belgium and 1% Netherlands and England. The main French fisheries are otter trawl, trammel and gill net, longline and pelagic trawl. The main Spanish fisheries are otter trawl, pelagic seine and longline.

Information on the nominal effort of the specific condition (special fishing permit) SBCIIIART5 has only been provided for the full time series by Belgian. It has only been provided for the 2010-2013 period for French vessels. This results in an apparent shift in effort for the main gear type from the "none" category to the specon "SBCIIIART5". Following these considerations, no firm conclusion could be drawn on trends in effort under specon SBCIIIART5 before 2010.

Due to data deficiencies, STECF was unable to fully evaluate the effort regime for sole in the Bay of Biscay. Spain provided data on fishing capacity in the unit of gross tonnage (GT) as requested in the data call, for the year 2012 only, France provided data in units of kW not GT.

Between 2012 and 2013 (the two years for which Spanish data is available) overall effort in units of kW days at sea fell by 10% in area VIIIa and increased by 1% in VIIIb.

Almost all supplied effort data on small boats is French. Also the effort data available for small boats before 2010 seem to be incomplete. Over the last four years, small boats represent almost 20% of the effort deployed by the large vessels in 8a and 10% in 8b.

EXPERT WORKING GROUP REPORT

REPORT TO THE STECF

**EXPERT WORKING GROUP ON
FISHING EFFORT REGIME EVALUATIONS
PART 1 (EWG-14-06)**

ISPRA, ITALY, 9-13 June 2014

This report does not necessarily reflect the view of the STECF and the European Commission and in no way anticipates the Commission's future policy in this area

1 EXECUTIVE SUMMARY

STECF EWG 14-06 notes that it has addressed the effort data related ToR regarding the requested fishing effort regime evaluations in the

1. Eastern and Western Baltic,
2. the Kattegat,
3. the Skagerrak, North Sea, European waters in ICES Div.2 and the Eastern Channel,
4. to the West of Scotland,
5. Irish Sea,
6. Celtic Sea,
7. Atlantic waters off the Iberian Peninsula,
8. Western Channel,
9. Western Waters and Deep Sea
10. Bay of Biscay.

The EWG 14-06 provides updated estimates of trends in fishing effort for effort regulated and non-regulated fisheries by Member States.

Since conclusion of the 2013 evaluation of effort regimes the means of data aggregation has been transferred to a new software architecture. There are three motivations for this

1. Greater data security as all data is processed on a secure server.
2. Increased quality assurance as data incorporated in the final aggregated results can only be included through use of the JRC upload facility.
3. Greater transparency of the data input and processing through a documented upload facility and processing algorithm and because of point two.

The time needed for processing has also considerably reduced, a welcome development given that, unfortunately, problems with national data submissions are still discovered during EWG meetings requiring re-compilation of aggregated data. This point is likely to become more significant as the quantity of data required for processing continues to increase.

All data used by the EWG 14-06 was submitted through a revised upload facility that functioned well and all processing was performed on the JRC secure server. Documentation of the processing is in progress and will be in a flow chart format as produced for the old architecture as part of the transition process. Time limits prevented full testing of the new system and outstanding software problems when aggregating catch data meant it was not possible for the EWG to review catch data or undertake ToR based on catch data. These ToRs will be dealt with during the forthcoming STECF EWG 14-13 fishing effort regime evaluations part 2 (29 September-03 October 2014, Barza d'Ispra, Italy).

2014 DCF Fishing Effort Data Call

The report of EWG 14-06 is based on data submitted by Member States in response to the DCF fishing effort data call in 2014. STECF notes a general improvement in Member States' submissions with regard to data completeness and quality as well as improved compliance with deadlines. This was probably aided by the fact no amendments were deemed necessary to the 2014 DCF

data call and therefore no re-submissions of data were required and only took place if a member state needed to correct data submitted in previous years.

However, the work of the EWG 14-06 was still compromised by delays in some Member States' submissions, incomplete and erroneous data submissions and re-submissions.

STECF EWG 14-06 notes that fisheries-specific parameters (relating to effort only) for the various fishing effort regimes can be downloaded at the corresponding aggregation level as digital Appendixes to the present report from the EWG 14-06 web page: <https://stecf.jrc.ec.europa.eu/web/stecf/ewg1406>.

Major findings regarding the regional fishing effort regime evaluations as derived by STECF EWG 14-06 are summarized in the following sections.

Effort regime evaluation for the Baltic

For regulated gears in accordance with Council Regulation (EC) 1097/2007 and unregulated gears combined the total effort deployed in the Baltic in 2013 was 41% lower compared to 2004 but 25% higher compared with 2012.

Deployed effort of regulated gears in cod plan areas A (subdivisions 22-24), B (subdivisions 25-28) and C (subdivisions 29-32) declined between 2004 and 2009 but fluctuated without clear trend since.

For small boats <8m LOA, data from Estonia was unavailable and data from Finland could not be used. Of the usable data the majority of effort was distributed between non-regulated gill nets (46%), pots (23%) and regulated gill nets (12%)

STECF undertook a provisional quantitative analysis regarding the estimation of effort deployed in units of days at sea by Member State. For this analysis the maximum number of days at sea available to the Member State was calculated as the product of its ceiling in number of days at sea per vessel and the number of active regulated vessels. For each Member State the total national uptake of days at sea is then expressed as a percentage of the calculated maximum effort available to the Member State. With this approach the individual vessels' uptake cannot be determined, nor whether any individual vessel exceeded the ceiling, but only the average uptake per vessel. From this analysis the average uptake of available days at sea across the Member States over the time period 2008-2013 was in the range of 39-47% for the ceiling in area A, 34-41% for the ceiling in the area B and has risen from 42% to 69% for the ceiling in areas A and B combined. Only one Member State slightly exceeded the allowed limit for regulated gears in areas A and B combined in 2011. No clear trend in average uptake in area A or in area B could be revealed over the observed period. For area A and B combined average uptake is higher in 2011-2013 compared to 2008 but very similar over the years 2011-2013.

According to the information submitted by member States, only Denmark has operated under the fully documented fisheries (FDF) scheme in the Baltic in 2012. The reported Danish catch of cod caught in fully documented fisheries with regulated gears amounted to 333 t in area A and 406 t in area B, representing 3% of the overall catch. A preliminary analyses of cod selectivity revealed that non-FDF fisheries were catching younger fish. However, the effects

of different age reading methods applied in different national institutes remain unclear. Such preliminary results require further investigation.

Effort regime evaluation for the Kattegat

In 2013 70% of the total effort was deployed by gears that are under effort regulation in the cod plan, dominated by the TR2 fishery (demersal trawls and seines with mesh 70-99mm). The effort deployed by regulated gears has decreased steadily from 2003 (by 57% between 2003 and 2013). Total effort in Kattegat has decreased by 46% between 2003 and 2013.

Fisheries in the Kattegat are almost exclusively conducted by Denmark and Sweden. There are three effort derogations in place in Kattegat for TR2, CPart13B, CPart13C and CPart11. All the Danish TR2 effort is under the derogation CPart13C from 2010 onwards. STECF notes that the uptake of the regulated gear TR2 exceeds the maximum effort levels defined in the annual TAC and quota regulations since 2010 as Member States applied additional effort allocations under article 13 of the cod plan. All other regulated gear categories in Kattegat are well below their respective effort base lines.

The Swedish regulated TR2 effort has decreased by 82% since 2003, partly due to a move towards the unregulated CPart11 category (achieves <1.5% cod catch by using a 35mm Nephrops sorting grid; introduced in 2003) which constituted 71% of the Swedish TR2 effort in 2013, and partly to an overall decrease in TR2 effort (38% since 2003).

The effort carried out by unregulated gears, including the Swedish Nephrops sorting grid under the derogation CPart11, has increased 43% between 2003 and 2013. It represents 30% of the total effort in 2013.

In 2013 the nominal effort (kW days at sea) deployed by small vessels (LOA<10m) constituted 13% of the total effort in the area.

STECF notes that information on fully documented fisheries FDF was only provided by Sweden and only for 2010. FDF fishing effort and catches appear negligible and are not evaluated further.

STECF notes that that ICES did not provide an analytical assessment of cod in the Kattegat in 2014. STECF EWG 14-06 is therefore unable to provide analyses dealing with the partial fishing mortalities by fisheries (metiers), the respective correlations between partial fishing mortality and fishing effort and the review of reductions in fishing mortality of the effort regulated gear groups in relation to the cod plan provisions.

Effort regime evaluation for the Skagerrak, North Sea including 2EU and Eastern Channel

STECF notes that in this area, a substantial part of the effort is deployed by Non-European fleets (primarily Norway); this component is not accounted for in this report. Norwegian fishing effort is reported to ICES (ICES, 2013). Catch and effort data including the special conditions of the cod management plan in force since 2009 (CPart11 and CPart13) have been provided by all Member States with significant fishing activity in this area. Additionally, distinction is now provided across the various CPart13 specifications (A, B, or C).

The North Sea (area 3b2) is the main fishing area (79% of the total 2013 regulated effort in area 3b), followed by The English Channel (15%, 3b3), while the Skagerrak represents a smaller component (6%, 3b1).

In all three sub areas, regulated effort has decreased since 2003. The estimated overall reduction in effort (kW days at sea) in 2013 of regulated gears in the entire area 3b amounts to 43% compared to the average of 2004-2006 but was marginally higher (1%) compared to 2012.

Overall, the share of regulated gears to total effort in area 3b has also decreased regularly, down to 61% in 2013 on average (but no more than 45% in Skagerrak). In area 3b2 (North Sea), regulated effort is equally shared between beam trawls and demersal trawls/seines (52% and 43% of total 2013 regulated effort respectively). Small mesh beam trawling (80-119 mm, BT2) and demersal trawls/seines with larger mesh sizes (≥ 100 mm, TR1) are the predominant fisheries. There is an increasing trend for large meshed beam trawls (BT1) in recent years. In the Eastern Channel, demersal trawls/seines are also the main gears (63% of the 2013 regulated effort in the area, mainly smaller mesh size 70-99mm TR2), but with beam trawls and passive gears representing important fisheries as well (20% and 16% of the 2013 regulated effort respectively). The main gears in management area 3b1 (Skagerrak) are demersal trawls/seines (86% of the 2013 regulated effort), with a predominance of TR2. However, there was a strong increase in Danish TR3 effort in 2013 compared to 2012.

The unregulated effort has increased in sub-areas 3b2 and 3b3 in 2013 compared to 2012. This, together with the general decreasing trend of regulated effort, means that unregulated effort now represents almost 40% of the total effort in area 3b. This is despite nearly all French TR1 effort being re-classified from the CPart11 exemption in 2012 back to under article 13B.

From 2003 to 2012 the effort of small boats (LOA<10m) gradually increased from 3% to 9% of the overall effort deployed in the entire area 3b (Skagerrak, North Sea and 2EU, Eastern Channel). Absolute effort has been slowly declining since 2010 however and in 2013, the effort from vessels <10m was 8% of the total effort in this area. Unregulated gears account for 60% of total effort from vessels <10m.

In 2012 and 2013 fully documented fisheries represented a similar proportion of the total effort (5.5% and 5.1% respectively). The importance of FDF in the main cod gear (TR1) also remained static (28.8% in 2012, 28.4% in 2013).

Effort regime evaluation for the West of Scotland

The fishery West of Scotland is primarily an otter trawl fishery; beam trawls and static gears are hardly used. Effort within regulated gears is 58.8% less in 2013 compared to 2003. Regulated effort by trawl and seine gears (TR gears under Coun. Reg. (EC) 1342/2008) shows a long term decrease in effort and fell to its lowest level in the time series in 2011, but was stable between 2011 and 2013 for those nations reporting in both years.

Unregulated effort has been increasing since 2010, and has exceeded regulated effort since 2011 and the difference has increased again in 2013.

Overall effort is 11% higher in 2013 compared to 2003 although it has been relatively stable since 2006. Greatest effort comes from Scottish vessels deploying pots.

Effort regime evaluation for the Irish Sea

For boats LOA \geq 10m there has been a 37% decline in Irish Sea nominal effort (kW*days at sea) since 2000, the majority of which occurred between 2003 and 2009. Since 2009 effort has remained relatively constant.

Irish Sea fisheries are predominantly demersal trawling and seining (TR group). Combined, TR effort mirrors the overall effort trend representing 55-60% of total Irish Sea effort. As part of regulated gears, the TR group accounted for over 70% of all effort from 2003, (over 80% since 2008). Within the TR group, the TR2 category (70-99mm mesh sizes) dominates. The majority of TR2 effort is now carried out under Article 13 of Coun. Reg. 1342/2008. A small amount of effort is reported under Article 11 of the regulation (CPart11) since 2010, 4-9%.

During 2006-2013, small boats' effort (LOA<10m) varied without a clear trend and constituted among 12-15% of the overall effort deployed. The majority of effort by the under 10m vessels is directed at pots and traps.

Effort regime evaluation for the Celtic Sea

The review of trends in fisheries-specific effort and catches in the Celtic Sea is presented at the level of aggregation for the fisheries defined in the multi-annual cod plan, to allow managers to evaluate the data with the view to the potential extension of the cod plan to include the Celtic Sea. The Celtic Sea is defined into two management areas, i.e. ICES Sub-divisions 7bcefghjk and ICES Sub-divisions 7fg.

Analysis of the larger area 7bcefghjk is affected by the fact Spanish data are only included for 2012 and 2013 as no data for earlier periods have been submitted by the Spanish Authorities. Area 7fg is only affected to a minor extent.

In 7bcefghjk in terms of kW*days in 2013 France contributed 37%, Ireland 20%, England and Wales 15%, Spain 8%, the Netherlands 8%, Belgium 5%, Scotland 3%, Germany 2% and Denmark 1%.

The demersal fisheries are dominated by the gears TR1, TR2 and BT2 (24%, 18% and 10% of total Celtic Sea effort respectively). In recent years (since 2008) fishing effort has been relatively stable, with the increase for most gears from 2012 due to the inclusion of Spanish data from 2012. The exception is TR1 effort which has been increasing since 2009.

For "unregulated" gears most of the effort is Dutch, French, Danish and Irish pelagic trawl fisheries (17% of total Celtic Sea effort), with a recent (since 2009) increase of Danish and Irish pelagic boats fishing for boarfish in the Celtic Sea.

The overall effort in 7fg decreased between 2003 and 2013, however, in the last two years the effort showed an increase to levels similar to 2004/2005. This increase is mainly due to an increase in effort by the demersal trawlers (TR). The effort in unregulated gears has been increasing steadily since 2006 until 2012, but in 2013 the unregulated gears effort showed a decrease, mainly due to the reduction of effort using pots.

Effort regime evaluation for southern hake and Norway lobster

STECF notes that the major data deficiency in its analyses is the lack of Spanish data in 2010 and 2011. Furthermore it is important to note that Spanish fishing vessels using regulated gears were not granted fishing effort derogations by the Spanish Authorities in 2012 and 2013 as provided for in Annex IIB to the annual TAC and Quota regulations.

The nominal effort of regulated gears (3a-c) declined by 17% during 2007-2013 and by 12% from 2009 to 2013. Regulated trawl (3a) deploys most effort in the area (62%) with most of it (90%) under effort control in 2012 and 2013. Bottom trawl effort subject to effort regulation decreased by 17% between 2007 and 2013 (but only 1.5% between 2009 and 2013).

Passive gears (3b, 3c and 3t) accounted for approximately 27% of all effort in 2012 and 2013. However, such results have a limited meaning regarding the relative fishing pressure exerted by these fleets, since the unit kW*day does not take into account the number of hooks deployed by longlines or the area covered and soak time of passive nets.

In 2012 and 2013, about 19% of the effort was assigned to non-regulated gears (“3t” and “none” gears), of which trammel nets (“3t”) contribute 8% to the overall effort deployed. Most non-regulated effort is deployed by gears that do not target hake, *Nephrops* or anglerfish.

For small vessels (LOA<10m) Portuguese data do not provide gear or fishery specific information. Spain has provided data for 2012 and 2013 only.

Effort regime evaluation for Western Channel sole

STECF notes the majority of fishing effort deployed in the Western Channel is effort that is not being regulated by the Management plan for sole in Division VIIe. The two regulated gear groups, beam trawls (80mm and above; labelled ‘3a’) and the static nets, (Gill and trammel nets up to 219mm mesh size; labelled ‘3b’) account for only a relatively small proportion (about 15%) of the overall deployed effort.

Effort in the regulated beam trawl fleets (gear 3a) decreased gradually from 2% above the 2004-2006 baseline level in 2004 to 37% below that level in 2009 and thereafter has fluctuated between 30% and 37% below the 2004-2006 level. Effort in the regulated static gear (gear 3b) dropped substantially from 9% above the 2004-2006 level in 2004 to 77% below the 2004-2006 level in 2013. The effort from the vessels <10m fluctuates between 13% and 25% of the effort deployed by the vessels >10m.

STECF notes that only UK (England and Wales) have had vessels operating under an FDF scheme in the Western Channel (2012 and 2013). In 2013 9 vessels (7 in 2012) were operational in the FDF fisheries using the regulated beam trawl gear (3a) and one vessel (same as 2012) using the unregulated beam trawl gear (mesh size <80mm). The total numbers of English vessels operating such gears are 44 and 2 respectively. The effort of the FDF fisheries to the total deployed effort by the regulated beamers (3a) and unregulated beamers amount to 24% and 5% respectively (17% and 1% in 2012).

STECF estimated the uptake of the permitted fishing effort in units of days at sea per vessel. The results should be interpreted with caution as the estimated ceilings are based on number of active vessels times the number of days allowed. STECF notes that the number of active

vessels and their associated days at sea may be overestimated (multiple counted) if they changed regulated gears. For the regulated beam trawl fleet (3a), the English series indicate an increasing uptake (47% - 95%) over time whereas the Belgian and the French regulated beam trawl fleets show a stable uptake at a low (around 10%) and high level (around 65%) respectively. The English regulated static gear (3b) show a slight increase in uptake (20%-45%) over time whereas the French regulated static gear shows a stable uptake of around 50%. However, uptake by both French fleets fell sharply in 2013 to approximately 30% and less than 40% respectively.

National amendments to the effort regulations were granted to the UK in 2012 and to the UK and France in 2013. This has the effect of increasing the maximum permitted fishing effort and lowering the percentage uptake of effort. In 2012 UK beam trawl fleet effort uptake fell from 95% to 75% as a result of the extra days allocated. In 2013 the effect was a change in uptake from 85% to 67%. The changes in French uptake were a reduction from 31% to 29% for the beam trawl fleet and a reduction from 38% to 35% for the passive gears fleet.

Effort regime evaluation for the Western Waters and Deep Sea

In accordance with the Terms of reference, the Report presents trends in effort for defined fisheries (major gear groups) for 18 management areas within the convention areas of ICES and CECAF. STECF notes that discard information is often scarce.

Effort within the Deep sea and Western waters has been compiled for kW*days-at-sea, GT*days-at-sea, and numbers of vessels. Within the report the focus is on kW*Days at sea. Information on GT*days at sea and numbers of vessels, landings, discards, CPUE and LPUE is available via the website (electronic appendixes to the report): <http://stecf.jrc.ec.europa.eu/web/stecf/ewg1406> Because of problems with data upload from Portugal effort analysis for areas with significant Portuguese effort was not possible (ICES areas IX and X and CECAF Areas 34.1.1, 34.1.2 and 34.2.0).

Bottom trawl effort is concentrated in ICES Area IVa as well as the Continental shelf and slope to the west and southwest of Ireland and the UK.

Pelagic trawling was concentrated to the west of Ireland, and to the west and north of Scotland in the mid-2000s. This effort decreased greatly between 2007 and 2009, increased in 2010 before reducing again in 2011 and 2012. In 2013 effort increased in Areas IVa and IXa, but decreased in areas VIIIa and VIIIb.

Longline effort was concentrated on the shelf and slope between Shetland and Portugal but has been in decline in recent years.

In the mid-2000s gill net effort was concentrated in the Celtic sea and Porcupine Bank. Due to current restrictions in the use of deepwater gill nets much of this effort is now concentrated in the Celtic sea, with some effort in the North sea, west of Scotland and the Bay of Biscay. In 2013 effort increased in areas VIIg and VIb but decreased in area IVb.

Beam trawling is concentrated in the Celtic sea and the western English Channel. While beam trawls are not a deepwater gear some of the species caught are classified under Annex 2.

Effort regime evaluation for the Bay of Biscay

STECF notes that all the analyses and trends presented in the Report include data from Spain for 2012 and 2013. However, Spain did not provide corresponding data for previous years to the DCF data call for fishing effort regime evaluations. In interpreting the trends in fishing effort and landings, it is important to take into account that data from Spain for years prior to 2102 are not included in the tables and graphs presented in the Report.

STECF notes that the multiannual plan for the sustainable exploitation of the stock of sole in the Bay of Biscay (R (EC) 388/2006) prescribes maximum annual fishing capacity for Member States' vessels that hold a special permit to fish. The Report provides fisheries-specific effort data for the Northern Bay of Biscay (ICES Div. VIIIa) and the southern Bay of Biscay (ICES Div. VIIIb).

In 8a-BoB, 90% of 2013 effort is French, 7% Spain, 1% Belgium and 1% Netherlands. The main French fisheries are otter trawl, trammel and gill net and pelagic trawl. The main Spain fisheries are longline, otter trawl and gill net. In 8b-BoB, 67% of effort in 2013 is French, 25% Spain, 6% Belgium and 1% Netherlands and England. The main French fisheries are otter trawl, trammel and gill net, longline and pelagic trawl. The main Spanish fisheries are otter trawl, pelagic seine and longline.

Due to data deficiencies, STECF was unable to fully evaluate the effort regime for sole in the Bay of Biscay. Spain provided data on fishing capacity in the unit of gross tonnage (GT) as requested in the data call, for the year 2012 only, France provided data in units of kW not GT.

Between 2012 and 2013 (the two years for which Spanish data is available) overall effort in units of kW days at sea fell by 10% in area VIIIa and increased by 1% in VIIIb.

Almost all effort of small boats is French. No Spanish, Belgium nor Netherlands data are available for small boats. Also the effort data available for small boats before 2010 seem to be incomplete. Small boats represent, the last four years, almost 20% of the effort deployed by the large vessels in 8a and 10% in 8b.

2 RECOMMENDATIONS OF THE WORKING GROUP

The EWG 14-06 has no specific recommendations.

3 INTRODUCTION

The STECF EWG 14-06 met during 9-13 June 2014 at the Hotel Europa, Ispra, Italy. The meeting started by 9 am on 9 June and was adjourned by 13.00 on 13 June 2014. Working conditions provided were considered fair.

3.1 Terms of Reference for EWG 14-06 and EWG 14-13

Background

The Commission consults the STECF 'Working Group on fishing effort regime evaluations' on a review of fisheries regulated through fishing effort management schemes adopted in application of

- ✓ the long term plan for cod stocks [R(EC) No 1342/2008],
- ✓ the recovery plan for Southern hake and Norway lobster stocks in the Cantabrian Sea and Western Iberian peninsula [R(EC) No 2166/2005],
- ✓ the multi-annual plan for the North Sea plaice and sole stocks [R(EC) No 676/2007],
- ✓ the multi-annual plan of Western Channel sole stock [R(EC) No 509/2007],
- ✓ the multi-annual plan for the cod stocks in the Baltic Sea [R(EC) No 1098/2007],
- ✓ the multi-annual plan for the sustainable exploitation of the stock of sole in the Bay of Biscay [R(EC) No 388/2006],
- ✓ R(EC) No 2347/2002 establishing specific access requirements and associated conditions applicable to fishing for deep sea stocks, and
- ✓ R(EC) No 1954/2003 on the management of the fishing effort relating to certain Community fishing areas and resources – so called Western Waters regime.

The overarching request is for: i) an assessment of fishing effort deployed by fisheries

and métiers which are currently affected by fishing effort management schemes as defined in Annex II of the TAC and Quota Regulations Regulation and including an assessment of fishing effort deployed by fisheries and métiers which would be affected by the extension of the cod recovery plan to the Celtic Sea and an assessment of effort in the Biscay sole fishery.; ii) an assessment of effort in the Baltic Sea and iii) an assessment of effort in Deep Sea and Western Waters regimes.

There will be two meetings of this STECF Working Group which will take place from 09 to 13 June 2014 and from 29 September to 03 October 2014.

Terms of Reference: see annex

Annex

1 – Assessment of fishing effort deployed by fisheries and métiers which are currently affected by fishing effort management schemes defined in the Baltic Sea cod management plan R(EC) No 1098/2007

Terms of Reference:

1. To provide historical series, as far back in time as possible, according to each of the following fishing areas:

Areas covered by the R(EC) No 1098/2007 (Baltic Sea)

- (i) ICES division 22 to 24,
- (ii) ICES divisions 25 to 28, by distinguishing areas 27 and 28.2
- (iii) ICES divisions 29 to 32,

The data should also be broken down by

Member State;

Regulated gear types defined in **R(EC) No 1098/2007** (and by associated special conditions defined in Appendix 6 of the data call);

Unregulated gear types catching cod in fishing areas (i), (ii) and (iii);

for the following parameters:

- a. Fishing effort, measured in kW.days and in GT.days

b. Fishing activity measured in days absent from port (according to definitions adopted in R(EC) No 1098/2007) and fishing capacity measured in kW, GT and in number of vessels concerned per year.

c. Catches (landings and discards provided separately) of cod in the Baltic Sea by weight and by numbers at age.

d. Catches (landings and discards provided separately) of non-cod in the Baltic Sea by species, by weight and by numbers at age.

e. Landings Per Unit of Effort (LPUE) and Catches Per Unit Effort (CPUE) of cod in the Baltic Sea (such data shall be issued by Member state, fishing area (i), (ii) and (iii) and fishing gear concerned in accordance with **Art. 3 of R(EC) No 2187/2005**).

2. To assess the fishing effort and catches (landings and discards separately) of cod in the Baltic Sea and associated species corresponding to vessels of length overall smaller than 8 metres in each fishery, by gear and by Member State.

3. To quantify the evolution of the calculated maximum effort in units of days at sea allocated annually to the cod fleet (regulated gear types) and the uptake of this effort.

4. To assess the catches (absolute values, landings and discards provided separately) and effort deployed in 2011 to 2013 corresponding to vessels participating in trials on fully documented fisheries FDF, by species, by gear and Member State, with the aim to determine the quality of the data submitted, the potentials and limitations of the fully documented fisheries and to what extent in particular catches (absolute values, landings and discards provided separately) differ from the figures estimated by the STECF for vessels not participating in these trials. STECF is requested to quantify and comment on the extent of changes in cod selectivity by FDF fisheries in comparison with the fisheries not participating in FDF schemes. If discard values are not provided or are zero, the assessment should be made on the basis of reported catch composition and its age structure.

5. To plot the spatial distribution of the fishing effort in units of hours fished by regulated gears deployed in the Baltic Sea, according to data reported in logbooks on the basis of ICES statistical rectangles and to provide interpretation of any changes or trends.

6. To comment on data quality and to highlight any unexpected evolutions in the estimated parameters which are not in line with the general trend, in particular as regards discard estimates of cod and pelagic species.

7. To assess and present in a tabular form the annual partial fishing mortalities of cod, for landings and discards separately, as generated by the effort regulated gears and the non-regulated gears by fishing areas and Member States, the latter non-regulated gears as a single lump group. The trends in gear group specific partial fishing mortalities shall then be compared with (correlated against) the trends in gear group specific fishing effort (units of kW days at sea) of the gears mentioned by fishing areas and Member States.

8. To identify, based on available data on fisheries specific landings and effort by statistical rectangle, ways to estimate standardised catchability indices for cod in the Baltic, considering the best practice to account for discards and to raise landings to catch figures. Detailed maps on estimated annual cod catchability indices shall then be presented for these areas.

2 – Assessment of fishing effort deployed by fisheries and métiers which are currently affected by fishing effort management schemes defined in the Kattegat (Annex IIA to Regulation (EC) No 39/2013 and 40/2013)

Terms of Reference:

1. To provide historical series, as far back in time as possible, according to each of the following fishing area:

Kattegat (ICES functional unit IIIaS)

The data should also be broken down by

Member State;

Regulated gear types defined in **Annex I to R(EC) No 1342/2008** (and by associated special conditions defined in the Appendix 6 of the data call);

Unregulated gear types catching cod;

for the following parameters:

- a. Fishing effort, measured in kW.days, in GT.days, in number of vessels concerned.
- b. Catches (landings and discards provided separately) of cod by weight and by numbers at age.
- c. Catches (landings and discards provided separately) of non-cod by species, by weight and by numbers at age

d. Landings Per Unit of Effort (LPUE) and Catches Per Unit Effort (CPUE) of cod (such data shall be issued by Member state, fishing area and fishing effort group designed in **Annex I to R(EC) No 1342/2008**).

2. Based on the information compiled under point (1) above, to rank fishing effort groups as designed in **Annex I to R(EC) No 1342/2008**, on the basis of their contribution to catches including estimated discards and landings expressed in weight of cod.

3. To assess the fishing effort and catches (landings and discards) of cod and associated species corresponding to vessels of length overall smaller than 10 metres in each fishery, by gear (corresponding to regulated and unregulated gear as defined in the Annex II framework) and by Member State according to sampling plans implemented to estimate these parameters.

4 To assess the catches (absolute values, landings and discards provided separately) and effort deployed in 2011 to 2013 corresponding to vessels participating in trials on fully documented fisheries, by species, by gear and Member State, with the aim to determine the quality of the data submitted, the potentials and limitations of the fully documented fisheries and to what extent in particular catches (absolute values, landings and discards provided separately) differ from the figures estimated by the STECF for vessels not participating in these trials. STECF is requested to quantify and comment on the extent of changes in cod selectivity by FDF fisheries in comparison with the fisheries not participating in FDF schemes. If discard values are not provided or are zero, the assessment should be made on the basis of reported catch composition and its age structure.

5. To plot, the spatial distribution of the fishing effort in units of hours fished of regulated gears deployed in the Kattegat, according to data reported in logbooks on the basis of ICES statistical rectangles and to provide interpretation of any changes or trends.

6. To comment on data quality and to highlight any unexpected evolutions in the estimated parameters which are not in line with the general trend, in particular as regards the discard estimates of cod, Norway lobster and pelagic species.

7. To develop and calculate standard cpue's, lpue's and standard correction factors to be used (within a MS) for transferring effort across gear groups with different cpue (Reg. (EC) No 1342/2008 Art 17, paragraph 5).

Commission Regulation (EU) No 237/2010 article 8(b) describes:

Correction factor = cpue donor gear /cpue receiving gear

The cpue's and lpue's have to be calculated per area per gear group (regulated gear) and presented in a table. Another table shall be provided for the standard correction factors between the regulated gear groups based on each cpue and lpue. Correction factors ≥ 1 will all be set at value 1.

8. To assess and present in a tabular form the annual partial fishing mortalities of cod, for landings and discards separately, as generated by the effort regulated gears (Annex I to Council Reg. 1342/2008) and the non-regulated gears by Member States, the latter non-regulated gears as a single lump group. The trends in gear group specific partial fishing mortalities shall then be compared with (correlated against) the trends in gear group specific fishing effort (in units of kW days at sea) of the gears mentioned by Member States.

9. To quantitatively assess the annual trend in cod mortality that would have resulted from the fishing mortality adjustments in Article 7 and the trends in fishing effort that would have resulted from Article 12 of Council Reg. 1342/2008, for the period 2008 to 2013. Taking into account the results from point (8) STECF is requested to comment on whether and to what extent the Member States application of Article 13, Paragraph 2, points a, b, and c have supported the reduction of cod fishing mortality as defined in Articles 7 and 9 and whether the increased fishing effort deployed by Member States was commensurate with the fishing mortality level target for 2013. The group is requested to quantify for each Member State and effort group (Annex I to Council Reg. 1342/2008) the partial target fishing mortality of cod, and partial fishing mortality of cod generated in excess of the cod plan, and, if a significant correlation between cod fishing mortality and fishing effort exists, the corresponding amounts of target fishing effort and of the excessive fishing effort in units of kW.days at sea.

3 – Assessment of fishing effort deployed by fisheries and métiers which are currently affected by fishing effort management schemes defined in the Skagerrak, the North Sea and the Eastern Channel (Annex IIA to Regulation (EC) No 39/2013 and 40/2013)

Terms of Reference:

1. To provide historical series, as far back in time as possible, according to each of the following fishing areas:

- (i) Skagerrak (ICES functional Unit IIIaN),
- (ii) North Sea (EC waters of ICES sub-area IIa and ICES sub-area IV),
- (iii) Eastern channel (ICES division VIIId)

The data should also be broken down by

Member State;

Regulated gear types designed in **Annex I to R(EC) No 1342/2008** (and by associated special conditions defined in Appendix 6 of the data call);

Unregulated gear types catching cod, sole and plaice in fishing areas (i), (ii) and (iii);

for the following parameters:

- a. Fishing effort, measured in kW.days, in GT.days, in number of vessels concerned and days at sea for the sole and plaice fishery.
- b. Fishing capacity in kW.
- c. Catches (landings and discards provided separately) of cod, sole and plaice by weight and by numbers at age.

d. Catches (landings and discards provided separately) of non-cod, non-sole and non-plaice by species, by weight and by numbers at age.

e. Landings Per Unit of Effort (LPUE) and Catches Per Unit Effort (CPUE) of cod, sole and plaice (such data shall be issued by Member state, fishing area and fishing effort group designed in **Annex I to R(EC) No 1342/2008**).

2. Based on the information compiled under point (1) above, to rank fishing effort groups as designed in **Annex I to R(EC) No 1342/2008**, on the basis of their contribution to catches including discards and landings expressed in weight of cod, sole and plaice.

3. To assess the fishing effort and catches (landings and discards) of cod, sole and plaice and associated species corresponding to vessels of length overall smaller than 10 metres in each fishery, by gear (corresponding to regulated and unregulated gear as defined in the Annex II framework) and by Member State.

4. To assess the catches (absolute values, landings and discards provided separately) and effort deployed in 2011 to 2013 corresponding to vessels participating in trials on fully documented fisheries, by species, by gear and Member State, with the aim to determine the quality of the data submitted, the potentials and limitations of the fully documented fisheries and to what extent in particular catches (absolute values, landings and discards provided separately) differ from the figures estimated by the STECF for vessels not participating in these trials. STECF is requested to quantify and comment on the extent of changes in cod selectivity by FDF fisheries in comparison with the fisheries not participating in FDF schemes. If discard values are not provided or are zero, the assessment should be made on the basis of reported catch composition and its age structure.

5. To plot the spatial distribution of the fishing effort in units of hours fished of regulated gears deployed in the Skagerrak, the North Sea and the Eastern Channel, according to data reported in logbooks on the basis of ICES statistical rectangles and to provide interpretation of any changes or trends.

6. To comment on data quality and highlight any unexpected evolutions in the estimated parameters which are not in line with the general trend, in particular as regards the discard estimates of cod, Norway lobster and pelagic species.

7. To develop and calculate standard cpue's, lpue's and standard correction factors to be used (within a MS) for transferring effort across gear groups with different cpue (Reg. (EC) No 1342/2008 Art 17, paragraph 5).

Commission Regulation (EU) No 237/2010 article 8(b) describes:

$$\text{Correction factor} = \text{cpue donor gear} / \text{cpue receiving gear}$$

The cpue's and lpue's have to be calculated per area per gear group (regulated gear) and presented in a table. Another table shall be provided for the standard correction factors between regulated gears groups based on each cpue and lpue. Correction factors ≥ 1 will all be set at value 1.

8. To assess and present in a tabular form the annual partial fishing mortalities of cod, haddock, saithe (Skagerrak and North Sea only), whiting, plaice (North Sea only) and sole (North Sea only), for landings and discards separately, as generated by the effort regulated gears (Annex I to Council Reg. 1342/2008) and the non-regulated gears by Member States, the latter non-regulated gears as a single lump group. The trends in gear group specific partial fishing mortalities shall then be compared with (correlated against) the trends in gear group specific fishing effort (in units of kW days at sea) of the gears mentioned by Member States.

9. To quantitatively assess the annual trend in cod mortality that would have resulted from the fishing mortality adjustments in Article 8 and the trends in fishing effort that would have resulted from Article 12 of Council Reg. 1342/2008, for the period 2008 to 2013.. STECF is requested to comment on whether and to what extent the Member States application of Article 13, Paragraph 2, points a, b, and c have supported the reduction of cod fishing mortality as defined in Articles 8 and 9 and whether the increased fishing effort deployed by Member States was commensurate with the fishing mortality level target for 2013. The group is requested to quantify for each Member State and effort group (Annex I to Council Reg. 1342/2008) the partial target fishing mortality of cod, and partial fishing mortality of cod generated in excess of the cod plan, and, if a significant correlation between cod fishing mortality and fishing effort exists, the corresponding amounts of target fishing effort and of the excessive fishing effort in units of kW.days at sea

10. To identify, based on available data on fisheries specific landings and effort by statistical rectangle, ways to estimate standardised catchability indices for cod, plaice and sole in areas Skagerrak, North Sea and Eastern Channel and 2EU, considering the best practice to account for discards and to raise landings to catch figures. Detailed maps on estimated annual catchability indices by species shall then be presented for these areas.

4 – Assessment of fishing effort deployed by fisheries and métiers which are currently affected by fishing effort management schemes defined in the West of Scotland (Annex II A to Regulation (EC) No 39/2013 and 40/2013)

Terms of Reference:

1. To provide historical series, as far back in time as possible, according to the following fishing area:

West of Scotland (ICES division VIa and EC waters of Vb)

The data should also be broken down by

Member State;

Regulated gear types designed in **Annex I to R(EC) No 1342/2008** (and by associated special conditions defined in Appendix 6 to the data call as far as relevant);

Unregulated gear types catching cod;

for the following parameters:

- a. Fishing effort, measured in kW.days, in GT.days and in number of vessels concerned
- b. Catches (landings and discards provided separately) of cod by weight and by numbers at age.
- c. Catches (landings and discards provided separately) of non-cod by species, by weight and by numbers at age.

d. Landings Per Unit of Effort (LPUE) and Catches Per Unit Effort (CPUE) of cod (such data shall be issued by Member state, fishing area and fishing effort group designed in **Annex I to R(EC) No 1342/2008**).

2. Based on the information compiled under point (1) above, to rank fishing effort groups as designed in **Annex I to R(EC) No 1342/2008**, on the basis of their contribution to catches including discards and landings expressed in weight of cod.

3. To assess the fishing effort and catches (landings and discards) of cod and associated species corresponding to vessels of length overall smaller than 10 metres in each fishery, by gear (corresponding to regulated and unregulated gear as defined in the Annex II framework) and by Member State.

4. To plot, the spatial distribution of the fishing effort in units of hours fished of regulated gears deployed in the West of Scotland, according to data reported in logbooks on the basis of ICES statistical rectangles and to provide interpretation of any changes or trends.

5. To comment on data quality and to highlight any unexpected evolutions in the estimated parameters which are not in line with the general trend, in particular as regards discard estimates of cod, Norway lobster and pelagic species.

6. To develop and calculate standard cpue's, lpue's and standard correction factors to be used (within a MS) for transferring effort across gear groups with different cpue (Reg. (EC) No 1342/2008 Art 17, paragraph 5).

Commission Regulation (EU) No 237/2010 article 8(b) describes:

Correction factor = cpue donor gear /cpue receiving gear

The cpue's and lpue's have to be calculated per area per gear group (regulated gear) and presented in a table. Another table shall be provided for the standard correction factors between regulated gear groups based on each cpue and lpue. Correction factors ≥ 1 will all be set at value 1.

7. To assess and present in a tabular form the annual partial fishing mortalities of cod, haddock, saithe (VIa only), for landings and discards separately, as generated by the effort regulated gears (Annex I to Council Reg. 1342/2008) and the non-regulated gears by Member States, the latter non-regulated gears as a single lump group. The trends in gear group specific partial fishing mortalities shall then be compared with (correlated against) the trends in gear group specific fishing effort (in units of kW days at sea) of the gears mentioned by Member States.

8. To quantitatively assess the annual trend in cod mortality that would have resulted from the fishing mortality adjustments in Article 7 and the trends in fishing effort that would have resulted from Article 12 of Council Reg. 1342/2008, for the period 2008 to 2013. STECF is requested to comment on whether and to what extent the Member States application of Article 13, Paragraph 2, points a, b, c and d have supported the reduction of cod fishing mortality as defined in Articles 7 and 9 and whether the increased fishing effort deployed by Member States was commensurate with the fishing mortality target in 2013. The group is requested to quantify for each Member State and effort group (Annex I to Council Reg. 1342/2008) the partial target fishing mortality of cod, and partial fishing mortality of cod generated in excess of the cod plan, and, if a significant correlation between cod fishing mortality and fishing effort exists, the corresponding amounts of target fishing effort and of the excessive fishing effort in units of kW.days at sea.

9. To identify, based on available data on fisheries specific landings and effort by statistical rectangle, ways to estimate standardised catchability indices for cod West of Scotland, considering the best practice to account for discards and to raise landings to catch figures. Detailed maps on estimated annual cod catchability indices shall then be presented for this area.

5 – Assessment of fishing effort deployed by fisheries and métiers which are currently affected by fishing effort management schemes defined in the Irish Sea (Annex IIA to Regulation (EC) No 39/2013 and 40/2013)

Terms of Reference:

1. To provide historical series, as far back in time as possible, according to the following fishing area:

Irish Sea (ICES division VIIa)

The data should also be broken down by

Member State;

Regulated gear types designed in **Annex I to R(EC) No 1342/2008** (and by associated special conditions defined in Appendix 6 to the data call as far as relevant);

Unregulated gear types catching cod;

for the following parameters:

- a. Fishing effort, measured in kW.days, in GT.days and in number of vessels concerned.
- b. Catches (landings and discards provided separately) of cod by weight and by numbers at age.
- c. Catches (landings and discards provided separately) of non-cod by species, by weight and by numbers at age.

d. Landings Per Unit of Effort (LPUE) and Catches Per Unit Effort (CPUE) of cod (such data shall be issued by Member State, fishing area and fishing effort group designed in **Annex I to R(EC) No 1342/2008**).

2. Based on the information compiled under point (1) above, to rank fishing effort groups as designed in **Annex I to R(EC) No 1342/2008**, on the basis of their contribution to catches including discards and landings expressed in weight of cod.

3. To assess the fishing effort and catches (landings and discards) of cod and associated species corresponding to vessels of length overall smaller than 10 metres in each fishery, by gear (corresponding to regulated and unregulated gear as defined in the Annex II framework) and by Member State.

4. To plot, the spatial distribution of the fishing effort in units of hours fished of regulated gears deployed in the Irish Sea, according to data reported in logbooks on the basis of ICES statistical rectangles and to provide interpretation of any changes or trends.

5. To comment on data quality and to highlight any unexpected evolutions in the estimated parameters which are not in line with the general trend, in particular as regards the discard estimates of cod, Norway lobster and pelagic species.

6. To develop and calculate standard cpue's, lpue's and standard correction factors to be used (within a MS) for transferring effort across gear groups with different cpue (Reg. (EC) No 1342/2008 Art 17, paragraph 5).

Commission Regulation (EU) No 237/2010 article 8(b) describes:

Correction factor = cpue donor gear /cpue receiving gear

The cpue's and lpue's have to be calculated per area per gear group (regulated gear) and presented in a table. Another table shall be provided for the standard correction factors between

regulated gear groups based on each cpue and lpue. Correction factors ≥ 1 will all be set at value 1.

7. To assess and present in a tabular form the annual partial fishing mortalities of cod, for landings and discards separately, as generated by the effort regulated gears (Annex I to Council Reg. 1342/2008) and the non-regulated gears by Member States, the latter non-regulated gears as a single lump group. The trends in gear group specific partial fishing mortalities shall then be compared with (correlated against) the trends in gear group specific fishing effort (in units of kW days at sea) of the gears mentioned by Member States.

8. To quantitatively assess the annual trend in cod mortality that would have resulted from the fishing mortality adjustments in Article 7 and the trends in fishing effort that would have resulted from Article 12 of Council Reg. 1342/2008, for the period 2008 to 2013. STECF is requested to comment on the questions if and to which extent the Member States application of Articles 13, Paragraph 2, points a, b, and c have supported the reduction of cod fishing mortality as defined in Article 7 and 9 and whether the increased fishing effort deployed by Member States was commensurate with the fishing mortality target in 2013. The group is requested to quantify for each Member State and effort group (Annex I to Council Reg. 1342/2008) the partial target fishing mortality of cod, and partial fishing mortality of cod generated in excess of the cod plan, and, if a significant correlation between cod fishing mortality and fishing effort exists, the corresponding amounts of target fishing effort and of the excessive fishing effort in units of kW.days at sea.

6 – Assessment of fishing effort deployed by fisheries and métiers which will be affected by the extension of the cod recovery plan to the Celtic Sea

Terms of Reference:

1. To provide historical series, as far back in time as possible, according to each of the following fishing areas:

(i) Celtic Sea (total of ICES divisions VIIb, VIIc, VIIe, VIIf, VIIg, VIIh, VIIj and VIIk)
and

(ii) combined area Bristol Channel/South-East Ireland (total of the subset of ICES divisions VIIf and VIIg)

The data should also be broken down by:

Member State;

Regulated gear types designed in **Annex I to R(EC) No 1342/2008**;

Unregulated gear types catching cod;

for the following parameters:

- a. Fishing effort, measured in kW.days, in GT.days and in number of vessels concerned.

- b. Catches (landings and discards provided separately) of cod by weight and by numbers at age.

c. Catches (landings and discards provided separately) of non-cod by species, by weight and by numbers at age.

d. Landings Per Unit of Effort (LPUE) and Catches Per Unit Effort (CPUE) of cod (such data shall be issued by Member state and fishing effort groups as designed in **Annex I to R(EC) No 1342/2008**).

2. When providing and explaining data in accordance with point (1), the following **specific question** should be answered as well:

For VIIf+VIIg only, identify the **main species** (volume and percentage) caught per gear category, and related trends in recent years. Specify when this calculation has taken account of discards as well.

3. To assess the fishing effort and catches (landings and discards) of cod and associated species corresponding to vessels of length overall smaller than 10 metres in each fishery, by gear (corresponding to regulated and unregulated gear as defined in the Annex II framework) and by Member State according to sampling plans implemented to estimate these parameters.

4. To comment on data quality and to highlight any unexpected evolutions in the estimated parameters which are not in line with the general trend, in particular as regards the discard estimates of cod, Norway lobster and pelagic species.

5. To assess and present in a tabular form the annual partial fishing mortalities of cod, for landings and discards separately, as generated by the gears defined in Annex I to Council Reg. 1342/2008) and the other gears by Member States, the latter other gear groups as a single lump group. The trends in gear group specific partial fishing mortalities shall then be compared with (correlated against) the trends in gear group specific fishing effort (in units of kW days at sea) of the gears mentioned by Member States.

7 – Assessment of fishing effort deployed by vessels under the Southern hake and Norway lobster plan (Council Regulation (EC) No 2166/2005) operating in the Atlantic waters of the Iberian Peninsula as specified in Annex IIB of Council Regulation (EC) No 39/2013 and 40/2013

Terms of Reference:

1. The STECF is requested to compile, validate, analyse and assess the following historical data on fishing effort and catches in relation to vessels under the Southern hake and Norway lobster plan (Regulation (EC) 2166/2005):

Details by Member State on both effort (2000-2013) deployed and catches (2003-2013) made by all fishing vessels, included those with less than 10 meters, in each fishery, broken down by age, gear type, and mesh size

The data should be broken down and assessed by:

Member State;

Regulated gear types, area as laid down **in Annex IIB of Council Regulation (EC) No 39/2013 and 40/2013** and associated special conditions as laid down in Appendix 6 to the data call; unregulated gear types catching hake and Norway lobster;

for the following parameters:

- a. fishing effort measured in kW.days, in GT.days and in number of vessels concerned;
- b. catches (landings and discards provided separately) of hake and Norway lobster by weight and by numbers at age;

c. catches (landings and discards provided separately) of species other than hake and Norway lobster in areas covered by Annex IIB mentioned above (particular attention should be paid to Anglerfish catches), by species, by weight and by numbers at age;

d. Landings Per Unit of Effort (LPUE) and Catches Per Unit Effort (CPUE) of hake, Norway lobster and Anglerfish in areas covered by Annex IIB (such data shall be issued by Member state, fishing gear and special conditions listed in **Annex IIB of Council Regulation (EC) No 39/2013 and 40/2013**);

In assessing the data described above, particular attention should be paid to:

the quality of estimates of total catches and discards;

both the fishing effort and catches including landings and discards of hake, Norway lobster, anglerfish, and associated species including pelagics in relation to vessels of overall length smaller than 10 metres in each fishery, by gear (regulated and unregulated gears) and by Member State. The representativeness of data originated from sampling schemes should also be assessed.

to the description of the spatial distribution of the fishing effort of regulated gears deployed in the Atlantic waters of the Iberian Peninsula according to data reported in logbooks on the basis of ICES statistical rectangles with the aim to determine to what extent fishing effort has moved from long distance to coastal areas since the implementation of the fishing effort regime.

An excel table listing the kW.days from 2000 to 2013 broken down per gear type, special condition and Member State should be made available.

To comment on data quality and to highlight any unexpected evolutions in the estimated parameters which are not in line with the general trend, in particular as regards discard estimates of hake, Norway lobster, anglerfish and pelagic species.

2. In the context of the revision of the current Southern hake and Norway lobster recovery plan (Council Regulation (EC) No 2166/2005) and on the basis of the data provided, the STECF is requested to assess the fishing effort regime, in particular commenting on the quality and

completeness of the data supplied to assess the impact of future effort management measures proposed by the Commission.

3. To compare days allocated to the vessels carrying regulated gears (allowed activity) and days used by those vessels.

4. To assess the correlation between fishing mortality rates and the effort in units of kW days at sea deployed by Member States.

If a good correlation between fishing mortality rates and fishing effort is found, the WG is asked to explain or describe it. In case the correlation between the nominal fishing effort and the fishing mortality rates is weak, the WG is asked to describe whether this is due to a wrong descriptor (i.e. wrong descriptor for fishing capacity) or to other factors.

5. To identify, based on available data on fisheries specific landings and effort by statistical rectangle, ways to estimate standardised catchability indices for Nephrops, hake and monk in ICES Div. 8c and 9a, considering the best practice to account for discards and to raise landings to catch figures. Detailed maps on estimated annual catchability indices by species shall then be presented for these areas.

8 – Assessment of fishing effort deployed by fisheries and métiers which are currently affected by fishing effort management schemes defined in the Western Channel (Western Channel sole stocks ICES zone VIIe, Annex IIC to Regulation (EC) No39/2013)

Terms of Reference:

1. To provide historical series, as far back in time as possible, according to the following fishing area:

Western Channel (ICES division VIIe)

The data should also be broken down by

Member State;

Regulated gear types designed in **Annex IIC to R(EC) No 39/2013** (and by associated special conditions defined therein as far as relevant);

Unregulated gear types catching sole;

for the following parameters:

- a. Fishing effort, measured in kW.days, in GT.days and in number of vessels concerned.
- b. Catches (landings and discards provided separately) of sole by weight and by numbers at age.
- c. Catches (landings and discards provided separately) of non-sole by species, by weight and by numbers at age.

d. Landings Per Unit of Effort (LPUE) and Catches Per Unit Effort (CPUE) of sole (such data shall be issued by Member state and fishing gear listed in **Annex IIC to R(EC) No 39/2013**).

2. To assess the fishing effort and catches (landings and discards) of sole and associated species corresponding to vessels of length overall smaller than 10 metres in each fishery, by gear (corresponding to regulated and unregulated gear as defined in the Annex II framework) and by Member State according to sampling plans implemented to estimate these parameters.

3. To assess the catches (absolute values, landings and discards provided separately) and effort deployed in 2011 to 2013 corresponding to vessels participating in trials on fully documented fisheries, by species, by gear and Member State, with the aim to determine the quality of the data submitted, the potentials and limitations of the fully documented fisheries and to what extent in particular catches (absolute values, landings and discards provided separately) differ from the figures estimated by the STECF for vessels not participating in these trials. STECF is requested to quantify and comment on the extent of changes in sole selectivity by FDF fisheries in comparison with the fisheries not participating in FDF schemes.

4. To plot the spatial distribution of the fishing effort of regulated gears deployed in the Western Channel, according to data reported in logbooks on the basis of ICES statistical rectangles and to provide interpretation of any changes or trends.

5. To quantify the annual days at sea allocated to the vessels carrying regulated gears (allowed activity) and the uptake of such effort allowances.

6. To comment on data quality and to highlight any unexpected evolutions in the estimated parameters which are not in line with the general trend, in particular as regards the discard estimates of sole, plaice, Norway lobster and pelagic species.

7. To assess and present in a tabular form the annual partial fishing mortalities of sole, for landings and discards separately, as generated by the effort regulated gears (Annex I to Council Reg. 1342/2008) and the non-regulated gears by Member States, the latter non-regulated gears as a single lump group. The trends in gear group specific partial fishing mortalities shall then be

compared with (correlated against) the trends in gear group specific fishing effort (in units of kW days at sea) of the gears mentioned by Member States.

9 - Assessment of fishing effort and evaluation of management measures for the Deep Sea and Western Waters effort regime

Terms of Reference:

1. To provide historical series, as far back in time as possible, according to each of the following fishing areas (and subareas to the extent possible):

(i) ICES area I (EU waters; non EU waters), only linked to Deep Sea species (according to both criteria: Annex I and II of Reg 2347/2002 and COM(2012)0371)

(ii) ICES area II (EU waters; non EU waters), only linked to Deep Sea species (according to both criteria: Annex I and II of Reg 2347/2002 and COM(2012)0371)

(iii) ICES area III (EU waters; non EU waters), only linked to Deep Sea species (according to both criteria: Annex I and II of Reg 2347/2002 and COM(2012)0371)

(iv) ICES area IV (EU waters; non EU waters), only linked to Deep Sea species (according to both criteria: Annex I and II of Reg 2347/2002 and COM(2012)0371)

(v) ICES area V (EU waters; non EU waters)

(vi) ICES area VI (EU waters; non EU waters)

(vii) ICES area VII excluding VIIId (EU waters; non EU waters)

(viii) ICES division VIIId

(ix) the Biologically Sensitive Area as defined in Article 6 of Reg (EC) No 1954/2003

(x) ICES area VIII (EU waters; non EU waters)

(xi) ICES area IX (EU waters; non EU waters)

(xii) ICES area X (EU waters; non EU waters)

(xiii) ICES area XII (EU waters; non EU waters), only linked to Deep Sea species (according to both criteria: Annex I and II of Reg 2347/2002 and COM(2012)0371)

(xiv) ICES area XIV (EU waters; non EU waters), only linked to Deep Sea species (according to both criteria: Annex I and II of Reg 2347/2002 and COM(2012)0371)

- (xv) CECAF area 34.1.1 (EU waters; non EU waters)
- (xvi) CECAF area 34.1.2 (EU waters; non EU waters)
- (xvii) CECAF area 34.1.3 (EU waters; non EU waters)
- (xviii) CECAF area 34.2 (EU waters; non EU waters)

The data should also be broken down by

Member State;

The following gear types:

- Regulated gear types
 - Beam trawls
 - Bottom trawls & demersal seines
 - dredges
 - drifting longlines or set longlines (bottom)
 - driftnets or set gillnets
 - trammel nets
 - pots & traps

- Unregulated gear types:
 - Pelagic trawls and pelagic seines;
 - longlines (surface)

for the following parameters:

a. Fishing effort, measured in kW.days, in GT.days and in number of vessels concerned

b. Catches (landings and discards provided separately) by weight of:

- 5 most important (in weight landed) demersal species excluding scallops, edible crab, spider crab,
- Scallops,
- Spider crab and edible crab,
- 5 most important (in weight landed) Deep-sea species (according to Annex I and II of Reg 2347/2002 and COM(2012)0371), only related to fisheries which have been identified with special condition DEEP,
- 4 most important (in weight landed) pelagic species, plus always tuna-like species (SKJ,ALB,YFT,BET,SWO).

c. Landings Per Unit of Effort (LPUE) and Catches Per Unit Effort (CPUE) by Member State and gear, given by total catches of the gear divided by kW-days and GT-days.

2. When providing and explaining data in accordance with point (1), the following **specific question** should be answered as well:

With respect to the foregoing estimation, STECF is requested to assess the extent to which linking VMS positions to logbook data would improve the accuracy and precision of the estimation.

3. To identify recent effort trends in pelagic fisheries where possible, in particular in areas X, XI and CECAF areas.

4. To comment on data quality and to highlight any unexpected evolutions in the estimated parameters which are not in line with the general trend, in particular as regards the discard estimates of pelagic species.

10 – Assessment of fishing effort deployed by fisheries and métiers which are currently affected by the multiannual plan for the sustainable exploitation of the stock of common sole in the Bay of Biscay (R(EC) No 388/2006)

Terms of Reference:

1. To provide historical series, as far back in time as possible, according to each of the following fishing areas:

ICES division VIIIa, and

ICES division VIIIb

The data should also be broken down by:

Member State;

Type of gear (as laid down in **Annex IV of Commission Decision 2008/949/CE**) for regulated vessels (as laid down in **Article 5 of R(EC) No 388/2006**)

Type of gear (as laid down in **Annex IV of Commission Decision 2008/949/CE**) for unregulated vessels (as laid down in **Article 5 of R(EC) No 388/2006**)

for the following parameters:

- a. Fishing effort, measured in kW.days, in GT.days and in number of vessels concerned.
- b. Fishing capacity in GT.
- c. Catches (landings and discards provided separately) of common sole (*Solea solea*) by weight and by numbers at age.
- d. Catches (landings and discards provided separately) of species other than common sole, by weight and by numbers at age.

2. To assess the fishing effort and catches (landings and discards separately) of common sole and associated species corresponding to vessels of length overall smaller than 10 metres in each fishery, by gear and by Member State.

3. To describe the spatial distribution of the fishing effort in units of hours fished deployed in the Bay of Biscay, according to data reported in logbooks on the basis of ICES statistical rectangles, with the aim to determine the spatial distribution of fishing effort and its development during the time period.

4. To comment on data quality and to highlight any unexpected evolutions in the estimated parameters which are not in line with the general trend, in particular as regards discard estimates of sole and pelagic species.

5. To assess and present in a tabular form the annual partial fishing mortalities of sole, for landings and discards separately, as generated by the major gear types and separately for vessels with and without the special fishing permit (>2 tons of sole/a). The trends in gear group specific partial fishing mortalities shall then be compared with (correlated against) the trends in gear group specific fishing effort (in units of kW days at sea) of the gears mentioned by Member States.

3.2 Participants

Section 7 of the present report lists the participants of the STECF EWG 14-06 and 14-13.

4 DATA USED

The following sections provide an overview on data definition, acquisition, and evaluation procedures agreed by the expert working group.

Also provided are experts' descriptions regarding the national data features/quality as submitted by the Member States in response to the DCF data call in 2014 for fishing effort regime evaluations.

The national sections provide specific information regarding the nations' methods applied to estimate the days at sea, and if the applied method is regarded as being consistent with the provisions of the DCF or the Control Regulation (Coun. Reg. No. 1224/2009). However, STECF EWG 14-06 is unable to evaluate these national statements.

Furthermore, the national data quality sections for the Baltic provide information regarding the consideration of drifting longlines (LLD) in the effort regulated gear category LONGLINE (LL) of the DCF data calls for fishing effort regime evaluations in 2014 and earlier.

4.1 Report Notations

4.1.1 Baltic Sea

To identify the categories assessed for effort and catch this working group adopts terminology that matches definitions made in the management plan for Baltic cod (R(EC) 1098/2007). This means that all trawls, Danish seines, gill nets, entangling nets or trammel nets with mesh size ≥ 90 mm and longlines were assumed to be regulated gears (Table 4.1.1.1). Remaining gear and mesh size combinations were taken to be unregulated gears (Table 4.1.1.2).

Sub-Areas were defined according to Council Regulation (EC) 1098/2007. This means that Subdivision 22-24 is declared as fishing area "A", Subdivision 25-28 as "B" and Subdivision 29-32 as "C".

Table. 4.1.1.1 Regulated gear types, mesh sizes and special conditions as defined in Reg. (EC) No. 1098/2007.

Gear	Mesh Size	SPECON
OTTER	≥ 90 mm	none
OTTER	≥ 90 mm	BACOMA
Danish Seine	≥ 90 mm	none
Danish Seine	≥ 90 mm	BACOMA
Pelagic Trawl	≥ 90 mm	none
Pelagic Trawl	≥ 90 mm	BACOMA
Pelagic Seine	≥ 90 mm	none
Pelagic Seine	≥ 90 mm	BACOMA
Gill net	≥ 90 mm	none
Trammel net	≥ 90 mm	none

BEAM	>=90mm	none
Longlines		

Table 4.1.1.2 Unregulated gear types, mesh sizes and special conditions as defined in Reg. (EC) No. 1098/2007.

Gear	Mesh Size	SPECON
OTTER	<90mm	none
Danish Seine	<90mm	none
Pelagic Trawl	<90mm	none
Pelagic Seine	<90mm	none
Gill net	<90mm	none
Trammel net	<90mm	none
Beam Trawl	<90mm	none
DREDGE	all	none
POTS	all	none

4.1.2 Cod Zones Multi-annual Plan

The compilation of effort data as described in this report represents a continuation of a process which was initiated in association with the establishment of recovery plans for various European cod and hake stocks.

In addition to other properties, major gear types are used to identify fisheries which are not effort regulated. The notation and categorisation of effort regulated fisheries used has reflected that defined in the relevant technical regulations. The most recent revision of the cod recovery plan, and the associated effort regime are described in Regulation 1342/2008.

Under the revised 'cod plan' the following gear groupings are set out in Annex I of the Regulation together with areas in which they apply. Throughout the report reference is made to gears such as TR1, TR2 etc. Under the revised scheme Member States are allocated 'effort pots' in KW*days for each category which can then be managed nationally. EU allocated 'days at sea' per vessel are no longer applicable. The following summary of gear and area codes that apply in the current cod plan is taken from Annex 1 of Regulation 1342/2008.

STECF 13-13 notes that, in accordance with the ToR, the areas of the plan for North Sea cod were split into Skagerrak (3b1), North Sea and 2 EU (3b2) and Eastern Channel (3b3). The present report provides the requested fisheries parameters by these sub-areas 3b1, 3b2 and 3b3.

ANNEX I

Effort groups are defined by one of the gear groupings set out in point 1 and one of the geographical areas set out in point 2.

1. Gear groupings

(a) Bottom trawls and seines (OTB, OTT, PTB, SDN, SSC, SPR) of mesh:
 TR1 equal to or larger than 100 mm,
 TR2 equal to or larger than 70 mm and less than 100 mm,
 TR3 equal to or larger than 16 mm and less than 32 mm;

(b) Beam trawls (TBB) of mesh:
 BT1 equal to or larger than 120 mm
 BT2 equal to or larger than 80 mm and less than 120 mm;

(c) Gill nets, entangling nets (GN);

(d) Trammel nets (GT);

(e) Longlines (LL).

2. Groupings of geographical areas:

For the purposes of this Annex, the following geographical groupings shall apply:

- (a) Kattegat;
- (b) (i) Skagerrak; (ii) that part of ICES zone IIIa not covered by the Skagerrak and the Kattegat; ICES zone IV and EC waters of ICES zone IIa; (iii) ICES zone VIIId;
- (c) ICES zone VIIa;
- (d) ICES zone VIa.

This categorisation is relatively simple when compared to that of the previous version of the cod recovery plan , and the number of ‘special conditions’ under which vessels have differing allocations of effort is relatively restricted. The current cod recovery plan makes allowance for vessels which can demonstrate a track record of having caught less than 1,5% cod to be excluded from the effort regime (Regulation 1342/2008, Article 11, para 2b). There is also scope for groups of vessels to be allocated additional effort if they participate in discard reduction or cod avoidance schemes leading to equivalent or greater reductions in cod mortality than the corresponding effort restriction (Regulation 1342/2008, Article 13, para 2c). These conditions are represented in the database as follows:

Condition	Code
Effort deployed by those boats granted the <1.5% derogation excluding them from the effort regime	CPart11

Effort deployed by vessels operating in Member State schemes under Article 13: highly selective gear with less than 1 % cod.	CPart13A
Effort deployed by vessels operating in Member State schemes under Article 13: cod avoiding fishing trips with less than 5% cod.	CPart13B
Effort deployed by vessels operating in Member State schemes under Article 13: cod avoidance or discard reduction plans.	CPart13C
Effort deployed by vessels operating in Member State schemes under Article 13: fisheries West of Scotland to the west of the cod line.	CPart13D

4.1.3 Southern hake and Nephrops

Notation devised for effort categories specified under Annex IIB of Regulation (EC) No. 39/2013 remains the same as in previous reports. Under Annex IIB the gears group is defined under point 2 and special conditions under point 6.1. The group of gears includes bottom trawls, gill nets and bottom long lines combined. In 2007 (Annex IIB in R (EC) No. 41/07) there are separate groups for trawl (3a), for gill nets (3b) and for longline (3c). These gear groups were merged in the 2008 legislation. The working group considered maintaining the 3 separate categories is important in terms of maximising the clarity of information from results. Therefore, gear groups and codifications have been kept as in 2007. Table 4.1.3.1 links notation with gear group and special conditions. So, for example, a vessel using a gill net of mesh size ≥ 60 mm and conforming to the hake catch composition rules would belong to derogation “3.b IIB61”. In order to provide additional insight into fisheries specific impact, the EWG 14-06 also defined trammel nets as a separate metier using the code “3t”.

Table. 4.1.3.1 Gear group and special conditions of Annex IIB, Reg. (EC) No. 39/2013 (and Reg. (EC) 43/2012)

Gear group (Regulation (EC) 41/2007)			Special condition				Effort Regime Derogation
Regulation point	Gear	Mesh size range (mm)	Regulation point	(Regulation(EC) 43/2012)	(Regulation(EC) 39/2013)	EWG code	
				Description	Description		
3.a	OTTER	≥ 32	6.1	Hake landings <5 tonnes in 2009 or 2010	Hake landings <5 tonnes in 2010 or 2011	IIB61	Yes
3.b	GILL	≥ 60		AND	AND		
3.c	LONGLINE	-					

				<i>Nephrops</i> landings <2.5 tonnes in 2009 or 2010	<i>Nephrops</i> landings <2.5 tonnes in 2010 or 2011		
3.a	OTTER	≥ 32		Other cases	Other cases	none	No
3.b	GILL	≥ 60					
3.c	LONGLINE	-					

OTTER = Trawl or Danish seine or “similar gears”

GILL = Gill net

LONGLINES = Bottom longlines

4.1.4 Western Channel sole

Gear groups, area and effort limits connected with the western Channel sole management plan are contained in Annex IIC of the annual fishing opportunities regulation. Notation in the effort reports relate to definitions under Annex IIC of Reg. (EC) No. 40/2008 where gear groups are defined under point 3 and special conditions under point 7. Table 4.1.4.1 links notation with gear group and special conditions. So, for example, a vessel using a static net of mesh size less than 220mm belongs to derogation “3.b”. The format of Annex IIC has changed in more recent regulations but for reasons of continuity with previous reports the notation of the effort reports has been kept the same. Note that no special conditions are currently in operation under Annex IIC.

Table. 4.1.4.1 Gear group and special conditions of Annex IIC, Reg. (EC) No. 40/2008. Note that no special conditions are currently in operation under Annex IIC.

Derogation			Mesh size range		Special Condition
Gear group Point 3	Special condition Point 7	Gear	mesh size mm From	mesh size To mm	
3.a		BT	80	inf	none
3.b		GE & TR	0	219	none

BT = Beam Trawl

GE = Gill net or entangling net

TR = Trammel net

4.1.5 Celtic Sea

STECF EWG 14-06 defined the codes of gears as identical to the ones for the cod zones given in section 4.1.2.

4.1.6 Bay of Biscay

STECF EWG 14-06 defined the codes of major gear groups as identical to the 2014 DCF data call with an identification of the boats holding a special fishing permit as defined in R (EC) No 388/2006, encoded as SBcIIIart5.

4.1.7 Western Waters and Deep Sea

STECF EWG 14-06 defined the codes of major gear groups as in the 2014 DCF data call with an identification of the boats conducting deep sea trips, encoded as DEEP.

4.2 Data call

The DCF data call 2014 to support fishing effort regime evaluations was published on 21 March 2014 with a deadline of 14 May 2014. The data call is fully documented at the JRC DCF web page: <https://datacollection.jrc.ec.europa.eu/home>

The STECF EWG 14-06 notes that the 2014 data call is consistent with the data call issued in 2013 for the same purpose.

4.3 Data policy, formats and data availability

Originally, the catch and effort data base structures used by STECF-SGRST were developed by the ICES Study Group on the Development of Fishery-based Forecasts (ICES CM 2004/ACFM:11, 41 pp.) with some amendments required for the review of specific fishery regulations. Over time, there have been numerous changes to the original database and the way in which data are stored and accessed in order to reflect changes to some of the effort regimes and to accommodate data from deep-water and Fully Documented Fisheries.

Experts reported on national data policies for the national fleet specific landings, discards and effort data and generally supported the continued use of the data by STECF but with required

permission for any use by other scientific or non-scientific groups. This implies that national experts need to be contacted for their consent before granting access to the data.

JRC requests to be informed about applications for data access and any notifications.

Since conclusion of the 2013 evaluation of effort regimes the means of data aggregation has been transferred to a new software architecture. There are three motivations for this

1. Greater data security as all data is processed on a secure server.
2. Increased quality assurance as data incorporated in the final aggregated results can only be included through use of the JRC upload facility.
3. Greater transparency of the data input and processing through a documented upload facility and processing algorithm and because of point two.

The time needed for processing has also considerably reduced, a welcome development given that, unfortunately, problems with national data submissions are still discovered during EWG meetings requiring re-compilation of aggregated data. This point is likely to become more significant as the quantity of data required for processing continues to increase.

4.3.1 Data availability Table A Catch 2003-2013

Table 4.3.1.1 Overview of the catch data submission for the 2014 Fishing Effort Regimes data call. In bold the dates when catch data were submitted after the official submission deadline (14th of May).

Country	Data Submission	First Submission (Deadline 14-May)	Last Re-submission
BEL	DCF website	09 May	09 May
DEU	DCF website	14-May	14-May
DNK	DCF website	14-May	14-May
ESP	DCF website	26-May	26-May
EST	DCF website	14-May	14-May
FIN	DCF website	14-May	14-May
FRA	DCF website	25-May	25-May
GBR	DCF website	06-June	06-June
GBR SCO	DCF website	12-May	10-June
IRL	DCF website	12-May	23-June
LTU	DCF website	13-May	13-May
LVA	DCF website	10-May	10-May
NLD	DCF website	25-May	06-June
POL	DCF website	13-May	13-May
PTR	DCF website	14-May	17-June
SWE	DCF website	13-May	14-May

4.3.1.1 Belgium

A number of 2559 records were submitted for 2013. No update for previous year's data was needed. There were a few records with missing mesh size information for gear types such as trammels, dredges and gillnets. Moreover, many records regard species that are not listed in the official data call, like BLL, RJN, RJM, RJC and RJH. The only special condition reported for 2013 data was SBCIIIart5. This year, all officially recorded species by the Belgian authorities were provided. However, it should be noted that the sum of all provided landings do not match

the total Belgian landings as there are a minority of species landed and recorded as e.g. “other demersal” or “other crustacean” which are not provided to the EGW 14-06.

Belgium provided fleet specific landings data for 2003-2013 derived from official logbook databases for all vessels ≥ 10 meters. The data covers all areas in which the Belgian fleets are active and conform to the requested aggregation, by quarter, area, gear and mesh sizes.

The species provided are: anglerfish, bib, brill, brown shrimp, cod, conger eel, cuttlefish, dab, dogfish, edible crab, flounder, great scallop, grey gurnard, haddock, hake, horse mackerel, lemon sole, ling, mackerel, megrim, Nephrops, octopus, plaice, pollack, red gurnard, saithe, sea bass, skates and rays (by separate species), sole, spurdog, squid, striped mullet, tub gurnard, turbot, whelk, witch flounder, whiting and wolffish. The age composition on landings for sole and plaice in ICES subdivisions IV, VIIa, VIIId, VIIIfg and sole in subdivision VIIIa and b have been provided by quarter for the Belgian beam trawlers. The total numbers of samples, as well as numbers at age by quarter have been apportioned in the same ratio as total quarterly beam trawl fleet landings to annual landings.

Discard data for 2004-2011 were provided from the Belgian Beam trawl fleet for the following species: anglerfish, brill, cod, dab, haddock, hake, lemon sole, plaice, saithe, sole, skates and rays, turbot and whiting. For 2012 and 2013 discard information was also provided for bib, ling, Striped mullet, pollack and whitch flounder. The areas covered are 4, 7a, 7d, 7e, 7f, 7g, 8a and 8b. Belgian discard data represent all ages and are disaggregation by age for cod in areas 4, 7a, 7e, 7f and 7g; for sole in areas 4, 7a, 7d, 7f, 7g, 8a and 8b; and for plaice in areas 4, 7a, 7d, 7f and 7g. The discards information for the other species mentioned above are without disaggregation by age. Information by area for all observer-trips during the year has been merged together, giving an annual percentage of discards estimate per species. The annual estimates of discard rate have been assumed to apply in each of the 4 quarters.

There is no information on misreporting. The landings in the database are based on combined information of logbook data and sale slips. The actual landed weight is split according the logbook information on hours fished in the respective rectangles.

As Belgium does not have trip-by-trip information on the true mesh size for its fleets for 2003-2006, Belgium (as well as other countries) agreed to assume certain mesh sizes for its beam trawler fleets. Beamers operating in the Bay of Biscay (VIIIa,b) were assumed to use a 70-79 mm mesh size as this is the minimum legal mesh size in that area for beamers. For the North Sea, the trips were split according to the rectangles reported in the logbooks, and mesh sizes were allocated in line with Council Regulation (EC) N° 2056/2001. This regulation stipulates that beam trawlers are prohibited to use less than 120 mm in ICES Division IV to the north of 56° 00' N. Therefore all beam trawl information from this part of ICES Division IV was accounted against an assumed >120mm mesh size. The same regulation also stipulates that within the rectangle with coordinates along the east coast of the UK between 55° 00' N and 56° 00' N and the points 55° 00' N – 05° 00' E and 56° 00' N – 05° 00' E, beam trawlers can use 100 to 119 mm mesh size. Here also it was assumed that the mesh size used by the Belgian Beam trawl fleet was 100-119 mm. For the rest of ICES Division IV (the southern part) a mesh size of 80-89 mm

was assumed for the beam trawlers. Apart from these assumed mesh size which are based on rectangle information from logbooks, it was also assumed that the shrimp fishery used a mesh size of 16-31 mm. The mesh size of the beam trawl fleets in the other area's was assumed to be 80-89 mm. Since 2007 mesh sizes used by beam trawls operating in different areas have been based on the true mesh sizes used on each trip.

The Belgian gear categories are: beam, dredge, gill, longline, otter, and trammel. For trammel nets, no assumptions of mesh sizes were made. The only specific condition reported for 2013 data was SBCIIIart5 for all Belgian vessels operating in areas 8a and 8b.

Belgium did not provide any information for vessels under 10m.

4.3.1.2 Denmark

Danish data were submitted on time, and with the requested information for all tables. Last year, Denmark had proceeded to a major revision and had resubmitted the whole time series 2003-2012. Therefore, no revision of older data was made this year, and only 2013 data were provided.

The extraction procedures are now fully compatible with the RDB FishFrame database, in order to get a unique raising procedure for all Danish catch information (discards and age-based information), thus improving the consistency of data reported to the various forums within e.g. ICES and STECF. As such, data raised in FishFrame are also used for the STECF Effort data call. Where the categories in the FishFrame format and the STECF Effort format are not the same, the data are scaled according to the landings.

10249 records were submitted for Table A for 2013. All records passed the Data Submission filters, but, as every year, a small proportion of the reported Danish fisheries activities have missing information. 1.8% of landings has no gear information. The Danish 2013 submission still does not cover the special conditions BACOMA or T90 in the Baltic, as these are not compulsory to report in logbooks according to control regulations 1224/2009 and 404/2011.

4.3.1.3 Estonia

A number of 2718 records were submitted for 2013. No updates for previous year's data. There were a number records with inconsistent mesh size ranges.

STECF-EWG 14-06 notes that the MS did not provide discard information. The reason for that is the discarding ban in the Estonian fishery in the Baltic Sea according to MS legislation.

4.3.1.4 Finland

A total of 3629 records were uploaded by the Member State.

Finish data were submitted in an inconsistent format due to data confidentiality (EC 199/2008, Article 20 (4)). To protect anonymity of individual fishermen and vessels, part of the data was aggregated to a higher level than asked in the data call. Data was followed by a letter, which explained the reasons for inconsistency and the aggregation method used.

4.3.1.5 France

A number of 24069 records were submitted and fitted in the system for 2013. No updates for previous years' data. There were a few records with missing area information for vessels less than 10 meters (~200 days at sea) which have not been taken into account as well as a few records for area 3a (less than 2 days at sea) but with no distinction between 3as and 3an. No mesh size was reported for pots records. Only data regarding species and gears that are requested in the official data call have been submitted and as a consequence records regarding species or gears not requested are missing.

The specific conditions Cpart11, Cpart13B, IIB72ab, DEEP and SBcIIIart5 have been provided for eligible vessels and fisheries for 2013 as last year for 2012. The data were not updated for 2009-2011 on this specific issue.

As in previous years, records for specific condition DEEP and records for specific area BSA are double counted.

France provided landings data for 2003-2013 derived from official logbook databases for all registered vessels 10m and over and from monthly declarative forms (contain declarative monthly data on fishing effort and catches per species by dates, locations and gears) for all registered vessels under 10m (logbooks are not mandatory for these vessels but they are covered by these monthly declarative forms). The data cover all areas requested in the data call and conform to the requested aggregation, by quarter, area, gear and mesh sizes.

Some biological data (age data) have been provided for 2013 for cod. For some other species, only distribution by length is available and it is not possible to provide distribution by age. Discards estimates have been provided for 2013 for all strata where sufficient samples were available.

Biological data are calculated based on samples collected during concurrent sampling by métier both at sea and at auction. The information collected at auction is complementary to the data collected at sea for the retained part of the catches. Discards estimates have been calculated based on data collected by métier on board of fishing vessels (sampling at sea program).

Some discards estimates have been previously provided for 2010 and 2011 but these estimates are now under revision and care is required in the use of these data to draw firm conclusions about catch composition.

4.3.1.6 Germany

A number of 2712 records were submitted for 2013. There were a few records with missing gear information as well as some records for pots, dem_seines, gills, otters without mesh size reported.

Fleet specific landings and estimated discard data were provided as outlined in the data call for 2003-2013 derived from official logbook data covering all vessels $\geq 10\text{m}$. For the Baltic information for vessels $\geq 8\text{m}$ is provided. Information on landings are provided for vessels $< 10\text{m}$ (North Sea) and $< 8\text{m}$ (Baltic) based on landings declarations from these vessels in a more aggregated format as logbooks are not mandatory for these vessels. All data provided do not include unallocated landings. The estimation of discards is based on about 20-30 observer trips per year. It is impossible to cover all quarter-gear-mesh size combinations in the data call. Therefore, final discard estimates in this report are to some extent based on observations from other countries. The data consider the aggregation by quarter, area, gear, mesh size, and existing derogations including special conditions of 8.1.a, 8.1.c, 8.1.d, 8.1.e and 8.1.f for the years 2003-2008 as requested. For 2009 onwards the special conditions from the new cod management plan are used. Some records did not pass the Data Submission filters when some information on e.g. gear, mesh size was missing, but these records represent only a very small proportion of the reported German fisheries activities. They are related to fishing operations with gears for which no code is available in the STECF data call.

4.3.1.7 Ireland

A number of records (38914) were submitted for 2009 - 2013 adding to unchanged 2003-2008 data submitted in 2012. There were some records with missing gear information as well as some records for pots, gills, otters without any mesh size reported.

In 2014 Ireland provided fleet specific landings data for 2009-2013 derived from declared landings within the national logbook database (IFIS) for all vessels ≥ 10 meters in length. Operational landings information was used to provide landings data within the Biologically Sensitive Area (BSA). All species requested by the group and landed by Irish vessels have been provided in the requested aggregation. The following special condition information was supplied: none, CPart13a, CPart13b, CPart13c, CPart13d, CPart11 and DEEP. SPECON DEEP is a duplication of effort within the relevant areas. This submission adds to unchanged 2003-2008 data submitted in 2012.

Under 10 meter vessels are not required to complete logbooks, therefore landings data from these vessels are obtained from monthly reports. These reports provide species live weight by ICES area on a monthly basis. No vessel, gear, or effort information is recorded. There is some doubt as to the accuracy of these monthly reports.

It was not possible to accurately aggregate data to the level of EU, coast, and RFMO. Data was assigned according to the following: Where an EU category existed within an area, all data from that area was categorised as EU, with the exception of ICES division X assumed to be RFMO. Those ICES divisions without an EU category were assumed as 1 coast and 2 coast.

Area misreporting has been accounted for between VIIg and VIIa for cod, haddock and whiting from 2009 onwards where the fishery straddles the ICES boundary of these two areas. Nephrops misreporting relating to the porcupine bank fishing ground has also been accounted for across the period 2011-2013.

Minor revisions were made to the 2009-2012 data due to continuing revisions and improvements to the national database.

Irish biological landings information is not recorded with mesh size information, this was reconstructed by linking to the logbooks database, where possible. The age composition of the landings was estimated for each quarter of 2009-2013 by gear, area and species (any further disaggregation would violate the sampling design). The age compositions were then assigned to each of the remaining strata (vessel_length; mesh,fishery; specon) based on the reported landings in each of these strata.

Similarly, discard data were raised up to the fleet level for each year, quarter, gear, area, species and the presence/absence of a selectivity device. Fishing effort (hours fished) was used for all species as the auxiliary variable. The discard rate (kg/h) and age composition (where applicable) were then applied across the remaining strata (vessel_length; mesh,fishery; specon) based on the effort (fishing hours) in each of these strata. Discards that were observed to be zero are included.

Warnings:

- 1) Differences between ICES stock assessment working group data and STECF data will arise because different levels of stratification were used; we applied the most disaggregated level of stratification possible for the STECF data call, while working group estimates are generally produced by merging a number of strata. Additionally, the discard estimates for the working groups are produced using different auxiliary variables for certain stocks. Because of the large number of species involved it was decided to use a single auxiliary variable for all species.
- 2) Because the data are estimated by year, quarter, gear and area, it is meaningless to compare age compositions between vessel length categories, mesh size categories and special conditions; the age composition will be identical for all of these strata)

- 3) Most strata (year, quarter, vessel length, gear, mesh etc) have not been sampled (84% of the landings strata and 94% for the discards strata were not sampled). Sample numbers were generally low for strata that were sampled (4% of the landings strata and 0% of the discard strata had 5 or more samples)
- 4) It is possible for numbers-at-age to be <0.001 thousand (i.e. less than one fish). This can arise when a certain year-quarter-area-gear-vessel length-mesh-fishery-specon combination has a very small amount of effort or landings. The numbers-at-age estimated for the year-quarter-area-gear combination will then be multiplied by a very small number. When these numbers are rounded to three decimals, a zero value can result.

For this reason the discard data and age composition data should only be used with extreme caution, keeping in mind how the data were inferred. It would be more useful to ask for the raw data so this can be aggregated at whatever level is appropriate.

4.3.1.8 Latvia

Latvian data were submitted on time and in accordance with required format. Fleet specific landings, estimated discards and biological data were provided for 2013 only and appended to the previous time series. All data concerning fishing operations e.g. gear, mesh size, area etc. were derived from logbooks and covered all fleet segments.

Discards data were collected under the Latvian National Programme 2011-2013 according to the sampling strategy. The sampling scheme does not cover all quarter-gear-mesh size combinations in the data call.

Latvian fishermen do not traditionally use drifting lines (LLD).

4.3.1.9 Lithuania

Lithuania provided catch data, both landings and discards, complete set in the required format for 2013. A number of 212 records were submitted for 2013. No updates for previous year's data. STECF EWG 14-06 notes that discards for cod only were estimated and provided. Lithuanian fishermen do not traditionally use drifting lines (LLD).

4.3.1.10 The Netherlands

The Netherlands provided landings and discard data for 2013. Updates for landings for previous years, 2003 – 2008, were submitted. This update regards all species and all gear categories except for cod, plaice and sole caught by gear category BT2. These three species were already

present in the 2003 – 2008 landings data. Note that only landings data was updated; it was not accompanied by discard or age data.

After correction of some records all records (1636 rows in Table A) passed the Data Submission filters.

4.3.1.11 Poland

A number of 1674 records were submitted for 2013. No updates for previous years' data. No mesh size range information reported for vessels under 8 meters. No specific condition reported. Few records for vessels > 8 m with no mesh size range information mainly affecting pots and gills. Only 17 records with discard information for COD, FLX, and FPP.

Information on special conditions (BACOMA window, T90) were not available as these data are not compulsory to report in logbooks according to control regulations.

The following section is kept unchanged from last year report: Comparison of 2011 onwards mesh size data with 2004-2010 shows that they are not consistent and significantly different. MS explanation: neither mesh size nor SPECON information were available from the database for 2004-2010, thus these information were estimated based on expert knowledge and assumptions. Targeted species assemblages (métier), actually fish species caught and gear used were taken into account to identify mesh size. In 2011-2013 data about mesh size were taken from logbooks.

4.3.1.12 Portugal

Portugal resubmitted the entire data series on landings for the period 2003 to 2013. Several differences were found between the resubmitted data in 2014 and the data submitted in 2013.

Due to a late availability of the Landings and discards datasets little analysis were performed on the Portuguese dataset. However it's evident that annually landings volume are consistently lower over the data series. The data series must be revised and resubmitted in due time for the second effort meeting.

In the period 2004-2010, hake discards were provided, assuming that they were proportional to the trawl landings. However, considering that, according to the Data Collection Framework raising procedures, discards are raised using effort and not landings and that the data call grouping is not consistent with the sampled DCF métiers, in 2012 hake discards from Portugal were removed from the database.

For 2013 discard estimates were provided only for hake. These estimates must be considered provisional. The final estimates will probably be reviewed for the Autumn meeting and more species will be added.

At present, the procedure used to raise discards from haul to fleet level in the Portuguese trawl fisheries is adapted from Fernandes et al. (2010) (Jardim and Fernandes, in prep.). Using this procedure, species with low frequency of occurrence or abundance in discards (i.e., a large number of zeros in the data set) cannot be reliably estimated at fleet level (Jardim et al., 2011). The frequency of occurrence and abundance of most species in the discards of the Portuguese bottom trawl fleet was below 30%. Consequently, annual trawl discard volumes and length frequencies at fleet level were only estimated for some métiers, species and years.

In what concerns gillnets and trammel nets, sampled from late 2009 onwards, the sampling methodologies used in these fisheries were only recently standardized (Prista and Jardim, 2011). These are only two of the several métiers that can be performed by the so-called Portuguese polyvalent fleet (or multi-gear fleet). Besides nets, the vessels in this fleet are also frequently licensed to use pots and bottom longlines, and frequently carry out several métiers in a single fishing trip and/or switch métiers during the year. Such uncertainties in determining fishing effort at métier level, along with low spatial-temporal coverage of fleet activity and difficulties in raising data from multi-métier fishing trips to fleet level have hampered the estimation of gillnet and trammel net discards. No estimates at fleet level have been performed to date. Bottom longlines are not among the selected métiers for onboard sampling under the DCF National program.

In 2013, discard estimates are presented only for bottom otter trawl. The problem of different métier aggregation in DCF and in the data call request is not yet solved and the total discards by species were allocated to the data call more disaggregated métiers proportionally to their landings, although this procedure is considered inappropriate. In this way, discards are presented for hake for the period 2004-2013 and blue whiting for the period 2004-2012; also for some years for *Nephrops* and mackerel. Zero discards have been reported for black scabbard fish, sole, sea breams, several species of sharks and *Nephrops* in most of the years.

No discard estimates were presented for other métiers than trawl due to the reasons presented above.

Age data: There is a serious concern about European hake growth. Tagging experiences show that growth rate could be two times higher than expected, although the true value is uncertain (ICES, 2009). At present, the assessment model is length based (ICES, 2010a). Therefore, no age data were provided for hake. For Norway lobster, there is not a standardized ageing methodology.

For the deep sea species caught in CECAF 34.1.2 EU, age data was submitted for black scabbardfish (BSF) for years 2010 and 2011.

4.3.1.13 Spain

Data provided in 2014:

On 26th May 2014 Spain provided catch data from 2013 by quarter, vessel length range, gear, mesh size range and metier (fishery). In the cases where there were not mesh size data 100-119 category was introduced in the mobile gears and 100-109 in the passive gears. Mesh sizes in longline were deleted. Landings were provided for BSA; ICES Subareas 1, 2, 10 and 12; ICES Divisions 6a, 6b, 7a, 7b, 7c, 7d, 7e, 7g, 7h, 7j, 7k, 8a, 8b, 8c, 8d, 8e, 9a, 9b, 14a and 14b and CECAF Divisions 34.1.1, 34.1.2, 34.1.3 and 34.2.0. Landings were divided by COAST/EU/RFMO zones where appropriate. RFMO or null in area 34.1.1 (Moroccan coast) was substituted by COAST. Empty 34.1.2 (Canary Islands, Spain) was substituted by EU. Empty or EU in 34.1.3 (coast of several North African countries) were substituted by COAST. Empty 34.2.0 were substituted by RFMO. Empty 7ck, 8d and 9b were substituted by EU. In all files deep trips were duplicated, once using special condition DEEP and another specon NONE, as requested in the data call. In ICES Divisions 8c and 9a there were not special condition (IIB72ab) landings (Hake Plan) in 2012 and 2013 because no vessel in those years has applied for that condition in relation to hake and *Nephrops* recovery plan (Annex IIB of R(EU) No 43/2012 and No. 39/2013). Landings were not divided in either Cod or Sole Plan special conditions owing to lack of time. Landings were provided for 85 of the 125 species of the 2014 data call. Data about European pilchard and “other species” (new categories in the species list) have been provided. No information about vessels under 10 meters was provided since the data source was logbooks, but Annex IIB (Hake Recovery Plan in 8c & 9a), which is the main Plan for Spain, does not deal with vessels under 10 meters.

A wrong assignment of landings data to metiers previous to 2012 was detected (the assignment of landings to metiers is mandatory only since 2009). This provoked wrong discards estimations. Therefore, all the species and all year discards estimations were redone according with the scientific values presented in ICES working groups in the past. Nevertheless, for technical reason, these new estimations were based on landings. Therefore, if there were not landings of one species in a stratum there are not discards of that species in that stratum.

Discard data were presented for all years (2003-2013) by quarter; from 2003 to 2009 for 8c and 9a divisions and gear otter and for 2012 and 2013 for divisions 6a, 6b, 7b, 7c, 7g, 7h, 7j, 7k, 8c and 9a by otter metiers. For 2013 data, there were also 8c gillnet metiers discard data.

As Spain sent a new discards time series, for technical reasons the landings time series was resent with exactly the same values that they were previously.

No of samples (trips) of landings by quarter and No of length measurements of landings by species and quarter were provided by gear for 2002 to 2009 data and by metier for 2012 and 2013 data. No of age measurements of landings were provided by stock from 2003 to 2008 data.

No of samples (otter trips) of discards and No of length measurements of discards by species were provided by gear from 2003 to 2009 and by metier in 2012. No of age measurements of discards were provided by stock from 2003 to 2012 data.

Hake and monkfish ages were not provided since there are relevant doubts in the correspondent international working groups about the ageing of these species (see February 2010 STECF Hake

Benchmark and 2011-2013 ICES WGHMM reports). Nephrops ages were not provided because there is not a standardized methodology for ageing of this species. Anchovy age data for were provided for 2003, 2004, 2006 and 2012. Mackerel age data were provided for 2003-2009. Blue whiting age data were provided for 2012.

Data provided in 2011 and 2012:

Spain did not provide data in 2011 and 2012; therefore, there are not any kind of data of 2010 and 2011.

4.3.1.14 Sweden

Sweden has previously provided catch data, both landings and discards, in the required format for the years 2003-2012, including vessels <10m LOA. In 2014 a complete set of catch data for the data year 2013 was submitted. In addition, catch data for the years 2009-2012 was updated, due to a previous error in the Swedish Pandalus catches.

Age distribution data was submitted for cod landings and discards in the Baltic, Skagerrak and Kattegat and for plaice discards in Skagerrak and Kattegat. Landings in tonnes were retrieved from logbooks for vessels ≥ 10 m LOA and from monthly coastal journals for vessels <10m. Age distribution data for landings was collected by market sampling and discard data was collected under the Swedish on board discard sampling programme. Discard data was raised according to the national sampling schemes, stratified by nationally identified fisheries and not by the highly disaggregated vessel length classes and mesh size groups in the STECF data call, to maintain as much stability as possible in the raising procedure and not compromise the quality of the data by extrapolations from very few samples. Discards were then allocated to the more disaggregated format proportionally to the landings of the target species used in the raising. This has the implication that it is not always possible to compare discard rates or age distributions between gears and mesh sizes in the format of the STECF data base since they could have been estimated from the same samples. Vessel length classes were not considered in the stratification and raising. No discards have been submitted for fisheries not covered by the sampling programme. The main nationally identified Swedish fisheries that were sampled for discards (each one treated as one stratum) in 2013 were:

In the Baltic:

- Trawls targeting cod (Mesh size ≥ 105 mm, including mid water trawls targeting cod and both trawls with BACOMA window and T90 mesh)
- Passive gears (including both gillnets and trammel nets)

In Skagerrak and Kattegat (Skagerrak and Kattegat being treated as separate strata):

- Trawls targeting demersal fish/Nephrops, with a mesh size of ≥ 90 mm, (including both TR2 and TR1)

- Trawls targeting Nephrops, with a 35mm sorting grid and a mesh size of 70-89mm (under derogation CPart11 in the cod plan)
- Demersal Pandalus trawls (Mesh size 32-54mm) with a 19mm sorting grid and a fish retention device, combined with an escape window, which allows catch of large fish.
- Demersal Pandalus trawls (Mesh size 32-54mm) with a 19mm sorting grid, no fish retention device.

Swedish landings of cod have been prohibited due to quota closure in Skagerrak and/or Kattegat during parts of 2003, 2004, 2005, 2006, 2012 and 2013, which has resulted in discard of adult cod.

Gillnets were not sampled in Skagerrak or Kattegat, meaning that discards for those gears have been extrapolated in the STECF data base from Danish discard data.

Drifting longlines, targeting salmon, were included in the “LONGLINE” category in the data set.

Since hand and pole lines (LHP) are under effort regulation in the cod plan in the Baltic Sea but not in Skagerrak and Kattegat, and the “LONGLINE” category is considered a regulated gear in the STECF data base, those gears were only included in the “LONGLINE” category in the Baltic and not in other areas. Since there is currently no suitable gear category in the data call for those gears in Skagerrak/Kattegat, they have been included in the “none” gear category and are accounting for the large majority of records with missing gear information in the Swedish data.

There is no information on misreporting.

4.3.1.15 United Kingdom

England, Wales: Data for 2013 were submitted. No update was provided for previous years. The discard and biological data were collected by the English on-board discard sampling programme. The data was raised accordingly with level of disaggregation the STECF data call required, though such disaggregation is not consistent with the sampling programme design which is set up to provide information for stock assessment; in many cases this means that very few samples were available per strata. The fully Documented Fishery vessels were treated separately for discard and biological raising, where such samples were available.

Northern Ireland: AFBNI provided data on discard estimates and biological sampling for 2013. Length frequencies from Northern Ireland observer trips were raised to the trip level, summed across trips during each year then raised by the nominal effort using the proportion of effort in each category to the sum of effort in the fleet segment to give raised annual LFDs for discards.

A total of 20186 records were submitted for 2013, for England, Wales and Northern Ireland. As in previous years, there were a number of records with missing mesh size information and a

combination of DEEP specific conditions and BSA area which were ignored during the analysis. Specific conditions reported were DEEP, CPart11, CPart13a,b,c, FDFIIA and FDFIIC.

Scotland: Data for 2010, 2011 and 2012 were re-submitted to correct errors in the biological data related to FDF vessels. A total of 18870 records were submitted for 2010, 2011 and 2012. A new submission of 4646 records were submitted for 2013. There were a few records with missing gear and/or mesh size information, these are included for completeness.

Vessels <10m: No specific consideration is given to estimating discards for vessels < 10m and discard sampling staff tend not to sail on vessels in the 10 metre and under category. In 2003 the Scottish Fisheries Statistics showed landings of the main commercial demersal species from vessels <=10 m to be below the level where sampling intensities as defined in Appendix XV (Section H) of regulation (EC) 1639/2001 (Table 2) requires sampling to be carried out. Estimation of demersal discards for vessels <10m is based on the assumption that all vessels targeting Nephrops and operating in the same sampling area have the same catching and discarding characteristics.

4.3.2 Data availability Table B nominal fishing effort 2000-2013

Table 4.3.2.1 Overview of the effort data submission for the 2014 Fishing Effort Regimes data call. In bold the dates when effort data were submitted after the official submission deadline (14th of May).

Country	Data Submission	First Submission (Deadline 14-May)	Last Re-submission
BEL	DCF website	09 May	09 May
DEU	DCF website	14-May	14-May
DNK	DCF website	14-May	14-May
ESP	DCF website	16-May	16-May
EST	DCF website	05-June	05-June
FIN	DCF website	14-May	14-May
FRA	DCF website	25-May	25-May
GBR	DCF website	05-June	05-June
GBR SCO	DCF website	13-May	10-June
IRL	DCF website	12-May	12-May
LTU	DCF website	13-May	13-May
LVA	DCF website	10-May	10-May
NLD	DCF website	13-May	13-May
POL	DCF website	13-May	13-May
PTR	DCF website	14-May	17 June
SWE	DCF website	12-May	12-May

4.3.2.1 Belgium

Data submitted for 2013 compose of 143 records in total. No update for previous year's data was needed. There were a few records submitted with no mesh size information for trammels, gillnet and dredges. The only specific condition reported for 2013 data was SBCIIIart5.

Belgium did not provide any information for vessels under 10m.

Belgium provided effort data (kw*days at sea) for 2003-2013 by quarter, for all relevant areas where the Belgian fleets are operational. Since 2003 effort (and landings) are split proportionally

over the rectangles as effort became available by rectangle from logbook data. As Belgium does not have trip-by-trip information on the true mesh size for its fleets for 2003-2006, Belgium (as well as other countries) agreed to assume certain mesh sizes for its beam trawler fleets. Beamers operating in area VIIIa,b were assumed to use a 70-79 mm mesh size as this is the minimum legal mesh size in that area for beamers. For the North Sea, the trips were split according to the rectangles reported in the logbooks, and mesh sizes were allocated in line with Council Regulation (EC) N° 2056/2001. This regulation stipulates that beam trawlers are prohibited to use less than 120 mm in ICES Division IV to the north of 56° 00' N. Therefore all beam trawl information from this part of ICES Division IV was accounted against an assumed >120mm mesh size. The same regulation also stipulates that within the rectangle with coordinates along the east coast of the UK between 55° 00' N and 56° 00' N and the points 55° 00' N – 05° 00' E and 56° 00' N – 05° 00' E, beam trawlers can use 100 to 119 mm mesh size. Here also it was assumed that the mesh size used by the Belgian Beam trawl fleet was 100-119 mm. For the rest of ICES Division IV (the southern part) a mesh size of 80-89 mm was assumed for the beam trawlers. Apart from these assumed mesh size which are based on rectangle information from logbooks, it was also assumed that the shrimp fishery used a mesh size of 16-31 mm. The mesh size of the beam trawl fleets in the other area's was assumed to be 80-89 mm. Since 2007 mesh sizes used by beam trawls operating in different areas have been based on the true mesh sizes used on each trip.

Trip information on the national data base calculates days at sea based on the voyage start date and the voyage end date. For example, a voyage starting on one date and returning (landing) the following day will be accounted for 2 days at sea. Each day a vessel is at sea is counted only once with the effort details allocated according to the longest voyage on that date. Nominal effort in kwdays is calculated as days at sea multiplied by the power of the vessel in kilowatts at the trip landing date. Activity and gear is assessed daily; where activity in a single day covers more than one area or more than one gear; that day's effort is allocated completely to the area/gear with the longest activity that day. Based on the detailed information given it remains unclear to the STECF EWG 14-06 if the data are consistent with Control or DCF Regulation.

The Belgian gear categories are: beam, dredge, gill, longline, otter, and trammel. For trammel nets, no assumptions of mesh sizes were made. The only specific condition reported for 2013 data was SBCIIIart5 for all Belgian vessels operating in areas 8a and 8b.

4.3.2.2 Denmark

4.3.2.2.1 Description of Danish procedures

Danish data were submitted on time, and with the requested information for all tables. Last year, Denmark had proceeded to a major revision and had resubmitted the whole time series 2003-2012. Therefore, no revision of older data was made this year, and only 2013 data were provided according to the same procedures.

The details of the calculations were explained in last year's report, and are summarised here. Procedures have been harmonised between the Danish AgriFish Agency and DTU Aqua, and all estimates are now provided using DTU Aqua's DFAD database, which is a coupling of the logbook register, the sales slips register and the vessel register based on a logbook sheet number. There are some few cases where the logbook area differs from the sales slips area, or where the Baltic subdivision is missing. Therefore a standard procedure for area assignment has been implemented for setting the "DFAD area", following the rules:

1. If there is a logbook area this is used
2. If the trip does not have a logbook the sales slips area is used
3. In the Baltic Sea if the square is 39G4 and the logbook area is 3D and the sales slip area contains information about the subdivision (3D24 or 3D25), the sales slips area is used.
4. If the area is 3D, the ICES rectangle information is used to assign the subdivision.
5. If the area is still 3D (no ICES rectangle information is available), the sales slips area is used.
6. If the area is still 3D the area of the previous trip with the same vessel within 3D with a subdivision assigned, this subdivision is used.
7. If the area is still 3D the most used subdivision for that vessel is used.
8. If the area is still 3D the most used subdivision during the year is used.

The last steps are mainly used on old data.

SPECON information is as follows:

- DEEP: The deep-water fishery is defined as option (2) *catch of Deep Sea species retained > 100 kg*. For the effort data this has been calculated from the logbook catch registration, which is the weight estimated by the fisherman. In DFAD the weights from the sales slips are used. When the weights of deep water species are close to 100 kg, the difference in the weight estimated and measured might lead to a difference in which trips goes into the DEEP specific condition.
- FDFBAL : In the Baltic Sea the fishermen are not obliged to keep the camera turned on. The fully documented fishery by the Danish AgriFish Agency is only implemented in the North Sea and Skagerrak.

All records (1099 rows in Table B) passed the Data Submission filters, but, as every year, a small proportion of the reported Danish fisheries activities have missing information. 3% of nominal effort has no gear information, being mainly small vessels. For larger vessels, missing gear information is expected to be linked to some extent to longline coding (see below). There are 1% of effort with gear but no mesh size provided (mainly dredge). The Danish 2013 submission still does not cover the special conditions BACOMA or T90 in the Baltic, as these are not compulsory to report in logbooks according to control regulations 1224/2009 and 404/2011.

4.3.2.2.2 Concerns about the data call

On May 15th, the Danish AgriFish Agency wrote to the EC about a number of concerns regarding the data call. These concerns are reported below :

“In relation to upload of the Danish figures, the AgriFish Agency is of the opinion that it is necessary to provide The Commission with comments to the methodology for compiling the figures in order to have transparency in the process and ensure proper use and interpretation of the data. Further it is also necessary to address a few remarks to the annexes of the data call in order to ensure a common understanding.

Our comments below refer to point B and D and corresponding appendixes regarding effort data for 2000-2013 (point B and D) :

- 1) With regard to point 6 GEAR (B). In Council Regulation 1342/2008, annex 1, the different gear segments are defined by stating the statistical code for the gear(s) in parenthesis. However, the gear coding in appendix 3 of the data call is not consistent with the gear coding of Council Regulation 1342/2008. This is the case for GILL and LONGLINE. GILL includes codes GNS and GND, however none of the two statistical codes are mentioned in 1342/2008 which only mentions GN which is a general code for Gill Nets. This causes confusion when compiling data. With regard to LONGLINE only LL is mentioned in Regulation 1342/2008 but LONGLINE includes poles (LHP), drifting lines (LLD) etc. Again this causes confusion in establishing a link to existing administrative procedures.*
- 2) Further point 6 GEAR (B) and 4 GEAR (D) : In Council Regulation 1098/2007 there are no specific gear codes mentioned, but in Council Regulation 1124/2010 (Tac and Quota Regulation for the Baltic 2011), Annex 2, there are mentioned a wide range of gears, although not with a statistical code, which all has to have a mesh size of 90 mm or above. In Annex 2, it is stated that drifting lines (LLD) should not be included and there is no references to drift nets. This causes confusion when compiling the data and establishing link to existing administrative procedures.*

As stated above in point 1) and 2) there is lack of consistency between the gears applied in the administrative legislation and the gears applied in the data call. Analysis and conclusions based on this data call must bear these inconsistencies in mind.

The gears applied by Denmark in this data call is:

POINT B	POINT D (REGGEAR >=90 mm)
BEAM : TBB	BEAM : Not included
OTTER : OTB, TB, PTB, OTT, TBN, TBS	OTTER : OTB, TB, PTB, OTT, TBN
DEM_SEINE : SDN, SSC, SB	DEM_SEINE : SDN, SSC, SB
PEL_TRAWL : OTM, TM, PTM	PEL_TRAWL : OTM, TM, PTM
PEL_SEINE: PS, PSN	PEL_SEINE: PS, PSN
DREDGE : DRB	DREDGE : Not included
LONGLINE : LL, LX, LH, LLS, LLD, LHP	LONGLINE : LL, LX, LLS
GILL : GN, GNS, GND	GILL : GN, GNS, GND
TRAMMEL : GTR	TRAMMEL : GTR
POTS : FYK, FPN, FPO, FIX	POTS : Not included

- 3) With regard to point 9 AREA (B) and 5 AREA (D) Denmark will like to stress that the data quality on IBSFC areas in 3C24 and 3D24 is not as good as for the remaining areas when it comes to registrations for square 39G4 which is in both areas. The quality of the data has improved in recent years, but still there may be inconsistencies.
- 4) Point 10 (B) SPECON: There is no information in the logbook with regard to whether a vessel has applied BACOMA or T90 and the vessel is not obliged to fill in this information in the logbook. Consequently Denmark has no information with regard to Baltic Technical Conditions. Further Denmark has only applied article 13C in Regulation 1342/2008 and no data is reported for Cod Plan R(EC) No 43/2009. Deep-water species is defined in line with Regulation 2347/2002 which states fishing trips >= 100 kg mix of species mentioned in the regulation. Fully documented fisheries are defined by the vessels participating and the date of entering the scheme.
- 5) Point 11 FISHING_ACTIVITY (B): Denmark submitted data previous years based on the definition in the data call which was calendar days at sea. This is also the case this year although it is not the definition applied for administrating the rules in regulation 1342/2008 and regulation 1098/2007. However the baseline was calculated with this

definition and the Commission was informed of the inconsistency between the definition in the data call and the definition applied by the Danish Administration and as such the time series of the data call will not be broken. In general applying calendar days combined with gear codes defined in the data call results in approximately 5-10 percent higher fishing activity and even more in one or two segments.

Denmark believes that there should be transparency in the process of how data are compiled in Member States and the mentioned points above are not a methodology report, but points which help researchers understand what data can be used for when conducting analysis. Therefore Denmark suggests that all Member States submits a methodology report on how data are compiled (data sources, definitions, sampling methods applied etc.) and the reports are distributed to every country. This procedure is well known for Member States submitting fishery statistics to Eurostat according to Regulations administered by Eurostat.”

4.3.2.3 Estonia

A number of 67 records were submitted for 2013. No updates for previous year's data.

The effort (days at sea) was calculated according to the Control Regulation. STECF EWG 14-16 noted that the data provided are only for vessels $\geq 12\text{m}$.

4.3.2.4 Finland

A number of 249 records were submitted for 2013. No updates for previous year's data.

4.3.2.5 France

A total number of 2795 records were submitted and fitted in the system for 2013. No updates for previous years' data. There were 6 records with missing area information for vessels less than 10 meters (~200 days at sea) which have not been taken into account as well 2 records for area 3a (less than 2 days at sea) but with no distinction between 3as and 3an. No mesh size was reported for pots records. Some inconsistent “gear*mesh size*area*specon” combination were observed, it concern notably the combination “pots*mesh size:-1”. Only data regarding gears that are requested in the official data call have been submitted and as a consequence records regarding gears not requested are missing.

The specific conditions Cpart11, Cpart13B, IIB72ab, DEEP and SBcIIIart5 have been provided for eligible vessels and fisheries for 2013 as last year for 2012. The data were not updated for 2009-2011 on this specific issue.

As in previous years, records for specific condition DEEP and records for specific area BSA are double counted.

Fishing activity data have been provided only for the period 2010 – 2013 (no fishing activity data for 2003 – 2009). Fishing capacity data were provided for the second time for 2013 in kW as last year for 2012. No fishing capacity data are available for the other years. It should be noted that this field is asked as kW or GT depending of the area and it would be much easier to fill it if it was duplicated in kW and GT.

France provided effort data for 2003-2013 derived from official logbook databases for all registered vessels 10m and over and from monthly declarative forms (contain declarative monthly data on fishing effort and catches per species by dates, locations and gears) for all registered vessels under 10m (logbooks are not mandatory for these vessels but they are covered by these monthly declarative forms). The data covers all areas requested in the data call and conform to the requested aggregation, by quarter, area, gear and mesh sizes. Days at sea are estimated with consistency with the DCF regulation (any continuous period of 24 hours (or part thereof) during which a vessel is present within an area and absent from port).

4.3.2.6 Germany

Data submitted for 2013 consists of 509 records in total. There were very few records with missing gear information as well as records for pots without any mesh size reported.

Germany provided fleet specific effort data for 2000-2013 in the requested formats derived from official logbook data. However, data on vessels <10m in the North Sea and <8m in the Baltic do not cover all vessels and trips because these vessels normally do not have to fill out logbooks. For the scientific evaluations in this report, the calculation procedure follows closely the description in the STECF technical report “Some technical guidance towards national fleet specific fishing effort and catch data aggregation” (ISBN 978-92-79-12134-0). This implies that effort related to rescue operations, etc. are not subtracted. The data consider the aggregation by quarter, area, gear, mesh size, and existing derogations including special conditions of 8.1.a, 8.1.c, 8.1.d, 8.1.e and 8.1.f for the years 2000-2008. For 2009 onwards the special conditions from the new cod management plan are used. Some records did not pass the Data Submission filters when some information on e.g. gear, mesh size was missing, but these records represent only a very small proportion of the reported German fisheries activities. They are related to fishing operations with gears for which no code is available in the STECF data call.

For the Baltic Sea, drifting lines LLD are included in regulated LONGLINE category.

4.3.2.7 Ireland

Data submitted for 2012 - 2013 compose of 1530 records adding to unchanged 2000-2011 data from the 2013 submission. There were some records with missing gear information as well as some records for pots, gills, dredges and otters without any mesh size reported.

Ireland provided fleet specific kW*days-at-sea, GT*days-at-sea, kW capacity, and vessel numbers for 2012-2013 in the requested aggregation format, derived from the national logbook database (IFIS) for vessels ≥ 10 meters in length. The following special condition information was supplied: none, CPart13a, CPart13b, CPart13c, CPart13d, CPart11 and DEEP. Specon DEEP is a duplication of effort within the relevant areas. Days-at-sea data were constructed following the methodology guidelines provided by the Joint Research Council at a meeting held by the Commission in February 2009. Only one gear and area combination is applied to any one vessel day assigned according to the dominant fishing activity. Data from 2000-2011 from the 2013 submission were retained in 2014. Data revisions made to 2012 update the provisional data available for the 2013 submission.

Fishing activity was not provided as Ireland does not operate within the areas for which this data was requested.

Mesh size information was only available from 2003 onwards.

Days-at-sea effort for 2000-2002 is presented as a calculated proxy, obtained from the average ratio of operational fishing days to days-at-sea by gear during 2003 to 2005.

Vessels less than 10m in length are not required to complete logbooks, and therefore no effort is available for these vessels.

It was not possible to accurately aggregate data to the level of EU, coast, and RFMO. Data was assigned according to the following: Where an EU category existed within an area, all data from that area was categorised as EU, with the exception of ICES division X assumed to be RFMO. Those ICES divisions without an EU category were assumed as 1 coast and 2 coast.

4.3.2.8 Latvia

Latvian data were submitted on time and in accordance with required format. Fleet specific effort data by quarter, gear, mesh size and area were provided for 2013 only and appended to the previous time series. All requested effort data, such as days at sea, kW*Days and GT*Days completely covered all fleet segments for 2008-2013, and only offshore fishery for the period 2003-2007.

All effort data on the Latvian Baltic Sea fleet were taken from Integrated Control and Information System for Latvian fisheries (ICIS), which includes the logbook data and technical parameters of fishing vessels from Fishing Vessels Register. The data were collected through

two types of logbooks –offshore and coastal. Registration number of boat was included in the coastal logbooks since 2008. Therefore, detailed data on kW*days and GT*days aggregated by quarter, vessel segments, gear and area for boats less than 10 m can be provided only from 2008 and afterwards. However, the number of “days at sea” were presented for small scale fishery for the period 2005-2013.

Latvian data on fishing activity were calculated by the same way during the recent years. The number of "days at sea" was counted as the sum of calendar days by subtracting the date of returning from the date of departure. Departure and return date concerning one trip is accepted as one day. If the vessels during the trip operated in more than one area each day was attributed to the area where the most fishing time was spent.

4.3.2.9 Lithuania

A number of 95 records were submitted for 2013. No updates for previous year's data.

Days at sea were measured according Control Regulation.

4.3.2.10 The Netherlands

The Netherlands provided effort data for 2013. No updates for previous years were submitted. The data was provided in the requested format using the official logbook data for vessels < 10 m, >= 10 <=15 m and >15 m.

All records (371 rows in Table B) passed the Data Submission filters.

Effort calculation is assumed to be based on days absent from port. As the national database contains not only departure date and arrival date but also the time of departure and the time of arrival, the absence can be calculated more precisely than just days. At the September/October meeting this information will be made final, based on information of the Ministry of Economic Affairs.

4.3.2.11 Poland

A number of 702 records were submitted for 2013. Unavailable mesh size range information for vessels under 8 meters. Additionally missing mesh size information for 22 records (vessels 8-10 meters only) for relatively low number of days 2.5 thousand out of 69.4 thousand days (3.6%). No specific condition reported. Different method of estimation of mesh size ranges in 2011 onwards (compared to the previous years) caused inconsistent mesh size classes, which used to be “110-156” in 2004-2010 period. This mostly concerns vessels under 8 meters. Other variables seem to be very consistent across years.

4.3.2.12 Portugal

Portugal provided kW*days, GT*days and number of vessels for 2000-2013 in the requested aggregation format, derived from the national logbook database for vessels ≥ 10 meters in length. Data are provided by quarter, vessel length, gear, mesh size range, area and special condition. However during the evaluation of the effort datasets, EWG14 06 found the figures on effort were significantly high when compared with those submitted during previous years. By evaluating the basic files uploaded by the MS it was found the effort data series had been uploaded several times files resulting in duplicated, triplicated or even quadruplicated figures. On agreement with the national data submitter, Portuguese effort data was cleared from the database and data re-submitted after the meeting.

Vessels < 10 meters are not required to complete logbooks. Effort of these vessels was estimated based on sales records and data are not available for all fields of the data call (i.e. fishing activity and fishing capacity).

4.3.2.13 Spain

Data provided in 2014:

On 16th May 2014 Spain provided nominal fishing effort data from 2013 by quarter, vessel length range, gear, mesh size range and metier (fishery). In the cases where there were not mesh size data the 100-119 category was introduced in the mobile gears and 100-109 in the passive gears. Mesh sizes in longline were deleted. Data were provided for BSA; ICES Subareas 1, 210 and 12; ICES Divisions 6a, 6b, 7a, 7b, 7c, 7d, 7e, 7g, 7h, 7j, 7k, 8a, 8b, 8c, 8d, 8e, 9a, 9b and 14a, 14b and CECAF Divisions 34.1.1, 34.1.2, 34.1.3 and 34.2.0. Data were divided by COAST/EU/RFMO zones where appropriate. RFMO or null in area 34.1.1 (Moroccan coast) was substituted by COAST. Empty 34.1.2 (Canary Islands, Spain) was substituted by EU. Empty or EU in 34.1.3 (coast of several North African countries) were substituted by COAST. Empty 34.2.0 were substituted by RFMO. Empty 7ck, 8d and 9b were substituted by EU. In all files deep trips were duplicated, once using special condition DEEP and again using specon NONE, as requested by the data call. In ICES Divisions 8c and 9a there were not special condition (IIB72ab) data (Hake Plan) because no vessel in 2012 nor 2013 has applied for that condition in relation to hake and *Nephrops* recovery plan (Annex IIB of R(EU) No 43/2012 and No 39/2013). Data were not divided in either Cod or Sole Plan special conditions owing to lack of time. Spain provided fishing activity, nominal effort, GT days at sea and number of vessels, as the 2014 Data Call requested.

No information about vessels under 10 meters was provided since data source was logbooks, but Annex IIB (Hake Recovery Plan in 8c & 9a), which is the main Plan for Spain, does not deal with vessels under 10 meters.

Spain did not resend effort data previous to 2013.

Data provided in 2011 and 2012:

Spain did not provide data in 2011 and 2012; therefore, there are not 2010 and 2011 data.

Data provided in 2010:

All the following comments correspond to the data provided in 2010:

Spain provided nominal fishing effort data from 2002-2009 data. 2000 and 2001 data were not provided because of the low quality of logbooks those years. Data were provided by quarter, vessel length range, gear and mesh size range. Data were provided for 8c and 9a from 2002-2009 divided by special condition IIB72AB and NONE according to the Southern Hake Plan and also special condition DEEP data (according to the Effort Regime in Deep Sea fisheries) were added. For 2009, also DEEP data of ICES Subarea 12 and ICES Divisions 6a, 7b, 7c, 7h, 8a, 8b, 8c, 9a and 14a were provided. Special condition NONE landings according to the Effort Regime in Deep Sea fisheries for 2009 were not provided by misunderstanding of the instructions. Data were divided by COAST/EU/RFMO zones. Spain provided fishing activity, nominal effort, GT days at sea and number of vessels.

No information about vessels under 10 meters was provided since data source was logbooks, but Annex IIB (Hake Recovery Plan in 8c & 9a), which is the main Plan for Spain, does not deal with vessels under 10 meters.

4.3.2.14 Sweden

Effort data was submitted in the required format for 2013. Sweden has previously provided all required effort data in the requested format from 2000-2012. Days at sea were calculated according to the DCF definition, i.e. continuous 24-hours periods absent from port. Effort data for vessels <10m LOA was included but is not considered reliable until 2009.

For the Baltic Sea, drifting lines (LLD) are included in the regulated “LONGLINE” category.

Since hand and pole lines (LHP) are under effort regulation in the cod plan in the Baltic Sea but not in Skagerrak and Kattegat, and the “LONGLINE” category is considered a regulated gear in the STECF data base, those gears were only included in the “LONGLINE” category in the Baltic and not in other areas. Since there is currently no suitable gear category in the data call for those gears in Skagerrak/Kattegat, they have been included in the “none” category and are accounting for the majority of records with missing gear type in the Swedish data.

4.3.2.15 United Kingdom

Voyage information on the non-Scottish UK national data base, FAD, calculates days at sea based on the dates of the voyage start and the voyage end. Voyage information on the Scottish national data base, FIN, calculates days at sea as the number of 24 hour periods in the duration of the voyage, rounded up. Vessels landing into Scotland are entered onto FIN; those landing into the rest of the UK are entered into FAD. Scottish vessels landing out with the UK are entered into FIN; Rest UK vessels landing outwith the UK are entered into FAD. Because most voyages by Rest UK vessels are entered into FAD; the calculation of days at sea is generally date based. Days at sea for voyages leaving on the same date as the return of the previous voyage are adjusted down by half a day applied to each voyage involved.

The information is not available on a comparable basis before 2003 because this was before the completion of the EU wide vessel gross tonnage recalibration exercise. Activity and gear is assessed daily; where activity in a single day covers more than one area (ICES Rectangle level) or more than one gear; that day's effort is apportioned equally between the area/gears recorded.

England, Wales and Northern Ireland: As a fully revised time series (2003-2012) was provided in 2013, and after checks to make sure revisions were not required to earlier years, only data for 2013 was submitted in response to the data call. A number of records were identified with missing mesh sizes – these were treated as follows depending on the nature of the fishing gear in question following the same practice as in earlier years. For mobile fishing gears where this occurred the activity was re-coded as mesh size “<16”. Dredge trawls accounted for over 99.9% of the nominal effort involved in such instances. While the amount of effort using dredge gear involved was significant, the fact that it was Dredge gear rather than one of the gears regulated under the effort regimes using mesh size means that there is no impact of this recoding on the conclusions drawn from the data. For passive gears activity reported with a missing mesh size was re-coded as mesh size “10-30”. Only Gill nets were involved in such instances with the total level of effort involved being around 0.1% of total effort using Gill Nets in 2013. As such there is no impact of this recoding on the conclusions drawn from the data submitted for activity in 2013 and 213 rows of data were submitted for activity in 2013. Some records were submitted with both area BSA and special condition DEEP and were ignored in the analysis. Special conditions reported were DEEP, CPart11, CPart13a,b,c,d, FDFIIA and FDFIIC.

Nominal effort in kwdays is calculated as days at sea multiplied by the power of the vessel in kilowatts at the voyage landing date.

GT_days_at_sea is calculated for years from 2003 as the days at sea multiplied by the Gross Tonnage of the vessel at the voyage landing date.

Scotland: A total of 674 records were submitted for 2013. There were some records with missing gear and/or mesh size information. Scotland supplies data where records present no gear type information and/or no mesh size information for the purpose of data completeness. As in previous years there were records for area BSA and specific condition DEEP which were ignored in the analysis. Specific conditions reported were DEEP, FDFIIA, CPart11 and CPart13. Any

effort in the Cod Recovery Zone for TR1 and TR2 gears was assigned to special condition CPart13A, CPart13B, CPart13C or CPart13D.

Vessels <10m: For vessels <10m effort is considered under reported 2000-2005 because of under reporting of POTS and shell fishing by hand. The <10m effort data for Scottish registered vessels 2000-2008 excludes voyages landing into ports in England and other non-Scottish areas of the UK. Scottish under 10m boats are known to use more than one type of gear on individual trips or within a quarter and multiple counting of boats is therefore significant.

Vessels landing into Scotland are entered into the Scottish database where the calculation of days at sea is based on the number of 24 hour periods, rounded up. Scottish vessels landing into the rest of the UK are entered into the UK (non-Scottish) database which calculates days at sea based on the dates of the voyage start and the voyage end. Days at sea for voyages leaving on the same date as the return of the previous voyage are adjusted down by half a day. Based on the detailed information given it remains unclear to the STECF EWG 14-06 if the data are consistent with Control or DCF Regulation.

4.3.3 Data availability Table C spatial fishing effort 2003-2013

Table 4.3.3.1 Overview of the spatial effort data submission for the 2014 Fishing Effort Regimes data call. In bold the dates when spatial effort data were submitted after the official submission deadline (14th of May).

Country	Data Submission	First Submission (Deadline 14-May)	Last Re-submission
BEL	DCF website	09 May	09 May
DEU	DCF website	14-May	14-May
DNK	DCF website	14-May	14-May
ESP	DCF website	16-May	16-May
EST	DCF website	05-June	05-June
FIN	DCF website	14-May	14-May
FRA	DCF website	25-May	25-May
GBR	DCF website	05-June	05-June
GBR SCO	DCF website	13-May	10-June
IRL	DCF website	12-May	12-May
LTU	DCF website	13-May	13-May
LVA	DCF website	10-May	10-May
NLD	DCF website	13-May	14-May
POL	DCF website	13-May	14-May
PTR	DCF website	14-May	17-June
SWE	DCF website	12-May	12-May

4.3.3.1 Belgium

Data submitted only for 2013. No updates for previous years' data were needed. In total, 594 records were submitted. There were a few records with missing mesh size information for gears such as trammels, gillnets and dredges.

Belgium did not provide any information for vessels under 10m.

Belgium provided effective effort by ICES statistical rectangle in units of hours trawled for the period 2003-2013, derived from the official logbook databases for all vessels ≥ 10 meters. The data covers all areas in which the Belgian fleets are active and conform to the requested

aggregation, by quarter, area, gear and mesh sizes. No spatial effort information is available for vessels less than 10m in length.

Trawled hours were calculated by summing fishing time to the aggregation level requested in the data call. To ensure consistency between datasets, the same base operational logbooks data was used as for the aggregation of days-at-sea effort.

As Belgium does not have trip-by-trip information on the true mesh size for its fleets for 2003-2006, Belgium (as well as other countries) agreed to assume certain mesh sizes for its beam trawler fleets. Beamers operating in the Bay of Biscay (VIIIa,b) were assumed to use a 70-79 mm mesh size as this is the minimum legal mesh size in that area for beamers. For the North Sea, the trips were split according to the rectangles reported in the logbooks, and mesh sizes were allocated in line with Council Regulation (EC) N° 2056/2001. This regulation stipulates that beam trawlers are prohibited to use less than 120 mm in ICES Division IV to the north of 56° 00' N. Therefore all beam trawl information from this part of ICES Division IV was accounted against an assumed >120mm mesh size. The same regulation also stipulates that within the rectangle with coordinates along the east coast of the UK between 55° 00' N and 56° 00' N and the points 55° 00' N – 05° 00' E and 56° 00' N – 05° 00' E, beam trawlers can use 100 to 119 mm mesh size. Here also it was assumed that the mesh size used by the Belgian Beam trawl fleet was 100-119 mm. For the rest of ICES Division IV (the southern part) a mesh size of 80-89 mm was assumed for the beam trawlers. Apart from these assumed mesh size which are based on rectangle information from logbooks, it was also assumed that the shrimp fishery used a mesh size of 16-31 mm. The mesh size of the beam trawl fleets in the other area's was assumed to be 80-89 mm. Since 2007 mesh sizes used by beam trawls operating in different areas have been based on the true mesh sizes used on each trip.

The Belgian gear categories are: beam, dredge, gill, longline, otter, and trammel. For trammel nets, no assumptions of mesh sizes were made. The only specific condition reported for 2013 data was SBCIIIart5 for all Belgian vessels operating in areas 8a and 8b.

4.3.3.2 Denmark

Danish data were submitted on time, and with the requested information for all tables. Last year, Denmark had proceeded to a major revision and had resubmitted the whole time series 2003-2012. Therefore, no revision of older data was made this year, and only 2013 data were provided according to the same procedures.

All records (4334 rows in Table C) passed the Data Submission filters, and only a very small proportion of the reported Danish fisheries activities have missing information.

The Danish 2013 submission still does not cover the special conditions BACOMA or T90 in the Baltic, as these are not compulsory to report in logbooks according to control regulations 1224/2009 and 404/2011.

More details on the Danish data are given under section effort data table B, and these are also valid for Table C.

4.3.3.3 Estonia

A number of 384 records were submitted for 2013. No updates for previous year's data. There were many records with inconsistent mesh size ranges.

STECF EWG 13-13 noted that data were provided only for vessels $\geq 12\text{m}$.

4.3.3.4 Finland

A number of 980 records were submitted for 2013. No updates for previous year's data.

4.3.3.5 France

A total number of 9905 records were submitted and fitted in the system for 2013. No updates for previous years' data. There were a few records with missing area information for vessels less than 10 meters as well as a few records with missing statistical rectangle information (data is available for the ICES division but not at this level of aggregation) or rectangle information not available in the reference's table (ex. 100B0 or 84I2) which have not been taken into account. As for the others tables, some records for area 3a were as well not taken into account because of the non distinction between 3as and 3an. No mesh size was reported for pots records. Some inconsistent "gear*mesh size*area*specon" combination were observed, notably the combination "pots*mesh size:-1". Only data regarding gears that are requested in the official data call have been submitted and as a consequence records regarding gears not requested are missing.

The specific conditions Cpart11, Cpart13B, IIB72ab, DEEP and SBcIIIart5 have been provided for eligible vessels and fisheries for 2013 as last year for 2012. The data were not updated for 2009-2011 on this specific issue.

As in previous years, records for specific condition DEEP and records for specific area BSA are double counted.

France provided specific effort data by rectangle for 2003-2013 derived from official logbook databases for all registered vessels 10m and over and from monthly declarative forms (contain declarative monthly data on fishing effort and catches per species by dates, locations and gears) for all registered vessels under 10m (logbooks are not mandatory for these vessels but they are

covered by these monthly declarative forms). The data covers all areas requested in the data call and conform to the requested aggregation, by quarter, area, gear and mesh sizes.

4.3.3.6 Germany

Data submitted for 2013 consists of 2124 records in total. There were a small number of records with missing gear information as well as records for pots without any mesh size reported.

Data for vessels <10m in the North Sea and 8m in the Baltic could not be submitted as these vessels do not have to fill out logbooks. Some records did not pass the Data Submission filters when some information on e.g. gear, mesh size was missing, but these records represent only a very small proportion of the reported German fisheries activities. They are related to fishing operations with gears for which no code is available in the STECF data call.

4.3.3.7 Ireland

Ireland provided effective effort by ICES statistical rectangle in units of hours fished for the period 2012-2013 in the requested aggregation format, derived from the national logbook database (IFIS) for vessels $\geq 10\text{m}$ in length. Hours fished were calculated by summing fishing time reported within the logbook operations. To ensure consistency between datasets, the same base operational logbooks data was used as for the aggregation of days-at-sea effort. The following special condition information was supplied: none, CPart13a, CPart13b, CPart13c, CPart13d, CPart11 and DEEP. Specon DEEP is a duplication of effort within the relevant areas. Data from 2000-2011 from the 2013 submission were retained in 2014. Data revisions made to 2012 update the provisional data available for the 2013 submission.

No spatial effort information is available for vessels less than 10m in length.

It was not possible to accurately aggregate data to the level of EU, coast, and RFMO. Data was assigned according to the following: Where an EU category existed within an area, all data from that area was categorised as EU, with the exception of ICES division X assumed to be RFMO. Those ICES divisions without an EU category were assumed as 1 coast and 2 coast.

4.3.3.8 Latvia

Latvian data were submitted on time and in accordance with required format. Fleet specific effort data in hours fished by ICES statistical rectangle were provided for 2013 only and appended to the previous time series. Effective effort (Hours fished) was calculated by summing fishing duration for each operation during the trip. For the small boats less than 10 m this parameter was calculated as fishing days multiplied by 24. Effort data were derived from logbooks and covered

all fleet segments for the period of 2005-2012. Fleet specific effort data for small boats (<8m) were not provided for 2003 –2004.

4.3.3.9 Lithuania

A number of 163 records were submitted for 2012. No updates for previous year's data.

No comments.

4.3.3.10 The Netherlands

The Netherlands only provided effort by rectangle data for 2013. No updates for previous years were submitted. The data was provided in the requested format using the official logbook data for vessels < 10 m, $\geq 10 \leq 15$ m and >15 m.

All records (1787 rows in Table C) passed the Data Submission filters.

4.3.3.11 Poland

A number of 4631 records were submitted for 2011-2013. No mesh size range information reported for vessels under 8 meters. No specific condition reported. Relative changes of the total effective effort seem to be consistent across the years. Mesh size data breakdown for 2011 is not comparable with previous years because of different aggregation method used (as described above).

4.3.3.12 Portugal

Portugal provided effective effort (in hours) by rectangle for the period 2003-2013 for vessels ≥ 10 meters with the aggregation requested by the data call, based on logbook data. Data for the ICES areas 6b, 7k, 8c, 8d, 8e, 9a, 9b, 10, 12 and 14, as well as for the CECAF areas were provided.

4.3.3.13 Spain

Data provided in 2014:

On 16 May 2014 Spain provided spatial fishing effort data from 2013 by quarter, vessel length range, gear, mesh size range and metier (fishery). In the cases where there were not mesh size data the 100-119 category was introduced in the mobile gears and 100-109 in the passive gears. Mesh sizes in longline were deleted. Data were provided for BSA; ICES Subareas 1, 2 10 and; ICES Divisions 6a, 6b, 7b, 7c, 7d, 7e, 7g, 7h, 7j, 7k, 8a, 8b, 8c, 8d, 8e, 9a, 9b and 14b and CECAF Division 34.2.0. Data were divided by COAST/EU/RFMO zones where appropriate. RFMO or null in area 34.1.1 (Moroccan coast) was substituted by COAST. Empty 34.1.2 (Canary Islands, Spain) was substituted by EU. Empty or EU in 34.1.3 (coast of several North African countries) were substituted by COAST. Empty 34.2.0 were substituted by RFMO. Empty 7ck, 8d and 9b were substituted by EU. Deep trips were duplicated, once using special condition DEEP and again using special condition NONE, as requested in the data call. In ICES Divisions 8c and 9a there were not special condition (IIB72ab) data (Hake Plan) because no vessel in 2012 and 2013 has applied for that condition in relation to hake and *Nephrops* recovery plan (Annex IIB of R(EU) No 43/2012 and No 39/2013). Data were not divided in either Cod or Sole Plan special conditions owing to lack of time.

No information about vessels under 10 meters was provided since data source was logbooks, but Annex IIB (Hake Recovery Plan in 8c & 9a), which is the main Plan for Spain, does not deal with vessels under 10 meters.

Spain did not resend spatial effort data previous to 2013.

Data provided in 2011 and 2012:

Spain did not provide data in 2011 and 2012; therefore, there are not 2010 and 2011 data.

Data provided in 2010:

All the following comments correspond to the data provided in 2010:

Spain provided spatial fishing effort data for 2002 to 2009. Data were provided by quarter, vessel length range (only in 2009), gear and mesh size range. Data were provided for 8c and 9a from 2002-2009 divided by special condition IIB72AB and NONE according to the Southern Hake Plan and also special condition DEEP data (according to the Effort Regime in Deep Sea fisheries) were added. For 2009, also DEEP data of ICES Subarea 12 and ICES Divisions 6a, 7b, 7c, 7h, 8a, 8b, 8c and 9a were provided. Special condition NONE landings according to the Effort Regime in Deep Sea fisheries for 2009 were not provided by misunderstanding of the instructions. Data were divided by COAST/EU/RFMO zones.

No information about vessels under 10 meters was provided since data source was logbooks, but Annex IIB (Hake Recovery Plan in 8c & 9a), which is the main Plan for Spain, does not deal with vessels under 10 meters.

4.3.3.14 Sweden

Specific effort data by rectangle was submitted in the required format for 2013 this year, including vessels <10m LOA, although the specific effort for the <10m vessels is probably not reliable due to a lack of information of fishing duration in this vessel category. The same information has previously been submitted for the years 2003-2012. Hours fished were derived from fishing time reported by fishing activity in the logbooks.

Since hand and pole lines (LHP) are under effort regulation in the cod plan in the Baltic Sea but not in Skagerrak and Kattegat, and the “LONGLINE” category is considered a regulated gear in the STECF data base, those gears were only included in the “LONGLINE” category in the Baltic and not in other areas. Since there is currently no suitable gear category in the data call for those gears in Skagerrak/Kattegat, they have been included in the “none” gear category and are accounting for the large majority of records with missing gear information in the Swedish data.

4.3.3.15 United Kingdom

England, Wales and Northern Ireland: As a fully revised time series (2003-2012) was provided in 2013, and after checks to make sure revisions were not required to earlier years, only data for 2013 was submitted in response to the data call. A number of records were identified with missing mesh sizes – these were treated as follows depending on the nature of the fishing gear in question following the same practice as in earlier years. For mobile fishing gears where this occurred the activity was re-coded as mesh size “<16”. Dredge trawls accounted for over 99.9% of the effort involved in such instances. While the amount of effort using dredge gear involved was significant, the fact that it was Dredge gear rather than one of the gears regulated under the effort regimes using mesh size means that there is no impact of this recoding on the conclusions drawn from the data. For passive gears activity reported with a missing mesh size was re-coded as mesh size “10-30”. Only Gill nets were involved in such instances with the total level of effort involved being around 0.1% of total effort using Gill Nets in 2013. As such there is no impact of this recoding on the conclusions drawn from the data submitted for activity in 2013 and 8093 rows of data were submitted for activity in 2013. Some records were submitted with both area BSA and special condition DEEP and were ignored in the analysis. Special conditions reported were DEEP, CPart11, CPart13a,b,c,d, FDFIIA and FDFIIC.

Where activity in a single day covers more than one area (ICES Rectangle level) or more than one gear; that day's effort is apportioned equally between the area/gears recorded. The hours fished entries are simply days at sea data multiplied by 24. This is because hours fished information obtained from vessels has been proven unreliable (not a required field in logbooks).

Scotland: A total of 4764 records were submitted for 2013. There were some records with missing gear and/or mesh size information.

Effort on voyages fishing in more than one rectangle is allocated according to logbook data. The hours fished entries are simply days at sea data multiplied by 24. This is because hours fished information has been proven unreliable from Scottish vessels (not a required field in logbooks).

Scotland supplies data where records present no gear type information and/or no mesh size information for the purpose of data completeness. As in previous years there were records for area BSA and specific condition DEEP which were ignored in the analysis. Specific conditions reported were DEEP, FDFIIA, CPart11 and CPart13A, CPart13B, CPart13C, CPart13D.

4.3.4 Data availability Table D fishing Capacity in the Baltic Sea 2003-2013

Table 4.3.4.1 Overview of the capacity data submission for the 2014 Fishing Effort Regimes data call. In bold the dates when capacity data where submitted after the official submission deadline (14th of May).

Country	Data Submission	First Submission (Deadline 14-May)	Last Submission
DEU	DCF website	14-May	14-May
DNK	DCF website	14-May	14-May
EST	DCF website	05-June	05-June
FIN	DCF website	14-May	14-May
LTU	DCF website	13-May	13-May
LVA	DCF website	10-May	10-May
POL	DCF website	13-May	14-May
SWE	DCF website	12-May	12-May

4.3.4.1 Denmark

Danish data were submitted on time, and with the requested information for all tables. Last year, Denmark had proceeded to a major revision and had resubmitted the whole time series 2003-2012. Therefore, no revision of older data was made this year, and only 2013 data were provided according to the same procedures.

All records (25 rows in Table D) passed the Data Submission filters.

The Danish 2013 submission still does not cover the special conditions BACOMA or T90 in the Baltic, as these are not compulsory to report in logbooks according to control regulations 1224/2009 and 404/2011.

More details on the Danish data are given under section effort data table B, and these are also valid for Table D.

4.3.4.2 Estonia

In total 4 records were submitted for 2013.

STECF EWG 13-13 notes that data for vessels <12 m was not provided. No updates for previous year's data

4.3.4.3 Finland

Five records were submitted for 2013. No updates for previous year's data

4.3.4.4 Germany

Data submitted for 2013 consists of 12 records in total.

Data on Capacity and Fishing Activity in the Baltic was provided as requested by the data call from logbook information. It was ensured that vessels do not count twice to get a realistic overview on fleet capacity. The full time series is covered.

4.3.4.5 Latvia

Latvian data were submitted on time and in accordance with required format. Fishing fleet capacity data for active vessels operated in the Baltic Sea were provided for 2013 only and appended to the previous time series. Registration number of boat was included in the coastal logbooks since 2008. Therefore, detailed data such as number of active vessels aggregated by area for boats less than 10 m which operated in the coastal fishing zone can only be provided from 2008 and afterwards.

4.3.4.6 Lithuania

Data submitted for 2009 - 2013 compose of 38 records in total.

No comments.

4.3.4.7 Poland

Data submitted for 2013 compose of 31 records in total. Data are consistent across years.

4.3.4.8 Sweden

Fisheries capacity data was submitted in the required format for the data year 2013 and has previously been provided for the years 2003-2012 for the Baltic Sea and for the years 2009-2012 for all other areas. Data includes vessels <8m LOA. Days at sea were calculated according to the DCF definition, i.e. continuous 24-hours periods absent from port.

4.3.5 Data availability Table E spatial landings 2003-2013

Table 4.3.5.1 Overview of the spatial landings data submission for the 2014 Fishing Effort Regimes data call. In bold the dates when spatial landings data where submitted after the official submission deadline (3th of May).

Country	Data Submission	First Submission (Deadline 14-May)	Last Submission
BEL	DCF website	09 May	09 May
DEU	DCF website	14-May	14-May
DNK	DCF website	14-May	14-May
ESP	DCF website	02-June	03-June
EST	DCF website	05-June	05-June
FIN	DCF website	14-May	14-May
FRA	DCF website	25-May	25-May
GBR	DCF website	05-Jun	05-Jun
GBR SCO	DCF website	13-May	13-May
IRL	DCF website	12-May	13-May
LTU	DCF website	13-May	13-May
LVA	DCF website	10-May	10-May
NLD	DCF website	14-May	14-May
POL	DCF website	14-May	14-May
PTR	DCF website	14-May	17-June
SWE	DCF website	13-May	14-May

4.3.5.1 Belgium

A total number of 7502 records were submitted for 2013. No update for previous year's data was needed. There were a few records with missing mesh size information for gear types such as trammels, dredges and gillnets. Moreover, many records regard species that are not listed in the official data call, like BLL, RJN, RJM, RJC and RJH. The only special condition reported for 2013 data was SBCIIIart5. This year, all officially recorded species by the Belgian authorities were provided. However, it should be noted that the sum of all provided landings do not match the total Belgian landings as there are a minority of species landed and recorded as e.g. "other demersal" or "other crustacean" which are not provided to the EGW 14-06.

Belgium provided fleet specific landings data for 2003-2013 derived from official logbook databases for all vessels ≥ 10 meters. The data covers all areas in which the Belgian fleets are active and conform to the requested aggregation, by quarter, area, gear and mesh sizes.

The species provided are: anglerfish, bib, brill, brown shrimp, cod, conger eel, cuttlefish, dab, dogfish, edible crab, flounder, great scallop, grey gurnard, haddock, hake, horse mackerel, lemon sole, ling, mackerel, megrim, Nephrops, octopus, plaice, pollack, red gurnard, saithe, sea bass, skates and rays, sole, spurdog, squid, striped mullet, tub gurnard, turbot, whelk, whitch flounder, whiting and wolffish.

As Belgium does not have trip-by-trip information on the true mesh size for its fleets for 2003-2006, Belgium (as well as other countries) agreed to assume certain mesh sizes for its beam trawler fleets. Beamers operating in the Bay of Biscay (VIIIa,b) were assumed to use a 70-79 mm mesh size as this is the minimum legal mesh size in that area for beamers. For the North Sea, the trips were split according to the rectangles reported in the logbooks, and mesh sizes were allocated in line with Council Regulation (EC) N° 2056/2001. This regulation stipulates that beam trawlers are prohibited to use less than 120 mm in ICES Division IV to the north of 56° 00' N. Therefore all beam trawl information from this part of ICES Division IV was accounted against an assumed >120 mm mesh size. The same regulation also stipulates that within the rectangle with coordinates along the east coast of the UK between 55° 00' N and 56° 00' N and the points 55° 00' N – 05° 00' E and 56° 00' N – 05° 00' E, beam trawlers can use 100 to 119 mm mesh size. Here also it was assumed that the mesh size used by the Belgian Beam trawl fleet was 100-119 mm. For the rest of ICES Division IV (the southern part) a mesh size of 80-89 mm was assumed for the beam trawlers. Apart from these assumed mesh size which are based on rectangle information from logbooks, it was also assumed that the shrimp fishery used a mesh size of 16-31 mm. The mesh size of the beam trawl fleets in the other area's was assumed to be 80-89 mm. Since 2007 mesh sizes used by beam trawls operating in different areas have been based on the true mesh sizes used on each trip.

The Belgian gear categories are: beam, dredge, gill, longline, otter, and trammel. For trammel nets, no assumptions of mesh sizes were made. The only specific condition reported for 2013 data was SBCIIIart5 for all Belgian vessels operating in areas 8a and 8b.

Belgium did not provide any information for vessels under 10m.

4.3.5.2 Denmark

Danish data were submitted on time, and with the requested information for all tables. Last year, Denmark had proceeded to a major revision and had resubmitted the whole time series 2003-2012. Therefore, no revision of older data was made this year, and only 2013 data were provided according to the same procedures.

The extraction procedures are fully compatible with the RDB FishFrame database, in order to get a unique raising procedure for all Danish catch information (discards and age-based information), thus improving the consistency of data reported to the various forums within e.g. ICES and STECF. As such, data raised in FishFrame are used for the STECF Effort data call. Where the categories in the FishFrame format and the STECF Effort format are not the same, the data are scaled according to the landings.

All records (34982 rows in Table E) passed the Data Submission filters, and only a very small proportion of the reported Danish fisheries activities have missing information.

The Danish 2013 submission still does not cover the special conditions BACOMA or T90 in the Baltic, as these are not compulsory to report in logbooks according to control regulations 1224/2009 and 404/2011.

More details on the Danish data are given under section effort data.

4.3.5.3 Estonia

A number of 1588 records were submitted for 2013. No updates for previous year's data. There were many records with inconsistent mesh size ranges.

STECF EWG 13-13 notes that the mesh sizes are inconsistent with the data call for vessels <12 m.

4.3.5.4 Finland

A number of 2321 records were submitted for 2013. No updates for previous year's data

4.3.5.5 France

A total number of 70541 records were submitted and fitted in the system for 2013. No updates for previous years' data. Landings data by rectangle have been only submitted since 2011 and are

available only from 2011 to 2013. No landings data by rectangle is available for 2003-2010. There were a few records with missing area information for vessels less than 10 meters as well as a few records with missing statistical rectangle information (data is available for the ICES division but not at this level of aggregation) or rectangle information not available in the reference's table (ex. 100B0 or 84I2) which have not been taken into account. As for the others tables, some records for area 3a were as well not taken into account because of the non distinction between 3as and 3an. No mesh size was reported for pots records. Some inconsistent “gear*mesh size*area*specon” combination were observed, notably the combination “pots*mesh size:-1”. Only data regarding gears that are requested in the official data call have been submitted and as a consequence records regarding gears not requested are missing.

The specific conditions Cpart11, Cpart13B, IIB72ab, DEEP and SBcIIIart5 have been provided for eligible vessels and fisheries for 2013 as last year for 2012. The data were not updated for 2009-2011 on this specific issue.

As in previous years, records for specific condition DEEP and records for specific area BSA are double counted.

France provided landings data by rectangle for 2011-2013 derived from official logbook databases for all registered vessels 10m and over and from monthly declarative forms (contain declarative monthly data on fishing effort and catches per species by dates, locations and gears) for all registered vessels under 10m (logbooks are not mandatory for these vessels but they are covered by these monthly declarative forms). The data covers all areas requested in the data call and conform to the requested aggregation, by quarter, area, gear and mesh sizes.

4.3.5.6 Germany

A number of 9542 records were submitted for 2013. There were some records with missing gear information as well as some records for pots, dem_seines, gills, otters without any mesh size reported.

Germany aggregated the landings from logbook information as requested by ICES statistical rectangles and covers the full time series. No complete data on the spatial distribution of landings could be provided for vessels <10m in the North Sea and <8m in the Baltic as for these vessels it is not mandatory to provide detailed logbook information. Description on special conditions from part A and B also apply to part E. Some records did not pass the Data Submission filters when some information on e.g. gear, mesh size was missing, but these records represent only a very small proportion of the reported German fisheries activities. They are related to fishing operations with gears for which no code is available in the STECF data call.

4.3.5.7 Ireland

A total of 296299 records were submitted for 2003 - 2013. There were some records with missing gear information as well as some records for pots, dredges, gills without any mesh size reported.

Ireland provided landings by ICES statistical rectangle for the period 2003-2013 in the requested aggregation format, derived from the national logbook database (IFIS) for vessels ≥ 10 m in length and monthly landing reports for under 10m vessels. For vessels ≥ 10 m landings were calculated by summing live weights reported within the logbook operations as declared landings are not available at the level of statistical rectangle. To ensure consistency between datasets, the same base operational logbooks data was used as for the aggregation of declared landings within the Landings database (A). The following special condition information was supplied: none, CPart13a, CPart13b, CPart13c, CPart13d, CPart11 and DEEP. Specon DEEP is a duplication of effort within the relevant areas. Under 10m landings were assumed to originate from the ICES rectangle in which the landing port was located when within the same ICES division as reported landings. Where the port and landing ICES division differed, the nearest ICES rectangle to the port of the reported ICES division was assigned.

Area misreporting has been accounted for between ICES areas VIIg and VIIa for cod, haddock and whiting where the fishery straddles the ICES boundary of these two areas. It was not possible to account for any Nephrops misreporting relating to the porcupine bank fishing ground, believed to happen since 2011.

It was not possible to accurately aggregate data to the level of EU, coast, and RFMO. Data was assigned according to the following: Where an EU category existed within an area, all data from that area was categorised as EU, with the exception of ICES division X assumed to be RFMO. Those ICES divisions without an EU category were assumed as 1 coast and 2 coast.

4.3.5.8 Latvia

Latvian data were submitted on time and in accordance with required format. Fleet specific landings data by ICES statistical rectangle were provided for 2013 only and appended to the previous time series.

4.3.5.9 Lithuania

A number of 351 records were submitted for 2013. No updates for previous year's data.

No comments.

4.3.5.10 The Netherlands

The Netherlands only provided landings by rectangle data for 2013. No updates for previous years were submitted. The data was provided in the requested format using the official logbook data for vessels < 10 m, >= 10 <=15 m and >15 m.

All records (7240 rows in Table E) passed the Data Submission filters.

4.3.5.11 Poland

A number of 9311 records were submitted for 2011-2013. No mesh size range information reported for all vessels under 8 meters, partly missing mesh size information for other length groups for a relatively low amount of catches (3.2% excluding longlines). Specific condition information based on assumption that all “>=105 “ mesh size is a BACOMA one, however according to a 2012 trial investigation about 35 demersal trawl vessels used T90 trawls as well. So the assumption should be treated with caution.

4.3.5.12 Portugal

Portugal provided landings by species and by rectangle for the period 2003-2013 for vessels ≥ 10 meters with the aggregation requested by the data call, based on logbook data. Data for the ICES areas 6b, 7k, 8c, 8d, 8e, 9a, 9b, 10, 12 and 14, as well as for the CECAF areas were provided.

4.3.5.13 Spain

Data provided in 2014:

In June of 2014 Spain provided spatial landings data from 2013 by quarter, vessel length range, gear, mesh size range and metier (fishery). In the cases where there were not mesh size data the 100-119 category was introduced in the mobile gears and 100-119 in the passive gears. Mesh sizes in longline were deleted. Landings were provided for BSA; ICES Subareas 1, 2, 10 and 12; ICES Divisions 6a, 6b,7a, 7b, 7c, 7d, 7e, 7g, 7h, 7j, 7k, 8a, 8b, 8c, 8d, 8e, 9a, 9b, 14a and 14b and CECAF Divisions 34.1.1, 34.1.2, 34.1.3 and 34.2.0. Landings were divided by COAST/EU/RFMO zones where appropriate. RFMO or null in area 34.1.1 (Moroccan coast) was substituted by COAST. Empty 34.1.2 (Canary Islands, Spain) was filled with EU. Empty or EU in 34.1.3 (coast of several North African countries) were substituted by COAST. Empty 34.2.0 were filled with RFMO. Empty 7ck, 8d and 9b were filled by EU. Deep trips were duplicated, once using special condition DEEP and again using special condition NONE, as requested by the data call. In ICES Divisions 8c and 9a there were not special condition (IIB72ab) landings (Hake Plan) because no vessel in 2012 and 2013 has applied for that condition in relation to hake and *Nephrops* recovery plan (Annex IIB of R(EU) No 43/2012 and No 39/2013). Landings were not divided in either Cod or Sole Plan special conditions owing to

lack of time. Landings were provided for 84 of the 125 species of the 2014 data call (the other 41 do not appear in our fisheries). Data about European pilchard and “other species” (new categories in the 2014 data call species list) have been provided.

No information about vessels under 10 meters was provided since data source was logbooks, but Annex IIB (Hake Recovery Plan in 8c & 9a), which is the main Plan for Spain, does not deal with vessels under 10 meters.

Spain did not resend spatial landings data previous to 2013.

4.3.5.14 Sweden

Landings data by rectangle has previously been submitted in the required format for the years 2003-2012, including landings by vessels <10m LOA. This year, data for 2013 was submitted and the years 2009-2012 were updated, due to previous error in the Swedish *Pandalus* catches.

Landings were derived from the logbook data base.

4.3.5.15 United Kingdom

England, Wales and Northern Ireland: As a fully revised time series (2003-2012) was provided in 2013, and after checks to make sure revisions were not required to earlier years, only data for 2013 was submitted in response to the data call. A number of records were identified with missing mesh sizes – these were treated as follows depending on the nature of the fishing gear in question following the same practice as in earlier years. For mobile fishing gears where this occurred the activity was re-coded as mesh size “<16”. Dredge trawls accounted for over 99.9% of the landings involved in such instances. While the amount of landings using dredge gear involved was significant, the fact that it was Dredge gear rather than one of the gears regulated under the effort regimes using mesh size means that there is no impact of this recoding on the conclusions drawn from the data. For passive gears activity reported with a missing mesh size was re-coded as mesh size “10-30”. Only Gill nets were involved in such instances with the total level of landings involved being around 0.02% of total landings using Gill Nets in 2013. As such there is no impact of this recoding on the conclusions drawn from the data submitted for activity in 2013 and 53,941 rows of data were submitted for activity in 2013. Some records were submitted with both area BSA and special condition DEEP and were ignored in the analysis. Special conditions reported were DEEP, CPart11, CPart13a,b,c,d, FDFIIA and FDFIIC.

Scotland: A total of 30368 records were submitted for 2013. There were some records with missing gear information as well as some records for otters, trammels, dem_seines and gills without any mesh size reported.

Specific conditions reported were DEEP (2003-2008), DEEP and CPart13A, CPart13B, CPart13C, CPart13D (2009) and DEEP, FDFIIA, CPart11 and CPart13A, CPart13B, CPart13C, CPart13D (2010-2012).

4.3.6 Fisheries specific landing and effort data 2003-2013 of small boats (< 8m or <10m)

This STECF EWG 14-06 report provides an overview of landings and effort data provided by the experts regarding their national fisheries of small vessels <8m or <10m, which are not obliged to report their landings through logbooks but rather do landings declarations.

Previously, information on small vessels has been provided in the reports only as a series of individual country reports describing activities and landings. In this report individual country information is again provided where available. An attempt is also made to compile available information for each area into overall figures. Since not all countries were able to fulfil this part of the data call, the aggregate estimates for each region of the cod recovery zone must be considered as minimum estimates. Nevertheless, they begin to give an idea of the scale of landings contributed by these smaller classes of vessel and can be used to comment on the likely relative importance compared with the regulated vessels.

Member States' data submissions for small boats are summarized in the previous sections by data table A-E, sections 4.3.1-5, respectively.

4.4 Estimation of fisheries specific international landings and discards

The estimation of fisheries specific international landings and discards is based on linking the information about fisheries specific discards and catch and discards at age among countries and replacing poor or lacking values with aggregated information from other countries.

Reported data by country are aggregated by fisheries properties and raised to the officially reported landings or discards in the format stipulated in the annual DCF fishing effort data calls. A similar format had been designed by ICES SGDFE 2004 (ICES 2004) format. Fisheries definitions are based on area, year, quarter, gear, mesh size groups, special conditions as defined in Council Reg. 41/2007 Annexes IIA-C and 57/2011 Annexes IIA-C or the multiannual management plans, and national fisheries (metiers) definitions.

The data aggregation and estimation procedures follow the simple raising strategies outlined below:

- Data aggregation:

The national fisheries data (row specific records in the data submissions from Member States) are classified to their management areas or sub-areas, species, years, quarters and effort regulated gear groups by disregarding the country and national fishery definitions (metiers).

- Estimation of discard rates by fisheries and raising of discard for non-sampled fisheries:

Let the following notation be: D=discards, L= landings, snf = national fishery with a discard value from 0 to X, unf = non-sampled fishery without a discard value.

The available landings and discards are aggregated (summed) over fisheries (by species, year, quarter, effort regulated area, effort regulated gear, special condition) and mean discard rates DR are calculated:

$$DR = \frac{\sum_{snf} D_{snf}}{\sum_{snf} (L_{snf} + D_{snf})} \quad \text{if } D_{snf} \geq 0 \text{ and with } L_{snf} + D_{snf} > 0$$

Fisheries specific discard amounts are then calculated if no discard information is available by

$$D_{unf} = \frac{L_{unf} \cdot DR}{(1 - DR)} \quad \text{where } D_{unf} \text{ is null (empty)}$$

Fisheries without any discard information, i.e. no average DR could be estimated, remain without any discard estimation as no quantitative information is available.

- Estimation (raising) of landings in numbers and mean weight at age for non or poorly sampled national fleets

A poorly sampled fishery is defined as such if the Sum of Products SOP derived from numbers at age landed times weight at age is as follows

$$SOP_{snf} < 0.75 \text{ or } SOP_{snf} > 1.25$$

Data of landings in numbers at age and their weight at age of poorly sampled fisheries are replaced with -1, meaning no information available.

Let i be the age reference.

Landings in numbers ($N_{snf,i}$) and mean weight at age ($W_{snf,i}$) are aggregated (summed for $N_{snf,i}$ and averaged for $W_{snf,i}$) over all sampled fisheries when $SOP_{snf} \geq 0.75$ and $SOP_{snf} \leq 1.25$.

Raising of numbers at age and respective fill in of mean weights at ages 0-11 to non or poorly sampled fisheries is performed by

$$N_{wuf,i} = \frac{\sum_{snf} (N_{snf,i}) \cdot L_{wuf}}{\sum_{snf} L_{snf}}$$

$$W_{wuf,i} = \text{mean}(W_{snf,i})$$

The mean weights are non-weighted and an appropriate weighing procedure, e.g. number of fish measured, should be explored.

Fisheries for which no summed landings in numbers at age information and mean weights at ages could be estimated remain non-raised, i.e. without any quantitative information.

- Estimation (raising) of discards in numbers and mean weight at age for non or poor sampled fleets

A poorly sampled fishery is defined as such if the Sum of Products SOP derived from numbers at age discarded times weight at age is as follows

$$SOP_{snf} < 0.75 \text{ or } SOP_{snf} > 1.25$$

Data of discards in numbers at age and their weight at age of poorly sampled fisheries are replaced with -1, meaning no information available.

Let i be the age reference.

Discards in numbers ($N_{snf,i}$) and mean weight at age ($W_{snf,i}$) are aggregated (summed for $N_{snf,i}$ and averaged for $W_{snf,i}$) over all sampled fisheries when $SOP_{snf} \geq 0.75$ and $SOP_{snf} \leq 1.25$.

Raising of numbers at age and respective fill in of mean weights at ages 0-11 to non or poorly sampled fisheries is performed by

$$N_{unf,i} = \frac{\sum_{snf} (N_{snf,i}) \cdot D_{unf}}{\sum_{snf} D_{snf}}$$

$$W_{unf,i} = mean(W_{snf,i})$$

The mean weights are non-weighted and an appropriate weighing procedure, e.g. number of fish measured, should be explored.

Fisheries for which no summed discards in numbers at age information and mean weights at ages could be estimated remain non-raised, i.e. without any quantitative information.

- Estimation of catch and catch at age in numbers including discards

Catches by fisheries are estimated as the sum of landings and discards, also where discards are lacking.

Catches at ages 0-11 in numbers by fisheries are estimated as the sum of landings at age in numbers and discards at age in numbers, also where discards are lacking.

Mean weights at ages 0-11 are estimated at weighted means (according to ratios of landings at age and discards at age to catches at age, respectively).

Finally, all fisheries' catches and catches at ages in numbers and mean weights are aggregated (summed or averaged, as appropriate) over management areas, species, years, effort regulated gear groups and special conditions.

It needs to be realised that fisheries for which no aggregated information on discards or landings in numbers at age and discards in numbers at age is available from other countries remain non-raised. STECF EWG 14-06 concludes that these non-raised fisheries may need to be subject to a specific raising procedure if total catch and catch in numbers is to be estimated and if the individual non-raised fisheries constitute significant catches.

The EWG 14-06 notes that sampling of catch at sea including discards is expensive and difficult. This means that sampling coverage tends to be rather limited, and estimates of discards are subject to high uncertainty. This is true of all the discard data used here, and in some cases the discard estimates presented represent the first attempt to use the discard data from some fisheries in an advisory context. Where the coverage is considered adequate to estimate the overall catch compositions of specific fleets these are presented, but they are intended only to provide an approximate indication of fleet catch compositions. In cases where there are little data, the estimated discard rates may be biased and imprecise (Stratoudakis *et al.*, 1999). The mean

weights are estimated as unweighted means. This results in a biased estimate. An appropriate weighing procedure, i.e. number of fish measured, should be explored.

EWG 14-06 further notes that the approach of discard estimation applied is generally consistent with the method used in the discard estimates published by the FAO (Kelleher, 2004). However, the group also notes that the design of a discard sampling scheme might differ depending on whether the objective was to estimate total discards, or discard for specific fleets. In the current context estimates from sampling schemes designed for the former purpose are being used for the latter purpose which again means the estimates should only be used with caution. Where this is the case, comparisons are made between the estimates of total discards used for assessment purposes, and the fleet-specific estimates used here.

4.5 Coverage Index of Discard Estimates DQI

STECF EWG 14-06 noted the high emphasis on discard estimates for scientific, advisory and management purposes. STECF EWG 14-06 notes that the scientific resources to monitor discards by fisheries are limited and thus best use of the scarce national information requires a defined raising procedure. Furthermore, STECF EWG 14-06 also notes that it has developed and applied a consistent approach to estimate discards by fisheries (Member State, species, year, quarter, area, gear, special condition) as described in the previous section 4.4. The available landings and discard quantities have been provided by Member States in accordance with the DCF data calls to support fishing effort regime evaluations. The provisions of the DCF data call invite the Member State to estimate its discards applying best practices and to omit the submission of an estimate if the discard sampling is considered inadequate or best practices cannot be applied. STECF EWG 14-06 estimates discards by fisheries based on reported landings quantities by applying an average discard rate if a Member State has not provided a discard estimate.

In order to allow an assessment of the representativeness of the discard estimates by species and fisheries, STECF EWG 13-13 developed a coverage index. The discard coverage index is called DQI and values will be available in the report and electronic appendixes provided on the website of the second meeting (STECF EWG 14-13).

STECF EWG 14-06 notes that the DQI does not support precise conclusions on data quality based on scientific criteria but rather aims to classify the available information and is therefore fully dependent on correctness of the submitted national landings and discards estimates.

The index represents the sum of landings with discard estimates by species and fishery (species, year, area, gear, special condition) in relation with the total sum of landings in the given segment. It is estimated as

$$DQI = \Sigma L_d / \Sigma L$$

where L denotes landings (t) and L_d landings with a discard estimate.

In order to facilitate the interpretation of the DQI value, the DQI is classified in three groups. The groups are defined as

- A = 67 % or more of the provided landings are with an accompanying discard estimate,
- B = 34-66 % of the provided landings are with an accompanying discard estimate, and
- C = less the 33 % of the provided landings are with an accompanying discard estimate.

It should be noted again that this discard coverage index cannot inform on the quality of the discard rate estimates supplied by nations (as affected for example by the proportion of fishing trips sampled for discards).

STECF EWG 14-06 advises the C qualified discard estimates not to be used as the majority of the reported landings lack a discard estimate.

4.6 Treatment of CPUE data

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. CPUE will be addressed during the second meeting. Once available CPUE by regulated gears will be presented in units of $g/(kW*days)$. Where discard estimates are not available, the trends in LPUE (landings per unit of effort) are given in the same units. EWG 14-06 is already aware that discard information continues to be sparse or absent for some categories of gear in some areas. **The STECF EWG wishes to stress again that great care should be used in the interpretation of the discard and resulting catch data owing to the incomplete nature of information on discarded fish.**

EWG 14-06 notes that CPUE series are often interpreted and used as stock abundance indicator. However, EWG 14-06 emphasises that the presented trends in CPUE by fleets are subject to selective fishing strategies (area, gear, mesh size etc.) and thus may be biased. On the other hand, CPUE derived from targeted fisheries may provide very useful information on stock abundance trends. Furthermore, it must be taken into consideration that the majority of the CPUE trends represent only overall weights in the landings (LPUE) without discards or with poorly estimated discards. Ideally, the CPUE should be based on age disaggregated abundance rather than overall weights and reflect technological creep when trends over longer periods are evaluated.

4.7 Ranking of gears on the basis of contribution to catches

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

4.8 Summary of effort and landings by ‘unregulated’ gears

In the summary tables of effort a total value for a ‘none’ category is provided. This ‘none’ category represents

- i) gear types and mesh sizes which are unregulated, i.e. non-regulated by effort in addition to
- ii) unidentified mesh sizes. In the main effort summary tables, this category is not broken down into its constituent gears.
- iii) the so-called derogation Swedish grid, (which was encoded as IIA83b) and CPart11, respectively. These gear configurations are explicitly exempted from the effort regime (R (EC) No 754/2009).

However, STECF EWG 14-06 has provided a break down of the main gears within the ‘none’ category in a dedicated subsection for each area. Information is given on effort (kW*days at sea) for gears such as ‘beam’, otter, pots, dredges etc. STECF EWG 14-013 will provide catches by these gears of key species (e.g. cod, plaice and sole). This analysis helps to identify which gears contribute significantly to landings of these species but which are not currently regulated.

With the adoption of the revised cod recovery plan towards the end of 2008 and the simplified list of regulated gears for which data are now collated, the compilation of the unregulated categories was more straightforward in 2009 onward and the data appear to be reliable.

It is important in making use of the data in this report, that the ‘none’ material is not counted more than once. It would be preferable to use data from the sections covering unregulated gears.

4.9 Presentation of spatial information on effective effort and landings

STECF EWG 14-06 notes that minimum geographic resolution in the available logbook information on landings and effective effort is by ICES rectangle and considers analyses to be only possible at that resolution at the present time. In a number of the smaller areas, however, this resolution is inadequate for describing any localised changes of effort distribution (for example, in the Kattegat) and finer scale is desirable. Increasing availability of VMS data should provide opportunities for improved resolution in due course. STECF EWG 14-06 notes that only major changes in the geographical distribution patterns should be given attention given the

imprecision of the created data set. A full set of figures is available electronically but a selection of key gears is included in this report.

Figures use a common scale across years for a given gear group (e.g. TR1) but scales are unique to each category such that the colours assigned to statistical rectangles for category TR1 cannot be compared directly to those assigned for category TR2. Note that this year the scale used in the plots relates to the actual effort values (rather than the percentile method used in previous years).

4.10 Response of EWG 13-13 regarding the estimation of spatio-temporal patterns in catchability

In 2013 STECF EWG 13-13 adopted the definition of catchability (q) as the relationship between the catch rate (CPUE) and the true population size. Consequently, the unit of catchability is fish caught per fish available per effort unit and per time unit, or, in easier words, catchability can conceptually be considered as the probability of any single fish being caught (Jul-Larsen *et al.*, 2003).

STECF EWG 14-06 notes that many factors are related to catchability, e.g. mainly fish abundance at a certain time in a certain area and gear efficiency (fishing power) including use of the gear and fishers' experience (Marchal *et al.*, 2001). A standard solution to evaluate changes in catchability is therefore to compare catch rates from commercial and research fishing where the catchability of the research fishing is holding constant from year to year (Neis *et al.*, 1999):

$$\text{CPUE (fishery)}/\text{CPUE (survey)} = q (\text{fishery})/q (\text{survey})$$

This catchability index has no units, as it represents the ratio of fish caught per fish available per effort unit and per time unit. The calculation of catchability indices for cod per ICES statistical square (rectangle) and year is derived from standardized and averaged ratios between CPUE by fishery and CPUE based on survey indices.

The estimation of catches by rectangle is derived from a raising procedure applied to landings data by stock, nation, fishery (effort regulated gear groups), year, quarter and rectangle to estimate discards and conclude on catches at this aggregation level. National landings by stock, fishery, year, quarter and rectangle were raised by average national discards rates obtained by stock, fishery, year and quarter without rectangle:

$$C_{\text{stock, nation, fishery, year, rectangle}} = \Sigma (L_{\text{stock, nation, fishery, year, rectangle}} / (1 - DR_{\text{stock, nation, fishery, year}})),$$

where C denotes the catch in weight (t), L denotes the landings in weight (t), and DR denotes a specific average discard rate based on the DCF data submissions of landings and discards. Where the discard rate is unknown, landings figures were accepted as a best estimate of catches.

Average national commercial catch rates by stock, fishery, year and rectangle were then estimated from

$$CPUE_{\text{stock, nation, fishery, year, rectangle}} = C_{\text{stock, nation, fishery, year, rectangle}} / E_{\text{stock, nation, fishery, year, rectangle}}$$

where CPUE denotes the catch rates, C the estimated catch in weight (t) and E the fishing effort in units of fished hours.

The catchability index CA per stock, year and rectangle is then derived from the ratio between the averaged commercial CPUE values by stock, nation, fishery, year and rectangle, each of them divided by the CPUE from the respective average scientific survey CPUE in units of weight (kg). Both catch rate estimates, the commercial and the scientific ones, were made subject to log transformation in order to reduce the high variation between years and rectangles.

$$CA_{\text{stock, year, rectangle}} = \sum_n (\ln(1 + CPUE_{\text{stock, nation, fishery, year, rectangle}}) / \ln(1 + CPUE_{\text{stock, survey, year, rectangle}})) / n,$$

where n is the number of nation-fleet combinations.

STECF EWG 14-06 was unable to update the calculation of spatio-temporal patterns in catchability because of problems processing the catch data; the ToR will be dealt with at STECF EWG 14-13.

4.11 Amendments of the 2013 DCF data calls to support fishing effort regime evaluations

STECF EWG 14-06 noted that no amendments were deemed necessary to the 2014 DCF data call. Therefore no re-submissions of data were required and only took place if a member state needed to correct data submitted in previous years.

5 EVALUATIONS BY FISHING EFFORT MANAGEMENT REGIME

5.1 Baltic Sea effort regime evaluation in the context of the management plan for Baltic cod (Council Regulation (EC) No 1098/2007)

5.1.1 *ToR 1.a Fishing effort in kWdays and GTdays by area, Member State and fisheries*

Table 5.1.1.1 lists the trends in effort for gear categories defined in the cod management plan Council Regulation (EC) 1098/2007 in kW*days at sea for the whole Baltic. Table 5.1.1.2 lists the trends in effort by gear category and area for regulated gears. Table 5.1.1.3 lists relative annual effort dynamics in Baltic cod r-GILL and r- OTTER fisheries in 2004-2013 by gear category and area.

Figures 5.1.1.1 – 5.1.1.6 show effort trends in regulated and unregulated gear categories by areas.

In accordance with the ToR respective tables by gear-category, area and Member States in GT*days at sea (GT gross tonnage), activity (in days absent from port) and capacity (number of vessels) are available on the web site of the EWG. STECF EWG 14-06 emphasize that the days at sea and number of vessels need to be interpreted with care and cannot be added across gear categories as the individual vessels may have been engaged in more than one of the defined fleets and thus could be multiple counted.

There have been marked reductions in effort measured in kW-days in 2004-2012 both for regulated gears in accordance with Council Regulation (EC) 1097/2007 and unregulated gears. The total effort deployed in the Baltic in 2013 was 41% lower compared to 2004 but 25% higher compared with 2012 (Table 5.1.1.1).

A clear reduction in total effort could be observed for area A until 2010. Since then the total effort stabilized. The effort dynamics in main regulated gear types show contrasting trends in 2011-2013: the effort of regulated pelagic trawls decreases and that of regulated demersal seine increased while regulated otter trawl effort remained unchanged (Figures 5.1.1.1.-5.1.1.2). Figures 5.1.1.3 and 5.1.1.4 display the trends in area B. The overall effort of regulated gears has increased since 2010 slightly due to increase in r-otter effort. The effort of non-regulated gears decreased from 2011 substantially. In area C the effort deployed with unregulated gears shows clear decreasing trend since 2010 (Figure 5.1.1.5). Since the majority of cod catches stem from areas A and B (see section below), the slight increase in total effort can be observed both for regulated and unregulated gears. Table 5.1.1.3 describes the relative annual effort dynamics in Baltic cod r-GILL and r-OTTER fisheries in 2004-2013. The total effort showed a consistent decreasing trend in area A until 2011. A decrease could be observed also in area B, however until 2010 only. In 2011-2013 an increase in effort followed, driven mostly by otter trawl effort..

The effort dynamics in area C did not show any particular trend. In 2011-2013 however, a substantial increase in effort was observed both in gillnet and otter trawl effort (Table 5.1.1.3).

The effort in ICES Sub-division 28.2 decreased in 2012 after the increase in 2011 both in the regulated gillnet and otter trawl fisheries (Figure 5.1.1.7). Effort levels returned to close to the 2011 value in 2013 because of increases in regulated otter trawl and pelagic trawl (Figure 5.1.1.8).

The decrease in total effort for the main gears catching cod in areas A and B (regulated otter) was obvious for all Member States (Table 5.1.1.4). When combining BACOMA and none, the reductions were most pronounced for Denmark (-62%) and Germany (-57%) in area A, and most pronounced for Poland (-70%) and Sweden (-44%) in area B. In contrast, the effort for r-Gill (the second most important gear) increased for Denmark and Germany in area A (by 5% and 4% respectively). At the same time combined effort for r-Gill decreased in area B for Denmark by 74% and for Latvia (-88%) and for Poland (-77%). This indicates a certain shift between métiers.

In area B the effort increased from 2011 to 2012 in r- otter trawl fishery- in Germany by 67%, Poland by 49% and in Lithuania by 20%. In 2012-2013 the German effort decreased again by 47% but Poland and Lithuania showed further increases of 6 and 2 %, respectively.

The regulated gill nets' effort decreased substantially in all Member States. The sharp increase of pelagic effort in 2004–2005, described in the Figure 5.1.1.5 can be explained by the inclusion of Estonian data set from 2005-2010, showing substantial pelagic effort.

In Sub-division 28.2 only Latvia reported the information on effort deployed in regulated GILL fishery. The effort has decreased over the period of 2004-2013 by 66% and for regulated otter-trawls by 65% (Figures 5.1.1.7 - 5.1.1.8).

For area C the full time series of information for regulated otter trawls was not available to the group. The effort for regulated gill nets decreased by 17% in 2004-2013. At the same time the increase in effort by 27% was observed from 2011 to 2013 (Sweden). The use of BACOMA-trawls increased over the years (see Figures 5.1.1.2, 5.1.1.4 and 5.1.1.6). However, as already mentioned several Member States were not able to identify vessels fishing with BACOMA-trawls from logbook data. Therefore, the increase in the usage of BACOMA-trawls is most likely underestimated substantially and trends are highly uncertain.

Table 5.1.1.1 Trend in nominal effort (kW*days at sea) by gear categories according to Council Regulation (EC) 1098/2007, 2004-2013. An “r” in front of the gear type indicates regulated gears. Gear types without an “r” are non-regulated gears. Data from Sweden and Poland were only available from 2003 or 2004 respectively. Relative change from 2004-2007 to 2013 and from 2012 to 2013.

REG GEAR COD	SPECON	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	rel 04-07	rel 2012
BEAM	NONE		132	1090	881	27566	16298	884	884	368			
DEM_SEINE	NONE	50829	31212	20892	20597	12522	5337	5031	12266	882	3284	-0.89	2.72
DREDGE	NONE	78384	72955	97700	110931	45088	48712	65364	56203	91968	129775	0.44	0.41
GILL	NONE	2514485	2781351	2465917	2293892	2019216	1862392	1922682	1906426	775303	2795002	0.11	2.61
NONE	NONE	72855	143013	173077	148369	115922	79044	84697	68084	47093	654547	3.87	12.90
OTTER	NONE	2870433	2450721	1971668	1672218	1353484	1477623	1197194	1101870	973442	890976	-0.60	-0.08
PEL_SEINE	NONE	2499				3528	16467	13674	12645	27163	13915	4.57	-0.49
PEL_TRAWL	NONE	15552840	62133235	45906681	39463937	43240579	40031349	29616128	26579447	8216408	12260947	-0.70	0.49
POTS	NONE	1519123	1616616	1346062	1211896	1209985	883458	1035858	919071	379577	1312448	-0.08	2.46
R-BEAM	BACOMA					3867							
	NONE							129					
R-DEM_SEINE	BACOMA			35178	46741	46182	62042	36621	52390	29641			
	NONE	404467	277118	262991	243984	181854	122508	95833	62941	113731	81042	-0.73	-0.29
R-GILL	NONE	9883237	8720856	7812598	6689205	6010468	4751522	4123605	3777836	3975573	3609193	-0.56	-0.09
R-LONGLINE	NONE	1441251	1762927	1696057	1007443	732605	901565	816726	792860	572124	550403	-0.63	-0.04
R-OTTER	BACOMA	8077219	6708057	8744572	6593542	5519745	4073745	4223497	3584428	3535393	1763597	-0.77	-0.50
	NONE	5997614	6125856	3554966	2555771	2427194	2099090	2103909	3342583	4089663	4663853	0.02	0.14
	T90						9536	160701	276747	195488	364552		0.86
R-PEL_TRAWL	BACOMA	1185898	577852	1689966	1636710	854557	349455	199507	936461	181573	52481	-0.96	-0.71
	NONE	249065	219359	119545	37349	3887	27748	12921	27136	19629	36497	-0.77	0.86
R-TRAMMEL	NONE	237634	474368	432884	502123	539744	564008	445131	418462	487356	480822	0.17	-0.01
TRAMMEL	NONE	20495	31581	32540	31788	25870	11054	11927	10883	5265	8004	-0.72	0.52
Grand total		50158328	94127209	76364384	64267377	64373863	57392953	46172019	43939623	23717640	29671338	-0.58	0.25

Table 5.1.1.2. Trend in nominal effort (kW*days at sea) by regulated gear categories and area 2003-2013. An “r” in front of the gear type indicates regulated gears in accordance with Council Regulation (EC) 1098/2007. Data from Sweden and Poland were only available from 2003 and 2004 respectively.

Annex	REG AREA COD	REG GEAR COD	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bal	28.2	R-DEM_SEINE	1534	804					4091	3967		3273	2172
Bal	28.2	R-GILL	128458	38171	62083	52887	52229	16129	15303	23211	17613	10418	13101
Bal	28.2	R-OTTER	44642	88489	84119	64123	60310	34048	19735	4865	36969	23786	31143
Bal	28.2	R-PEL_TRAWL	882		6850	5500	1100		2860				9066
Sum	28.2		175516	127464	153052	122510	113639	50177	41989	32043	54582	37477	55482
Bal	A	R-BEAM	442					3867		129			
Bal	A	R-DEM_SEINE	367804	401961	265914	276632	277345	220254	160744	101579	68761	91495	78870
Bal	A	R-GILL	2136791	2202578	3605681	3464031	3182556	3025722	2353090	2043431	1929540	1887253	1834013
Bal	A	R-LONGLINE	176508	230860	555892	409225	300403	166043	205986	160958	175618	204547	195867
Bal	A	R-OTTER	5286832	4961432	5171790	4124965	4367256	3537808	2807271	2362321	2450277	2475071	2252869
Bal	A	R-PEL_TRAWL	30931	20233	67882	50463	40983	6994	2744	11521	8247	2319	161
Bal	A	R-TRAMMEL	247947	227298	467533	424155	487260	528888	546918	441372	416361	484318	464915
Sum	A		8247255	8044362	10134692	8749471	8655803	7489576	6076753	5121311	5048804	5145003	4826695
Bal	B	R-DEM_SEINE	729	1702	11204	21537	13380	7782	19715	26908	46570	48604	
Bal	B	R-GILL	3516915	7551967	4959662	4199675	3379807	2902885	2320231	1983437	1772316	2003874	1688043
Bal	B	R-LONGLINE	555385	1210391	1207035	1286832	707040	566482	695579	655768	617242	367577	293343
Bal	B	R-OTTER	4232302	9024912	7573972	8104996	4718919	4368681	3355365	4120921	4716512	5321587	4504393
Bal	B	R-PEL_TRAWL	73507	1414730	722479	1753548	1631976	851450	371599	200907	955350	198883	78871
Bal	B	R-TRAMMEL	12374	10336	6835	8464	14863	10856	17090	3759	2101	3038	15907
Sum	B		8391212	19214038	14481187	15375052	10465985	8708136	6779579	6991700	8110091	7943563	6580557
Bal	C	R-GILL	88826	90521	93430	96005	74613	65732	62898	73526	58367	74028	74036
Bal	C	R-LONGLINE	992					80		0			61193
Bal	C	R-OTTER			4032	5454	2828	6402				100	3597
Bal	C	R-PEL_TRAWL											880
Bal	C	R-TRAMMEL				265							
Sum	C		89818	90521	97462	101724	77441	72214	62898	73526	58367	74128	139706
Sum	BC		8481030	19304559	14578649	15476776	10543426	8780350	6842477	7065226	8168458	8017691	6720263

Table 5.1.1.3. Relative annual effort dynamics in Baltic cod r-GILL and r- OTTER fisheries in 2004-2013.

REG GEAR COD	REG AREA COD	SPECON	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013
R-GILL	28.2	NONE	0.63	-0.15	-0.01	-0.69	-0.05	0.52	-0.24	-0.41	0.26
	A	NONE	0.64	-0.04	-0.08	-0.05	-0.22	-0.13	-0.06	-0.02	-0.03
	B	NONE	-0.34	-0.15	-0.20	-0.14	-0.20	-0.15	-0.11	0.13	-0.16
	C	NONE	0.03	0.03	-0.22	-0.12	-0.04	0.17	-0.21	0.27	0.00
R-OTTER	28.2	BACOMA	-0.05	-0.24	-0.06	-0.44	-0.42	-0.75	6.60	-0.36	0.31
	A	BACOMA	0.58	2.49	0.23	-0.27	-0.25	-0.14	0.03	-0.10	-0.84
		NONE	0.00	-0.54	-0.11	-0.08	-0.16	-0.19	0.03	0.12	0.50
		T90							0.83	-0.10	0.38
	B	BACOMA	-0.21	0.10	-0.39	-0.09	-0.27	0.14	-0.23	0.04	-0.36
		NONE	0.09	-0.05	-0.53	0.03	-0.07	0.41	1.29	0.28	-0.04
		T90						13.51	0.70	-0.33	0.97
	C	BACOMA									
		NONE		0.35	-0.48	0.50					0.00
		T90									
All regulated gears	28.2		0.20	-0.20	-0.07	-0.56	-0.16	-0.24	0.70	-0.31	0.48
All regulated gears	A		0.26	-0.14	-0.01	-0.13	-0.19	-0.16	-0.01	0.02	-0.06
All regulated gears	B		-0.25	0.06	-0.32	-0.17	-0.22	0.03	0.16	-0.02	-0.17
All regulated gears	C		0.08	0.04	-0.24	-0.07	-0.13	0.17	-0.21	0.27	0.88

Table 5.1.1.4 Trend in nominal effort (kW*days at sea) by regulated gear categories according to Council Regulation (EC) 1098/2007, area and Member State for 2004-2013. Data from Estonia were only available from 2005 and from Finland from 2013.

REG AREA COD	REG GEAR COD	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
28.2	R-DEM_SEINE	LAT	804					4091	3967		3273	2172	
	R-GILL	EST			166								
		LAT	38171	62083	52721	52229	16129	15303	23211	17613	10418	13101	
	R-OTTER	EST			221	221							
		LAT	88489	84119	63902	60089	34048	19735	4865	36969	23786	31143	
	R-PEL_TRAWL	LAT		6850	5500	1100		2860					8646
POL												420	
A	R-BEAM	DEN							129				
		GER					3867						
	R-DEM_SEINE	DEN	394563	264002	253210	239604	181854	118417	91866	54972	89731	78870	
		GER	7398	1912	23422	37741	38400	42327	9713	13789	1764		
	R-GILL	DEN	540757	1245235	993868	804366	872897	723711	610449	593694	597244	567492	
		EST		40887	57436	19041	39051	41349					
		GER	662527	1135980	1449940	1457215	1247682	932027	893907	809150	771580	690023	
		LAT	142491	171002	161456	30116	12676	3528	11604	6174	2940	43917	
	R-LONGLINE	LIT		19111	32901								
		POL	236261	331555	199045	325354	228173	135263	84558	81024	126904	128374	
		SWE	620542	661911	569385	546464	625243	517212	442913	439498	388585	404207	
		DEN	86314	164621	202815	126714	32557	33817	42527	46243	56902	59144	
		GER	80543	122727	119348	100892	97335	122409	74286	62880	58865	62332	
		LIT		12533	0								
	R-OTTER	POL	17962	143615	46306	53736	21615	6391	4502	6118	7932	8678	
		SWE	46041	112396	40756	19061	14536	43369	39643	60377	80848	65713	
		DEN	2814169	2879424	2035587	1812121	1669672	1415553	1145919	1077878	1182374	1070256	
		EST		4199						4248		2650	
	R-PEL_TRAWL	GER	1753928	1686831	1481387	1491775	1207722	1028646	933844	964057	932751	758924	
		LAT		17632		18488				7920			
		LIT		57602	84342								
		POL	172618	310416	185144	618979	315079	172795	114560	101350	146051	195742	
		SWE	220717	215686	338505	425893	345335	190277	155830	306992	211245	227947	
		DEN	11156	14346	24308	6246	2831	2744	7621	561	322	161	
	R-TRAMMEL	EST		662		1269							
		GER	3975	17039	20699	30856	3443		3740	5756	1607		
		LIT		16799	0								
		POL	2220	16612	1258	2612			160				
		SWE	2882	2424	4198		720			1930	390		
		DEN	176833	368285	311401	309684	349896	317238	301565	271304	335772	318336	
	B	R-DEM_SEINE	GER	880	11204	9781	4380				7936	20727	
			POL	822		11756	9000	7782	19715	26908	38601	27877	
		R-GILL	DEN	247793	288548	255355	190114	195224	170484	133853	129032	109307	65640
			EST		287824	253368	128268	40036	31107				
	GER		8290	43704	14527	11824	5048	6594					
	LAT		1471236	701180	596996	568781	539579	401856	361015	350477	273839	174692	
	R-LONGLINE	LIT		93187	55397	90686	128949	107267	104170	78123	48511	54538	
		POL	4339027	2361250	1992875	1556930	1079645	791231	788566	695263	1121302	1007639	
		SWE	1485621	1183969	1031157	833204	914404	811692	595833	519421	450915	385534	
		DEN	112769	154482	157371	86736	45320	63169	76826	76881	41313	42754	
		GER	11771	15007	9881	11920	17580	12580	6600	2420		3304	
		LIT		264	59543	35332	34991	6664	3956	5514		1694	
R-OTTER	POL	712715	691955	738832	410561	270046	412292	391897	324267	187100	167926		
	SWE	373136	345327	321205	162491	198545	200874	176489	208160	139164	77665		
	DEN	891009	993201	1279055	585792	644737	629248	781262	1071791	1160176	867098		
	EST		94896	5729	9503			96642	179832	79178	39820		
	GER	211999	280977	163096	80177	191198	220844	276398	108001	180536	95531		
	LAT	322019	242532	350925	186093	229860	198632	218426	473943	376406	252057		
R-PEL_TRAWL	LIT		342503	192759	170844	382050	286887	332848	398109	477440	486675		
	POL	5657875	3902889	4457610	2534977	1715576	1018609	1245924	1064287	1582454	1676202		
	SWE	1942010	1716974	1655822	1151533	1205260	1001145	1169421	1420549	1465397	1087010		
	DEN	51827	44286	94797	31103	1056	4030	3536	5080	3750			
	EST		214426	355398	702922	703021	219177	114680	714754	86256	15410		
	GER	182107	143688	141492	70379	16691	36135	61303	128870	48484	1547		
R-TRAMMEL	LAT	114489	4122	29965	122803	10521	14473			18648	19467		
	LIT		1100	89918	85447	61407	20974	1764	4420	6837	4081		
	POL	921668	193724	628134	440888	21895	36317	3424	2428	14087	28122		
	SWE	144639	121133	413844	178434	36859	40493	16200	99798	20821	10244		
	DEN	2167	5598	7550	12631	5910	15546	3693	1185	546	384		
	SWE	8169	1237	914	2232	4946	1544	66	916	2492	15523		
C	R-GILL	EST		166	166								
		POL									573	265	
	R-LONGLINE	SWE	90521	93264	95839	74613	65732	62898	73526	58367	73455	73771	
		FIN										61193	
	R-OTTER	SWE					80		0				
		EST		3628	5454	2828	4242						
	R-PEL_TRAWL	POL									100	100	
		SWE		404			2160					3497	
	R-TRAMMEL	EST										880	
		SWE			265								

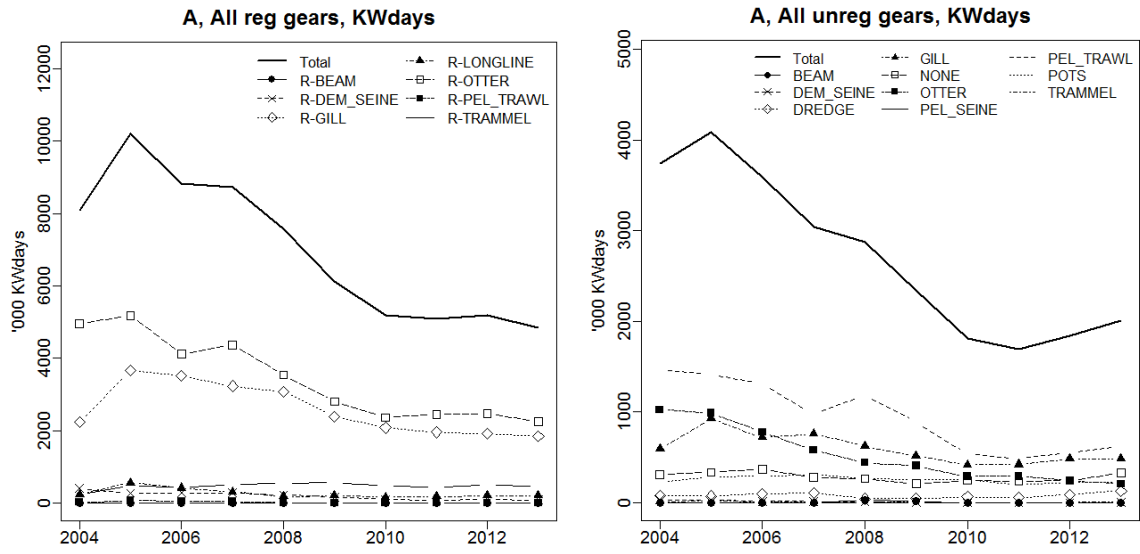


Figure 5.1.1.1. Area A Baltic: Trend in nominal effort by gear types 2004-2013 (kW*days at sea). Left panel: Regulated gears. Right panel: Unregulated gears. Note that data from Poland, Latvia and Lithuania are only available from 2004 and from Estonian from 2005 onwards. Therefore, effort trends are shown from 2004 to 2013. **No data from Finland.**

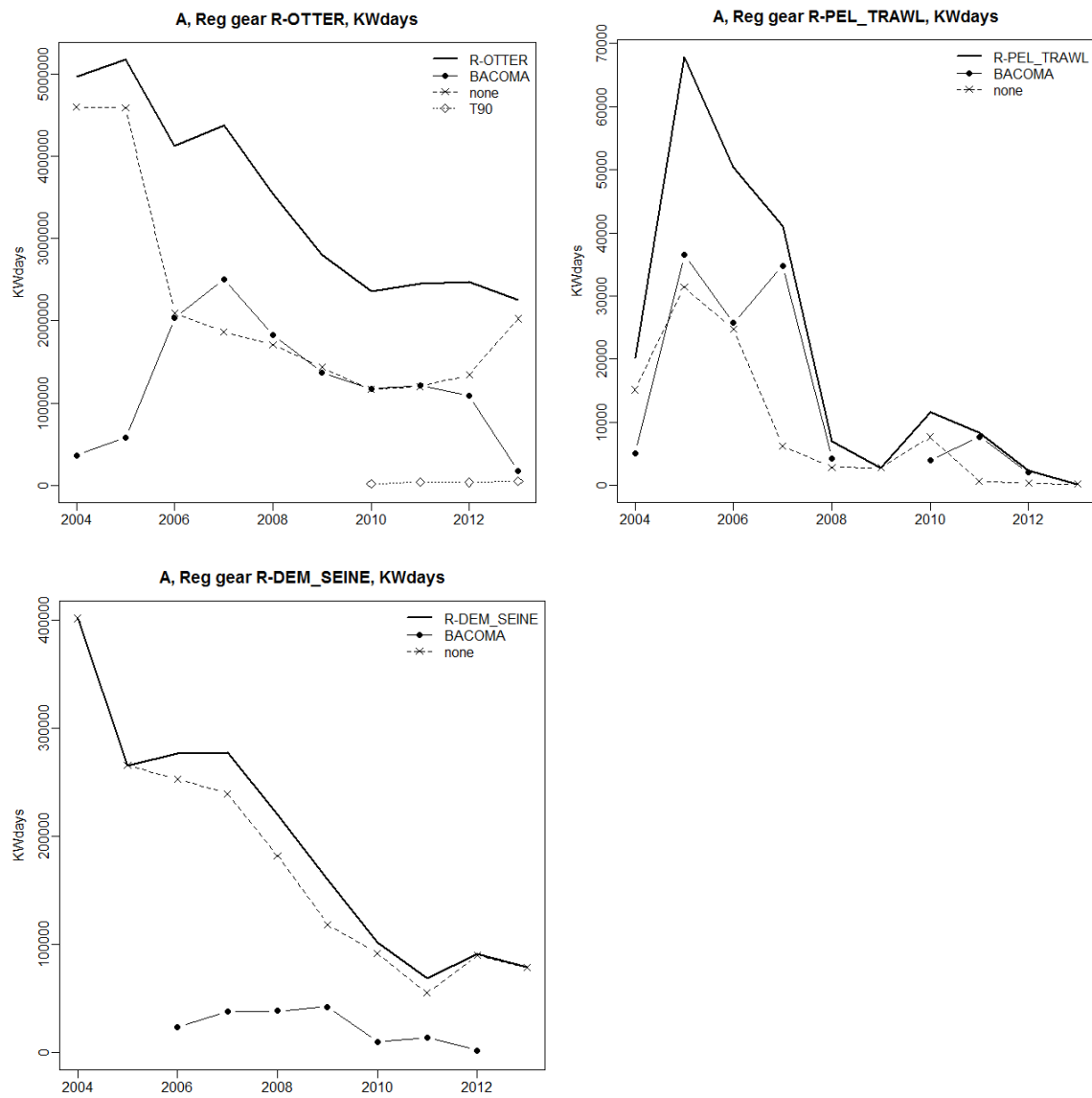


Figure 5.1.1.2. Area A Baltic: Trend in nominal by special conditions, 2004-2013 (kW *days at sea). Note that data from Poland, Latvia and Lithuania are only available from 2004 and from Estonia from 2005 onwards. Therefore, effort trends are shown from 2004 to 2013. No data from Finland.

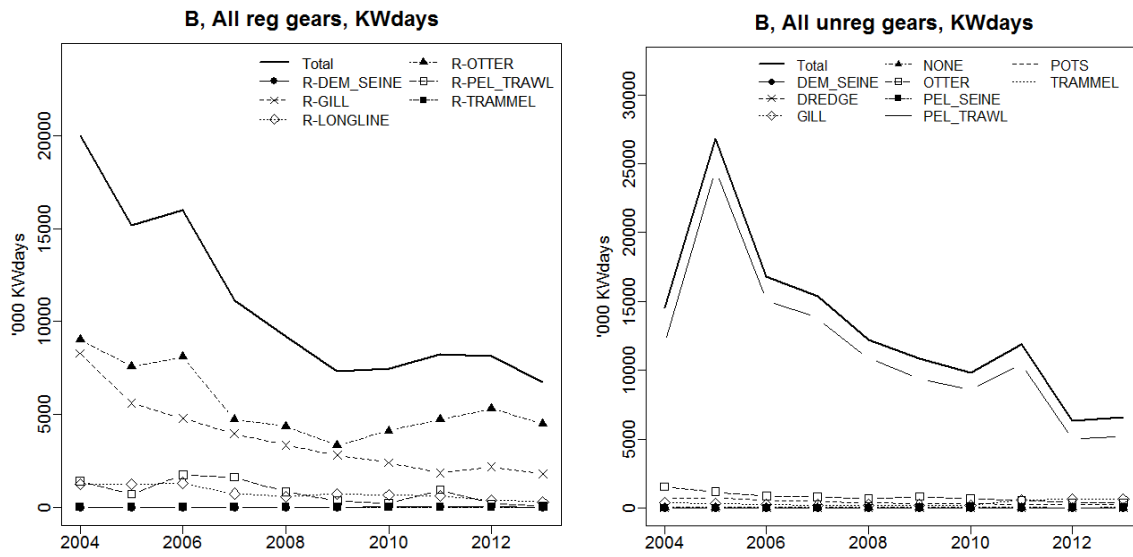


Figure 5.1.1.3. Area B, Baltic: Trend in nominal effort by gear types 2004-2013 (kW *days at sea). Left: Regulated gears. Right: Unregulated gears. Note that data from Poland, Latvia and Lithuania are only available from 2004 and from Estonia from 2005 onwards. Therefore, effort trends are shown from 2004 to 2013. No data from Finland.

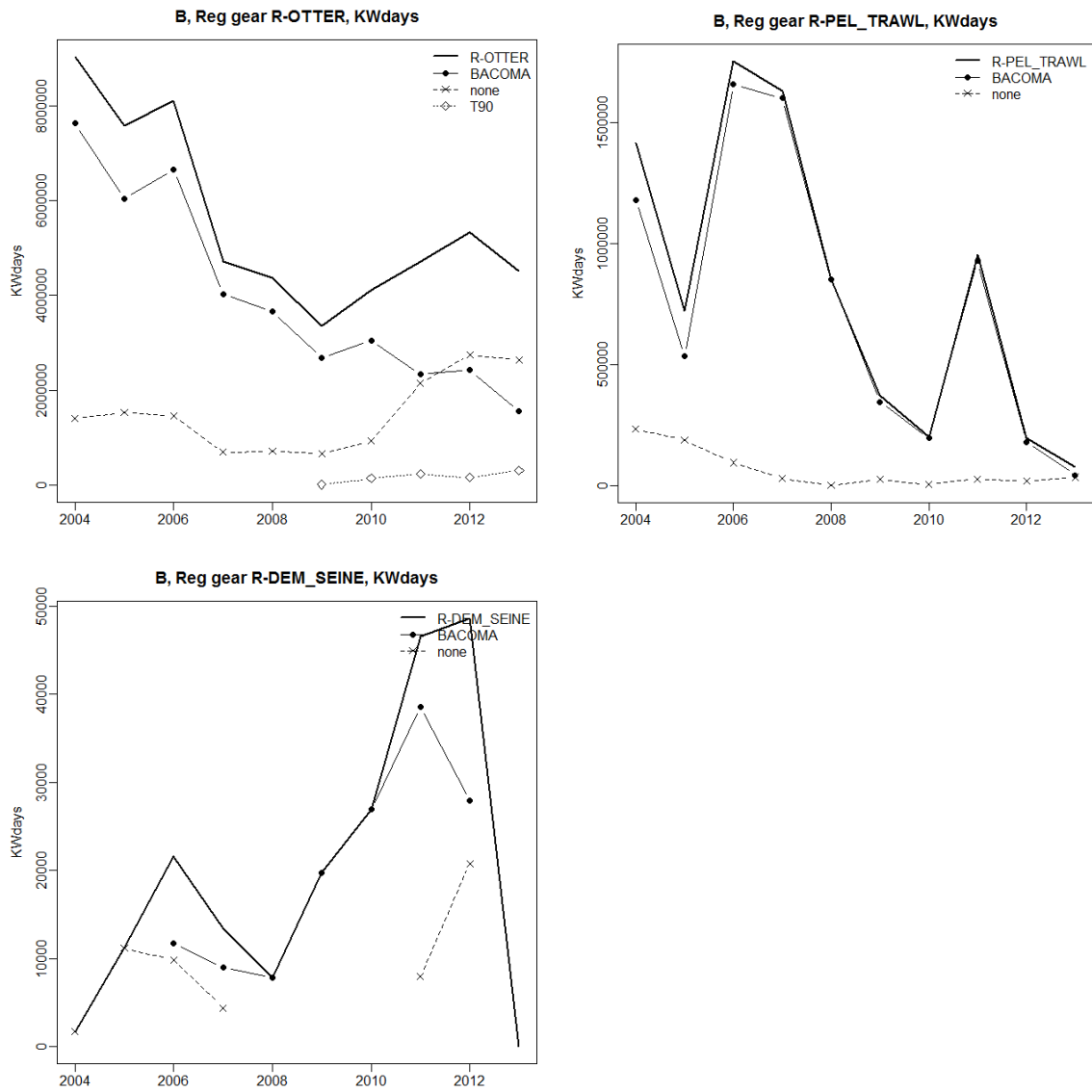


Figure 5.1.1.4. Area B Baltic: Trend in nominal effort by special conditions, 2004-2013 (kW *days at sea). Note that data from Poland, Latvia and Lithuania are only available from 2004 and from Estonia from 2005 onwards. Therefore, effort trends are shown from 2004 to 2013. Note that data from Finland is only for 2013 (long-lines).

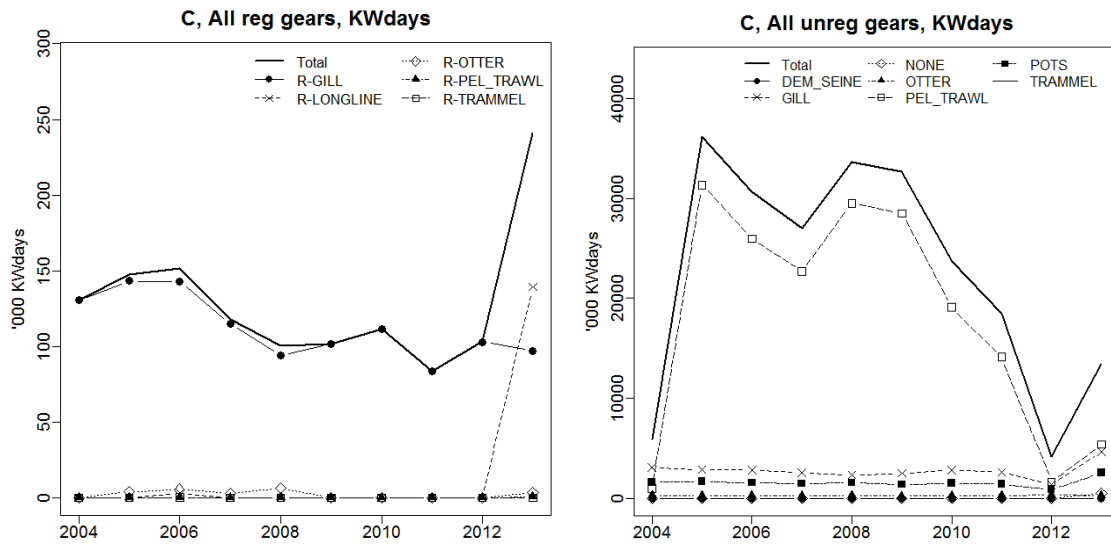


Figure 5.1.1.5. Area C Baltic: Trend in nominal effort by gear types 2004-2013 (kW *days at sea). Left: Regulated gears. Right: Unregulated gears. Note that data from Poland, Latvia and Lithuania are only available from 2004 onwards. Therefore, effort trends are shown from 2004 to 2013. Additionally, Estonian data from (including substantial pelagic effort) was included from 2005. Data from Finland is only for 2013 (r-longline).

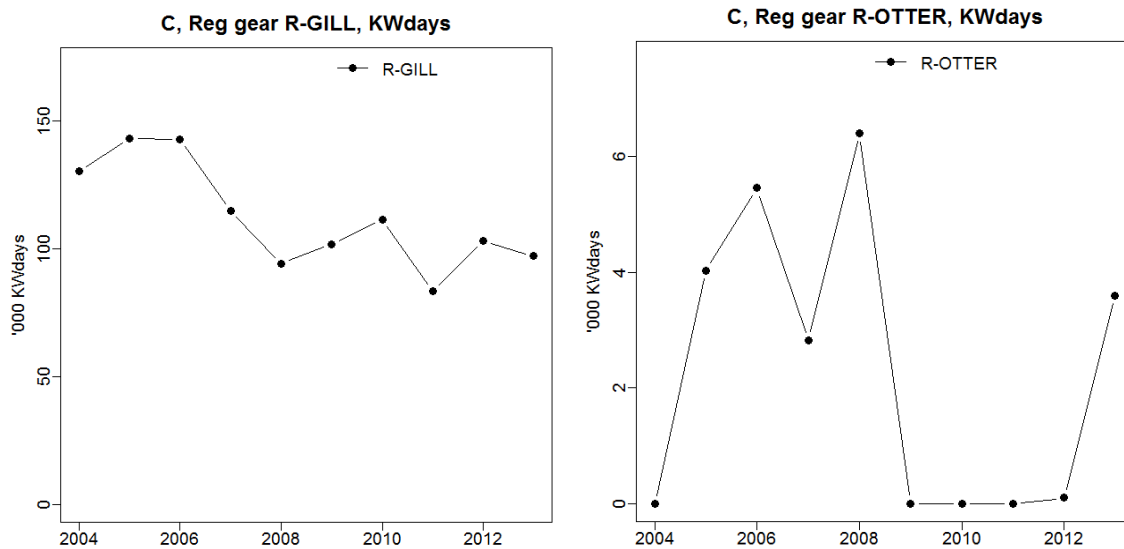


Figure 5.1.1.6. Area C Baltic: Trend in nominal effort by special conditions, 2004-2013 (kW *days at sea). Note that data from Poland, Latvia and Lithuania are only available from 2004 and from Estonia from 2005 onwards. Therefore, effort trends are shown from 2004 to 2013. No data from Finland.

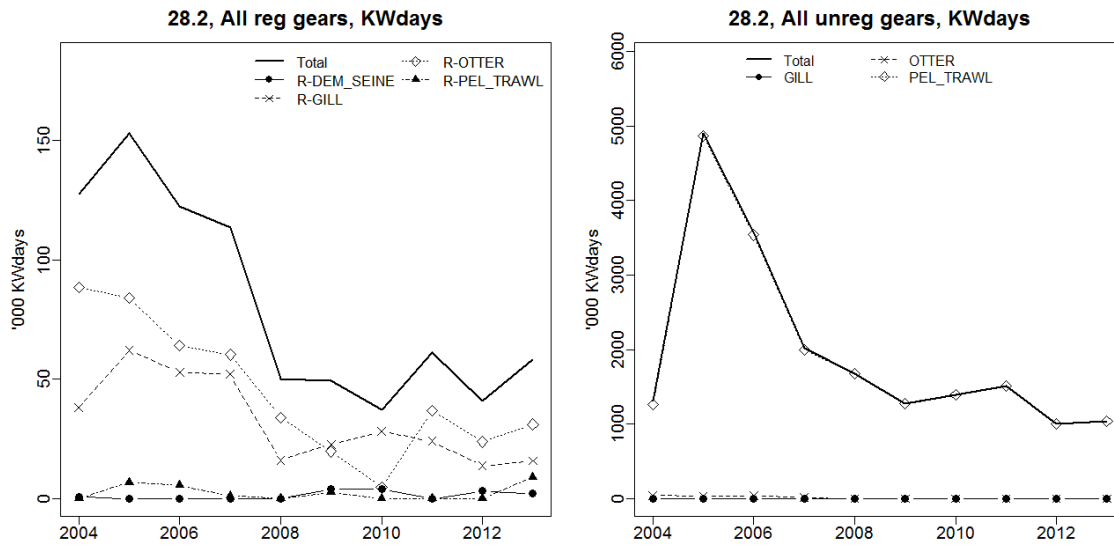


Figure 5.1.1.7. Sub-division 28.2. Baltic: Trend in nominal effort by gear types 2004-2013 (kW *days at sea). Left: Regulated gears. Right: Unregulated gears. Note that data from Poland, Latvia and Lithuania are only available from 2004 and from Estonia from 2005 onwards. Therefore, effort trends are shown from 2004 to 2013. No data from Finland.

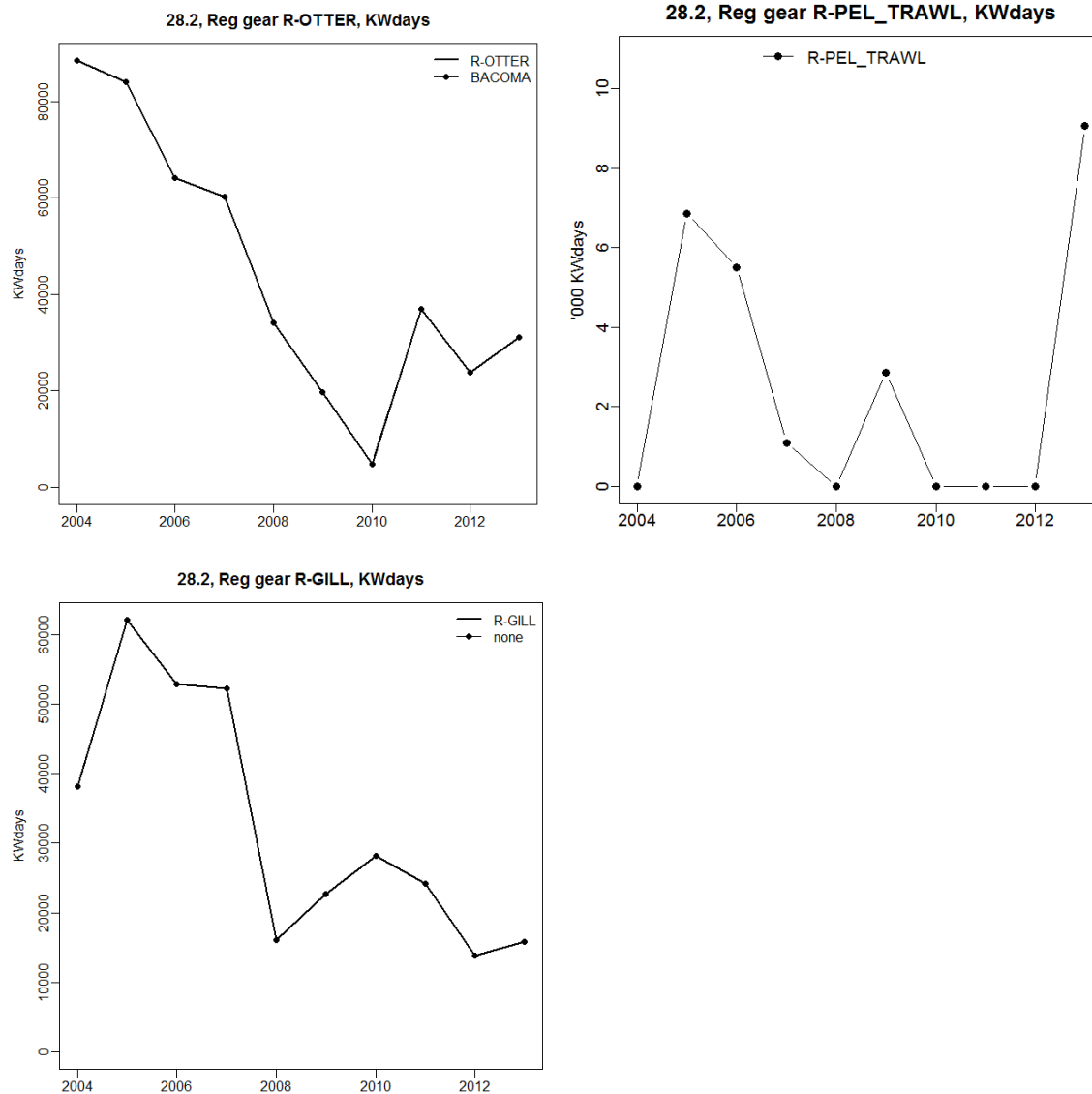


Figure 5.1.1.8. Sub-division 28.2. Baltic: Trend in nominal effort by special conditions, 2004-2013 (kW *days at sea). Note that data from Poland, Latvia and Lithuania are only available from 2004 and from Estonia from 2005 onwards. Therefore, effort trends are shown from 2004 to 2013. No data from Finland.

5.1.2 ToR 1.b Fishing activity and capacity by area, fisheries and Member State

Table 5.1.2.1 lists the estimated days at sea by area, main regulated gears (r-otter and r-gill) and Member State. The results show a clear decreasing trend over the areas A and B from total of 153,000 days at sea in 2004 to 76,000 days in 2013. In 2012 the overall number of days at sea increased again to 82,000 days, but decreased to 75,600 days in 2013. The total decrease in fishing activity has been mostly driven by the respective trend in area B only (from 104,000 to 41,000 days). The decreasing trend was observed both in regulated gillnets and otter-trawls. In Area A the fishing activity decreased in 2004-2010 and stabilised then at around 37,000- 38,000 days in 2010-2012. A new decrease to 34,000 days was observed in 2013. The figures presented in the table should be, however, taken cautiously, since multi-fold counting may have taken place in cases where certain vessels may have deployed more than one specific regulated gear.

Uptake of days at sea against the available days at sea by Member State and area for regulated and non-regulated gear types in 2008-2013 is presented in the Section 5.1.7.

Tables 5.1.2.2- 5.1.2.3 present the sum of capacity declared by Member States in fisheries with all regulated and non-regulated gears, respectively in areas A, B and AB combined. Capacity used in regulated gears (all combined) shows a slight decreasing trend since 2004 in area A from 70,000 to 49,000 kW and in area B from 131,000 to 77,000 kW. The capacity in area B has increased slightly in 2011-2013. The capacity in fisheries with non-regulated gears has shown in general an increasing trend in area B from 84,800 to 112,800 kW. The capacity has remained virtually unchanged in area A at approximately 20,000 kW. The combined areas follow generally the trend of area A in both cases.

Table 5.1.2.1 Days at sea by area, two main regulated gear types (r- GILL and r-OTTER), and Member State in 2004-2013.

REG AREA COD	REG GEAR COD	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
A	R-GILL	DEN	5661	15776	13324	11008	11983	9358	8284	7917	7813	7306.03
		EST		115	124	68	125	151				
		GER	7219	14201	22002	21213	17262	13418	11971	11310	11142	9837.22
		LAT	811	1044	997	145	47	12	48	21	10	256
		LIT										
		POL	3908	4173	2656	4062	2912	1914	1129	1106	1551	1862
	R-OTTER	SWE	5329	5743	5015	4958	5547	4643	4057	3944	3331	3396
		DEN	15836	16086	11915	9922	9264	8205	6945	6105	6535	5513.27
		EST		7					6		9	
		GER	9467	8771	8125	7952	6727	5677	5239	5317	5002	4053.67
		LAT		76		84			36			
		LIT										
		POL	748	1361	589	2374	1323	940	717	733	1120	1483
		SWE	705	589	807	960	728	415	331	691	498	553
		Total A			49684	67942	65554	62746	55918	44733	38763	37144
B	R-GILL	DEN	1886	3243	2974	2320	2367	2050	1617	1676	1224	833
		EST		462	458	308	140	101				
		GER	50	361	82	58	24	50				
		LAT	9376	4413	3501	3306	3024	2447	2213	2140	1715	1107
		LIT						944	821	635	538	616
		POL	40916	25446	21835	17523	13910	11214	10733	10156	14991	15160
	R-OTTER	SWE	15348	12125	10484	9220	10766	9395	6868	6188	5121	4652
		DEN	4190	4775	5880	2790	2644	2749	3137	4145	4379	3493.83
		EST		100	26	43			171	281	313	181
		GER	644	996	625	282	775	1078	1365	485	666	442
		LAT	1421	1054	1546	797	1012	806	892	2005	1422	973
		LIT						1300	1508	1812	2202	1960
		POL	24902	15831	17179	10038	7031	4601	5562	5647	8628	9315
		SWE	5079	4262	4041	2640	2847	2539	2810	3427	3454	2631
		Total B			103812	73068	68631	49325	44540	39274	37697	38597
Grand Total A+B			153496	141010	134185	112071	100458	84007	76460	75741	81664	75624.02

Table 5.1.2.2 Capacity (kW) used in fishery with all regulated gears by Member States for the vessels which have operated exclusively in areas A and B, and for the vessels which have operated in both areas AB in 2003-2013.

Area	Country	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
A	DEN	39372	43175	45001	43476	38362	36726	29239	23244	27155	22791	20485
A	GER	21694	20408	16838	23355	29831	25011	21326	20407	22620	20700	21148
A	POL		4758	3140	1996	3521	3918	2773	2140	1393	2192	1621
A	SWE	2125	1941	1754	709	401	6907	4548	5056	4576	5400	6020
B	DEN	5708	3546	2873	2794	772	2903	3243	3483	3784	2669	703
B	EST			12398	11373	9756	2848	2187	1526	3556	3288	1101
B	FIN											11025
B	GER	2324	441	1683	2512		1751	415	415	1015	1090	
B	LAT	14362	14155	7351	9174	9418	10109	9277	6949	6232	9079	7819
B	LIT							5817	5934	5928	6136	6903
B	POL		106054	72488	68652	48496	48937	32408	36825	27441	39225	35784
B	SWE	8732	7022	6132	3112	2725	21279	24316	20118	13456	13298	13668
AB	DEN	39563	30155	36403	34032	28987	21249	20960	18340	16562	18956	18258
AB	EST			1345	628	720	331	331	708		574	
AB	FIN		1511	1279	1279	1175	2073	3032	3618	3769	3882	7984
AB	GER	5823	9005	17117	11682	9867	10277	11728	11063	6671	6332	3885
AB	LAT	2642	4400	6777	4874	2628	569	515	1669	294	294	789
AB	POL		18224	37476	18132	32666	23206	12030	8182	7366	10277	12667
AB	SWE	355	254	412	25	18	21734	19732	15757	22602	22467	18612

Table 5.1.2.3 Capacity (kW) used in fishery with all non-regulated gears by Member States for the vessels which have operated exclusively in areas A and B, and for the vessels which have operated in both areas AB in 2003-2013

Area	Country	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
A	DEN	13322	17956	13014	13274	11585	11465	9848	10818	10765	11070	12909
A	GER	482	584	3369	1724	1807	2439	1809	1530	1280	1422	1301
A	POL		8695	7998	6926	6975	6189	6746	5652	5360	4840	4556
A	SWE	1266	852	1003	992	628	3471	3359	3304	2120	3251	3438
B	DEN	22372	13604	26789	28799	23018	22638	24044	20794	15442	8843	8253
B	EST						7630	7500	8287	8160	9652	6155
B	FIN											7981
B	GER	1646			973					1469	1469	1469
B	LAT	13083	9947	10743	10447	10093	11071	13084	9952	10445	8113	8058
B	LIT							2172	2914	2584	2291	2857
B	POL		57090	46654	33830	33050	34077	37030	37938	40018	36817	42222
B	SWE	4568	4144	3963	3724	3570	39135	46423	47996	39785	32791	35802
AB	DEN	2114	5225	4147	652	3010	1971	2274	2466	3947	2387	709
AB	EST										574	
AB	FIN											5236
AB	GER		1646	2619	685	1469	1469	2204	2204	735		
AB	LAT									353		
AB	LIT							1200	221	221		
AB	POL		14970	16429	10810	9655	12567	10995	4486	9771	9449	9721
AB	SWE	25	36	7	32	25	18597	14499	7424	9681	11601	11888

5.1.3 ToR 1.b Catches (landings and discards) of cod in weight and numbers at age by fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data. This ToR will be addressed during the second meeting.

5.1.4 Tor 1.d Catches (landings and discards) of non-cod species in weight and numbers at age by area, Member State and fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data. This ToR will be addressed during the second meeting.

5.1.5 ToR 1.e CPUE and LPUE of cod by area, fisheries and Member State

Because of software problems when aggregating data it was not possible for the EWG to review catch data. This ToR will be addressed during the second meeting.

5.1.6 ToR 2 Information on small boats (<8m by area)

An updated dataset on fishing effort and catches (landings and discards) of cod corresponding to vessels of the overall length below 8 m by gear and Member State were made available for EWG 14-06. Estonia did not provide effort data for this fleet segment.

5.1.6.1 Fishing effort of small boats by area, Member State and fisheries

According to data provided to the EWG 13-06/13-13 (see STECF 13-21, Table 5.1.6.1.1), in 2003-2012 the highest fishing effort was deployed by Finland, Sweden and Poland (86% of total fishing effort in that fleet segment in 2012) The dataset used by EWG 14-06, in 2013, Sweden, Poland and Denmark deployed approximately 88% of effort of small boats.(Figure 5.1.6.1.1). The Finnish data on 2013 was uploaded to the database, but not used for analyses by the group since the method of effort calculation has changed in 2013 compared to the rest of the period (multi-fold counting of effort).

The majority of effort was distributed between non-regulated gill nets (46%), pots (23%) and regulated gill nets (12%) (Figure 5.1.6.1.2). The highest fishing effort was used in area B (56% of the total), which is quite different from the results of analysis from last year (STECF 13-21), due to the above mentioned problem with Finnish data. Last year's analysis showed on average 62% of effort was deployed in area C.

The effort deployed in the areas A and B (40% of the total), was distributed approximately equally between the areas, (Figure 5.1.6.1.3). Fishing effort in the Sub-division 28.2 represented <1% of all fishing efforts in area B in 2013.

Dynamics of fishing effort in areas A, B, C has shown that from 2004 onwards the effort decreased significantly in area B; in the areas A and C fishing effort fluctuated during the period with a slight decreasing trend.

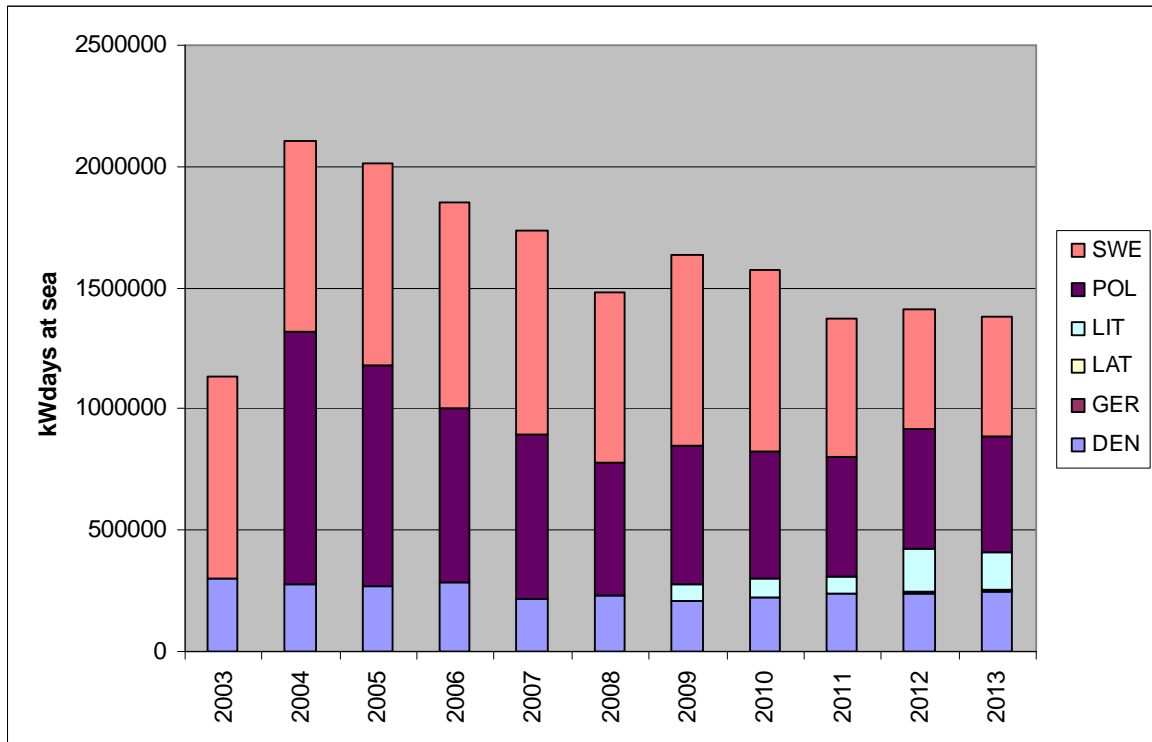


Figure 5.1.6.1.1. Distribution of fishing effort (kW days at sea) by Member States in 2003 – 2013. Small boats.

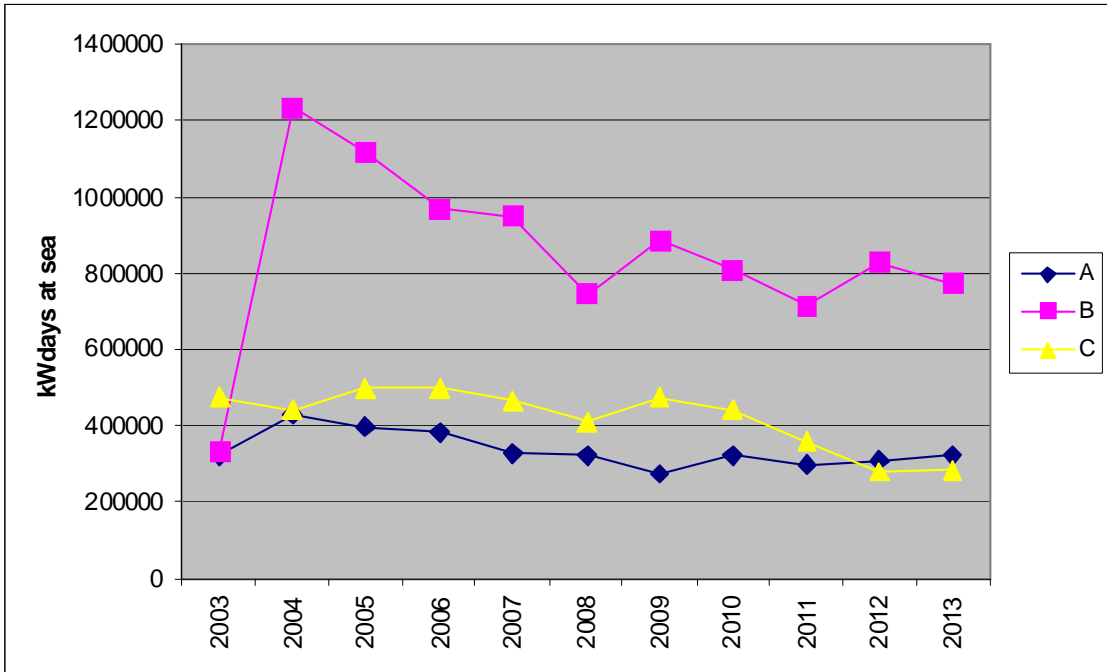
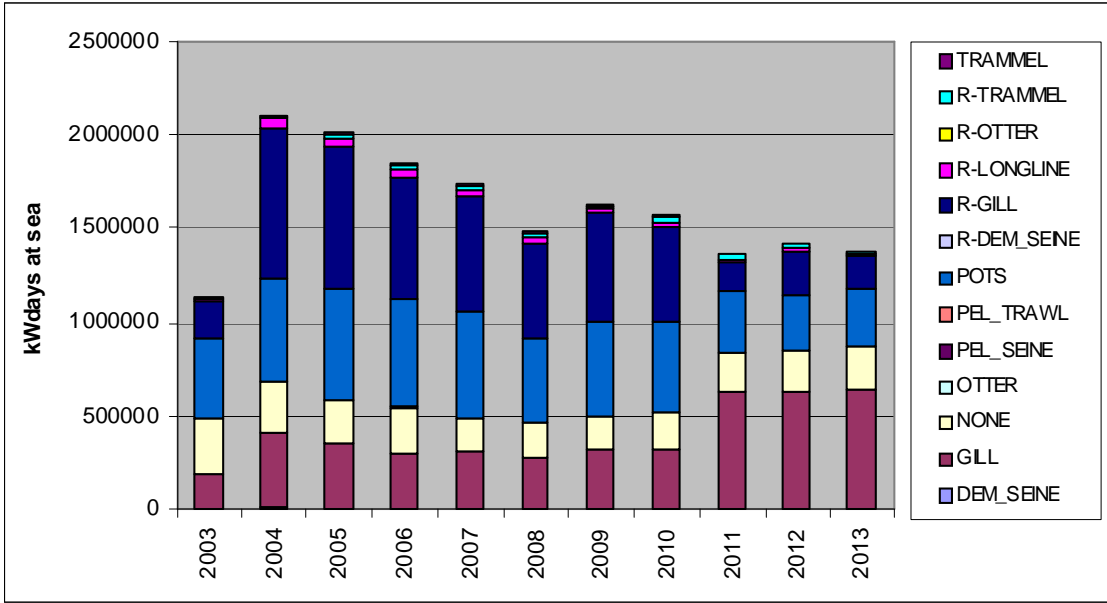


Figure 5.1.6.1.2. Distribution of fishing effort (kW days at sea) by different fishing gears in 2003 – 2013. Small boats.

Figure 5.1.6.1.3. Dynamics of fishing effort (kW days at sea) in areas A, B, C. in 2003-2013. Finland excluded) Small boats.

Table 5.1.5.1.1 Fishing effort (kWdays at sea) of small boats by area, Member State and fisheries in 2004-2013.

ANNEX	REG AREA	COD	REG GEAR	COD	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
BAL	A		DEM_SEINE		DEN			34			32				
BAL	A		DEM_SEINE		POL	1925	1035								
BAL	A		DEM_SEINE		SWE		16								
BAL	A		GILL		DEN	356	4026	7693	4976	4158	3089	1542	3049	2575	2560
BAL	A		GILL		POL	70644	49864	34033	43230	35850	21984	35190	40226	48359	54270
BAL	A		GILL		SWE	6271	383	885			1353	485	313	442	407
BAL	A		NONE		DEN	248064	204447	207229	144252	154790	142535	168846	184330	200985	217277
BAL	A		NONE		SWE	74	2813	2052	2659	2739	110	706			
BAL	A		OTTER		DEN	8		19		15					
BAL	A		OTTER		POL					21					
BAL	A		POTS		DEN		12524	13839	16716	11219	5304	5506	2272	2455	1775
BAL	A		POTS		POL	26730	20268	14502	15888	25323	21954	20576	13086	8841	11355
BAL	A		POTS		SWE	23886	25365	28788	23451	12845	23090	29839	8425	14312	10717
BAL	A		R-DEM_SEINE		DEN		8				32			32	
BAL	A		R-GILL		DEN	46	15677	15957	14579	21185	15050	12637	10723	11759	8618
BAL	A		R-GILL		GER								192		
BAL	A		R-GILL		POL	26014	19941	15700	18809	17544	15584	9865			
BAL	A		R-GILL		SWE	13884	15332	16650	15614	15720	7406	13074	15376	9473	9944
BAL	A		R-LONGLINE		DEN	621	2766	4149	6128	2210	996	982	798	793	8
BAL	A		R-LONGLINE		POL	658			29	97	753	102	173	826	
BAL	A		R-LONGLINE		SWE	2522	392								88
BAL	A		R-OTTER		DEN	23	79	121	54	158	63	232			
BAL	A		R-TRAMMEL		DEN		7361	9765	7424	10027	7100	8239	9080	2845	371
BAL	A		R-TRAMMEL		SWE	8118	10053	8683	7146	7657	7687	14540	9764	6458	4713
BAL	A		TRAMMEL		DEN		86	197	40	240	135	4	24	212	133
BAL	A		TRAMMEL		POL	3058	2708	2357	5414	1367	971	112			238
BAL	B		DEM_SEINE		POL	3111	959	31		59		82	1054		
BAL	B		DEM_SEINE		SWE					44					
BAL	B		GILL		DEN		56	19		23					
BAL	B		GILL		LAT						844	462	720	1013	2071
BAL	B		GILL		LIT						34504	30277	16793	48662	64326
BAL	B		GILL		POL	145108	109011	72210	71172	60146	51258	50365	397312	386491	368111
BAL	B		GILL		SWE	17940	17036	18779	21529	17550	27674	31454	28688	33454	35300
BAL	B		NONE		DEN	25493	22940	27175	22623	24599	29787	23237	25846	19750	15924
BAL	B		NONE		SWE	9		1014	4495	1100	1109	998		1798	
BAL	B		PEL_SEINE		POL								22		
BAL	B		PEL_TRAWL		POL		59								
BAL	B		POTS		DEN				8						
BAL	B		POTS		LIT								5018	4869	13640
BAL	B		POTS		POL	124796	107603	69044	59160	46886	44134	69259	29144	36719	41741
BAL	B		POTS		SWE	138253	149638	180982	205254	137653	162669	129568	85842	85807	83211
BAL	B		R-DEM_SEINE		LAT									0	0
BAL	B		R-GILL		DEN		1060	207	610	3465	3415	2783	45	79	297
BAL	B		R-GILL		LAT						1078	1979	3266	1694	2905
BAL	B		R-GILL		LIT						28808	42127	42080	127316	74520
BAL	B		R-GILL		POL	613889	572660	483645	447619	343626	398418	322538	22	40	
BAL	B		R-GILL		SWE	111340	86034	71269	79583	81410	68069	61424	42923	55460	52016
BAL	B		R-LONGLINE		DEN		223		718	2210	2163	1041	117	18	
BAL	B		R-LONGLINE		LIT						2170	3787	7999	2981	750
BAL	B		R-LONGLINE		POL	30606	27836	21358	19258	12028	14925	13281	8997	6490	6678
BAL	B		R-LONGLINE		SWE	12481	15858	8229	8089	6978	6209	5882	3589	4140	6027
BAL	B		R-OTTER		DEN					54					
BAL	B		R-TRAMMEL		SWE	3881	3238	3931	3740	3410	1530	11884	10915	9024	6423
BAL	B		TRAMMEL		POL	119			37	31					
BAL	B		TRAMMEL		SWE	6999	3406	11500	5455	4858	5238	5030	5433		
BAL	C		DEM_SEINE		SWE	824			526						
BAL	C		GILL		FIN	1152304	1000201	1033994	957521	888768	1057622	1188962	1101469	1087866	2343070
BAL	C		GILL		POL								102		
BAL	C		GILL		SWE	160268	173471	166700	168797	154373	185927	169655	139908	106857	108534
BAL	C		PEL_TRAWL		FIN										3292
BAL	C		NONE		SWE	257	1269	4126	2030	331	629			309	
BAL	C		OTTER		SWE			66							
BAL	C		POTS		FIN	505759	510189	483518	472706	527856	609518	586124	599198	664637	1433469
BAL	C		R-LONGLINE		FIN										78168
BAL	C		POTS		SWE	240193	275226	277286	251989	227243	247262	234842	191732	140684	152891
BAL	C		R-GILL		SWE	39858	49762	46841	40313	28534	38939	38007	25078	29051	23139
BAL	C		R-LONGLINE		SWE			3077							
BAL	C		TRAMMEL		SWE	912									
BAL	28.2		GILL		LAT						2460	1024		594	679
BAL	28.2		GILL		POL										113
BAL	28.2		R-DEM_SEINE		LAT						46	36			22
BAL	28.2		R-GILL		LAT						7387	5022	6518	3432	2687

5.1.6.2 Catches (landings and discards) of small boats by area, Member State and fisheries

STECF notes that discard observation and estimation are not comprehensive for small boats. Therefore the information available on the estimated catches is believed to represent landings rather than catches.

Because of software problems when aggregating data it was not possible for the EWG to review catch data. This ToR will be addressed during the second meeting.

5.1.7 ToR 3 Fishing effort (days at sea) uptake analysis, by Member State, gear type and fishing area.

The EWG 14-06 was addressed the task of quantifying the evolution of the calculated maximum effort allocated to the cod fleet (ceiling of days using regulated gear types) in relation to the effort actually used by that fleet and was asked to highlight possible shifts between métiers.

The uptake of days at sea against the available days at sea by Member State and area for regulated and non-regulated gear types in 2008-2013 is presented in the Table 5.1.7.1. and in the Figures 5.1.7.1 –5.1.7.3. For this analysis the maximum number of days at sea available to the Member State was calculated as the product of its ceiling in number of days at sea per vessel and the number of active regulated vessels. For each Member State the total national uptake of days at sea is then expressed as a percentage of the calculated maximum effort available to the Member State. With this approach the individual vessels' uptake cannot be determined, nor whether any individual vessel exceeded the ceiling, but only the average uptake per vessel.

The average uptake of available days at sea across the Member States over the time period 2008-2013 was in the range of 39-47% for the ceiling in area A, 34-41% for the ceiling in the area B and has risen from 42% to 69% for the ceiling in areas A and B combined. Only one Member State slightly exceeded the allowed limit for regulated gears in areas A and B combined in 2011 (Figure 5.1.7.3). No clear trend in average uptake in area A or in area B could be revealed over the observed period. For area A and B combined average uptake is higher in 2011-2013 compared to 2008 but very similar over the years 2011-2013.

Table 5.1.7.1. Uptake of available days at sea by Member State and area for regulated and nonregulated gear types in 2008-2013.

Reg	Area	MS	Category	Gear types	2008	2009	2010	2011	2012	2013
BAL	A	GER	Limit		65339	53868	45612	41728	39772	38794
BAL	A		Uptake	Nonreg	2034	889	863	609	448	491
BAL	A		Uptake	Reg	33414	25373	21911	23187	21568	20351
BAL	A	DNK	Limit		69799	53265	41268	40587	35534	31948
BAL	A		Uptake	Nonreg	1942	1789	1857	1890	2064	2730
BAL	A		Uptake	Reg	22923	17797	15505	15568	15139	13820
BAL	A	POL	Limit		10035	7638	4887	2934	4401	4564
BAL	A		Uptake	Nonreg	6438	5608	5234	5624	5726	5766
BAL	A		Uptake	Reg	872	925	466	315	592	939
BAL	A	SWE	Limit		11373	7638	7240	6194	6683	6846
BAL	A		Uptake	Nonreg	1618	2416	1870	1144	1080	1363
BAL	A		Uptake	Reg	5124	4007	3638	3003	2864	3177
BAL	B	GER	Limit		534	160	160	320	320	
BAL	B		Uptake	Nonreg				165	217	172
BAL	B		Uptake	Reg	139	32	24	79	25	
BAL	B	DNK	Limit		3382	2080	3200	3200	1920	480
BAL	B		Uptake	Nonreg	871	1215	967	460	259	145
BAL	B		Uptake	Reg	1530	1070	1361	2045	967	230
BAL	B	EST	Limit		1602	960	480	1440	1440	640
BAL	B		Uptake	Nonreg	869	960	1136	1111	3733	799
BAL	B		Uptake	Reg	221	89	58	521	180	153
BAL	B	FIN	Limit							160
BAL	B		Uptake	Nonreg						30
BAL	B		Uptake	Reg						65
BAL	B	LIT	Limit			5120	4320	3840	4320	4640
BAL	B		Uptake	Nonreg		397	433	522	254	489
BAL	B		Uptake	Reg		3006	2690	2526	3207	3246
BAL	B	LAT	Limit		9968	9920	7840	6240	6880	6400
BAL	B		Uptake	Nonreg	3527	2763	2650	2667	1793	1774
BAL	B		Uptake	Reg	4853	4567	3388	4518	4357	3426
BAL	B	POL	Limit		55714	39520	41440	36000	46880	43040
BAL	B		Uptake	Nonreg	6272	8824	8529	8837	8280	8928
BAL	B		Uptake	Reg	15244	11885	13845	11775	17024	18182
BAL	B	SWE	Limit		27768	24800	20960	16960	18080	16800
BAL	B		Uptake	Nonreg	7121	6680	5899	5031	3923	4455
BAL	B		Uptake	Reg	11654	10479	8190	5827	5015	4171
BAL	AB	GER	Limit		10035	11457	9412	4727	4401	2934
BAL	AB		Uptake	Nonreg	300	375	397	102		
BAL	AB		Uptake	Reg	5705	7347	6046	3581	3431	2010
BAL	AB	DNK	Limit		23861	23316	17919	12551	14344	13203
BAL	AB		Uptake	Nonreg	123	342	342	444	454	115
BAL	AB		Uptake	Reg	10494	11181	10496	8565	10580	10018
BAL	AB	EST	Limit		446	402	362		326	
BAL	AB		Uptake	Nonreg					22	
BAL	AB		Uptake	Reg	265	258	218		253	
BAL	AB	FIN	Limit		892	1005	1267	1304	1304	326
BAL	AB		Uptake	Nonreg						27
BAL	AB		Uptake	Reg						42
BAL	AB	LIT	Limit							
BAL	AB		Uptake	Nonreg		90	146	124		
BAL	AB		Uptake	Reg						
BAL	AB	LAT	Limit		669	402	1448	163	163	652
BAL	AB		Uptake	Nonreg				113		
BAL	AB		Uptake	Reg	501	261	1166	223	151	604
BAL	AB	POL	Limit		33896	16482	10317	10921	15485	16300
BAL	AB		Uptake	Nonreg	3050	3469	1622	3449	3091	2964
BAL	AB		Uptake	Reg	12029	6780	5874	6974	10343	10223
BAL	AB	SWE	Limit		16725	15075	11222	14181	13855	11247
BAL	AB		Uptake	Nonreg	3606	3573	2045	2719	2185	1935
BAL	AB		Uptake	Reg	7707	7970	6545	10280	9767	8099



Figure 5.1.7.1. Fishing area A. Uptake of available days at sea by Member States and regulated and non-regulated gears in 2008-2013.

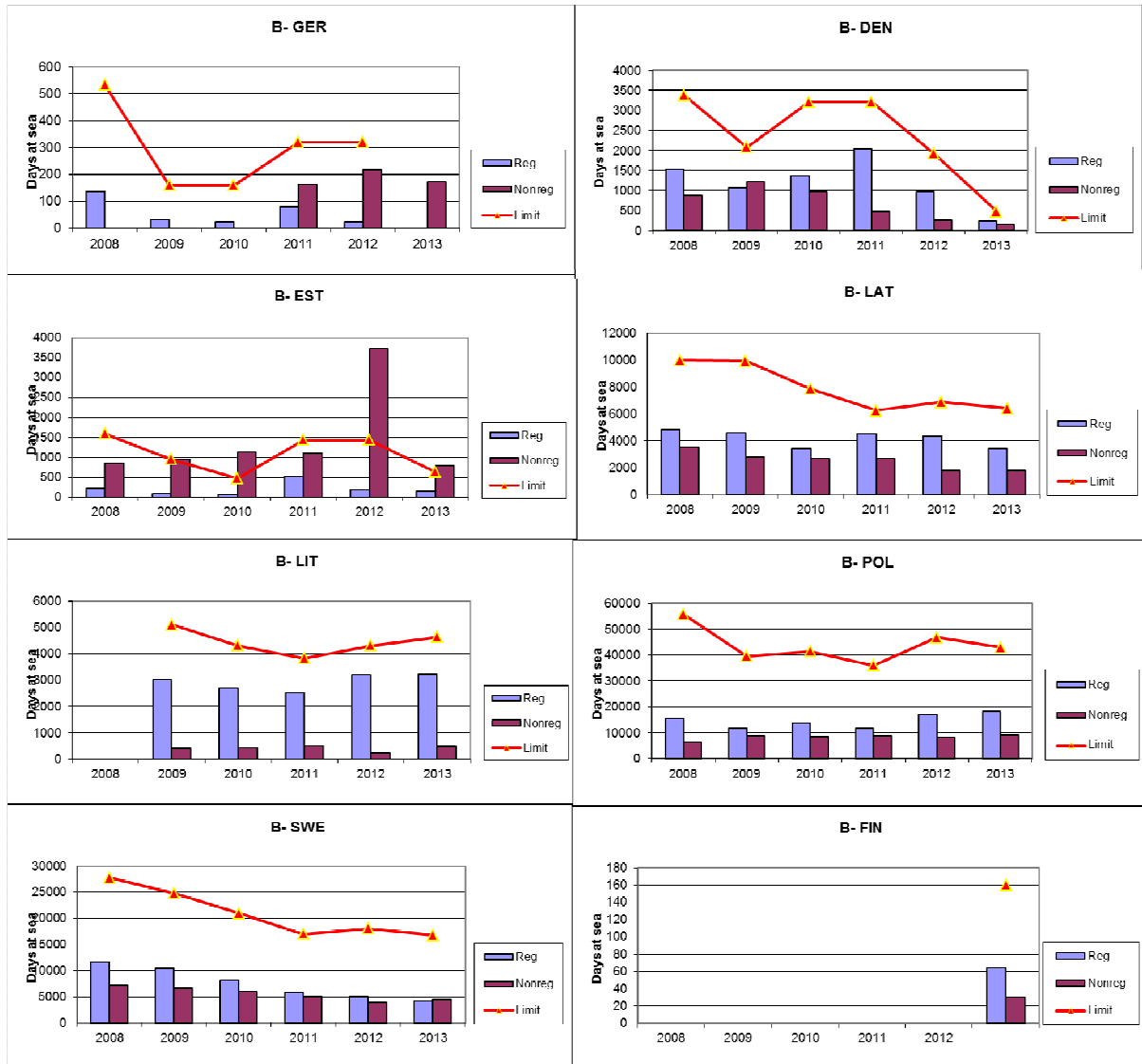


Figure 5.1.7.2. Fishing area B. Uptake of available days at sea by Member States and regulated and non-regulated gears in 2008-2013.

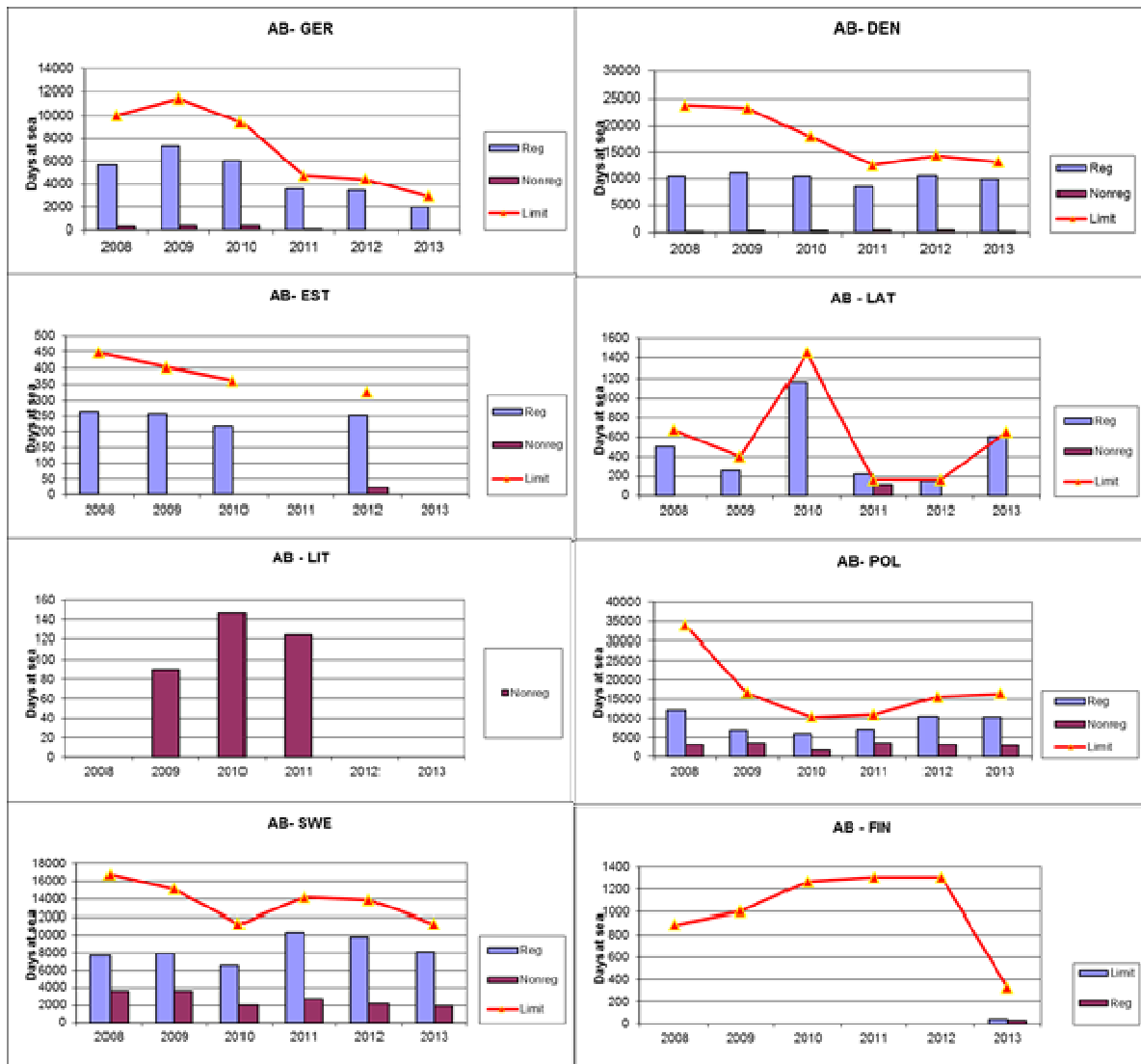


Figure 5.1.7.3. Fishing areas A and B combined. Uptake of available days at sea by Member States and regulated and non-regulated gears in 2008-2013.

5.1.8 ToR 4 Evaluation of fully documented fisheries FDF

5.1.8.1 Fishing effort of FDF vessels by area, Member State and fisheries in comparison with fisheries not working under FDF provisions

Only Denmark has reported FDF fisheries in the Baltic in 2012 in both areas A (Western Baltic) and B (Eastern Baltic). There was no information on FDF provided to the EWG 14-06.

Therefore, no new analyses were performed by the group. Table 5.1.8.1.1 provides the information on effort deployed in fully documented fishery, which was made available to EWG 13-06. The fully documented fishery represented on average 2.3% of the total Danish regulated effort deployed in both areas A and B in 2012. FDF share in overall effort used with respective gear types was generally below 1%. Only for regulated demersal seine in area A the share of FDF reached 37%.

Table 5.1.8.1.1 Danish fishing effort (kW*days at sea) in Fully Documented Fishery (FDF) and total (all countries) non-FDF effort in 2012 by areas A (Western Baltic) and B (Eastern Baltic).

Area	Specon	MS	REG Gear_COD	FDF Effort	All Non-FDF effort	%
A	FDFBAL	DNK	PEL_TRAWL	880	548950	0.2
A	FDFBAL	DNK	r-DEM_SEINE	33798	91495	36.9
A	FDFBAL	DNK	r-OTTER	7810	2475071	0.3
B	FDFBAL	DNK	PEL_TRAWL	7040	5005154	0.1
B	FDFBAL	DNK	r-OTTER	33660	5321587	0.6
B	FDFBAL	DNK	r-PEL_TRAWL	770	198883	0.4

5.1.8.2 Catches (landings and discards) of cod and other species taken by FDF fisheries by area, Member State and fisheries in comparison with fisheries not working under FDF provisions

Only Denmark has reported FDF fisheries in the Baltic in 2012 in both areas A (Western Baltic) and B (Eastern Baltic). There was no information on FDF provided to the EWG 14-06. The reported Danish landings of cod from the fully documented fishery with regulated gears amounted to 333 t in area A and 406 t in area B (total 739 t) in 2012 (Table 5.1.3.5.). The landings from FDF covered 4% from the reported cod landings in these areas in 2012. FDF reported about 42 t of cod discards in 2012.

5.1.8.3 Comparative analysis of cod selectivity by FDF fisheries and non-FDF fisheries

Only Denmark has reported FDF fisheries in the Baltic in 2012 in both areas A (Western Baltic) and B (Eastern Baltic). There was no information on FDF provided to the EWG 14-06. The analysis presented is therefore as first conducted by STECF EWG 13-06 and STECF EWG-13-13. STECF EWG 13-06 interpreted the task as to compare age specific fishing patters (partial Fs by fishery and age group). As a first step into the requested analyses, STECF EWG 13-06 estimated and presented the landing and discards at age by FDF and non-FDF fisheries. STECF EWG 13-06 noted that any attempt to compare the selectivity of FDF and non-FDF fisheries implies that Member States sampling and raising procedures to estimate the specific age compositions of landings and discards are specific for these fisheries. Since the data of Danish FDF in 2012 only were made available, the EWG decided to evaluate the age composition of landings and discards of comparative gear types from FDF and nonFDF. STECF EWG-13-13 further elaborated the available information looking at different patterns in landings and discard age structures observed in areas A and B. The findings on both non-FDF and FDF fisheries for

the Western and Eastern cod stocks are presented below in Sections 5.1.8.3.1 and 5.1.8.3.2 respectively.

5.1.8.3.1 ToR 4 Cod selectivity by FDF fisheries and non-FDF fisheries of the Western Baltic cod

Table 5.1.8.1 and Figure 5.1.8.1 provide the overview of age composition of landings taken with regulated gears in FDF and non-FDF in area A (Sub-divisions 22-24, Western Baltic cod).

The main gears in the area A (r-otter and r-demersal seine) show now difference in age composition of cod landings from FDF and non-FDF fisheries. In both gears landings are dominated by the age groups 3-5. However, the age composition of discards shows certain fisheries-dependent pattern in case of r-otter, where the share of age group 2 in non-FDF significantly exceeded the respective value of FDF. In case of r-demersal seine, the discard structure of both fisheries was identical.

The same age groups dominate also the age composition of discards and thus hint at a clear difference in age composition in age range 2-5. The age composition of landings from non-FDF fisheries were shifted to the younger age groups indicating at the substantial difference in selectivity. However, the data should be taken with caution because of potential systematic differences in age reading in areas A and B.

Table 5.1.8.1. Age composition of cod landings and discards in FDF and non-FDF in area A (Western Baltic) in 2012 t.

Landings																	
REG-AREA	ANNEX	REG_GEAR	SPECON	Landings t	Landings no	AGE 0L	AGE 1L	AGE 2L	AGE 3L	AGE 4L	AGE 5L	AGE 6L	AGE 7L	AGE 8L	AGE 9L	AGE 10L	AGE 11L
A	Bal	PEL_TRAWL	none	10.774	10.472	0	0	1.01	2.404	4.841	1.809	0.364	0.039	0.005	0	0	0
A	FDFBAL	PEL_TRAWL	FDFBAL	0.071	0.079	0	0	0	0.006	0.047	0.023	0.002	0.001	0	0	0	0
A	Bal	r-DEM_SEINE	none	437.903	414.98	0	0	7.779	104.453	186.686	91.594	23.208	1.013	0.157	0.09	0	0
A	FDFBAL	r-DEM_SEINE	FDFBAL	256.52	244.024	0	0	6.379	76.209	98.828	48.519	13.515	0.478	0.061	0.035	0	0
A	Bal	r-OTTER	BACOMA	4015.657	3848.549	0	218.386	962.984	1310.275	1188.712	141.655	21.941	3.506	0.85	0.161	0.079	0
A	Bal	r-OTTER	none	6262.26	6181.5	0	0	45.139	1106.915	3216.977	1483.365	296.954	27.777	3.542	0.831	0	0
A	Bal	r-OTTER	T90	172.84	189.386	0	0	9.024	42.476	109.162	23.961	3.762	0.73	0.218	0.042	0.011	0
A	FDFBAL	r-OTTER	FDFBAL	76.642	95.916	0	0	0.902	25.494	49.338	17.556	2.09	0.517	0.019	0	0	0
Discards																	
REG-AREA	ANNEX	REG_GEAR	SPECON	Discards t	Discards no	AGE 0D	AGE 1D	AGE 2D	AGE 3D	AGE 4D	AGE 5D	AGE 6D	AGE 7D	AGE 8D			
A	Bal	PEL_TRAWL	none	1.477	3.677	0	0.045	1.494	1.454	0.606	0.078	0	0	0			
A	FDFBAL	PEL_TRAWL	FDFBAL	0	0	0	0	0	0	0	0	0	0	0			
A	Bal	r-DEM_SEINE	none	8.74	21.686	0	0.068	1.747	9.791	9.033	0.832	0.215	0	0			
A	FDFBAL	r-DEM_SEINE	FDFBAL	0.519	1.287	0	0.004	0.104	0.581	0.536	0.05	0.012	0	0			
A	Bal	r-OTTER	BACOMA	331.956	788.075	3.961	104.727	355.818	243.595	70.96	8.942	0.046	0.026	0			
A	Bal	r-OTTER	none	324.825	802.898	0	2.455	76.068	363.408	323.628	29.627	7.712	0	0			
A	Bal	r-OTTER	T90	39.223	97.411	0	1.683	40.541	37.54	15.669	1.973	0.003	0.002	0			
A	FDFBAL	r-OTTER	FDFBAL	4.654	11.549	0	0.037	0.929	5.215	4.811	0.442	0.115	0	0			

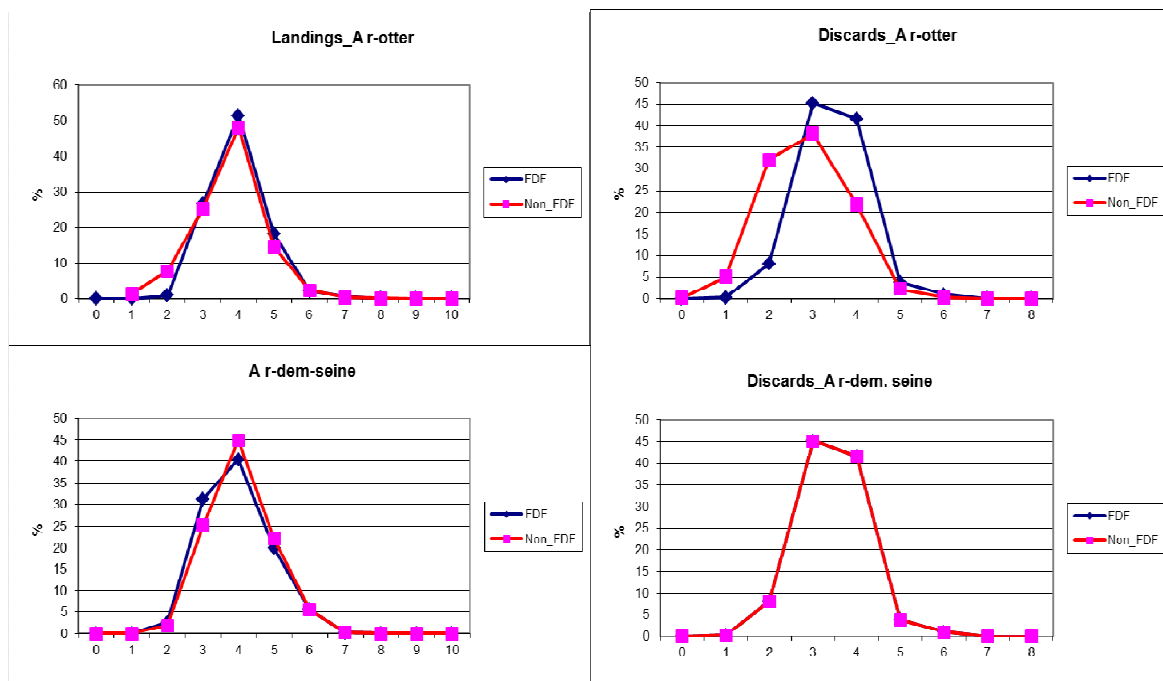


Figure 5.1.8.1. Age composition of cod landings (left panels) and discards from Fully Documented Fishery (FDF) and non-FDF in area A in 2012.

5.1.8.3.2 *ToR 4 Cod selectivity by FDF fisheries and non-FDF fisheries of the Eastern Baltic cod*

Table 5.1.8.2 and Figure 5.1.8.2 provide the overview of age composition of landings taken with regulated gears in FDF and non-FDF in area A (Sub-divisions 25-28, Eastern Baltic cod). The main comparable gears (r-otter and r-gill) show a clear difference in age compositions over the ages 3-5. The age composition of landings in non-FDF was shifted towards the younger age groups in both gear types indicating potential difference in selectivity. The main difference occurs in age group 3, which is significantly higher represented in the non-FDF. The similar pattern can be observed in the discard composition.

Table 5.1.8.2. Age composition of cod discards in FDF and non-FDF in area B (Eastern Baltic) in 2012, t.

Landings																	
REG_AREA	ANNEX	REG_GEAR	SPECON	Landings t	Landings no	AGE 0L	AGE 1L	AGE 2L	AGE 3L	AGE 4L	AGE 5L	AGE 6L	AGE 7L	AGE 8L	AGE 9L	AGE 10L	AGE 11L
B	Bal	PEL_TRAWL	none	55.798	72.29	0	0	1.259	39.147	26.943	3.727	1.202	0.008	0.002	0.002	0	0
B	FDFBAL	PEL_TRAWL	FDFBAL	0.008	0.014	0	0	0	0.001	0.007	0.005	0.001	0	0	0	0	0
B	Bal	r-OTTER	BACOMA	14979.899	17813.862	0	0	829.551	8910.497	4990.605	1341.699	1023.244	409.885	224.181	60.009	24.191	0
B	Bal	r-OTTER	none	20418.548	27254.002	0	0	162.732	4555.018	10961.636	8953.221	2222.529	308.05	84.665	4.709	1.048	0.394
B	Bal	r-OTTER	T90	752.612	984.9	0	0	43.951	579.521	296.209	49.003	14.449	1.396	0.278	0.077	0.016	0
B	FDFBAL	r-OTTER	FDFBAL	404.892	536.325	0	0	0.49	37.005	224.276	211.689	52.469	8.022	2.235	0.108	0.031	0
B	Bal	r-PEL_TRAWL	BACOMA	1158.093	1185.22	0	0	118.507	534.927	415.564	98.779	15.818	0.944	0.673	0.008	0	0
B	Bal	r-PEL_TRAWL	none	108.386	149.793	0	0	0.316	12.76	65.149	58.022	11.822	1.515	0.183	0.026	0	0
B	FDFBAL	r-PEL_TRAWL	FDFBAL	1.436	1.964	0	0	0.075	0.822	0.863	0.176	0.025	0.003	0	0	0	0

Discards														
REG_AREA	ANNEX	REG_GEAR	SPECON	Discards t	Discards no	AGE 0D	AGE 1D	AGE 2D	AGE 3D	AGE 4D	AGE 5D	AGE 6D	AGE 7D	AGE 8D
B	Bal	PEL_TRAWL	none	17.13	47.281	0	0.082	5.167	34.663	7.367	0.002	0	0	0
B	FDFBAL	PEL_TRAWL	FDFBAL	0	0	0	0	0	0	0	0	0	0	0
B	Bal	r-OTTER	BACOMA	3577.229	9370.848	0	39.256	1252.61	5665.798	1763.891	449.61	174.155	24.335	1.193
B	Bal	r-OTTER	none	2763.958	7053.126	0	8.774	530.606	2346.346	2650.029	1369.514	145.943	1.914	0
B	Bal	r-OTTER	T90	229.499	609.222	0	3.871	104.657	402.45	96.155	2.053	0	0.019	0.017
B	FDFBAL	r-OTTER	FDFBAL	36.693	94.92	0	0.167	2.642	16.667	46.657	25.983	2.768	0.036	0
B	Bal	r-PEL_TRAWL	BACOMA	200.851	513.588	0	1.734	81.013	375.861	54.87	0.11	0	0	0
B	Bal	r-PEL_TRAWL	none	15.292	39.405	0	0.092	2.665	13.41	14.825	7.595	0.811	0.007	0
B	FDFBAL	r-PEL_TRAWL	FDFBAL	0.174	0.45	0	0.001	0.013	0.079	0.221	0.123	0.013	0	0

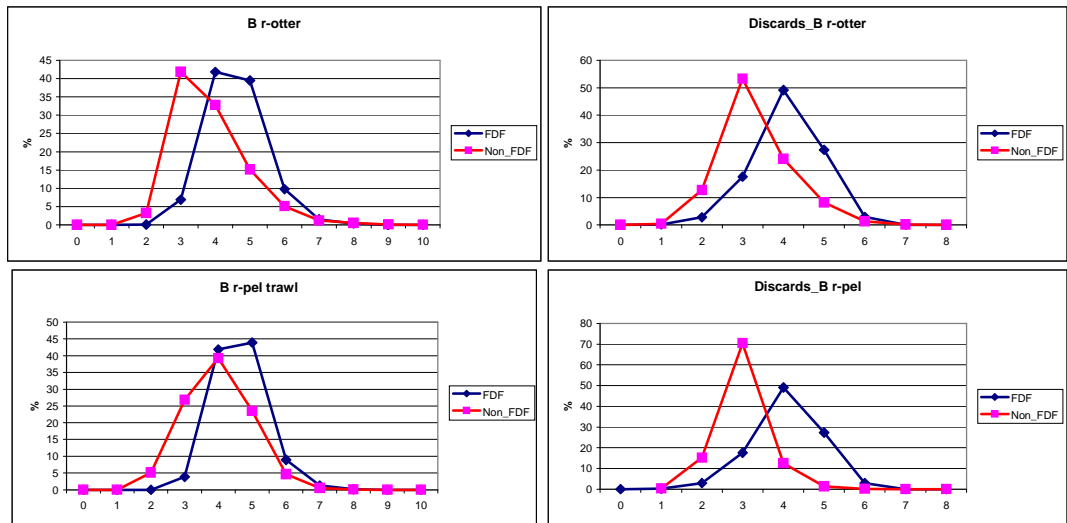


Figure 5.1.8.2. Age composition of cod landings (left panels) and discards from Fully Documented Fishery (FDF) and non-FDF in area B in 2012.

The ICES Baltic Fisheries Assessment Working Group has reiterated in its reports that the age composition data of Eastern Baltic cod from both the commercial catches and the survey suffer from severe in-consistencies, between countries and years (ICES 2013). ICES has tried to solve the problem by establishing a special study groups. For example the Report of the ICES Study Group on Baltic Cod Age Reading (ICES 2000) presents the observed differences in age reading results between countries, indicating that the age reading countries fall into 3 groups showing similar results: 1) Sweden+Germany, 2) Denmark and 3) Poland+Latvia+Russia. The different age interpretation can also be observed in CANUM data presented in the Reports of the Baltic Fisheries Assessment Working Group (ICES 2006, 2012, 2013).

Therefore, the presented above results from the FDF analysis should be taken with caution because of potential differences in age reading in areas A and B. Differently from the area A, the age reading of cod from non-FDF in area B is executed in a number of institutes, with distinct differences in interpretation of cod otoliths. As the FDF data currently stem from Denmark it may imply that differences between FDF and non-FDF age compositions in area B (Eastern stock) may at least partly result from potential inconsistencies in age interpretation between Denmark and other Baltic countries.

Since the majority (56% of otter trawl landings) in area A stem from Denmark, as well as the age readings, the potential country effect does not emerge here.

5.1.9 ToR 5 Spatio-temporal patterns in effective effort by area and fisheries

According to available effort data in units of fished hours, the spatial distribution of deployed otter trawl effort (Figure 5.1.9.1) did not show any particular trend over the time series. During 2003–2005 the highest fishing effort concentration was observed in areas of Bornholm Deep and in the northern part of Polish EEZ. However, the effort seems to be distributed more evenly across the areas A-C after 2006.

The gillnet effort has been concentrated in areas A and B without any clear temporal pattern (Figure 5.1.9.2). During 2003–2013 period the biggest fishing efforts concentration was in the Polish coastal areas.

The Figure 5.1.9.3 shows the general distribution pattern of another big contributor of effort in the Baltic – the pelagic trawls. The distribution pattern indicates the high concentration of effort in the areas of Bornholm and Gdansk Deep as well as in the Sub-division 28.2 in 2003-2007. The pelagic trawl effort was distributed rather evenly in the most recent years. This can be explained with northward distribution of sprat stock in recent years (ICES, 2012).

A full set of effort distribution figures, will be made available on the web page of the EWG 14-06/14-13.

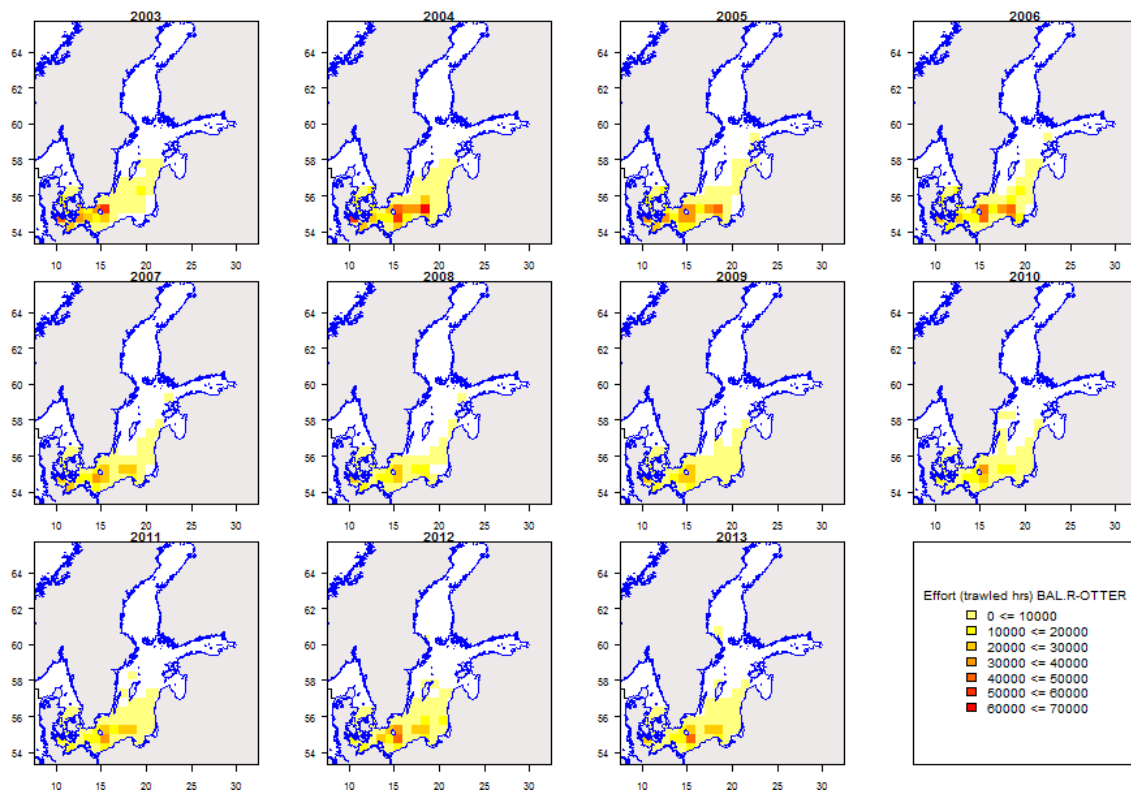


Figure 5.1.9.1 Spatial distribution of effective effort (trawled hours) r-OTTER 2003-2013. There was no data reported on the spatial distribution from Finland.

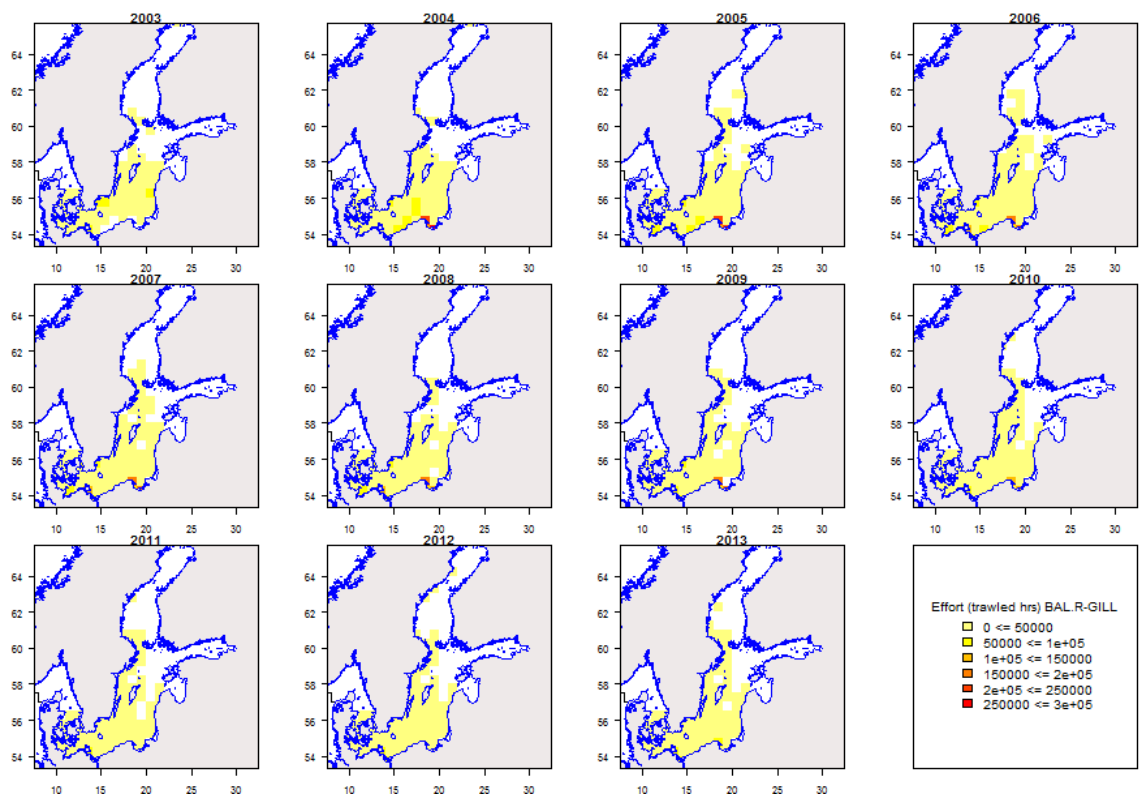


Figure. 5.1.9.2 Spatial distribution of effective effort (fishing hours) r-Gill 2003-2013. There was no data reported on the spatial distribution from Finland.

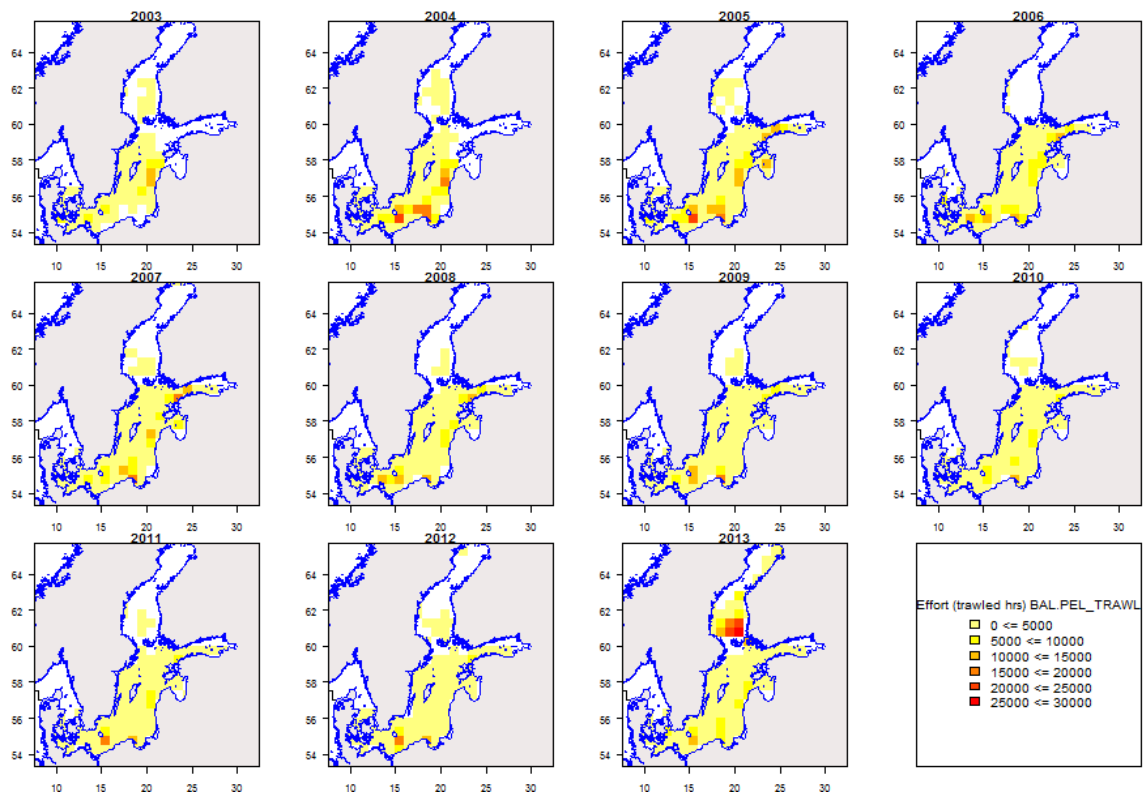


Figure 5.1.9.3 Spatial distribution of effective effort (fishing hours) pelagic trawls 2003-2012. There was no data reported on the spatial distribution from Finland.

5.1.10 ToR 6 Remarks on quality of catches and discard estimates

Discard estimates were available from all Baltic Member States except for Finland. This country, however has landed small quantities of the eastern cod stock (approximately 1% of the total landings). It seems that the sampling intensity, particularly in passive gears, was generally lower as compared to active gears. This might imply that even if all major métiers were sampled, the discard estimate is an underestimate compared to the real discard. Therefore, variation in discard figures from year to year must be taken with caution and may not reflect the true exploitation pattern of the fishery. The EU Data Collection Framework (DCF) defines which métiers (Level 6) are to be sampled in a country following the rules of the fisheries métiers ranking system. The sampling strata include also Baltic ICES Sub-divisions (not ICES rectangles) and months. Independently of the uncertainties in the discard estimates available to the STECF EWG, the changes in discard level reflect relatively well the year-classes strength of the eastern Baltic cod stock, which is in particular evident for the active gears (see Figure 5.1.3.1). Also discard ratio estimates for the Member States for the same year and fishing gears are close and follow the same trends across years studied.

5.1.11 ToR 7 Estimation of partial fishing mortalities of cod by area, Member State and fisheries and correlation between partial cod mortality and fishing effort by area, Member State and fisheries

5.1.11.1 Western Baltic cod in area A

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.1.11.2 Eastern Baltic cod in area B

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake toR based on catch data. This ToR will be addressed during the second meeting.

5.1.12 ToR 8 Spatio-temporal pattern in standardized catchability indices for cod

5.1.12.1 Introduction

Catchability (q) is defined as the relationship between the catch rate (CPUE) and the true population size. Consequently, the unit of catchability is fish caught per fish available per effort unit and per time unit, or, in easier words, catchability can conceptually be considered as the probability of any single fish being caught (Jul-Larsen *et al.*, 2003).

Many factors are related to catchability, e.g. fish abundance at a certain time in a certain area and gear efficiency (fishing power) including use of the gear and fishers' experience (Marchal *et al.*, 2001). A standard solution to evaluate changes in catchability is therefore to compare catch rates from commercial and research fishing where the catchability of the research fishing remains constant from year to year (Neis *et al.*, 1999):

$$\text{CPUE (fishery)}/\text{CPUE (survey)} = q \text{ (fishery)}/q \text{ (survey)}$$

This catchability index has no units. STECF EWG 13-13 interprets the resulting ratio as an index of fishing mortality per individual fish independent of stock size, which allows spatio-temporal analyses. The calculation of catchability indices for cod per ICES statistical square (rectangle) and year from standardized and averaged ratios between CPUE by fishery /BITS Q1-Q4 indices are therefore believed to provide indications of spatio-temporal patterns.

5.1.12.2 Data

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.2 Kattegat effort regime evaluation in the context of Annex IIA to Council Regulation (EC) No 57/2011)

5.2.1 ToR 1.a Fishing effort in kWdays, GTdays, kW and number of vessels by Member State and fisheries

Trends in effort by the new cod plan gear groups and by country are shown in Table (5.2.1.1). In 2013 70% of the total effort was deployed by gears that are under effort regulation in the cod plan, dominated by the TR2 fishery, and the total effort in Kattegat has decreased by 46% between 2003 and 2013. The effort deployed by regulated gears has decreased steadily from 2003 (by 57% between 2003 and 2013) with the exception of 2012, when the effort increased by 11% (266 406 kW*days) from the previous year. This was mainly due to an increase by 233 353 kW*days in the Danish TR2 fishery (an increase by 12% for that fishery), which is under the derogation CPart13c from 2010 onwards. Between 2012 and 2013 the effort by the Danish TR2 fishery decreased again by 90 726 kW*days and the total nominal effort by regulated gears decreased by 7%.

The Swedish regulated TR2 effort has decreased by 82% since 2003, partly due to a move towards the unregulated CPart11 (using a 35mm Nephrops sorting grid, introduced in 2003) which constituted 71% of the Swedish TR2 effort in 2013, and partly to an overall decrease in TR2 effort (38% since 2003). The effort carried out by unregulated gears, including the Swedish Nephrops sorting grid under the derogation CPart11, has increased from 776 555 kW*days in 2003 to 1 113 664 kW*days in 2013, an increase by 43% (Table 5.2.1.3).

Table 5.2.1.1 Kattegat: Trend in nominal effort (kW*days at sea) by regulated gear group and country. 2004-2013. The gear category TR2 does not include effort carried out under the derogation CPart11 (from 2009 onwards) or IIA83b (2004-2008).

Annex	Area	Reg. Gear	Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Rel. 2004-2006	Rel. 2012
IIa	3a	GN1	DEN	111648	129061	103851	72616	65829	80031	64536	46211	19778	27565	0.24	1.39
IIa	3a	GN1	GER	14289	26827	38486	39725	31562	23156	19526	21484	11860	8164	0.31	0.69
IIa	3a	GN1	SWE	17690	9609	14748	14949	32697	33120	32270	27481	35082	22312	1.59	0.64
IIa	3a	GT1	DEN	14791	28220	24754	11927	11758	22410	13398	11408	5279	5889	0.26	1.12
IIa	3a	GT1	SWE	11254	12833	19178	34170	29266	17518	26612	25205	14941	27610	1.91	1.85
IIa	3a	LL1	DEN	3080		220					221	397	221	0.13	0.56
IIa	3a	LL1	SWE	1376	10684	27478	37856	25234						0.00	
IIa	3a	TR1	DEN	191743	203625	191632	184599	156198	100777	67525	48671	100989	79227	0.40	0.78
IIa	3a	TR1	GER	2390	4985	5262	5526	1964				4309	1105	0.26	0.26
IIa	3a	TR1	SWE	15121	24870	5160	19799	57592	6985	13626	1006		1682.95	0.11	
IIa	3a	TR2	DEN	3062610	2546820	2250888	2026560	2148333	2208298	2378545	2000136	2233489	2142763	0.82	0.96
IIa	3a	TR2	GER	31861	7505	10318	35338	38716	19918	30730	13670	2645	2646	0.16	1.00
IIa	3a	TR2	SWE	1033710	932268	1062871	1041966	920320	436355	284594	271686	260287	247313	0.24	0.95
IIa	3a	TR3	DEN	483712	485616	359693	301698	146119	75792	27110	25572	70101	10382	0.02	0.15
IIa	3a	TR3	SWE				1470		1148						
Total				4995275	4422923	4114539	3828199	3665588	3025508	2958472	2492751	2759157	2576880	0.57	0.93

Table 5.2.1.2 Kattegat: Trend in nominal effort (kW*days at sea) by regulated gear group and derogation 2004-2013. All the Danish TR2 effort is under the derogation CPart13c from 2010 onwards while the German TR2 effort is partly under the derogation CPart13B between 2010 and 2011.

Annex	Area	Reg. Gear	SPECON	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Rel. 2004-2006	Rel. 2012
Ila	3a	GN1	none	143627	165497	157085	127290	130088	136307	116332	95176	66720	58041	0.37	0.87
Ila	3a	GT1	none	26045	41053	43932	46097	41024	39928	40010	36613	20220	33499	0.91	1.66
Ila	3a	LL1	none	4456	10684	27698	37856	25234			221	397	221	0.02	0.56
Ila	3a	TR1	none	209254	233480	202054	209924	215754	107762	81151	49677	105298	82014.45	0.38	0.78
Ila	3a	TR2	CPart13B							20020	4180				
Ila	3a	TR2	CPart13C							2378545	2000136	2233489	2142763		0.96
Ila	3a	TR2	none	4128181	3486593	3324077	3103864	3107369	2664571	295304	281176	262932	249959	0.07	0.95
Ila	3a	TR3	none	483712	485616	359693	303168	146119	76940	27110	25572	70101	10382	0.02	0.15
Total				4995275	4422923	4114539	3828199	3665588	3025508	2958472	2492751	2759157	2576880	0.57	0.93

Table 5.2.1.3 Trend in nominal effort (kW*days at sea) of unregulated gears in Kattegat 2004-2013. Sweden is the only country using the derogation CPart11/IIIA83B.

Annex	Area	Gear	SPECON	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Rel. 2004-2006	Rel. 2012
Ila	3a	BEAM	none	118											
Ila	3a	DEM_SEINE	none		354										
Ila	3a	DREDGE	none	426	26658	39802	50977	55259	35442	36517	51741	67491	48885	2.19	0.72
Ila	3a	none	none	3318	2579	2806	2712	188	19260	16306	15267	34391	8216	2.83	0.24
Ila	3a	OTTER	none	206117	189146	258514	198403	151091	229931	72299	30432	60366	119771	0.55	1.98
Ila	3a	PEL_SEINE	none	20680	25640	52976	32560	16157	11000	19876	19160	2760	21520	0.65	7.80
Ila	3a	PEL_TRAWL	none	392938	450906	374702	358100	195358	340860	277918	336209	400608	271422	0.67	0.68
Ila	3a	POTS	none	85806	65321	75311	86516	75233	64289	29897	32929	46114	45562.6	0.60	0.99
Ila	3a	TR2	CPart11						415194	482432	426638	546416	598286		1.09
Ila	3a	TR2	IIA83B	9912	113989	165425	233076	307336							
Total				719315	874593	969536	962344	800622	1115976	935245	912376	1158146	1113664	1.30	0.96

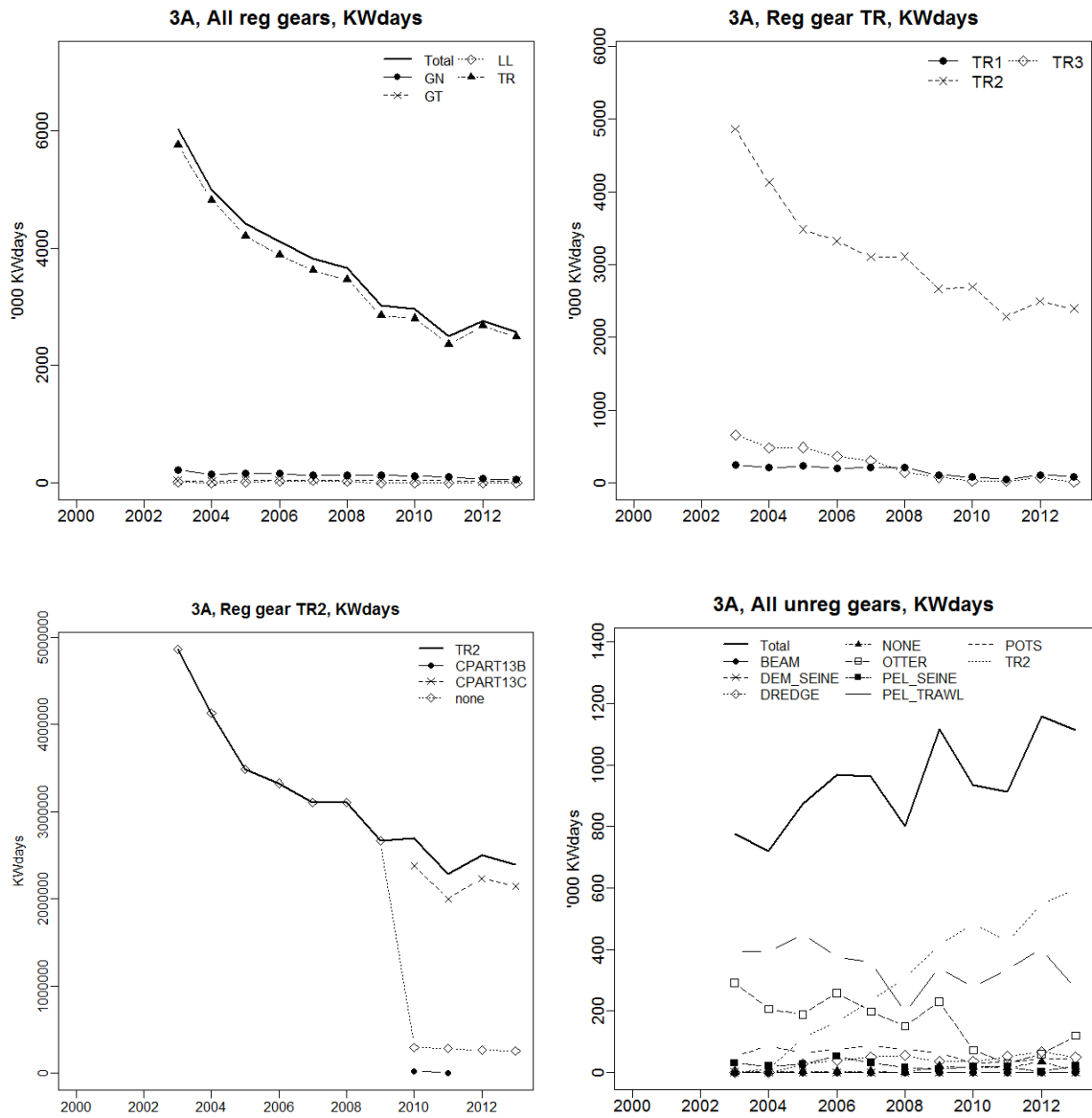


Figure 5.2.1.1. Kattegat: Top left: Trend in nominal effort (Kw *days at sea) by regulated gear types, 2003-2013. TR=Demersal trawl, BT=Beam trawl, GN=Gillnet, GT=Trammel net, LL=Longline. Note that the derogations CPart11 and IIA83b are not included in the TR gear category since they are considered unregulated. Top right: effort by gear types within gear group TR; TR1=mesh size ≥ 100 mm; TR2=mesh size $\geq 70, \leq 100$ mm; TR3 $\geq 16, \leq 32$ mm. The derogations CPart11 and IIA83b are not included in the TR2 category. Bottom left: Effort by derogation within gear type TR2. Note that the derogations CPart11 and IIA83b are not included in the TR2 category. Bottom right: effort by unregulated gear categories. The TR2 effort here is the effort carried out under the derogations IIA83B (2003-2008) and CPart11 (2009-2013).

The effort deployed in Gross tonnage days (GTdays), number of vessels and fishing capacity in kW by metier are not described in this report but can be found on the STECF EWG 13-13 website at: <http://stecf.jrc.ec.europa.eu/web/stecf/ewg1406>:

Relative changes in data since last submissions:

No updates of effort data for previous years were submitted.

5.2.1.1 Uptake of effort baseline

The uptake of effort baselines is presented in Figure 5.2.1.1.1. Care must be taken in the interpretation of this figure, for a number of reasons, including e.g: i) the baseline displayed here is extracted from the TAC and quotas regulations nr 43/2009, 53/2010, 57/2011, 44/2012, 40/2013 and 43/2014, and do not take into account the effort buyback performed by Member states as part of Article 13 and/or other agreements. This information is sometimes publicly available for some Member States, but not for all and STECF EWG 14-06 has not been provided with this information specifically; ii) as described in section 4, the effort information provided to STECF EWG 14-06 by a number of Member States is calculated in calendar days, whereas the actual regulation of effort uptake is based on 24h periods, which can lead to some differences especially in coastal fisheries; iii) STECF data are calculated by calendar year whereas the effort baselines apply from February to January.

All regulated gear categories in Kattegat are well below the effort base line apart from the TR2 fishery, which is the predominant fishery in the area. The TR2 overshoot is probably due to a combination of the points mentioned above and particularly the fact that the Danish TR2 fishery, which constituted 90% of the total TR2 nominal effort in 2013, is entirely under the derogation CPart13C which allows effort to be bought back by the Member State.

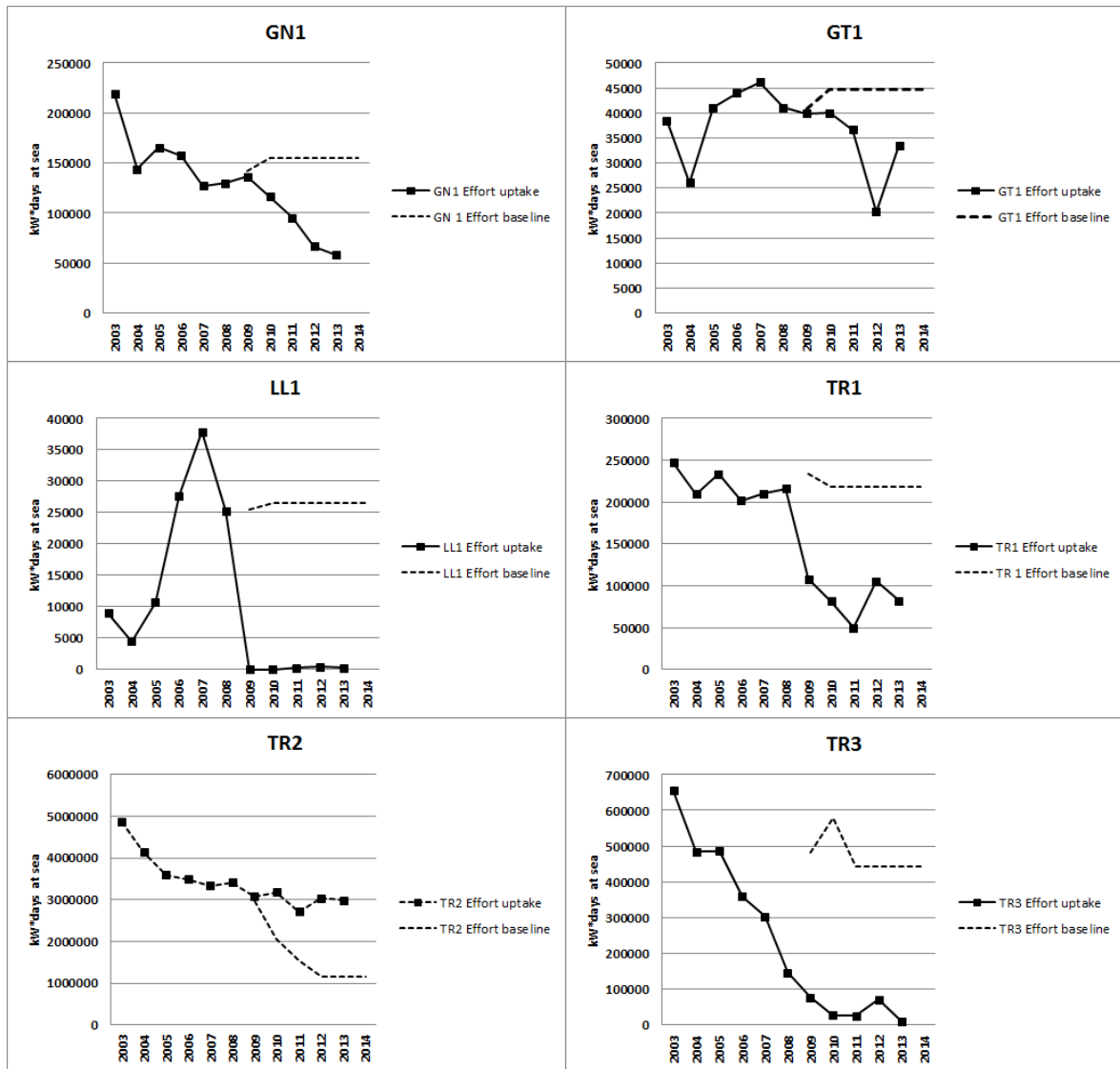


Figure 5.2.1.1.1 Management area 3a, Kattegat. Uptake of effort 2003-2013 by regulated gear category. Solid line=deployed effort in kW*days at sea, dashed line=Effort base line from the TAC and quota regulation for the years 2009-2014. Note that the derogations CPart11 and IIA83b are not included in the TR2 gear category since they are considered unregulated.

5.2.2 ToR 1.b and c Catches (landings and discards) of cod and non-cod species in weight and numbers at age by fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.2.3 ToR 1.d CPUE and LPUE of cod by fisheries and Member States

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.2.4 ToR 2 Rank regulated gear groups on the basis of catches expressed both in weight and in number of cod

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.2.5 ToR 3 Information on small boats (<10m)

5.2.5.1 Fishing effort of small boats by Member State

Vessels <10m LOA are exempted from the effort regulation in Kattegat with regard to the cod plan. Table 5.2.5.1.1 shows the nominal effort (kW*days at sea) of vessels <10m LOA in Kattegat. In 2013 the nominal effort deployed by small vessels constituted 13% of the total effort in the area. The Danish effort for this group of vessels has decreased in general during the time series, from 459 521 kW*days in 2003 to 265 101 kW*days in 2013. The Swedish total effort of small vessels has been fairly stable since 2009, accounting for about half of the effort deployed by small vessels in the area. However, the effort of Swedish vessels <10m fishing with TR2 gears has increased since 2009, from 4 801kWd to 55 459kWd in 2013. The German effort in this vessel category is insignificant. It should be noted that effort data for vessels <10m is more uncertain than for larger vessels. This is due to the fact that the majority of small vessels do not carry a logbook and the effort data has to be acquired from alternative data sources, such as monthly journals or sale slips.

Table 5.2.5.1.1 Nominal effort (kW*days at sea) deployed by vessels <10m LOA in Kattegat 2003-2013. Swedish effort data for vessels <10m LOA is not considered reliable before 2009 and are excluded from the table.

Gear	SPECON	country	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Rel.2003	Rel. 2009	Rel.2012
DREDGE	none	DEN							243							0
GN1	none	DEN	33319	29006	52205	65655	47184	62330	46955	53325	49306	28118	24267	0.73	0.52	0.86
GN1	none	GER				378										
GN1	none	SWE							62122	93134	45170	65829	64817		1.04	0.98
GT1	none	DEN	7919	1335	8914	16783	8930	5112	5023	5609	2993	1810	2854	0.36	0.57	1.58
GT1	none	SWE							38574	41407	25114	30193	28202		0.73	0.93
LL1	none	DEN	118		201	692	256		16							0
LL1	none	SWE							209	55	0					0
none	none	DEN	413225	388817	381605	345393	289656	243566	238901	212724	234535	182939	208486	0.50	0.87	1.14
none	none	SWE							37960	21438	21887	26061	17658		0.47	0.68
OTTER	none	DEN			406	1072	96	672	192			576	192		1	0.33
OTTER	none	SWE							128			3485			27.23	
PEL_SEINE	none	SWE														
PEL_TRAWL	none	DEN			336								708			
POTS	none	DEN			6611	7950	6942	6702	5308	4503	4506	5255	4765		0.90	0.91
POTS	none	SWE							134604	182519	105753	128945	126615		0.94	0.98
TR1	none	DEN	510		3210	1410	5350	80	276		910	294		0	0	0
TR1	none	SWE							828	966	1242	4867	1380		1.67	0.28
TR2	CPART11	SWE							2891	7932	4607	3189	1643		0.57	0.52
TR2	CPART13C	DEN								45373	27981	15317	23829			1.56
TR2	IIA83B	SWE														
TR2	none	DEN	4430	7672	9307	28840	28572	33945	30304						0	0
TR2	none	SWE							4801	17516	36719	54523	55459		11.55	1.02
TR3	none	DEN			23		23	164	34							0
Tot. kWd DEN and GER			459521	426830	462818	468173	387009	352571	327252	321534	320231	234309	265101	0.58	0.81	1.13
Tot. kWd SWE									281908	365121	240547	313607	299259		1.06	0.95
Total kWd all countries									609160	686655	560778	547916	564360		0.93	1.03

The effort deployed in Gross tonnage days (GTdays), number of vessels and fishing capacity in kW by vessels <10m LOA are not described in this report but can be found on the **STECF EWG 13-13** website under the Final Report section: <http://stecf.jrc.ec.europa.eu/web/stecf/ewg1306>:

Catches (landings and discards) of cod and associated species by small boats by Member State

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.2.6 ToR 4 Evaluation of fully documented fisheries FDF

There are no FDF fisheries in Kattegat.

5.2.7 ToR 5 Spatio-temporal patterns in effective effort by fisheries

Figures 5.2.7.1 to 5.2.7.3 show the effective effort in fishing hours carried out by the gear categories TR2, TR1 and GN1 respectively.

It should be noted that Kattegat is a rather small management area to find any changes in the pattern of the distribution of effort between the gears using statistical rectangles. A smaller grid would be required in order to pick up any spatial changes in this area. However Figure 5.2.7.1.2 shows a different spatial pattern in 2013 between vessels regulated for effort and those exempt under CPart11 (both using TR2 category gear).

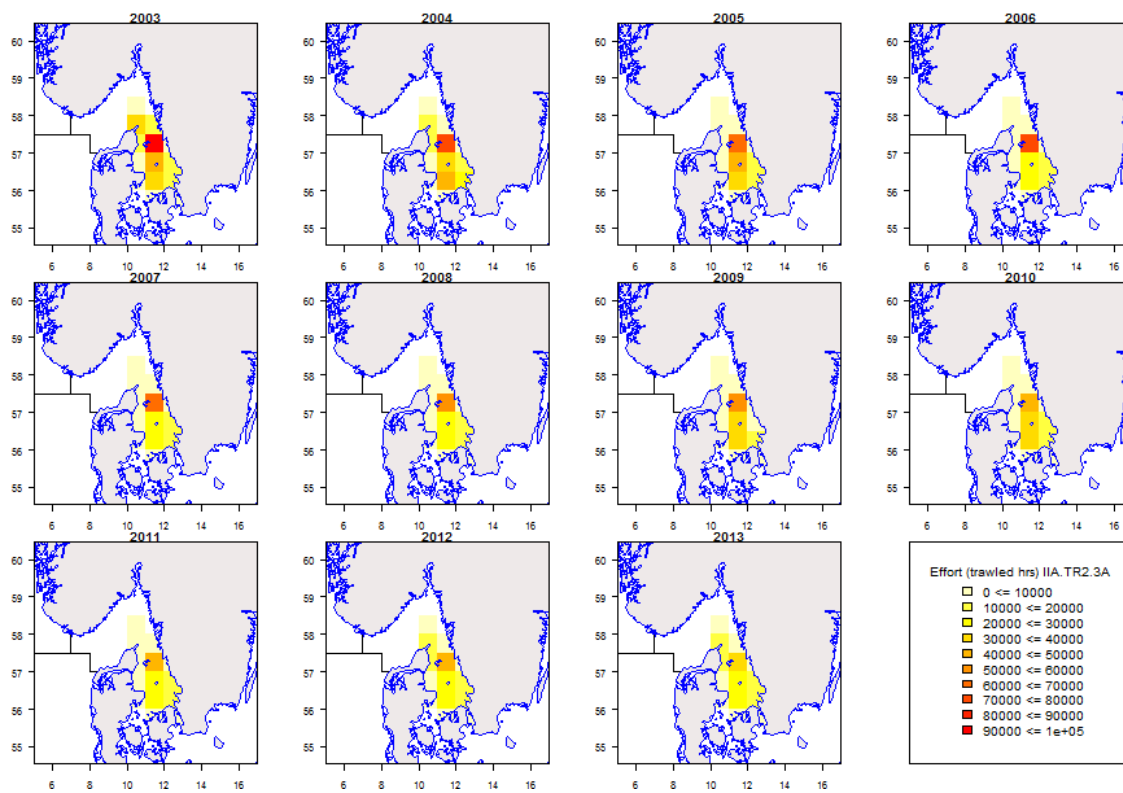


Figure 5.2.7.1.1 Spatial distribution of effective effort (fishing hours) for the gear category TR2 including the unregulated CPart11 and IIA83b in Kattegat 2003-2013.

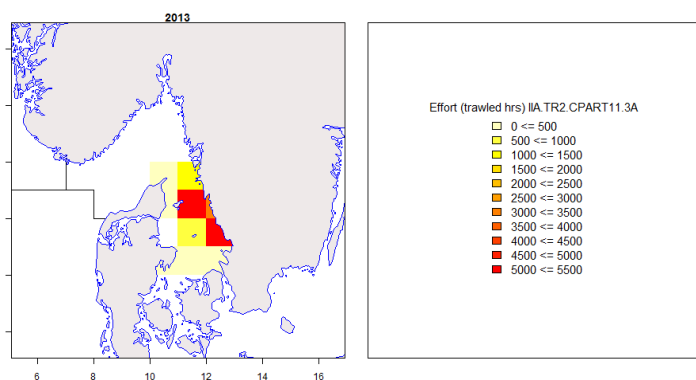
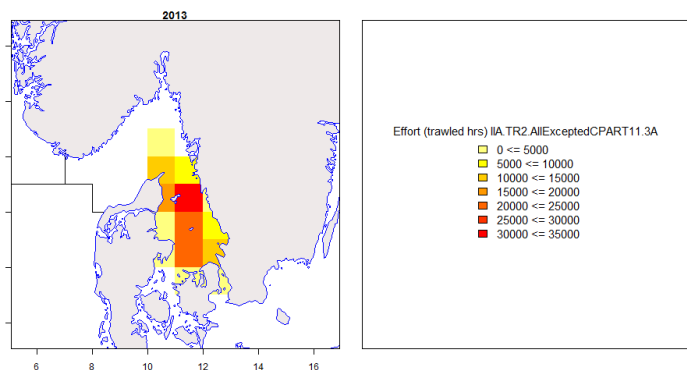


Figure 5.2.7.1.2. Top: Spatial distribution of effective effort (fishing hours) 2013 in Kattegat for the gear category TR2, not including the derogation CPart11. Bottom: Spatial distribution of effective effort (fishing hours) 2013 in Kattegat for the derogation CPart11. Note the different scale in the right panels.

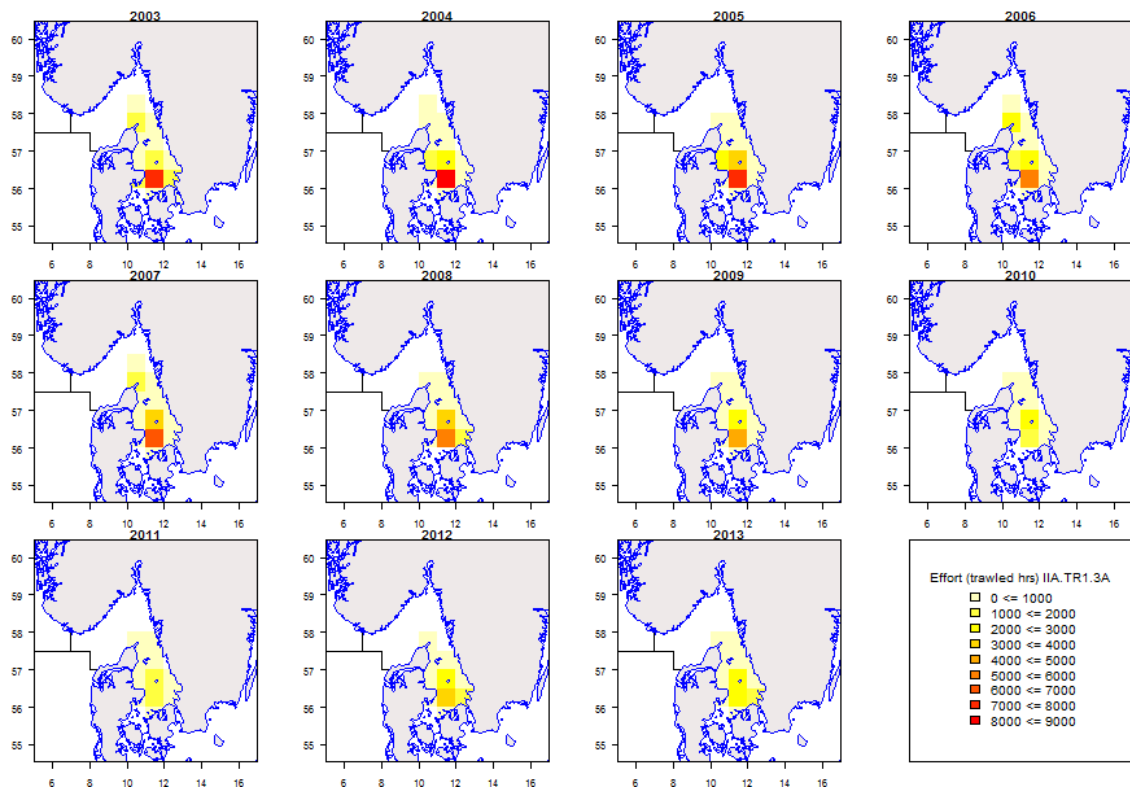


Figure 5.2.7.2 Spatial distribution of effective effort (fishing hours) for the gear category TR1 in Kattegat 2003-2013.

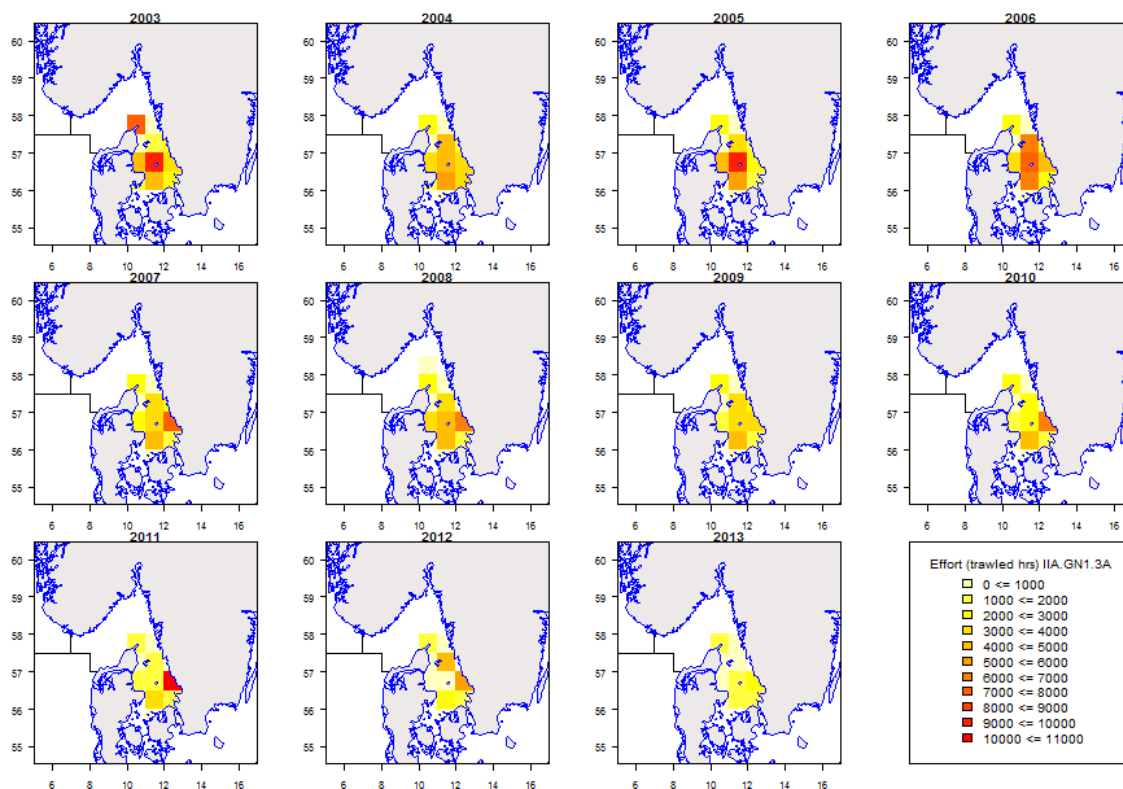


Figure 5.2.7.3. Spatial distribution of effective effort (fishing hours) for the gear category GN1 in Kattegat 2003-2013.

5.2.8 ToR 6 Remarks on quality of catches and discard estimates

The STECF EWG 14-06 expresses overall high confidence in the effort data and results.

5.2.9 ToR 7 Estimation of conversion factors to be applied for effort transfers between regulated gear groups

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.2.10 ToR 8 Correlation between partial cod mortality and fishing effort by Member State and fisheries

STECF EWG 14-06 noted that ICES did not provide an analytical assessment of cod in the Kattegat in 2013. STECF EWG 14-06 is therefore unable to deal with the ToR 8.

5.2.11 ToR 9 Trends in fishing mortality and fishing effort by Member State and fisheries with regards to the cod plan (R (EC) No 1342/2008) provisions, in particular with regard to Article 13

STECF EWG 14-06 noted that ICES did not provide an analytical assessment of cod in the Kattegat in 2013. STECF EWG 14-06 is therefore unable to deal with the ToR 9.

STECF EWG 14-06 is therefore also unable to estimate the fishing effort commensurate with the fishing mortality level to be achieved in 2012 and to estimate any excessive amount of effort.

5.3 Skagerrak, North Sea and II EU Eastern Channel effort regime evaluation in the context of Annex IIA to Council Regulation (EC) No 57/2011)

5.3.1 ToR 1.a Fishing effort in kWdays, GTdays, kW and number of vessels by Member State and fisheries

In 2014, data were made available at the sub area level (3b1= Skagerrak, 3b2 = North Sea and 2 EU, 3b3 = Eastern Channel), allowing a better understanding of the general trends. Most plots and figures within this report have been now provided by sub-area accordingly, but in case of more details are needed, all information are available in the relevant digital Appendixes:

<http://stecf.jrc.ec.europa.eu/web/stecf/ewg1406>

5.3.1.1 Fishing effort of regulated gears, management area 3b

Catch and effort data including the special conditions in force since 2009 (CPart11 and CPart13) have been provided by all Member States with significant fishing activity in this area. Additionally, distinction is now provided across the various CPart13 specifications (A, B, or C). The data are considered to represent a complete account of fishing effort by regulated gears in the area as reported by national administrations. As a result, any inconsistencies or problems in the data arise from the reported data rather than the subsequent compilation by the working group.

Data are given from 2004 in the tables to ease readability. Because of obvious inconsistencies in the French 2002 data, times series figures are displayed from 2003 only. As noted in previous years, the French 2009 figures should still be regarded as preliminary; they have not been revised yet.

In 2013, the group pursued its investigation of the consistencies between data submitted to STECF and data submitted to ICES WGMIXFISH for the North Sea, the Skagerrak and the Eastern English Channel (ICES, 2013). The group noted that the 2011 effort data appeared very consistent between both data sources (see chapter 4.12), with only a few deviations. There is an ongoing collaboration between both groups in order to further check and improve these estimates and reduce the risk of different sources providing different figures.

Information on nominal effort (kW days at sea) regulated in the Skagerrak, North Sea (incl. 2EU) and the Eastern Channel are listed by country and by area in Table 5.3.1.1 for the current cod plan categories. Additional information including GTdays and numbers of vessels or the extended time series can be found on the STECF website and in the Appendixes.

Information related to the Fully Documented Fishery (FDF) is dealt with specifically in section 5.3.8 further below.

Overall trends in nominal aggregated effort in kilowatt-days by gear category and sub-areas are given in Tables 5.3.1.2 and shown in Figures 5.3.1.1 (by gear type) and 5.3.1.2 (by mesh size grouping). An overview on effort from unregulated gears by subarea is given in table 5.3.1.3 as well as the share of regulated gear effort in total effort in table 5.3.1.4. A more detailed analysis of unregulated gears is presented in section 5.3.1.2.

The North Sea is the main fishing area (79% of the total 2013 regulated effort in area 3b), followed by The English Channel (15%), while the Skagerrak represents a smaller component (6%).

In all three sub areas, regulated effort has decreased since 2003. Overall, the share of regulated gears to total effort in area 3b has also decreased regularly, down to 61% in 2013 on average (but no more than 45% in Skagerrak).

In area 3b2 (North Sea), regulated effort is equally shared between beam trawls and demersal trawls/seines (52% and 43% of total 2013 regulated effort respectively). Small mesh beam trawling (80-119 mm, BT2) and demersal trawls/seines with larger mesh sizes (≥ 100 mm, TR1) are the predominant fisheries. There is an increasing trend for large meshed beam trawls (BT1) in recent years. In the Eastern Channel, demersal trawls/seines are also the main gears (63% of the 2013 regulated effort in the area, mainly smaller mesh size 70-99mm TR2), but with beam trawls and passive gears representing important fisheries as well (20% and 16% of the 2013 regulated effort respectively). The main gears in management area 3b1 (Skagerrak) are demersal trawls/seines (86% of the 2013 regulated effort), with a predominance of TR2. However, there was a strong increase in Danish TR3 effort in 2013 compared to 2012.

The overall effort by demersal trawls / seines has shown a reduction since 2003, especially in the North Sea. The effort by larger mesh (TR1) had remained relatively stable over the previous cod plan (2004-2009) but has been declining since the full implementation of the new cod plan in 2010. In 2013 an increase can be observed between 2012 and 2013. A part of the TR1 decrease and increase observed in 2012 and 2013 (-14% between 2011 and 2012; +8% between 2012 and 2013) is linked to the shift of the French saithe fishery into unregulated Article11 for 2012 and the shift back into Article13 in 2013. However, also the increasing number of FDF vessels without effort management contributes to the increase in 2013 (see [section xxx](#))

In the Skagerrak, TR1 trawling effort has been slightly more stable since 2007 but TR2 effort decreased substantially. In the Eastern Channel TR2 effort has remained constant between 2010 and 2012 but decreased in 2013.

It must be kept in mind that the current grouping covers many different fisheries. TR2 in particular gathers different fisheries e.g. *Nephrops* trawling, mainly in the Northern North Sea, and whiting trawling in the south-western North Sea, and these local fisheries may follow different dynamics. Similarly, TR1 fisheries cover a mixed whitefish fishery, a saithe-targeted fishery as well as a plaice targeted fishery in the southern North Sea.

For the whole area 3b, 66% and 32% of the regulated effort (i.e. excluding article 11) by TR1 and TR2 is under Article 13. Many English fisheries other than demersal trawls/Seines have been reported under Article13B, i.e. catching less than 5% cod, both in the North Sea and in the Eastern Channel.

There are a number of Article 13 derogations used for trawls/seines fisheries (both TR1 and TR2) in the North Sea. Germany, Scotland and England have reported 54%, 100% and 100% of their TR1 effort in Article 13 respectively. UK has also reported 100% of TR2 effort under Article 13.

Article 13C has represented the largest Specon. It is only used by the UK, but is overall operated at fishing effort levels comparable to the “none” specon. The Art13B has been applied by the UK as well, but also by Germany. Article13A has only been reported by Northern Ireland in 2013. There is only a limited use of Article 13 in the Skagerrak (3b1), operated by the German saithe fishery.

As a quality check, STECF routinely compares the data currently submitted with the data submitted during the previous year, as is displayed in table 5.3.1.5. Compared to the data submitted in 2012, updates were only reported by Northern Ireland. While some changes can appear large in the table below, they usually apply to categories with limited effort, and this does not affect the overall perception of trends from previous years’ reports. The updates represent some improvements of the quality of the data submitted, so this year’s data are considered more consistent.

Table 5.3.1.1 Area 3b: Trend in regulated nominal effort (kW *days at sea) by Gear group, country and specon, 2004-2013 (the extended time series is available on the STECF website). NB CPart11 and SPECON IIA83b is accounted for in the *unregulated* gears

REG AREA	REG GEAR	COUNTRY	SPECON	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Rel 04-06	Rel 2012
3B1	BT1	DEN	NONE	478214	320631	277249	329335	78260	42335	52098	59305	123592	165600	0.46	1.34
3B1	BT1	GER	NONE	1986				884							
3B1	BT1	NED	NONE	113976	137531	70311	108445	22570	27415	109513	442		7355	0.07	
3B1	BT1	SCO	NONE			4476									
3B1	BT2	DEN	NONE	49611	38835	50351	103304	36836	29052	3678					
3B1	BT2	GER	NONE	20501											
3B1	BT2	NED	NONE	651750	522477	542233	519000	74615	31846	138751	884				
3B1	GN1	DEN	NONE	347090	322715	294630	283147	321868	371533	327758	306895	242996	272584	0.85	1.12
3B1	GN1	GER	NONE	202	1579	1158	6919	3174	1980	660		17636	18038	18.41	1.02
3B1	GN1	SWE	NONE	127286	89748	76409	58618	96877	101209	67326	70682	76606	70409	0.72	0.92
3B1	GT1	DEN	NONE	2059	2450	9463	236	25240	36891	44205	40159	37525	39309	8.44	1.05
3B1	GT1	SWE	NONE	16206	27824	56771	62309	63022	36250	21260	23899	25752	20387	0.61	0.79
3B1	LL1	DEN	NONE	5620	2501	3130	1814	2255	1173	2481	33199	30454	5368	1.43	0.18
3B1	LL1	SWE	NONE	43165	38665	108455	153999	42453	0		396	660	221	0.00	0.33
3B1	TR1	DEN	NONE	637030	1299770	1276319	1449368	1290895	1285901	1351258	918690	999170	984960	0.92	0.99
3B1	TR1	ENG	CPART13C										940		
3B1	TR1	GER	CPART13B						119193	20700	30300	16063	86886		5.41
3B1	TR1	GER	NONE	193030	178369	260596	304370	189600	132585	82954	64169	82526	93355	0.44	1.13
3B1	TR1	NED	NONE				16547	11576	1369	120821			120512		
3B1	TR1	SCO	CPART13C										369		
3B1	TR1	SCO	NONE			575									
3B1	TR1	SWE	NONE	95348	109502	55251	88670	92874	10554	11528	27124	25524	87624	1.01	3.43
3B1	TR2	DEN	NONE	5514510	3998032	3290591	2359541	2613146	2817250	2759331	2941652	2436599	1890353	0.44	0.78
3B1	TR2	GER	NONE	11891					660	4180	2200		1100		
3B1	TR2	NED	NONE					2942	732	2942					
3B1	TR2	SWE	NONE	1644706	1428840	1450466	1158228	1364854	781107	661331	514449	467823	439799		
3B1	TR3	DEN	NONE	206651	233393	71910	37373	17405	18494	11401	1145	3621	132609	0.78	36.62
3B1	TR3	SWE	NONE	3330	1564	588	919			1986				0.00	
3B2	BT1	BEL	NONE	1439951	1509759	1333012	1320169	984056	575501	535636	671368	963867	1198066	0.84	1.24
3B2	BT1	DEN	NONE	887830	996227	511642	527282	370939	366679	513056	373757	317294	288845	0.36	0.91
3B2	BT1	ENG	CPART13B							202685	169873	384590	575558		1.50
3B2	BT1	ENG	NONE	671130	618160	1321240	305837	228530	265710			40284			
3B2	BT1	GER	NONE	29712	2128	53986	30297	16790		884	1535	2793	65906	2.30	23.60
3B2	BT1	NED	NONE	700747	719292	1528652	720068	370417	412420	378796	308516	1090258	1202666	1.22	1.10
3B2	BT1	NIR	NONE	543305	36825										
3B2	BT1	SCO	NONE	694716	730810	598616	349914	68568	53082						
3B2	BT2	BEL	NONE	4294884	3884007	3418751	2707991	3536979	3327143	2480357	1742532	1269319	1178340	0.30	0.93
3B2	BT2	DEN	NONE	38279	62036	42447	1390	2894	49163		440	242	5884	0.12	24.31
3B2	BT2	ENG	CPART13B						47771	2863860	2644958	2412375	2853226		1.18
3B2	BT2	ENG	NONE	3559560	4046341	2974409	3251512	1975399	2444807	401247	96356	79036	28485	0.01	0.36
3B2	BT2	FRA	NONE	94514	75129	66203	103453	88053	88053	40118	67545	57044	56091	0.71	0.98
3B2	BT2	GER	NONE	2060092	2212397	1927398	1590823	1464163	1666322	1801775	1242171	1071896	1290574	0.62	1.20
3B2	BT2	NED	NONE	44669317	44478122	38823660	37931313	27646215	28696410	28510104	25776297	22428296	23823379	0.56	1.06
3B2	BT2	NIR	NONE	47517	16785										
3B2	BT2	SCO	NONE	4608817	4185262	3108933	2790115	1351720	554376	144306		68262	217190	0.05	3.18
3B2	GN1	BEL	NONE	152642	148827	127951	128626	158409	161734	97609	95383	45103	36531	0.26	0.81
3B2	GN1	DEN	NONE	2164307	2031057	1795453	949658	1003603	1050057	1195617	1136118	1080149	1059195	0.53	0.98
3B2	GN1	ENG	CPART13B							111390	152556	102172	177100		1.73
3B2	GN1	ENG	CPART13C										11890		
3B2	GN1	ENG	NONE	359134	308275	308517	180503	70981	175602	74835	73826	61957	28672	0.09	0.46
3B2	GN1	FRA	NONE	64809	46058	31231	61545	47746	46493	2149	7803	3322	1536	0.03	0.46
3B2	GN1	GER	NONE	163463	271624	235427	145714	278008	233164	275364	225797	269836	241938	1.08	0.90
3B2	GN1	NED	NONE	416025	387945	511580	521697	507733	419797	357091	316070	295035	233663	0.53	0.79
3B2	GN1	SCO	NONE	197407	165644	293823	320785	417076	376332	440579	607650	569749	422532	1.93	0.74
3B2	GT1	BEL	NONE				15402	18000	5014	19041	18155	25216	12765		0.51
3B2	GT1	DEN	NONE	244626	237800	175339	98614	100902	158205	130662	182841	321220	483287	2.20	1.50
3B2	GT1	ENG	NONE	1564	5342	11100	3291	12918	12654	17355	12003	5823	12169	2.03	2.09
3B2	GT1	FRA	NONE	793053	813190	1785801	1703889	1010253	1010253	634781	690428	636164	599606	0.53	0.94
3B2	GT1	GER	NONE			1547			15444	1188	924				

Table 5.3.1.1 (ctd)

REG AREA	REG GEAR	COUNTRY	SPEC ON	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Rel 04-06	Rel 2012
3B2	GT1	NED	NONE					740	26917	37399	21431	29054	7442		0.26
3B2	LL1	BEL	NONE					1768		1660	128	786			
3B2	LL1	DEN	NONE	79773	41626	42159	15924	25347	28769	45576	29388	21089	23908	0.44	1.13
3B2	LL1	ENG	CPART13B						143				29060		
3B2	LL1	ENG	NONE	83137	142602	54974	15752	6164	4318	12052	6253	15449	8401	0.09	0.54
3B2	LL1	FRA	NONE					99602	99602	48552	7644	14962	30000		2.01
3B2	LL1	SCO	NONE	4350		7542	1487	276898	621114	301689	183352	68192	15395	2.59	0.23
3B2	LL1	SWE	NONE	1056	4239	15026	11020	10928	11352	6600	8184	5016			
3B2	LL1	NLD	NONE							142					
3B2	TR1	BEL	NONE	1989			161520	201379	220428	212429	128701	183682	145247	73.03	0.79
3B2	TR1	DEN	NONE	6422756	6405176	6020308	3801069	4034203	3793148	3592389	3664621	3593770	3346858	0.53	0.93
3B2	TR1	ENG	CPART13B						898933	964206	874021	939503	1089822		1.16
3B2	TR1	ENG	CPART13C						1242445	1144923	1254762	931671	1127181		1.21
3B2	TR1	ENG	NONE	1497618	1254880	1823891	1501499	1846925							
3B2	TR1	FRA	CPART13B									29600	2129413		71.94
3B2	TR1	FRA	NONE	2299125	1901534	2675348	2418190	2714146	2622538	1913401	1727371	324	20972	0.01	64.73
3B2	TR1	GER	CPART13B						808679	898007	815730	747693	722448		0.97
3B2	TR1	GER	NONE	1526666	1988209	2176131	1736694	1585192	759368	829604	741965	495051	598769	0.32	1.21
3B2	TR1	IRL	NONE										294		
3B2	TR1	NED	NONE	589170	547564	532260	631492	1400068	1316055	1290080	1173220	1329299	1196661	2.15	0.90
3B2	TR1	NIR	CPART13A									2672	4310		1.61
3B2	TR1	NIR	CPART13B						41944	23326	33246	16573	7062		0.43
3B2	TR1	NIR	CPART13C						14196	6034		2781	16050		5.77
3B2	TR1	NIR	NONE	16948	70710	51951	61460	49104							
3B2	TR1	SCO	CPART13B						692932	955808	810706	36937			
3B2	TR1	SCO	CPART13C						11552644	9486824	9185531	9265940	8340695		0.90
3B2	TR1	SCO	NONE	12684328	12158295	11660764	11022982	12176292							
3B2	TR1	SWE	NONE	375455	387252	237269	269171	333387	245040	196354	189867	190816	2702229	0.81	1.42
3B2	TR2	BEL	NONE	519343	343840	366940	298814	425374	506865	476033	435961	484371	467533	1.14	0.97
3B2	TR2	DEN	NONE	2580788	1916695	1405216	1080616	706247	569359	431399	370536	312765	267597	0.14	0.86
3B2	TR2	ENG	CPART13A										2580		
3B2	TR2	ENG	CPART13B						260311	873808	721452	865045	542146		0.63
3B2	TR2	ENG	CPART13C						1376367	482080	524579	267661	236428		0.88
3B2	TR2	ENG	NONE	1705154	1937849	1707774	1621394	1794132							
3B2	TR2	FRA	NONE	1911744	1713917	1558413	1727617	1930459	1924156	1089380	960559	725367	478491	0.28	0.66
3B2	TR2	GBJ	NONE		660										
3B2	TR2	GER	CPART13B						2420	39820	31240	14740	20680		1.40
3B2	TR2	GER	NONE	893439	704404	771597	680681	457259	470754	420345	408157	320809	315656	0.40	0.98
3B2	TR2	IRL	NONE	884											
3B2	TR2	NED	NONE	1496720	1298918	1224916	1384658	1853682	1334665	1231860	1313554	1277297	1181714	0.88	0.93
3B2	TR2	NIR	CPART13A									90338	245268		2.72
3B2	TR2	NIR	CPART13B						65544	161981	207697	109647			
3B2	TR2	NIR	CPART13C						320087	236516	70443	25672	50085		1.95
3B2	TR2	NIR	NONE	12440	221904	532885	758972	409182							
3B2	TR2	SCO	CPART13B						4219929	7467356	5277096	287446			
3B2	TR2	SCO	CPART13C						3796988	490013	1285425	4861297	3539874		0.73
3B2	TR2	SCO	NONE	9485974	9108232	8561812	8678139	8855742							
3B2	TR2	SWE	NONE	2055	1192	1298	2515	1059		0		3930			
3B2	TR3	BEL	NONE					663		1899		1175	6734		
3B2	TR3	DEN	NONE	3026636	2373302	1761200	799803	916558	577813	1063007	336257	477168	824551	0.35	1.73
3B2	TR3	ENG	CPART13B										82		
3B2	TR3	ENG	NONE	7840	3315	6360	1220	492	82	718	621	246	216	0.04	0.88
3B2	TR3	FRA	NONE	1753	7121	1319		2184	2184	13827	2210	1250	85	0.03	0.07
3B2	TR3	GER	NONE			772	884	4410	426				184	0.24	
3B2	TR3	IRL	NONE								2247				
3B2	TR3	NED	NONE	42894	43261	20649	20589	4038	274	31973	23268	25897	50615	1.42	1.95
3B2	TR3	SCO	NONE	5460	2356	116	11896		33117	27524		20706	1567	0.59	0.08
3B3	BT1	BEL	NONE					3578					33947		
3B3	BT1	FRA	NONE									318			
3B3	BT2	BEL	NONE	2422541	2068612	2782454	3183635	2691356	2204585	1907807	1861455	1541411	1629221	0.67	1.06

Table 5.3.1.1 (ctd)

REG AREA	REG GEAR	COUNTRY	SPEC ON	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Rel 04-06	Rel 2012
3B3	BT2	ENG	CPART13B						108485	123228	101532	144684	108270		0.75
3B3	BT2	ENG	NONE	671323	423730	359264	324577	368882	295714	148793	99461	96917	90608	0.19	0.93
3B3	BT2	FRA	NONE	1278065	919129	1258094	1135160	1106661	1106661	570711	542158	675860	529295	0.46	0.78
3B3	BT2	GBJ	NONE	14375	10346										
3B3	BT2	NED	NONE	5147		4796			1471		663				
3B3	BT2	SCO	NONE				9776	3055	6353						
3B3	GN1	BEL	NONE	18591	19026	23556	906	10560	19527	10885					
3B3	GN1	ENG	CPART13B									309			
3B3	GN1	ENG	NONE	3373	219	2529	1699	4957	12756	25620	25787	10339	3563	1.75	0.34
3B3	GN1	FRA	NONE	341495	243018	301125	386493	150995	150995	98661	45185	109662	98840	0.33	0.90
3B3	GN1	NED	NONE			442									
3B3	GT1	BEL	NONE				26676	16200	7416	21600	30600	34086	34684		1.02
3B3	GT1	ENG	NONE	8742	9183	6081	7708	9580	5968	8324	8075	8332	7694	0.96	0.92
3B3	GT1	FRA	NONE	2632950	3308229	3681721	3588824	2611489	2607735	1796377	1839296	1771276	1816224	0.57	1.03
3B3	GT1	IRL	NONE									220			
3B3	LL1	ENG	CPART13B							30899	25183	24565	27489		1.12
3B3	LL1	ENG	NONE	31882	39988	40165	37923	39699	40081	15397	13022	11097	12344	0.33	1.11
3B3	LL1	ESP	NONE									672	1022		1.52
3B3	LL1	FRA	NONE	163370	97311	114742	162573	116680	116680	118214	86512	69920	97800	0.78	1.40
3B3	TR1	BEL	NONE							10219	1858	4645	5795		1.25
3B3	TR1	ENG	CPART13B										1271		
3B3	TR1	ENG	CPART13C						4350	2226	11276	1229	2446		1.99
3B3	TR1	ENG	NONE	473	1306	788	268	4154							
3B3	TR1	FRA	NONE	49849	60402	49633	224000	73652	73652	91341	113909	53370	119494	2.24	2.24
3B3	TR1	IRL	NONE										420		
3B3	TR1	NED	NONE	4062					5888	4981	3472		4000		
3B3	TR1	SCO	CPART13B									3750			
3B3	TR1	SCO	CPART13C								1292		8779		
3B3	TR2	BEL	NONE	27043	10703	23328	13756	15816	46344	132308	189285	212691	229843	11.29	1.08
3B3	TR2	ENG	CPART13B						87339	281244	301325	404526	363919		0.90
3B3	TR2	ENG	CPART13C						193078	89159	73206	82494	100380		1.22
3B3	TR2	ENG	NONE	271549	249748	184677	148256	165497							
3B3	TR2	FRA	CPART13B									289041	314665		1.09
3B3	TR2	FRA	NONE	12929692	11713996	13485158	13060035	10070068	9834906	6980814	6766474	6300774	5578182	0.44	0.89
3B3	TR2	GBJ	CPART13B						7480						
3B3	TR2	GBJ	NONE	20201	23483	10560	13420	9680							
3B3	TR2	IRL	NONE									1437			
3B3	TR2	NED	NONE	316376	344814	287224	434839	625656	602354	701538	608347	706896	872099	2.76	1.23
3B3	TR2	SCO	CPART13B						66292	250268	158225	90437			
3B3	TR2	SCO	CPART13C						264567		67063	52632	57000		1.08
3B3	TR2	SCO	NONE			116011	209124	340147							
3B3	TR3	ENG	NONE				252								
3B3	TR3	FRA	NONE	79758	99705	114293	138596	65643	64323	134347	122925	92978	80846	0.83	0.87
3B3	TR3	NED	NONE	3048											
Sum				147630963	140965469	134953181	124626584	108709327	106456621	97088202	87575501	79078104	80135315	0.57	1.01

Table 5.3.1.2 Area 3b: Trend in nominal effort (Kw *days at sea) by Gear group and subarea. 2004-2013 (the extended time series is available on the STECF website). NB CPart11 and SPECON IIA83b is accounted for in the *unregulated* gears

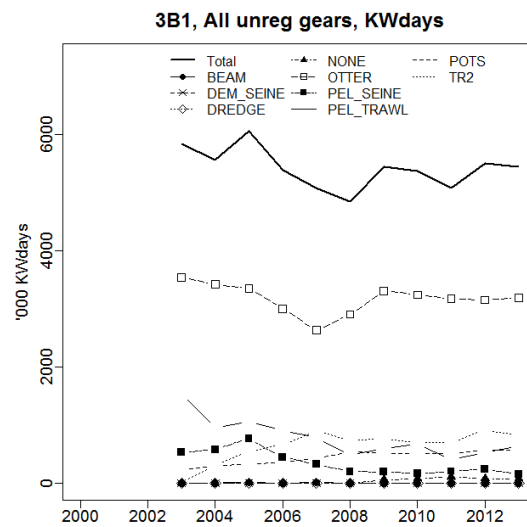
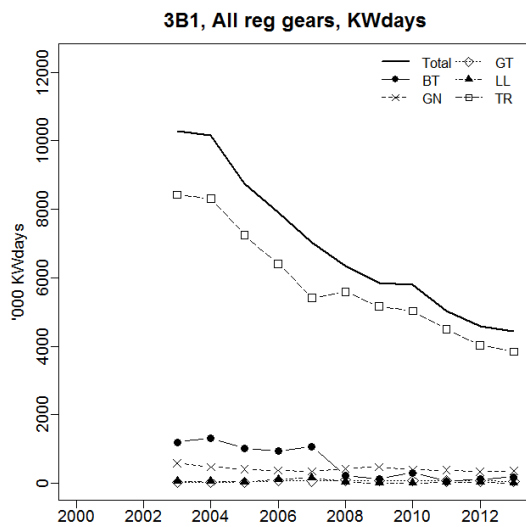
REG AREA	REG GEAR	SPECON	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Rel 04-06	Rel 2012
3B1	BT1	NONE	594176	458162	352036	437780	101714	69750	161611	59747	123592	172955	0.37	1.40
3B1	BT2	NONE	721862	561312	592584	622304	111451	60898	142429	884				
3B1	GN1	NONE	474578	414042	372197	348684	421919	474722	395744	377577	337238	361031	0.86	1.07
3B1	GT1	NONE	18265	30274	66234	62545	88262	73141	65465	64058	63277	59696	1.56	0.94
3B1	LL1	NONE	48785	41166	111585	155813	44708	1173	2481	33595	31114	5589	0.08	0.18
3B1	TR1	CPART13B						119193	20700	30300	16063	86886		5.41
3B1	TR1	CPART13C										1309		
3B1	TR1	NONE	925408	1587641	1592741	1858955	1584945	1430409	1566561	1009983	1107220	1286451	0.94	1.16
3B1	TR2	NONE	7171107	5426872	4741057	3517769	3980942	3599749	3427784	3458301	2904422	2331252	0.40	0.80
3B1	TR3	NONE	209981	234957	72498	38292	17405	18494	13387	1145	3621	132609	0.77	36.62
Sum			10164162	8754426	7900932	7042142	6351346	5847529	5796162	5035590	4586547	4437778	0.50	0.97
3B2	BT1	CPART13B							202685	169873	384590	575558		1.50
3B2	BT1	NONE	4967391	4613201	5347148	3253567	2039300	1673392	1428372	1355176	2414496	2755483	0.55	1.14
3B2	BT2	CPART13B						47771	2863860	2644958	2412375	2853226		1.18
3B2	BT2	NONE	59372980	58960079	50361801	48376597	36065423	36826274	33377907	28925341	24974095	26599943	0.47	1.07
3B2	GN1	CPART13B							111390	152556	102172	177100		1.73
3B2	GN1	CPART13C										11890		
3B2	GN1	NONE	3517787	3359430	3303982	2308528	2483556	2463179	2443244	2462647	2325151	2024067	0.60	0.87
3B2	GT1	NONE	1039243	1056332	1973787	1821196	1142813	1228487	840426	925782	1017477	1115269	0.82	1.10
3B2	LL1	CPART13B						143				29060		
3B2	LL1	NONE	168316	188467	119701	44183	420707	765155	416271	234949	125494	77704	0.49	0.62
3B2	TR1	CPART13A									2672	4310		1.61
3B2	TR1	CPART13B						2442488	2841347	2533703	1770306	3948745		2.23
3B2	TR1	CPART13C						12809285	10637781	10440293	10200392	9483926		0.93
3B2	TR1	NONE	25414055	24713620	25177922	21604077	24340696	8956577	8034257	7625745	5792942	5579030	0.22	0.96
3B2	TR2	CPART13A									90338	247848		2.74
3B2	TR2	CPART13B						4548204	8542965	6237485	1276878	562826		0.44
3B2	TR2	CPART13C						5493442	1208609	1880447	5154630	3826387		0.74
3B2	TR2	NONE	18608541	17247611	16130851	16233406	16433136	4805799	3649017	3488767	3124539	2710991	0.16	0.87
3B2	TR3	CPART13B										82		
3B2	TR3	NONE	3084583	2429355	1790416	834392	928345	613896	1138948	364603	526442	883952	0.36	1.68
Sum			116172896	112568095	104205608	94475946	83853976	82674092	77737079	69442325	61694989	63467397	0.57	1.03
3B3	BT1	NONE					3578				318	33947		106.75
3B3	BT2	CPART13B						108485	123228	101532	144684	108270		0.75
3B3	BT2	NONE	4391451	3421817	4404608	4653148	4169954	3614784	2627311	2503737	2314188	2249124	0.55	0.97
3B3	GN1	CPART13B									309			0.00
3B3	GN1	NONE	363459	262263	327652	389098	166512	183278	135166	70972	120001	102403	0.32	0.85
3B3	GT1	NONE	2641692	3317412	3687802	3623208	2637269	2621119	1826301	1877971	1813914	1858602	0.58	1.02
3B3	LL1	CPART13B						30899	25183	24565	27489			1.12
3B3	LL1	NONE	195252	137299	154907	200496	156379	156761	133611	99534	81689	111166	0.68	1.36
3B3	TR1	CPART13B									3750	1271		0.34
3B3	TR1	CPART13C						4350	2226	12568	1229	11225		9.13
3B3	TR1	NONE	54384	61708	50421	224268	77806	79540	106541	119239	58015	129709	2.34	2.24
3B3	TR2	CPART13B						161111	531512	459550	784004	678584		0.87
3B3	TR2	CPART13C						457645	89159	140269	135126	157380		1.16
3B3	TR2	NONE	13564861	12342744	14106958	13879430	11226864	10483604	7814660	7564106	7221798	6680124	0.50	0.92
3B3	TR3	NONE	82806	99705	114293	138848	65643	64323	134347	122925	92978	80846	0.82	0.87
Sum			21293905	19642948	22846641	23108496	18504005	17935000	13554961	13097586	12796568	12230140	0.58	0.96
Grand sum			147630963	140965469	134953181	124626584	108709327	106456621	97088202	87575501	79078104	80135315	0.57	1.01

Table 5.3.1.3 Area 3b: Trend in nominal effort (Kw *days at sea) of unregulated gears by subarea. 2003-2013 (the extended time series is available on the STECF website). NB CPart11 and SPECON IIA83b is accounted for in the *unregulated* gears. The last line gives the total effort of all gears in Area 3b.

REG_AREA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	rel 04-06	rel 2012
3B1 total	5847376	5571271	6064813	5397317	5082719	4855283	5455095	5382084	5083047	5506112	5453994	0.96	0.99
3B2 total	50731775	51049280	40843512	38091923	34907032	31156761	33829775	32102961	29905082	36045920	39861602	0.92	1.11
3B3 total	7159706	7548509	10267830	6901208	7101292	5916597	6421808	6705668	5292201	5616550	5889999	0.71	1.05
Grand Total unreg gears in area 3b	63738857	64169060	57176155	50390448	47091043	41928641	45706678	44190713	40280330	47168582	51205595	0.89	1.09
Grand total (reg and unreg gears) area 3b	219727901	211800023	198141624	185343629	171717627	150637968	152163299	141278773	127855831	126246686	131340910	0.66	1.04

Table 5.3.1.4 Area 3b: Share of regulated effort in total effort by subarea. 2003-2013.

Reg_AREA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
3B1 total	0.64	0.65	0.59	0.59	0.58	0.57	0.52	0.52	0.50	0.45	0.45
3B2 total	0.71	0.69	0.73	0.73	0.73	0.73	0.71	0.71	0.70	0.63	0.61
3B3 total	0.74	0.74	0.66	0.77	0.76	0.76	0.74	0.67	0.71	0.69	0.67
3b combined	0.71	0.70	0.71	0.73	0.73	0.72	0.70	0.69	0.68	0.63	0.61



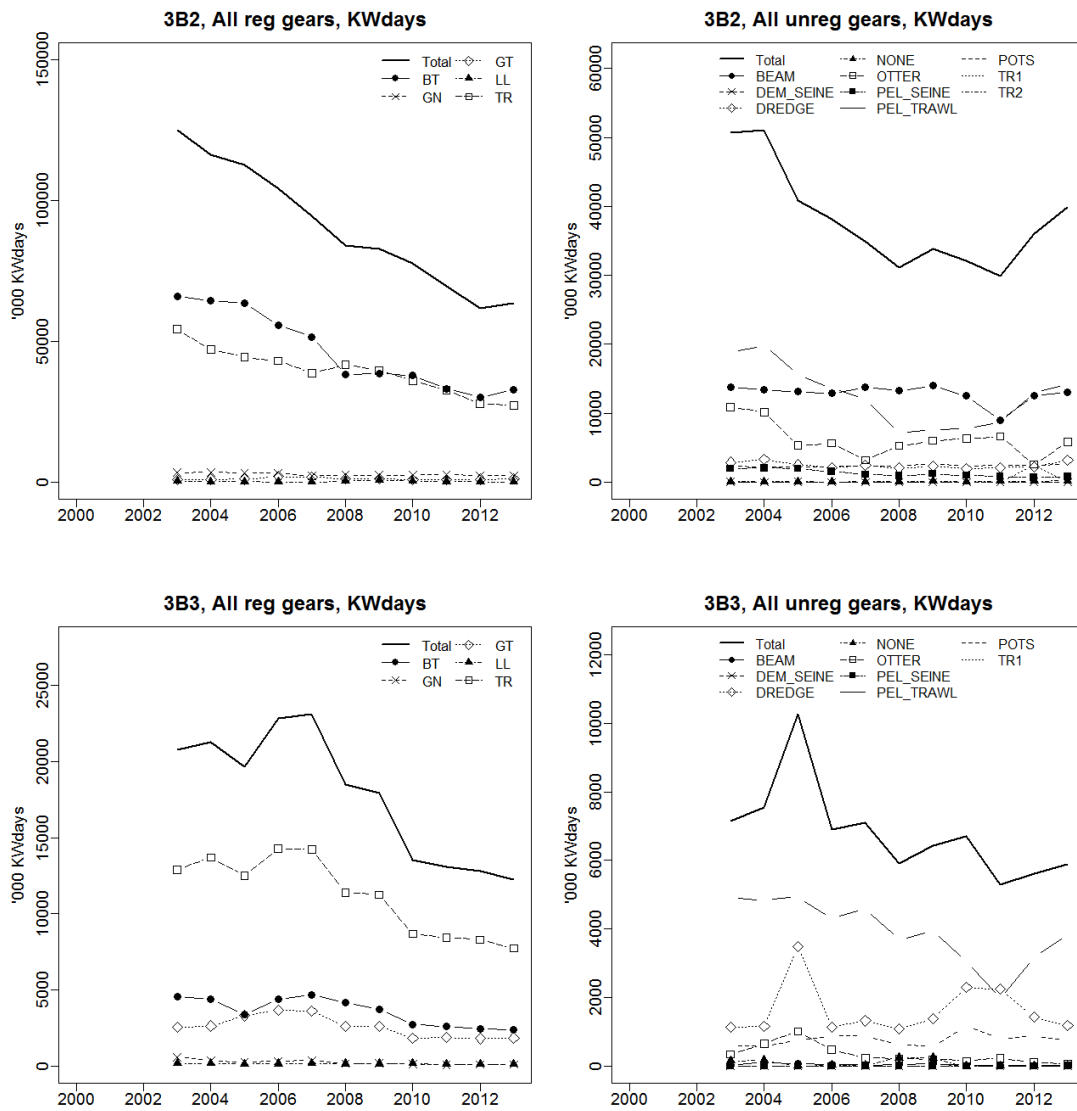
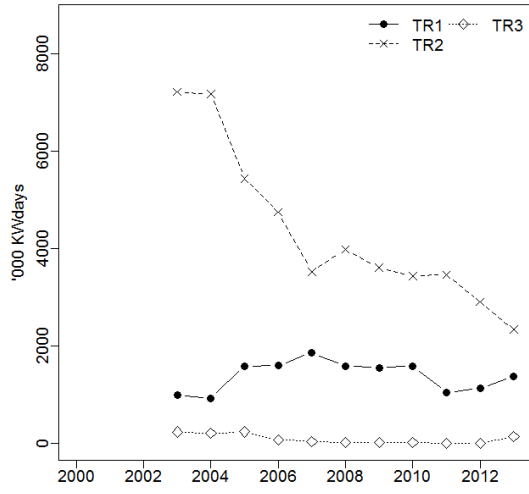
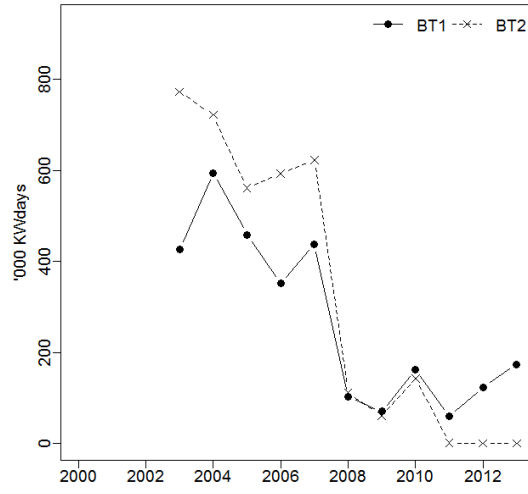


Figure 5.3.1.1. Management area 3b. Effort trends for regulated (left) and unregulated (right, TR regards CPart11) gear types by subarea. TR = demersal otter trawl and demersal seine, BT = Beam trawl, GN = Gillnet, GT = Trammel net, LL = Longline. NB y-axis scale varies across plots.

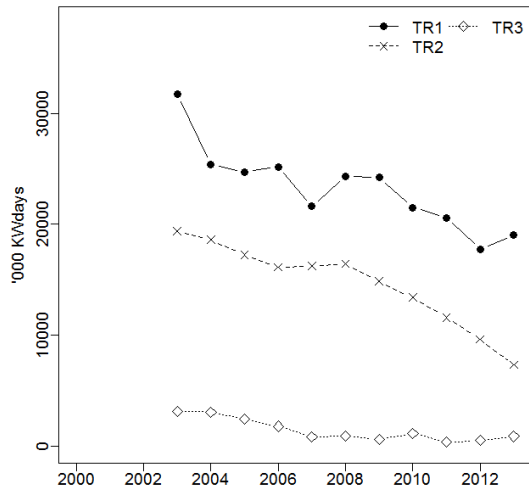
3B1, Reg gear TR, KWdays



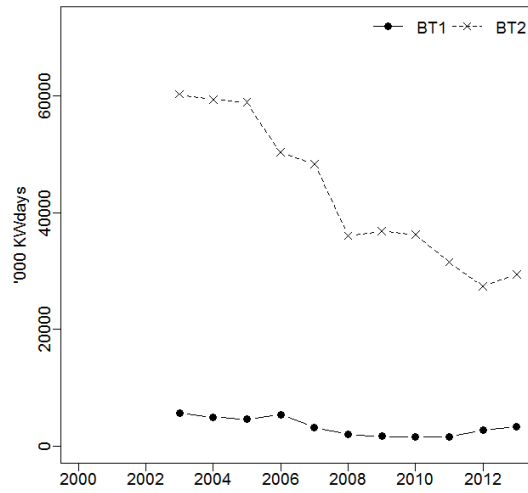
3B1, Reg gear BT, KWdays



3B2, Reg gear TR, KWdays



3B2, Reg gear BT, KWdays



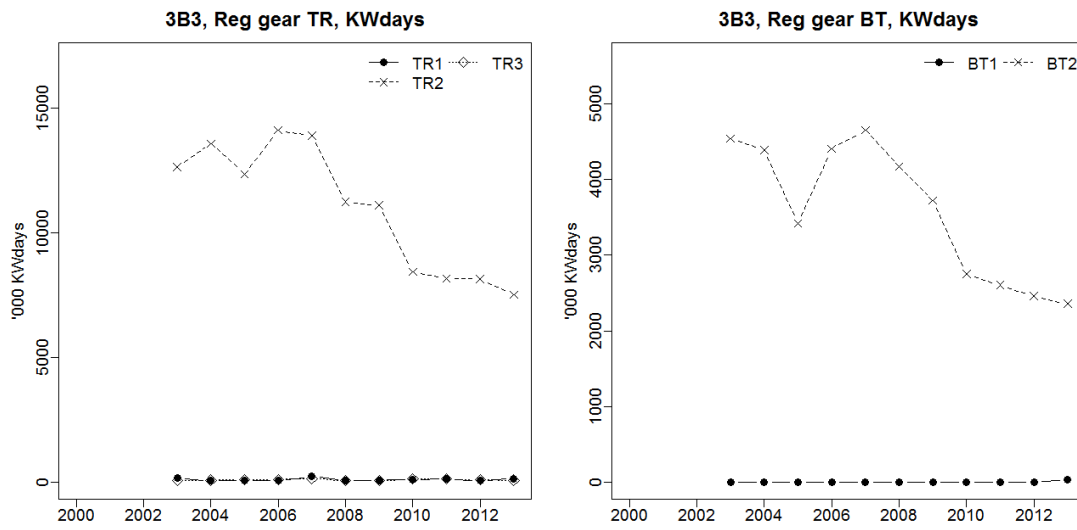
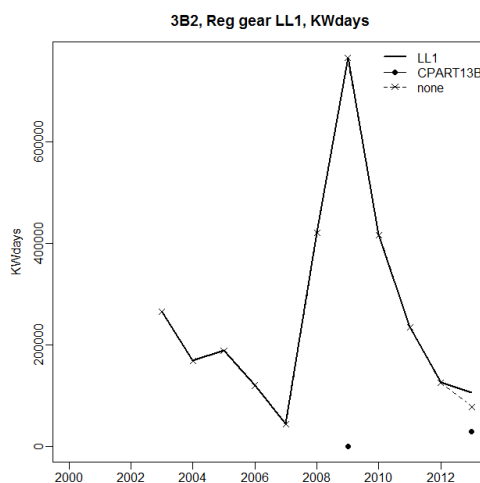
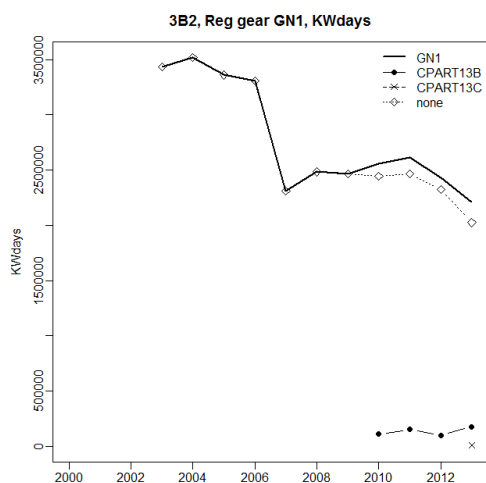
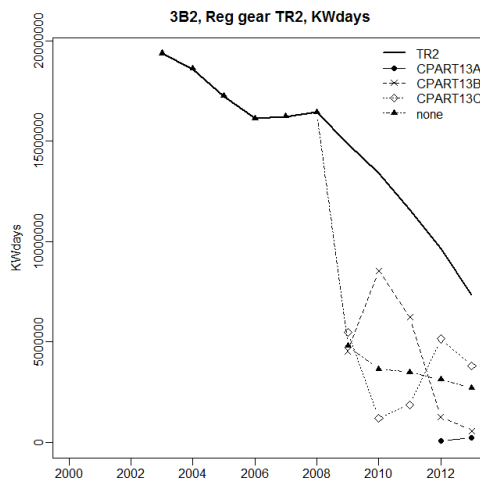
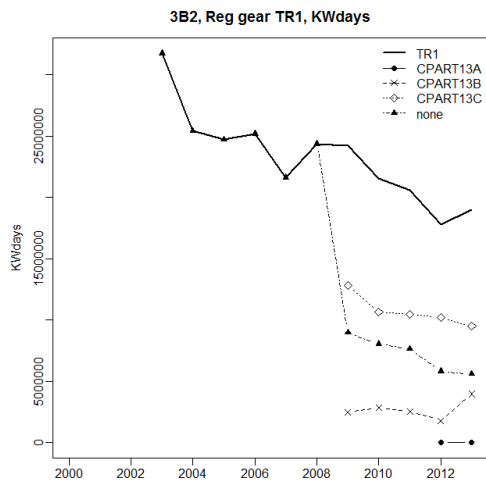
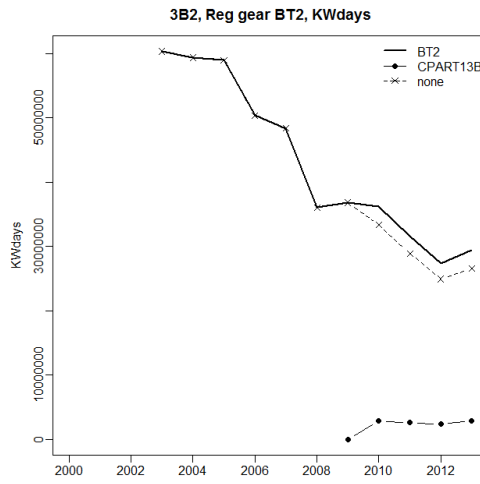
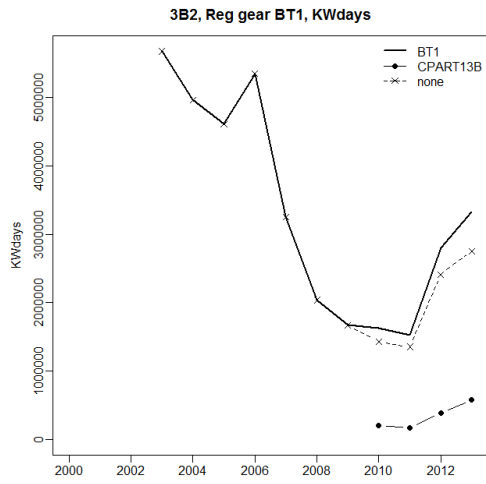


Figure 5.3.1.2. Management area 3b. Effort trends for regulated TR and BT gear by sub-area disaggregated by mesh size range. NB y-axis scale varies across plots.



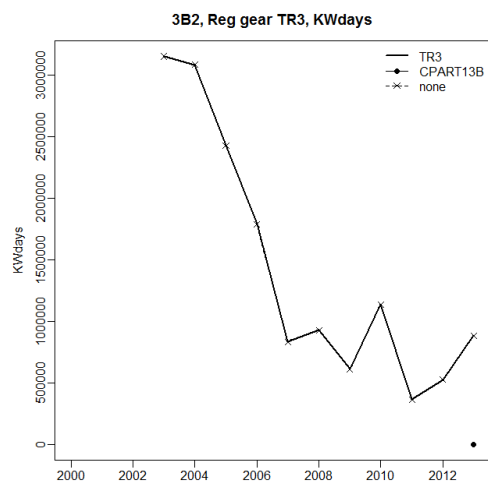


Figure 5.3.1.3. Management area 3b, subarea 3b2 (North Sea). Effort separated by each individual SPECON within regulated gear type when applied.

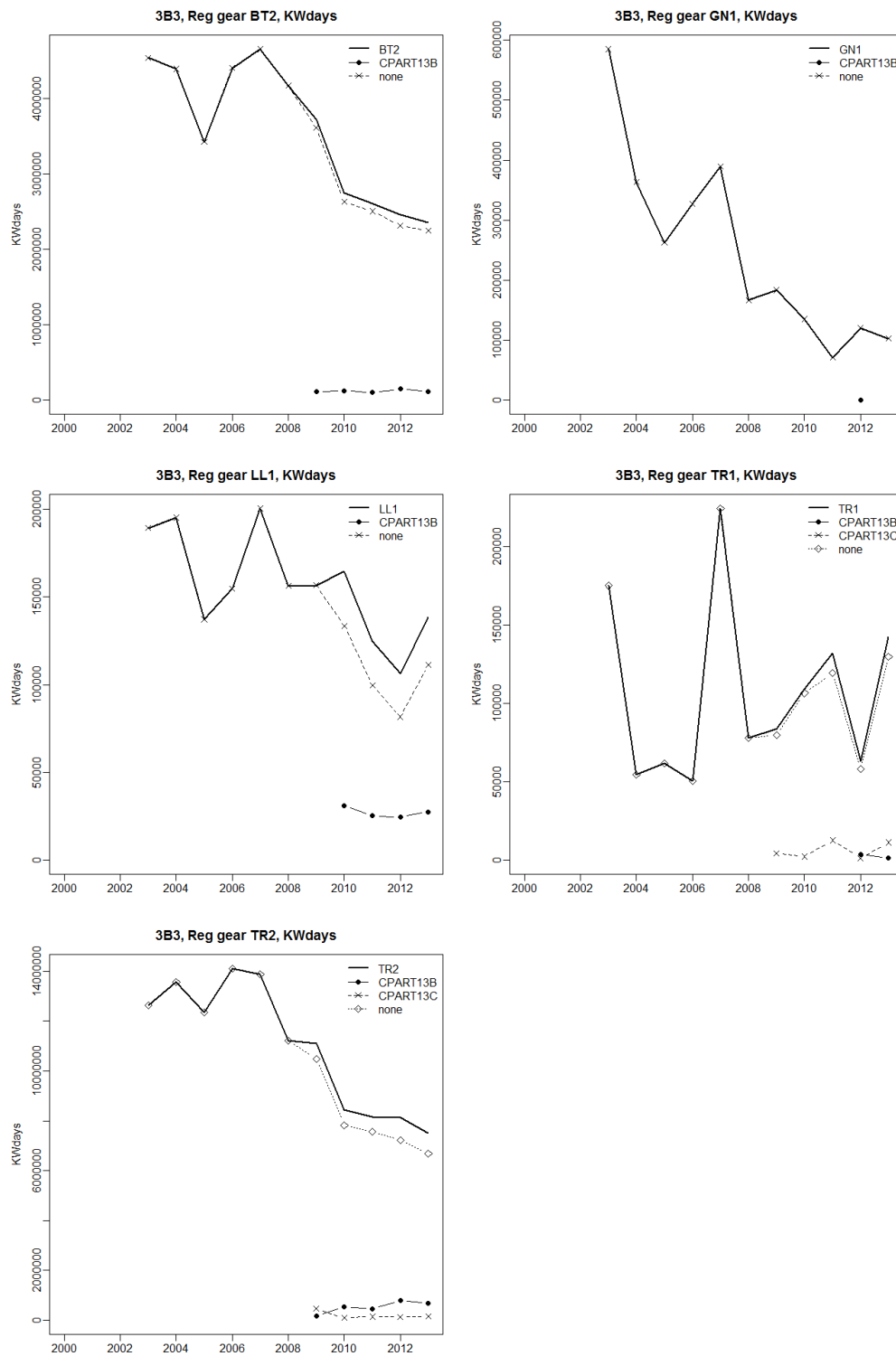


Figure 5.3.1.4. Management area 3b, subarea 3b3 (Eastern Channel) and 3b1 (Skagerrak). Effort separated by each individual SPECON within regulated gear type when applied.

Table. 5.3.1.5 Area 3b: Relative change in nominal effort 2014 data submission compared to 2013 submission (kW *days at sea) by subarea, country, gear, derogation and vessel length 2003-2012. Only the lines with non-zeros values are displayed

annex	reg_area_co	reg_gear_cod	country	specon	vessel_length	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
IIA	3B2	POTS	IRL	NONE	O15M	0	0	0	0	0	0	0	0	0	0.022
IIA	3B2	POTS	IRL	NONE	O15M	0	0	0	0	0	0	0	0	0	0.022
IIA	3B2	POTS	IRL	NONE	O15M	0	0	0	0	0	0	0	0	0	0.022
IIA	3B3	TR2	IRL	NONE	O15M	0	0	0	0	0	0	0	0	0	0.521
IIA	3B3	TR2	IRL	NONE	O15M	0	0	0	0	0	0	0	0	0	0.521
IIA	3B3	TR2	IRL	NONE	O15M	0	0	0	0	0	0	0	0	0	0.521

5.3.1.2 Fishing effort of unregulated gears, management area 3b

Effort trends by unregulated gears (including CPart11 and SPECON IIA83b) are given in Table 5.3.1.6 and shown in Figure 5.3.1.1.1 together with the regulated effort in the previous section. Category 'none' represents unregulated gear types and mesh sizes in addition to unidentified mesh sizes, and this category represents 0.5% of the unregulated effort in 2013.

The unregulated effort has increased in sub-areas 3b2 and 3b3 in 2013 compared to 2012. This, together with the general decreasing trend of regulated effort, make that unregulated effort represents now almost 40% of the total effort in area 3b. This is despite nearly all French TR1 effort being re-classified from the CPart11 exemption in 2012 back to under article 13b. When nearly all French TR1 effort was re-classified to CPart11 exemption in 2012, it was accompanied by an increase of effort of this fishery back to its 2009 level. As stated, in 2013 the exempted vessels are back under article 13b.

In Skagerrak (3b1), the main unregulated effort is performed with otter trawls with other mesh sizes (59%, including the major small meshed *Pandalus* trawling), and with unregulated TR2 fishing for *Nephrops* under CPart11 exemption (15%). In the North Sea (3b2), most of the unregulated effort is performed by pelagic fisheries and unregulated beam trawls (mainly the small mesh-sized *Crangon* beam fishery), with 38% and 33% of the 2013 unregulated effort in the area respectively. In the Eastern Channel (3b3), nearly all unregulated effort is performed using pelagic trawls, dredges and pots (65%, 20% and 13% of 2013 unregulated effort respectively).

Table 5.3.1.6. Effort (kWdays) of unregulated gear by subarea in area 3b 2003-2013. The full time series is available on the STECF website.

REG_AREA	GEAR	SPECON	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	rel 04-06	rel 2012	
3B1	BEAM	NONE		6531	9484		13085	442				4597		0.00	0.00	
	DEM_SEINE	NONE	2183			439		368	177		104			0.00		
	DREDGE	NONE	231	540			94		94	484	390	128		0.00	0.00	
	NONE	NONE	1776	153	469	727	10119	217	58975	85324	100480	80578	74322	165.28	0.92	
	OTTER	NONE	3544400	3427326	3354592	3007470	2633605	2905565	3313077	3246259	3175442	3158753	3194800	0.98	1.01	
	PEL_SEINE	NONE	530066	581166	771370	447103	329070	198654	196295	165770	201916	244262	151481	0.25	0.62	
	PEL_TRAWL	NONE	1527128	954414	1064576	910470	785364	474195	600538	680827	404710	524294	644472	0.66	1.23	
	POTS	NONE	241592	292682	322315	366137	416807	540803	519185	504260	504191	573080	569777	1.74	0.99	
	TR2	CPART11														0.89
		IIA83B														0.00
3B1 total			5847376	5571271	6064813	5397317	5082719	4855283	5455095	5382084	5083047	5506112	5453994	0.96	0.99	
3B2	BEAM	NONE	13771171	13393539	13150790	12887540	13735577	13288264	13977649	12502485	8988168	12511111	13094042	1.00	1.05	
	DEM_SEINE	NONE	22916	9718	23138	2146	13017	4846	14128	17871		27144	6051	0.52	0.22	
	DREDGE	NONE	2880919	3296169	2508437	2073566	2479674	2035480	2315671	1988726	2132577	2210516	3162569	1.20	1.43	
	NONE	NONE	90735	87526	64797	50106	73483	63328	134203	80714	115574	143766	206566	3.06	1.44	
	OTTER	NONE	10858228	10164778	5377674	5659003	3209016	5298165	6004949	6339670	6630044	2587249	5845542	0.83	2.26	
	PEL_SEINE	NONE	1982133	2053534	1962646	1522402	1087940	932519	1221321	971554	819015	662248	836660	0.45	1.26	
	PEL_TRAWL	NONE	18799521	19795935	15590942	13622148	11994660	7183610	7585415	7758977	8761269	12959556	14127118	0.86	1.09	
	POTS	NONE	2326152	2248081	2165088	2275012	2313665	2350549	2576439	2343830	2419764	2452338	2572655	1.15	1.05	
	TR1	CPART11														0.00
	TR2	CPART11														0.46
3B2 total			50731775	51049280	40843512	38091923	34907032	31156761	33829775	32102961	29905082	36045920	39861602	0.92	1.11	
3B3	BEAM	NONE	30157	121214	70108	51418	32339	48248	69118	26586	24517	21417	13295	0.16	0.62	
	DEM_SEINE	NONE	1323							21500	1125		1500			
	DREDGE	NONE	1128525	1162627	3483715	1144701	1323782	1080856	1391023	2291506	2241794	1426359	1184716	0.61	0.83	
	NONE	NONE	155575	172817	2468	32944	19603	241609	241609		4141			0.00		
	OTTER	NONE	346749	648988	1016771	477940	242207	224612	199366	151753	240336	108974	73034	0.10	0.67	
	PEL_SEINE	NONE		7680				7764			1650		4444	0.58		
	PEL_TRAWL	NONE	4903883	4848102	4939656	4312174	4599318	3687254	3942055	3048145	1966515	3177736	3846950	0.82	1.21	
	POTS	NONE	593494	587081	755112	882031	884043	626254	570873	1166178	812123	872370	766060	1.03	0.88	
	TR1	CPART11														0.00
													9694			0.00
3B3 total			7159706	7548509	10267830	6901208	7101292	5916597	6421808	6705668	5292201	5616550	5889999	0.71	1.05	
Grand Total unregulated gears in area 3b			63738857	64169060	57176155	50390448	47091043	41928641	45706678	44190713	40280330	47168582	51205595	0.89	1.09	

Statistics on fishing capacity can be taken from the electronic appendixes to the present report, which can be downloaded from: <http://stecf.jrc.ec.europa.eu/web/stecf/ewg1406>

5.3.1.3 Uptake of effort baseline

The uptake of effort baselines is presented in Figure 5.3.1.5. Care must be taken in the interpretation of this figure, for a number of reasons, including e.g: i) the baseline displayed here is extracted from the TAC and quotas regulations nr 43/2009, 53/2010, 57/2011, 44/2012, 40/2013 and 43/2014 and does not take into account the effort buyback performed by Member states as part of Article 13 and/or other agreements. This information is sometimes publicly available for some Member States, but not for all and STECF has not been provided with this information specifically; ii) as described in section 4, the effort information provided to STECF by a number of Member States is calculated in calendar days, whereas the actual regulation of effort uptake is based on 24h period, which can lead to some differences especially in coastal fisheries; iii) STECF data are calculated by calendar year whereas the effort baselines apply from February to January.

Point i) above is particularly important for the demersal trawls/seines fishery, as 66% and 32% of the regulated effort (i.e. excluding article 11) by TR1 and TR2 respectively is operated under article 13, and the actual effort is therefore much higher than the official baseline.

For all other regulated gears, the actual overall effort is not constrained by the baseline, however a break down by individual member states would show that some national segments are more constrained than others.

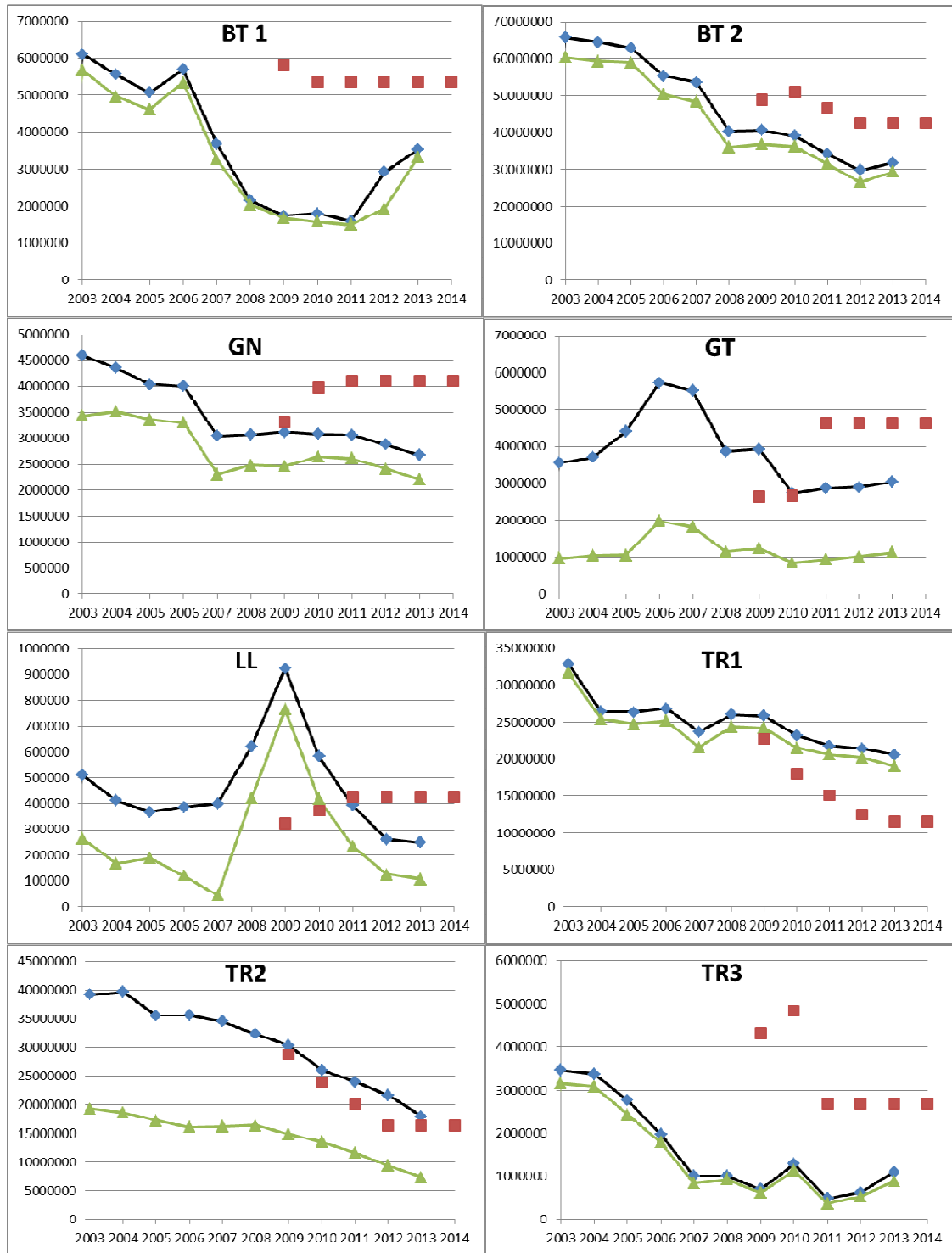


Figure 5.3.1.5 Management area 3b. Uptake of effort ceilings. Red squares: effort ceiling. Blue diamonds: regulated effort in whole area 3b (CPart 11 excluded). Green triangles: regulated effort in North Sea (subarea 3b2) alone.

5.3.2 ToR 1.b Catches (landings and discards) of cod in weight and numbers at age by fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.3.3 ToR 1.c-d Catches (landings and discards) of non-cod species in weight and numbers at age by fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.3.4 ToR 1.e CPUE and LPUE of cod, plaice, and sole by fisheries and by Member States

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.3.5 ToR 2 Rank regulated gear groups on the basis of catches expressed both in weight and in number of cod, sole and plaice

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.3.6 *ToR 3 Information on small boats (<10m)*

5.3.6.1 Fishing effort of small boats by Member State

Effort (Table 5.3.6.1.1) is provided for the vessels under 10m (including Article 11 vessels!) in area 3b, for all countries except Belgium. German data are incomplete as logbook information is not mandatory for vessels under 10m in Germany. UK data are poor until the introduction of registration of buyers and sellers legislation in 2006 after which recording of effort has improved. Danish data are incomplete till 2010. Therefore, up to 2010 data have to be regarded as not representative and should not be interpreted. Especially the increase in effort around 2006 and 2010 does most likely not mean an increase in effort in reality. Between 2010 and 2011 effort was stable. In 2011 around half of the effort is operated with Pots (47%), followed by GN1 (13%) and TR2 (12%). Unregulated gears account for 60% of total effort from vessels <10m.

The highest effort in 2013 was recorded by England, Scotland and France (Table 5.3.6.1.2.) For the whole area 3b in 2013, the effort from vessels <10m was 8% of the total effort in this area.

Table 5.3.6.1.1 Skagerrak, North Sea and Eastern Channel. Fishing effort (kWdays) by vessels <10m. Data include Art. 11 vessels

REG AREA	REG GEAR	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
3B1	DEM_SEINE	858	301	503	457	679	6052	4971	197	8768	7597
3B1	DREDGE						3437	10003	771	2177	
3B1	GN1	49981	100597	143850	85267	117597	210526	196336	180466	213700	164247
3B1	GT1	2745	7199	7542	4145	2361	49133	17339	17034	21252	27140
3B1	LL1	6962	12773	11632	8460	13611	809	7527	4026	1415	1992
3B1	NONE	321589	279834	228367	196976	238944	343631	359647	374678	346954	396650
3B1	OTTER	8197	5809	10608	6512	6815	7430	19478	23751	34663	51781
3B1	PEL_SEINE	1723	441	315	252	1148	1125	442	3466	252	1096
3B1	PEL_TRAWL		53	106	17		53				
3B1	POTS	72125	84747	163269	105493	106041	781512	859133	408138	477168	502402
3B1	TR1	3616	13405	19028	22638	21597	15800	18684	4932	18856	30215
3B1	TR2	10122	14372	14888	19943	19755	34859	75774	98526	123061	100450
3B1	TR3	360	162	956	1052	603	1619	3119	1544	507	5478
3B2	BEAM	32681	20795	45923	73273	111576	81068	38237	49726	63895	56069
3B2	BT1	204	4	4				4	4		4
3B2	BT2	2567	637	574	676	58	3466	14376	3650	802	261
3B2	DREDGE	85202	103978	106632	125628	164279	183741	170258	167121	174140	254094
3B2	GN1	277203	310649	473886	639122	641390	565616	555102	592653	482077	371376
3B2	GT1	110307	141442	243251	51469	123419	132229	121147	230749	162722	178731
3B2	LL1	150215	185215	121158	223379	256904	193040	273476	259039	275349	272793
3B2	NONE	400145	319791	265304	241312	247650	269798	294912	315079	296765	327154
3B2	OTTER	104230	121290	53281	81701	68334	110265	75189	45469	32884	39845
3B2	PEL_SEINE	969	5020	5225	3924	14327	18095	27139			
3B2	PEL_TRAWL	425	7226	316	3058	1196	13625	13159	19964	17865	10866
3B2	POTS	2151033	1977969	3855408	4019404	4129470	4128191	4067548	4275794	4205901	4252201
3B2	TR1	53653	74027	106819	172073	165212	145161	174062	200265	211144	134629
3B2	TR2	1047840	966629	1032910	1191938	1064981	959253	941263	1075229	882548	889613
3B2	TR3	4775	7434	6465	1983	164	1344	2769	4725	3360	2166
3B3	BEAM	4185	15887	745		149	149	347	62		
3B3	BT2	46341	44073	35255	61328	65598	55374	37649	26407	33732	51625
3B3	DREDGE	35422	170967	165851	164335	227297	189076	178185	197563	183166	128649
3B3	GN1	236069	242581	581413	1233830	1173083	1222671	1073271	934576	696090	704081
3B3	GT1	459688	469766	630019	465130	353821	384219	503202	777802	861366	776893
3B3	LL1	58748	69475	87057	149972	68164	84464	239074	316428	376729	342233
3B3	NONE	26077	28060	7750	24289	13867	13867		5794		
3B3	OTTER	61541	109479	8086	3660	2817	1693	51027	31562	48307	22179
3B3	PEL_SEINE										303
3B3	PEL_TRAWL	2592	4593	4694	8355	17874	17874	16249	7788	3636	5991
3B3	POTS	460898	544348	1221805	1260523	935385	792216	1657083	1213275	1382224	1394701
3B3	TR1	6901	6450	6447	26518	172434	125897	99165	80878	136035	136459
3B3	TR2	250380	102348	262295	375394	180269	201305	267964	381672	301177	293467
3B3	TR3	97158	120992	163184	125478	52603	52128	52326	63039	42104	57493
Sum		6645727	6690818	10092821	11178964	10781472	11401811	12516636	12393842	12122791	11992924

Table 5.3.6.1.2 Skagerrak, North Sea and Eastern Channel. Fishing effort (kWdays) by vessels <10m by country.

REG AREA	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
3B1	DEN	363936	376922	379678	303712	375610	381497	377669	389910	367746	344714
3B1	SWE	114342	142771	221386	147500	153541	1074489	1194784	727619	881027	944334
3B2	DEN	421407	388486	367508	321918	382763	361730	317980	376195	347352	335727
3B2	ENG	1329676	1365227	2938590	3270361	3218856	2731080	2597354	3089443	2798937	2797999
3B2	FRA	130180	87111	57751	52761	59281	59281	44940	64959	44761	93480
3B2	GER		8359	33326	48357	31085	38899	26849	41101	34498	
3B2	NED	138247	155640	176535	174381	197396	215075	237511	185237	174048	200732
3B2	NIR	420	209	14136	1672		371		112	1121	
3B2	SCO	2401519	2237074	2729310	2959490	3099579	3398456	3544007	3482420	3408709	3361864
3B2	SWE										26
3B3	ENG	356779	422216	1566408	2452694	2429908	2299272	2318911	2447658	2533846	2280236
3B3	FRA	1389221	1506803	1607091	1445793	832742	829871	1849140	1586097	1530504	1633838
3B3	GBG			1074		224					
3B3	NIR			0		112					
3B3	SCO			28	325	375	11790	7491	3091	216	
Sum		6645727	6690818	10092821	11178964	10781472	11401811	12516636	12393842	12122791	11992924

5.3.6.1 Catches (landings and discards) of cod and associated species by small boats by Member State

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.3.7 ToR 4 Evaluation of fully documented fisheries FDF

The figures in this paragraph cover area 3b. In the electronic appendices, the information by subarea 3b1 (Skagerrak), 3b2 (North Sea) and 3b3 (Eastern Channel) are available.

5.3.7.1 Fishing effort of FDF by Member State and fisheries in comparison with fisheries not working under FDF provisions

Table 5.3.7.1.1 shows that during 2011 nominal fishing effort (KW*days) by vessels operating in Fully Documented Fisheries (FDF) trials in the Skagerrak, North Sea and Eastern Channel was a small proportion of the total effort (4.9%), but was significant for the main cod gear (27.3% of effort by otter trawls of ≥ 120 mm mesh size (TR1)). Figures in this table can differ from last year's report due to resubmission of effort data for the period 2010 – 2012.

In 2012 FDF was still a small proportion of the total effort (5.1%), but it was increasing. The significance for the main cod gear has increased further and was 28.8% in 2012. All FDF countries contributed to this increase. However, in 2013 the total effort in FDF fisheries is slightly decreased from 5.5% to 5.1%. The total effort for the main gear, TR1, decreased from 28.8% to 28.4%.

With respect to the number of vessels that participate in FDF, EWG14-06 assumes that only vessels of the TR1 gear group target cod. The number of TR1 vessels participating in FDF increased from 44 in 2011 to 48 in 2012. In 2013 the number of vessels decreased to 46. These numbers must be used with care because some TR1 vessels also apply GN1 gears, so overlap can occur.

Table 5.3.7.1.1 Skagerrak, North Sea and Eastern Channel: (A part 1) total fishing effort for countries with Fully Documented Fisheries (FDF, REM/CCTV), (B) FDF (REM/CCTV) nominal fishing effort (kW days) and C) the percentage of total effort attributable to FDFs.

Table A, part 1					Table B					Table C			
COUNTRY	GEAR	2011	2012	2013	COUNTRY	GEAR	2011	2012	2013	2011	2012	2013	
DEN	BEAM	583866	851414	910888	DEN	BEAM				0.0%	0.0%	0.0%	
	BT1	433062	440886	454445		BT1					0.0%	0.0%	0.0%
	BT2	440	242	5884		BT2					0.0%	0.0%	0.0%
	DEM_SEINE	104	1190			DEM_SEINE					0.0%	0.0%	0.0%
	DREDGE	396732	385786	297041		DREDGE					0.0%	0.0%	0.0%
	GN1	1443013	1323145	1331779		GN1	12668	83232	95642		0.9%	6.3%	7.2%
	GT1	223000	358745	522596		GT1	0	3249	6156		0.0%	0.9%	1.2%
	LL1	62587	51543	29276		LL1	11445	0	994		18.3%	0.0%	3.4%
	NONE	58471	69657	59002		NONE	10560	9020	220		18.1%	12.9%	0.4%
	OTTER	5841057	2905333	5523324		OTTER	660				0.0%	0.0%	0.0%
	PEL_SEINE	337529	269988	447815		PEL_SEINE					0.0%	0.0%	0.0%
	PEL_TRAWL	3613072	4619017	6092417		PEL_TRAWL			7260		0.0%	0.0%	0.1%
	POTS	6205	6970	12888		POTS					0.0%	0.0%	0.0%
	TR1	4583311	4592940	4331818		TR1	2178914	2180822	2060752		47.5%	47.5%	47.6%
	TR2	3312188	2749364	2157950		TR2	22030	72463	20600		0.7%	2.6%	1.0%
TR3	337402	480789	957160	TR3					0.0%	0.0%	0.0%		
DEN Total		21232039	19107009	23134283	DEN Total		2236277	2348786	2191624	10.5%	12.3%	9.5%	
ENG	BEAM	156166	325638	384971	ENG	BEAM				0.0%	0.0%	0.0%	
	BT1	169873	424874	575558		BT1					0.0%	0.0%	0.0%
	BT2	2942307	2733012	3080589		BT2					0.0%	0.0%	0.0%
	DEM_SEINE					DEM_SEINE					0.0%	0.0%	0.0%
	DREDGE	711217	338768	380225		DREDGE	2685				0.4%	0.0%	0.0%
	GN1	252169	174777	221225		GN1	31604	35681	11890		12.5%	20.4%	5.4%
	GT1	20078	14155	19863		GT1					0.0%	0.0%	0.0%
	LL1	44458	51111	77294		LL1					0.0%	0.0%	0.0%
	OTTER	182918	422	9495		OTTER	3395		480		1.9%	0.0%	5.1%
	PEL_TRAWL	896373	1417868	1581577		PEL_TRAWL					0.0%	0.0%	0.0%
	POTS	1612911	1619790	1794848		POTS					0.0%	0.0%	0.0%
	TR1	2140059	1872403	2221660		TR1	694484	656180	1014058		32.5%	35.0%	45.6%
	TR2	1620562	1619726	1245453		TR2					0.0%	0.0%	0.0%
	TR3	621	246	298		TR3					0.0%	0.0%	0.0%
	ENG Total		10749712	10592790		11593056	ENG Total		732168	691861	1026428	6.8%	6.5%
GER	BEAM	3901769	5365103	5112720	GER	BEAM				0.0%	0.0%	0.0%	
	BT1	1535	2793	65906		BT1					0.0%	0.0%	0.0%
	BT2	1242171	1071896	1290574		BT2					0.0%	0.0%	0.0%
	DEM_SEINE					DEM_SEINE					0.0%	0.0%	0.0%
	DREDGE	122438	6426	10962		DREDGE					0.0%	0.0%	0.0%
	GN1	225797	287472	259976		GN1					0.0%	0.0%	0.0%
	GT1	924				GT1					0.0%	0.0%	0.0%
	NONE	32656	30500			NONE					0.0%	0.0%	0.0%
	OTTER	101740	16158	95489		OTTER					0.0%	0.0%	0.0%
	PEL_TRAWL	931868	1149843	1617352		PEL_TRAWL					0.0%	0.0%	0.0%
	POTS					POTS					0.0%	0.0%	0.0%
	TR1	1652164	1341333	1501458		TR1		335331	410324		0.0%	25.0%	27.3%
	TR2	441597	335549	337436		TR2					0.0%	0.0%	0.0%
	TR3			184		TR3					0.0%	0.0%	0.0%
	GER Total		8654659	9607073		10292057	GER Total		335331	410324		0.0%	3.5%

Table 5.3.7.1.1. (ctd.)

NED	BEAM	4126270	5642413	6270506	NED	BEAM	442	81897	178347	0.0%	1.5%	2.8%
	BT1	308958	1090258	1210021		BT1				0.0%	0.0%	0.0%
	BT2	25777844	22428296	23823379		BT2		14586	4862	0.0%	0.1%	0.0%
	DEM_SEINE		9500	442		DEM_SEINE		4000		0.0%	42.1%	0.0%
	DREDGE	497268	565191	720024		DREDGE				0.0%	0.0%	0.0%
	GN1	316070	295035	233663		GN1	4862	4420	7514	1.5%	1.5%	3.2%
	GT1	21431	29054	7442		GT1	663	884		3.1%	3.0%	0.0%
	OTTER	4111	53293	412		OTTER		442		0.0%	0.8%	0.0%
	PEL_SEINE					PEL_SEINE				0.0%	0.0%	0.0%
	PEL_TRAWL	2242925	4105752	4525042		PEL_TRAWL		1326		0.0%	0.0%	0.0%
	POTS	6133	9397	3412		POTS				0.0%	0.0%	0.0%
	TR1	1176692	1329299	1321173		TR1	197344	411771	459047	16.8%	31.0%	34.7%
	TR2	1921901	1984193	2053813		TR2	211502	435725	500812	11.0%	22.0%	24.4%
	TR3	23268	25897	50615		TR3		221		0.0%	0.9%	0.0%
NED Total		36422871	37567578	40219944	NED Total		414813	955272	1150582	1.1%	2.5%	2.9%
SCO	BEAM				SCO	BEAM				0.0%	0.0%	0.0%
	BT1					BT1				0.0%	0.0%	0.0%
	BT2		68262	217190		BT2				0.0%	0.0%	0.0%
	DEM_SEINE	1125	16454	7109		DEM_SEINE				0.0%	0.0%	0.0%
	DREDGE	2209299	1959531	2498996		DREDGE				0.0%	0.0%	0.0%
	GN1	607650	569749	422532		GN1				0.0%	0.0%	0.0%
	LL1	183352	68192	15395		LL1				0.0%	0.0%	0.0%
	NONE	59440	70360	163095		NONE				0.0%	0.0%	0.0%
	OTTER	668510	441398	636317		OTTER				0.0%	0.0%	0.0%
	PEL_SEINE	61300	21286	143745		PEL_SEINE				0.0%	0.0%	0.0%
	PEL_TRAWL	1283926	1685322	1677789		PEL_TRAWL				0.0%	0.0%	0.0%
	POTS	1060237	1022054	984898		POTS				0.0%	0.0%	0.0%
	TR1	9997529	9306627	8349843		TR1	2871664	2585992	1880832	28.7%	27.8%	22.5%
	TR2	6826480	5314452	3607273		TR2			2191	0.0%	0.0%	0.1%
	TR3		20706	1567		TR3				0.0%	0.0%	0.0%
SCO Total		22958848	20564393	18725749	SCO Total		2871664	2585992	1883023	12.5%	12.6%	10.1%
Grand Total		100018129	97438843	103965089	Grand Total		6254922	6917242	6661981	6.3%	7.1%	6.4%

Table A, part 2

Effort of all IIa countries by gear

GEAR	2011	2012	2013	GEAR	2011	2012	2013	2011	2012	2013
BEAM	9012685	12537125	13107337	BEAM	442	81897	178347	0.0%	0.7%	1.4%
BT1	1584796	2922996	3537943	BT1				0.0%	0.0%	0.0%
BT2	34176452	29845342	31810563	BT2		14586	4862	0.0%	0.0%	0.0%
DEM_SEINE	1229	27144	7551	DEM_SEINE		4000		0.0%	14.7%	0.0%
DREDGE	4374761	3637003	4347285	DREDGE	2685			0.1%	0.0%	0.0%
GN1	3063752	2884871	2676491	GN1	49134	123333	115046	1.6%	4.3%	4.3%
GT1	2867811	2894668	3033567	GT1	663	4133	6156	0.0%	0.1%	0.2%
LL1	393261	262862	251008	LL1	11445			2.9%	0.0%	0.0%
NONE	252851	254844	280888	NONE	10560	9020	220	4.2%	3.5%	0.1%
OTTER	10045822	5854976	9113376	OTTER	4055	442	480	0.0%	0.0%	0.0%
PEL_SEINE	1022581	906510	992585	PEL_SEINE				0.0%	0.0%	0.0%
PEL_TRAWL	11132494	16661586	18618540	PEL_TRAWL		1326		0.0%	0.0%	0.0%
POTS	3736078	3897788	3908492	POTS				0.0%	0.0%	0.0%
TR1	21771831	21431463	20532862	TR1	5942406	6170096	5825013	27.3%	28.8%	28.4%
TR2	23963410	21634967	18024933	TR2	233532	508188	523603	1.0%	2.3%	2.9%
TR3	488673	623041	1097489	TR3		221		0.0%	0.0%	0.0%
Grand Total	127888487	126277186	131340910	Grand Total	6254922	6917242	6653727	4.9%	5.5%	5.1%

5.3.7.2 Catches (landings and discards) of cod and other species taken by FDF fisheries by Member State and fisheries in comparison with fisheries not working under FDF provisions

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.3.7.3 Comparative analysis of cod selectivity by FDF fisheries and non-FDF fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data.

The following is based on analysis of 2012 data

The analysis is done only for area 3b2 (North Sea), TR1 in 2012 for countries that raise FDF data separately. These countries are Denmark, Scotland and Sweden. It should be noted that no information is available how gaps in the sampling data are treated (e.g., missing quarters). The other countries with FDF fisheries England, Germany, and The Netherlands do not raise them separately (because there are not enough trips to do this). The catches in numbers for a certain age are expressed as a percentage of the total catch numbers (TC). Note that Sweden has no FDF fisheries in area 3b2. Note also that non FDF also includes FDF as the data call do not ask for information for non FDF separately. Therefore the analysis is biased and cannot show the full difference between non FDF and FDF fisheries.

The current figures and plots do not show a large difference between FDF and non FDF fisheries

Table 5.3.7.3.1 Age composition non FDF catches for cod.

COUNTRY	SPECON	Landings no	Discards no	Age 1C	1%TC	Age 2C	2%TC	Age 3C	3%TC	Age 4C	4%TC	Age 5C	5%TC	Age 6C	6%TC	Age 7C	7%TC	Age 8C	8%TC
DNK	none	1286.51	475.042	112.10	6.36%	632.75	35.92%	695.21	39.47%	185.47	10.53%	95.03	5.39%	32.83	1.86%	5.56	0.32%	1.71	0.10%
SCO	CPart13C	3172.98	1563.75	513.05	10.83%	880.15	18.58%	2206.41	46.58%	828.29	17.49%	155.62	3.29%	72.73	1.54%	75.54	1.59%	1.57	0.03%
SWE	none	117.746	36.617	8.79	5.69%	53.30	34.53%	62.84	40.71%	16.98	11.00%	8.70	5.63%	3.01	1.95%	0.51	0.33%	0.16	0.10%

Table 5.3.7.3.2 Age composition FDF catches for cod.

COUNTRY	SPECON	Landings no	Discards no	Age 1C	1%TC	Age 2C	2%TC	Age 3C	3%TC	Age 4C	4%TC	Age 5C	5%TC	Age 6C	6%TC	Age 7C	7%TC	Age 8C	8%TC
DNK	FDIIA	921.324	126.593	62.97	6.01%	328.35	31.33%	446.61	42.62%	119.95	11.45%	63.24	6.03%	20.82	1.99%	4.01	0.38%	1.27	0.12%
SCO	FDIIA	1711.6	124.252	90.87	4.95%	536.45	29.22%	818.41	44.58%	222.83	12.14%	117.48	6.40%	38.67	2.11%	7.45	0.41%	2.35	0.13%

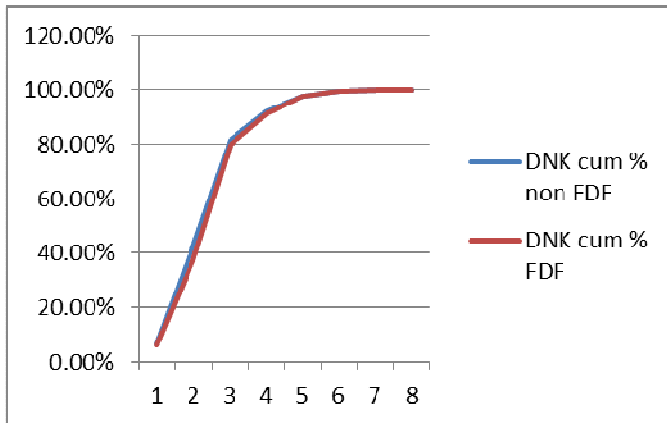


Figure 5.3.7.3.1 Cumulative percentage of catches over ages for Denmark.

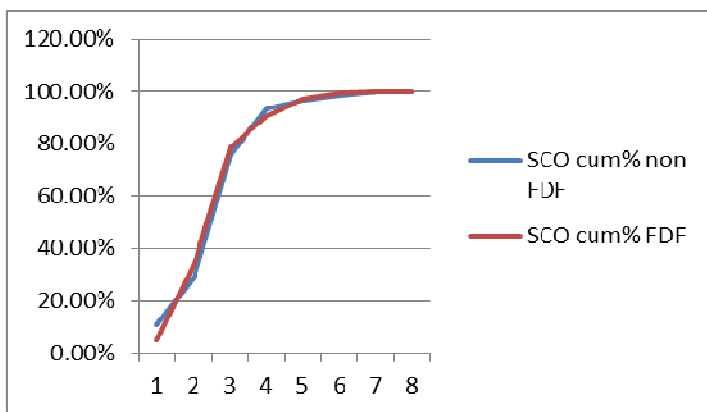


Figure 5.3.7.3.2 Cumulative percentage of catches over ages for Scotland.

5.3.8 ToR 5 Spatio-temporal patterns in effective effort by fisheries

Figures 5.3.8.1 - 5.3.8.8 show spatio-temporal patterns in fishing effort by regulated gears.

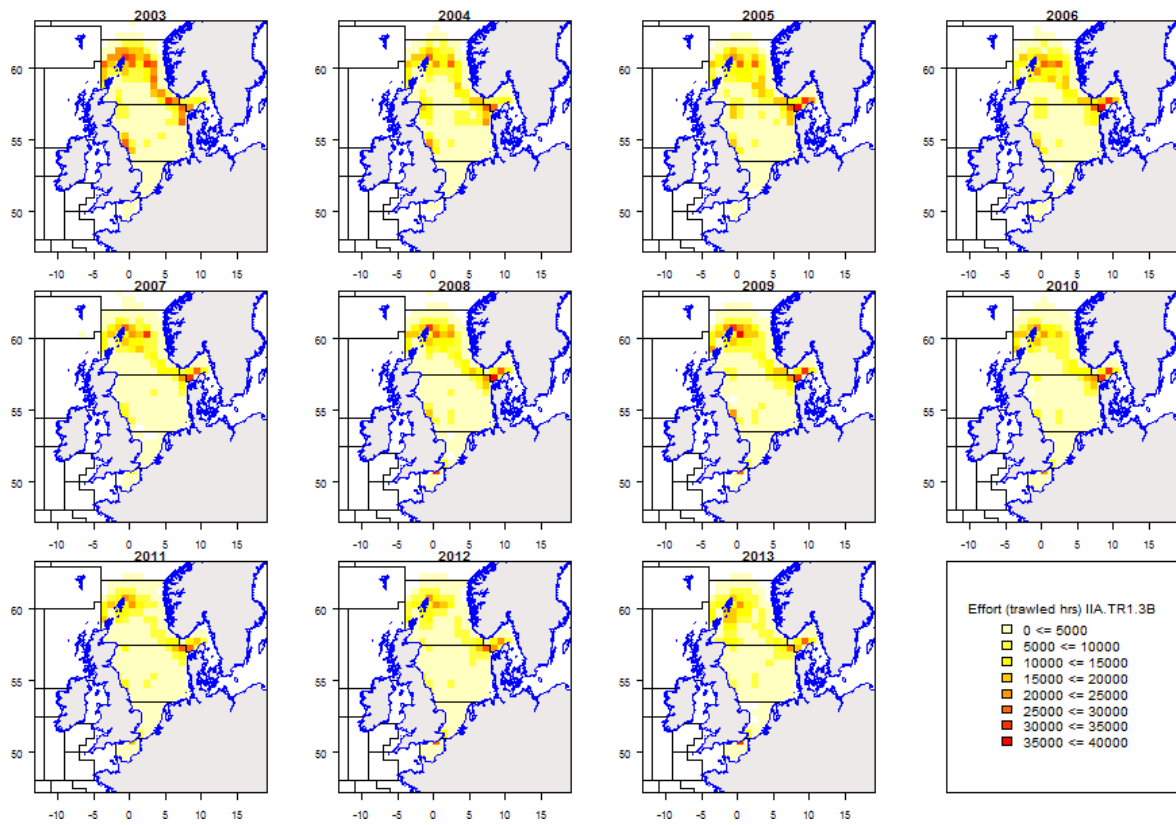


Figure 5.3.8.1. Patterns in spatio-temporal distribution for TR1 regulated gears.

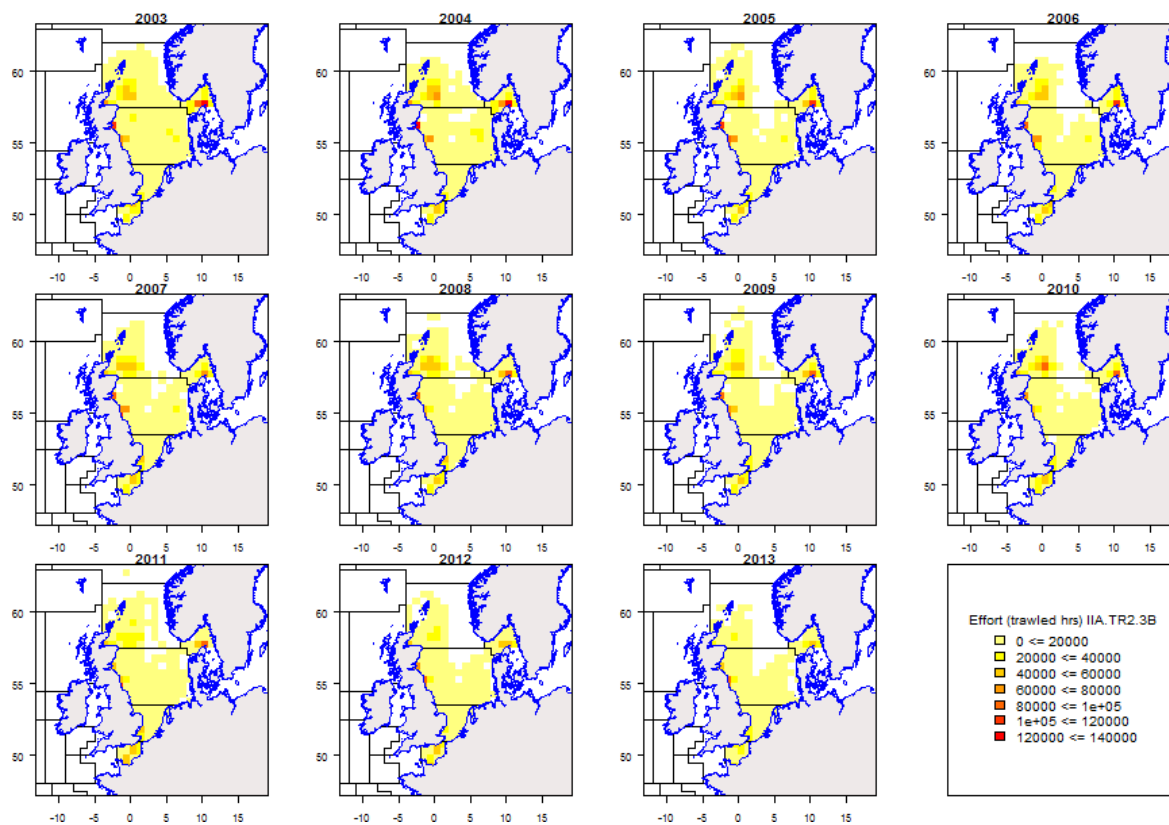


Figure 5.3.8.2. Patterns in spatio-temporal distribution for TR2 regulated gears.

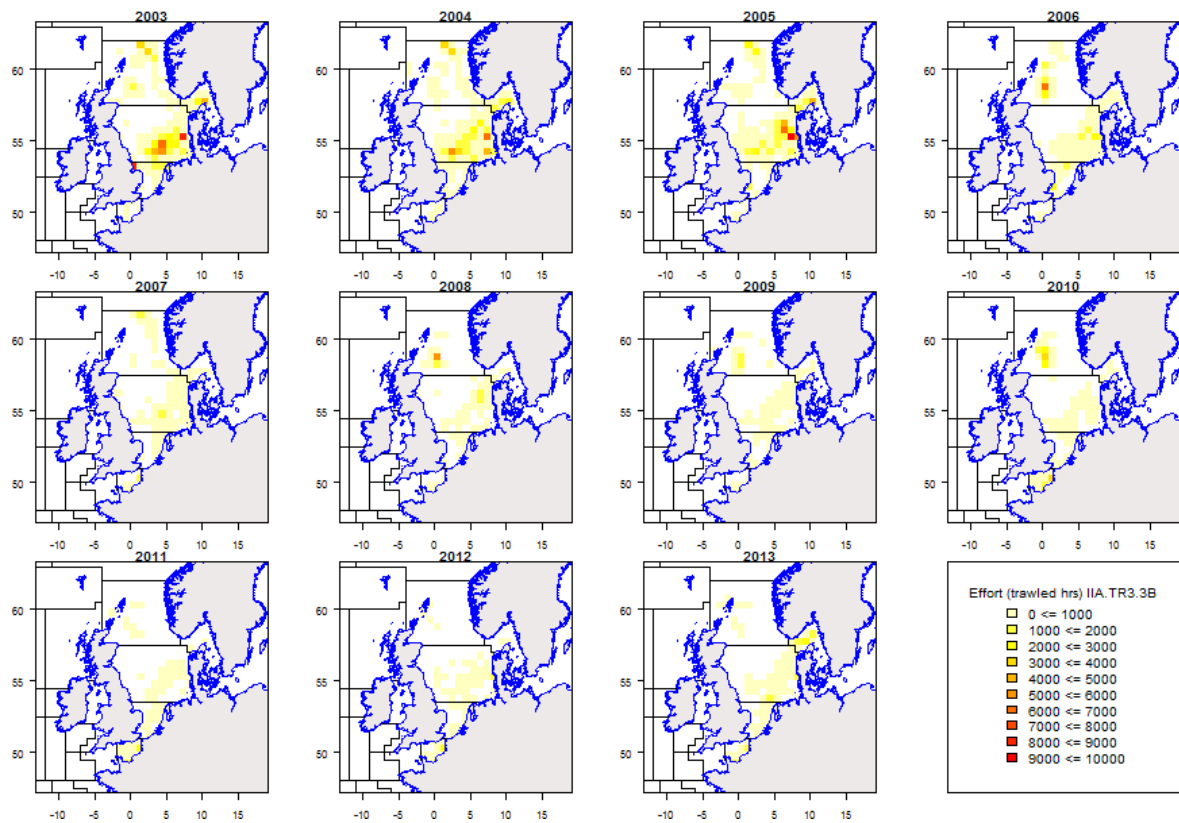


Figure 5.3.8.3. Patterns in spatio-temporal distribution for TR3 regulated gears.

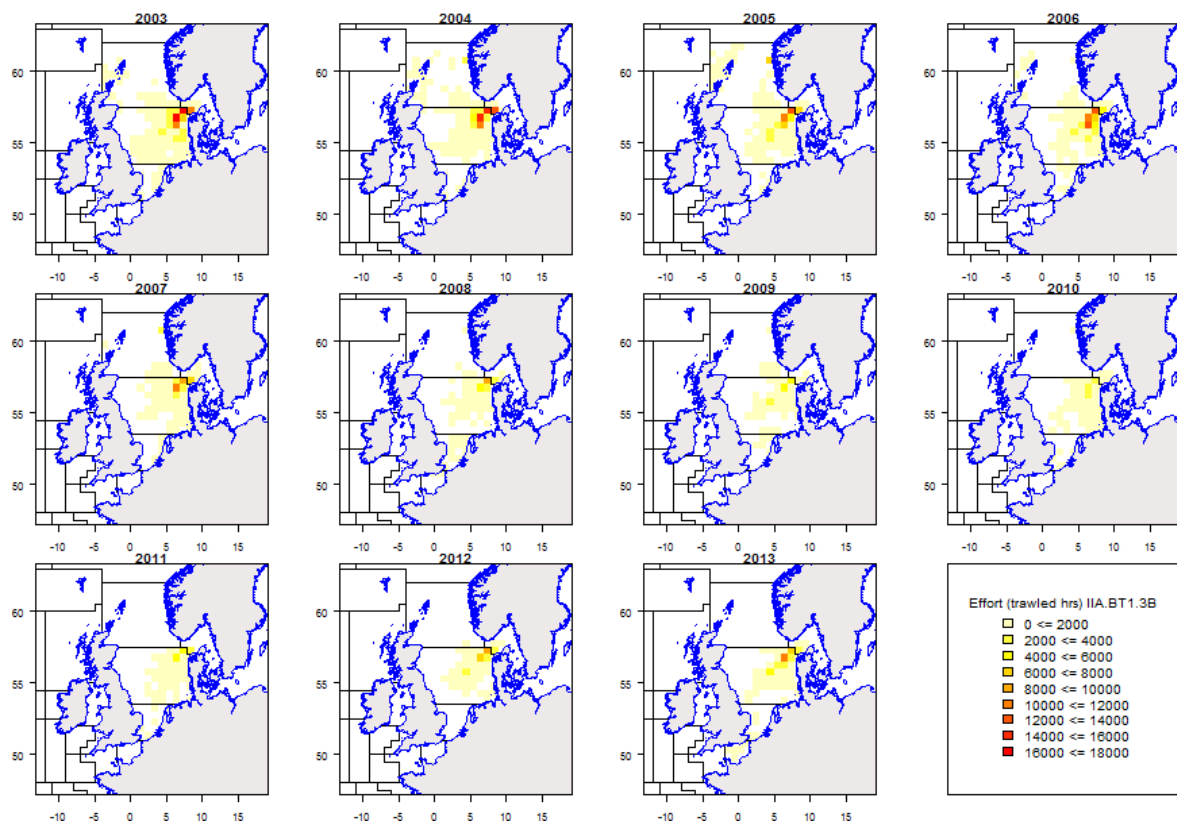


Figure 5.3.8.4. Patterns in spatio-temporal distribution for BT1 regulated gears.

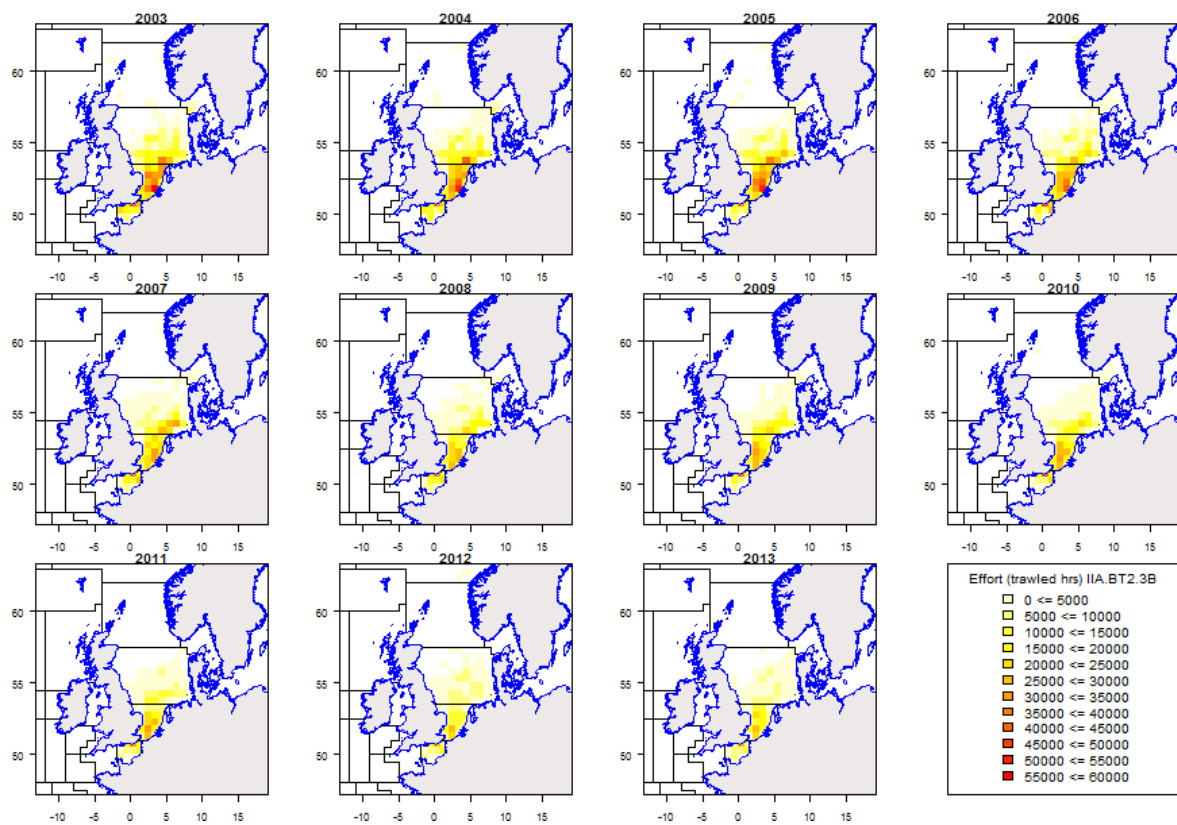


Figure 5.3.8.5. Patterns in spatio-temporal distribution for BT2 regulated gears.

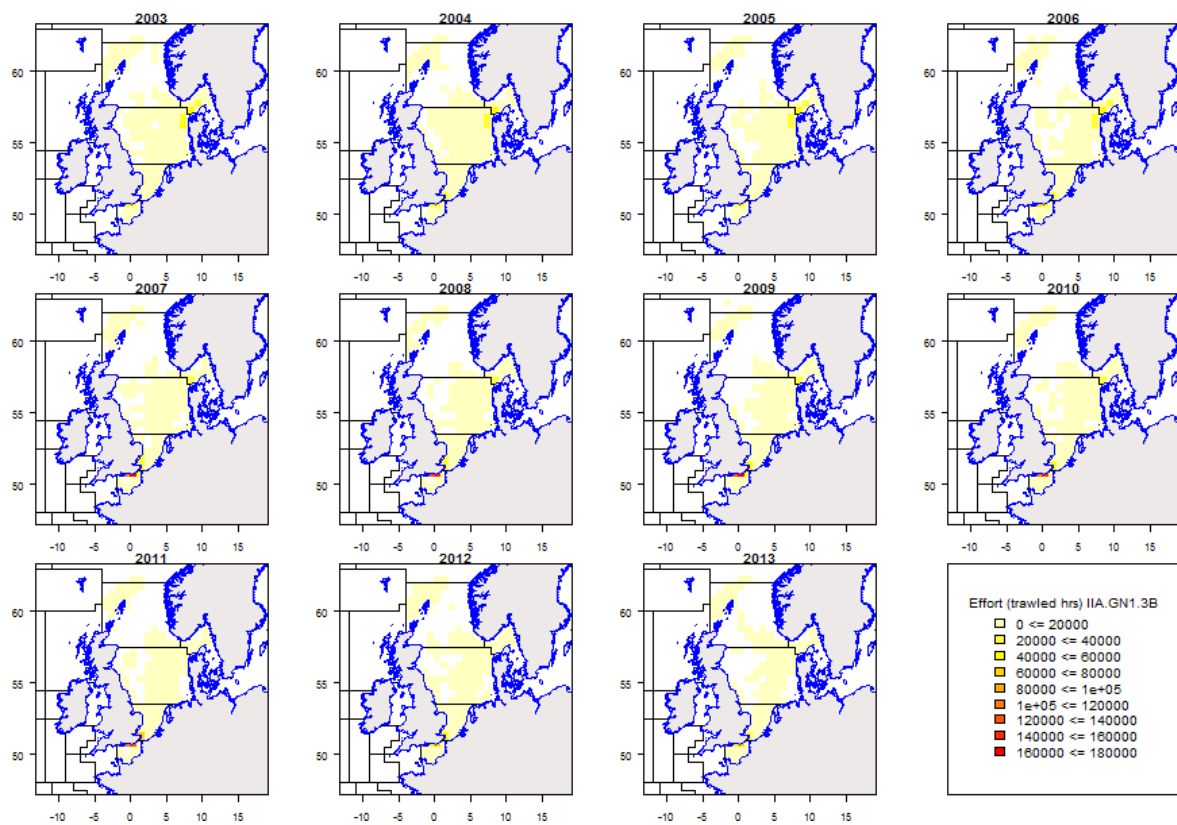


Figure 5.3.8.6. Patterns in spatio-temporal distribution for GN1 regulated gears.

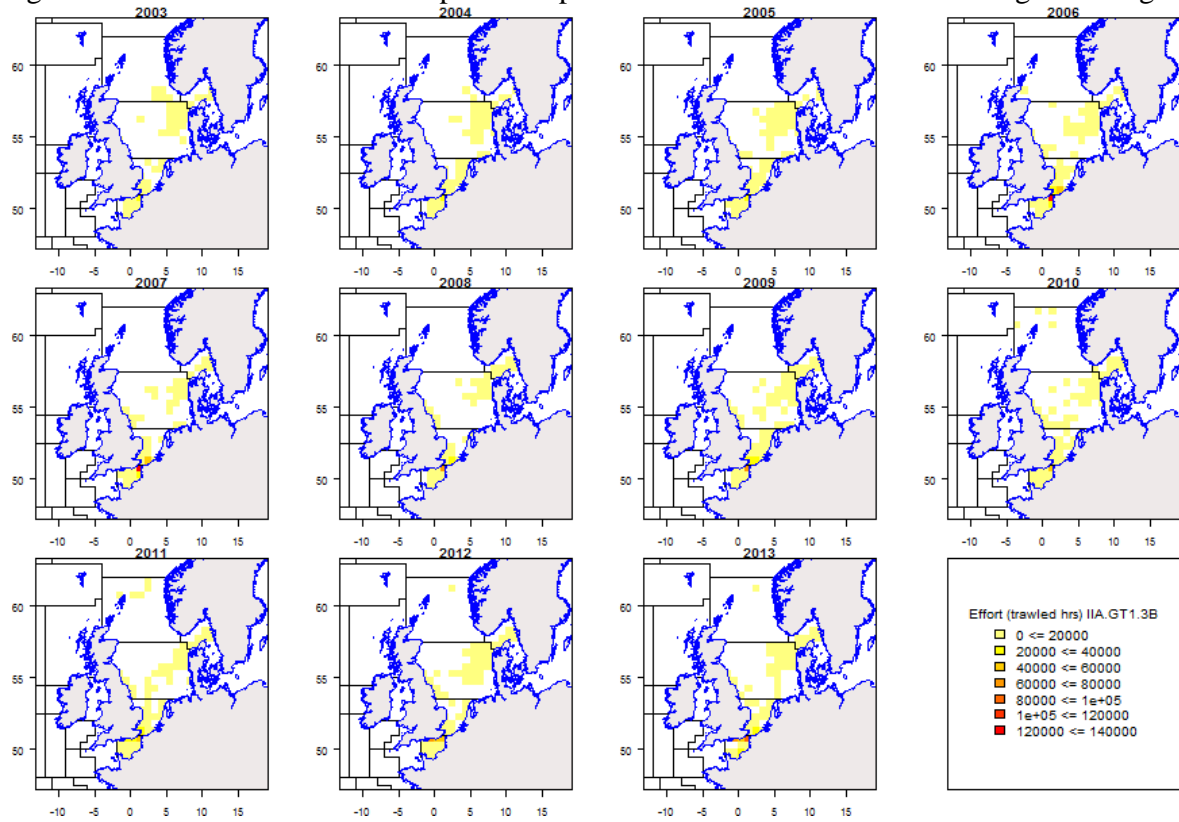


Figure 5.3.8.7. Patterns in spatio-temporal distribution for GT1 regulated gears.

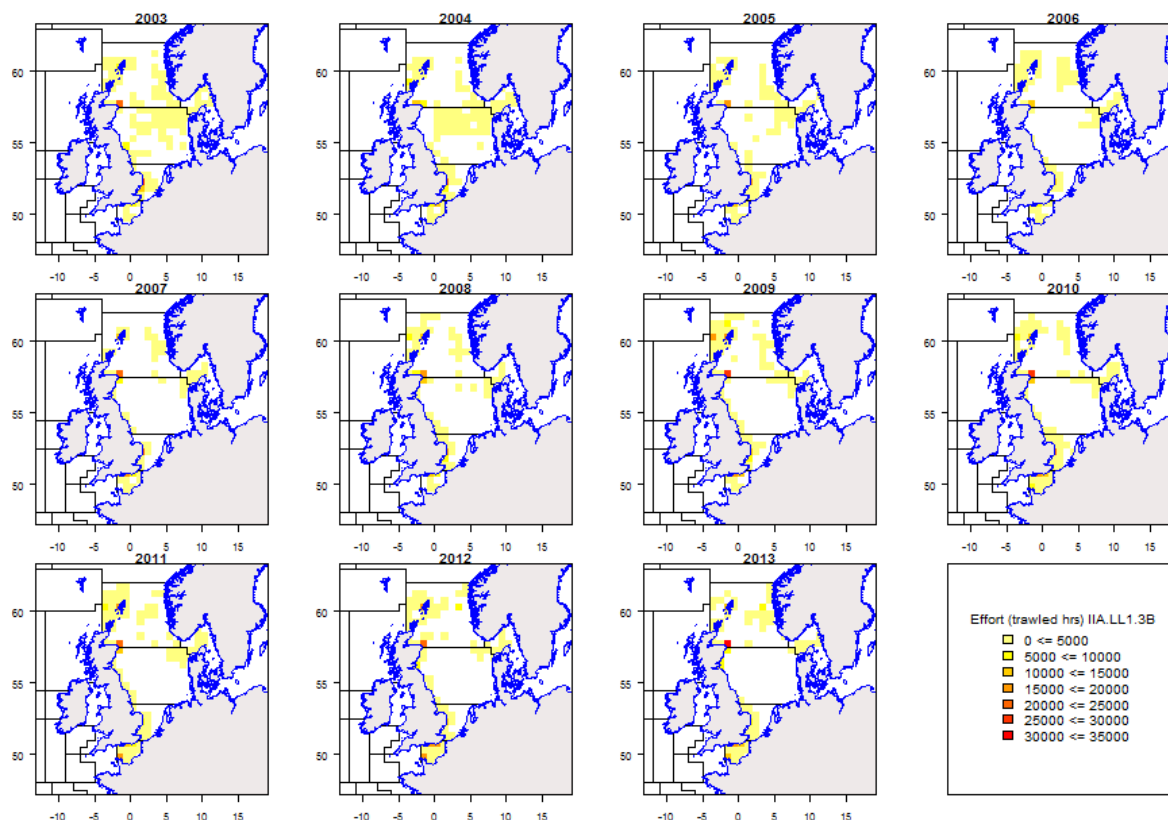


Figure 5.3.8.8. Patterns in spatio-temporal distribution for LL1 regulated gears.

5.3.9 ToR 6 Remarks on quality of catches and discard estimates

General comments on the quality of catch and discard estimates has been provided in section 4.

5.3.10 ToR 7 Estimation of conversion factors to be applied for effort transfers between regulated gear groups

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.3.11 ToR 8 Estimation of partial fishing mortalities of cod, haddock, saithe, whiting, plaice and sole by area, Member State and fisheries and correlation between partial cod mortality and fishing effort by area, Member State and fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.3.12 ToR 9 Trends in fishing mortality and fishing effort by Member State and fisheries with regards to the cod plan (R (EC) No 1342/2008) provisions, in particular with regard to Article 13

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.3.13 ToR 10 Considerations in order to accomplish spatio-temporal patterns in standardized catchability indices for cod

5.3.13.1 Introduction

Catchability (q) is defined as the relationship between the catch rate (CPUE) and the true population size. Consequently, the unit of catchability is fish caught per fish available per effort unit and per time unit, or, in easier words, catchability can conceptually be considered as the probability of any single fish being caught (Jul-Larsen *et al.*, 2003).

Many factors are related to catchability, e.g. mainly fish abundance at a certain time in a certain area and gear efficiency (fishing power) including use of the gear and fishers' experience (Marchal *et al.*, 2001). A standard solution to evaluate changes in catchability is therefore to compare catch rates from commercial and research fishing where the catchability of the research fishing is holding constant from year to year (Neis *et al.*, 1999):

$$\text{CPUE (fishery)}/\text{CPUE (survey)} = q (\text{fishery})/q (\text{survey})$$

This catchability index has no units. STECF EWG 13-13 interprets the resulting ratio as an index of fishing mortality per individual fish independent of stock size, which allows spatio-temporal analyses. The calculation of catchability indices for cod per ICES statistical square (rectangle)

and year from standardized and averaged ratios between CPUE by fishery /NS IBTS Q1 indices are therefore believed to provide indications of spatio-temporal patterns.

5.3.13.2 Data

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.4 West of Scotland effort regime evaluation in the context of Annex IIA to Council Regulation (EC) No 57/2011)

5.4.1 ToR 1.a Fishing effort in kWdays, GTdays, kW and number of vessels by Member State and fisheries

According to the data provided by Member States in 2014 aggregated by categories in Coun. Reg. (EC) 1342/2008 (cod plan) the fishery West of Scotland is primarily an otter trawl fishery; beam trawls and static gears are hardly used. Longline gears are the second most important gear category; but still much less important in terms of effort than trawl gears. Spanish data has been provided for 2012 and 2013 only. The Spanish effort represents 3.6% of large mesh trawl (TR1) effort and 47% of longline effort in 2012 and 2.6% of large mesh trawl (TR1) effort and 39.2% of longline effort in 2013. Table 5.4.1.2 shows the percentage change in effort totals supplied by Member States compared to data submitted in 2013 (and as available on the STECF website). The only changes in effort totals supplied by Member States were associated with Irish dredge, pelagic trawl, pots and TR1 gears.

In terms of kWdays the overall nominal effort in ICES division VIa displays a decrease of 41% since 2003. The majority of that reduction took place between 2003-2006 and 2009-2011. Effort within regulated gears is 58.8% less in 2013 compared to 2003. Regulated effort by trawl and seine gears (TR gears under Coun. Reg. (EC) 1342/2008) shows a long term decrease in effort and fell to its lowest level in the time series in 2011, but was stable between 2011 and 2013 for those nations reporting in both years, (Table 5.4.1.3 and Figure 5.4.1.1). With Spanish data only available for 2012 and 2013 for this area the trend in long line (LL1) effort is uncertain.

Within the trawl gear categories it can be seen from Figure 5.4.1.2 that effort is only significant in categories TR1 and TR2. TR3 effort is very low (with no effort recorded in 2010; Table 5.4.1.3). There is a clear contrast in effort trend between the TR1 and TR2 categories; effort using TR1 gears declined markedly between 2003 and 2006, was relatively stable from 2006 to 2009 before falling again. Up to 2010 patterns of effort decline or stability were similar between the TR1 and TR2 gears, but effort by TR2 gears stabilised in 2011 and there has been an increase from 2011 to 2012. In 2013 TR1 gears stabilised, whereas effort related to TR2 gears declined to its lowest level.

Five years of data are now available regarding TR effort under articles 11 and 13 of Coun. Reg. (EC) 1342/2008. Effort under article 11 is classified as unregulated (exempt) so Figure 5.4.1.3 does not include effort with CPART11. The figure shows a sharp decline in TR1 'none' effort in 2009, but this was more than compensated for by effort now categorised under CPART13 leading to a small increase in overall TR1 effort. Effort under TR1, CPART13 increased again in 2010 but the fall in 'none' effort was bigger. Effort in the 'none' category has increased in 2013 along with an increase in effort under CPART13 also and this has led to an increase in overall TR1 effort. Effort under CPART13B is chiefly from the French saithe fishery in 2012. Effort under this category in 2013, as with 2012, is greater than that of category CPART13D (fishing conducted west of a line known as the West of Scotland line).

Figure 5.4.1.4 shows a very large decline in TR2 'none' effort in 2009 which was bigger than the effort recorded for TR2, CPART13 in 2009. Effort by vessels not qualifying for special condition has remained stable since. Vessels transferred from CPART13 to CPART11 in 2010 but there was also an overall reduction in effort. There was a considerable increase in effort assigned to CPART13C in 2012 leading to an overall increase in regulated TR2 effort. Effort assigned to CPART13C again increased in 2013, as a result of allocation of Scottish vessels from CPART13B to CPART13C. However, overall TR2 effort declined.

Unregulated effort comprises: a) effort not assigned to a regulated gear type; b) effort where a special condition allows a vessel to be exempted from effort control (west of Scotland only special condition CPART11 applies to date). Effort not assigned to a regulated gear type comprises 1) mesh size groups 32-54mm and 55-69mm targeting pelagic resources, 2) effort where mesh size was not identified in the data provided, 3) unregulated gear types such as pots and dredges. Figure 5.4.1.5 illustrates the importance of unregulated gear effort within the area. Between 2004 and 2010 total effort recorded for unregulated gears has been close to that for regulated gears (slightly greater between 2004 and 2006) while following a similar trend. Unregulated effort has been increasing since 2010, and has exceeded regulated effort since 2011 and the difference has increased again in 2013. Whilst effort of unregulated gears fell by 22% in 2012 compared to 2003, 2013 only saw a 7% reduction compared to 2003 (Table 5.4.1.3). Table 5.4.1.4 and Figure 5.4.1.6 show trends in unregulated effort by gear type. Very small quantities of effort under TR1, CPART11 are recorded except in 2012 and 2013 (doubling of Irish effort and addition of French effort under this category). From 2010-2012 approximately 1m kWdays was recorded each year under TR2, CPART11, this has dropped to around 855 000 kWdays in 2013. Pelagic trawl is the most significant unregulated category, but has also contributed most to the long term decline in unregulated effort.

Tables showing effort in terms of gross tonnage days at sea (GT*days at sea) and number of vessels by derogation are presented below. It should be noted that to record an annual number of vessels the maximum number from any of the four quarters within the year is chosen. Because vessels are not necessarily assigned exclusively to a single derogation, some multiple counting may occur if summing across derogations.

Table 5.4.1.1 West of Scotland. Trend in nominal effort (kW*days at sea) by derogations existing in Appendix 1 of Annex IIA of Coun. Reg. 39/2013 and Member State, 2003-2013. Derogations are sorted by gear type and country

REG GEAR	SPECON	COUNTRY	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
BT1	NONE	FRA	1519	15327										
		SCO	60295	151480	119958	81194	1803							
BT2	NONE	BEL	19005	18103	8566	4415	2356							
		ENG	1274	12067	1810								302	
		FRA	25827	34218										
		IRL		28827	5068	6335								6660
GN1	NONE	ENG	471808	309423	201100	23028	36174		13832	2540		765		
		FRA	130216	169758	145478	129344	230271	572425	572425	294925	241877	206263	178288	
		GER	113084	79545	26780			37334	29088	36132	21816	21446	29492	
		IRL	19967	20763	192	3554	13346	9949	3275	551	2075	75	12590	
		NIR						3564						
GT1	NONE	SCO	47095	66913	38855	1044	553	6155			11972	6628	6791	
		IRL			12000	448					359		64	
LL1	NONE	SCO	636	435										
		ENG	370933	459841	317428	284497	325325	28103				4415	130192	
		FRA				163130	445344	277750	277750	189072	172250		110	
		IRL	7200	18400	3000		9750			1397	7470	3471	2082	
		NIR			1574									
TR1	CPART13B	SCO	124695	148430	306947	371404	518888	378736	703396	723065	694992	518307	305940	
		SPN										460307	375991	
	CPART13C	FRA										1734176	1907198	
		GER								4530		1103		
	CPART13D	SCO							113760	102762	443735	4566		
		IRL							117484	108034	17295	12836	183	
	FDFIIA	SCO							217928	358116	519551	707987	873638	
		IRL							253879	347386	206350	27041	31825	
	NONE	ENG	SCO						1897026	1855833	1116540	1383078	1193424	
			SCO							126775	402802	424177	132363	
FRA		ENG	319445	145914	85851	48469	8711	17020	24446	14062	12979	5327	4230	
		FRA	6010785	5807538	6038254	5193815	5058616	4486887	4482329	3469228	2149300	16870	574	
GER		GER	19191	12530	35586	27897	23652	3060	4854	2427				
		IOM											284	
IRL		IRL	496439	316477	308681	325597	530740	435661	179594	298286	126436	17853	72426	
		NIR	338394	162967	87191	29352	33609	38029	45378	23860	3160		11788	
SPN		SCO	5722625	4502156	2635380	2099673	1986483	1990144						
		SPN											162834	133226
TR2	CPART13B	SCO							3733406	2494409	2462700	1905142		
		SCO							792028	237022	174669	1517753	2874809	
NONE	BEL	BEL				1766	795			1176				
		ENG	106861	66311	57345	63616	58724	87267	15721	14802	21642	64875	62793	
	FRA	FRA	43098	12350			883	269645	274203					
		IOM	181	1172	181	894		649						
	IRL	IRL	1130195	977557	767211	712325	388727	205082	17989	9135	17461	18797	11935	
		NED									5464	884		
	NIR	NIR	281887	353511	350269	454128	757758	654124	524483	878592	948262	806188	600828	
		SCO	5760703	5334038	4586665	4381098	4693561	4808599						
TR3	NONE	DEN	156570	98707		11520								
		IRL	2198		342	160	317	11321	1323		5915	2503	600	
		NIR		317										
		SCO	29877	6880	41202		256					6535	21693	
Total reg gears			21812003	19331955	16182914	14418703	15126642	14321504	14295597	11594117	9787072	10042486	8982035	
NONE	DEN	DEN	66029	289874	172142	636193	132815	99889			119982	94838	44114	
		ENG	763289	597101	528405	1101891	1187425	746498	870027	632396	454937	251527	599203	
	FRA	FRA	434384	453248	215280	361858	354281	275460	275460	233392	235080	240408	290720	
		GBJ							321		1043			
	GER	GER	729409	767344	720815	1066842	1057879	700908	490212	430923	1094346	739578	1574941	
		IOM	8144	13229	2722	9133	11285	35882	15424	7850	17371	40103	40079	
	IRL	IRL	3254759	3603506	2137558	2210269	2153596	2188949	2084171	1874504	2094240	2373230	1965294	
		LIT							29520		150400			
	NED	NED	2170705	6497392	5592136	4295071	4118663	3873076	2839787	1564318	1258498	1651394	2163558	
		NIR	454206	708614	496663	477364	583955	420274	285040	388615	709247	660801	787313	
SCO	SCO	8904500	9410186	8208090	5548713	4990951	4673720	5194309	5046456	4939660	5001460	4504465		
	FRA										205044	145920		
LL1	CPART11	FRA										319400	509390	
		IRL									213774	415736	373488	
TR2	CPART11	SCO								44284	20755	6192	850	
		SCO								1055383	933604	960648	855624	
Total unreg gears			16785425	22340494	18073811	15707334	14590850	13014656	12084271	11278121	12242937	12960359	13854958	
Grand total			38597428	41672449	34256725	30126037	29717492	27336160	26379868	22872238	22030009	23002845	22836994	

Table 5.4.1.2 (cont) West of Scotland. Relative change in nominal effort (kW*days at sea) reported by Member State compared to the data submitted in 2013; by derogations existing in Appendix 1 of Annex IIA of Coun. Reg. 39/2013.

COUNTRY	REG GEAR	VES LENGTH	2004	2005	2006	2007	2008	2009	2010	2011	2012
LIT	PEL_TRAWL	O40M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NED	OTTER	O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	PEL_TRAWL	O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	TR2	O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NIR	DREDGE	O10T15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	GN1	O10T15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	LL1	O10T15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	OTTER	O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	PEL_SEINE	O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	PEL_TRAWL	O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	POTS	O10T15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	TR1	O10T15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	TR2	O10T15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	TR3	O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
SCO	BT1	O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	BT2	O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DEM_SEINE	O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	DREDGE	O10T15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	GN1	O10T15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	GT1	O10T15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	LL1	O10T15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	NONE	O10T15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	OTTER	O10T15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	PEL_SEINE	O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	PEL_TRAWL	O10T15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	POTS	O10T15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	TR1	O10T15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	TR2	O10T15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	TR3	O10T15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		O15M	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Table 5.4.1.3 West of Scotland. Trend in nominal effort (kW*days at sea) by derogation as defined by Coun. Reg. 1342/2008, 2003-2013. The average of 04-06 was used as the effort baseline for the cod management plan.

REG GEAR	SPECON	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	rel chng 03	rel chng 04-06	rel chng 12
BT1	NONE	61814	166807	119958	81194	1803							-100	-100	
BT2	NONE	46106	93215	15444	10750	2356						6962	-85	-83	
GN1	NONE	782170	646402	412405	156970	280344	629427	618620	334148	277740	235177	227161	-71	-44	-3
GT1	NONE	636	435	12000	448					359		64	-90	-99	
LL1	NONE	502828	626671	628949	819031	1299307	684589	981146	913534	874712	986500	814315	62	18	-17
TR1	CPART13B							113760	107292	443735	1739845	1907198			10
	CPART13C							335412	466150	536846	720823	873821			21
	CPART13D							2150905	2203219	1322890	1410119	1225249			-13
	NONE	12906879	10947582	9190943	7724803	7641811	6970801	4736601	3807863	2291875	203168	222244	-98	-98	9
TR2	CPART13B							3733406	2494409	2462700	1905142				-100
	CPART13C							792028	237022	174669	1517753	2874809			89
	NONE	7322925	6744939	5761671	5613827	5900448	6025366	832396	903705	992829	890744	675556	-91	-89	-24
TR3	NONE	188645	105904	41544	11680	573	11321	1323		5915	9038	22293	-88	-58	147
Total reg gears		21812003	19331955	16182914	14418703	15126642	14321504	14295597	11467342	9384270	9618309	8849672	-59	-47	-8
Total unreg gears		16785425	22340494	18073811	15707334	14590850	13014656	12084271	11278121	12242937	12960359	13854958	-17	-26	7
Total		38597428	41672449	34256725	30126037	29717492	27336160	26379868	22745463	21627207	22578668	22704631	-41	-36	1

Table 5.4.1.4 West of Scotland. Trend in nominal effort (kW*days at sea) by unregulated gear, 2003-2013. The average of 04-

REG GEAR	SPECON	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	rel chng 03	rel chng 04-06	rel chng 12
BEAM	NONE		10136												-100
DEM_SEINE	NONE	644											-100		
DREDGE	NONE	1956375	1698346	1510557	1161671	910993	1075527	1071111	1002819	912292	1374878	1223113	-37	-16	-11
NONE	NONE	52102	26858	42249	50920	63504	68847	99379	99562	98890	118429	100063	92	150	-16
OTTER	NONE	188521	514624	654988	290706	41340	151972	171586	95489	345660	313347	286144	52	-41	-9
PEL_SEINE	NONE	251947	266254	157776	186486	113645			53255	128000			-100	-100	
PEL_TRAWL	NONE	11673697	17106281	12924636	11287883	10022299	8781704	7785023	5592818	6726463	6652975	7892841	-32	-43	19
POTS	NONE	2662139	2717995	2783605	2729668	3439069	2936606	2957172	3334511	2863499	2593710	2467526	-7	-10	-5
LL1	CPART11										205044	145920			-29
TR1	CPART11								44284	234529	741328	883728			19
TR2	CPART11								1055383	933604	960648	855624			-11
Grand Total		16785425	22340494	18073811	15707334	14590850	13014656	12084271	11278121	12242937	12960359	13854958	-17	-26	7

3D, All reg gears, KWdays

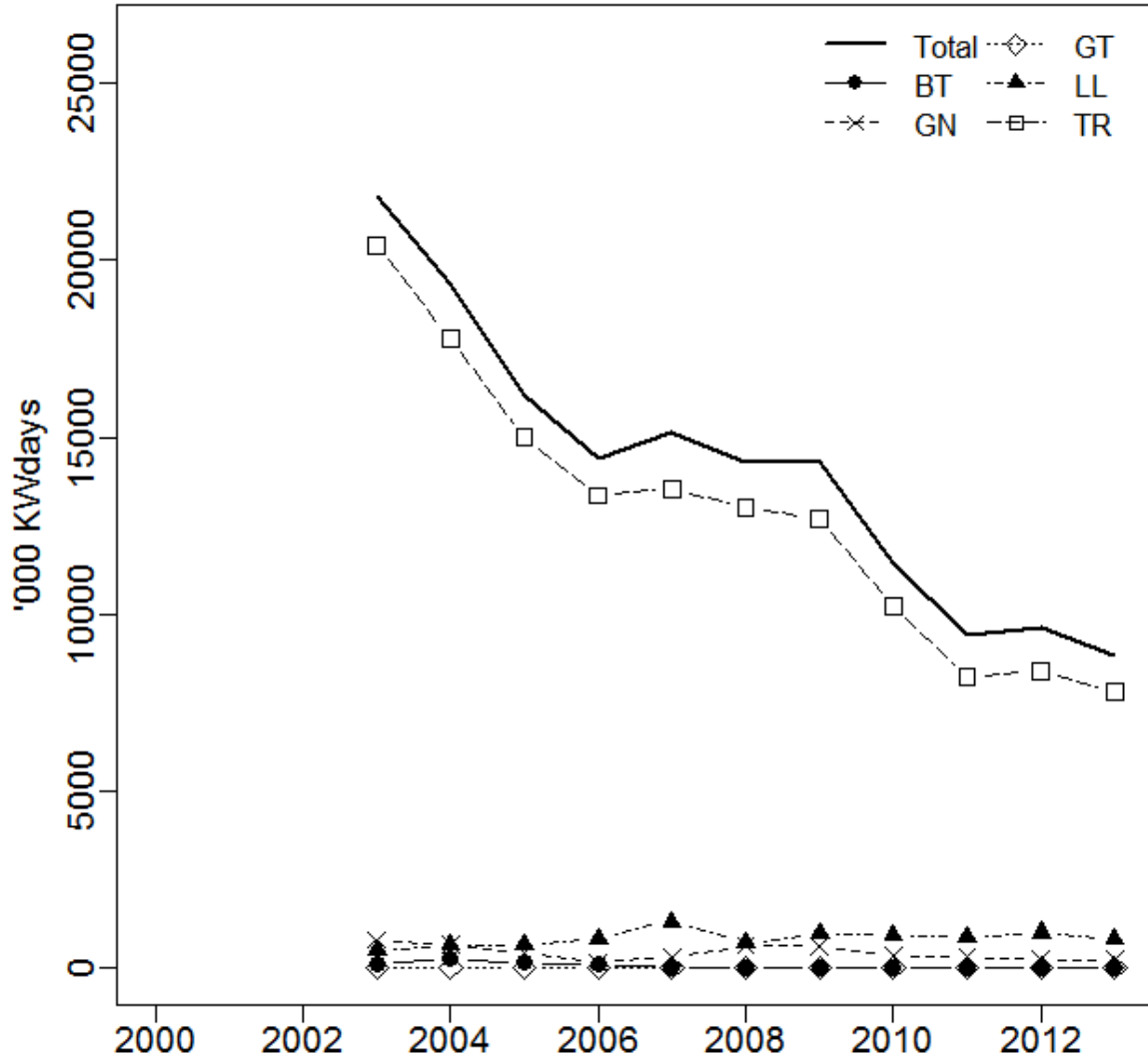


Figure 5.4.1.1 West of Scotland. Trend in nominal effort (kW*days at sea) by gear types as defined by Coun. Reg. 1342/2008, 2003-2013. Values exclude effort in categories exempted from effort control (CPart11).

3D, Reg gear TR, KWdays

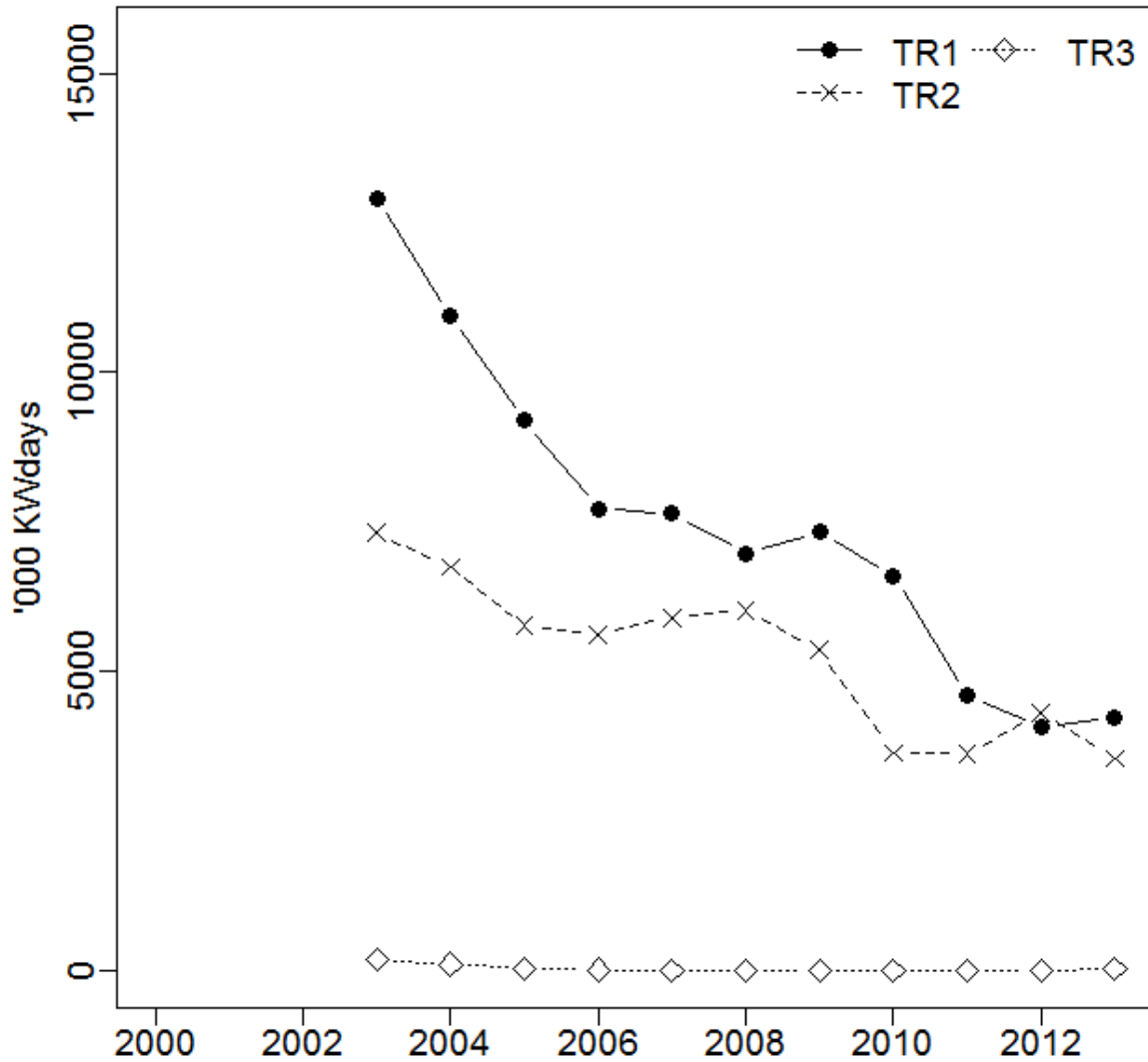


Figure 5.4.1.2 West of Scotland. Trend in nominal effort (kW*days at sea) by TR gear groups as defined by Coun. Reg. 1342/2008, 2003-2013. Values exclude effort in categories exempted from effort control (CPart11).

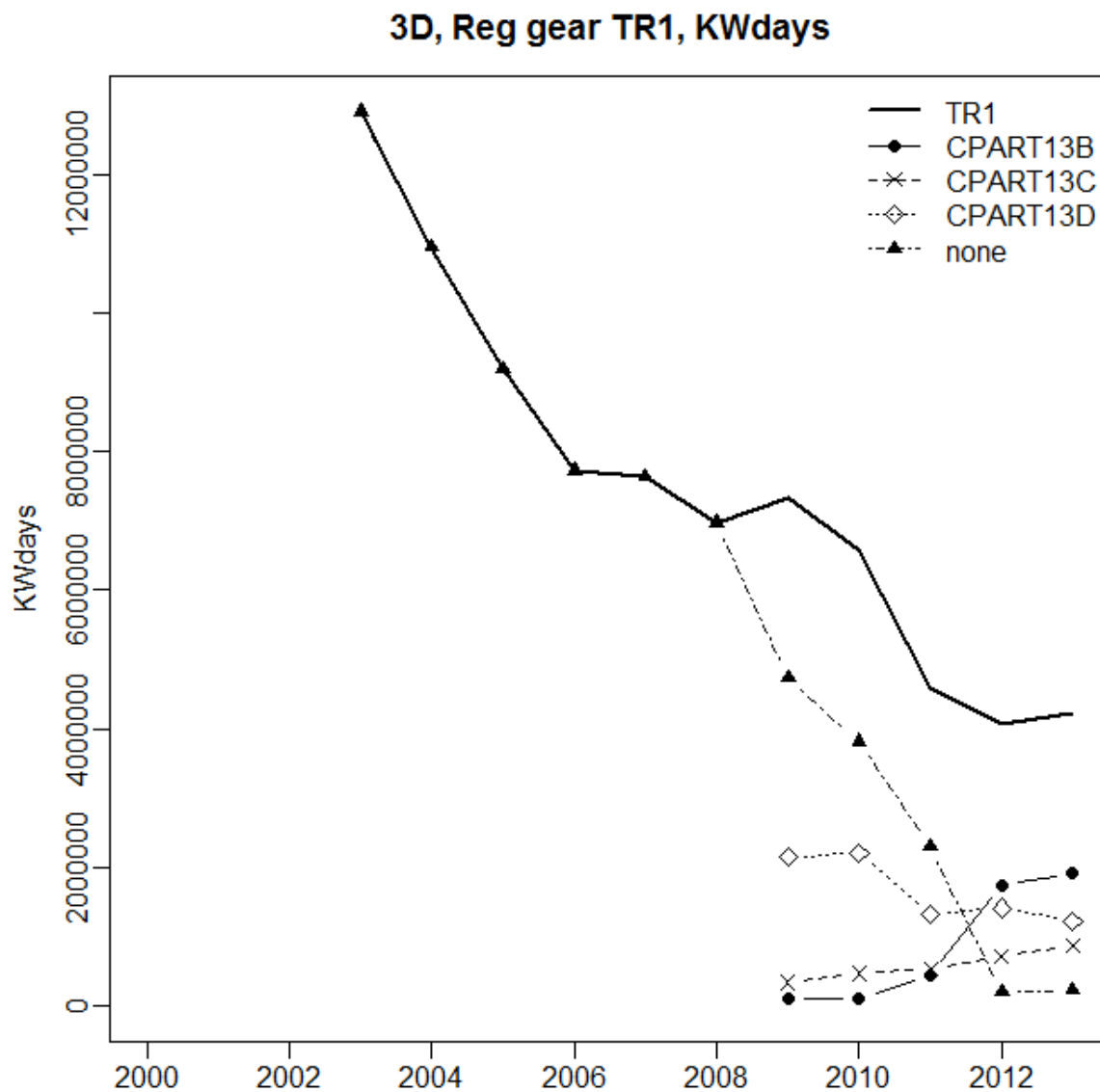


Figure 5.4.1.3 West of Scotland. Trend in nominal effort (kW*days at sea) by specon for regulated gear TR1. Line labelled TR1 represents the sum of the other lines. Categories exempted from effort control (CPart11) excluded.

3D, Reg gear TR2, KWdays

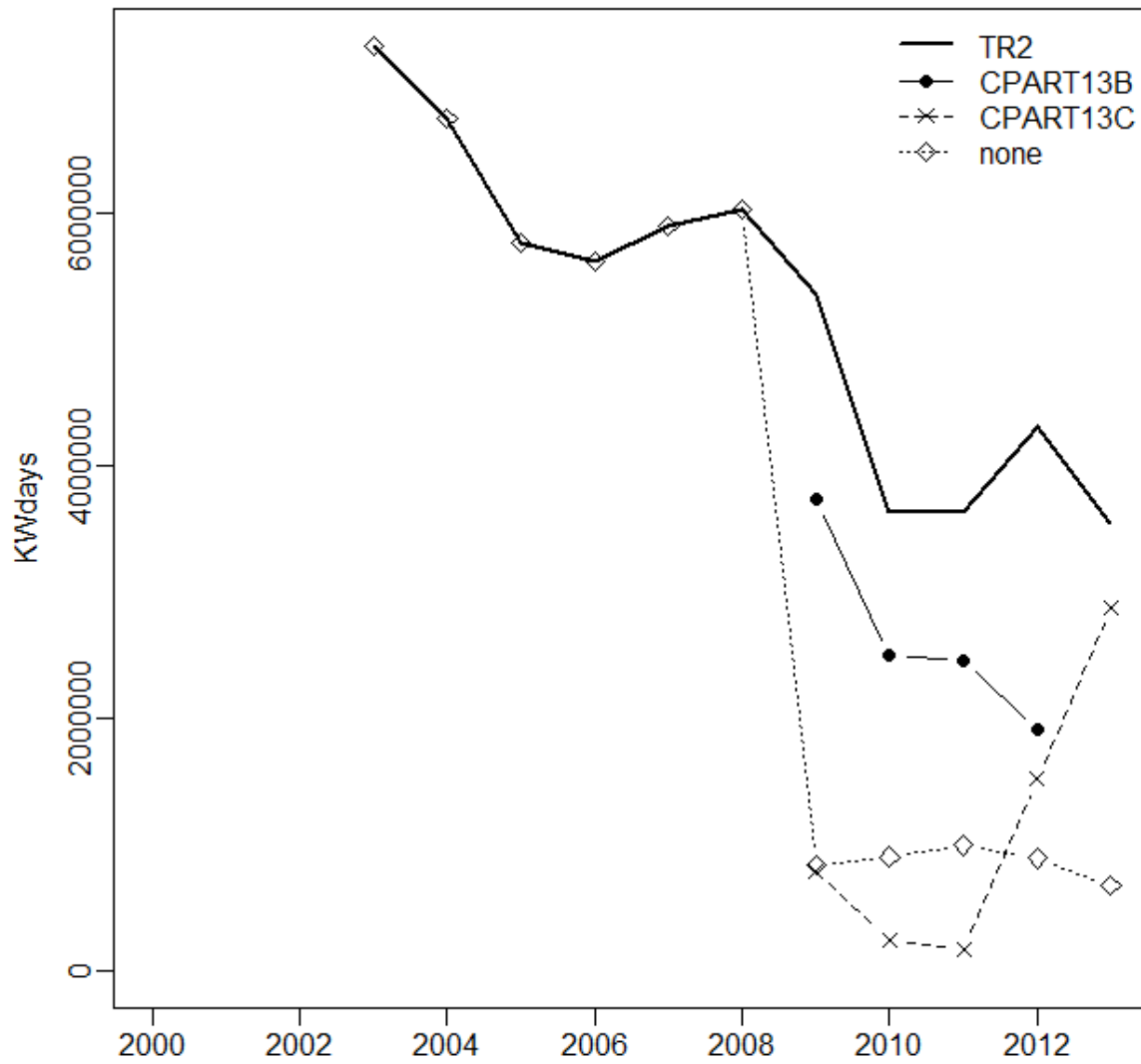


Figure 5.4.1.4 West of Scotland. Trend in nominal effort (kW*days at sea) by specon for regulated gear TR2. Line labelled TR2 represents the sum of the other lines. Categories exempted from effort control (CPart11) excluded.

3D, Reg vs Unreg gears, KWdays

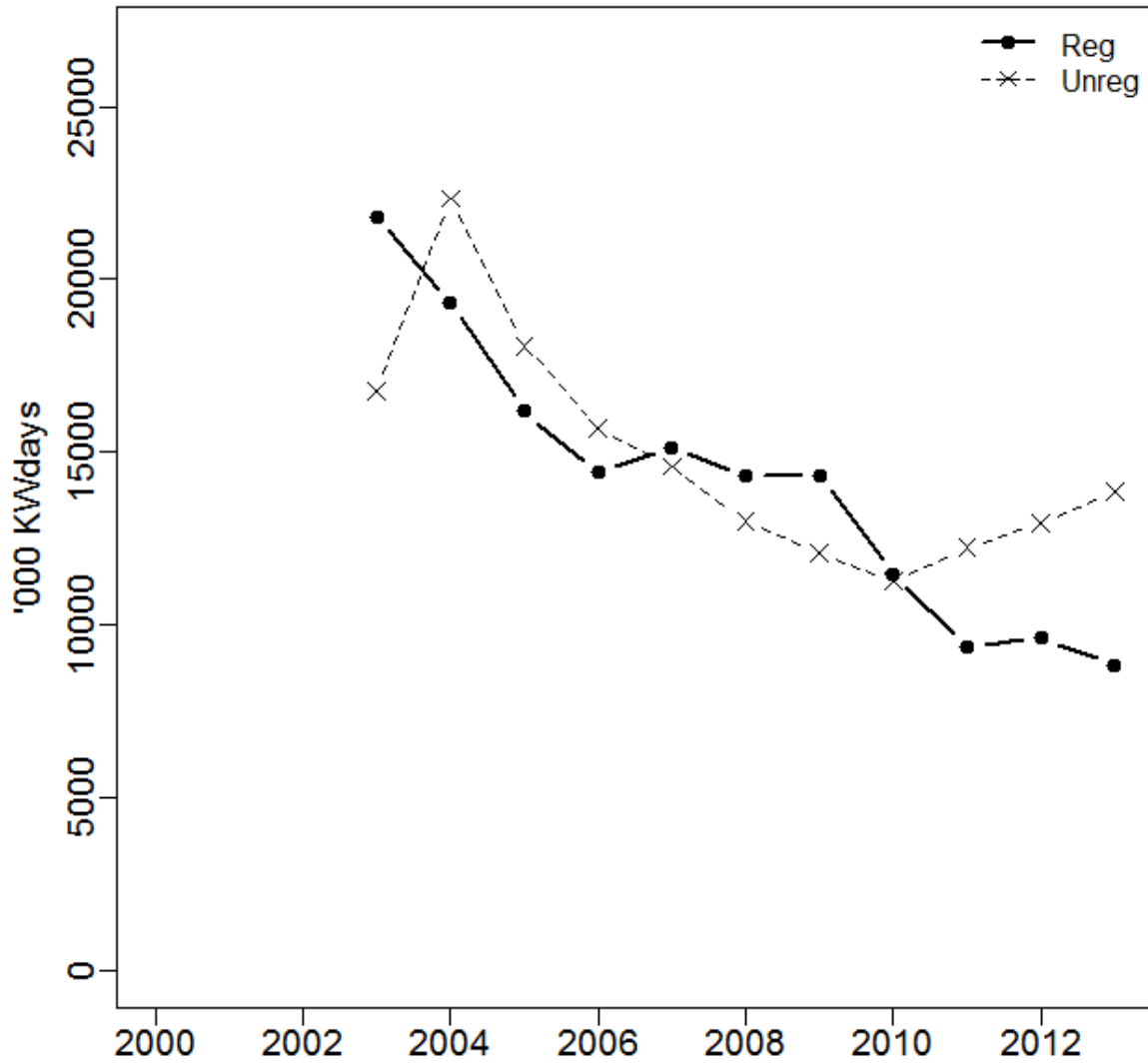


Figure 5.4.1.5 West of Scotland. Trend in nominal effort (kW*days at sea) by regulated gear groups (combined) as defined by Coun. Reg. 1342/2008 compared to unregulated gear groups (combined), 2003-2013. Unregulated effort includes gears with special conditions that exempt them from effort control (TR1 and TR2 with specon CPART11).

3D, All unreg gears, KWdays

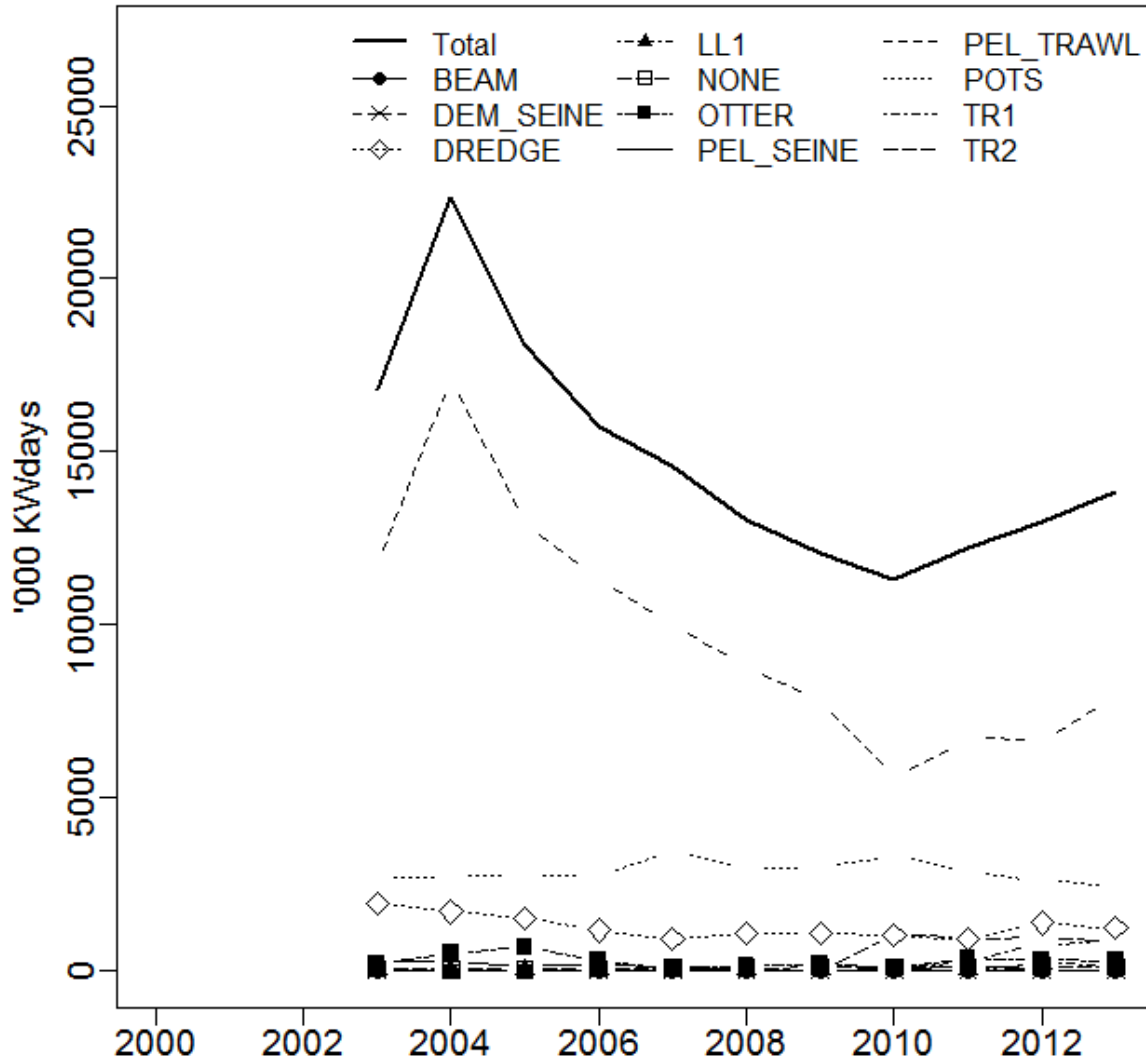


Figure 5.4.1.6 West of Scotland. Trend in nominal effort (kW*days at sea) by unregulated gear groups, 2003-2013. Unregulated effort includes gears with special conditions that exempt them from effort control (TR1 and TR2 with specon CPART11).

Information on trends in GT*days at sea and in the number of vessels active in the West of Scotland are presented in tables 5.4.1.5 and 5.4.1.6 respectively.

Table 5.4.1.5 – West of Scotland – 3d - Trends in GT*days at sea by existing derogations, 2004-2013. Derogations are sorted by gear, special condition, and country (o. 10m length vessels).

REG GEAR	SPECON	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
BEAM	NONE	IRL	2848									
BT1	NONE	FRA	5312									
		SCO	50073	44550	31348	1181						
BT2	NONE	BEL	6501	3157	1430	732						
		ENG	6911	1037								136
		FRA	14045									
		IRL	8157	1424	1780							2043
DEM_SEINE	NONE	SCO										
DREDGE	NONE	ENG	6488	9224	11959	7016	5605	4299	1228	5184	14992	2276
		FRA	99									
		IOM	2294	522	1954	2461	7525	2728	2545	4884	10190	9917
		IRL	6130	168	128	5715	2196			108	1578	95
		NIR	10289	7283	3074	5144	5013	13179	5225	1004	44671	19225
		SCO	329987	304292	231793	179578	225636	218065	212289	203408	282807	265143
GN1	NONE	ENG	129720	98841	12483	16707		7467	1371		413	
		FRA	68310	58531	49871	90384	230897	230897	121133	98682	85066	67586
		GER	36850	12730			16615	13176	16573	9882	9715	13359
		IRL	9740	44	777	3676	2812	957	96	323	15	3251
		NIR					369					
		SCO	47224	25230	289	87	826			6427	2737	3444
GT1	NONE	IRL		3315	88					51		15
		SCO	121									
LL1	CPART11	FRA									77824	55264
	NONE	ENG	237890	193945	175546	177134	14473				2539	67743
		ESP									331659	279502
		FRA			72269	171260	108491	108491	72090	65242		4
		IRL	8188	1335		7770			298	1453	726	412
		NIR		193								
		SCO	101144	182746	215188	287477	204145	322112	351533	351920	271046	166654
NONE	NONE	IRL					42		197		5479	2978
		SCO	4668	6677	5821	7424	12136	18371	19398	19294	18566	15240
OTTER	NONE	ENG	7476	4844	11478	7792	4126	11158			2124	452
		FRA								35763	74529	38766
		IRL	61027	3858	328	2737	9593	5626	7359	29925	732	
		NED										
		NIR	3155		195	131		450	89		65	3443
		SCO	158279	229293	98120	8897	49173	55658	27532	53002	40099	62427
PEL_SEINE	NONE	DEN										
		FRA										
		NIR	90405	54004	63320	38588			12580	50320		
		SCO							10248			
PEL_TRAWL	NONE	DEN	138393	77211	263116	63195	45890			53653	48635	22669
		ENG	287709	171206	645267	579380	464559	519793	293705	197990	74640	356534
		FRA	358166	156986	265084	274800	208028	208028	248284	149258	32746	182364
		GER	1060550	984820	1472970	1391100	855725	602788	418677	1207714	906795	1831722
		IRL	1537241	914681	904673	805111	938838	919822	732002	835008	980411	833170
		LIT						28497		149507		
		NED	6089478	5166292	4002474	3766189	3534630	2381472	1398785	1071985	1655420	2229091
		NIR	91820	40008	41640	51871	46474	27688	60183	112712	125560	190458
		SCO	2268589	1688646	923161	767036	579182	696451	608540	712240	647361	521716
POTS	NONE	ENG	66754	107014	65057	163808	29768	36841	40267	38723	30361	25045
		GBJ						102		333		
		GER		5160	4560	21770	7562	2587	25355	9333		769
		IRL	350009	324834	255039	281358	237577	194407	196772	143480	99472	108625
		NIR	53206	57793	45952	83533	66658	30929	38607	80293	38918	43296
		SCO	290678	291877	321080	361243	340448	382410	427486	363547	364382	341314

Table 5.4.1.5 cont. – West of Scotland – 3d - Trends in GT*days at sea by existing derogations, 2004-2013. Derogations are sorted by gear, special condition, and country (o. 10m length vessels).

REG GEAR	SPECON	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
TR1	CPART11	FRA									154006	257040		
		IRL								90101	173946	150006		
		SCO							11432	5367	1625	247		
	CPART13B	FRA										920435	949255	
		GER								2259		460		
		SCO							43544	37290	169538	1257		
	CPART13C	IRL							47408	42521	6979	5307	75	
		SCO							65040	130450	203409	274570	345826	
	CPART13D	IRL							111598	149776	89498	10661	12591	
		SCO							811206	797296	507315	624767	540014	
	NONE	ENG		61428	39662	20068	3477	6747		8938	5002	4577	1890	1501
		ESP											151265	109850
		FRA		2242488	2279838	1935378	1893901	1658107	1655998	1770792	1114422	7731	277	
		GER		8540	23420	14650	13340	1275	3194	1597				
		IOM											113	
		IRL		138416	151851	136497	212636	182886	70019	121513	51717	6267	29076	
		NIR		55697	27443	9251	11791	12549	13213	8150	1103		4303	
		SCO		1858886	1102686	855842	810330	807959						
		TR2	CPART11	SCO							245719	215354	216840	192018
CPART13B	SCO							907450	621769	643190	457344			
CPART13C	SCO							215984	54728	49228	518898	762981		
NONE	BEL					572	273			386				
	ENG			18264	14079	15973	12427	19654	4076	3527	5451	17844	13091	
	FRA			4236			322	104560	106669					
IOM			204	3	248		4							
IRL			367114	311971	291071	149987	78041	6561	3163	5809	6828	5316		
NED										1664	432			
NIR			97193	96417	122558	210217	184240	144082	242409	266988	223706	174672		
SCO		1284871	1085508	1034618	1112761	1179125								
TR3	NONE	DEN	47735		5130									
		IRL		144	34	127	7132	522		1713	730	166		
		NIR	76											
		SCO	2134	12010		82					1861	6998		
Total			20193206	16378803	14641202	14063956	12497291	11259951	9600226	9496071	10061056	11321451		

Table 5.4.1.6 – West of Scotland – 3d - Trends in number of vessels by existing derogations, 2004-2013. Derogations are sorted by gear, special condition, and country (o. 10m length vessels).

REG GEAR	SPECON	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
BEAM	NONE	IRL	1										
BT1	NONE	FRA	1										
		SCO	2	1	1	1							
BT2	NONE	BEL	2	1	1	1							
		ENG	2	1								2	
		FRA	4										
		IRL	2	1	1								1
DEM_SEINE	NONE	SCO											
DREDGE	NONE	ENG	3	4	4	3	5	2	1	3	7	2	
		FRA	1										
		IOM	3	2	4	3	4	5	2	4	7	3	
		IRL	3	1	1	2	1			1	1	1	
		NIR	5	5	2	3	3	6	6	5	11	6	
		SCO	63	63	61	43	39	45	41	40	47	49	
GN1	NONE	ENG	4	2	1	2		1	1		1		
		FRA	2	6	5	7	22	17	5	5	5	4	
		GER	3	1			2	1	2	1	1	1	
		IRL	3	1	3	5	5	4	2	2	1	4	
		NIR					1						
		SCO	3	3	1	2	2			1	1	1	
GT1	NONE	IRL		1	1					1		1	
		SCO	1										
LL1	CPART11	FRA									2	2	
	NONE	ENG	6	4	5	6	2				1	3	
		ESP									8	10	
		FRA			16	30	25	25	3	2		1	
		IRL	1	1		1			6	12	6	4	
		NIR		2									
SCO	4	3	6	7	7	13	12	9	7	4			
NONE	NONE	IRL					1		1		5	2	
		SCO	5	6	4	8	8	7	7	9	8	12	
OTTER	NONE	ENG	1	1	3	1	1	1			1	1	
		FRA								2	2	1	
		IRL	5	2	3	2	2	2	5	7	1		
		NED											
		NIR	1		1	1		1	1		1	2	
		SCO	15	9	14	8	8	15	11	6	11	11	
PEL_SEINE	NONE	DEN											
		FRA											
		NIR	1	1	1	1			1	1			
		SCO							1				
PEL_TRAWL	NONE	DEN	6	4	11	4	2			1	2	2	
		ENG	2	2	3	2	3	4	4	3	4	3	
		FRA	28	14	14	17	17	17	2	1	2	3	
		GER	4	3	4	4	3	3	3	4	2	4	
		IRL	40	30	40	42	41	39	48	50	52	49	
		LIT						1		1			
		NED	11	13	9	8	9	6	6	5	7	7	
		NIR	3	3	3	3	3	3	3	3	3	3	
		SCO	30	24	23	18	20	18	21	20	18	20	
		POTS	NONE	ENG	4	5	4	7	3	4	3	5	4
GBJ								1		1			
GER				1	1	1	1	1	2	1		1	
IRL	13			11	24	35	33	33	34	32	31	30	
NIR	5			4	4	6	7	6	6	4	5	6	
SCO	71	74	81	84	77	78	83	85	75	73			

Table 5.4.1.6 cont. – West of Scotland – 3d - Trends in number of vessels by existing derogations, 2004-2013. Derogations are sorted by gear, special condition, and country (o. 10m length vessels).

REG GEAR	SPECON	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
TR1	CPART11	FRA									2	6		
		IRL								5	5	5		
		SCO							2	2	2	2		
	CPART13B	FRA										5	5	
		GER								2		1		
		SCO							8	7	8	2		
	CPART13C	IRL							9	8	7	3	1	
		SCO							7	7	16	15	37	
	CPART13D	IRL							11	12	14	5	6	
		SCO							42	33	24	29	27	
	NONE	ENG	ENG	7	3	2	1	1	1	1	1	1	1	
			ESP										4	3
		FRA	FRA	158	132	162	105	87	72	13	11	11	3	1
			GER	2	2	2	1	1	1	1				
			IOM											1
IRL		IRL	7	14	12	15	17	13	17	17	16	7	8	
		NIR	17	15	8	5	6	5	4	4	1		1	
SCO		SCO	53	39	38	36	39							
										43	42	42	39	
TR2	CPART11	SCO							43	42	42	39		
	CPART13B	SCO						131	83	81	65			
		SCO						26	10	9	71	99		
	NONE	BEL			1	1				1				
		ENG	ENG	7	3	5	6	8	3	3	6	8	6	
			FRA	3			1	7	7					
		IOM	2	1	1		1							
		IRL	IRL	27	28	19	22	16	6	5	5	4	5	
			NED									1	1	
		NIR	NIR	28	26	36	34	28	32	60	71	73	53	
SCO			138	111	117	111	115							
TR3	NONE	DEN	2		1									
		IRL		1	1	1	2	1		3	2	1		
		NIR	1											
		SCO	4	3		1						3	1	
Grand Total			820	688	765	708	685	734	635	650	694	639		

5.4.2 ToR 1.b and c Catches (landings and discards) of cod and non-cod species in weight and numbers at age by fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.4.3 ToR 1.d CPUE and LPUE of cod by fisheries and by Member States

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.4.4 ToR 2 Rank regulated gear groups on the basis of catches expressed both in weight and in number of cod

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.4.5 ToR 3 Information on small boats (<10m)

Activity by vessels <10m in area 3d (west of Scotland) was recorded by France, IOM, UK(EWNI) and UK(Scotland). Ireland supplied landings data. Descriptions of the type and quality of data available for assessing effort and landings of vessels <10m can be found in section 4.

5.4.5.1 Fishing effort of small boats by Member State

Effort by nation and gear type is shown in Table 5.4.6.1.

Overall effort is 11% higher in 2013 compared to 2003 although it has been relatively stable since 2006. Greatest effort comes from Scottish vessels deploying pots. The effort employed in

this category to a certain extent dictates the perception of overall effort changes in this region. The second largest effort total is for Scottish vessels employing TR2 gear. Effort in this category is roughly one eighth that in pots and has declined from a high in 2006, although increased again in 2013 as a result of English TR2 effort. Although small in absolute terms compared to Scottish effort there have been large increases in Northern Irish effort in pots up until 2011, this is followed by a 21% drop in effort from 2011-2013. Northern Irish dredging effort has also increased significantly recently and is now comparable to Scottish dredging effort, although both declined by between 25-30% in 2013.

Table 5.4.6.1 West of Scotland. Effort (kW*days) of vessels under 10 metres by gear type and Member State, 2003-2013. The average of 04-06 was used as the effort baseline for the cod

REG AREA	REG GEAR	SPECON	COUNTRY	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	rel chng 03	rel chng 04-06	rel chng 12
3D	DREDGE	NONE	ENG	536			2726				825	990	6920	1074	100	-61	-84
3D			IOM	2728			774								-100	-100	
3D			NIR	252		13886	14934	10218	10819	17595	19622	22454	42135	29943	11782	108	-29
3D			SCO	84393	104545	66603	19995	31968	57077	34484	34256	41033	45207	33432	-60	-48	-26
3D	GN1	NONE	NIR											464			
3D			SCO			56	468	1800	6493							-100	
3D	GT1	NONE	SCO					368			610	342	225				-100
3D	LL1	NONE	ENG									10					
3D			FRA								1419						
3D			NIR							66				406			
3D			SCO	25			51	241	740	664	410	2205	1296	2528	10010	4856	95
3D	NONE	NONE	SCO	110078	125306	120513	163399	124414	116648	164375	182992	210052	208226	224580	104	65	8
3D	OTTER	NONE	ENG				783			75				1805			131
3D			NIR								112						
3D			SCO	9008	7717	18258	20563	5222	5669	2366	4390	5075	3833	1221	-86	-92	-68
3D	POTS	NONE	ENG	3380	194	7137	1682	8794	1500	11417	1219	7710	3014	3947	17	31	31
3D			NIR	7518	4191	2700	74328	92327	115948	90049	101479	117849	99252	92128	1125	240	-7
3D			SCO	2743791	2775120	3080793	3690442	3625560	3200012	3354454	3498490	3090422	2990277	3070025	12	-4	3
3D	TR1	NONE	SCO	1266	496	359	2789	2837	969	1991	5272	2685	3444	6323	399	421	84
3D	TR2	NONE	ENG	9260	3987	11052	6941	14620	12354	1343	217	5476	2279	15670	69	114	588
3D			NIR	8934	5756	1379	8683	5427	6125	7857	15903	13696	19555	9359	5	77	-52
3D			SCO	502576	484133	456538	532719	485139	479805	441125	398362	350432	396510	373161	-26	-24	-6
3D	TR3	NONE	SCO	116											-100		
Total				3483861	3511445	3779274	4541277	4408935	4014159	4127861	4265578	3870431	3822173	3866065	11	-2	1

management plan.

5.4.5.2 Catches (landings and discards) of cod and associated species by small boats by Member State

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.4.6 *ToR 4 Spatio-temporal patterns in effective effort by fisheries*

Spatial figures of effort for area 3d concentrate on those categories identified as significant in terms of recorded effort (see previous section 5.4.1) and in terms of catches of cod (section 5.4.2). From section 5.4.2 catches of plaice and sole are shown to be small for all gear categories in the west of Scotland area and these species were not considered when deciding on categories to present here. Figures use a common scale across years for a given category (e.g. TR1) but scales are unique to each category therefore the colours assigned to statistical rectangles for category TR1 cannot be compared directly to those assigned for category TR2. Figures are based on absolute values. This is after data values across all years have been combined for that category. Zero values are removed first.

TR1 (Figure 5.4.8.1) – Effort is greatest in the north of the area with a distinct line of high effort in statistical rectangles straddling or close to the shelf edge. At the start of the time series a rectangle in the far south east of the area (mouth of the Clyde) had one of the highest recorded levels of effort. This area was the location for a specific cod fishery now subject to seasonal closures. The reduction in overall effort within this gear category is clear. CPart11 vessels in 2013 contributed little effort per ICES statistical rectangle. In the rectangles of highest CPart11 effort there was only 1000-1200 trawled hours effort.

TR2 (Figure 5.4.8.2) – It can be seen that vessels using gear in the TR2 category primarily belong to coastal fisheries. These vessels target Nephrops on well defined fishing grounds with muddy substrate. Highest effort is consistently just north of the boundary between management areas 3d and 3c (mouth of the Clyde). Remaining important rectangles are adjacent to the Scottish mainland, in particular between the Scottish mainland and the Outer Hebrides (known as the north and south Minches). The time series shows a contraction of effort in towards these areas of greatest activity. In 2013 CPart11 vessels contributed a large proportion of the effort in the north and south minches in comparison to a relatively small contribution of effort on the boundary between management areas 3d and 3c (see Figures 5.4.8.2.1 and 5.4.8.2.2). Note the scales for Figures 5.4.8.2.1 and 5.4.8.2.2 are unique and therefore not directly comparable.

LL1 (Figure 5.4.8.3) – There is a concentration of effort along the continental shelf edge throughout the time series.

GN1 (Figure 5.4.8.4) – Overall effort recorded for this category is low but LPUE of cod is currently the highest behind the TR gears. Until 2005 effort generally took place offshore and was split between an area in the north west of ICES division VIa and an area to the west of Ireland. Subsequently effort shifted until in 2008 there appeared to be a new concentration of effort in the north of area VIa but now located on the continental shelf edge.

The following are unregulated gear types but given the importance of unregulated gear effort relative to regulated gear effort (see Figure 5.4.1.5) they are shown to provide background information on the three unregulated gear types with highest effort.

PEL_TRAWL: (Figure 5.4.8.5) – Primarily an offshore fishery, (targeting herring), between 2003 and 2005 greatest effort was expended in the far north east corner of area VIa. Highest effort is at the shelf edge but overall effort has decreased before stabilizing from 2010.

POTS (Figure 5.4.8.6) – Vessels using pots target Nephrops and edible crabs west of Scotland and effort is concentrated in coastal waters of Scotland from the southern border of area VIa north as far as the North Minch. There is no indication of a spatial shift in effort or of a change in overall effort.

DREDGE (Figure 5.4.8.7) – West of Scotland dredge fishing is used to catch scallops. Greatest effort seems to have shifted from the South Minch area to coastal areas further south (including the Clyde). This switch was particularly evident in 2012 and 2013, with a high level of effort in the south.

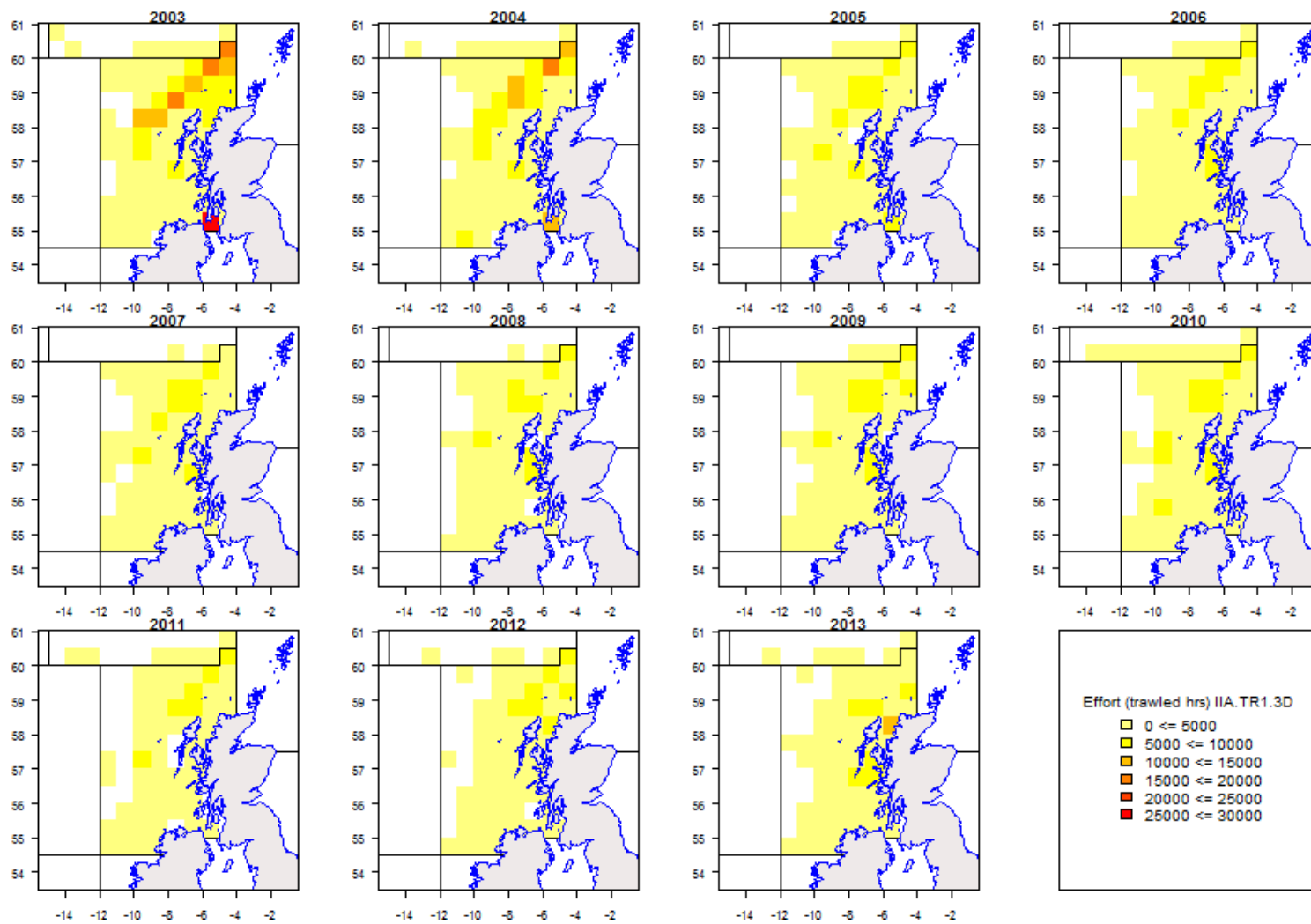


Figure 5.4.8.1 West of Scotland. Effort (trawled hours) by ICES statistical rectangle for TR1, 2003-2013. These figures include effort carried out under special condition CPart11.

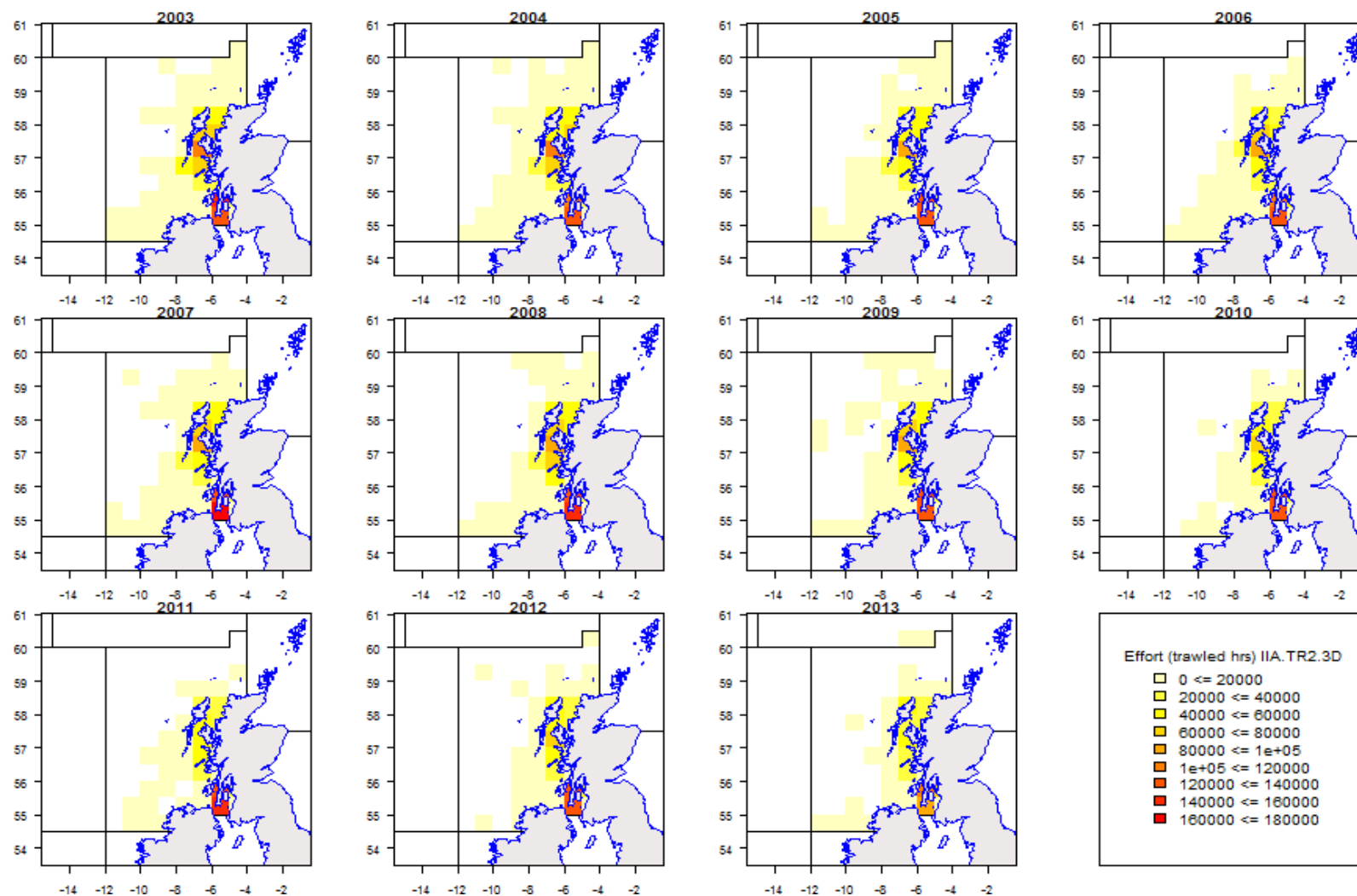


Figure 5.4.8.2 West of Scotland. Effort (trawled hours) by ICES statistical rectangle for TR2, 2003-2013. These figures include effort carried out under special condition CPart11.

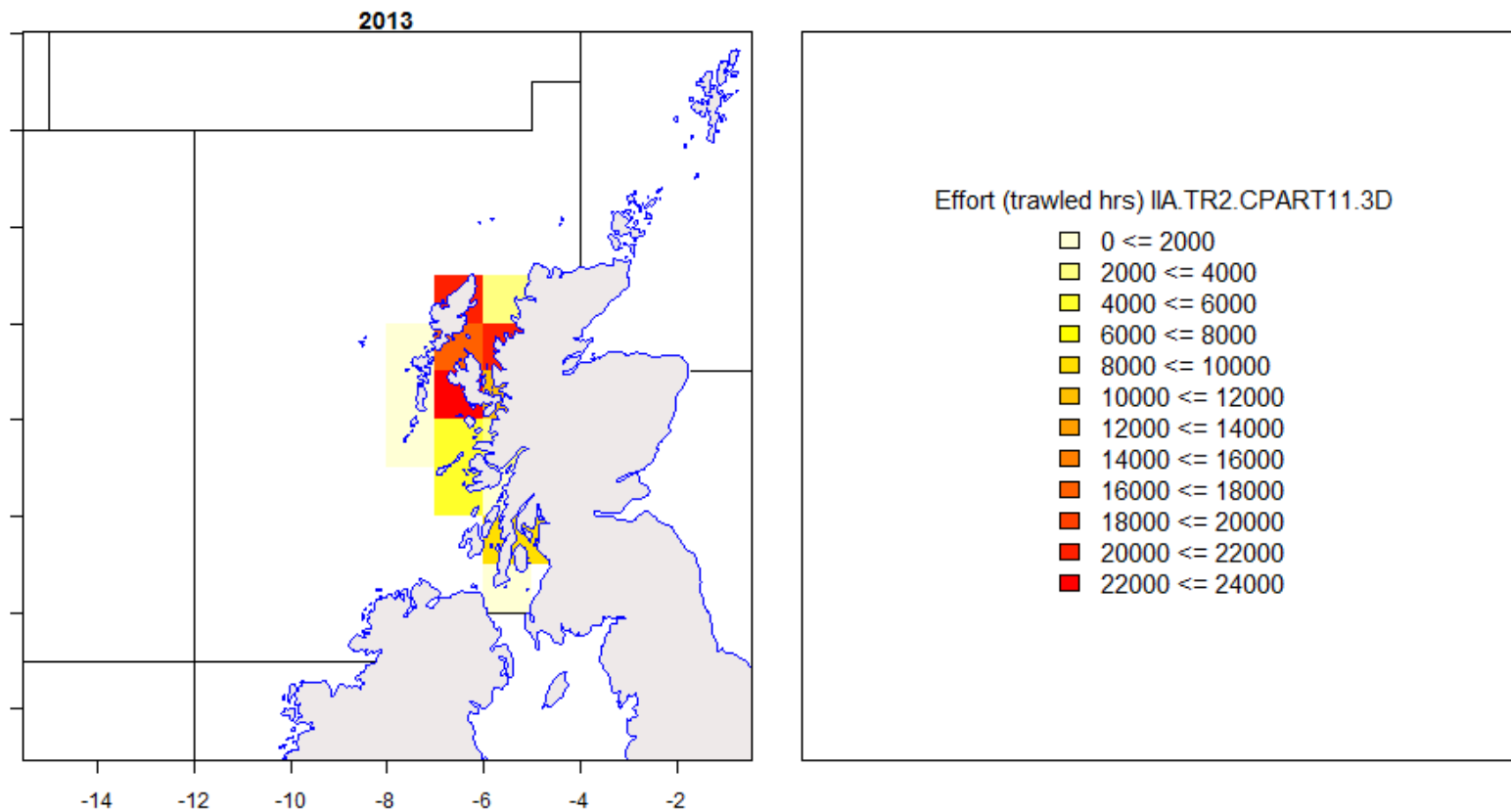


Figure 5.4.8.2.1 West of Scotland. Effort (trawled hours) by ICES statistical rectangle for TR2 vessels under CPart11, 2003-2013.

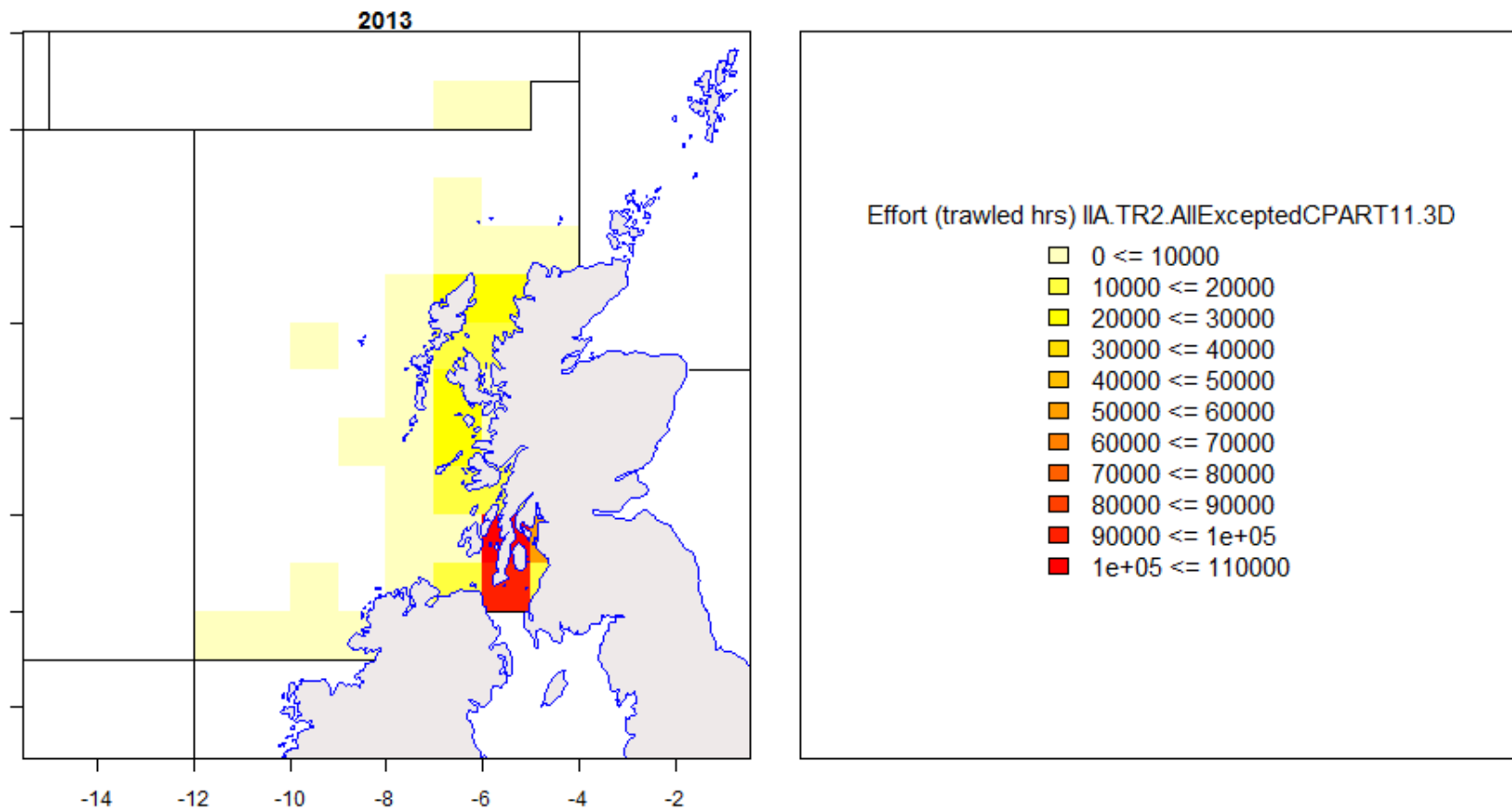


Figure 5.4.8.2.2 West of Scotland. Effort (trawled hours) by ICES statistical rectangle for all TR2 vessels except those under CPart11, 2003-2013.

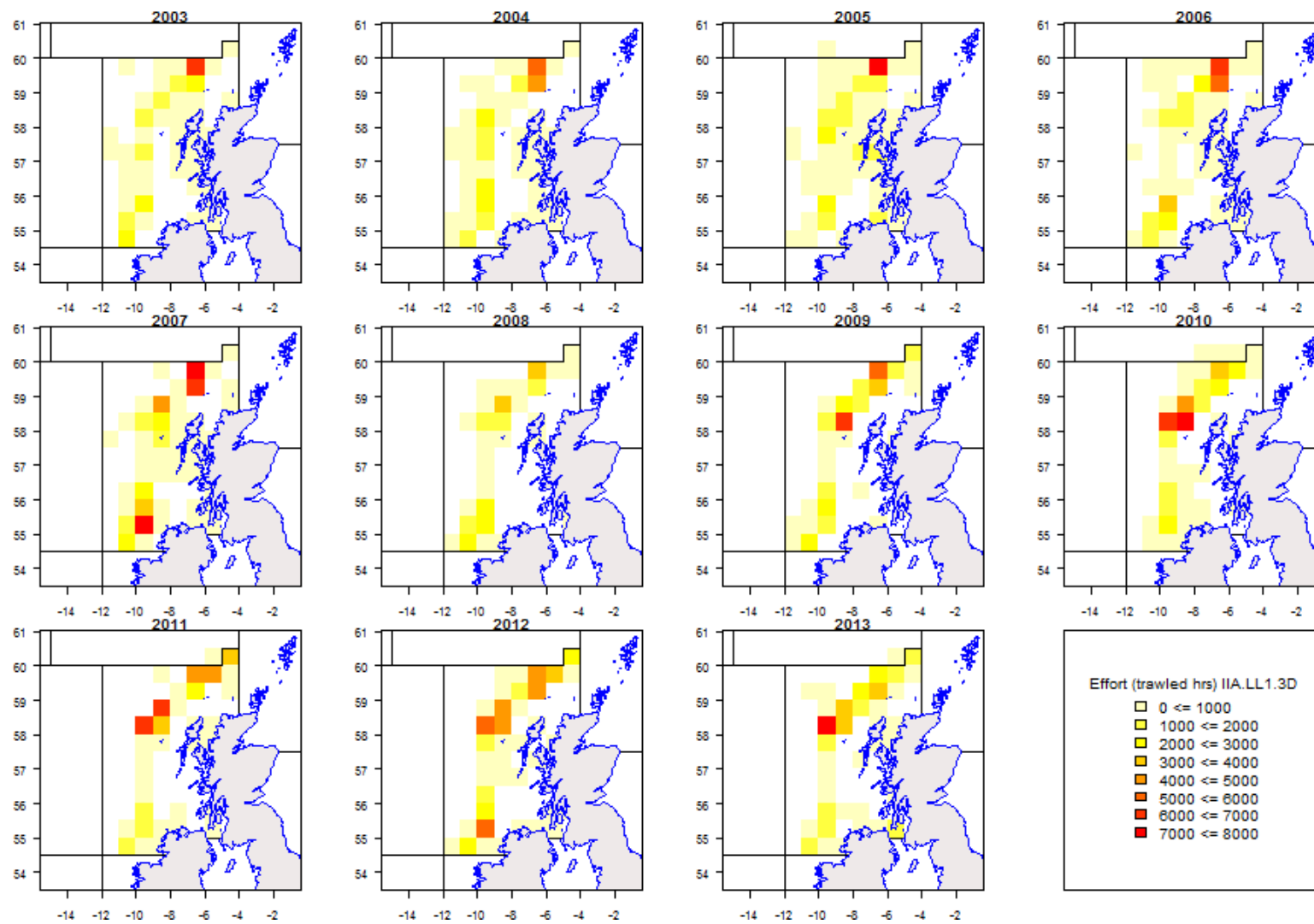


Figure 5.4.8.3 West of Scotland. Effort (trawled hours) by ICES statistical rectangle for LL1, 2003-2013.

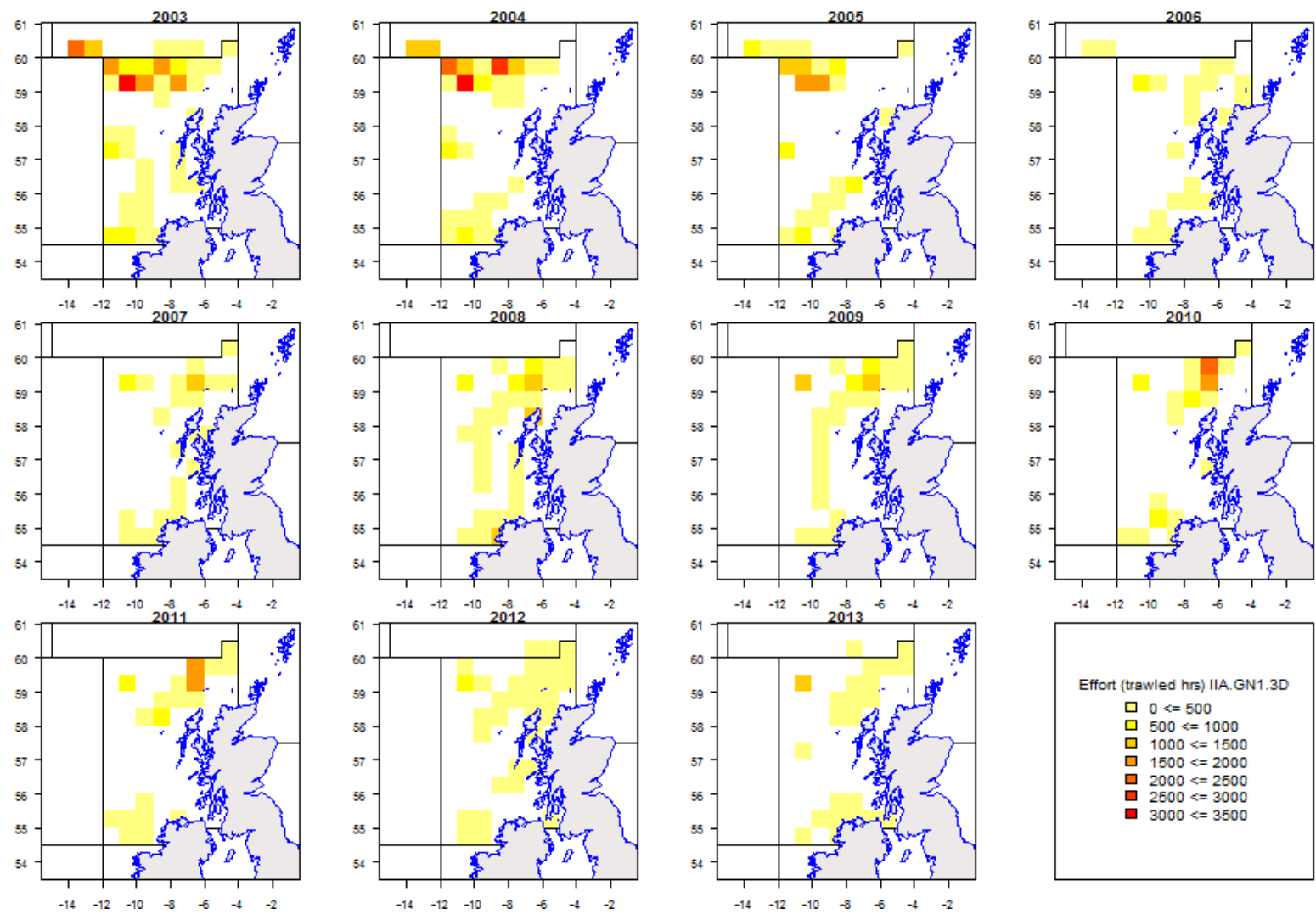


Figure 5.4.8.4 West of Scotland. Effort (hours) by ICES statistical rectangle for GN1, 2003-2013.

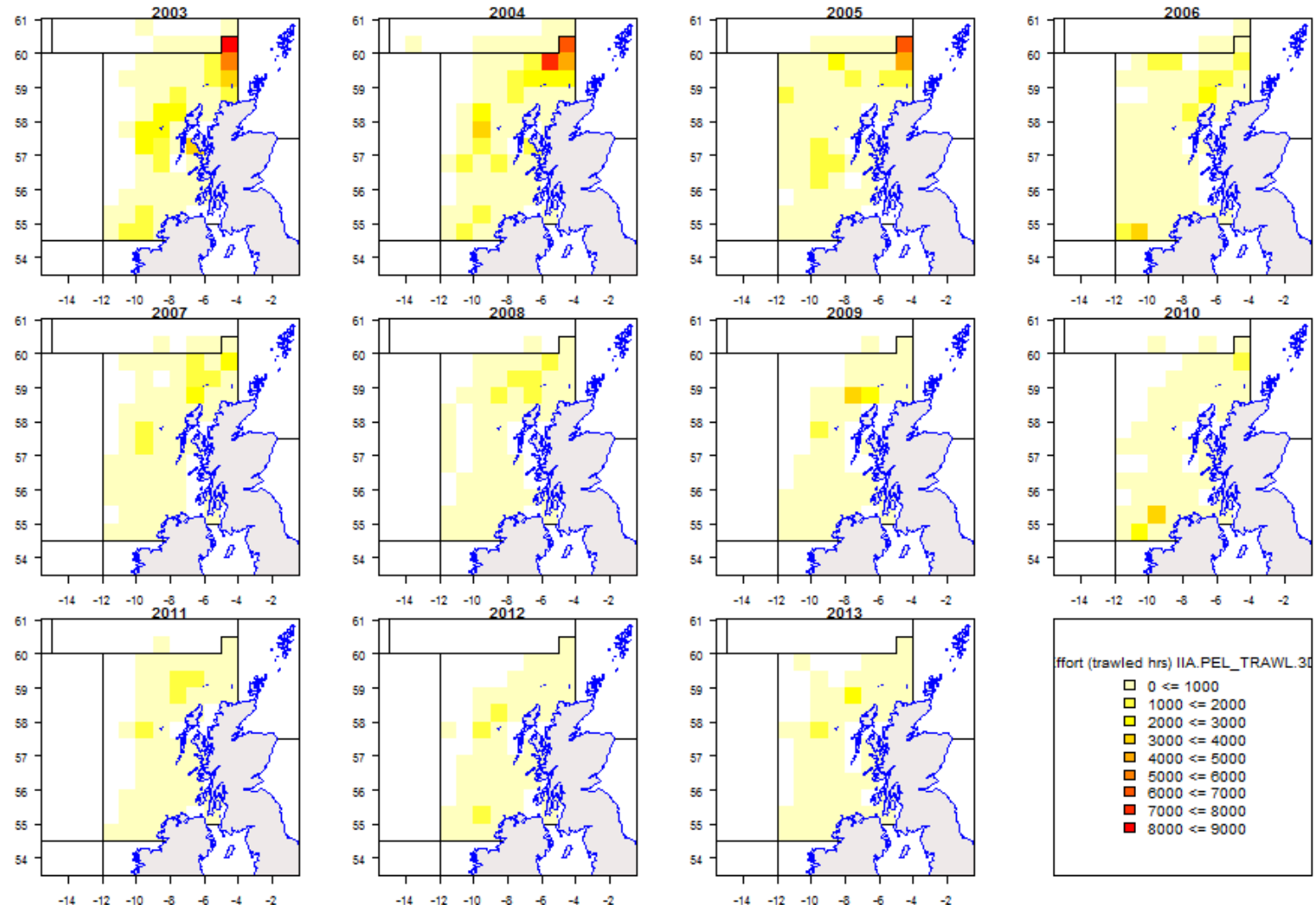


Figure 5.4.8.5 West of Scotland. Effort (hours) by ICES statistical rectangle for unregulated gear PELAGIC TRAWL, 2003-2013

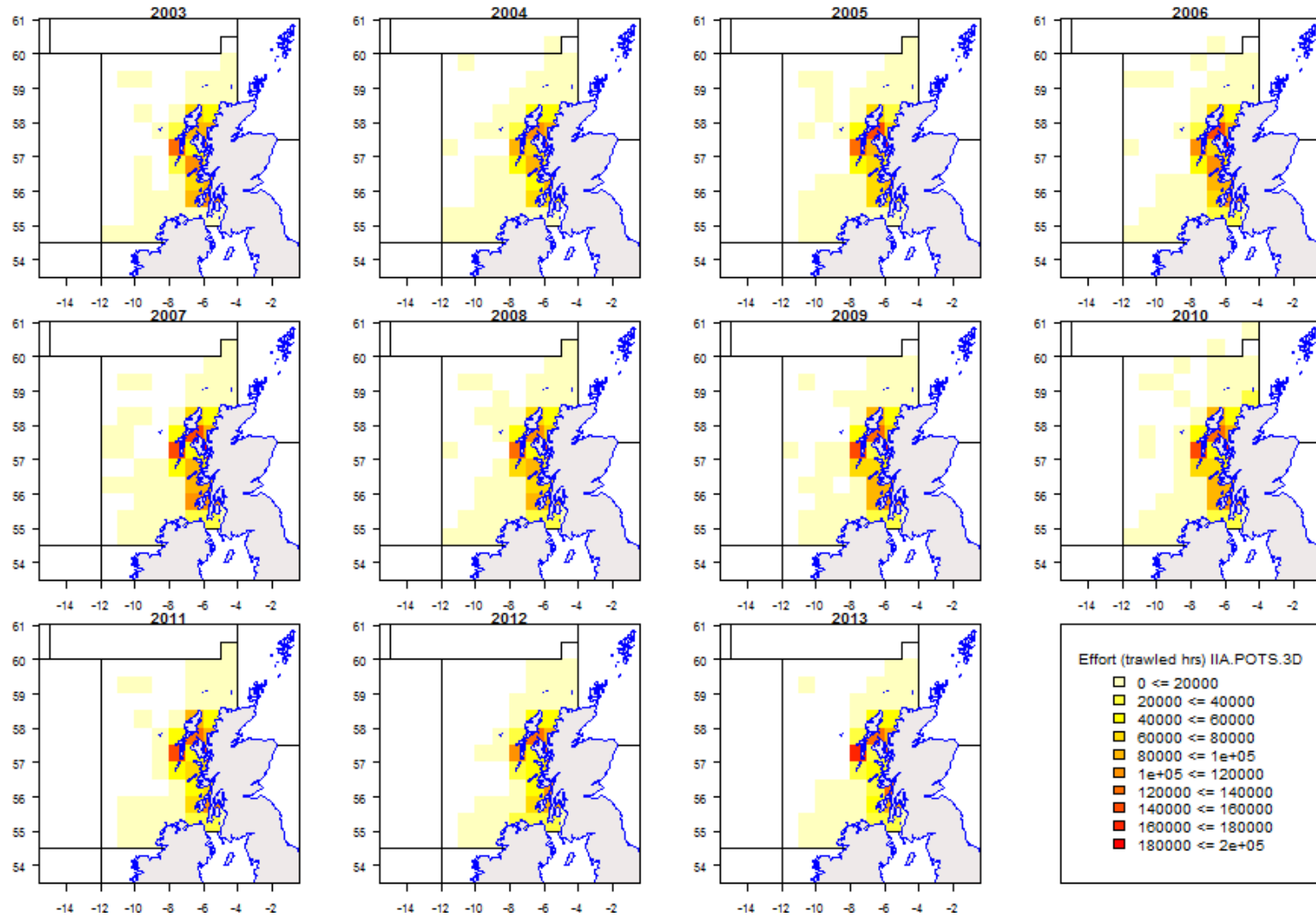


Figure 5.4.8.6 West of Scotland. Effort (hours) by ICES statistical rectangle for unregulated gear POTS, 2003-2013

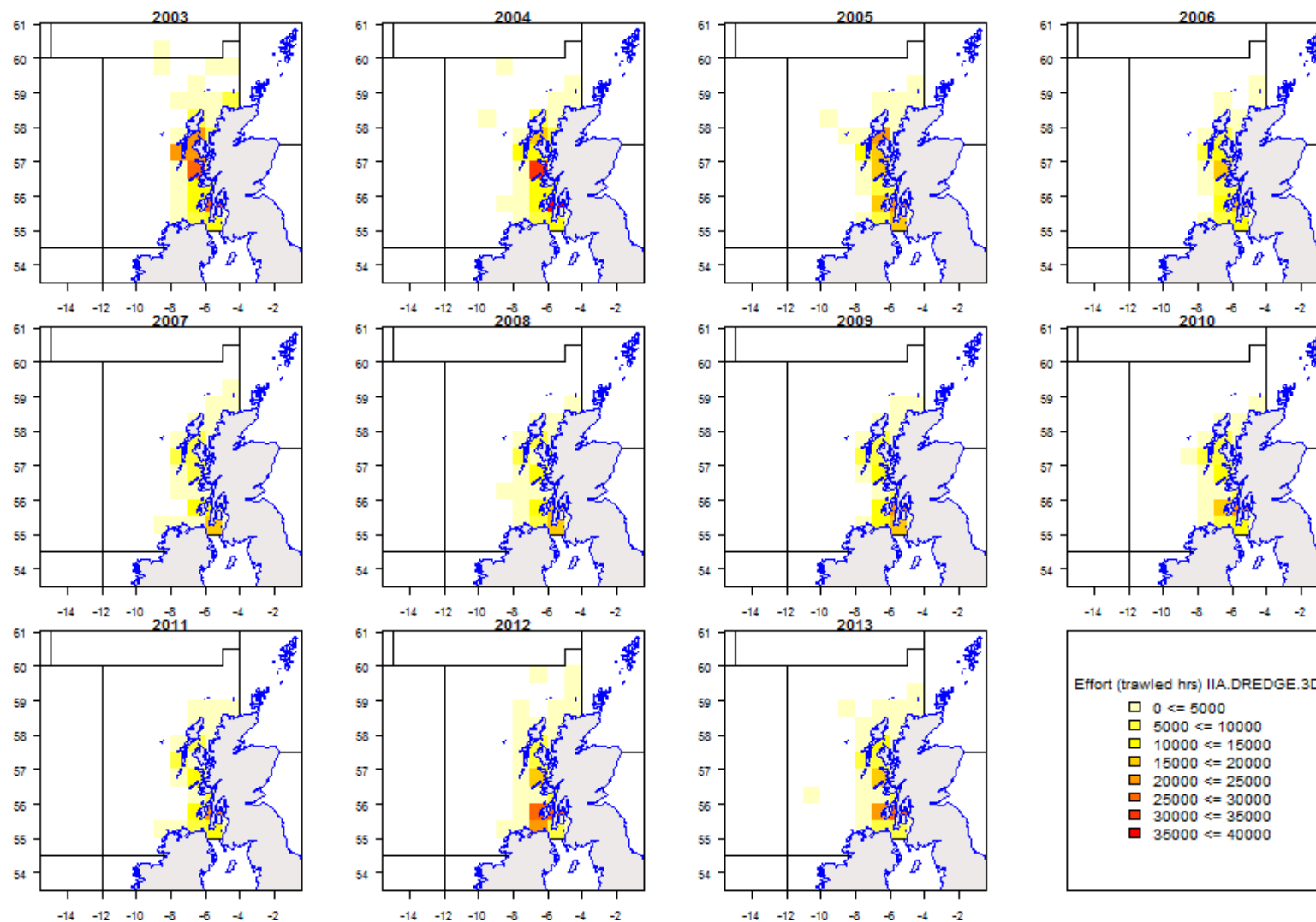


Figure 5.4.8.7 West of Scotland. Effort (hours) by ICES statistical rectangle for unregulated gear DREDGE, 2003-2013

5.4.7 ToR 5 Remarks on quality of catches and discard estimates

General comments on the quality of catch and discard estimates has been provided in section 4.

5.4.8 ToR 6 Estimation of conversion factors to be applied for effort transfers between regulated gear groups

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.4.9 ToR 7 Correlation between partial cod mortality and fishing effort by Member State and fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.4.10 ToR 8 Comparative analyses between trends in fishing mortality and fishing effort by Member State and fisheries and the cod plan (R (EC) No 1342/2008) provisions, in particular with regard to Article 13

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.4.11 ToR 9 Considerations in order to accomplish spatio-temporal pattern in standardized catchability indices for cod

STECF EWG 14-06 notes that estimating catchabilities using landings information can only be meaningful if discarding is low. This is not the case for cod west of Scotland.

5.5 Irish Sea effort regime evaluation in the context of Annex IIA to Council Regulation (EC) No 57/2011)

5.5.1 ToR 1.a Fishing effort in kWdays, GTdays, kW and number of vessels by Member State and fisheries

Effort within the Irish Sea has been compiled for kW*days-at-sea, GT*days-at-sea, capacity in kW and numbers of vessels. Within the report focus is on kW*Days at sea and brief discussion of the newly available capacity. Information on GT*days at sea and numbers of vessels is available via the website: <http://stecf.jrc.ec.europa.eu/web/stecf/ewg1406>

Data submissions affecting the Irish Sea were limited to 2013 for all nations bar Ireland which also submitted revised values for 2012, changes were limited to those detailed in Table 5.5.1.1.

Tables 5.5.1.2 and 5.5.1.3 detail nominal effort, in kW*days-at-sea, by nation and then aggregated by gear and special condition according to Annex I of Coun. Reg. 1342/2008 (new cod plan). These tables show a 37% decline in Irish Sea nominal effort since 2000, the majority of which occurred between 2003 and 2009, since 2009 effort has remained relatively constant. In relation to effort by gear, discussions are primarily focused on data from 2003 onwards. This is due to the unavailability of Irish mesh size information prior to 2003 resulting in Irish effort occurring within the 'none' category which encompasses unidentified effort and effort by gears and mesh sizes not regulated under the cod plan. See below for further description of this category.

Irish Sea fisheries are predominantly demersal trawling and seining (TR group). Combined, TR effort mirrors the overall effort trend (Figure 5.5.1.1) representing 55-60% of total Irish Sea effort. This includes the small amount of effort (2-5%) excluded from effort regulation in the last three years. As part of regulated gears, the TR group accounted for over 70% from 2003 and >80% from 2008. Within the TR group, the TR2 category (70-99mm mesh sizes) dominates (Table 5.5.1.3 and Figure 5.5.1.2), and effort had been relatively stable between 2003 and 2008. An effort reduction occurred in 2009, coinciding with the introduction of the current cod plan, since then effort has remained at the reduced level. The majority of TR2 effort is now carried out under Article 13 of Coun. Reg. 1342/2008 (CPart13; Figure 5.5.1.3). CPart13 is broken down into its constitute parts (Figure 5.5.1.4), much of the effort began as category C (avoidance), switching to category B (<5% cod) and then moving to highly selective gear (category A; <1.0% cod). In addition an amount under category A (technical changes) relates to the use of the Swedish grid (prior to exemption under article 11), separator panels (these includes Seltra 300 mm box trawl, 270 mm diamond mesh panel Seltra box trawl, and 300 mm square mesh panel) within the *Nephrops* fishery. A small amount of effort is reported under Article 11 of the regulation (CPart11) since 2010, 4-9%. Effort within TR1 (≥ 100 mm mesh sizes) is currently at a very low level. This group underwent a large decline in effort between 2003 and 2007, since then effort has continued to decline at a slower rate. The majority of TR1 was assigned to CPart13 (mostly category C, and category B to a lesser extent) categories in 2009-2011 (~80%), while in 2012 much of the effort exited CPart13 into the no special condition category.

Beam trawling, exclusively BT2 in the Irish Sea, declined greatly between 2003 and 2008. The gear has continued at a low level over the last three years (accounting for around 10% of Irish Sea effort), and is currently indicating a slight decrease (Table 5.5.1.3). Note, Belgium beam trawl effort within the Irish Sea contains assumed mesh sizes, as described in Section 4. Of the remaining regulated gears, gillnetting occurs at very low levels <0.5% (Figure 5.5.1.1) while GT1 and LL1 show negligible effort accounting for less than 0.5% of total effort.

Category 'none none' represents gear types and mesh sizes not regulated by Coun. Reg. 1342/2008 effort restrictions. This category includes effort assigned to special condition CPart11 which is exempt from effort restrictions through the use of cod avoidance measures (discussed above). A large proportion of the 'none none' group prior to 2003 was due to Irish effort reported without mesh size information. Once Irish mesh size information became available in 2003, the 'none' category decreased substantially. Effort within this category has increased over the last seven years and currently accounts for 44% of Irish Sea effort. These increases primarily result from dredge and pot activity (Figure 5.5.5.1), in addition to the appearance of CPart11 effort within this category. Low levels of effort also occur within the pelagic trawl category.

Capacity was submitted at the highest level of aggregation and summations across certain groups are misleading due to double counting of vessels active within the area over multiple metiers, years or quarters. The annual values presented here and available on the website are the maximum capacity of a quarter. However, regulated gears (Table 5.5.1.5) and unregulated gear capacity (Table 5.5.1.6) can be observed. Since 2009 there has been a slight general increase in capacity, with an unexplained peak in 2012 dropping once more in 2013. Northern Ireland and Ireland have the greatest capacity of those provided for this area, utilizing primarily TR2 gears. Dredges have the greatest unregulated capacity with a slow increasing trend over time, primarily Scottish, followed by France.

Table 5.5.1.1. Irish Sea relative differences in nominal effort (kW*days at sea) to 2013 submissions by Member State by Annex I, Coun. Reg. 1342/2008. Only those differing combinations are displayed. Sorted by gear, derogation (SPECON), and country.

ANNEX	REG AREA	REG GEAR	COUNTRY	SPECON	LENGTH	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
IIA	3C	POTS	IRL	NONE	O10T15M	0	0	0	0	0	0	0	0	0	0.002
IIA	3C	TR2	IRL	CPART13A	O10T15M	0	0	0	0	0	0	0	0	0	0.009
IIA	3C	DREDGE	IRL	NONE	O10T15M	0	0	0	0	0	0	0	0	0	0.017
IIA	3C	TR1	IRL	NONE	O15M	0	0	0	0	0	0	0	0	0	0.046
IIA	3C	DREDGE	IRL	NONE	O15M	0	0	0	0	0	0	0	0	0	0.151
IIA	3C	TR2	IRL	CPART13A	O15M	0	0	0	0	0	0	0	0	0	0.222
IIA	3C	TR2	IRL	NONE	O15M	0	0	0	0	0	0	0	0	0	1.966

Table 5.5.1.2. Irish Sea trends in nominal effort (kW*days at sea) by gear groups of Annex I, Coun. Reg. 1342/2008 and Member State, 2000-2013. Sorted by gear, derogation (SPECON), and country. Data qualities are summarised in Section 4.

ANNEX	AREA	GEAR	SPECON	COUNTRY	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
IIA	3C	BT2	CPART13B	ENG								718		8619	
IIA	3C	BT2	NONE	BEL	1884843	1482831	1694567	1153947	956953	554841	624989	649225	690853	616775	368886
IIA	3C	BT2	NONE	ENG	172354	68579	161500	59199	31112	17349	5808	1810	41222	13240	221
IIA	3C	BT2	NONE	GBJ	40878	42260	3542								
IIA	3C	BT2	NONE	IRL	860849	414446	514653	481404	550975	374494	173927	218054	212313	179498	142034
IIA	3C	BT2	NONE	NED			5884								
IIA	3C	BT2	NONE	SCO					1074	1378					
IIA	3C	GN1	CPART13B	ENG										765	
IIA	3C	GN1	CPART13B	NIR							2140				
IIA	3C	GN1	NONE	ENG	14872	12326	10011	8378	3930	4297	684	2260	3602	1097	190
IIA	3C	GN1	NONE	FRA			838							4414	
IIA	3C	GN1	NONE	IRL	92103	63069	26672	29531	47941	40957	22219	22172	20333	9000	2925
IIA	3C	GN1	NONE	NED				161							715
IIA	3C	GN1	NONE	NIR		222									
IIA	3C	GN1	NONE	SCO			895								
IIA	3C	GT1	NONE	ENG				475	656	1066	2788	984	1476		2144
IIA	3C	GT1	NONE	FRA										180	
IIA	3C	GT1	NONE	IRL						1327	1237				
IIA	3C	LL1	NONE	ENG	44138	58414	93773	59656	12238	840	924		1543	5001	2059.4
IIA	3C	LL1	NONE	IRL		800				24199		620	146	3625	
IIA	3C	LL1	NONE	SCO	3247										2610
IIA	3C	LL1	NONE	SPN										372	269.75
IIA	3C	TR1	CPART11	IOM										687	10486.15
IIA	3C	TR1	CPART13A	NIR											30993.97
IIA	3C	TR1	CPART13B	ENG				2541	2310		5544	5319		10416	
IIA	3C	TR1	CPART13B	NIR							29532	47406	25968	28260	
IIA	3C	TR1	CPART13B	SCO								390		536	
IIA	3C	TR1	CPART13C	ENG							16316	19792	14364	7988	7100
IIA	3C	TR1	CPART13C	NIR							364594	306824	147347	12091	7276
IIA	3C	TR1	CPART13C	SCO								1273	407	13504	2588.13
IIA	3C	TR1	NONE	ENG	399886	197351	94201	66364	14536	5932					
IIA	3C	TR1	NONE	FRA	264447	167253	180515	109174	67487	19701	19701	6668	6138	18034	4739
IIA	3C	TR1	NONE	IOM		9070	362	172		649	895				
IIA	3C	TR1	NONE	IRL	381119	157955	87263	84550	141442	73625	60348	73585	56161	127170	174540
IIA	3C	TR1	NONE	NED						442					734
IIA	3C	TR1	NONE	NIR	2055358	1162035	872476	785815	343025	498488					
IIA	3C	TR1	NONE	SCO	92514	32104	3889	3104							
IIA	3C	TR2	CPART11	IOM							21982	22808	153825	108428	114025.8
IIA	3C	TR2	CPART11	IRL								107511	231706	206698	196939
IIA	3C	TR2	CPART11	SCO								9055			
IIA	3C	TR2	CPART13A	IRL							98492	115391	392685	1205066	783550
IIA	3C	TR2	CPART13A	NIR										240258	2788701
IIA	3C	TR2	CPART13B	ENG				12243	17787	15246	11319	116327	46765	87715	9073
IIA	3C	TR2	CPART13B	NIR							235743	1450621	1820787	2225228	
IIA	3C	TR2	CPART13B	SCO							23350	17981	42035	82657	
IIA	3C	TR2	CPART13C	ENG							160679	65836	109946	66348	140236
IIA	3C	TR2	CPART13C	IOM											8127.41
IIA	3C	TR2	CPART13C	NIR							2895541	1336192	863528	213809	
IIA	3C	TR2	CPART13C	SCO							7569		1713	28113	90783.54
IIA	3C	TR2	NONE	BEL		13541	43486	34052	76789	67534	29980	14283	29125	20947	13525
IIA	3C	TR2	NONE	ENG	211774	347848	287791	235204	225834	204211					
IIA	3C	TR2	NONE	FRA	588		2352		810						395
IIA	3C	TR2	NONE	IOM	18628	10826	27205	5427	29763	14592					
IIA	3C	TR2	NONE	IRL	1242769	1386883	1475114	1452830	1583605	1300696	733216	673091	445123	34019	
IIA	3C	TR2	NONE	NIR	3395323	3138292	3213416	2959511	3143032	3326397					
IIA	3C	TR2	NONE	SCO	44656	93770	34415	7435	16808	21995					
IIA	3C	TR3	NONE	DEN	992										
IIA	3C	TR3	NONE	ENG	134										
IIA	3C	TR3	NONE	IRL	900	90	3305	960		436			179	634	381
Total of regulated gears					11231442	8851257	8837935	7551961	7268756	6570938	5548622	5286196	5359290	5581587	4905854
IIa	3c	none	none	BEL	528					53686		41044	65538	16550	
IIa	3c	none	none	ENG	648435	546205	596195	688014	589585	506163	442687	490590	459843	527265	510547.4
IIa	3c	none	none	FRA	1694				906	2844	2844	1180	4982	1296	131
IIa	3c	none	none	GBG						397	11116	1119			
IIa	3c	none	none	GBJ	74180	76378	17726	11996	35952	53500	78825	62274	52172	68016	59920
IIa	3c	none	none	IOM	10154	6782	5194	10315	14170	47908	3908	10953	37165	37298	382160
IIa	3c	none	none	IRL	611981	830250	417215	436077	445217	396694	437256	630794	670709	760399	727317
IIa	3c	none	none	NED		14520	12797	525	4725	54075	17118	3960		663	7920
IIa	3c	none	none	NIR	303426	256628	249139	273483	289130	352026	270031	307264	291270	303954	530639.9
IIa	3c	none	none	SCO	901594	725105	807056	603817	940554	1260522	1371630	1028690	1087235	949306	1049857
IIa	3c	none	none	SPN										735	323.4
Total of unregulated gears					2551992	2455868	2105322	2024227	2320239	2727815	2635415	2577868	2668914	2665482	3268816
Overall total					13783434	11307125	10943257	9576188	9588995	9298753	8184037	7864064	8028204	8247069	8174670

Table 5.5.1.3 Trend in nominal effort (kW*days at sea) by effort group (Coun. Reg. 1342/2008), 2003-2013.

Annex	REG AREA	REG GEAR	SPECON	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Relative change to 2004	Relative change to 2009
			CPart13a											30994		
Ila	3c	TR1	CPart13B				2541	2310		35076	53115	25968	39212			
Ila	3c	TR1	CPart13c							380910	327889	162118	33583	16964		-0.96
Ila	3c	TR1	none	3202394	1717060	1238516	1049007	567139	599083	80049	80253	62299	145204	180013	-0.90	1.25
Ila	3c	TR1 Total		3202394	1717060	1238516	1051548	569449	599083	496035	461257	250385	217999	227971	-0.87	-0.54
Ila	3c	TR2	CPart13a							98492	115391	392685	1445324	3572251		35.27
Ila	3c	TR2	CPart13B				12243	17787	15246	270412	1584929	1909587	2395600	9073		-0.97
Ila	3c	TR2	CPart13c							3063789	1402028	975187	308270	239147		-0.92
Ila	3c	TR2	none	4913738	4991160	5083779	4694459	5076641	4935425	763196	687374	474248	55361	13525	-1.00	-0.98
Ila	3c	TR2 Total		4913738	4991160	5083779	4706702	5094428	4950671	4195889	3789722	3751707	4204555	3833996	-0.23	-0.09
Ila	3c	TR3	none	2026	90	3305	960		436			179	634	381	3.23	
Ila	3c	TR3 Total		2026	90	3305	960		436			179	634	381	3.23	
Ila	3c	BT2	CPart13B								718		8619			
Ila	3c	BT2	none	2958924	2008116	2380146	1694550	1540114	948062	804724	869089	944388	809513	511141	-0.75	-0.36
Ila	3c	BT2 Total		2958924	2008116	2380146	1694550	1540114	948062	804724	869807	944388	818132	511141	-0.75	-0.36
Ila	3c	GN1	CPart13B							2140			765			-1.00
Ila	3c	GN1	none	106975	75617	38416	38070	51871	45254	22903	24432	23935	14511	3830	-0.95	-0.83
Ila	3c	GN1 Total		106975	75617	38416	38070	51871	45254	25043	24432	23935	15276	3830	-0.95	-0.85
Ila	3c	GT1	none				475	656	2393	4025	984	1476	180	2144		-0.47
Ila	3c	GT1 Total					475	656	2393	4025	984	1476	180	2144		-0.47
Ila	3c	LL1	none	47385	59214	93773	59656	12238	25039	924	620	1689	8998	4939	-0.92	4.35
Ila	3c	LL1 Total		47385	59214	93773	59656	12238	25039	924	620	1689	8998	4939	-0.92	4.35
Ila	3c	none	none	2551992	2455868	2105322	2024227	2320239	2727815	2635415	2577868	2668914	2665482	3268816	0.33	0.24
Ila	3c	TR1	CPART11										687	10486		
Ila	3c	TR2	CPART11							21982	139374	385531	315126	310965		13.15
Ila	3c	None Total		2551992	2455868	2105322	2024227	2320239	2727815	2657397	2717242	3054445	2981295	3590267	0.46	0.35
Grand Total				13783434	11307125	10943257	9576188	9588995	9298753	8184037	7864064	8028204	8247069	8174670	-0.28	0.00

Table 5.5.1.4. Irish Sea trends in unregulated effort (kW*days at sea), according to Annex 1 of Con. Reg. 1342/2008, by major gear type, 2003-2013.

Annex	Area	REG	GEAR	COUNTRY	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Ila	3c	BEAM	ENG		7360	1966	25324	8221	8992	26350	9508	1788	988	186	26060
Ila	3c	BEAM	IRL		23853	159015									
Ila	3c	BEAM	NED											663	
Ila	3c	BEAM	NIR					145		3639	370				720
Ila	3c	DEM_SEIN	ENG					142							
Ila	3c	DEM_SEIN	IRL			759									
Ila	3c	DREDGE	BEL							53686		41044	65538	16550	
Ila	3c	DREDGE	ENG		225232	197412	196065	313285	238677	265214	212467	261604	303072	382980	326296
Ila	3c	DREDGE	FRA									251	4401		131
Ila	3c	DREDGE	GBJ		2968										
Ila	3c	DREDGE	IOM		8573	5387	5194	9987	14170	17732	3908	10953			347946
Ila	3c	DREDGE	IRL		413698	342029	170130	151968	223441	176175	197039	281497	353159	386321	424537
Ila	3c	DREDGE	NED					525	4725	54075	17118				
Ila	3c	DREDGE	NIR		135202	137511	111692	99662	106536	145080	100503	113048	77853	121370	287671
Ila	3c	DREDGE	SCO		894237	724139	777599	572146	905364	1226238	1276319	943377	1013183	872719	968500
Ila	3c	NONE	FRA						906						
Ila	3c	NONE	IRL							96				220	20799
Ila	3c	NONE	SCO				2130								1780
Ila	3c	OTTER	BEL		528										
Ila	3c	OTTER	ENG		62	76	1416	112	820				188	95	
Ila	3c	OTTER	FRA											736	
Ila	3c	OTTER	IRL		24648	99895	4109	3940			455	2380	291	4007	1894
Ila	3c	OTTER	NED												
Ila	3c	OTTER	NIR		696		179	2560				3120		9550	16767
Ila	3c	OTTER	SCO		5792	966		414				828		290	1520
Ila	3c	PEL_SEINE	FRA		1694								285	560	
Ila	3c	PEL_SEINE	IRL		560	5872									
Ila	3c	PEL_SEINE	NIR		45458	22042	61552	34310		1131					
Ila	3c	PEL_SEINE	SPN											735	323
Ila	3c	PEL_TRAW	ENG		12729		7200					13440			
Ila	3c	PEL_TRAW	FRA									792			
Ila	3c	PEL_TRAW	IRL		48375	146806	127361	59473	24970	13968	10980	74946	38999	81914	48761
Ila	3c	PEL_TRAW	NED			14520	12797					3960			7920
Ila	3c	PEL_TRAW	NIR		87890	65982	49486	93380	140424	104430	92084	108198	167634	117316	146633
Ila	3c	PEL_TRAW	SCO				14700								
Ila	3c	POTS	ENG		403052	346751	366190	366254	341096	214599	220712	213758	155595	144004	158192
Ila	3c	POTS	FRA							2844	2844	137	296		
Ila	3c	POTS	GBG							397	11116	1119			
Ila	3c	POTS	GBJ		71212	76378	17726	11996	35952	53500	78825	62274	52172	68016	59920
Ila	3c	POTS	IOM		1581	1395		328		30176			37165	37298	34214
Ila	3c	POTS	IRL		100847	75874	115615	220696	196806	206455	228782	271971	278260	287937	231326
Ila	3c	POTS	NIR		34180	31093	26230	43426	42170	97746	77074	82898	45783	55718	78849
Ila	3c	POTS	SCO		1565		12627	31257	35190	34284	95311	84485	74052	76297	78057
Ila	3c	TR1	IOM											687	10486
Ila	3c	TR2	IOM								21982	22808	153825	108428	114026
Ila	3c	TR2	IRL									107511	231706	206698	196939
Ila	3c	TR2	SCO									9055			
Grand Total					2551992	2455868	2105322	2024227	2320239	2727815	2657397	2717242	3054445	2981295	3590267

Table 5.5.1.5. Irish Sea trends in maximum capacity (kW) of regulated gears, according to Annex 1 of Con. Reg. 1342/2008, by major gear type, 2000-2013.

ANNEX	AREA	GEAR	SPECON	COUNTRY	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
IIa	3c	BT2	CPART13B	ENG								221		221	
IIa	3c	BT2	NONE	BEL	10533	10901	10176	8008	7614	5403	5251	5590	4958	4432	2976
IIa	3c	BT2	NONE	ENG	9400	3317	4452	2444	880	881	663	406	914	628	221
IIa	3c	BT2	NONE	GBJ	1216	1357	738								
IIa	3c	BT2	NONE	IRL							1578	1798	2240	1798	2759
IIa	3c	BT2	NONE	NED											
IIa	3c	BT2	NONE	SCO				537	106						
IIa	3c	GN1	CPART13B	ENG										741	
IIa	3c	GN1	CPART13B	NIR							428				
IIa	3c	GN1	NONE	ENG	851	678	478	205	396	205	89	473	205	205	95
IIa	3c	GN1	NONE	FRA										1177	
IIa	3c	GN1	NONE	IRL							1492	1620	1388	1402	565
IIa	3c	GN1	NONE	NED											
IIa	3c	GN1	NONE	NIR		111									
IIa	3c	GN1	NONE	SCO			551								
IIa	3c	GT1	NONE	ENG				95	82	82	82	82	82		268
IIa	3c	GT1	NONE	FRA										180	
IIa	3c	GT1	NONE	IRL							96				
IIa	3c	LL1	NONE	ENG	498	1238	1634	1100	492	84	84		294	294	294
IIa	3c	LL1	NONE	ESP										186	
IIa	3c	LL1	NONE	IRL								263	146	657	
IIa	3c	LL1	NONE	SCO	492										522
IIa	3c	TR1	CPART11	IOM										545	979
IIa	3c	TR1	CPART13A	NIR											2048
IIa	3c	TR1	CPART13B	ENG				231	231		231	231		541	
IIa	3c	TR1	CPART13B	NIR							428	428	428	1249	
IIa	3c	TR1	CPART13B	SCO								195		134	
IIa	3c	TR1	CPART13C	ENG							509	509	447	648	753
IIa	3c	TR1	CPART13C	NIR							4484	2915	2567	783	428
IIa	3c	TR1	CPART13C	SCO								413	356	585	585
IIa	3c	TR1	NONE	ENG	4129	1997	1698	841	569	767					
IIa	3c	TR1	NONE	FRA										3700	978
IIa	3c	TR1	NONE	IOM	632	181	172		216	336					
IIa	3c	TR1	NONE	IRL							3110	4459	4566	3757	4408
IIa	3c	TR1	NONE	NED											
IIa	3c	TR1	NONE	NIR	16673	10864	9460	7669	5162	6183					
IIa	3c	TR1	NONE	SCO	1637	1829	373	537							
IIa	3c	TR2	CPART13A	IRL							1131	1131	4070	12147	9907
IIa	3c	TR2	CPART13A	NIR										15777	24586
IIa	3c	TR2	CPART13B	ENG				231	231	231	231	1178	956	1680	522
IIa	3c	TR2	CPART13B	NIR							1997	10847	14370	20771	
IIa	3c	TR2	CPART13B	SCO							1104	1170	1783	1642	
IIa	3c	TR2	CPART13C	ENG							2643	1286	1943	1335	2463
IIa	3c	TR2	CPART13C	IOM											198
IIa	3c	TR2	CPART13C	NIR							19207	14114	8036	6816	
IIa	3c	TR2	CPART13C	SCO							652		566	1000	3310
IIa	3c	TR2	NONE	BEL		336	553	1180	1149	1724	1138	1188	982	495	495
IIa	3c	TR2	NONE	ENG	3724	3290	3336	3395	2533	2794					
IIa	3c	TR2	NONE	FRA										395	
IIa	3c	TR2	NONE	IOM	826	453	952	592	966	680					
IIa	3c	TR2	NONE	IRL							7953	8420	7333	3685	
IIa	3c	TR2	NONE	NIR	21072	17375	19539	18722	17946	18373					
IIa	3c	TR2	NONE	SCO	1499	1797	1275	492	797	596					
IIa	3c	TR3	NONE	DEN	534										
IIa	3c	TR3	NONE	ENG	134										
IIa	3c	TR3	NONE	IRL									179	634	221
Regulated maximum capacity															59581

Table 5.5.1.6. Irish Sea trends in maximum effort (kW) of unregulated gears, according to Annex 1 of Con. Reg. 1342/2008, by major gear type, 2003-2013.

ANNEX	AREA	GEAR	SPECON	COUNTRY	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
IIa	3c	TR2	CPART11	IOM							846	884	2430	2512	2193
IIa	3c	TR2	CPART11	IRL								1131	1131	1131	2054
IIa	3c	TR2	CPART11	SCO								292			
IIa	3c	BEAM	NONE	ENG	354	134	210	142	218	313	267	172	76	186	420
IIa	3c	BEAM	NONE	IRL											
IIa	3c	BEAM	NONE	NED											
IIa	3c	BEAM	NONE	NIR				145		417	226				240
IIa	3c	DEM_SEINE	NONE	ENG				142							
IIa	3c	DEM_SEINE	NONE	IRL											
IIa	3c	DREDGE	NONE	BEL						494		210	210	210	
IIa	3c	DREDGE	NONE	ENG	2215	3041	2589	3622	3131	4022	3324	4815	5659	6448	5523
IIa	3c	DREDGE	NONE	FRA											131
IIa	3c	DREDGE	NONE	GBJ	212										
IIa	3c	DREDGE	NONE	IOM	714	181	577	739	1256	1356	193	193			3707
IIa	3c	DREDGE	NONE	IRL							3912	5899	4004	8458	3734
IIa	3c	DREDGE	NONE	NED											
IIa	3c	DREDGE	NONE	NIR	1899	1551	2123	1947	2040	2562	2325	2037	2076	3592	4183
IIa	3c	DREDGE	NONE	SCO	11796	11479	11002	10875	13545	15893	15297	13424	11514	13577	13774
IIa	3c	NONE	NONE	FRA											
IIa	3c	NONE	NONE	IRL										220	836
IIa	3c	NONE	NONE	SCO			213								595
IIa	3c	OTTER	NONE	BEL	207										
IIa	3c	OTTER	NONE	ENG	62	76	354	112	466				94	95	
IIa	3c	OTTER	NONE	FRA											736
IIa	3c	OTTER	NONE	IRL							309	408	221	547	160
IIa	3c	OTTER	NONE	NIR	309		179	1280				240		1469	3128
IIa	3c	OTTER	NONE	SCO	585	276		207				276		193	585
IIa	3c	PEL_SEINE	NONE	ESP											368
IIa	3c	PEL_SEINE	NONE	FRA										280	
IIa	3c	PEL_SEINE	NONE	IRL											
IIa	3c	PEL_SEINE	NONE	NIR	6494	6494	6494	6494		809					
IIa	3c	PEL_TRAWL	NONE	ENG	4320		4320					4320			
IIa	3c	PEL_TRAWL	NONE	FRA											
IIa	3c	PEL_TRAWL	NONE	IRL							1096	1090	2415	3560	3334
IIa	3c	PEL_TRAWL	NONE	NED											
IIa	3c	PEL_TRAWL	NONE	NIR	3558	2749	2749	2749	3128	3128	3128	3128	11128	11128	11128
IIa	3c	PEL_TRAWL	NONE	SCO			2940								
IIa	3c	POTS	NONE	ENG	2996	2588	2510	2505	2432	1900	2096	2041	1520	2006	1861
IIa	3c	POTS	NONE	FRA											
IIa	3c	POTS	NONE	GBG						170	298	298			
IIa	3c	POTS	NONE	GBJ	542	675	179	179	214	214	393	214	214	214	214
IIa	3c	POTS	NONE	IOM	93	93		328		328			198	198	455
IIa	3c	POTS	NONE	IRL							2924	2449	2247	2554	2681
IIa	3c	POTS	NONE	NIR	575	553	245	638	954	1308	1066	1183	707	745	690
IIa	3c	POTS	NONE	SCO	239		207	207	207	1102	1102	643	436	570	562
Unregulated maximum capacity															62189

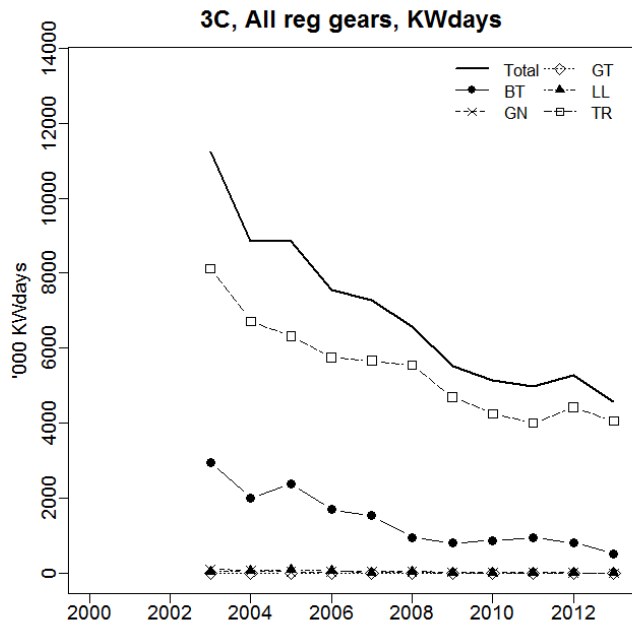


Figure 5.5.1.1. Irish Sea. Trend in regulated gear nominal effort (kW*days-at-sea) by Coun. Reg. 1342/2008, 2003-2013. N.B. CPart11 effort is excluded from this plot.

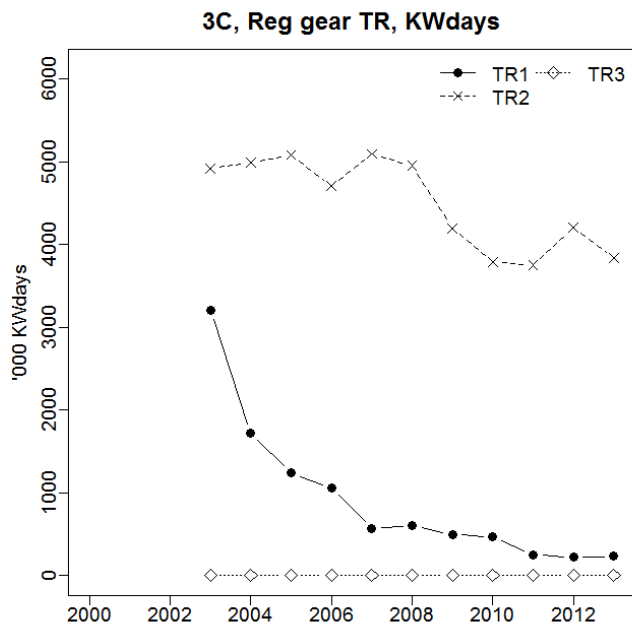


Figure 5.5.1.2. Irish Sea. Trend in regulated gear TR (demersal trawl and Danish seine) nominal effort (kW*days-at-sea) by Coun. Reg. 1342/2008, 2003-2013. N.B. CPart11 effort is excluded from this plot.

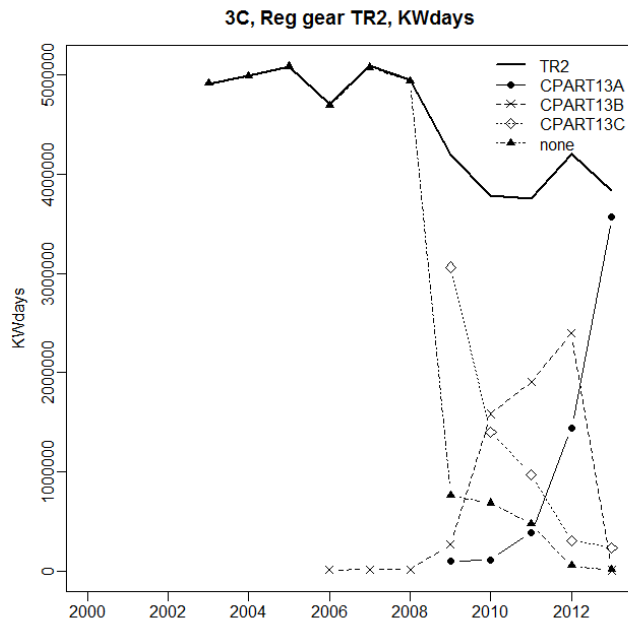


Figure 5.5.1.3. Irish Sea. Trend in special conditions of regulated TR2 (demersal trawl and Danish seine 70-99mm) gear nominal effort (kW*days-at-sea) by Coun. Reg. 1342/2008, 2003-2013.

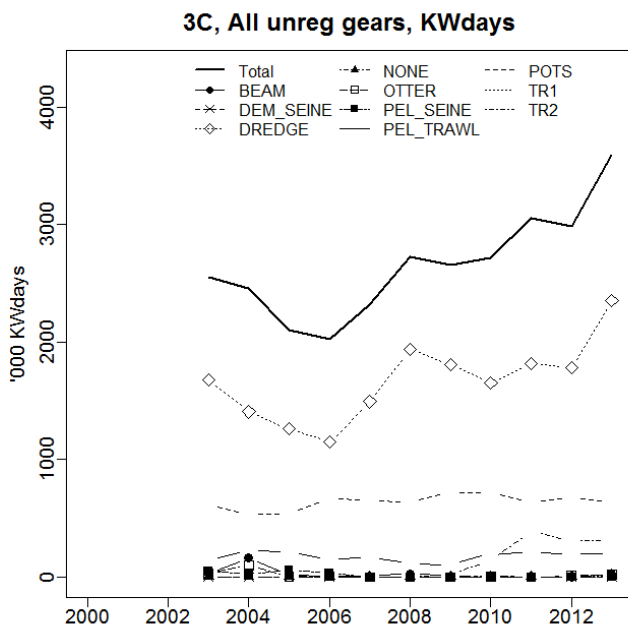


Figure 5.5.1.4. Irish Sea. Effort composition in kW*Days at sea for unregulated gears according to Coun. Reg. 1342/2008 (category none), 2003-2013. N.B. this plot contains TR1 and TR2 CPart11 effort as TR1 and TR2

5.5.2 ToR 1.b and c Catches (landings and discards) of cod and non-cod species in weight and numbers at age by fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.5.3 ToR 1.d CPUE and LPUE of cod by fisheries and by Member States

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.5.4 ToR 2 Rank regulated gear groups on the basis of catches expressed both in weight and in number of cod

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.5.5 ToR 3 Information on small boats (<10m)

It should be noted that under 10m vessels are not required to report effort levels in the same way as larger vessels. As such not all nations operating within the Irish Sea have been able to provide this information. Presented is information from England (including Northern Ireland and Isle of Man), France (small amount 2010-2012) and Scotland. The methodology for production of this data may vary between nations. For details, refer to the national data descriptions in Section 4.

5.5.5.1 Fishing effort of small boats by Member State

The majority of effort by the under 10m vessels reported here is directed at pots and traps (Table 5.5.5.1.1). The effort levels increased greatly in 2006 due to the introduction of buyers and sellers notes into the UK who have used these to estimate effort. Under 10 effort dropped during

2009 and 2010, increasing again thereafter. Dredge effort has been increasing in recent years now occurring at similar levels as those for TR2 gear.

Table 5.5.5.1.1. Irish Sea trends in nominal effort (kW*days at sea) of under 10m vessels by gear groups of Annex I, Coun. Reg. 1342/2008 and unregulated gears, 2003-2013. National data qualities are summarised in Section 4.

ANNEX	AREA	Reg_gear	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Ila	3c	TR1	14080	2043	2747	1624	3313	6692	4523	2885	6423	8090	10781
Ila	3c	TR2	167205	220378	240805	208490	234149	276620	284710	164095	214743	236466	176758
Ila	3c	BT2	1718	2354	9386	10855	2888	1884	627	623	178	89	
Ila	3c	GN1	12429	13342	10545	10940	34100	45173	35398	27087	28213	25948	29559
Ila	3c	GT1				78	22	424	9	330	4301	134	
Ila	3c	LL1		0	3107	10348	6469	3656	5028	4811	22857	25531	30150
Ila	3c	BEAM	414	11750	327	2580	8779	6010	3164	7246	4228	2702	4443
Ila	3c	DEM_SEINE							662		75		
Ila	3c	DREDGE	18631	18654	11709	44601	60910	160354	109787	116792	161012	205495	170084
Ila	3c	NONE					425	425			726	280	7480
Ila	3c	OTTER	119			311	295	75		637			104
Ila	3c	PEL_SEINE						142					
Ila	3c	POTS	237544	293990	295377	1068497	1124087	1023622	720517	695537	864323	867746	772533
Grand Total			452140	562511	574003	1358324	1475437	1525077	1164425	1020043	1307079	1372481	1201893

5.5.5.2 Catches (landings and discards) of cod and associated species by small boats by Member State

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.5.6 ToR 4 Spatio-temporal patterns in effective effort by fisheries

Spatial figures of effort for the Irish Sea concentrate on those categories identified as significant in recorded effort, and/or cod catches. Figures use a common scale across years for a given gear group, but scales are unique to each category such that the colours assigned to statistical rectangles for gear group TR1 cannot be compared directly to those assigned for TR2.

TR1: At the beginning of the presented time series, TR1 effort was focused across the Northern boarder and western Irish Sea. Subsequently effort has declined to an overall low level. In 2011 this was limited to the northern and western areas, expanding across the whole area again in 2012 and 2013 (Figure 5.5.6.1).

TR2: Clear TR2 effort focal points occur within the Irish Sea, coinciding with areas of mud based substrate representing the *Nephrops* grounds, with most effort occurring in the Western Irish Sea across two rectangles. In addition, there is an additional secondary focus in the Eastern Irish Sea. Over the period there has been a reduction in effort, with indications of this in the contraction of both focus areas (Figure 5.5.6.2).

BT2: This gear has shown a marked contraction in fishing areas and effort within the Irish Sea (Figure 5.5.6.3). Two of the three focus areas which were present in 2003 still occur in 2011. The southern most focus had reduced to background effort levels a number of years ago reappeared in 2012, disappearing again in 2013.

GN1: The measure of spatial effort submitted in the data call is not considered appropriate for application to static gears. However, the figure for gillnet effort is provided here as an indication of spatial distribution as this gear category can contain relatively high cod catches. Gillnet effort distribution has been changeable over the period, although current focus is in the eastern Irish Sea above Wales (Figure 5.5.6.4). This focus has been showing an increasing trend in effort since 2010.

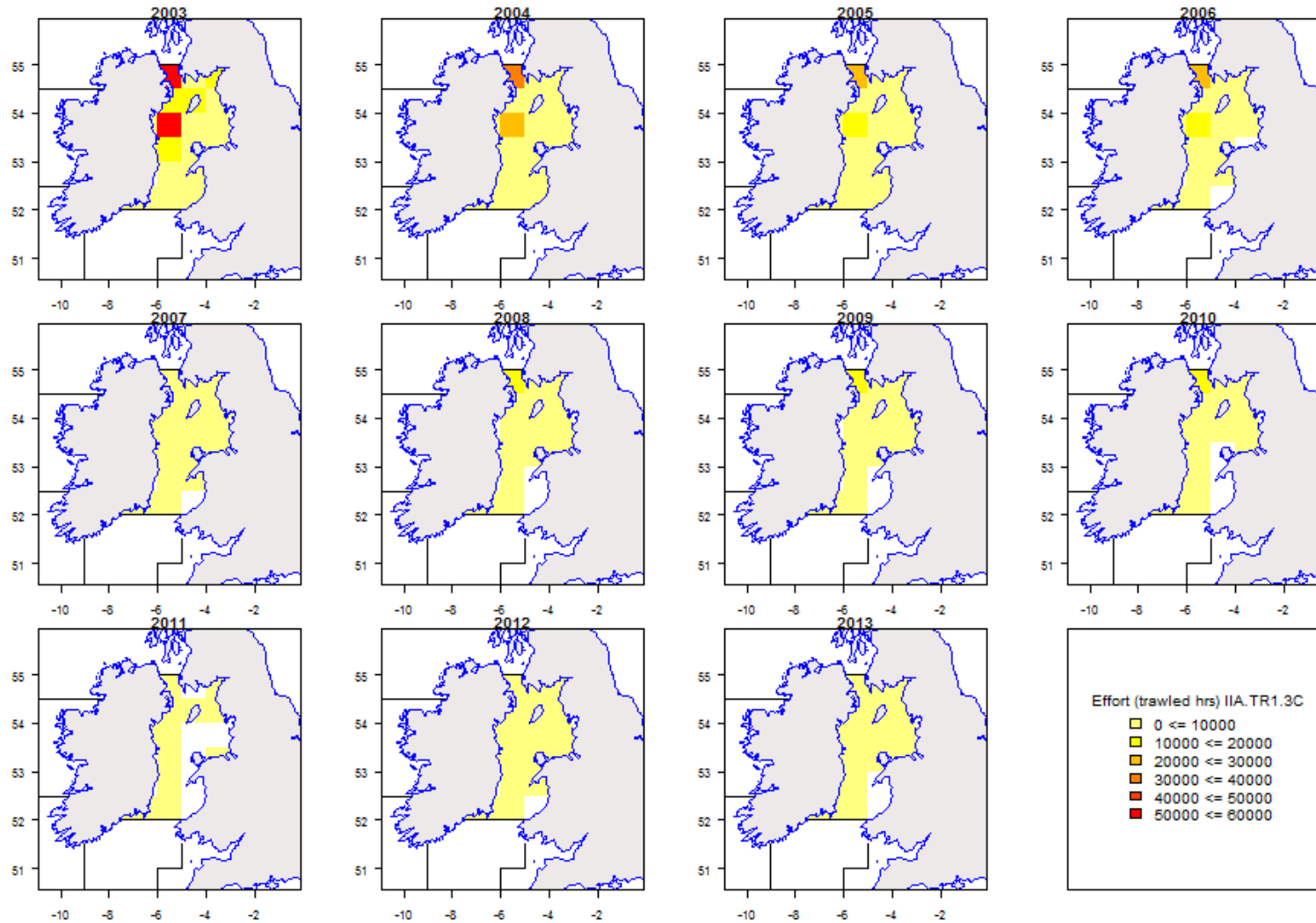


Figure 5.5.6.1. Irish Sea. Spatial distribution of effort (trawled hours) by ICES statistical rectangle for TR1, 2003-2013. N.B. These figures include effort carried out under special condition CPart11.

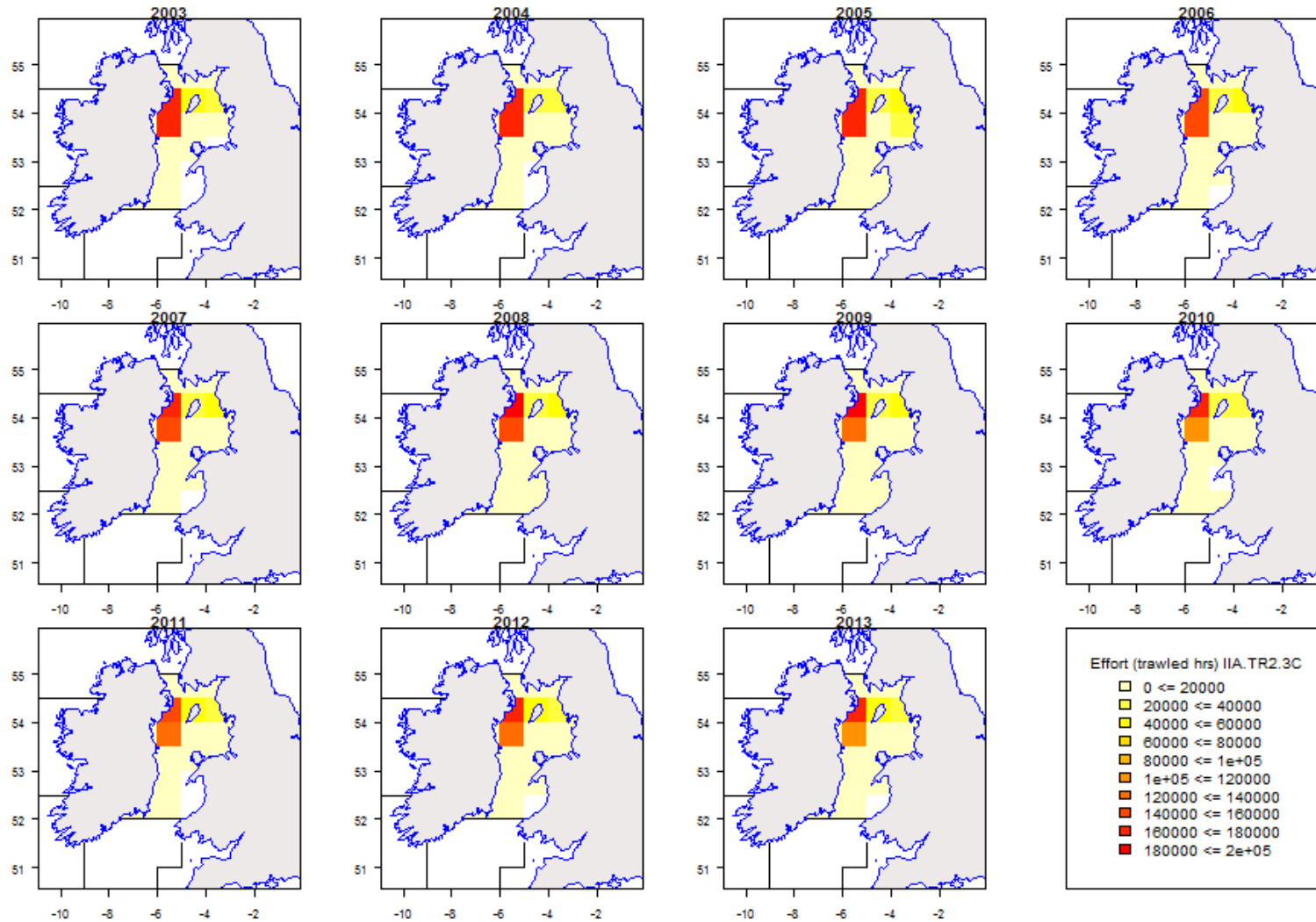


Figure 5.5.6.2. Irish Sea. Spatial distribution of effort (trawled hours) by ICES statistical rectangle for TR2, 2003-2013. N.B. These figures include effort carried out under special condition CPart11.

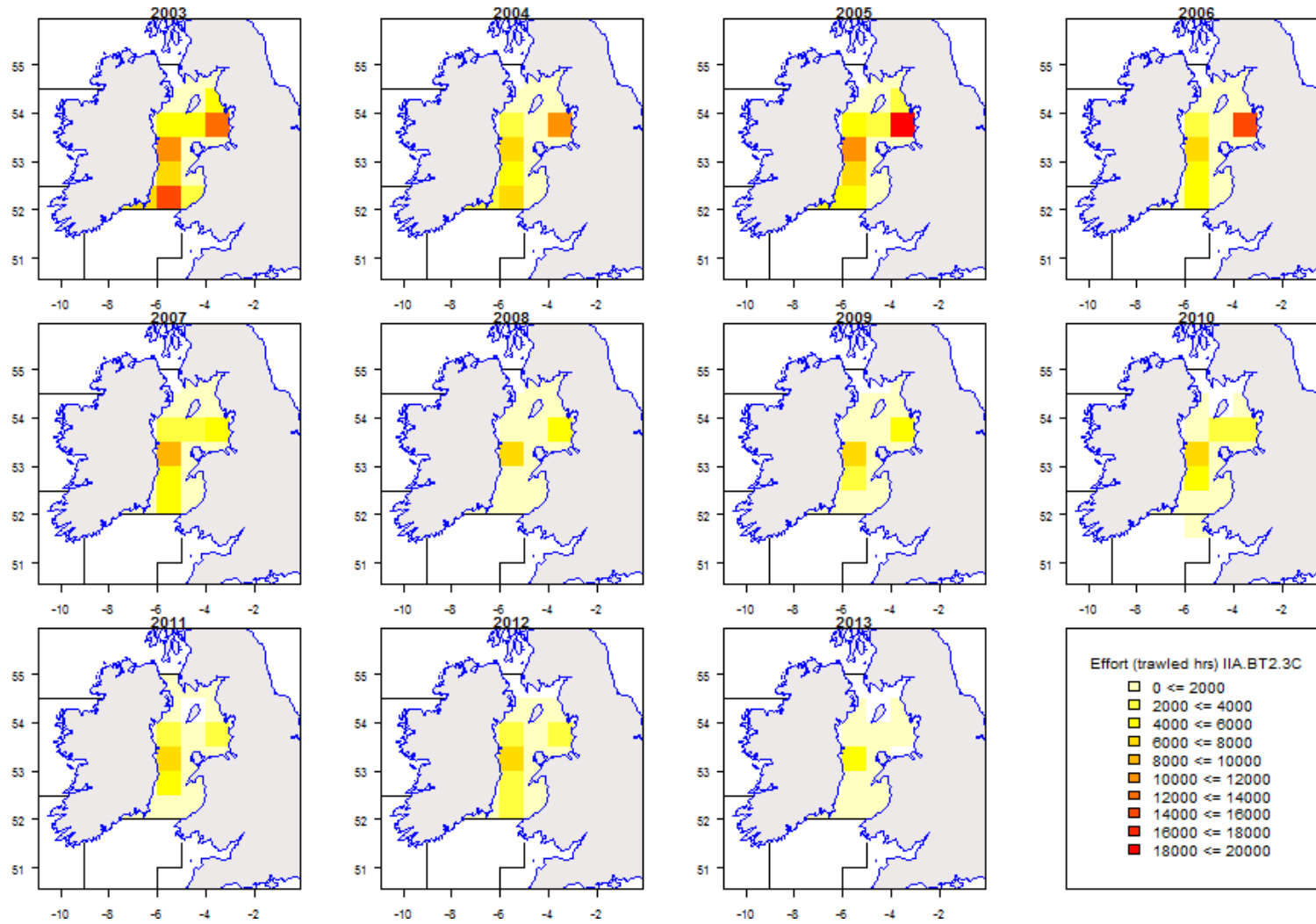


Figure 5.5.6.3. Irish Sea. Spatial distribution of effort (trawled hours) by ICES statistical rectangle for BT2, 2003-2013.

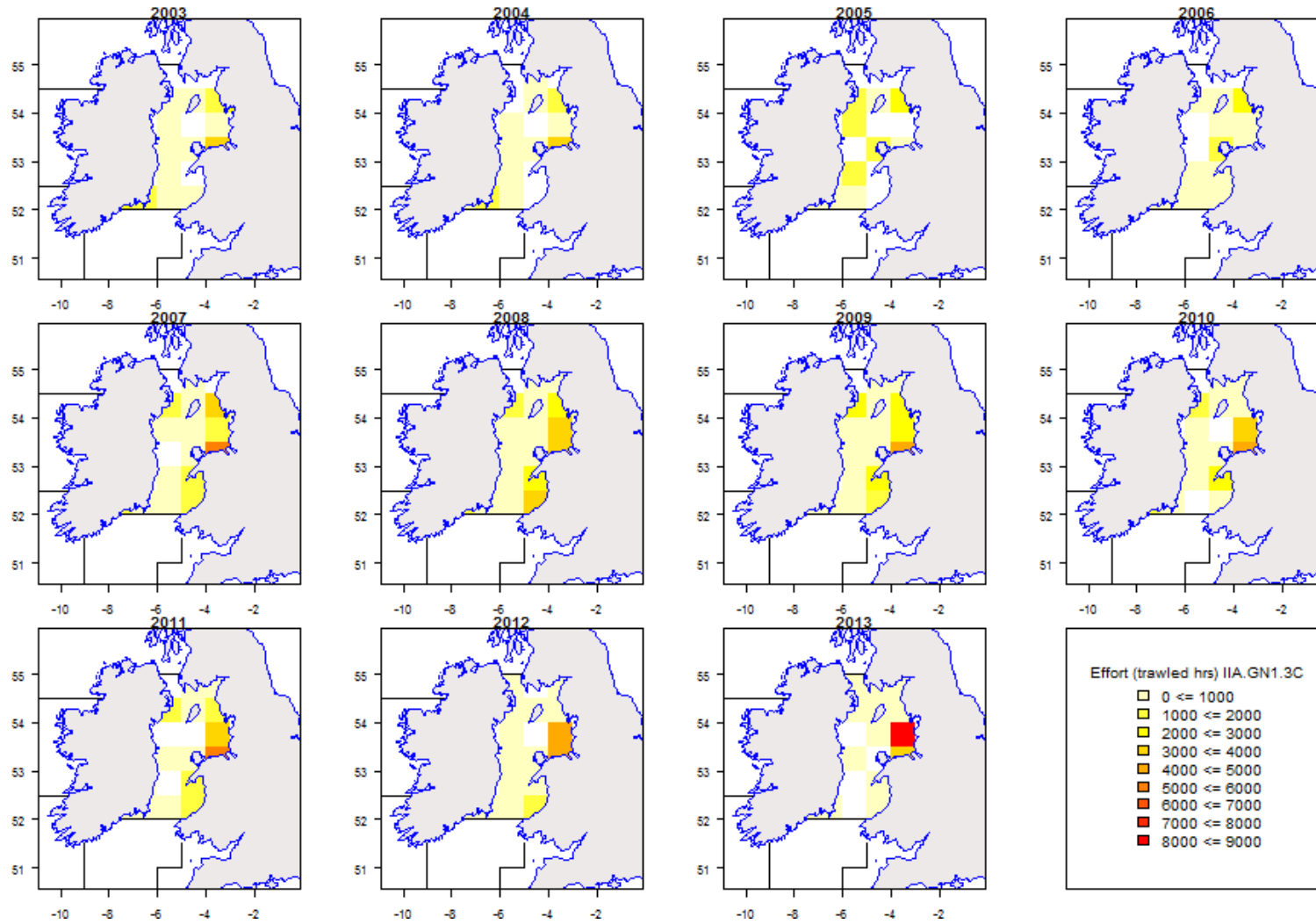


Figure 5.5.6.4. Irish Sea. Spatial distribution of effort (trawled hours) by ICES statistical rectangle for GN1, 2003-2013.

5.5.7 ToR 5 Remarks on quality of catches and discard estimates

Discard information is scarce for a number of gear categories. Where discard data is available it is considered to be highly variable and inaccurate.

No unexpected evolutions in effort trends by Member state or fishery were observed in the addition of 2013 data.

5.5.8 ToR 6 Estimation of conversion factors to be applied for effort transfers between regulated gear groups

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.5.9 ToR 7 Estimation of partial fishing mortalities of cod by area, Member State and fisheries and correlation between partial cod mortality and fishing effort by area, Member State and fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.5.10 ToR 8 Comparative analyses between trends in fishing mortality and fishing effort by Member State and fisheries and the cod plan (R (EC) No 1342/2008) provisions, in particular with regard to Article 13

STECF EWG 14-06 is unable to conduct the requested analyses due to data deficiencies, in particular the lack of discard data.

5.6 Celtic Sea effort regime evaluation for fisheries which would be affected by the extension of the cod management plan

5.6.1 ToR 1.a Fishing effort in kWdays, GTdays and number of vessels by area, Member state and fisheries

While there is no effort regulation in the Celtic Sea at present, the analyses below consider the same gear and mesh categories as used in the cod plan management plan (Council Regulation No. 1342/2008). Table 5.6.1 lists the trends in effort by gear and mesh categories by country in kW*days. Information on GT*days at sea and the number of vessels active in Celtic sea are not presented in this report but are available on the JRC website: <http://stecf.jrc.ec.europa.eu/web/stecf/ewg1406>

The following sections are subdivided into the whole Celtic Sea, the ICES sub-divisions 7bcefghjk (Cel1) and the subset of ICES subdivision 7gh (Cel2).

STECF EWG 14-06 notes that Spanish data has not been provided for periods before 2012; as such the time series of effort and catch is incomplete. The inclusion of Spanish data for 2012-2013 mainly affects fisheries with Long-lines (LL1), otter trawl and seines (TR1, TR2) and to a lesser extent Gillnets (GN1), and predominately in the wider Celtic Sea (7bcefghjk (Cel1), with only small amounts of effort in the sub-set divisions 7fg (Cel2).

5.6.1.1 ICES sub-divisions 7bcefghjk (Cel1)

Table 5.6.1.1.1 show fishing effort (kw days at sea) by Country, Gear type and Special condition (as defined for the cod management plan) for ICES sub-divisions 7bcefghjk between 2004 and 2013. In 2013, the predominated fisheries were the TR1, TR2 and pelagic trawlers, with 24%, 18% and 17% of the total effort, respectively. The countries that contributed with most effort were France, Ireland and England and Wales. Between 2004/06 and 2013, the nominal effort (kW*days-at-sea) in the Celtic Sea remained relatively stable. TR2 effort between 2004/06 and 2013 decreased 25%, but it showed a 3% increase in relation to 2012. In contrast, TR1 effort increased 30% between 2004/06 and 2013 and in relation to 2012 increased 6%. The countries that contributed for this increase were France and Ireland.

Beam trawling in the Celtic Sea is mostly carried out by BT2 (BT1 is negligible). Between 2004/06 and 2013 the BT2 effort decreased 35%. The effort from this gear remained constant in the last 5 years, accounting for 10% of the Celtic Sea effort.

The pelagic trawlers are the unregulated gear with highest effort in Cel1. It showed a 32% increase between 2004/06 and 2013 and 8% increase in relation to 2012.

Table 5.6.1.1.1 Trend in effort (kW*days at sea), according to cod plan gear definition and Member State, 2003-2013. Note, data for Celtic Sea 7bcefgjhk (Cell)

REG.AREA.COD	REG.GEAR.COD	SPECON	COUNTRY	VESSEL_LENGTH	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
7BCEFGHJK	BEAM	NONE	BEL	O15M						38953	70493	68474	51436	68246
7BCEFGHJK	BEAM	NONE	ENG	O10T15M	232	654						641	820	216
7BCEFGHJK	BEAM	NONE	ENG	O15M	1388	16341	12221	6031	884	2750	6993	5419	767	4634
7BCEFGHJK	BEAM	NONE	FRA	O10T15M		52646					1461	441	221	
7BCEFGHJK	BEAM	NONE	FRA	O15M	5940		1776							
7BCEFGHJK	BEAM	NONE	GBJ	O15M	1476									
7BCEFGHJK	BEAM	NONE	IRL	O15M	700722	5372								
7BCEFGHJK	BT1	NONE	BEL	O15M					1766					5754
7BCEFGHJK	BT1	NONE	ENG	O15M	52079									
7BCEFGHJK	BT1	NONE	FRA	O10T15M									159	
7BCEFGHJK	BT1	NONE	IRL	O15M										
7BCEFGHJK	BT2	NONE	BEL	O15M	4568918	3996701	3246205	3351614	2285026	1932211	2392748	2698681	3206396	3133707
7BCEFGHJK	BT2	NONE	ENG	O10T15M	72927	57373	53413	68457	70383	39504	57209	50614	70693	58233
7BCEFGHJK	BT2	NONE	ENG	O15M	5623896	5626763	5225546	4943815	4253780	3822565	3678346	3831714	3657607	3625273
7BCEFGHJK	BT2	NONE	FRA	O10T15M	27252	19355	99790	130720	55970	48196	109999	117351	68844	38871
7BCEFGHJK	BT2	NONE	FRA	O15M	290521	244545	206042	189856	90473	90473	196958	87754	62709	22599
7BCEFGHJK	BT2	NONE	GBJ	O15M	365302	202229								
7BCEFGHJK	BT2	NONE	IRL	O10T15M				187						
7BCEFGHJK	BT2	NONE	IRL	O15M	2331454	2969538	2079409	1767309	1020052	916246	948287	879763	1090097	1127501
7BCEFGHJK	BT2	NONE	NED	O15M							1467		2572	
7BCEFGHJK	BT2	NONE	SCO	O15M				3666		1396				
7BCEFGHJK	DEM_SEINE	NONE	FRA	O15M							19311			
7BCEFGHJK	DEM_SEINE	NONE	IRL	O15M	92689	18279			20910					
7BCEFGHJK	DREDGE	NONE	BEL	O15M					23028	72828	68186	35748	91356	2362
7BCEFGHJK	DREDGE	NONE	ENG	O10T15M	382001	553035	554194	492392	317471	450701	478773	572404	590166	664021
7BCEFGHJK	DREDGE	NONE	ENG	O15M	764430	891393	921527	921550	595747	700967	869100	1091645	1226928	1125100
7BCEFGHJK	DREDGE	NONE	FRA	O10T15M	2954269	2755241	3279571	3330398	2518083	2478802	1680444	1676208	1594941	1452602
7BCEFGHJK	DREDGE	NONE	FRA	O15M	904367	644169	719978	852839	788184	788405	664555	540029	488812	359849
7BCEFGHJK	DREDGE	NONE	GBJ	O15M							440	440		
7BCEFGHJK	DREDGE	NONE	IOM	O10T15M					1689					
7BCEFGHJK	DREDGE	NONE	IOM	O15M		23622	1488							
7BCEFGHJK	DREDGE	NONE	IRL	O10T15M	16170	2686	5237	6625	19361	16193	23843	31788	18938	20209
7BCEFGHJK	DREDGE	NONE	IRL	O15M	775093	414693	55741	135371	117801	162441	167179	157570	168829	144945
7BCEFGHJK	DREDGE	NONE	NED	O15M	136772	198540	129990	174403	92329	196579	77210			
7BCEFGHJK	DREDGE	NONE	NIR	O15M										894
7BCEFGHJK	DREDGE	NONE	SCO	O10T15M		20295					8316			877
7BCEFGHJK	DREDGE	NONE	SCO	O15M	606523	820152	716849	509439	532987	545777	495326	162180	439796	548479
7BCEFGHJK	GN1	NONE	BEL	O15M					2700					
7BCEFGHJK	GN1	NONE	ENG	O10T15M	408264	321651	303347	273695	241386	272475	263607	257877	262748	217447
7BCEFGHJK	GN1	NONE	ENG	O15M	1801520	1361727	664922	710075	482738	367021	458224	360084	408130	510947
7BCEFGHJK	GN1	NONE	FRA	O10T15M	1015940	904288	951675	917344	704412	704349	442616	453543	453261	390440
7BCEFGHJK	GN1	NONE	FRA	O15M	1069302	1240069	996131	1258557	1535687	1535360	1791358	1589363	1834150	1781850
7BCEFGHJK	GN1	NONE	GBJ	O15M							716			
7BCEFGHJK	GN1	NONE	GER	O15M	452381	396914	32794	171880	229650	93910	114413	91953	105780	146074
7BCEFGHJK	GN1	NONE	IRL	O10T15M	74856	63650	82996	92300	115527	146889	122657	88310	112910	114355
7BCEFGHJK	GN1	NONE	IRL	O15M	812092	615141	448209	469433	417322	403203	400345	362955	393729	367117
7BCEFGHJK	GN1	NONE	NIR	O10T15M					2106	1701	1296	1539	1094	
7BCEFGHJK	GN1	NONE	SCO	O15M	643185	498672	192066	193116	355719	437451	387259	463248	439892	435615
7BCEFGHJK	GN1	NONE	ESP	O15M									25441	79723
7BCEFGHJK	GT1	NONE	ENG	O10T15M	243	11051	7204	13030	17085	14082	2188	14617	11907	16716
7BCEFGHJK	GT1	NONE	ENG	O15M	40645	16189	63807	16867	20745	3249	13969	72025	105327	125077
7BCEFGHJK	GT1	NONE	FRA	O10T15M	613504	763828	906651	1057950	662533	662382	493742	505116	476564	467931
7BCEFGHJK	GT1	NONE	FRA	O15M	358319	438016	465337	471663	381102	381102	498932	494870	460213	395258
7BCEFGHJK	GT1	NONE	IRL	O10T15M			6673	18759	21940	29379	30733	27980	29331	22278
7BCEFGHJK	GT1	NONE	IRL	O15M	172	16260	13550	6624	22125	7800	35672	23000	49028	15628
7BCEFGHJK	GT1	NONE	SCO	O15M	13362									
7BCEFGHJK	LL1	NONE	ENG	O10T15M	64003	57687	69608	81526	63299	44113	52964	51934	36152	42395
7BCEFGHJK	LL1	NONE	ENG	O15M	276751	265897	405536	575325	138810	4194	6800	3781		224301
7BCEFGHJK	LL1	NONE	FRA	O10T15M	153667	198527	350334	313997	139114	139114	170925	133564	112422	136385
7BCEFGHJK	LL1	NONE	FRA	O15M	184636	206807	360284	410608	336703	336703	382978	363457	643074	1306528
7BCEFGHJK	LL1	NONE	IRL	O10T15M		4074	1265	9962	16325	26309	21174	14444	22094	12400
7BCEFGHJK	LL1	NONE	IRL	O15M	3600	68722		46022	7281	2856	13030	3193	27100	2208
7BCEFGHJK	LL1	NONE	POR	O15M										
7BCEFGHJK	LL1	NONE	SCO	O10T15M		221								
7BCEFGHJK	LL1	NONE	SCO	O15M	6160	50975	249936	257928	811319	194403	261208	147510	415740	320452
7BCEFGHJK	LL1	NONE	ESP	O10T15M									574	8444
7BCEFGHJK	LL1	NONE	ESP	O15M									2554892	2690480
7BCEFGHJK	NONE	NONE	FRA	O10T15M	33746	76396	41748	6979	16784	16784		45498		
7BCEFGHJK	NONE	NONE	FRA	O15M		327	858	5495	5849	5849		8828		
7BCEFGHJK	NONE	NONE	IRL	O10T15M				383	275		52		64	986
7BCEFGHJK	NONE	NONE	IRL	O15M									844723	375153
7BCEFGHJK	NONE	NONE	SCO	O15M										3064
7BCEFGHJK	NONE	NONE	ESP	O15M									39856	

Celtic Sea 7bcefg hjk (Cell) continued

REG.AREA.COD	REG.GEAR.COD	SPECON	COUNTRY	VESSEL_LENGTH	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
7BCEFGHJK	OTTER	NONE	BEL	O15M										
7BCEFGHJK	OTTER	NONE	DEN	O15M	197431	77968	121909	77502	54619	161809				
7BCEFGHJK	OTTER	NONE	ENG	O10T15M	2308	39153	5023	39319	2922	24642	18573	26944	22177	15950
7BCEFGHJK	OTTER	NONE	ENG	O15M	110395	224730	82807	35121	61169	41458	243826	78176	484890	6152
7BCEFGHJK	OTTER	NONE	FRA	O10T15M	245014	357035	187430	132530	72340	71584	66696	78561	44834	58490
7BCEFGHJK	OTTER	NONE	FRA	O15M	120842	176987	64322	122042	28194	28194	136817	75075	58562	163283
7BCEFGHJK	OTTER	NONE	GBJ	O15M									220	
7BCEFGHJK	OTTER	NONE	IRL	O10T15M	103219	4119	2100		240	145		828	425	397
7BCEFGHJK	OTTER	NONE	IRL	O15M	1014106	158922	14130	8602	24074	3425	14674	51316	9476	560
7BCEFGHJK	OTTER	NONE	NED	O15M										
7BCEFGHJK	OTTER	NONE	SCO	O10T15M		1490				4470				
7BCEFGHJK	OTTER	NONE	SCO	O15M	106141	333853	25058	22830	64600	97476	453991	101950	202535	333313
7BCEFGHJK	OTTER	NONE	ESP	O15M									35073	2645
7BCEFGHJK	PEL_SEINE	NONE	ENG	O10T15M								402		9997
7BCEFGHJK	PEL_SEINE	NONE	ENG	O15M							6750			
7BCEFGHJK	PEL_SEINE	NONE	FRA	O10T15M	87549	60693	69936	38525	50446	50446	58203	61033	85960	86280
7BCEFGHJK	PEL_SEINE	NONE	FRA	O15M	106304	126726	228685	169325	124836	124521	259720	281078	411804	519749
7BCEFGHJK	PEL_SEINE	NONE	IRL	O10T15M										
7BCEFGHJK	PEL_SEINE	NONE	IRL	O15M	37748	8338				85				
7BCEFGHJK	PEL_SEINE	NONE	NIR	O15M	123386	123386								
7BCEFGHJK	PEL_SEINE	NONE	SCO	O15M							36147	7695		
7BCEFGHJK	PEL_SEINE	NONE	ESP	O15M									7714	4797
7BCEFGHJK	PEL_TRAWL	NONE	DEN	O15M	285933	529574	461159	937210	350859	692215	2183860	615653	1188791	1029987
7BCEFGHJK	PEL_TRAWL	NONE	ENG	O10T15M	19022	13409	21430	55665	83542	76419	81105	65577	53907	66717
7BCEFGHJK	PEL_TRAWL	NONE	ENG	O15M	909490	593944	1024722	1032729	1239855	1212908	1459339	1168163	983157	558581
7BCEFGHJK	PEL_TRAWL	NONE	FRA	O10T15M	21456	12171	9745	73230	18571	18571	53128	35608	35744	16533
7BCEFGHJK	PEL_TRAWL	NONE	FRA	O15M	1539255	1496366	1487064	1660738	861162	857922	1827724	1426415	1715054	1739085
7BCEFGHJK	PEL_TRAWL	NONE	GBG	O10T15M				201		191				
7BCEFGHJK	PEL_TRAWL	NONE	GBJ	O15M								385		
7BCEFGHJK	PEL_TRAWL	NONE	GER	O15M	1236846	936424	856734	962635	1191573	1095622	1863980	1718554	1637554	1625536
7BCEFGHJK	PEL_TRAWL	NONE	IRL	O10T15M	2370			1627	813	8803	2164	7323	28702	19916
7BCEFGHJK	PEL_TRAWL	NONE	IRL	O15M	1576831	1459330	1311817	1987134	2271355	3567806	4268273	2312966	3770799	3503421
7BCEFGHJK	PEL_TRAWL	NONE	LIT	O40M						246000		601600	60800	
7BCEFGHJK	PEL_TRAWL	NONE	NED	O15M	5212064	4726876	4683381	4252343	5963606	4646318	5976389	4137665	3749935	5737195
7BCEFGHJK	PEL_TRAWL	NONE	NIR	O15M	45931	52854	25667	51430	14170	34520	15640	14905	123142	61895
7BCEFGHJK	PEL_TRAWL	NONE	SCO	O10T15M	5066	1341	596			894				
7BCEFGHJK	PEL_TRAWL	NONE	SCO	O15M	1092027	1092313	310332	927221	1033393	803582	1099186	105981	195698	239380
7BCEFGHJK	POTS	NONE	ENG	O10T15M	854630	944496	758847	781807	797875	829660	876436	892495	780062	776272
7BCEFGHJK	POTS	NONE	ENG	O15M	420885	363252	361554	395238	488690	522285	505893	483962	377727	430591
7BCEFGHJK	POTS	NONE	FRA	O10T15M	1768450	1751646	2194275	1912615	417846	417846	1034732	1251441	1358973	1374137
7BCEFGHJK	POTS	NONE	FRA	O15M	310610	331470	383133	367272	147387	147387	372225	385966	414227	358975
7BCEFGHJK	POTS	NONE	GBG	O10T15M					112		6632		3805	42298
7BCEFGHJK	POTS	NONE	GBG	O15M	75868	56398	39402	67026	39092	54645	53544	55728	46024	42381
7BCEFGHJK	POTS	NONE	GBJ	O15M	3772		19963		34730	11426				
7BCEFGHJK	POTS	NONE	GER	O15M	22932	67473	37763	49735	33957	45423	41460	63464	23675	21543
7BCEFGHJK	POTS	NONE	IOM	O15M						9840		25256	82000	54448
7BCEFGHJK	POTS	NONE	IRL	O10T15M	110768	147064	159380	353648	293311	291359	353204	297733	299145	292181
7BCEFGHJK	POTS	NONE	IRL	O15M	10262	37509	31626	17494	9423	26437	33333	18642	8604	1231
7BCEFGHJK	POTS	NONE	NIR	O10T15M							7833			
7BCEFGHJK	POTS	NONE	SCO	O10T15M								3870		253
7BCEFGHJK	POTS	NONE	SCO	O15M					15155					

Celtic Sea 7bcefg hjk (Cell) continued

REG.AREA.COD	REG.GEAR.COD	SPECON	COUNTRY	VESSEL_LENGTH	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
7BCEFGHJK	TR1	NONE	BEL	O15M										1326
7BCEFGHJK	TR1	NONE	ENG	O10T15M	24379	12250	18271	30261	68970	105539	173102	439093	315786	289381
7BCEFGHJK	TR1	NONE	ENG	O15M	2237575	1791918	2209095	2274588	1600379	1263283	1368151	1641154	1077547	1596310
7BCEFGHJK	TR1	NONE	FRA	O10T15M	21245	24258	28074	19271	2627	2627	6974	9027	2514	4170
7BCEFGHJK	TR1	NONE	FRA	O15M	7767596	7342415	7853011	7400986	6311661	6287869	9424263	10044412	9927729	10373174
7BCEFGHJK	TR1	NONE	GBG	O10T15M				328	402					
7BCEFGHJK	TR1	NONE	GBJ	O15M									660	
7BCEFGHJK	TR1	NONE	IRL	O10T15M		4595	32698	12161	18276	26323	67478	120505	141117	87614
7BCEFGHJK	TR1	NONE	IRL	O15M	5080624	4806489	3850598	4019448	3850262	4152808	4428522	4290102	4200489	4811046
7BCEFGHJK	TR1	NONE	NED	O15M							6044	221	4442	1500
7BCEFGHJK	TR1	NONE	NIR	O15M		716	5176		1141	1805	16616	24770	42944	58252
7BCEFGHJK	TR1	NONE	SCO	O10T15M						36953	58669	6556	762	
7BCEFGHJK	TR1	NONE	SCO	O15M	879428	1084677	779453	681392	835556	869444	939069	742392	764935	287962
7BCEFGHJK	TR1	NONE	ESP	O15M									2211273	2366764
7BCEFGHJK	TR2	NONE	BEL	O15M	119327	188914	424630	464699	467476	468989	422826	322422	468384	396905
7BCEFGHJK	TR2	NONE	ENG	O10T15M	1465978	1433817	1480541	1518102	1487671	1508410	1417313	1072092	1117170	1091990
7BCEFGHJK	TR2	NONE	ENG	O15M	793106	748269	545935	546165	188851	219920	270932	277086	199744	228632
7BCEFGHJK	TR2	NONE	FRA	O10T15M	1170583	934323	1811990	2322695	1359817	1332591	1377589	1450200	1377944	1155892
7BCEFGHJK	TR2	NONE	FRA	O15M	9749701	10606401	9086047	8463099	5978693	5961053	5517774	4618154	4640702	5833783
7BCEFGHJK	TR2	NONE	GBG	O10T15M		730	6042	11065	5203	3090	7854	2298	11868	1108
7BCEFGHJK	TR2	NONE	GBG	O15M			336							
7BCEFGHJK	TR2	NONE	GBJ	O15M		6745	19360	30580	25740	31020	37620	41195	12760	33660
7BCEFGHJK	TR2	NONE	IRL	O10T15M	257022	350469	334422	459059	451136	535137	532232	412184	498594	465370
7BCEFGHJK	TR2	NONE	IRL	O15M	5224000	6198534	5446878	5597666	4158601	2949734	3573429	3347927	3777676	3873553
7BCEFGHJK	TR2	NONE	NED	O15M	64393	108566	162551	113851	90839	216240	252472	259559	150099	130151
7BCEFGHJK	TR2	NONE	NIR	O10T15M						1832	1832			
7BCEFGHJK	TR2	NONE	NIR	O15M	53672	72432	42938	20658	128847	151565	144625	6852	31350	62129
7BCEFGHJK	TR2	NONE	SCO	O10T15M	76992	66156	5364	17582	162	9536	17322	20264		
7BCEFGHJK	TR2	NONE	SCO	O15M	367031	352869	382627	350470	506435	487733	439290	529514	322248	310884
7BCEFGHJK	TR2	NONE	ESP	O15M									1499154	1082649
7BCEFGHJK	TR3	NONE	DEN	O15M	15575									
7BCEFGHJK	TR3	NONE	ENG	O10T15M	559	220	1505	4986	7072	10318	2204	4242	13828	3460
7BCEFGHJK	TR3	NONE	ENG	O15M	432	2984		660	880					
7BCEFGHJK	TR3	NONE	FRA	O10T15M	5840	14923	17955	2179	7931	7931	22410	21286	14772	6499
7BCEFGHJK	TR3	NONE	FRA	O15M	1146		3516	2304	1596	1596	32619	33180	7492	429
7BCEFGHJK	TR3	NONE	IRL	O10T15M				403	906	4910	1355	97	2126	1542
7BCEFGHJK	TR3	NONE	IRL	O15M	8964	340	10012	3573	11035	12724	8249	21567	18025	936
7BCEFGHJK	TR3	NONE	SCO	O10T15M	1192	4917				894				
7BCEFGHJK	TR3	NONE	SCO	O15M					5499				26807	
7BCEFGHJK	TR3	NONE	ESP	O15M									1440	

Effort contributions by vessels operating in the entire Celtic Sea 7bcefghjk (Cell) from different nations are shown in Figure 5.6.1.1.1. In terms of kW*days, in 2013, France contributed 37%, Ireland 20%, England and Wales 15%, Spain 8%, the Netherlands 8%, Belgium 5%, Scotland 3%, Germany 2% and Denmark 1% (2013).

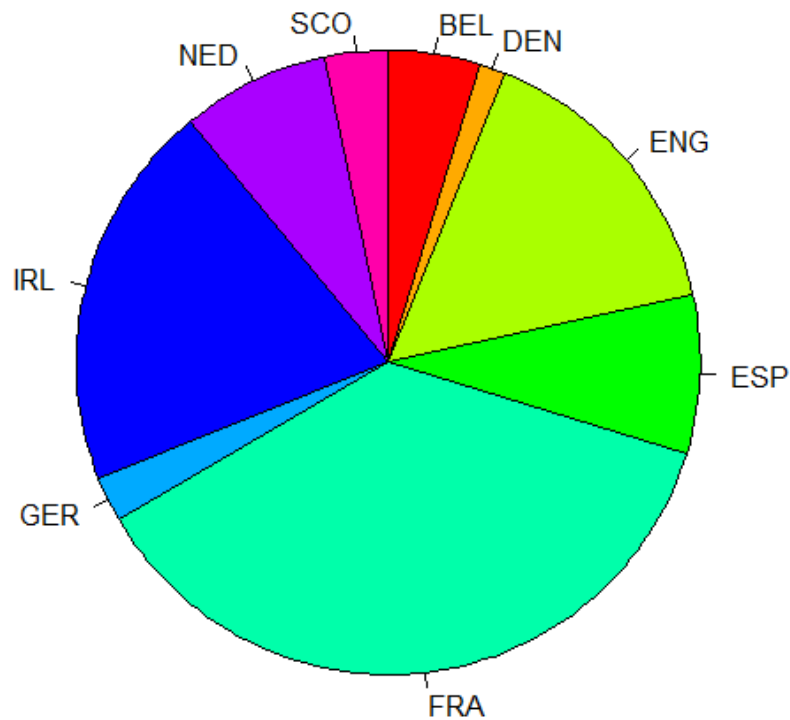


Figure 5.6.1.1.1. Contribution of each country (countries fishing less than 1% of the total catches were excluded from the figure) to the total effort (kW days at sea) in the Celtic Sea (7bcefghjk) in 2013 (Cell).

Figure 5.6.1.1.2 shows the proportion contribution of defined gear groups to the total effort in 2013. It shows that the two main gear categories regulated under the cod plan are TR1 and TR2. TR1 contributes 26% to the reported fishing effort in 2013, TR2 19% and BT2 10%. The gear

classified as “non-regulated” are dominated by pelagic trawls (19%) and in to a lesser extend dredges (6%) and pots (4%).

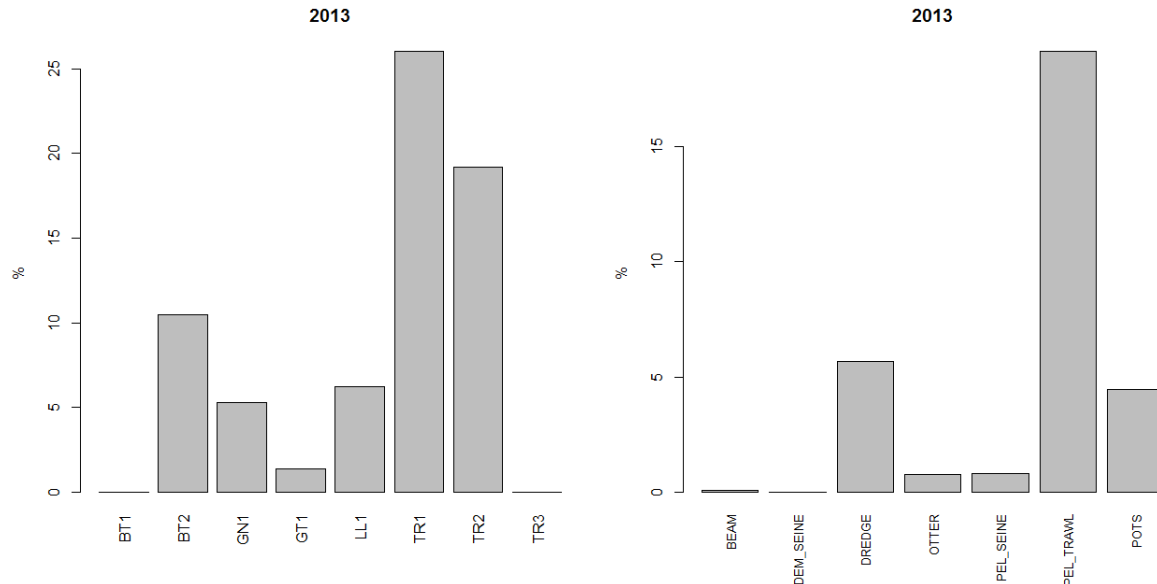


Figure 5.6.1.1.2. Contribution of each gear category to the total effort (kWdays) in the Celtic Sea (ICES Divisions VIIbc,e-k) in 2013.

The fishing effort in kW days at sea of “unregulated” gears accounts for about 31% of the total effort in the Celtic Sea. Figure 5.6.1.1.3 shows fishing effort by gear type for gear defined as unregulated under the cod management plan (left) and defined as regulated (right).

For “unregulated” gears most of the effort is Dutch, Irish, French, and German pelagic trawl fisheries, with a recent (since 2009) increase of Danish and Irish pelagic boats fishing for boarfish in the Celtic Sea. There was an increase in fishing effort by unregulated gears in 2010, mainly due to an increase of the pelagic trawl effort by the Danish vessels that dropped in 2011. Between 2011 and 2013 there was a slight increase again of the unregulated effort.

For “regulated” gears, over the period 2003-2009 there was a decline in overall effort but effort has been increasing slightly since, due to a slight increase in the TR effort. The increasing trend continued in 2013. All the other regulated gears: BT, LL1, GT1, GN1 remained relatively stable in relation to previous years.

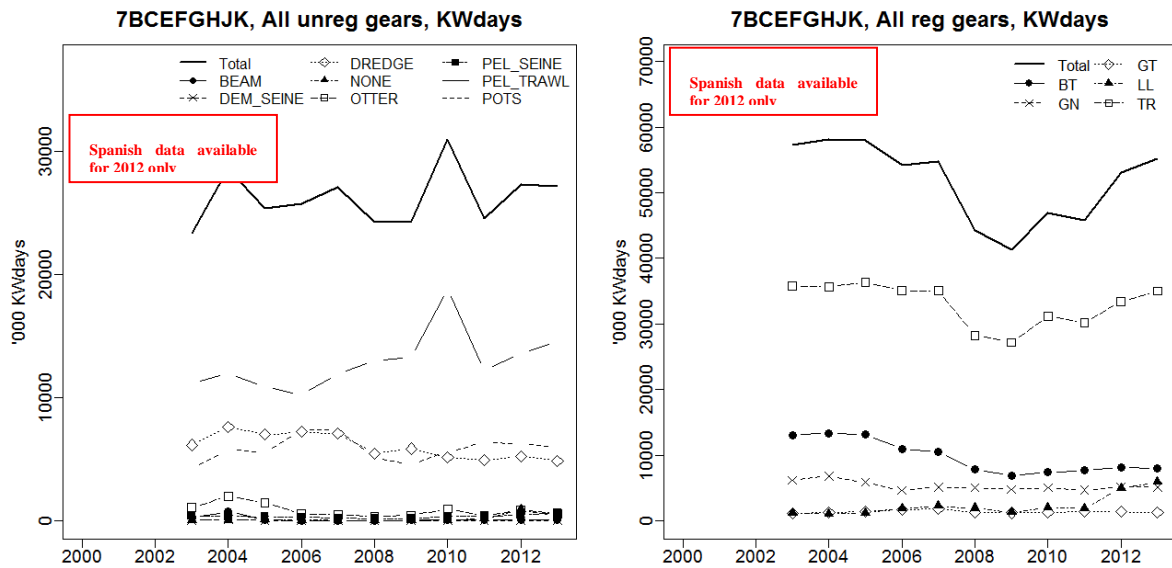


Fig. 5.6.1.1.3. Trend in nominal effort (kW days at sea) for unregulated gears in the Celtic Sea, 2003-2013 (left) and gears as defined as regulated by the cod management plan (right).

Figures 5.6.1.1.4 show the recent trends in nominal effort for the various gear categories and mesh size in the Celtic Sea. The main demersal trawl gears operating in the Celtic sea are the TR1 and TR2 (TR3 is negligible). Between 2003 and 2009 there was a decrease in TR1 and TR2 effort. And between 2009 and 2013, the TR1 effort shows an accentuated increase (14%), the TR2 effort remained relatively stable.

The beam trawling is dominated by the BT2 effort (BT1 is negligible). The BT2 effort showed a steep decline between 2003 and 2009 and remained stable since then, with a slight increase until 2012 and in 2013 the BT2 effort had a minor decrease (1%) in relation to 2012. Between 2003 and 2013, the BT2 effort decreased 39%.

Figure 5.6.1.1.5 shows trends in effort by Gillnet (GN1), Trammel Net (GT1) and Longline (LL1) fisheries. The GT1 and GN1 effort has been relatively stable between 2003 and 2013. The increase in longline effort in 2012 and 2013 is related to the inclusion of Spanish data for these years.

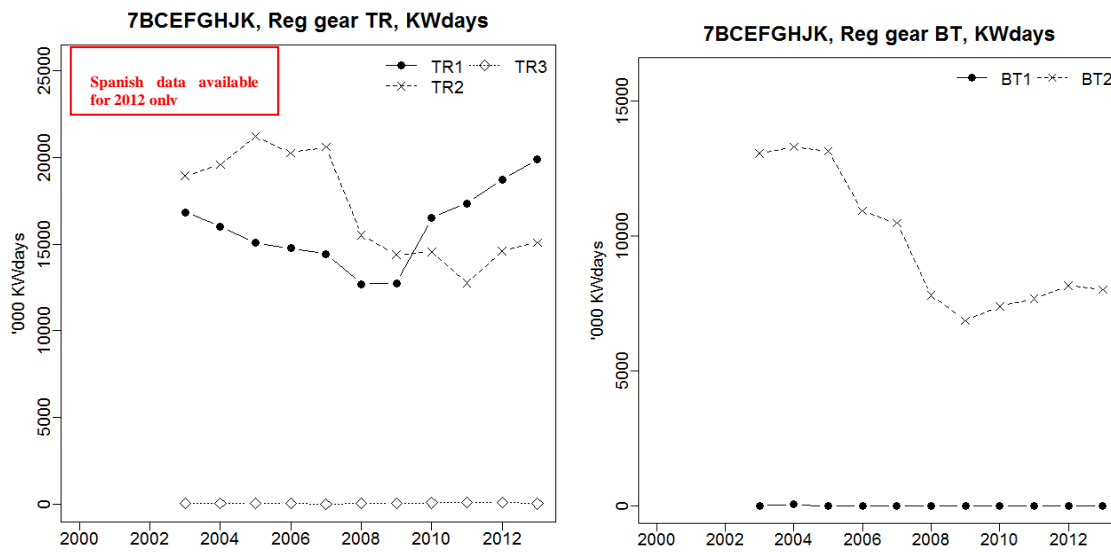


Fig. 5.6.1.1.4. Trend in nominal effort for demersal trawl (Regulated Gear TR1, TR2 and TR3; left) and beam trawl (Regulated Gear BT1, BT2; right) by mesh size range in the Celtic Sea (ICES Divisions VIIbc,e-k), 2003-2013.

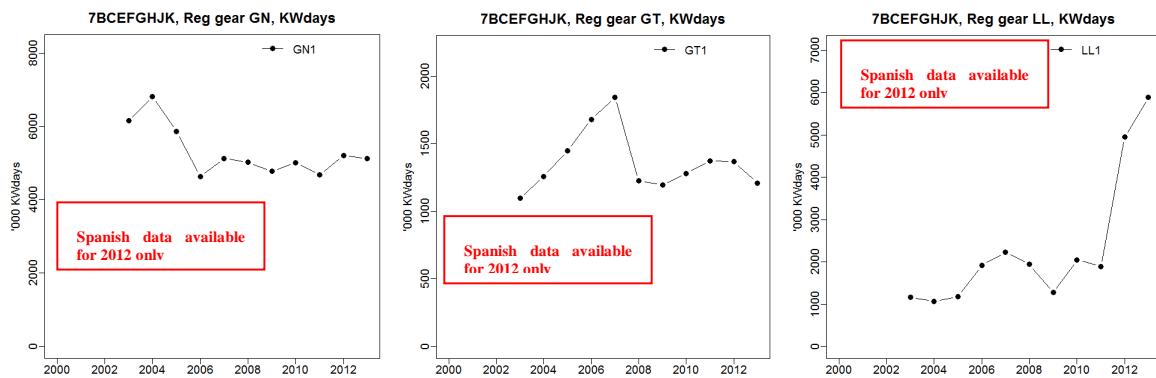


Fig. 5.6.1.1.5. Trend in nominal effort for Regulated Gear GT, GN1, LL1 in the Celtic Sea (ICES Divisions VIIbc,e-k), 2003-2013.

5.6.1.2 ICES sub-divisions 7fg (Cel2)

Table 5.6.1.2.1 shows trends in effort in ICES sub-divisions 7fg by gear type and Member State. Trends broadly reflect those from the wider Celtic Sea area (Section 5.6.1.1 above), with the effort of the main gears, BT2, TR1 and TR2 in 2013, remaining relatively stable in relation to 2012. In 2013 TR1 effort showed an increment of 11% in relation to 2012, keeping its increasing trend since 2008 and had a 60% increase since 2004/06. The countries which contributed most for this increase were France and Ireland. TR2 effort kept its decreasing trend since 2004/06 (-38%) and in relation to 2012 the TR2 effort declined 8%. Between 2004/06 and 2013 BT2 effort decreased 27% and increased 3% in relation to 2012.

Table 5.6.1.2.1 Trend in effort (kW*days at sea), according to cod plan gear definition and Member State, 2000-2013. Note, data are for Celtic Sea subdivisions 7fg (Cel2).

REG.AREA.COD	REG.GEAR.COD	SPECON	COUNTRY	VESSEL_LENGTH	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
7FG	BEAM	NONE	BEL	O15M						6709	9597	16023	8536	19086
7FG	BEAM	NONE	ENG	O10T15M		214								
7FG	BEAM	NONE	ENG	O15M	330	3604	369		884					407
7FG	BEAM	NONE	IRL	O15M	625594	5372								
7FG	BT1	NONE	BEL	O15M										4795
7FG	BT1	NONE	ENG	O15M	8787									
7FG	BT1	NONE	IRL	O15M										
7FG	BT2	NONE	BEL	O15M	3744619	3121706	2534199	2448583	1651116	1570823	1987520	2163164	2636349	2698782
7FG	BT2	NONE	ENG	O10T15M	42075	9779		676	7691	7891	11403	13165	16911	7625
7FG	BT2	NONE	ENG	O15M	970762	775553	645496	569682	403865	408146	392279	265057	472194	531699
7FG	BT2	NONE	FRA	O10T15M		2200					1665	4131	176	420
7FG	BT2	NONE	FRA	O15M			15965				486			
7FG	BT2	NONE	GBJ	O15M	145409	46378								
7FG	BT2	NONE	IRL	O10T15M				187						
7FG	BT2	NONE	IRL	O15M	1784027	2398012	1779651	1544366	960802	840028	910631	863511	1080147	1109423
7FG	BT2	NONE	NED	O15M									1105	
7FG	DEM_SEINE	NONE	IRL	O15M	76406	7498								
7FG	DREDGE	NONE	BEL	O15M					10708	4429	5958	11254	10592	
7FG	DREDGE	NONE	ENG	O10T15M	1934	1740	592	2426	8788	3453	34465	51708	29627	58188
7FG	DREDGE	NONE	ENG	O15M	10671	16336	5658	1458	6034	884	1460	5704	38184	16474
7FG	DREDGE	NONE	FRA	O10T15M							1291	2083	1460	
7FG	DREDGE	NONE	FRA	O15M		750					1112	1621	294	
7FG	DREDGE	NONE	IOM	O10T15M					911					
7FG	DREDGE	NONE	IOM	O15M			3720	372						
7FG	DREDGE	NONE	IRL	O10T15M					6200	179	1543			
7FG	DREDGE	NONE	IRL	O15M	161117	162396	37161	111079	109674	157541	166199	156686	167257	140229
7FG	DREDGE	NONE	NED	O15M			43017	3728	4725	1628				
7FG	DREDGE	NONE	NIR	O15M										894
7FG	DREDGE	NONE	SCO	O10T15M							6930			877
7FG	DREDGE	NONE	SCO	O15M	2000	16246	39971	13036	21843	56181	90166	7184	906	64182
7FG	GN1	NONE	BEL	O15M					1800					
7FG	GN1	NONE	ENG	O10T15M	166518	116219	127376	112183	85832	88748	101641	126513	127610	97154
7FG	GN1	NONE	ENG	O15M	347111	323813	278118	265198	223518	171258	184084	194244	189204	212506
7FG	GN1	NONE	FRA	O10T15M								200		1624
7FG	GN1	NONE	FRA	O15M	37833	18804		5908	441	441	4199	6096	5836	8113
7FG	GN1	NONE	GBJ	O15M							716			
7FG	GN1	NONE	IRL	O10T15M	54249	44009	54520	48775	62188	86151	68034	54882	67727	81847
7FG	GN1	NONE	IRL	O15M	366145	271954	130182	184209	239806	159271	168595	138422	164940	132849
7FG	GN1	NONE	SCO	O15M	721	1337					2025			3277
7FG	GT1	NONE	ENG	O10T15M	243	4630	5447	5497	4186	9217	1538	8979	10356	8279
7FG	GT1	NONE	ENG	O15M	23676	4647	21344	12802	12273	2052	5572	33508	72324	69847
7FG	GT1	NONE	FRA	O10T15M	1458		7683				11645	8947	2892	4852
7FG	GT1	NONE	FRA	O15M	801	14256	20068	21032	19104	19104	7506	37761	11705	37782
7FG	GT1	NONE	IRL	O10T15M				4675	4720	7091	8434	10120	17272	9249
7FG	GT1	NONE	IRL	O15M				4968	7649	1104	13840	6348	18768	11040
7FG	LL1	NONE	ENG	O10T15M	3743	1093	703	2622	498	4673	3785	3719	610	3695
7FG	LL1	NONE	ENG	O15M	29331	43411	32066	11479	5879	215	828	909		
7FG	LL1	NONE	FRA	O10T15M									173	109
7FG	LL1	NONE	FRA	O15M		4745		552	883	883				8829
7FG	LL1	NONE	IRL	O10T15M				3583	4986	4137	2208	2935	2291	374
7FG	LL1	NONE	IRL	O15M		2167					2240			
7FG	LL1	NONE	SCO	O10T15M		221								
7FG	LL1	NONE	ESP	O15M									4592	

Celtic Sea 7fg (Cel2) Continued

REG.AREA.COD	REG.GEAR.COD	SPECON	COUNTRY	VESSEL_LENGTH	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
7FG	NONE	NONE	IRL	O10T15M				233	179					
7FG	NONE	NONE	IRL	O15M									169834	83739
7FG	OTTER	NONE	BEL	O15M										
7FG	OTTER	NONE	ENG	O10T15M	642	36523	4432	36302	1860	21806	15590	26191	20890	12832
7FG	OTTER	NONE	ENG	O15M		1850	1572	17152		6007	12232	4255	2220	833
7FG	OTTER	NONE	FRA	O10T15M							338			
7FG	OTTER	NONE	FRA	O15M	14904						14272	1966	3680	
7FG	OTTER	NONE	IRL	O10T15M	9912	894	2100		240	145				
7FG	OTTER	NONE	IRL	O15M	267713		615	619	1472	1500	8989	8214	2238	
7FG	OTTER	NONE	SCO	O10T15M						4470				
7FG	OTTER	NONE	SCO	O15M						798	4796			3413
7FG	OTTER	NONE	ESP	O15M										4244
7FG	PEL_SEINE	NONE	ENG	O10T15M								179		446
7FG	PEL_SEINE	NONE	ENG	O15M							5062			
7FG	PEL_SEINE	NONE	FRA	O15M									84429	71073
7FG	PEL_SEINE	NONE	IRL	O10T15M										
7FG	PEL_SEINE	NONE	IRL	O15M	37539	8338								
7FG	PEL_SEINE	NONE	SCO	O15M								2430		
7FG	PEL_TRAWL	NONE	FRA	O10T15M							294			263
7FG	PEL_TRAWL	NONE	FRA	O15M	4097	4585	7331	1851			3310	4196	27786	751
7FG	PEL_TRAWL	NONE	GER	O15M						5299	8589			
7FG	PEL_TRAWL	NONE	IRL	O10T15M	2370			187	653	4301	336	5211	22795	8469
7FG	PEL_TRAWL	NONE	IRL	O15M	293567	119426	161226	152567	131130	195972	263987	458621	330812	341255
7FG	PEL_TRAWL	NONE	NED	O15M	115456	7210	4853	47101			3960		3960	40800
7FG	POTS	NONE	ENG	O10T15M	406212	458422	319320	366223	404291	426106	451778	399558	418635	403520
7FG	POTS	NONE	ENG	O15M	98951	94391	82850	115136	160299	171922	212593	218830	113590	93422
7FG	POTS	NONE	FRA	O10T15M							558	1398	453	
7FG	POTS	NONE	FRA	O15M	21435	30680	53838	38996	23492	23492	50447	62606	50721	21084
7FG	POTS	NONE	GBG	O15M				20910	16433	20888				
7FG	POTS	NONE	GBJ	O15M	3772				34730	11426				
7FG	POTS	NONE	IOM	O15M						9840		25256	63632	44936
7FG	POTS	NONE	IRL	O10T15M	733	9459	15246	28421	30421	28253	38506	39766	29813	23069
7FG	POTS	NONE	IRL	O15M	1044	1568				15774	30114	18642	8604	
7FG	POTS	NONE	NIR	O10T15M							7833			
7FG	POTS	NONE	SCO	O10T15M								3870		253
7FG	TR1	NONE	BEL	O15M										1105
7FG	TR1	NONE	ENG	O10T15M	4919	3621	7115	3761	4872	7425	15376	9544	7846	20368
7FG	TR1	NONE	ENG	O15M	117608	76471	79283	70737	96274	107589	147472	129164	212176	197532
7FG	TR1	NONE	FRA	O10T15M							330	1908		
7FG	TR1	NONE	FRA	O15M	3326622	3113639	2740592	2475013	2303217	2295080	3282997	2630843	2956038	3368695
7FG	TR1	NONE	IRL	O10T15M		1455	29926	11211	16349	13413	19267	36899	64237	55172
7FG	TR1	NONE	IRL	O15M	832656	855906	1022284	1382543	1632837	1965350	1855287	2203318	2328972	2660999
7FG	TR1	NONE	NIR	O15M		716	5176		1141	1805	16028	23389	42944	50494
7FG	TR1	NONE	SCO	O10T15M						745	894			
7FG	TR1	NONE	SCO	O15M	7701		9616	4479	12835	12332	86805	44476	83618	57382
7FG	TR1	NONE	ESP	O15M									127970	88345
7FG	TR2	NONE	BEL	O15M	110564	168754	400049	443057	434936	449108	376867	276627	356164	324453
7FG	TR2	NONE	ENG	O10T15M	154707	165360	257877	176637	225580	184298	201033	175504	172994	119732
7FG	TR2	NONE	ENG	O15M	80260	86357	50874	55815	33883	40429	79839	29505	23851	10638
7FG	TR2	NONE	FRA	O10T15M					3250	3250	1302	489	732	214
7FG	TR2	NONE	FRA	O15M	593609	731407	287766	355358	227706	227706	72113	38972	34270	9089
7FG	TR2	NONE	IRL	O10T15M	132522	157952	196727	230785	221421	197978	194811	159901	192854	143276
7FG	TR2	NONE	IRL	O15M	2227910	3152039	2603114	2625295	2081110	1655034	1838178	1272473	1761311	1655771
7FG	TR2	NONE	NED	O15M										500
7FG	TR2	NONE	NIR	O10T15M						1832	1832			
7FG	TR2	NONE	NIR	O15M	52370	72432	42938	20658	124635	151079	144049	6852	31350	62129
7FG	TR2	NONE	SCO	O10T15M					162					
7FG	TR2	NONE	SCO	O15M	12285	4095	2828		2531	29426	3626	17933	9776	40826
7FG	TR2	NONE	ESP	O15M									1030	
7FG	TR3	NONE	ENG	O10T15M	373							1890		
7FG	TR3	NONE	ENG	O15M		1119								
7FG	TR3	NONE	FRA	O10T15M							212	1163	636	
7FG	TR3	NONE	FRA	O15M								1458		
7FG	TR3	NONE	IRL	O10T15M					324					75
7FG	TR3	NONE	IRL	O15M			720			1500		1498		

Figure 5.6.1.2.1 shows the contribution by different countries to overall effort in the smaller area, ICES sub-divisions VII_{fg}. Vessels from Belgium, France, Ireland and UK (E-W) operate in the Divisions VII_{fg}. In terms of kW*days, Ireland contributes to 42%, France 23%, Belgium 20%, England and Wales 12% and Northern Ireland, Scotland and Spain contributed with 1% (2013).

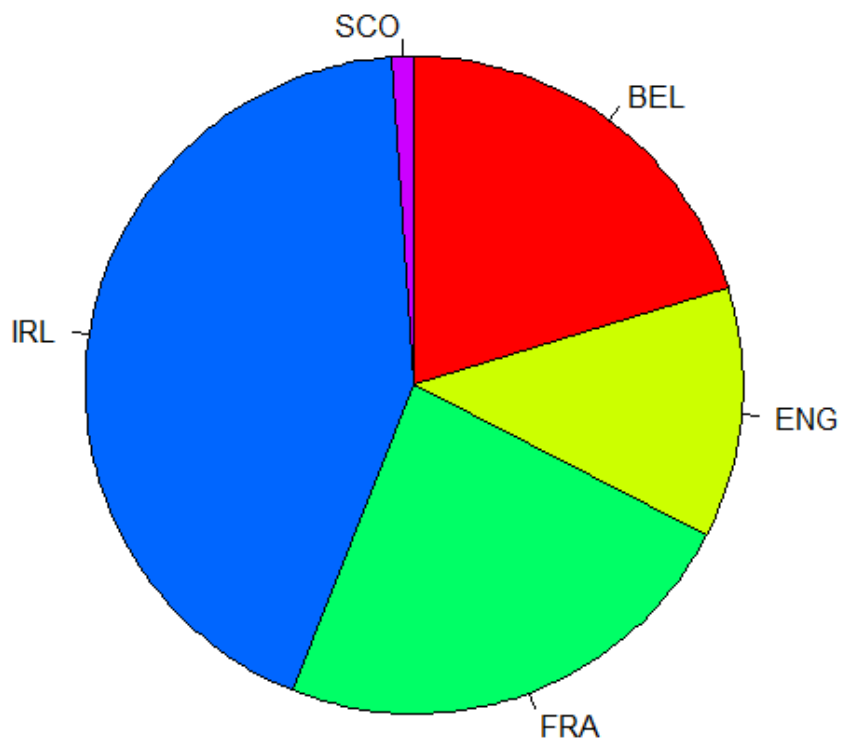


Figure 5.6.1.2.1. Contribution of each country (Countries fishing less than 1% of the total catches were excluded from the figure) to the total effort in the Divisions VII_{fg} (2013).

Figure 5.6.1.2.2 shows the proportion contribution of different gears to the total overall effort in 2013. The fisheries in this area are dominated by the TR1 (42%), BT2 (28%) and TR2 (15%)

fisheries. The majority of effort (89%) is undertaken by gears defined as “regulated” by the cod management plan.

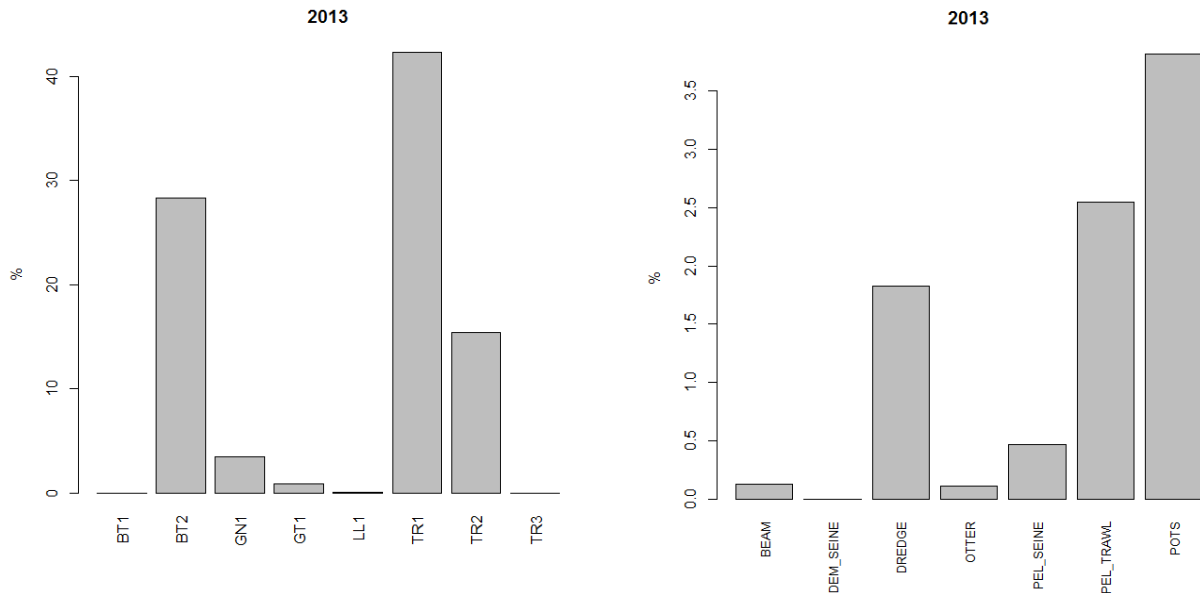


Figure 5.6.1.2.2. Contribution of each gear category to the total effort (kW*days) in the ICES Divisions VIIfg. 2013

Figure 5.5.1.2.3 shows trends in effort by gears grouped into the classification of regulated (left) and unregulated (right) under the cod management plan. The effort in VIIfg followed the trends observed in VIIbc,e-k. The overall effort in VIIfg decreased between 2003 and 2013, however, in the last two years the effort showed an increase to levels similar to 2004/2005. This increase is mainly due to an increase in effort by the demersal trawlers (TR). The effort in unregulated gears has been increasing steadily since 2006 until 2012. In 2013 the unregulated gears effort showed a decrease, mainly due to the reduction of effort of pots.

Figure 5.6.1.2.4 (left) shows effort by otter trawl. Since 2007 there has been a shift in effort from the smaller mesh size in the demersal fishery (70-99 mm; TR2) to the larger mesh size in the demersal fishery (≥ 100 mm; TR1), with effort being relatively stable overall by the TR gear. In 2013, the increase effort trend for TR1 and decrease for TR2 remained. Figure 5.6.1.2.4 (right) shows effort by the beam trawl gear by mesh size. There has been a large decline in effort in the smaller mesh beam trawl gear (80-120 mm; BT2, the only beam trawl mesh category used in the area) since 2003, but in 2012 there was a significant increase in effort on 2011 (39%) and in 2013 BT2 showed a slight increase in the effort.

The GT1, GN1 and LL1 effort in VIIfg showed different trends from Cell area (VIIbc,e-k). There has been a decline in gillnet and longline effort in the area since 2003, however in 2013 the longline effort increased due to the inclusion of the Spanish data. The trammel net effort increased significantly between 2009 and 2013.

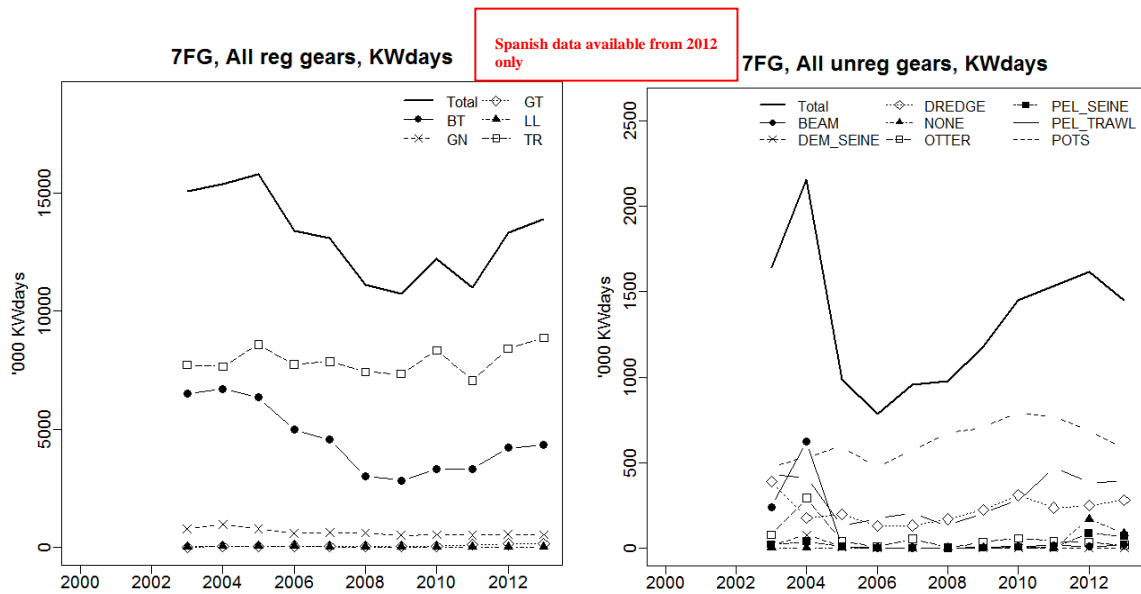


Fig. 5.6.1.2.3. Trend in nominal effort by gear types in the Celtic Sea (ICES Divisions VIIfg), 2003-2013. Spanish data available from 2012 only.

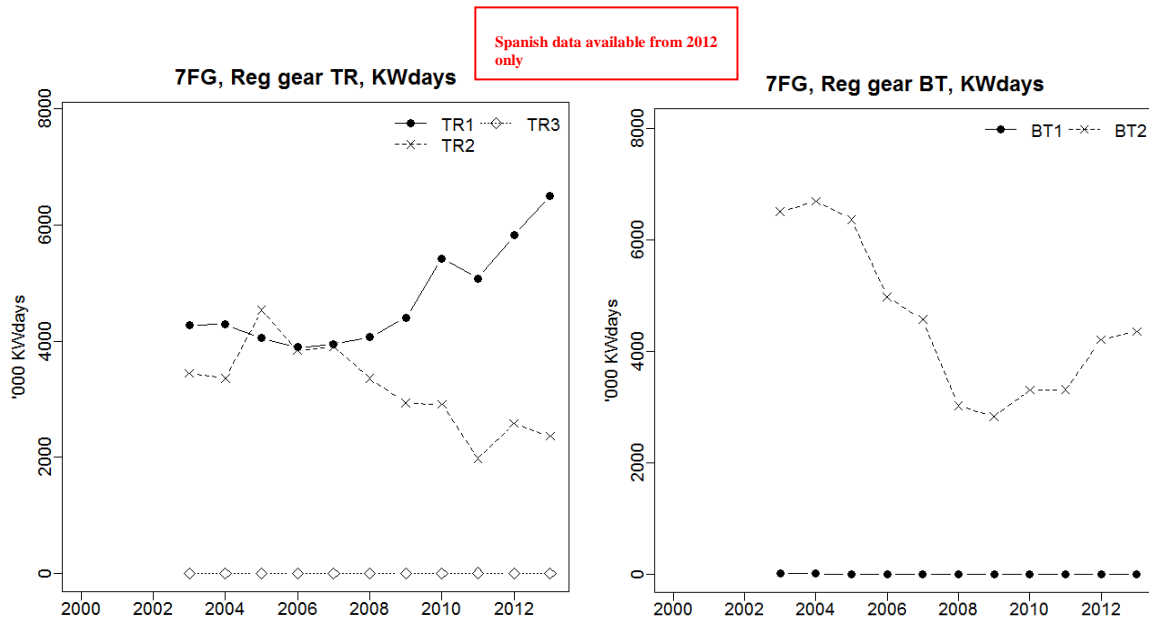


Fig. 5.6.1.2.4. Trend in nominal effort for demersal trawl (TR1, TR2 and TR3; left) and beam trawl by mesh size range (BT1, BT2; right) in the Celtic Sea (ICES Divisions VIIfg), 2003-2013. Spanish data available from 2012 only.

Spanish data available from 2012 only

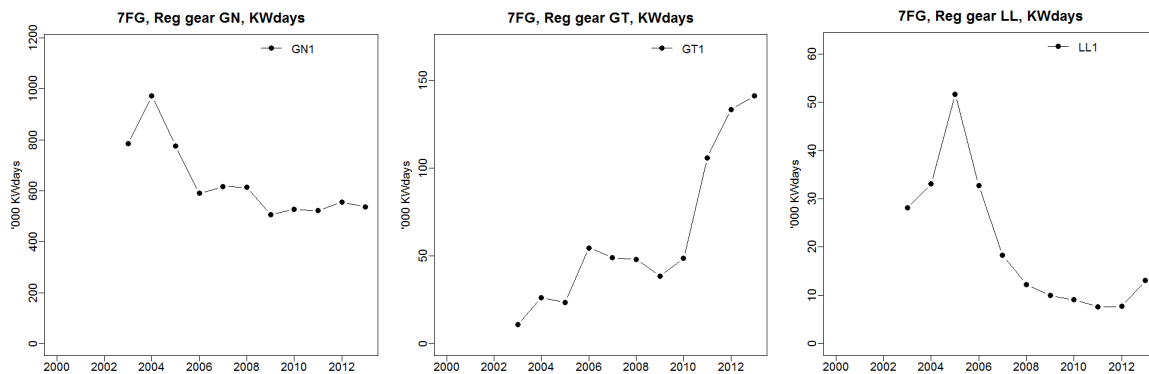


Fig. 5.6.1.2.5. Trend in nominal effort for static gears (Regulated Gear GT, GN1, LL1) in the Celtic Sea (ICES Divisions VIIIfg), 2003-2013. Spanish data available from 2012 only.

5.6.2 *ToR 1.b Catches (landings and discards) of cod in weight and numbers at age by area, Member State and fisheries*

5.6.2.1 ICES sub-divisions 7bcefg hjk (Cel1)

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.6.2.2 ICES sub-divisions 7fg (Cel2)

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.6.3 *ToR 1. c Catches (landings and discards) of non-cod species in weight and numbers at age by area, Member State and fisheries*

5.6.3.1 ICES sub-divisions 7bcefg hjk (Cel1)

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.6.3.2 ICES sub-divisions 7fg (Cel2)

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.6.4 *ToR 1.d CPUE and LPUE of cod by area, fisheries and Member States*

5.6.4.1 ICES sub-divisions 7bcefg hjk (Cel1)

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.6.4.2 ICES sub-divisions 7fg (Cel2)

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.6.5 *ToR 2 Main species by gear group and remarks on quality of catches and discard estimates*

5.6.5.1 ICES sub-divisions 7bcefg hjk (Cel1)

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.6.5.2 ICES sub-divisions 7fg (Cel2)

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.6.6 *ToR 3 Information on small boats (<10m by area)*

Information for French and UK under 10m fisheries was available; Irish information was not available. Information for other countries is given by gear type, however this information is known to be incomplete.

5.6.6.1 Fishing effort of small boats by area, Member State and fisheries

Table 5.6.6.1.1 Nominal effort (kWdays at sea) by Member State for both areas, the entire Celtic Sea (Cel 1) and the sub-divisions 7fg only (Cel2). The countries with the highest effort were England (UK) and France. The English effort remained stable between 2012 and 2013. Relatively to 2004 the under 10 English fleet effort increased significantly. In 2013 under 10m French effort increased 8% in relation to 2012. French effort appears to have increased significantly since 2009 though this is due to incomplete data prior to this period rather than an observed increase in effort by the fisheries. The gear that contributed most for the under 10m effort were pots.

ANNEX	REG.AREA.COD	REG.GEAR.COD	SPECON	COUNTRY	VESSEL_LENGTH	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
CEL1	7BCFEGHJK	BEAM	NONE	ENG	U10M		0		207	112	471		221	221	221	
CEL1	7BCFEGHJK	BEAM	NONE	FRA	U10M										295	
CEL1	7BCFEGHJK	BT2	NONE	ENG	U10M			12562	13305	15748	11579	3677				
CEL1	7BCFEGHJK	BT2	NONE	FRA	U10M		7998						2565	594	316	594
CEL1	7BCFEGHJK	DREDGE	NONE	ENG	U10M		48934	33463	161077	187150	185413	158641	125421	152417	125370	106433
CEL1	7BCFEGHJK	DREDGE	NONE	FRA	U10M		1020244	658413	661222	455336	279707	277385	468049	531299	498655	437950
CEL1	7BCFEGHJK	DREDGE	NONE	GBG	U10M						560	560				
CEL1	7BCFEGHJK	DREDGE	NONE	NIR	U10M						119		573			
CEL1	7BCFEGHJK	DREDGE	NONE	SCO	U10M							22			1968	8851
CEL1	7BCFEGHJK	GN1	NONE	ENG	U10M		69050	74894	563412	730928	783075	667972	624143	716419	804574	714720
CEL1	7BCFEGHJK	GN1	NONE	FRA	U10M		470349	383942	399424	310109	150085	150085	407988	289702	355761	354980
CEL1	7BCFEGHJK	GN1	NONE	GBG	U10M						672	784	2829	4480	4831	2120
CEL1	7BCFEGHJK	GN1	NONE	IOM	U10M						158					
CEL1	7BCFEGHJK	GN1	NONE	SCO	U10M				194	1732	339		85	60	2618	803
CEL1	7BCFEGHJK	GT1	NONE	ENG	U10M		0	160	709	3026	3162	1699	1523	974	583	47
CEL1	7BCFEGHJK	GT1	NONE	FRA	U10M		233202	202572	216971	255766	96495	96385	204060	235068	233191	165955
CEL1	7BCFEGHJK	LL1	NONE	ENG	U10M		38722	40782	120378	267883	292465	388625	464270	476390	497331	465959
CEL1	7BCFEGHJK	LL1	NONE	FRA	U10M		334891	286741	358796	264220	133317	133317	671963	691829	643782	679427
CEL1	7BCFEGHJK	LL1	NONE	GBG	U10M						325	896		602	478	
CEL1	7BCFEGHJK	LL1	NONE	SCO	U10M				169	254			127	169	4	191
CEL1	7BCFEGHJK	NONE	NONE	FRA	U10M		19490	20585	11710	21071	9972	9972		100435		
CEL1	7BCFEGHJK	NONE	NONE	SCO	U10M							170			75	
CEL1	7BCFEGHJK	OTTER	NONE	ENG	U10M		622	1858	1939	3166	2913	4295		523	1463	1817
CEL1	7BCFEGHJK	OTTER	NONE	FRA	U10M		79589	69392	40911	35208	4735	4735	25069	19283	14440	15609
CEL1	7BCFEGHJK	PEL_SEINE	NONE	ENG	U10M					1300		354	1769	1723		
CEL1	7BCFEGHJK	PEL_SEINE	NONE	FRA	U10M		364		540	295			60	729		1000
CEL1	7BCFEGHJK	PEL_TRAWL	NONE	ENG	U10M					1106	8244	144		222	253	
CEL1	7BCFEGHJK	PEL_TRAWL	NONE	FRA	U10M			2918		900	540	540	2996	3337	2222	1662
CEL1	7BCFEGHJK	POTS	NONE	ENG	U10M		92568	94533	1624452	1804630	1796809	1088507	1170435	1118346	1144306	1124207
CEL1	7BCFEGHJK	POTS	NONE	FRA	U10M		2126775	1719730	1825507	1621260	1107466	1105491	1126890	1769013	1660944	1514300
CEL1	7BCFEGHJK	POTS	NONE	GBG	U10M						448	237				302
CEL1	7BCFEGHJK	POTS	NONE	NIR	U10M							2530				
CEL1	7BCFEGHJK	POTS	NONE	SCO	U10M			187	1040	454	180	37		791	1834	262
CEL1	7BCFEGHJK	TR1	NONE	ENG	U10M			2034	2246	4562	9425	10605	18178	34476	29832	23944
CEL1	7BCFEGHJK	TR1	NONE	FRA	U10M		4918	3990	6615	2520			8116	100	931	981
CEL1	7BCFEGHJK	TR1	NONE	SCO	U10M											347
CEL1	7BCFEGHJK	TR2	NONE	ENG	U10M		81776	85163	413462	658783	638121	495758	470138	314999	388622	361703
CEL1	7BCFEGHJK	TR2	NONE	FRA	U10M		170118	71616	91906	47909	26772	21741	62223	91493	99771	68740
CEL1	7BCFEGHJK	TR2	NONE	GBG	U10M								672	90		172
CEL1	7BCFEGHJK	TR2	NONE	GBJ	U10M		0									112
CEL1	7BCFEGHJK	TR2	NONE	NED	U10M											30
CEL1	7BCFEGHJK	TR2	NONE	NIR	U10M				1050		2388	4382	1038	80		
CEL1	7BCFEGHJK	TR2	NONE	SCO	U10M			1824			300	116	35	112	307	
CEL1	7BCFEGHJK	TR3	NONE	ENG	U10M						201	152				
CEL1	7BCFEGHJK	TR3	NONE	FRA	U10M		13640	13703	8440	1414	721	721	10200	16392	23818	15162

Table 5.6.6.1.1 continued.

ANNEX	REG.AREA.COD	REG.GEAR.COD	SPECON	COUNTRY	VESSEL_LENGTH	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
CEL2	7FG	BEAM	NONE	ENG	U10M		0								
CEL2	7FG	BT2	NONE	ENG	U10M				1009	350	5668	2091			
CEL2	7FG	BT2	NONE	FRA	U10M										206
CEL2	7FG	DREDGE	NONE	ENG	U10M	4250	500	5417	5962	9761	7581	4139	7247	3750	8702
CEL2	7FG	DREDGE	NONE	FRA	U10M							574			
CEL2	7FG	DREDGE	NONE	NIR	U10M					119		573			
CEL2	7FG	DREDGE	NONE	SCO	U10M									116	124
CEL2	7FG	GN1	NONE	ENG	U10M	25449	15139	93621	183300	217701	178566	188959	186763	202886	180609
CEL2	7FG	GN1	NONE	SCO	U10M				224					1575	224
CEL2	7FG	GT1	NONE	ENG	U10M	0	0		845			65	223	317	
CEL2	7FG	GT1	NONE	FRA	U10M							3059			
CEL2	7FG	LL1	NONE	ENG	U10M	24059	21580	10158	84820	84181	127260	134122	152160	143220	167921
CEL2	7FG	NONE	NONE	SCO	U10M										75
CEL2	7FG	OTTER	NONE	ENG	U10M	622	1764	913	1728	57	1885		126		37
CEL2	7FG	PEL_SEINE	NONE	ENG	U10M				1300		354		132		
CEL2	7FG	PEL_TRAWL	NONE	ENG	U10M						40				
CEL2	7FG	PEL_TRAWL	NONE	FRA	U10M							596			
CEL2	7FG	POTS	NONE	ENG	U10M	3867	5083	706650	826383	793296	361204	395633	395011	407189	433268
CEL2	7FG	POTS	NONE	FRA	U10M							328			28
CEL2	7FG	POTS	NONE	SCO	U10M				410	180	37		126	1371	192
CEL2	7FG	TR1	NONE	ENG	U10M		1677	2131	4546	2464	6591	4783	12583	11272	9367
CEL2	7FG	TR1	NONE	FRA	U10M							220			
CEL2	7FG	TR2	NONE	ENG	U10M	13397	15912	53406	115790	109414	57108	55202	34583	33061	43190
CEL2	7FG	TR2	NONE	FRA	U10M							592	2395		
CEL2	7FG	TR2	NONE	NIR	U10M			1050		2388	3389	1038	80		
CEL2	7FG	TR2	NONE	SCO	U10M							35		75	
CEL2	7FG	TR3	NONE	FRA	U10M							82		510	

5.6.6.2 Catches (landings and discards) of small boats by area, Member State and fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.6.7 ToR 4 Data quality and any unexpected evolutions of the trends in catches and effort by area, Member State and fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.6.8 ToR 5 Correlation between partial cod mortality and fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.6.9 Spatio-temporal patterns in effective effort by fisheries

The following maps display the spatio-temporal patterns in effective fishing effort (fished hours) by major gear groups for the two potential management areas Cel 1 (7bcefghjk) and Cel 2 (7fg), respectively.

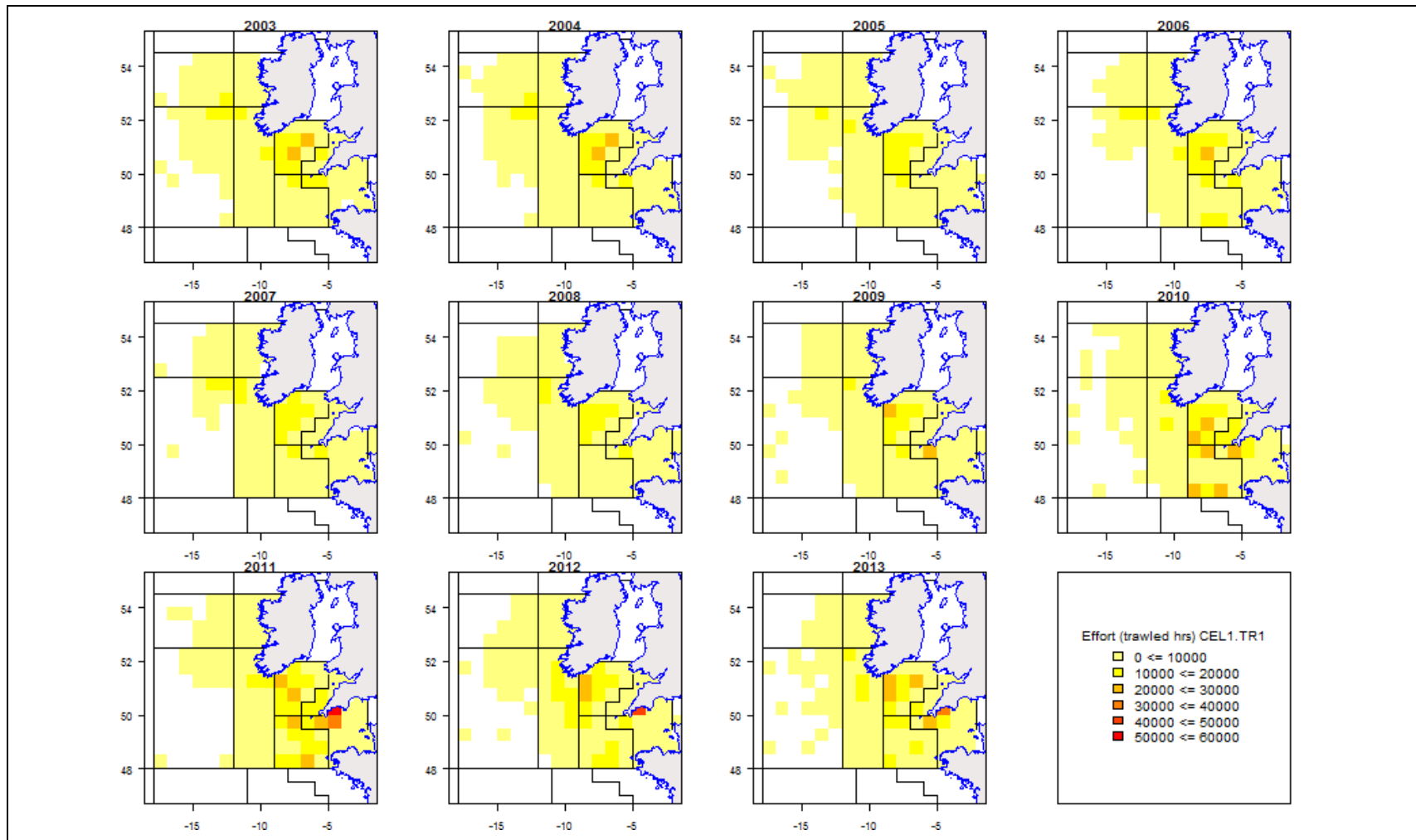


Figure 5.6.9.1.1 Cell1: Effective effort distribution of TR1 gears 2003-2013.

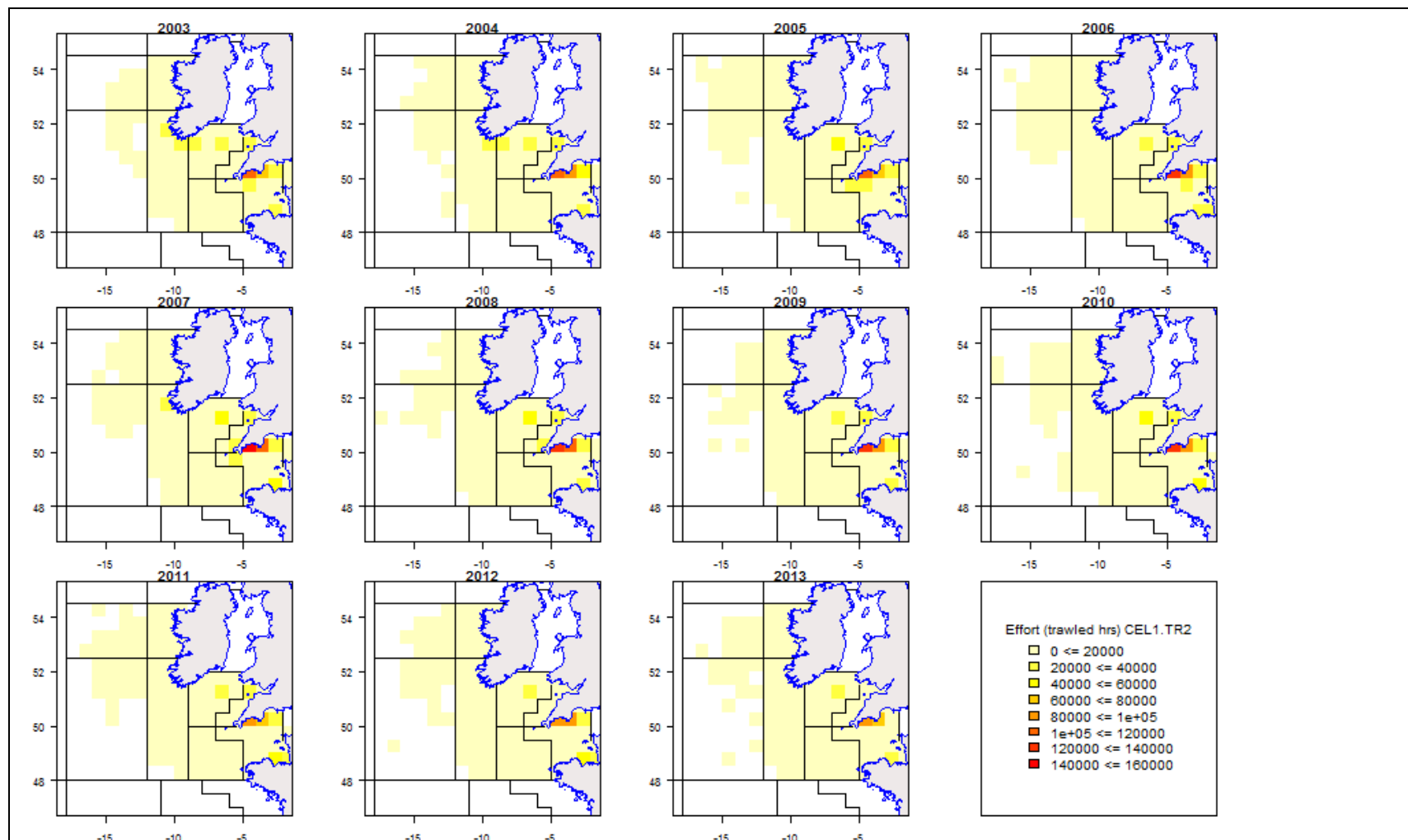


Figure 5.6.9.1.2 Cell: Effective effort distribution of TR2 gears 2003-2013

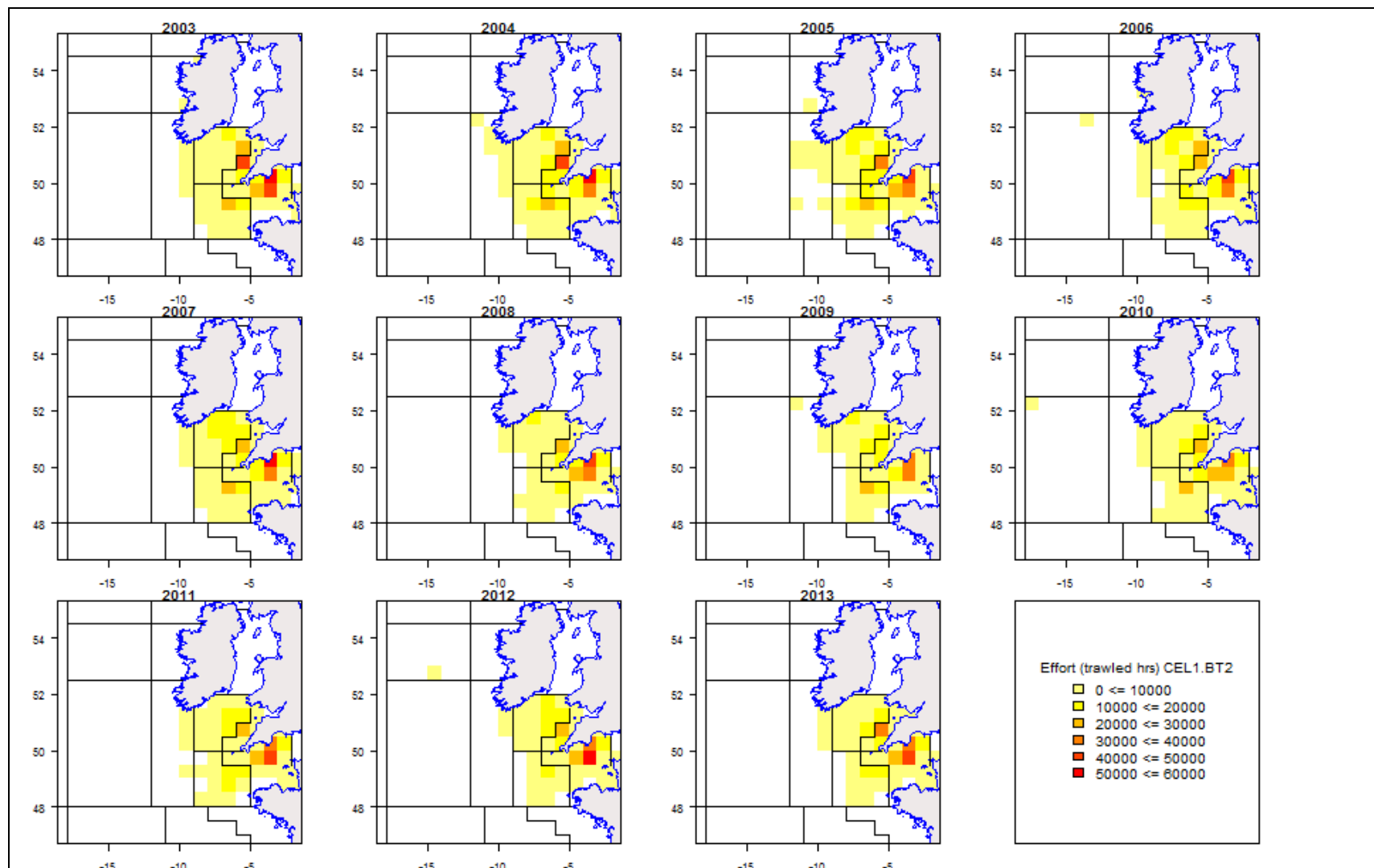
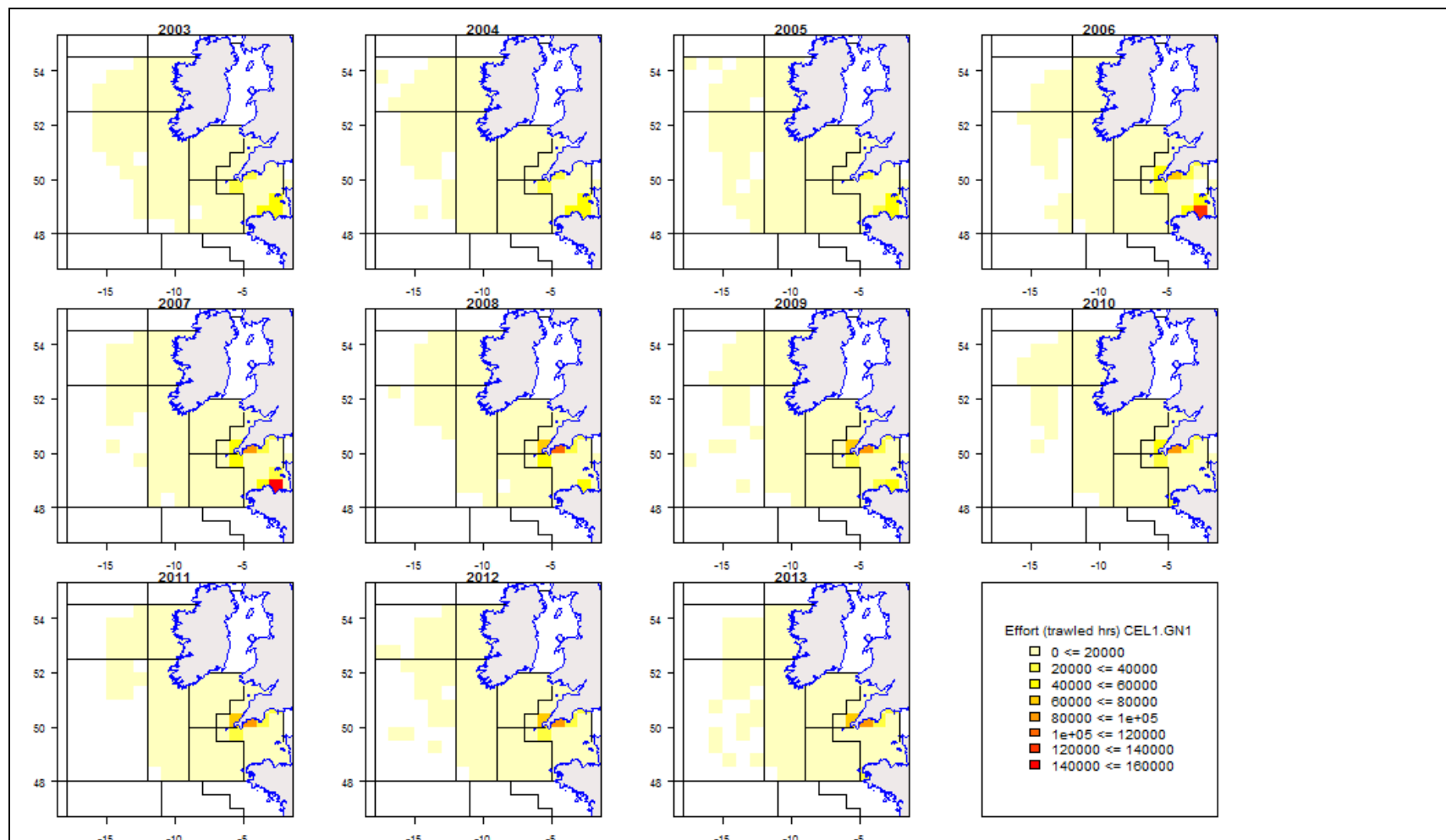


Figure 5.6.9.1.3 Cell1: Effective effort distribution of BT2 gears 2003-2013



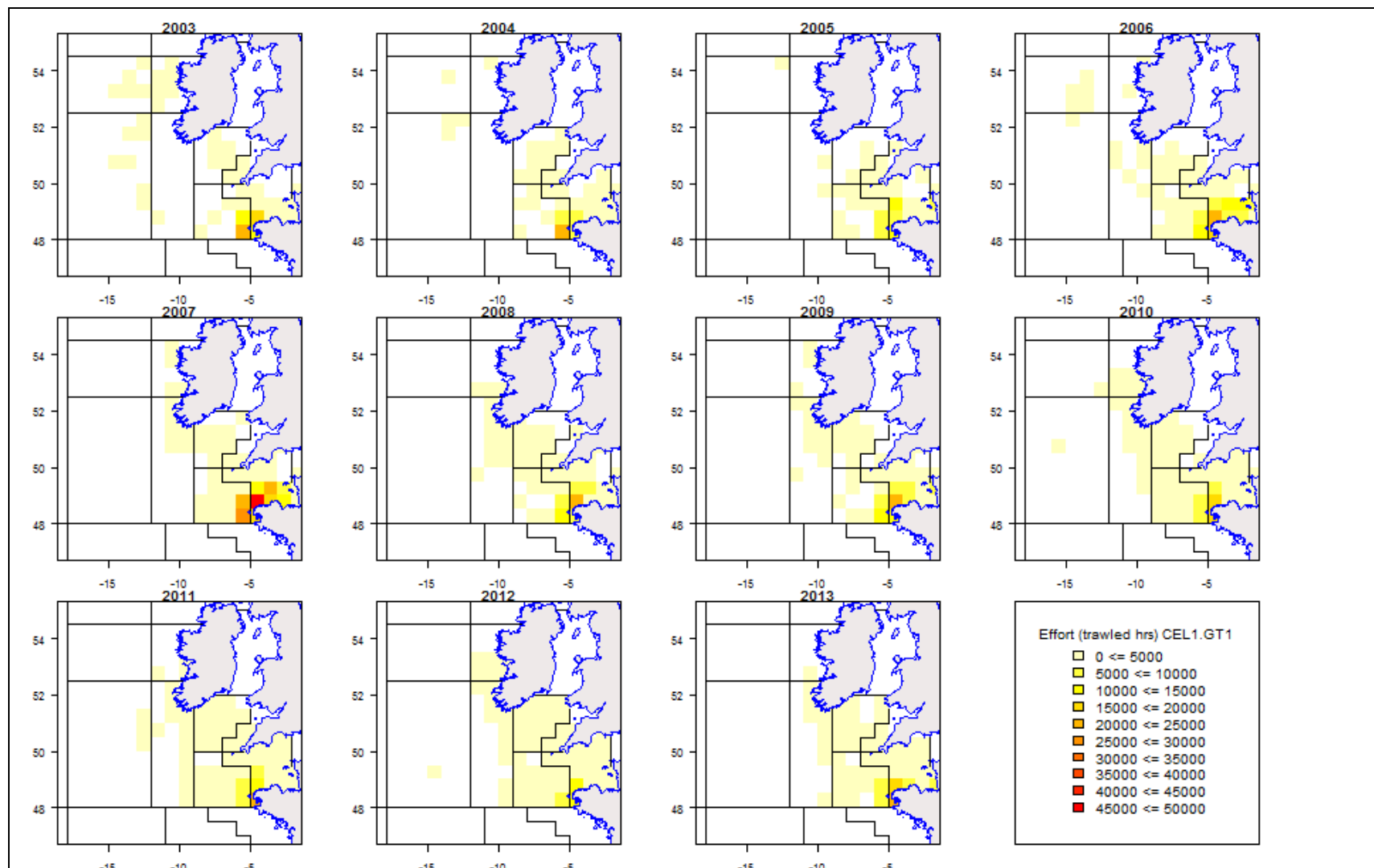


Figure 5.6.9.1.5 Cell: Effective effort distribution of GT1 gears 2003-2013

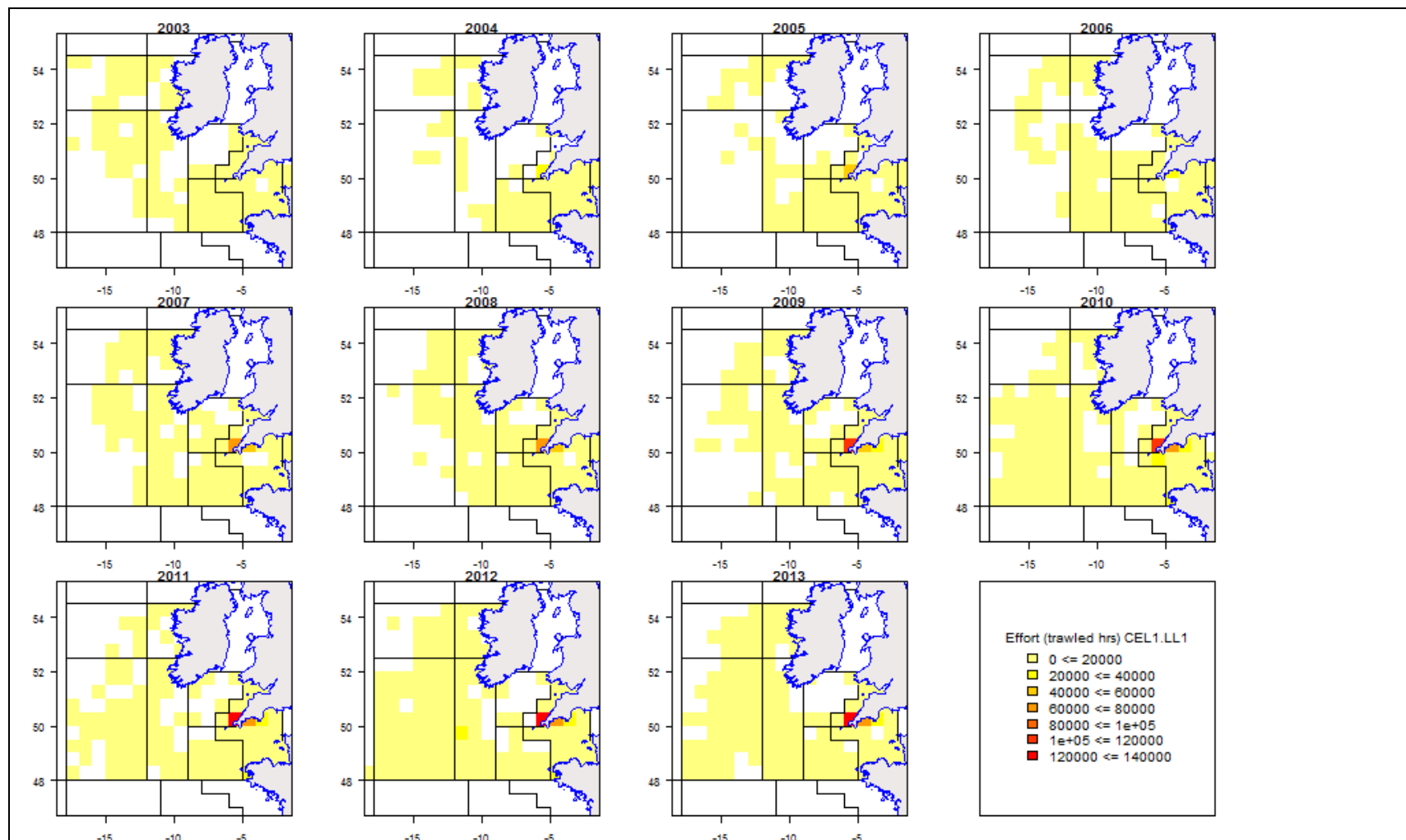


Figure 5.6.9.1.6 Cell: Effective effort distribution of LL1 gears 2003-2013

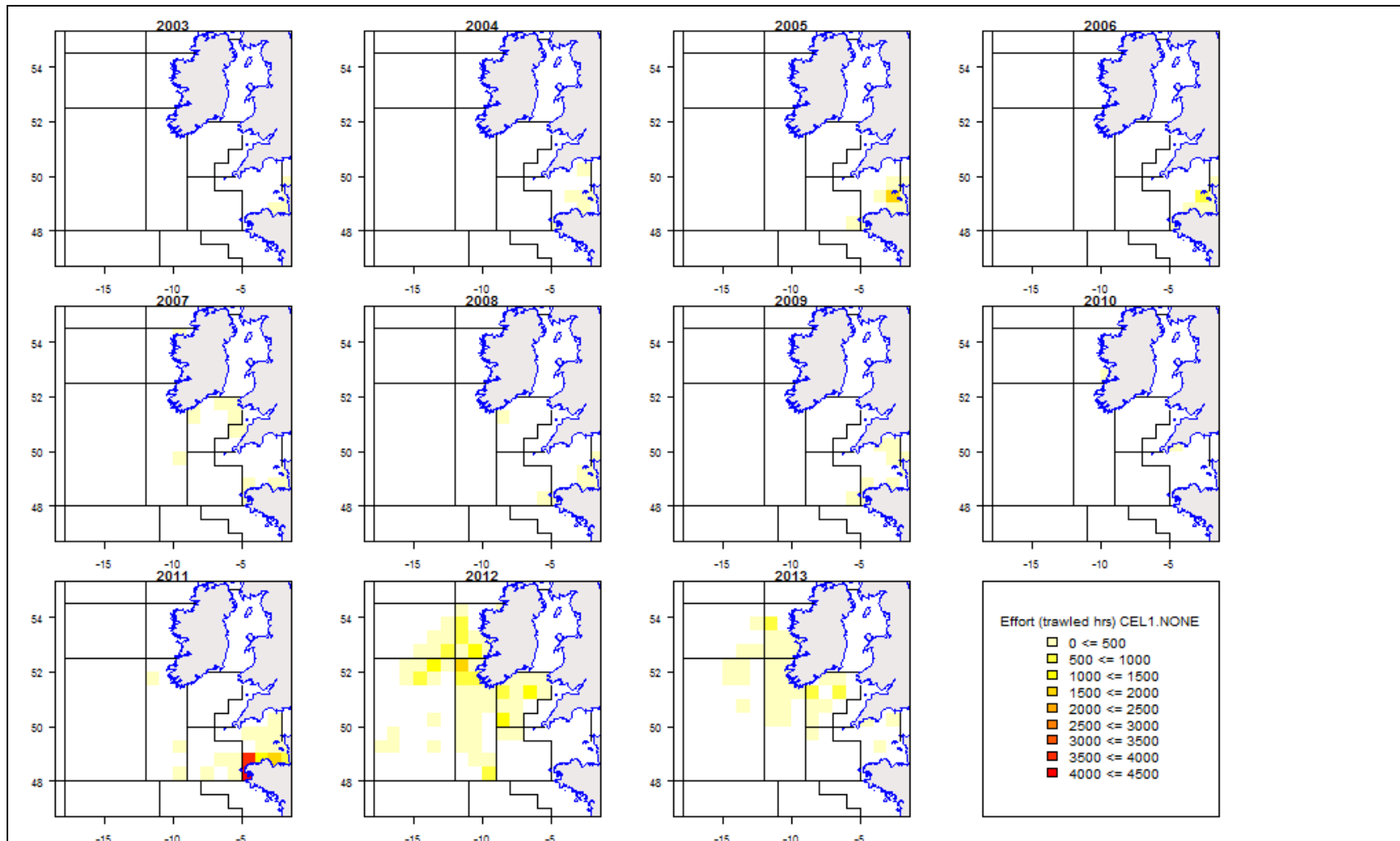


Figure 5.6.9.1.7 Cell: Effective effort distribution of none gears 2003-2013

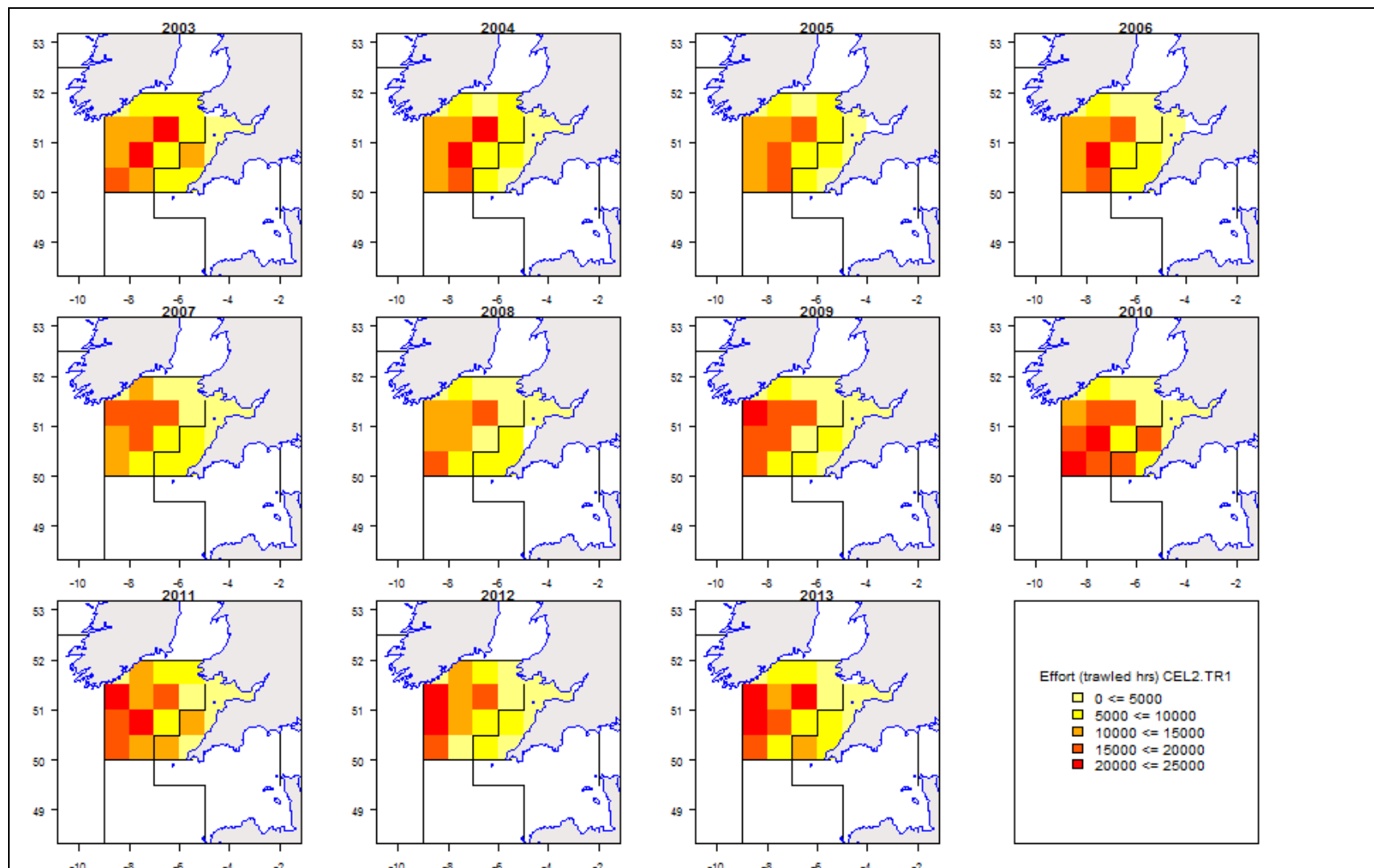


Figure 5.6.9.2.1 Cel2: Effective effort distribution of TR1 gears 2003-2013

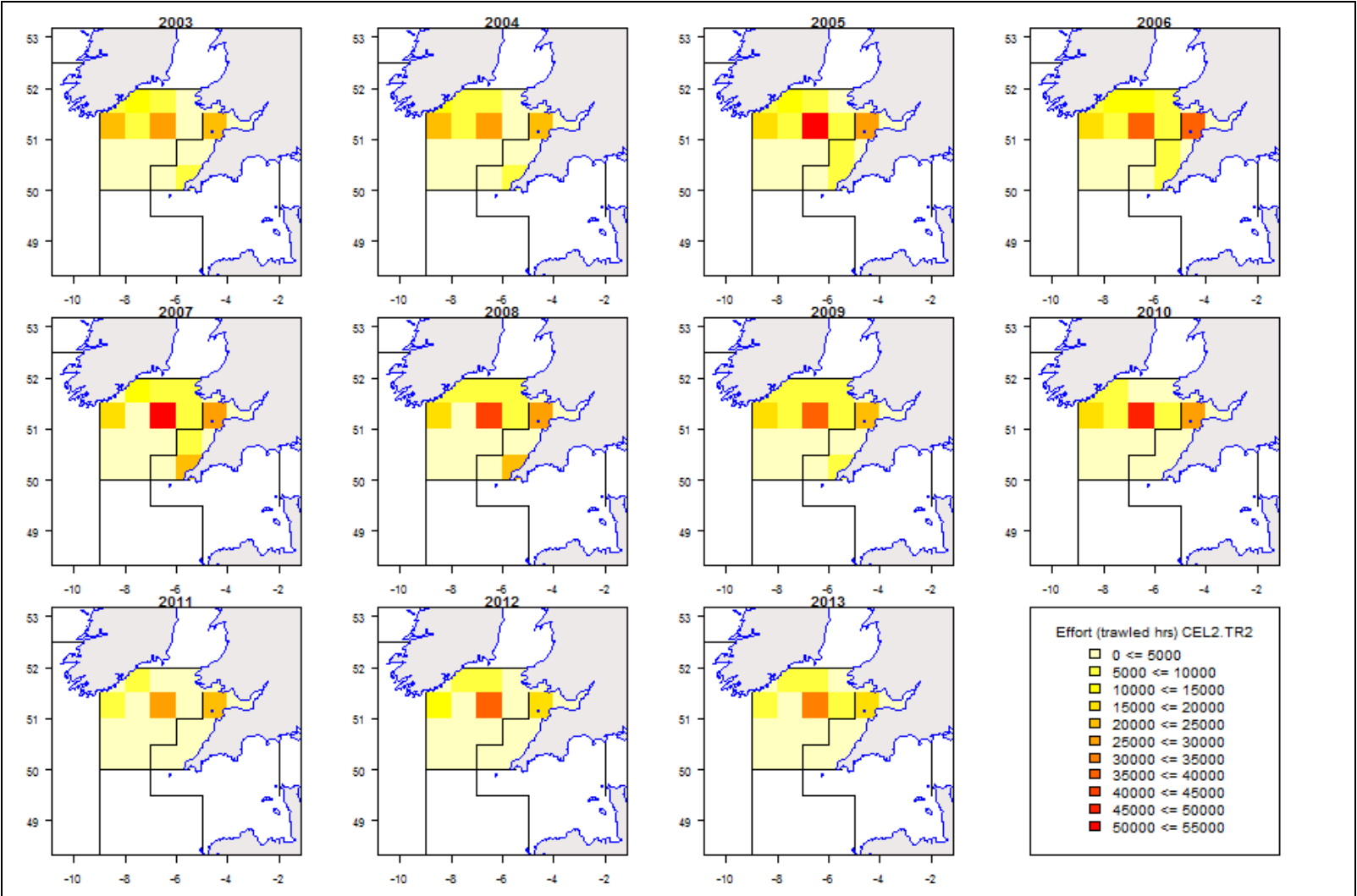


Figure 5.6.9.2.2 Cel2: Effective effort distribution of TR2 gears 2003-2013

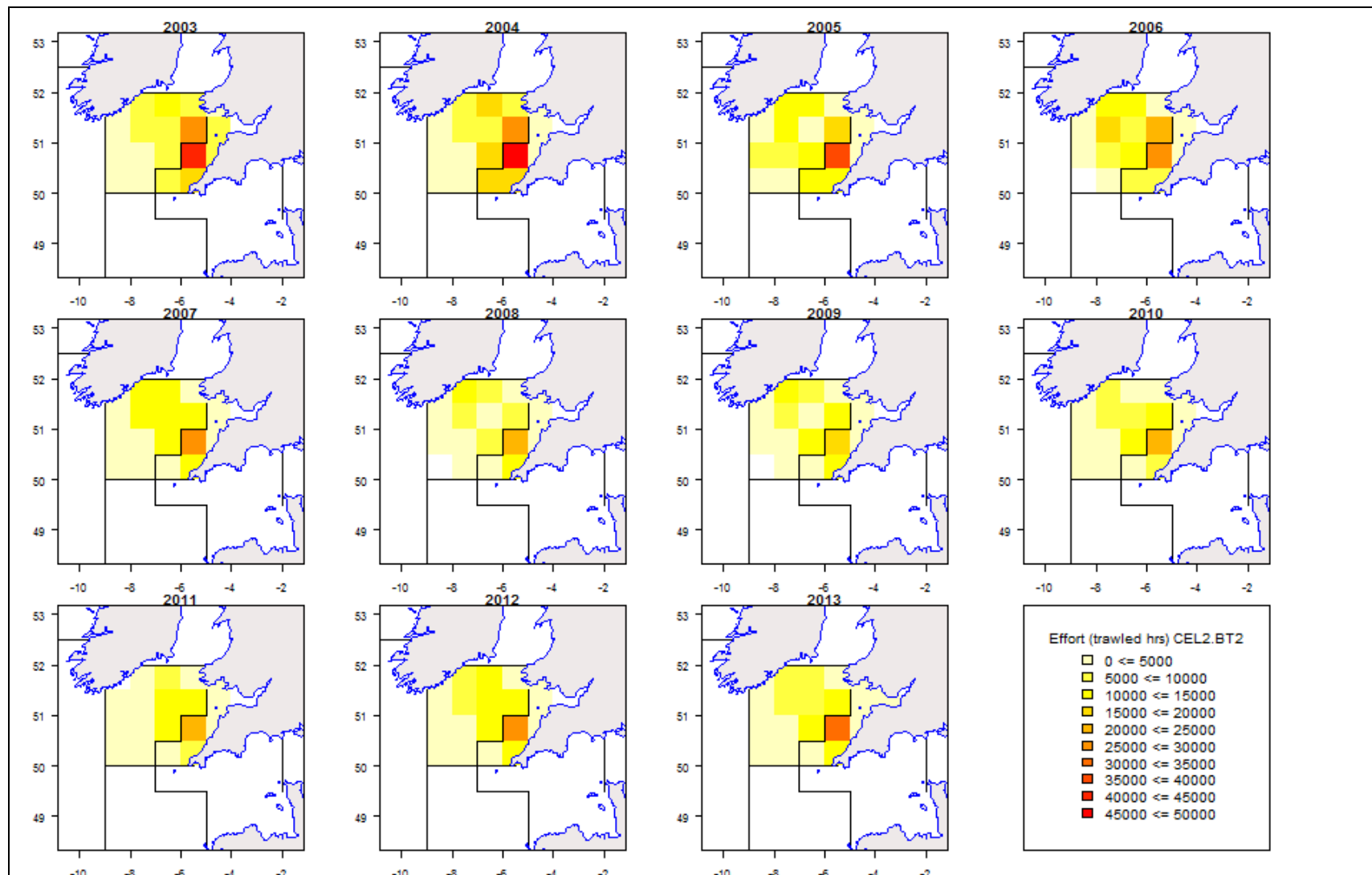
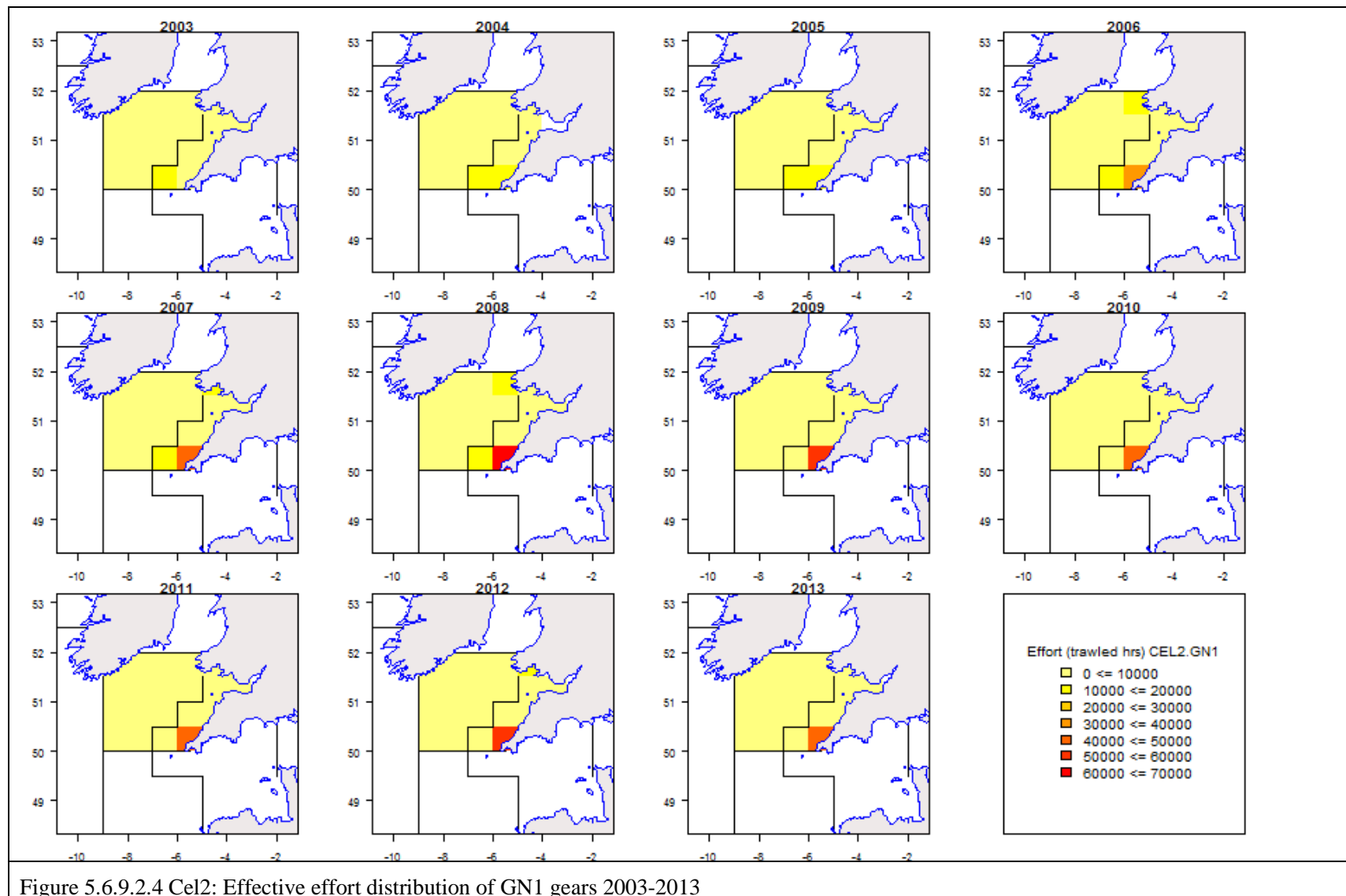


Figure 5.6.9.2.3 Cel2: Effective effort distribution of BT2 gears 2003-2013



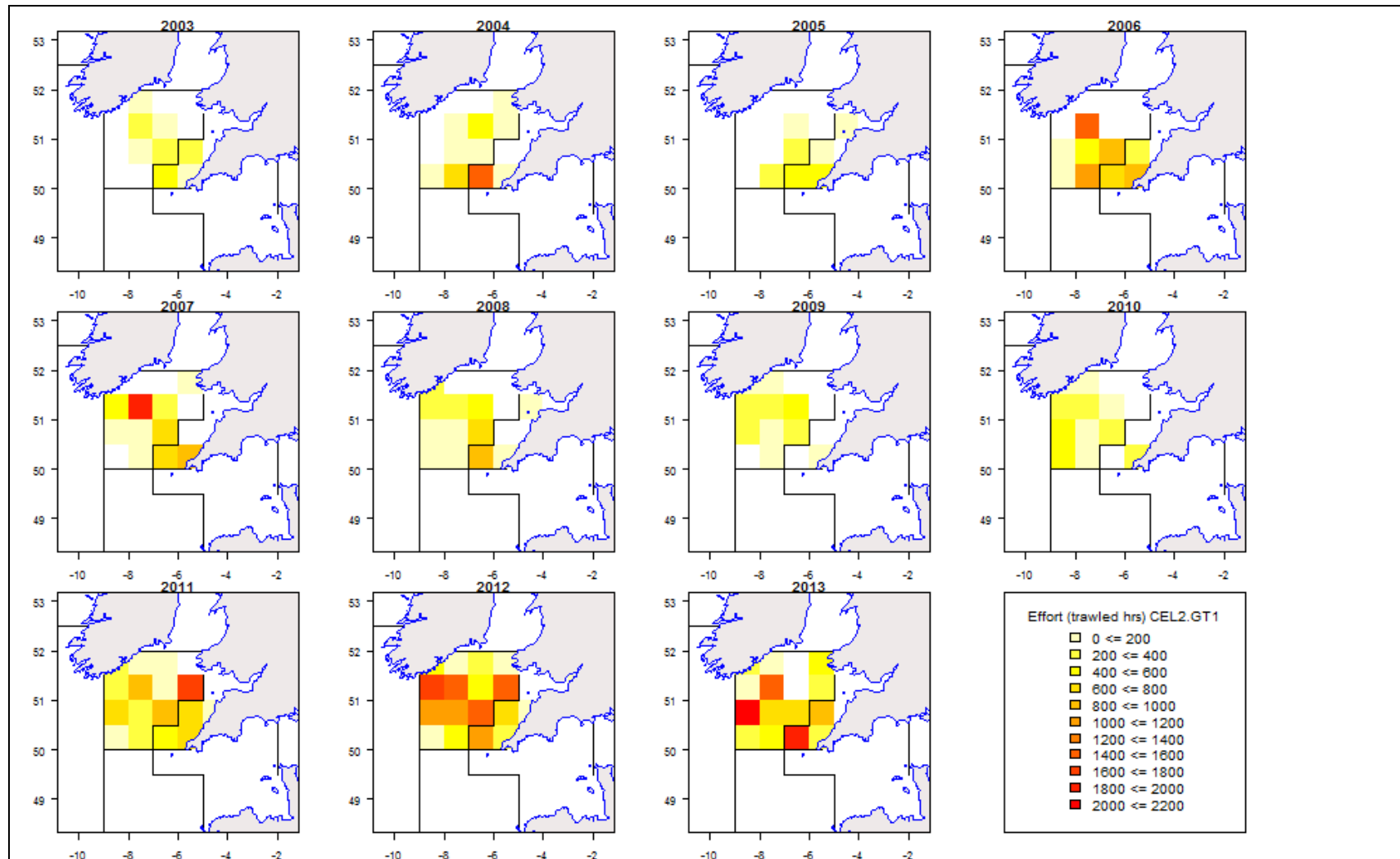


Figure 5.6.9.2.5 Cel2: Effective effort distribution of GT1 gears 2003-2013

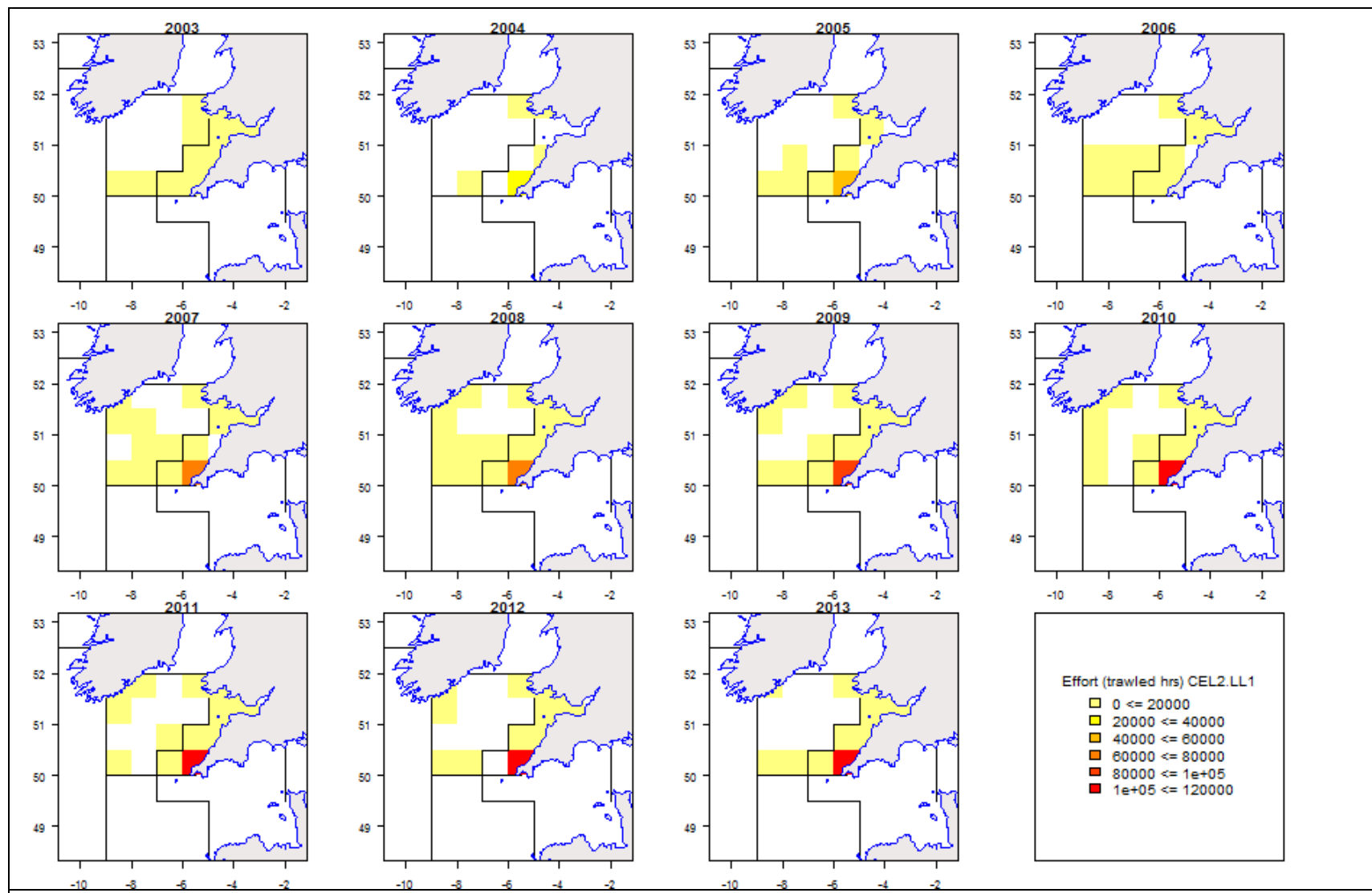


Figure 5.6.9.2.6 Cel2: Effective effort distribution of LL1 gears 2003-2013

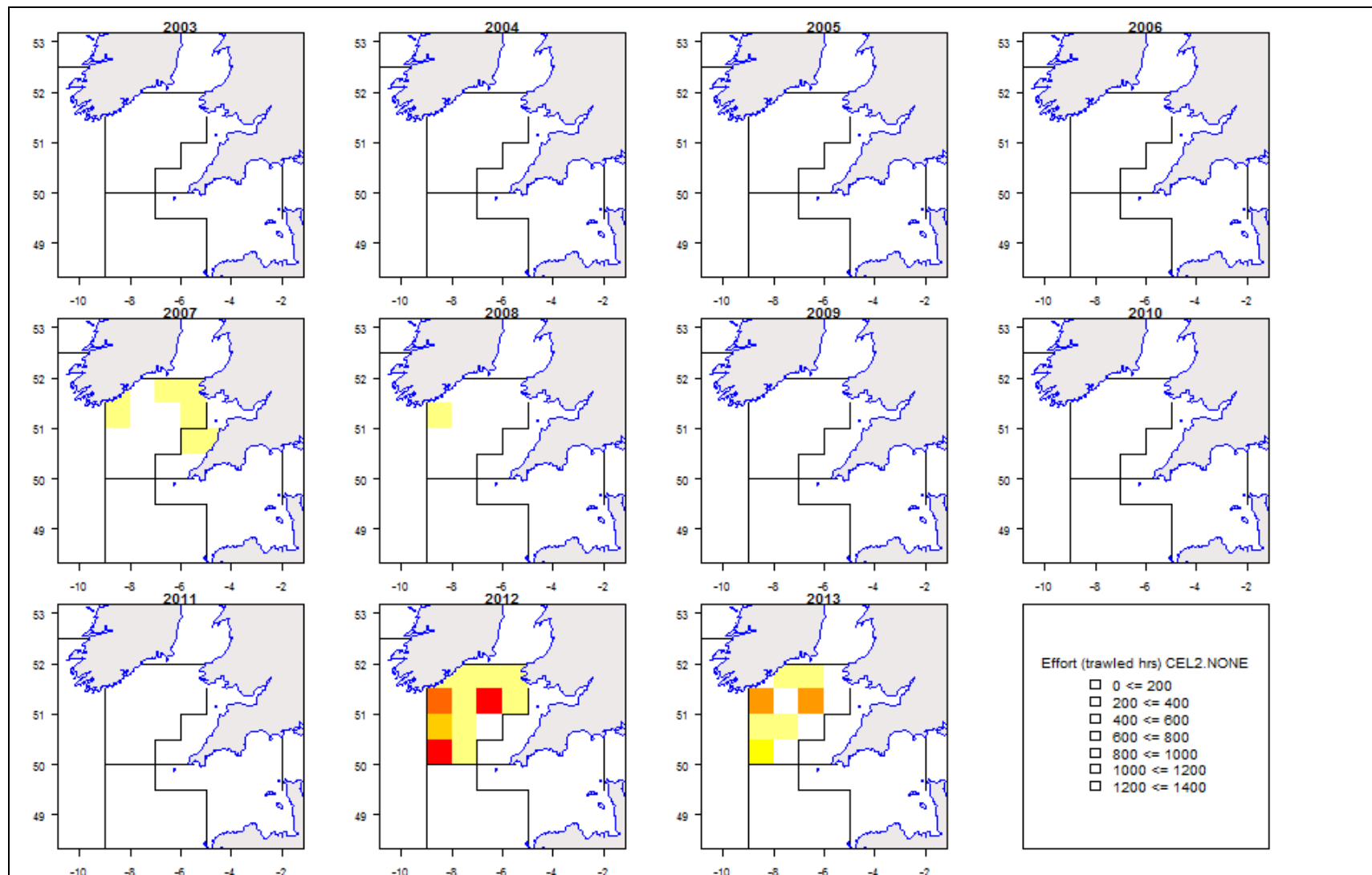


Figure 5.6.9.2.7 Cel2: Effective effort distribution of non regulated gears 2003-2013.

5.7 Southern hake and *Nephrops* effort regime evaluation in the context of Annex IIB to Council Regulation (EU) No 43/2012

STECF-EWG 14-06 considers that Annex IIB of CR 39/2013 represents a fleet specific effort management regime which supports the Southern hake and *Nephrops* recovery plan (CR 2166/2005).

Annex IIB excludes the Gulf of Cádiz although this area is included in the recovery plan (CR 2166/2005) and is part of the area of Southern stock of hake (8c and 9a) and Iberian *Nephrops* populations (30% of *Nephrops* landings in 2012 [ICES, 2012]). The cause of this exclusion is that when the recovery plan was established in 2005 the Spanish administration had already established a fishing plan for the trawl fleet of the Gulf of Cádiz that has been followed by consecutive similar plans since then. The last Fishing Plan (AAA/627/2013) is based on a fishing effort reduction (days & hours) and established a 50 days close season in autumn.

CR 39/2013 defines “Gulf of Cádiz” as the area eastwards from the longitude 7° 23’ 48” W, therefore “excluding Gulf of Cádiz” means in practice to exclude from area 9a the rectangles 01E3, 02E3, 03E3 and 01E4 and partially the rectangles 01E2 and 02E2. Data have been made according to this definition. Nevertheless in the Fishing Plan AAA/627/2013 Gulf of Cádiz goes from the Guadiana river estuary (frontier between Portugal and Spain) and Moroccan Point meridian (005° 36’W), a bigger area.

STECF-EWG 14-06 notes that the classification of the trawl mesh size ≥ 32 mm in point 1 of Annex IIB mixes two clearly defined Portuguese fleets and fisheries. One fishery targets demersal fish species with mesh size 65-69mm and greater (OTB_DEF_ \geq 55_0_0), and the other targets crustaceans with mesh size 55-59mm and greater (OTB_CRU_ \geq 55_0_0), operating in different fishing grounds and depth ranges. The demersal trawl fleet targets a large variety of species, namely horse mackerel (*Trachurus trachurus*), blue whiting (*Micromesistius poutassou*), blue jack mackerel (*Trachurus picturatus*), pouting (*Trisopterus luscus*) and hake (*Merluccius merluccius*). The crustacean trawl fleet operates along the SW and S coasts of Portugal and the main target species are deepwater rose shrimp (*Parapenaeus longirostris*), Norway lobster (*Nephrops norvegicus*), other shrimp species and blue whiting. The bottom otter trawl fleet is not allowed to fish inside the 6-mile coastal area, and a closed season is established for the Portuguese crustacean trawl in January each year.

The static gears (gillnets, trammel nets, longline and pots) are mainly used by the so-called Portuguese polyvalent fleet, which are licensed for more than one type of gear. Only gillnets and longlines are regulated within the Annex IIB.

Table 5.7.1 Portuguese Annex IIB regulated gears and trammel nets.

Effort control regime (Annex IIB)	DCF métier (Acronym)	Description
Bottom trawls, Danish seines and similar trawls of mesh size ≥ 32 mm	OTB_DEF_ ≥ 55 _0_0	Otter bottom trawl targeting demersal fish using mesh size ≥ 65 mm
	OTB_CRU_ ≥ 55 _0_0	Otter bottom trawl targeting crustacean species using mesh size ≥ 55 mm
Gill-nets of mesh size ≥ 60 mm	GNS_DEF_60-79_0_0	Set gillnet targeting demersal fish using mesh size of 60-79 mm
	GNS_DEF_80-99_0_0	Set gillnet targeting demersal fish using mesh size of 80-99 mm
	GNS_DEF_ ≥ 100 _0_0	Set gillnet targeting demersal fish using mesh size ≥ 100 mm
Bottom longlines	LLS_DEF_0_0_0	Set longline targeting demersal fish
Trammel nets (non-regulated)	GTR_DEF_80-99_0_0	Set trammel net targeting demersal fish using mesh size of 80-99 mm
	GTR_DEF_ ≥ 100 _0_0	Set trammel net targeting demersal fish using mesh size ≥ 100 mm

STECF-EWG 14-06 notes that under gears regulated by the Annex IIB there is also a mixture of different Spanish DCF métiers (Table 5.7.2).

The Spanish bottom trawl operating in the Northern and Western coastal waters (ICES Divisions VIIIc and IXa) is prosecuted by vessels with 28 m of average length. The minimum trawl depth is 100 m, the maximum activity period is 18 hours per day and they must stop fishing for a 48-hour continuous period per week. This fleet is composed of otter trawlers, High Vertical Open Trawlers and pair trawlers.

The most important Spanish métiers in 8c and 9a are described below:

Otter trawl “Baca” gear (OTB_DEF_ ≥ 55 _0_0), characterized by a vertical opening of 1.5-2.5 m and a wingspread of 20-30 m, is allowed to use a cod end mesh size >55 , however usually fishes with a 70 mm to catch demersal species, in particular hake (*Merluccius merluccius*), megrims (*Lepidorhombus boscii* and *L. whiffiagonis*) or anglerfish (*Lophius piscatorius* and *L. budegassa*).

High Vertical Open Trawl “Jurelera” (OTB_MPD_ ≥ 55 _0_0) permits a higher vertical opening (6-9 m) and is normally uses a smaller mesh size (55 mm), so it is used to target pelagic fish such as horse mackerel (*Trachurus trachurus*) and mackerel (*Scomber scombrus*). As ‘baca’ and

‘jurelera’ gears can be used on the same trip, the identification of the trip métier must be done by multivariate analysis (Punzón et al., 2010) of the landings profile.

The pair bottom trawl fleet (PTB_MPD_>=55_0_0) uses a gear that can reach a vertical opening of 40 m and a wingspread of 130 m. This fleet has to use a minimum mesh size of 55-59 mm when 70% of catch belongs to a list of non demersal species, if it is not like that pair bottom trawl fleet has to use a mesh size of 70 mm or bigger. However, both cod ends are included into the same DCF mesh range due to the difficulty of splitting both kind of trips for sampling purposes.

Table 5.7.2 Spanish Annex IIB regulated gears and trammel nets.

Effort control regime (Annex IIB)	Area	DCF Metier acronym	Description
Trawls, Danish seines or similar gears of mesh size \geq 32 mm	8c & 9a	OTB_DEF_>=55_0_0	(‘Baca’) Otter bottom trawl targeting demersal species (hake, megrim, anglerfish ...) using a cod end mesh size of 70 mm
	8c & 9a North	OTB_MPD_>=55_0_0	(‘Jurelera’) Otter trawl targeting pelagic and demersal species (horse mackerel, mackerel)
		PTB_MPD_>=55_0_0	Pair bottom trawl targeting pelagic and demersal species (blue whiting, hake, mackerel) using a
		SDN_MCF_>=55_0_0	Danish seine targeting cuttlefish
	9a South	OTB_MCD_>=55_0_0	Otter bottom trawl targeting crustaceans and demersal species (rose shrimp, hake, cuttlefish)
Gill-nets of mesh size \geq 60 mm	8c & 9a North	GNS_DEF_60-79_0_0	(‘Beta’) Set gillnet targeting demersal species (horse mackerel, pouting, hake, ...) using a mesh size of 60 mm
		GNS_DEF_80-99_0_0	(‘Volanta’) Set gillnet targeting hake using a mesh size of 90 mm
		GNS_DEF_>=100_0_0	(‘Rasco’) Set gillnet targeting anglerfish using mesh size of 280 mm
Bottom longlines	8c & 9a	LLS_DEF_0_0_0	Bottom longline targeting demersal species (conger, pomfret, hake, ...)
	9a S	LLS_DWS_0_0_0	Bottom longline targeting silver scabbardfish
Trammel nets (non regulated)	8c & 9a N	GTR_DEF_60-79_0_0	Set trammel net targeting demersal species (cuttlefish, spider crab, rays, ...) using mesh size over 60 mm
	9a S	GTR_DEF_40-59_0_0	Set trammel nets targeting demersal species (cuttlefish, wedge sole, meagre, prawns, ...) using 40-60 mm mesh size

Otter bottom trawl in 9a South (OTB_MCD_>55_0_0) fishes in both Portuguese and Spanish waters and is directed to crustaceans and demersal species such as rose shrimp (*Parapeanaeus longirostris*), hake and cuttlefish (*Sepia officinalis*).

The Northern Spanish gillnet fleet uses three types of nets: “beta”, “volanta” and “rasco” nets (Castro et al., 2011).

- “Beta” gear (GNS_DEF_60-79_0_0) uses mesh sizes of 60 mm to target a variety of demersal species such as horse mackerel, pouting (*Trisopterus luscus*), hake and mullets (*Mullus spp.*).
- “Volanta” gear (GNS_DEF_80-99_0_0) is a gillnet composed by nets with 10 m high and 50 m length, which is regulated under a mesh size of 90 mm to specifically catch hake.
- “Rasco” gillnet is composed by nets with 3.5 m high and 50 m length, and uses a 280 mm mesh size to target anglerfish (GNS_DEF_>=100_0_0).

The main Spanish set longline fleet (LLS_DEF_0_0_0) uses a line with less than 4000 hooks and is used to catch demersal fish as conger (*C. conger*), pomfret and hake, among others.

The Northern Spanish trammel net fleet (GTR_DEF_60-79_0_0) uses a gear made with three walls of netting, the two outer walls being of a larger mesh size (400-500 mm) than the loosely hung inner netting panel (60-90 mm), and targets a variety of demersal species such as cuttlefish, spider crabs or rays.

Annex IIB of CR 39/2013 sets the maximum number of days the fishing vessels are allowed to be present in the area carrying the specified regulated gears (Table 5.7.3). The regulated gear types are named as “3a” (bottom trawler mesh size ≥ 32 mm), “3b” (gillnet ≥ 60 mm) and “3c” (bottom longline), using the 2006-2007 regulations numbering. Special conditions are applied to vessels that landed less than 5 tons of hake and less than 2.5 tons of Norway lobster in the year 2010 or 2011 (CR 39/2013). These special conditions, previously referred as IIB72ab according to their numbering (Annex IIB, point 7.2, *a* and *b*) in CR(s) 40/2008 and 43/2009, were updated to IIB52ab in CR(s) 53/2010 and 57/2011 and to IIB61 in CR 43/2012 and CR 39/2013.

In 2010, additional days were allocated to Spanish and Portuguese vessels on the basis of permanent cessation of vessels from each country. This different allocation is reflected since then in the annual allowed days at sea.

Table 5.7.3. Historic trends in allowed days at sea by vessel specified in the Council Regulations since 2005.

Annex	AREA	REG GEAR	SPECON (**)	Country	2005	2006	2007	2008	2009	2010	2011	2012	2013		
IIB	8c9a	3a, 3b & 3c (*)	none	ESP	264	240	216	194	175	158	158	150	141		
				FRA							142	149	134		
				PRT							172	155	140		
			IIB52ab	ESP	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
				FRA											
				PRT											

(*) according to 2006 and 2007 regulations

(**) SPECON IIB52ab corresponds to IIB72ab of the regulations prior to 2010

The days of a trip shall not be counted for effort regulation if hake catch (landing + discard) is less than 4% of the trip catch (CR 39/2013).

STECF-EWG 14-06 considers that the use of fishing days (or kW*days) to manage effort of static gears such as gillnets and longlines is a very poor approximation of the effective effort and thus may put at risk the management goals.

In the case of Spanish data some inconsistencies between “gear” and “fishery” (= metier) information could be found in the database. That is because “gear” information comes directly from the logbooks (official information) and “fishery” information comes from multivariate analysis carried out to identify the metier of each trip (scientific estimations).

5.7.1 ToR 1.a Fishing effort in kWdays, GTdays and number of vessels by Member state and fisheries

2013 kW*days, GT*days and number of vessels in 8c and 9a were provided by Spain, Portugal, France, Germany, Scotland and England by area, gear, special condition and vessel length. EWG effort data time series start in 2000. There has been sporadic effort from Ireland and the Netherlands in previous years. Spain did not provide 2010 and 2011 data.

According to Annex IIB of CR 39/2013, in the context of the recovery plan for Southern hake and *Nephrops* stocks, fishing vessels with overall length above 10 meters that have trawl nets with mesh sizes >32 mm, gillnets > 60 mm or bottom longlines might be present within the area for a maximum of 141 days during 2013 if they have Spanish flag, 134 days if they have French flag and 140 days if they have Portuguese flag (Table I of the Annex II B, Table 5.7.3).

If, during 2010 or 2011 these vessels landed less than 5 tonnes of hake and less than 2.5 tonnes of *Nephrops*, special conditions were applied and they were not covered by the effort limitation (Table 5.7.3), but were obliged not to exceed those amounts in 2013. The special conditions reference years were 2001-2003 average for 2005–2009 regulations, 2007 or 2008 for 2010 regulation, 2008 or 2009 for 2011 regulation, 2009 or 2010 for 2012 regulation and 2010 or 2011 for 2013 regulation.

Trawl effort data provided by Spain (2002-2009, 2012, 2013) to the STECF EWG database come from logbooks and show a decreasing trend from 2004 to 2012 and a slight increase from 2012 to 2013. These data can be compared with the effort data presented by Spain for the same area to the 2013 ICES WGHMM (2014 report is not available yet in June 2014). The data provided to the ICES WG were effort estimates derived from several sources of data. These data

also presented a decreasing trend, but show a more marked effort drop in the last years (ICES, 2013; Figure 5.7.1.1, left).

Portugal presented a new set of data for the time series with values slightly superior to the previous. Effort estimates provided by Portugal (2000-2013) to the EWG database present a decreasing trend between 2007 and 2009, stability in 2009, 2010 and 2011, a slight increase in 2012 and a decrease in 2013. Portuguese data come mostly from logbooks and, for those that do not have logbooks (< 10 m), from sales records. We can compare these data with the effort data presented by Portugal for the same area to the 2013 ICES WGHMM. The data provided to the ICES WG come from a standardized effort series based on logbook data (ICES, 2013). The data presented here also shows a decreasing trend until 2010, but no data were available for 2011 and 2012 (Figure 5.7.1.1, right).

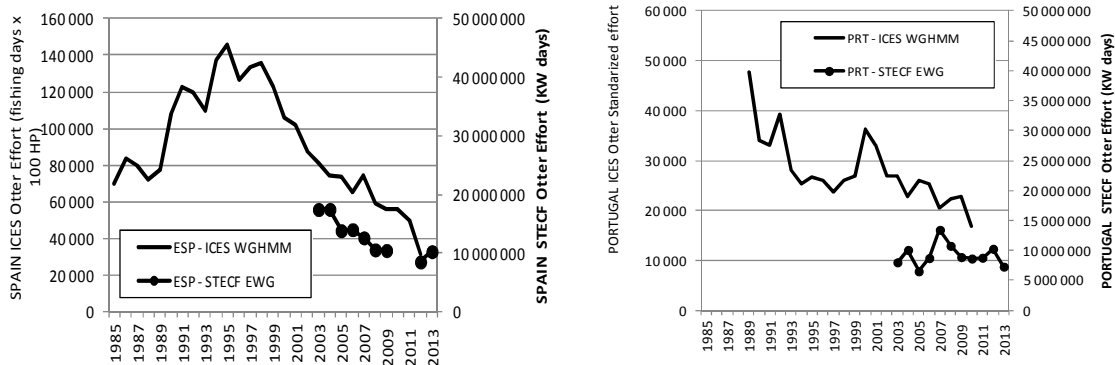


Figure 5.7.1.1. Comparison of trawl effort presented to ICES 2013 WGHMM and to STECF EWG data base (this report) (left: Spain, right: Portugal).

Figure 5.7.1.2 shows the decreasing trend until 2012 in the 8c and 9a trawl fleets from the 2013 ICES WGHMM that corroborates the decreasing trends found in the EWG trawl effort data.

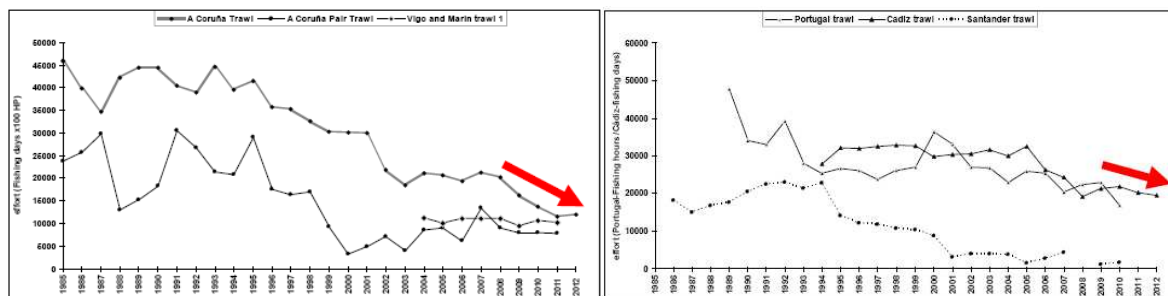


Fig. 5.7.1.2. 8c and 9a trawl fleets (left Spanish, right Portuguese) effort from the 2013 ICES WGHMM (1985-2012).

The 2000-2013 effort data in terms of kW*days by Member State are given in Table 5.7.1.1.

Table 5.7.1.1. Trend in nominal effort (kW*days at sea) by Member State and existing derogations given in Table 1 of Annex IIB (CR 39/2013), 2004-2013. Derogations are sorted by gear, special condition (SPECON) and country. Data quality is summarised in section 4. Note that the gear type “3t” denotes the non-regulated effort for trammel gear with all mesh sizes. **No Spanish data in 2010 and 2011.**

annex	reg_area	reg_gear	specon	country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
IIB	8C-9A	3A	IIB72AB	ESP	3,051,855	2,677,605	2,420,208	2,458,721	2,478,225	2,403,446	-	-	-	-
IIB	8C-9A	3A	IIB72AB	FRA	-	-	-	-	-	-	-	-	39,910	-
IIB	8C-9A	3A	IIB72AB	PRT	1,657,564	1,609,414	560,066	186,292	195,742	314,695	310,341	897,592	1,559,753	1,315,161
IIB	8C-9A	3A	NONE	ENG	-	1,277	-	-	-	-	-	-	-	2,484
IIB	8C-9A	3A	NONE	ESP	14,344,840	11,072,135	11,473,544	9,902,350	7,975,346	7,959,428	-	-	8,113,213	10,268,598
IIB	8C-9A	3A	NONE	FRA	110,098	198,178	345,256	274,429	315,954	315,954	48,163	72,798	37,581	27,489
IIB	8C-9A	3A	NONE	IRL	-	-	1,612	-	-	-	82	-	-	-
IIB	8C-9A	3A	NONE	PRT	5,074,403	4,425,695	6,137,863	8,941,196	8,299,896	7,380,318	6,493,382	6,082,354	6,297,702	5,593,564
IIB	8C-9A	3A	NONE	SCO	-	-	-	-	-	-	-	-	-	442
IIB	8C-9A	3B	IIB72AB	ESP	865,145	1,033,742	916,120	1,056,900	1,330,193	1,668,152	-	-	-	-
IIB	8C-9A	3B	IIB72AB	FRA	-	-	-	-	-	-	-	-	36,742	1,323
IIB	8C-9A	3B	IIB72AB	PRT	2,695	51,269	116,027	152,925	176,030	276,056	248,338	179,928	177,891	105,861
IIB	8C-9A	3B	NONE	ENG	-	-	26,652	1,984	-	-	-	-	-	-
IIB	8C-9A	3B	NONE	ESP	684,167	787,527	916,038	1,010,060	1,195,943	1,480,125	-	-	1,488,982	2,169,086
IIB	8C-9A	3B	NONE	FRA	28,023	97,700	69,478	128,595	296,765	296,765	129,308	69,860	57,234	53,050
IIB	8C-9A	3B	NONE	PRT	32,276	144,697	231,204	816,228	886,822	763,806	680,987	285,066	227,532	388,084
IIB	8C-9A	3B	NONE	SCO	-	-	3,234	-	-	-	-	-	-	-
IIB	8C-9A	3C	IIB72AB	ESP	692,039	686,974	755,191	846,255	897,264	1,099,242	-	-	-	-
IIB	8C-9A	3C	IIB72AB	FRA	-	-	-	-	-	-	-	-	22,172	14,784
IIB	8C-9A	3C	IIB72AB	PRT	280,951	572,386	869,687	841,563	750,091	864,313	844,144	907,462	239,579	323,207
IIB	8C-9A	3C	NONE	ENG	-	-	4,928	-	-	-	-	-	-	-
IIB	8C-9A	3C	NONE	ESP	383,472	545,271	830,548	522,362	521,613	728,602	-	-	2,483,342	2,261,828
IIB	8C-9A	3C	NONE	FRA	3,972	2,094	588	700	40,052	40,052	84,663	58,384	33,643	41,149
IIB	8C-9A	3C	NONE	IRL	-	-	1,684	2,472	-	-	-	-	-	-
IIB	8C-9A	3C	NONE	PRT	33,808	39,774	95,715	149,000	139,305	111,767	91,062	102,865	115,392	114,379
IIB	8C-9A	3C	NONE	SCO	-	-	-	-	-	-	2,323	3,437	2,294	-
IIB	8C-9A	3T	NONE	ESP	736,892	955,031	742,397	716,707	917,963	932,788	-	-	871,893	853,126
IIB	8C-9A	3T	NONE	FRA	525	-	1,878	-	2,823	2,823	5,350	4,506	6,551	6,441
IIB	8C-9A	3T	NONE	PRT	40,252	253,707	525,524	1,252,867	1,026,614	1,264,013	1,437,577	1,430,235	1,404,160	1,446,426
IIB	8C-9A	NONE	NONE	ESP	4,810,089	5,846,970	4,758,504	5,524,720	4,164,070	3,595,736	-	-	973,382	-
IIB	8C-9A	NONE	NONE	FRA	-	-	686	-	-	-	-	1,056	-	-
IIB	8C-9A	NONE	NONE	PRT	1,882,993	1,957,345	2,284,845	2,424,685	2,432,272	2,529,158	2,786,350	2,740,057	2,688,375	2,592,948
TOTAL					34,716,059	32,958,791	34,089,477	37,211,011	34,042,983	34,027,239	13,162,070	12,835,600	26,877,323	27,579,430

Information on trends in GTdays is available on the website: <http://stecf.jrc.ec.europa.eu/ewg1406>

In addition to the 2006 and 2007 regulation defined gear types “3a” (bottom trawler mesh size ≥ 32 mm), “3b” (gillnet ≥ 60 mm), “3c” (bottom longline) and the undefined (“none”), the tables include trammel nets under the coding “3t”, as they were found to contribute significantly to the static effort deployed (7% of the kWdays in 2012 and 2013).

In May 2014 Spain only provided 2013 data, not changing previous data. Portugal provided the whole series, correcting to tons what was submitted in 2013. Differences were found between the resubmitted data in 2014 and the data submitted in 2013. The new effort values are bigger but the trends remain the same.

Figure 5.7.1.3 shows effort trends for Spain and Portugal, the main players in the area (99% of the kWdays over the whole time series), for the period 2003 – 2013. No Spanish data were available for 2010 and 2011.

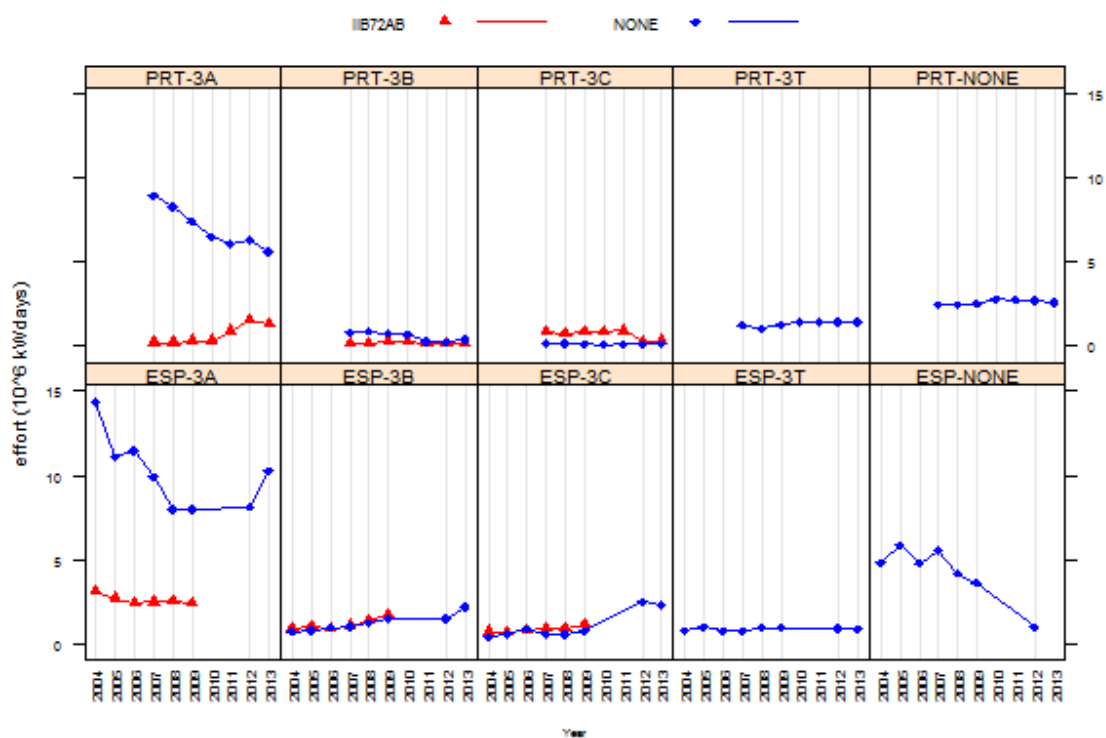


Fig. 5.7.1.3. Effort (kW*days) trends by gear type and Member State (2003-2013). There are not Spanish data from 2010 and 2011. Above: Portugal, below: Spain. IIB72AB: without effort limitation.

The data submitted by the Member States for the years 2000-2002, initial period of the time series, do not seem realistic as several gears present very low effort data and/or gaps, therefore there were omitted in the Figure 5.7.1.3. Both Spanish and Portuguese information comes from logbooks and for the Portuguese vessel with length under 10 m, from sales notes. Logbooks from Portuguese vessels before 2007 were not completely recorded in the national database and were also omitted in the graph in order to not give a wrong perception of the effort trend in this period. Spanish data from 2010 and 2011 were not available. See section 4 for more details in data quality provided by Member States. In 2012 and 2013 there was not Spanish effort under special conditions because no vessel had applied for that in those years.

Spanish and Portuguese regulated trawlers and Spanish pelagic seine (esp-3a, prt-3a and esp-pelagic seine, respectively) were the gears deploying more effort in the area in 2012 and 2013 (27%, 20% and 9% respectively).

The effort of trawlers (3a) under effort restrictions (Fig. 5.7.1.3 blue line) decreased since 2007 in the case of Portugal and since 2003 in the case of Spain. Spanish 3a effort increased in 2013.

The effort of gillnet (3b) and longline (3c) under effort restrictions (Fig. 5.7.1.3 blue line) was stable for the last years for Portugal and slightly increased for Spain.

The effort of trawlers (3a) without effort restrictions, i.e. with special conditions (Fig. 5.7.1.3 IIB61, red line) has been stable in the period 2007-2010 in the Portuguese case, with a slight increase since 2010, and stable between 2004 and 2009 in the case of Spain. As referred above, no Spanish vessel applied for special conditions in 2012 and 2013.

The effort of Portuguese longliners (3c) without effort restrictions (Fig. 5.7.1.3 IIB61, red line) decreased in the last years. Trammel (3t) effort is stable in the last years. .

Spanish unregulated gears including 3t effort (Figs. 5.7.1.3 and 5.7.1.4) in 2012 and 2013 was the 18% of 8c and 9a effort

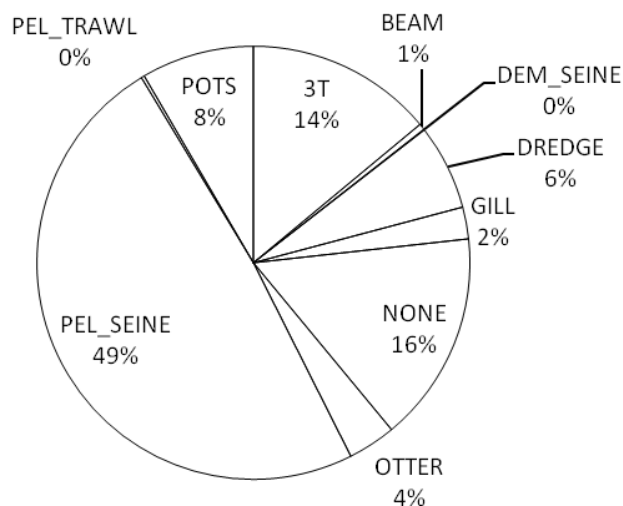


Figure 5.7.1.4.- Spanish non regulated gears effort (KW*day) by gear)(average 2012-2013). “none” gears (24%) are composed by tuna and mackerel gears (troll and hand lines).

Table 5.7.1.2 lists the trend in effort by derogation since 2004 in terms of kW*days at sea. GT*days at sea and number of vessels are available on the web. The effort of 3a under effort regime is stable since 2009. The effort of non regulated gears apart from trammel decreased in the last years.

Table 5.7.1.2. Trend in nominal effort (kW*days at sea) by derogations given in Table 1 of Annex IIB (CR 39/2013), 2004-2013. Derogations are sorted by gear and special condition (SPEC CON) (all countries together). Data qualities are summarised in section 4.3. Note that the gear type “3t” denotes the non-regulated (effort) trammel gear with all mesh sizes. **No Spanish data in 2010 and 2011.**

annex	reg_area	reg_gear	specon	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
IIB	8C-9A	3A	IIB72AB	4,709,419	4,287,019	2,980,274	2,645,013	2,673,967	2,718,141	310,341	897,592	1,599,663	1,315,161
IIB	8C-9A	3A	NONE	19,529,341	15,697,285	17,958,275	19,117,975	16,591,196	15,655,700	6,541,627	6,155,152	14,448,496	15,892,577
IIB	8C-9A	3B	IIB72AB	867,840	1,085,011	1,032,147	1,209,825	1,506,223	1,944,208	248,338	179,928	214,633	107,184
IIB	8C-9A	3B	NONE	744,466	1,029,924	1,246,606	1,956,867	2,379,530	2,540,696	810,295	354,926	1,773,748	2,610,220
IIB	8C-9A	3C	IIB72AB	972,990	1,259,360	1,624,878	1,687,818	1,647,355	1,963,555	844,144	907,462	261,751	337,991
IIB	8C-9A	3C	NONE	421,252	587,139	933,463	674,534	700,970	880,421	178,048	164,686	2,634,671	2,417,356
IIB	8C-9A	3T	NONE	777,669	1,208,738	1,269,799	1,969,574	1,947,400	2,199,624	1,442,927	1,434,741	2,282,604	2,305,993
IIB	8C-9A	NONE	NONE	6,693,082	7,804,315	7,044,035	7,949,405	6,596,342	6,124,894	2,786,350	2,741,113	3,661,757	2,592,948
TOTAL				34,718,063	32,960,796	34,091,483	37,213,018	34,044,991	34,029,248	13,164,080	12,837,611	26,879,335	27,581,443

Regulated trawl (3a) deploys most effort in the area (62%), being most of it (90%) under effort control in 2012 and 2013. Passive gears (3b, 3c and 3t) accounted for approximately 27% of all effort in 2012 and 2013. However, such results have a limited meaning regarding the fishing pressure exerted by these fleets, since the unit kW*day does not take into account the number of hooks deployed and area covered by the nets and hence it is a poor indicator of the fishing activity. In 2012 and 2013, about 19% of the effort was assigned to other gears than the regulated ones (“3t” and “none” gears), of which trammel nets (“3t”) contribute 8% to the overall effort deployed. Most of this effort is deployed by gears that do not target hake, *Nephrops* or anglerfish.

Figure 5.7.1.5 shows the effort trends by gear type in the period 2003-2013. Effort control measures started in 2005. There were not Spanish data in 2010 and 2011. The effort has decreased since 2004 in regulated trawlers (3a) and since 2007 in the non regulated gears. The effort has been stable between 2012 and 2013 in regulated gillnet (3b), regulated longline (3c) and in trammel (3t).

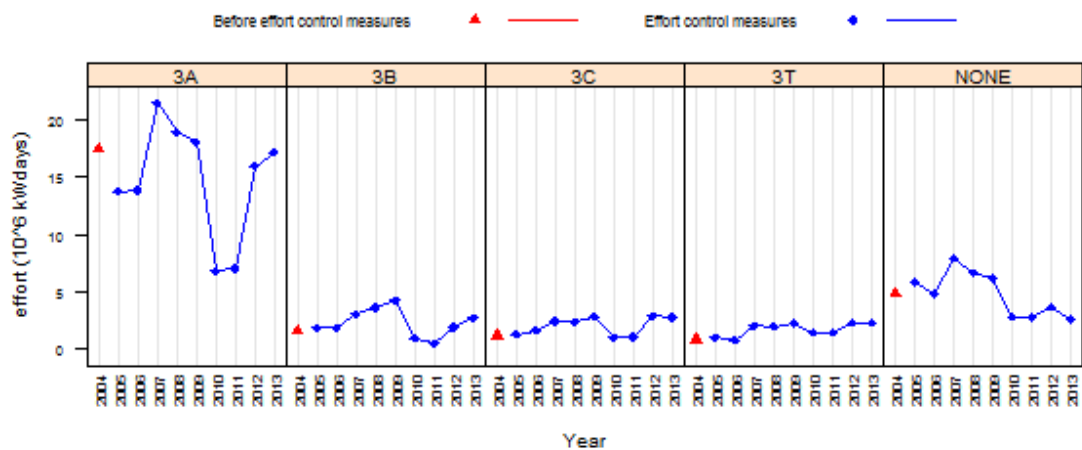


Fig. 5.7.1.5. Effort trends by gear type (Spain and Portugal together). There were not Spanish data in 2010 and 2011. Period before effort control measures as red triangle. Fishing effort regime started in 2005.

5.7.1.1 Spatial distribution of effective fishing effort by statistical rectangle

Portugal, Spain, France and Scotland submitted effort by ICES rectangle. Figures 5.7.1.1.1, 5.7.1.1.2 and 5.7.1.1.3 show the distribution of Spanish and Portuguese effort for regulated gears, with effort control (“none”) and without effort restriction (“IIB61”) for the period 2003-2013. For the years 2010 and 2011, only the effort from Portuguese fleets is plotted because no Spanish data were available for those years. In 2012 and 2013 no Spanish vessel applied for the effort special condition (IIB72AB). 2003-2009 Spanish longline effort was misallocated in the figure to specon “none”.

As referred in the introduction of section 5.7, STECF-EWG considers that the use of fishing days (or kW*days) to manage effort of static gears such as gillnets and longlines is a very poor approximation of the effective effort. Although the figures present the effective effort in the same units, the effort deployed by the different gear groups is not comparable.

No changes in the effort distribution pattern have been identified since the implementation of the fishing effort regulation.

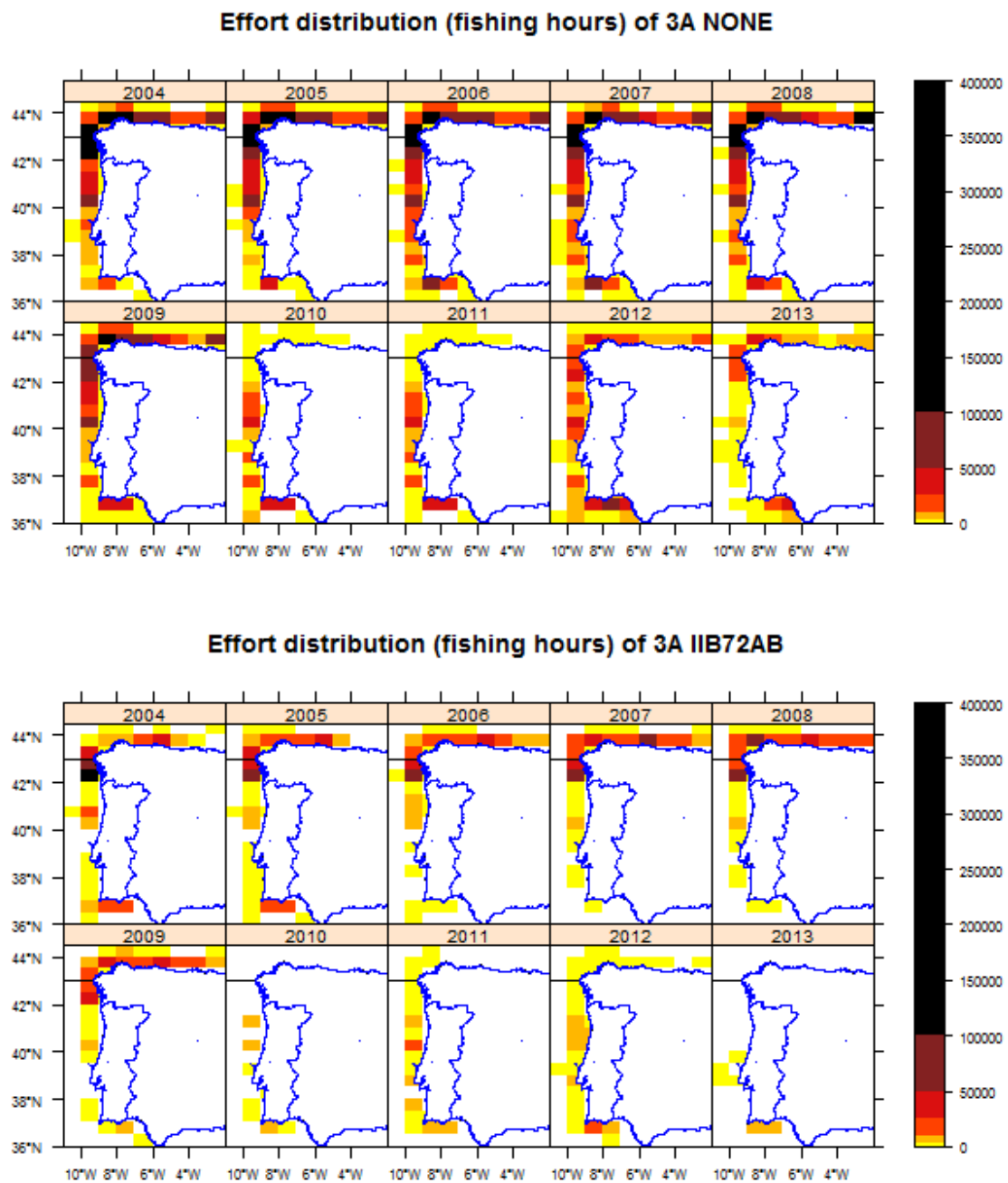
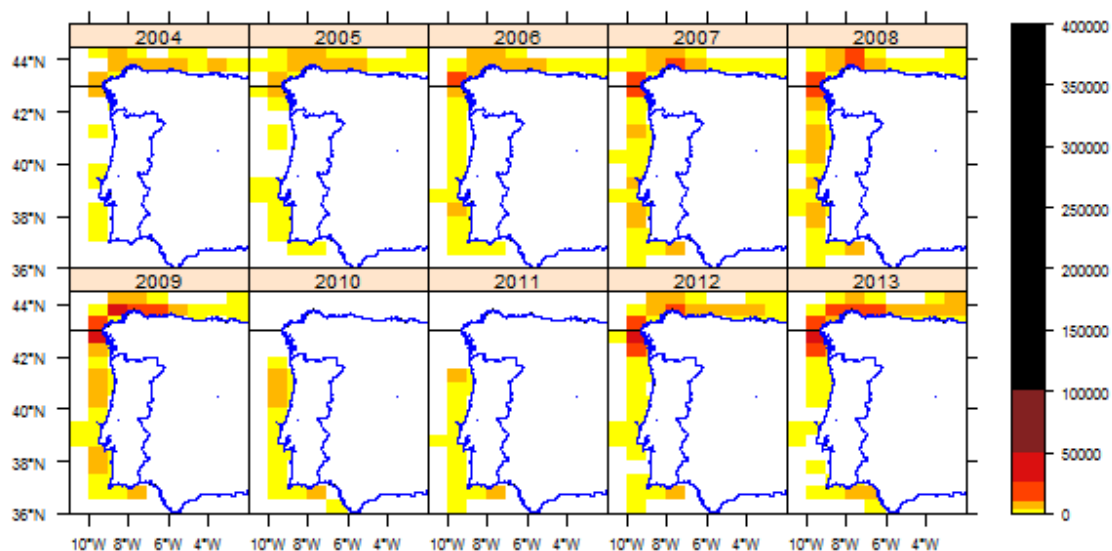


Figure 5.7.1.1.1. Effort spatial distribution for regulated trawl (gear 3a) without (upper panel) and with special conditions (lower panel) for the period 2004-2013. **No Spanish data for the years 2010 and 2011.** In 2012 and 2013 no Spanish vessel applied for the effort special condition (IIB72AB).

Effort distribution (fishing hours) of 3B NONE



Effort distribution (fishing hours) of 3B IIB72AB

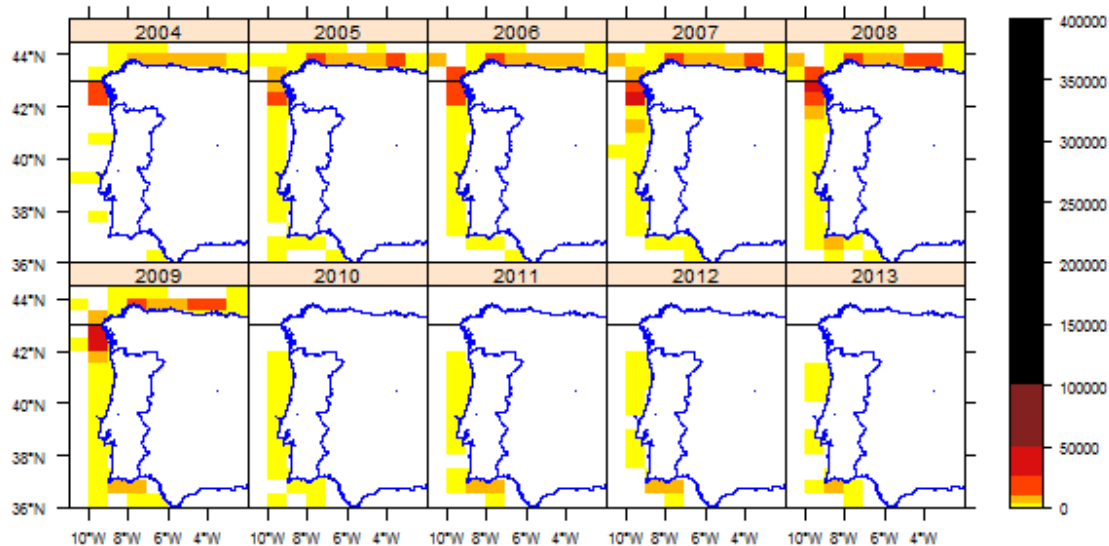


Figure 5.7.1.1.2. Effort spatial distribution for regulated gillnets (gear 3b) without (upper panel) and with special conditions (lower panel) for the period 2004-2013. **No Spanish data for the years 2010 and 2011.** In 2012 and 2013 no Spanish vessel applied for the effort special condition (IIB72AB).

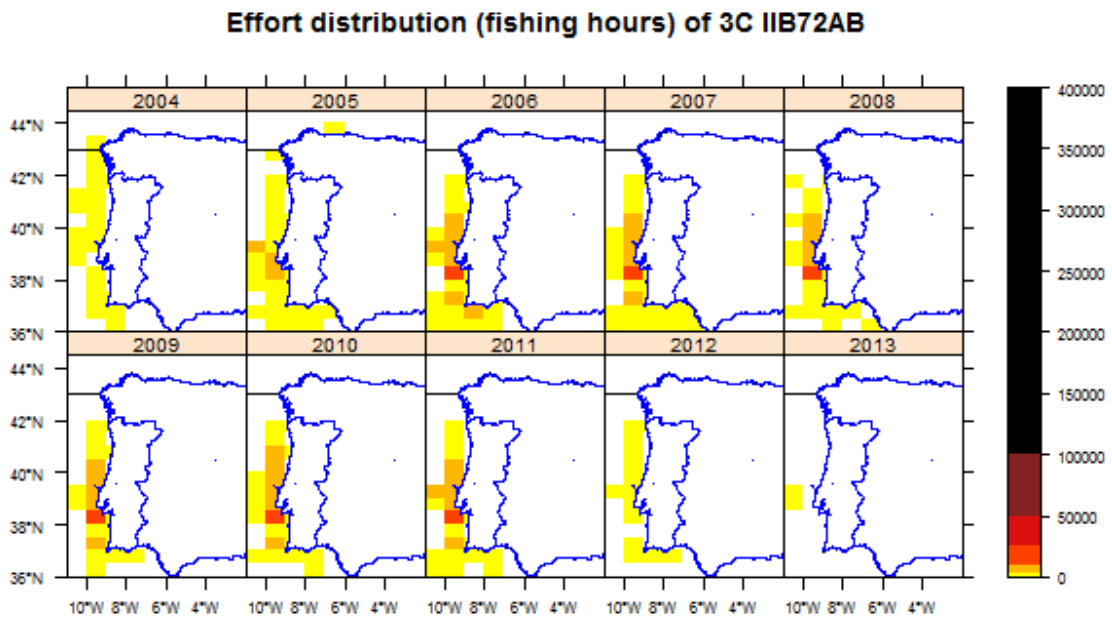
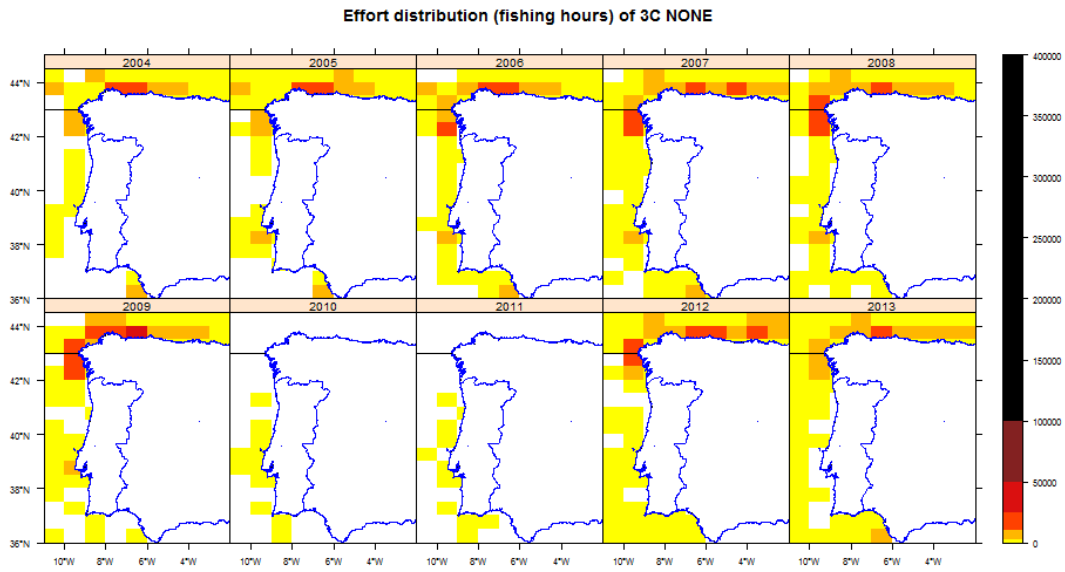


Figure 5.7.1.1.3. Effort spatial distribution for longlines (gear 3c) without (upper panel) and with special conditions (lower panel) for the period 2004-2013. **No Spanish data for the years 2010 and 2011.** In 2012 and 2013 no Spanish vessel applied for the effort special condition (IIB72AB). By mistake, in the period 2003-2009, all Spanish effort under category “3c IIB61” was submitted as “3c none”.

5.7.2 ToR 1.b Catches (landings and discards) of hake and Norway lobster in weight and numbers at age by Member State and fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.7.3 ToR 1.c Catches (landings and discards) of species other than hake and Norway lobster, in particular anglerfish, in weight and numbers at age by Member State and fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.7.4 ToR 1.d CPUE and LPUE of hake, Norway lobster and anglerfish by fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.7.5 Information on small boats (<10m by area)

Only Portugal has provided a time series of data for vessels below 10 m operating in areas 8c-9a, though specifying neither gear nor fishery. These vessels operate, in general, with several gears and do not fill logbooks. Data on catch and effort for these vessels are based on landings records. Spain has provided data for 2012 and 2013 only. Given the limited data and the fact Annex IIB does not include limitations on this fleet effort, no analysis on this fleet segment was performed.

Since 2003, Portugal has carried out a specific sampling plan to collect data on the activity of the small scale fleet (<10m vessels) operating in continental waters. The data are collected with a stratified random strategy by interviews with skippers, and provides information about catches by species and effort. This sampling plan is under the scope of Reg. (EC) 1639/2001 and the results are presented on the DCF annual reports requested by DGMARE.

<10 m vessels Spanish information is collected by sales notes, this segment of the fleet is not presented in logbooks. Sales notes only provide information about name of the vessel, port of landing, sold weight by species, price by kg and euros by species. It is not possible to know gear or fishing area.

5.7.6 ToR 2 Remarks on quality of catches and discard estimates

For member state reporting on quality of catches and discard estimates, see the section 4 “Data Quality” for each country.

5.7.7 ToR 3 Trend in calculated maximum effort of regulated gears and uptake by Member State

No adequate data are available to address this ToR. The allowed activity by vessel for the period 2003-2013 is presented in Table 5.7.3. Although the field “Number of Vessels” in effort database has been filled, the data on the fishing activity is incomplete. Also, the vessels included can operate with different area/fishery/gear/mesh size combinations and therefore, the same vessels may be included in different records. Spain did not present any data on the fishing activity in 2000-2009.

5.7.8 ToR 4 Correlation between partial hake mortality and fishing effort by Member State and fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.7.9 ToR 5 Considerations in order to accomplish spatio-temporal patterns in standardized catchability indices for hake, Nephrops and anglerfish

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.8 Western Channel effort regime evaluation in the context of Annex IIC to Council Regulation (EC) No 57/2011)

5.8.1 ToR 1.a Fishing effort in kWdays, GTdays, and number of vessels by Member State and fisheries

STECF EWG-14-06 notes that assignment of derogations and special conditions is based on best expert knowledge. Data errors may exist regarding the huge data bases and the special knowledge required to deal with them (grouping and exact formulation of data queries).

STECF EWG noted six years ago a change in Annexes IIC to Council Reg. 41/2007 for 2007 as compared to the Annex IIC to 51/2006 which removed the special conditions IIC71a and IIC71b to static nets <220mm (3b). STECF EWG further notes that there were no special derogations added to Annex IIC of Council Reg. 40/2008, Annex IIC of Council Reg. 43/2009, Annex IIC of Council Reg. 53/2010, Annex IIC of Council Reg. 57/2011, Annex IIC of Council Reg. 43/2012, Annex IIC of Council Reg. 39/2013 or Annex IIC of Council Reg. 43/2014. Table 5.8.1.1 lists the historic developments of days at sea by vessel and derogations.

Table 5.8.1.1 – Western Channel - Historic trends in days at sea by vessel specified in the Council Regulations since 2005.

Annex	AREA	REG GEAR	SPECON	2005	2006	2007	2008	2009	2010	2011	2012*	2013**	2014
IIC	7e	3a	none	240	216	192	192	192	164	164	164	164	164
IIC	7e	3b	none	240	216	192	192	192	164	164	164	164	164
IIC	7e	3b deleted	ICC71ab		365								

*UK has been allocated 42 extra days for regulated gear 3a in 2012

**UK has been allocated 43 extra days for regulated gear 3a in 2013

FR has been allocated 11 extra days for regulated gear 3a in 2013

FR has been allocated 14 extra days for regulated gear 3b in 2013

The previously identified French data problems affecting 2002 have so far not been corrected. STECF EWG decided therefore only to provide effort trends graphically starting from 2003. For brevity and clarity in this report only information since 2004 are tabulated. The dominating fleet from the two existing derogations in 7e (3a and 3b) is by far the English beam trawl fleet with percentages in the last 9 years in excess of 55% of the effort deployed (Table 5.8.1.2 and Figures 5.8.1.1 and 5.8.1.2). The other fleets involved are the French static gear fleet with a decreasing trend from 22% in 2006 to 6% in 2013 of the deployed effort and the Belgian beam trawl fleet with an increasing trend from less than 1% in 2000 up to about 16% in 2007 followed by a fluctuation around 10-15%. STECF-EWG however notes that about 85% of the overall effort deployed could not be allocated to regulated gear (e.g. gears outside the regulation such as otter- and pelagic trawls, dredges and pots). The “total” trend in Figure 5.8.1.2 is therefore highly influenced by the none regulated gear group. Effort from regulated gears remain low. The

composition of the unregulated gears can be found in Table 5.8.1.7. Figure 5.8.1.3 shows the trends for all the unregulated gear in area VIIe.

There are no differences between the data provided for the years 2004-2012 in 2014 and 2013 in effort (kW*days at sea) for the Western Channel (Table 5.8.1.3).

Information on GT*days at sea and the number of vessels active in 7e is presented in Tables 5.8.1.4 and 5.8.1.5 respectively.

The trends in the nominal effort of the two derogations (3a and 3b) are illustrated in Table 5.8.1.6. The beam trawl fleets decreased gradually from 2% above the 2004-2006 level in 2004 to 37% below that level in 2009. Thereafter it fluctuated between 30% and 37% below the 2004-2006 level. Also the static gear effort dropped substantially from 9% above the 2004-2006 level in 2004 to a 77% below the 2004-2006 level in 2013.

Category 'none' represents unregulated gear types and mesh sizes in addition to unidentified mesh sizes. The effort of the unregulated gear group 'None' has been around 85% of the overall nominal effort for the whole time series.

Table 5.8.1.7 shows the disaggregation of the 'none' category into the different gears categories. Effort by otter trawl is by far the dominant gear category with percentages in excess of 40% for all years. Dredges contribute around 25%. Pelagic trawl and pots contribute each about 10% to the overall effort of the non regulated gear. The rest of the gears also account for about 10%.

Table 5.8.1.2 – Western Channel - Trend in nominal effort (kW*days at sea) by existing derogations given in Table 1 of Annex IIC (Coun. Reg. 43/2014) and Member State, 2004-2013. Derogations are sorted by gear, special condition (SPECON), and country. Data qualities are summarised in Section 4 of the report.

ANNEX	REG AREA COD	REG GEAR COD	SPECON	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
IIc	7e	3a	none	BEL	633428	689624	628907	837161	584560	355399	383303	514973	554941	423935
IIc	7e	3a	none	ENG	3208806	3227096	3283897	3021075	2871790	2197118	2227991	2318845	2474852	2250479
IIc	7e	3a	none	FRA	317275	261700	289867	320576	146443	138669	303078	200030	131536	61050
IIc	7e	3a	none	GBJ	209969	121139								
IIc	7e	3a	none	IRL	34577	16518	6474	16610	2143	442				
IIc	7e	3a	none	SCO				3666		1396				
IIc	7e	3a Total	none		4402055	4316077	4209145	4199088	3604936	2696024	2914372	3033848	3161329	2735464
IIc	7e	3b	none	ENG	206294	178818	153434	103278	104187	104045	109304	118156	113947	117863
IIc	7e	3b	none	FRA	1236654	946127	1236595	920004	615534	611990	304540	280434	302188	182019
IIc	7e	3b	none	SCO			1215	3240	9315	2430				
IIc	7e	3b Total	none		1442948	1124945	1391244	1025222	729006	718465	413844	398590	416135	299882
IIc	7e	none	none	BEL	6625	11039	17515	17231	45760	106007	138035	95963	213484	99135
IIc	7e	none	none	DEN	1780	46728	107696	39322	80473	17994	90505		67919	60745
IIc	7e	none	none	ENG	4177419	4262278	4138385	4149320	3744303	4043960	4222836	4398527	4523403	4241110
IIc	7e	none	none	FRA	17093208	17780680	19456045	19370589	12637420	12553428	12823801	13095161	12156880	11976886
IIc	7e	none	none	GBG	75868	57128	45780	57710	28376	37038	68030	58026	61687	85787
IIc	7e	none	none	GBJ	1476	6745	19360	30580	25740	31020	38060	42020	13640	33660
IIc	7e	none	none	GER	106234	92768	29865		36994	21196	139157	51687	199687	240659
IIc	7e	none	none	IOM			19902	1116	778				18368	984
IIc	7e	none	none	IRL	347597	152539	3880	23340	1023	14228	52800	22942	13220	17734
IIc	7e	none	none	LIT						29520	150400			
IIc	7e	none	none	NED	449855	632891	956066	894614	1073200	901327	1040600	558954	949302	1492210
IIc	7e	none	none	NIR	1302						576			
IIc	7e	none	none	SCO	607937	691419	585805	595030	606253	676127	598837	543344	641501	715088
IIc	7e	none	none	SPN									13629	2167
IIc	7e	none Total	none		22869301	23734215	25380299	25178852	18280320	18331845	19213237	19017024	18872730	18966165
IIc	7e	Grand Total	none		28714304	29175237	30980688	30404462	22614292	21746334	22541453	22449462	22450194	22001511

Table 5.8.1.3 – Western Channel – Percentage difference in effort (kW*days at sea) by existing derogations given in Table 1 of Annex IIC (Coun. Reg. 43/2014) and Member State, 2004-2012. Derogations are sorted by gear, special condition (SPECON), and country. Data qualities are summarised in Section 4 of the report.

annex	reg_area_cod	reg_gear_cod	country	specon	vessel_length	2004	2005	2006	2007	2008	2009	2010	2011	2012
FDFIIC	7E	3A	ENG	FDFIIC	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
FDFIIC	7E	BEAM	ENG	FDFIIC	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	3A	BEL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	3A	ENG	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	3A	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	3A	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	3A	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	3A	GBJ	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	3A	IRL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	3A	NED	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	3A	SCO	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	3B	ENG	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	3B	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	3B	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	3B	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	3B	SCO	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	BEAM	BEL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	BEAM	ENG	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	BEAM	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	BEAM	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	BEAM	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	BEAM	GBJ	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	BEAM	IRL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	BEAM	NED	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	DEM_SEINE	BEL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	DEM_SEINE	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	DEM_SEINE	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	DEM_SEINE	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	DEM_SEINE	NED	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	DEM_SEINE	SCO	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	DREDGE	BEL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	DREDGE	ENG	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	DREDGE	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	DREDGE	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	DREDGE	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	DREDGE	GBJ	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	DREDGE	IOM	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	DREDGE	IOM	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	DREDGE	IRL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	DREDGE	NED	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	DREDGE	SCO	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	DREDGE	SCO	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	GILL	BEL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	GILL	ENG	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	GILL	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	GILL	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	GILL	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	GILL	SCO	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	LONGLINE	DEN	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	LONGLINE	ENG	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	LONGLINE	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	LONGLINE	ESP	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	LONGLINE	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	LONGLINE	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	LONGLINE	SCO	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%

Table 5.8.1.3 (cont) – Western Channel – Percentage difference in effort (kW*days at sea) by existing derogations given in Table 1 of Annex IIC (Coun. Reg. 43/2014) and Member State, 2004-2012. Derogations are sorted by gear, special condition (SPECON), and country. Data qualities are summarised in Section 4 of the report – Continued.

annex	reg_area_cod	reg_gear_cod	country	specon	vessel_length	2004	2005	2006	2007	2008	2009	2010	2011	2012
IIC	7E	NONE	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	NONE	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	OTTER	BEL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	OTTER	DEN	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	OTTER	ENG	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	OTTER	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	OTTER	ESP	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	OTTER	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	OTTER	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	OTTER	GBG	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	OTTER	GBG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	OTTER	GBJ	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	OTTER	IRL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	OTTER	NED	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	OTTER	NIR	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	OTTER	SCO	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	OTTER	SCO	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	PEL_SEINE	ENG	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	PEL_SEINE	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	PEL_SEINE	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	PEL_SEINE	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	PEL_SEINE	SCO	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	PEL_TRAWL	DEN	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	PEL_TRAWL	ENG	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	PEL_TRAWL	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	PEL_TRAWL	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	PEL_TRAWL	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	PEL_TRAWL	GBG	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	PEL_TRAWL	GBJ	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	PEL_TRAWL	GER	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	PEL_TRAWL	IRL	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	PEL_TRAWL	IRL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	PEL_TRAWL	LIT	NONE	O40M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	PEL_TRAWL	NED	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	PEL_TRAWL	SCO	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	PEL_TRAWL	SCO	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	POTS	ENG	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	POTS	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	POTS	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	POTS	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	POTS	GBG	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	POTS	GBG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	POTS	IOM	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	POTS	IRL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	POTS	SCO	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	POTS	SCO	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	TRAMMEL	ENG	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	TRAMMEL	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	TRAMMEL	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
IIC	7E	TRAMMEL	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%

Table 5.8.1.4 – Western Channel - Trend in GTdays (GT*days at sea) by existing derogations given in Table 1 of Annex IIC (Coun. Reg. 43/2014) and Member State, 2004-2013. Derogations are sorted by gear, special condition (SPECON), and country. Data qualities are summarised in Section 4 of the report.

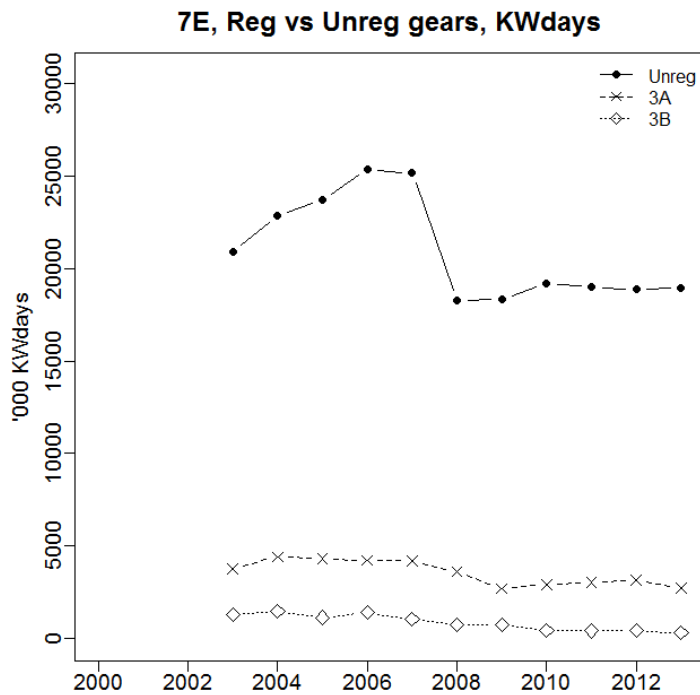
ANNEX	REG AREA COD	REG GEAR COD	SPECON	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
IIc	7e	3a	none	BEL	217960	230378	211798	264266	182061	108653	115214	158450	163206	133240
IIc	7e	3a	none	ENG	931813	932208	957038	922227	919080	715956	732929	810429	942571	881478
IIc	7e	3a	none	FRA	67633	58636	54792	58858	22666	21952	59701	45891	29538	13241
IIc	7e	3a	none	GBJ	63209	36001								
IIc	7e	3a	none	IRL	7838	4112	2022	3620	810	196				
IIc	7e	3a	none	SCO				1296		592				
IIc	7e	3a Total	none		1288453	1261335	1225650	1250267	1124617	847349	907844	1014770	1135315	1027959
IIc	7e	3b	none	ENG	48508	45697	42816	24434	24507	21666	25049	24994	24202	26582
IIc	7e	3b	none	FRA	158424	125936	172966	133602	77388	76950	43128	33332	36865	24979
IIc	7e	3b	none	SCO			384	1024	2944	768				
IIc	7e	3b Total	none		206932	171633	216166	159060	104839	99384	68177	58326	61067	51561
IIc	7e	none	none	BEL	3636	5200	6484	6161	15039	34208	43562	29969	65661	31247
IIc	7e	none	none	DEN	774	23056	55676	18646	35877	8022	40349	45702	49971	
IIc	7e	none	none	ENG	1004424	1014489	996194	942884	917363	947737	1020597	1028118	1221418	999623
IIc	7e	none	none	FRA	3320926	3501265	3904177	3818126	2530061	2518492	2948271	2952478	2670451	2666008
IIc	7e	none	none	GBG	14231	10689	8385	12267	5219	6974	12573	10903	11211	15474
IIc	7e	none	none	GBJ	511	1708	5787	9141	7694	9271	11377	12561	4078	10061
IIc	7e	none	none	GER	143250	106230	39730		50030	29112	154280	48999	189473	256014
IIc	7e	none	none	IOM			4547	255	114			4121	221	
IIc	7e	none	none	IRL	107588	41848	1240	10073	415	6676	52272	10030	5783	7765
IIc	7e	none	none	LIT						28497	149507			
IIc	7e	none	none	NED	331902	391614	734553	602242	769364	432649	687063	355146	791963	1369630
IIc	7e	none	none	NIR	301					221				
IIc	7e	none	none	SCO	198595	218717	194240	208252	229716	265052	225247	200533	233498	263695
IIc	7e	none	none	SPN								12069	1607	
IIc	7e	none Total	none		5126138	5314816	5951013	5628047	4560892	4286590	5195812	4798244	5255428	5671316
IIc	7e	Grand Total	none		6621523	6747784	7392829	7037374	5790348	5233323	6171833	5871340	6451810	6750836

Table 5.8.1.5 – Western Channel - Trend in number of vessels by existing derogations given in Table 1 of Annex IIC (Coun. Reg. 43/2014) and Member State, 2004-2013. Derogations are sorted by gear, special condition (SPECON), and country. Data qualities are summarised in section 4 of the report.

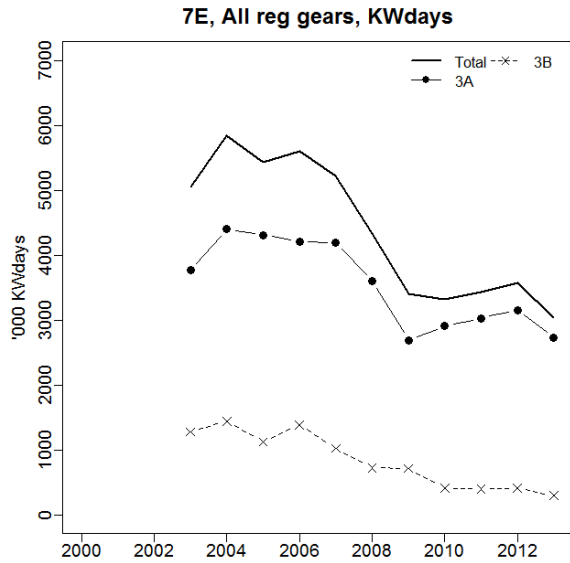
ANNEX	REG AREA COD	REG GEAR COD	SPECON	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
IIc	7e	3a	none	BEL	57	67	58	55	49	44	31	33	37	33
IIc	7e	3a	none	ENG	62	53	51	53	47	43	38	44	43	44
IIc	7e	3a	none	FRA	12	13	20	15	11	10	13	8	6	6
IIc	7e	3a	none	GBJ	4	2								
IIc	7e	3a	none	IRL	2	2	5	1	2	1				
IIc	7e	3a	none	SCO				1	1	1				
IIc	7e	3a Total	none		137	137	134	125	109	99	82	85	86	83
IIc	7e	3b	none	ENG	21	17	17	14	12	13	12	12	11	10
IIc	7e	3b	none	FRA	68	62	77	48	34	34	22	22	25	19
IIc	7e	3b	none	SCO			1	1	1	1				
IIc	7e	3b Total	none		89	79	95	63	47	48	34	34	36	29
IIc	7e	none	none	BEL	3	6	7	6	12	28	23	20	22	22
IIc	7e	none	none	DEN	1	4	8	1	1	1	1	1	1	1
IIc	7e	none	none	ENG	178	162	170	175	174	156	154	158	158	167
IIc	7e	none	none	FRA	837	943	1114	1259	868	1022	688	654	642	635
IIc	7e	none	none	GBG	1	2	4	5	4	3	3	2	3	3
IIc	7e	none	none	GBJ	1	1	1	1	1	1	2	3	1	1
IIc	7e	none	none	GER	4	3	3	2	1	3	1	2	4	4
IIc	7e	none	none	IOM			1	1	2				1	1
IIc	7e	none	none	IRL	13	5	1	3	2	2	1	2	3	2
IIc	7e	none	none	LIT						1		1		
IIc	7e	none	none	NED	15	13	13	19	15	18	16	17	15	16
IIc	7e	none	none	NIR	1						1			
IIc	7e	none	none	SCO	23	14	21	16	15	18	18	19	18	20
IIc	7e	none	none	SPN									5	2
IIc	7e	none Total	none		1077	1153	1343	1486	1096	1251	910	877	871	874
IIc	7e	Grand Total	none		1303	1369	1572	1674	1252	1398	1026	996	993	986

Table 5.8.1.6 Western Channel - Trend in nominal effort (kW*days at sea) by derogations given in Table 1 of Annex IIC (Coun. Reg. 43/2014), 2004-2013. Derogations are sorted by gear and special condition (SPECON). Data qualities are summarised in Section 4 of the report.

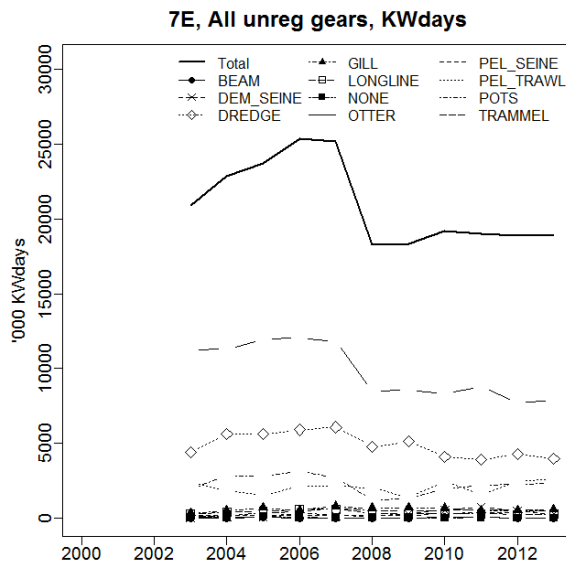
ANNEX	REG ARE/REG GEAR (SPECON)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Rel. Change to 04-06	Rel. Change to 12
IIc	7e 3a none	4402055	4316077	4209145	4199088	3604936	2696024	2914372	3033848	3161329	2735464	-0.37	-0.13
IIc	7e 3b none	1442948	1124945	1391244	1026522	729036	718465	413844	398590	416135	299882	-0.77	-0.28
IIc	7e none none	22869301	23734215	25380299	25178852	18280320	18331845	19213237	19017024	18872730	18966165	-0.21	0.00
Sum	7e	28714304	29175237	30980688	30404462	22614292	21746334	22541453	22449462	22450194	22001511	-0.26	-0.02



Figures 5.8.1.1 – Western Channel -Trend in nominal effort (kW*days at sea) by derogations given in Table 1 of Annex IIC (Coun. Reg. 43/2014), 2003-2013. Derogations are sorted by gear and special condition (SPECON). Data qualities are summarized in section 4. 3a represents beam trawls of mesh size ≥ 80 mm and 3b represents static nets with mesh size < 220 mm.



Figures 5.8.1.2 – Western Channel -Trend in nominal effort (kW*days at sea) by derogations given in Table 1 of Annex IIC (Coun. Reg. 43/2014), 2003-2013. Derogations are sorted by gear and special condition (SPEC CON). Data qualities are summarised in section 4. 3a represents beam trawls of mesh size ≥ 80 mm and 3b represents static nets with mesh size < 220 mm.



Figures 5.8.1.3 – Western Channel -Trend in nominal effort (kW*days at sea) by unregulated gear according to Table 1 of Annex IIC (Coun. Reg. 43/2014), 2003-2013. Data qualities are summarised in section 4.

Table. 5.8.1.7. Western Channel Unregulated gear (category none-none) effort (kW*Days) by gear type, 2004-2013.

ANNEX	REG_AREA	REG_GEAR	REG GEAR COD	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
IIc	7e	none	OTTER	11306477	11989022	12028329	11848608	8487417	8578780	8281710	8829762	7718110	7870251
IIc	7e	none	DREDGE	5637002	5602368	5903594	6083728	4767408	5120969	4098107	3897499	4292450	3984119
IIc	7e	none	PEL_TRAWL	1830379	1475309	2168733	2140059	2012123	1410938	2458100	1537387	2449951	2612035
IIc	7e	none	POTS	2801196	2784755	3141625	2718763	1232195	1275601	1972511	2202740	2252751	2342869
IIc	7e	none	GILL	488105	674577	534836	781892	658756	666149	661402	520427	507914	550685
IIc	7e	none	PEL_SEINE	193853	183887	295531	207190	175282	174967	321953	344896	395244	511464
IIc	7e	none	TRAMMEL	131206	346504	436467	626072	486195	475625	522126	571254	541891	496966
IIc	7e	none	DEM_SEINE	52316	94168	202941	166784	129716	309602	537514	730853	453211	290151
IIc	7e	none	LONGLINE	382787	441367	615657	587251	312345	279633	321512	301230	237950	278238
IIc	7e	none	BEAM	12234	65823	9980	6031		20698	38302	32175	23258	26323
IIc	7e	none	NONE	33746	76435	42606	12474	18883	18883		48801		3064
Sum				22869301	23734215	25380299	25178852	18280320	18331845	19213237	19017024	18872730	18966165

5.8.2 ToR 1.b Catches (landings and discards) of sole in weight and numbers at age by fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.8.3 ToR 1.c Catches (landings and discards) of non-sole species in weight and numbers at age by fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.8.4 ToR 1.d CPUE and LPUE of sole, plaice and cod by fisheries and Member States

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.8.5 ToR 2 Information on small boats (<10m)

5.8.5.1 Fishing effort of small boats by Member State

It should be noted that not all countries have submitted information and that the total figures are therefore likely to give an underestimation of effort and catches of this vessel category.

Table 5.8.5.1.1 provides an overview of the effort deployed by vessels >10m (regulated and non regulated gear) and vessels <10m in the Western Channel for the period 2004-2013. The effort from the vessels <10m fluctuates between 13% and 25% of the effort deployed by the vessels >10m.

Table 5.8.5.1.1 Western Channel - Trend in nominal effort (kW*days at sea) by derogations given in Table 1 of Annex IIC (Coun. Reg. 43/2014), unregulated gear and vessels <10m, 2004-2013.

ANNEX	REG AREA	REG GEAR	SPECON	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
IIc	7e	3a	none	4402055	4316077	4209145	4199088	3604936	2696024	2914372	3033848	3161329	2735464
IIc	7e	3b	none	1442948	1124945	1391244	1026522	729036	718465	413844	398590	416135	299882
IIc	7e	none	none	22869301	23734215	25380299	25178852	18280320	18331845	19213237	19017024	18872730	18966165
Sum O10m	7e			28714304	29175237	30980688	30404462	22614292	21746334	22541453	22449462	22450194	22001511
Sum U10m	7e			4723799	3698241	5633713	5463330	4315920	3878714	4903821	5615040	5560087	5041084
%-U10m	7e			16	13	18	18	19	18	22	25	25	23

5.8.5.2 Catches (landings and discards) of sole and associated species by small boats by Member State

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.8.6 ToR 3 Evaluation of fully documented fisheries FDF

5.8.6.1 Fishing effort of FDF by Member State and fisheries in comparison with fisheries not working under FDF provisions

Only England had vessels operating under FDF fisheries in 2012 and 2013. In 2012 and 2013, 7 and 9 vessels respectively were operational in the FDF fisheries using the regulated beam trawl gear (3a) and one vessel using the unregulated beam trawl gear. The total number of English vessels operating these gears are 44 and 2 respectively.

Effort deployed by the regulated beam trawls (3a) FDF, accounts for 22% and 29% of the total English effort for that gear in 2012 and 2013 respectively. The unregulated beamers fishing with a FDF licence represented 16% and 58% of the total English effort for that gear in 2012 and 2013 respectively (Table 5.8.6.1.1). Dredges account for about 3% in 2013.

The effort of the FDF fisheries as a percentage of the total deployed effort by the regulated beamers (3a) and unregulated beamers amount to 17% and 1% respectively in 2012 and 24% and 5% respectively in 2013 (Table 5.8.6.1.1). Dredges account for about 1% in 2013.

Table 5.8.6.1.1 Western Channel: (A part 1) total fishing effort for countries with Fully Documented Fisheries (FDF, REM/CCTV), (B) FDF (REM/CCTV) nominal fishing effort (kW*days) and (A part 2, C) the percentage of total effort attributable to FDFs for 2012 and 2013

Table A, part 1

COUNTRY	GEAR	2012	2013
ENG	3a	2474852	2250479
	3b	113947	117863
	BEAM	1587	2223
	DEM_SEINE	95175	63778
	DREDGE	1745440	1712833
	GILL	33495	19738
	LONGLINE	35542	38699
	OTTER	1415239	1404014
	PEL_SEINE		9283
	PEL_TRAWL	551025	261012
	POTS	625564	708855
	TRAMMEL	20336	20675
	none		
	ENG Total		7112202

Table A, part 2

Effort of all contries by gear

GEAR	2012	2013
3a	3161329	2735464
3b	416135	299882
BEAM	23258	26323
DEM_SEINE	453211	290151
DREDGE	4292450	3984119
GILL	507914	550685
LONGLINE	237950	278238
OTTER	7718110	7870251
PEL_SEINE	395244	511464
PEL_TRAWL	2449951	2612035
POTS	2252751	2342869
TRAMMEL	541891	496966
none		3064
Grand Total	22450194	22001511

Table B

COUNTRY	GEAR	2012	2013
ENG	3a	537367	661608
	3b		
	BEAM	251	1298
	DEM_SEINE		
	DREDGE		57284
	GILL		
	LONGLINE		
	OTTER		
	PEL_SEINE		
	PEL_TRAWL		
	POTS		
	TRAMMEL		
	none		
	ENG Total		537618

Table B

GEAR	2012	2013
3a	537367	661608
3b		
BEAM	251	1298
DEM_SEINE		
DREDGE		57284
GILL		
LONGLINE		
OTTER		
PEL_SEINE		
PEL_TRAWL		
POTS		
TRAMMEL		
none		
Grand Total	537618	720190

Table C

	2012	2013
	21.7%	29.4%
	0.0%	0.0%
	15.8%	58.4%
	0.0%	0.0%
	0.0%	3.3%
	0.0%	0.0%
	0.0%	0.0%
	0.0%	0.0%
	0.0%	0.0%
	0.0%	0.0%
	0.0%	0.0%
	0.0%	0.0%
	0.0%	0.0%
	0.0%	0.0%
	7.6%	10.9%

Table C

	2012	2013
	17.0%	24.2%
	0.0%	0.0%
	1.1%	4.9%
	0.0%	0.0%
	0.0%	1.4%
	0.0%	0.0%
	0.0%	0.0%
	0.0%	0.0%
	0.0%	0.0%
	0.0%	0.0%
	0.0%	0.0%
	0.0%	0.0%
	0.0%	0.0%
	0.0%	0.0%
	2.4%	3.3%

5.8.6.2 Catches (landings and discards) of sole and other species taken by FDF fisheries by Member State and fisheries in comparison with fisheries not working under FDF provisions

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.8.6.3 Comparative analysis of sole selectivity by FDF fisheries and non-FDF fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.8.7 *ToR 4 Spatio-temporal patterns in effective effort by fisheries*

Figure 5.8.7.1 shows the spatial distribution of the effective fishing effort for beam trawl fleets with mesh size $\geq 80\text{mm}$ (3a) during the period 2003 to 2013. The pattern seems similar for the whole period with higher effort deployed south of Devon.

Figure 5.8.7.2 shows the spatial distribution of the effective fishing effort for static nets with mesh size $< 220\text{mm}$ (3b) during the period 2003 to 2013. The fishing effort pattern is rather homogeneous over the whole VIIe area and full time series with occasional higher densities of activities along the most southern point of the English coast and off the French coast from Saint-Malo.

Figure 5.8.7.3 shows the spatial distribution of the effective fishing effort for the unregulated beam trawl fleet with no mesh size provided or mesh size $< 80\text{mm}$ during the period 2003 to 2013. Since 2008, the effort which was predominantly deployed on the English coast and the French coast north of Cherbourg, has substantially decreased in all rectangles and is now more evenly spread over the whole area.

Figure 5.8.7.4 shows the spatial distribution of the effective fishing effort for the unregulated demersal seine during the period 2003 to 2013. The years 2003 and 2004 only indicate activities in 1 rectangle. Since 2005 most effort deployed in the same rectangles off the English coast with a substantial increase in the last 5 years, especially south of Dorset up to the French coast.

Figure 5.8.7.5 shows the spatial distribution of the effective fishing effort for the unregulated dredges during the period 2003 to 2013. Most effort deployed off the English coast and off the coast of Saint Malo.

Figure 5.8.7.6 shows the spatial distribution of the effective fishing effort for the unregulated gill nets during the period 2003 to 2013. A similar pattern appears apparent of effort deployment for all years over almost the whole VIIe area, with higher concentrations on the most southern part of the English coast and off the coast of Saint-Malo. Since 2010 there appears to be less effort deployed along the French coast.

Figure 5.8.7.7 shows the spatial distribution of the effective fishing effort for the unregulated longlines during the period 2003 to 2013. Again, a similar pattern appears apparent of effort deployment for all years over almost the whole VIIe area, with the highest concentrations along the English coast off Brixham.

Figure 5.8.7.8 shows the spatial distribution of the effective fishing effort for the unregulated otter trawls during the period 2003 to 2013. From 2003 until 2013 a similar pattern appears apparent of effort deployment over almost the whole VIIe area with higher concentrations along the English coast and off the coast of Saint Malo.

Figure 5.8.7.9 shows the spatial distribution of the effective fishing effort for the unregulated pelagic seine during the period 2003 to 2013. Very sparse patches of effort deployment, predominantly along the French coast off Brest until 2009. Since then a more widely effort spread over the whole VIIe area with even higher concentrations off the French coast at Brest.

Figure 5.8.7.10 shows the spatial distribution of the effective fishing effort for the unregulated pelagic trawls during the period 2003 to 2013. A similar pattern appears apparent of effort deployment for all years over almost the whole VIIe area, with the highest concentrations on the English coast off Brixham.

Figure 5.8.7.11 shows the spatial distribution of the effective fishing effort for the unregulated pots during the period 2003 to 2013. A similar pattern appears apparent of effort deployment for all years, predominantly along the English coast and the French coast off Saint Malo.

Figure 5.8.7.12 shows the spatial distribution of the effective fishing effort for the unregulated trammel nets during the period 2003 to 2013. A similar pattern appears apparent of effort deployment for all years, with the highest concentrations predominantly off the French coast.

Figure 5.8.7.13 shows the spatial distribution of the effective fishing effort for the unregulated gear (“none-none”), gears without mesh size given during the period 2003 to 2013. A similar pattern of effort deployment for all years, predominantly off the French coast with some relatively higher values. For 2011 very high effort was deployed along the French coast and particularly off Brest. STECF notes that these relative high values only represent a very small amount of the total effort deployed in VIIe.

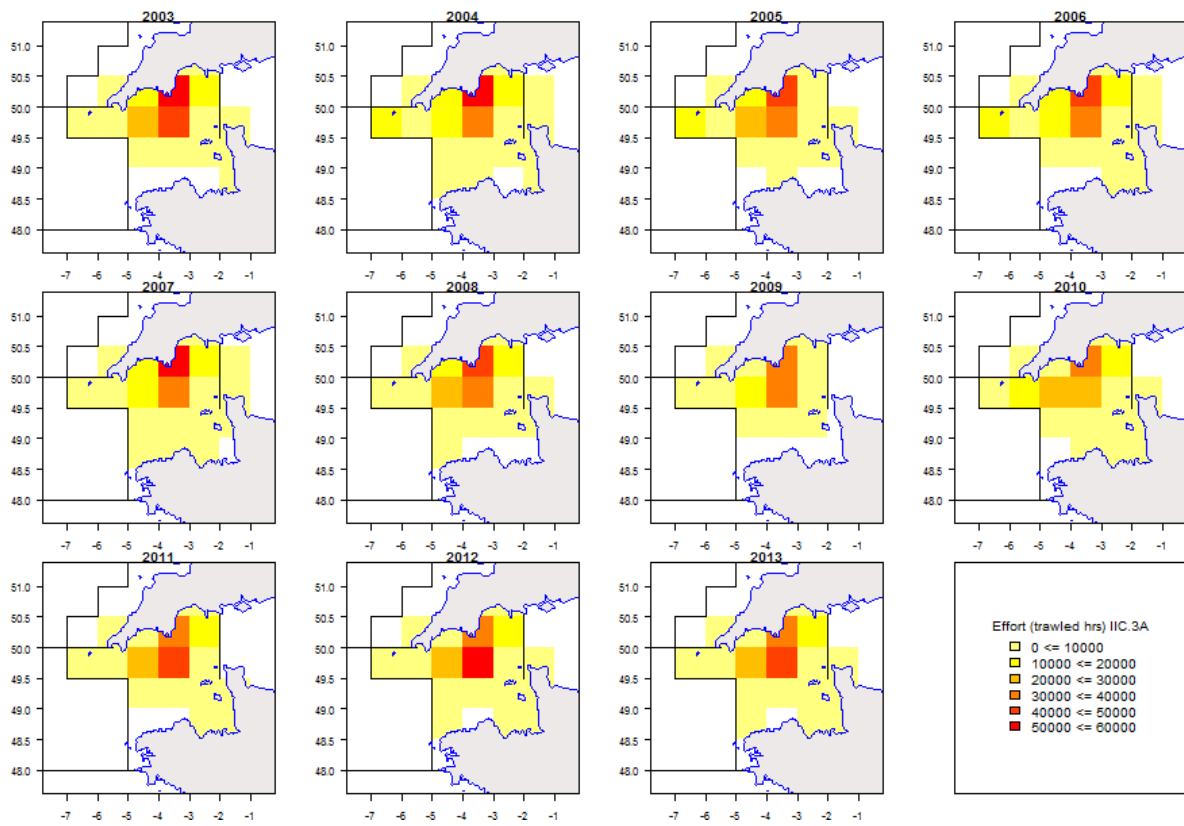


Figure 5.8.7.1. Western Channel. Spatial distribution of effective fishing effort (trawled hours) by ICES statistical rectangle for the Beam trawl fleet with mesh size ≥ 80 mm(3a), 2003-2013.

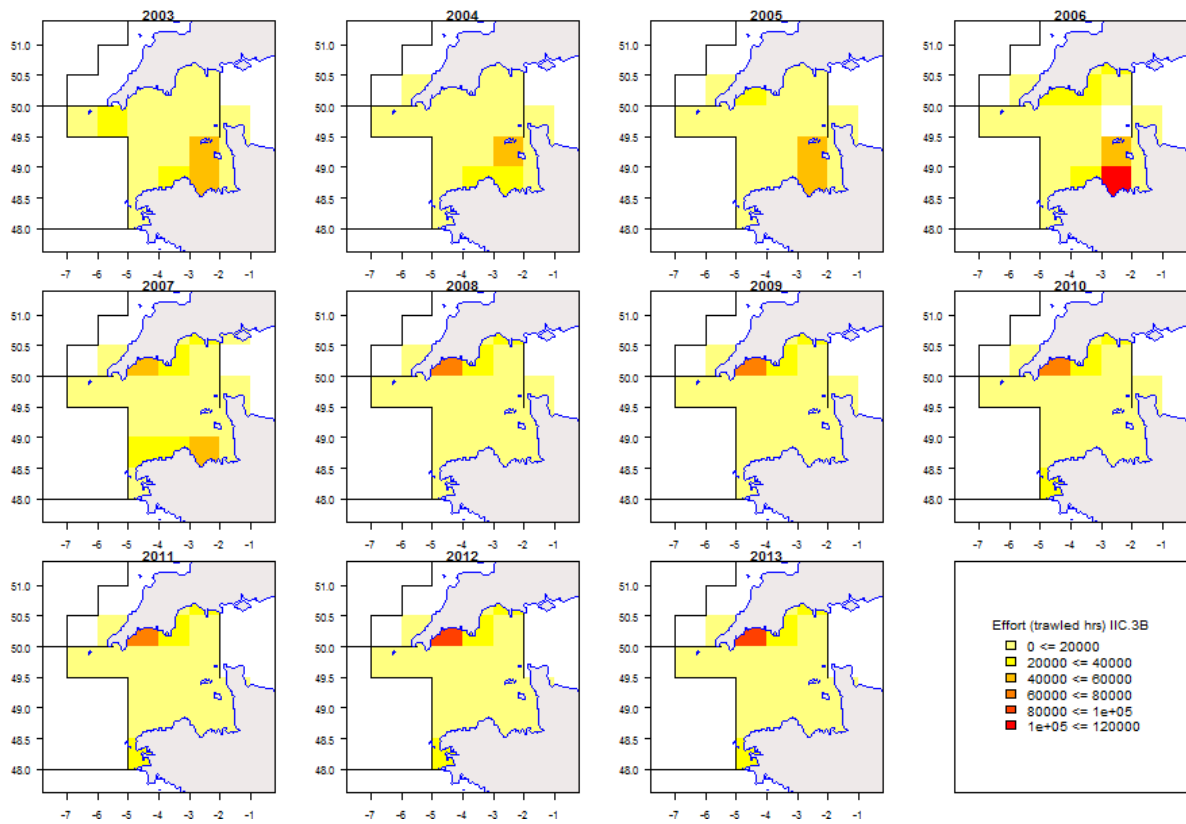


Figure 5.8.7.2. Western Channel. Spatial distribution of effective fishing effort (trawled hours) by ICES statistical rectangle for static nets with mesh size <220mm (3b), 2003-2013.

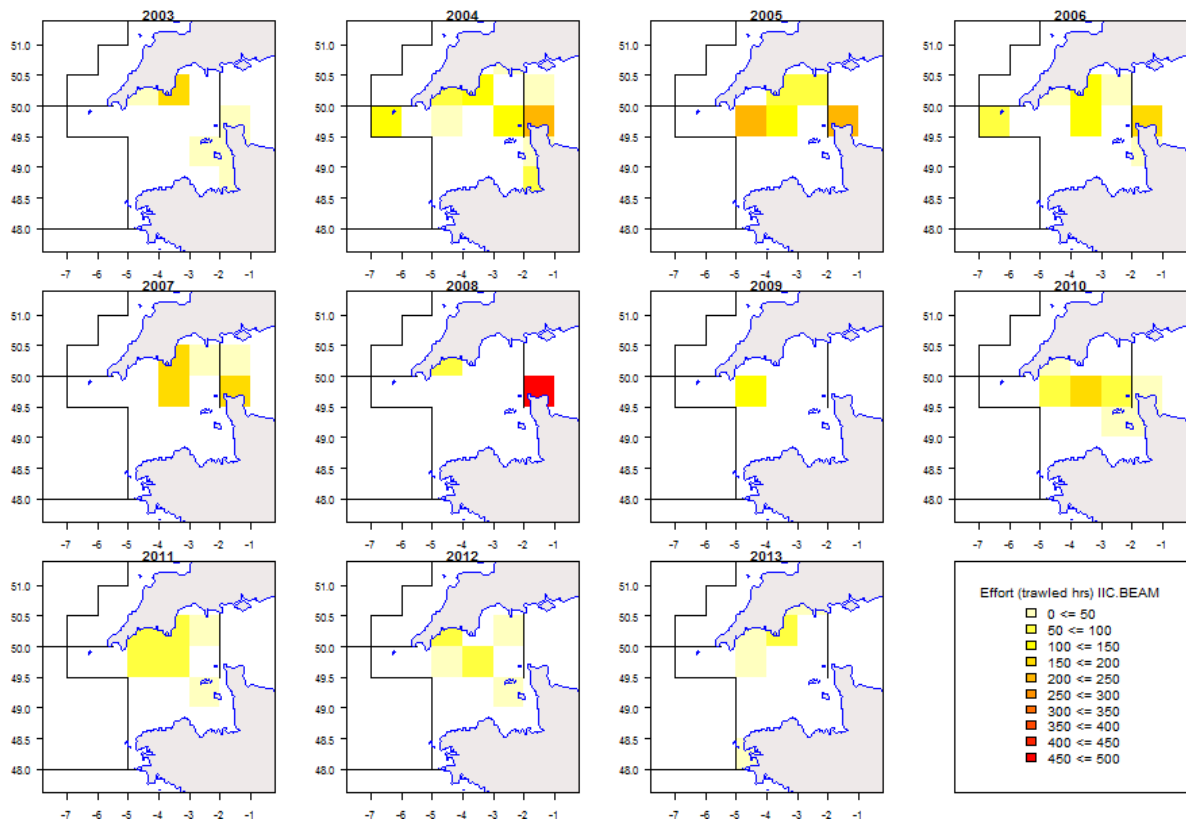


Figure 5.8.7.3. Western Channel. Spatial distribution of effective fishing effort (trawled hours) by ICES statistical rectangle for Beam trawl fleet with no mesh size provided or mesh size <80 mm, 2003-2013.

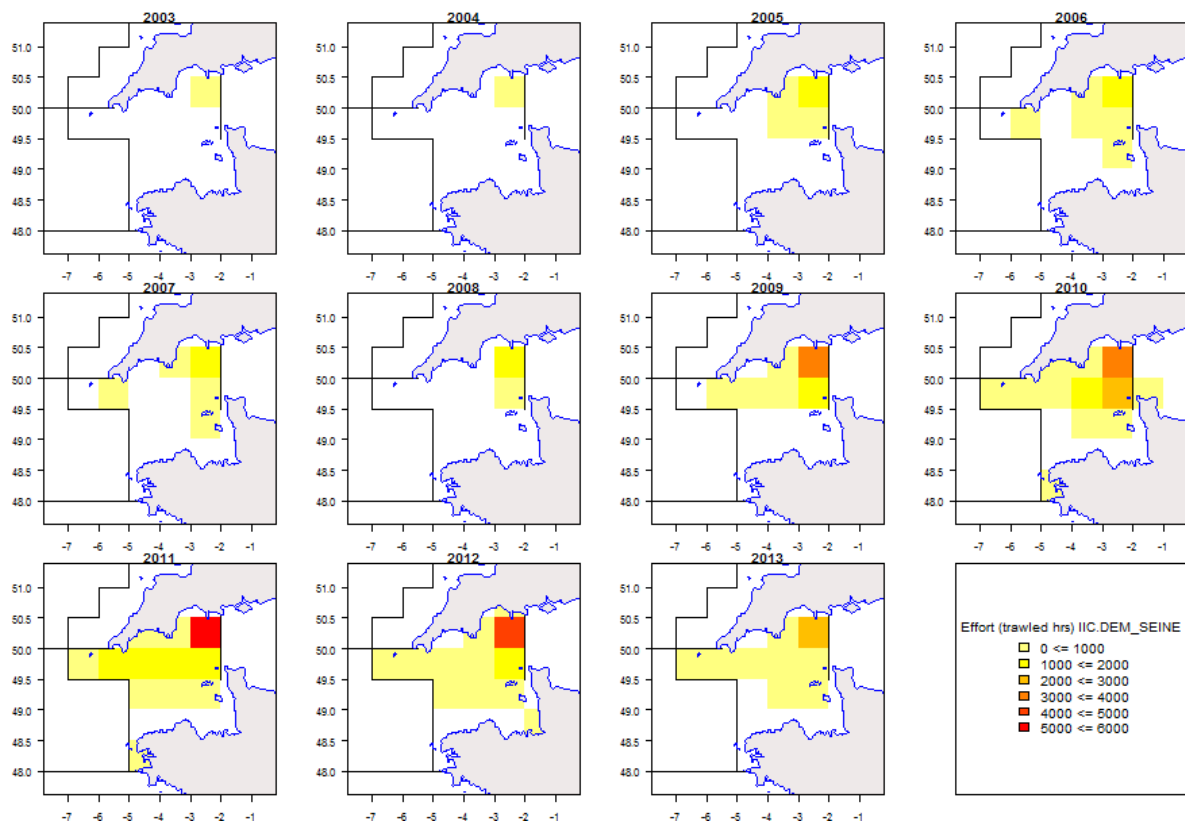


Figure 5.8.7.4. Western Channel. Spatial distribution of effective fishing effort (trawled hours) by ICES statistical rectangle for Demersal Seine, 2003-2013.

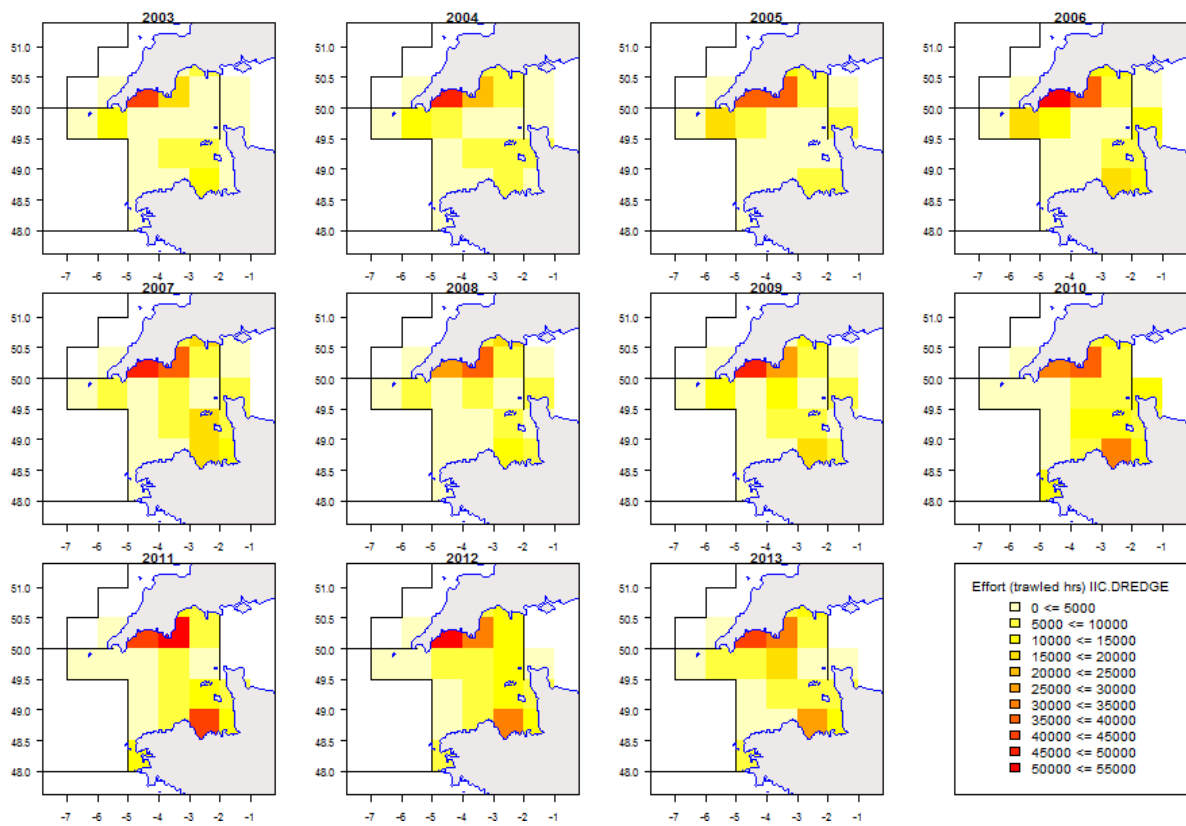


Figure 5.8.7.5. Western Channel. Spatial distribution of effective fishing effort (trawled hours) by ICES statistical rectangle for Dredges, 2003-2013.

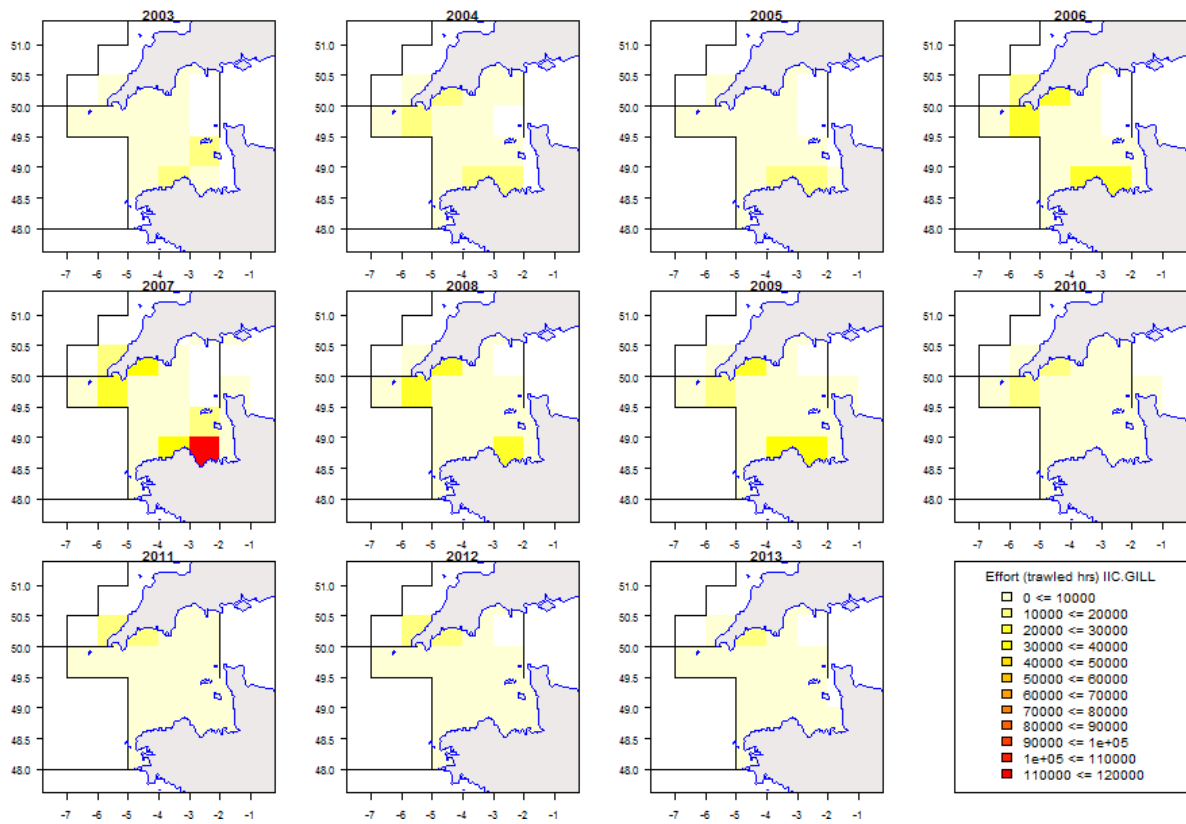


Figure 5.8.7.6. Western Channel. Spatial distribution of effective fishing effort (trawled hours) by ICES statistical rectangle for Gill nets, 2003-2013.

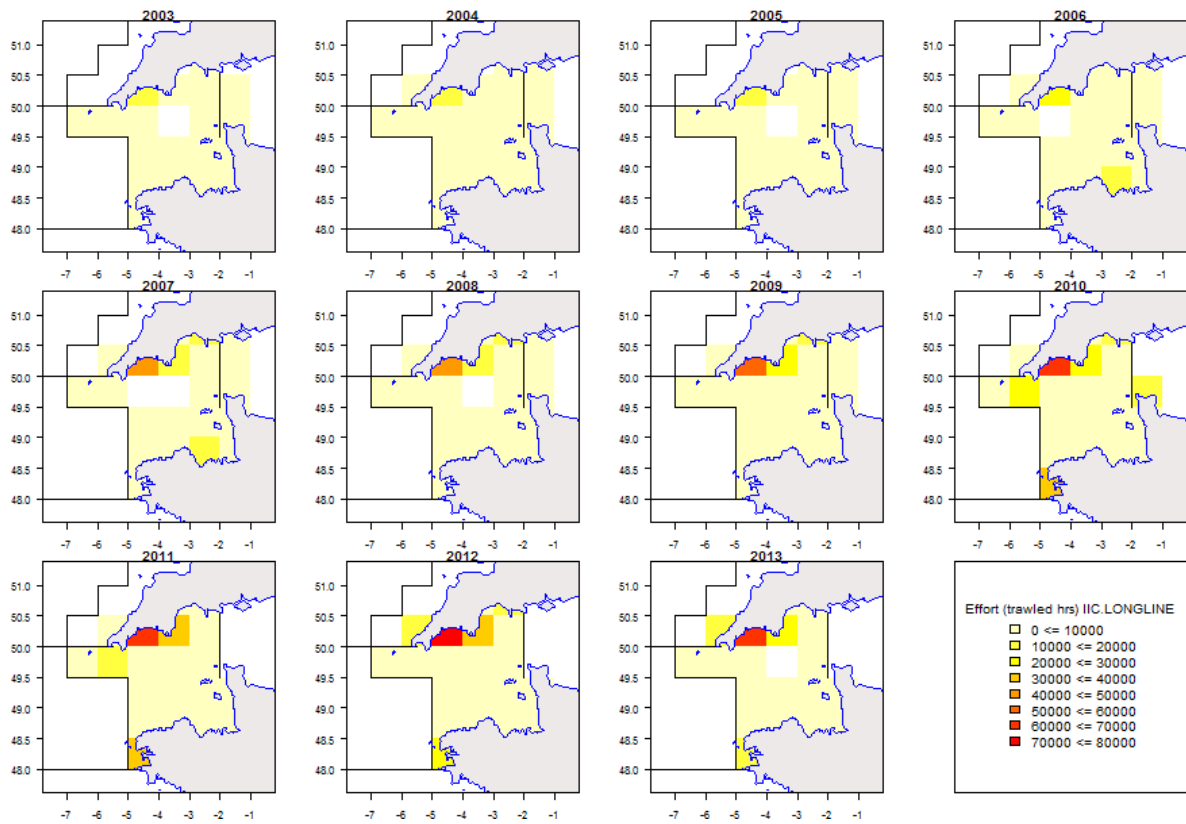


Figure 5.8.7.7. Western Channel. Spatial distribution of effective fishing effort (trawled hours) by ICES statistical rectangle for Longlines, 2003-2013.

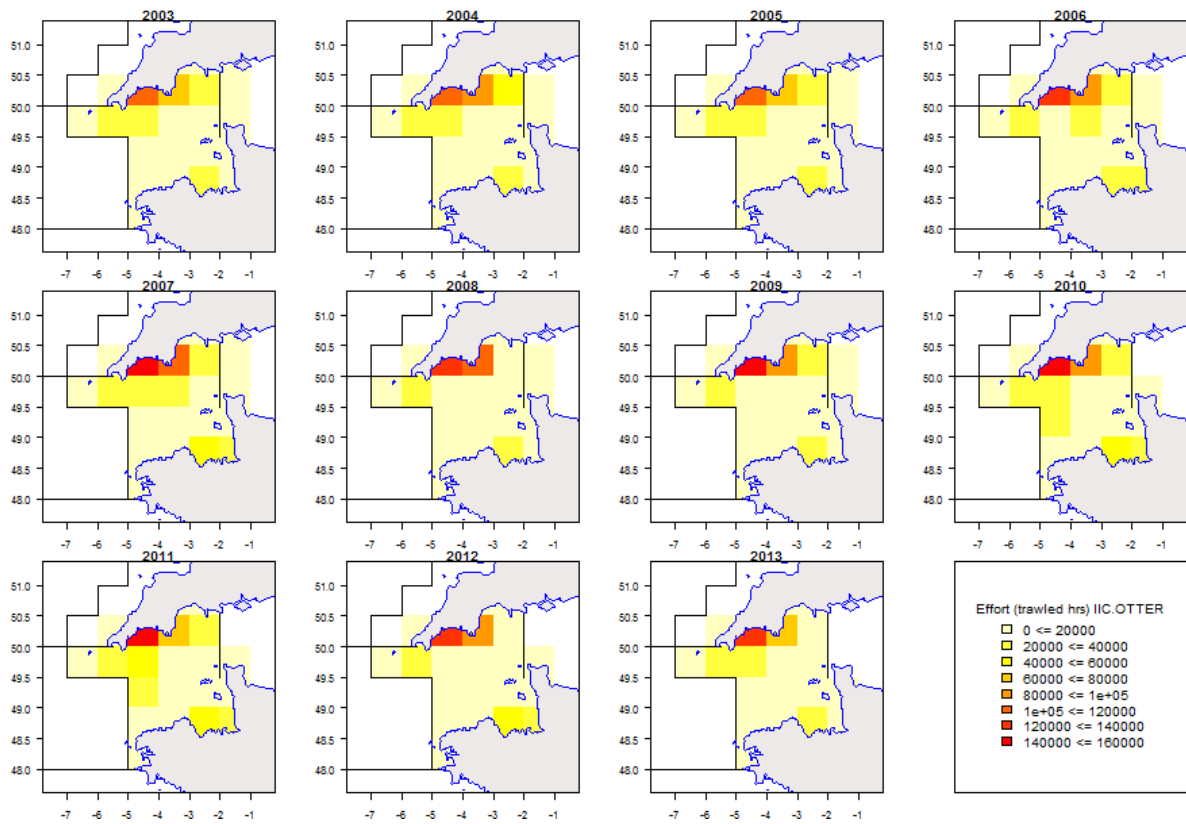


Figure 5.8.7.8. Western Channel. Spatial distribution of effective fishing effort (trawled hours) by ICES statistical rectangle for Otter Trawl, 2003-2013.

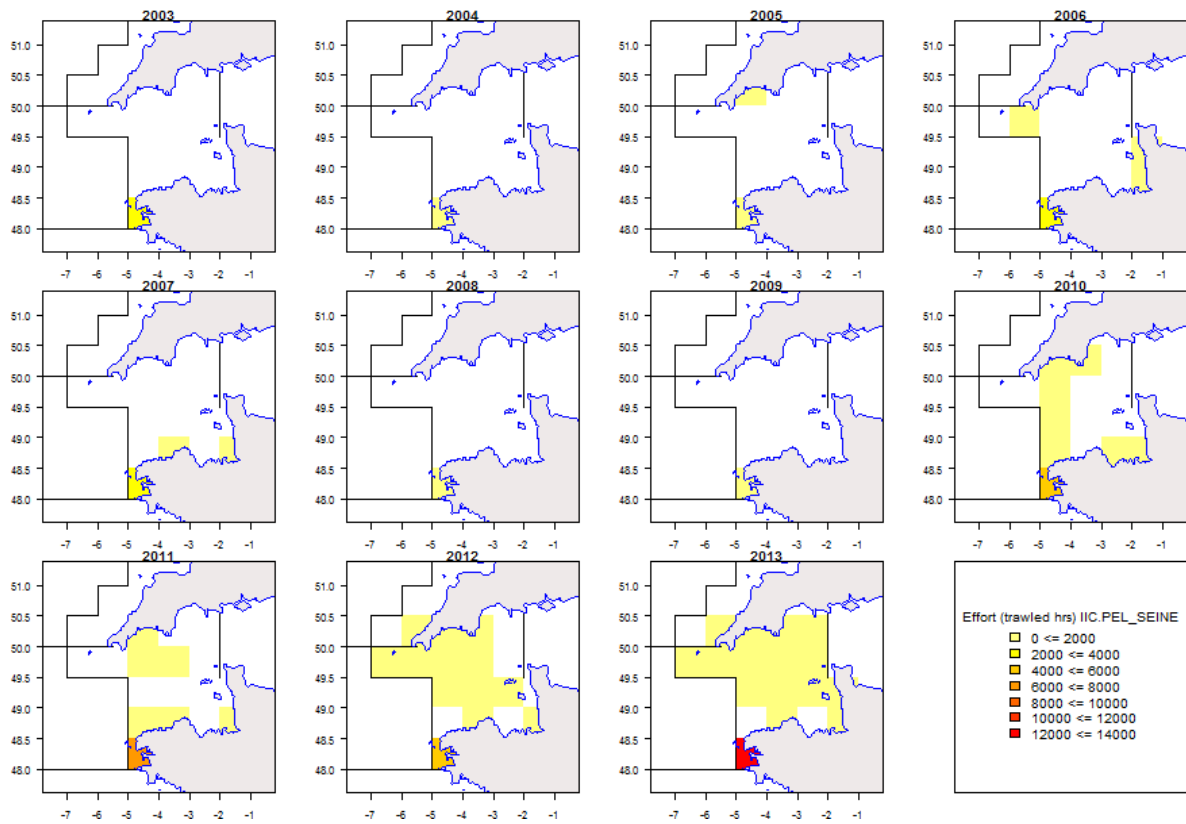


Figure 5.8.7.9. Western Channel. Spatial distribution of effective fishing effort (trawled hours) by ICES statistical rectangle for Pelagic Seine, 2003-2013.

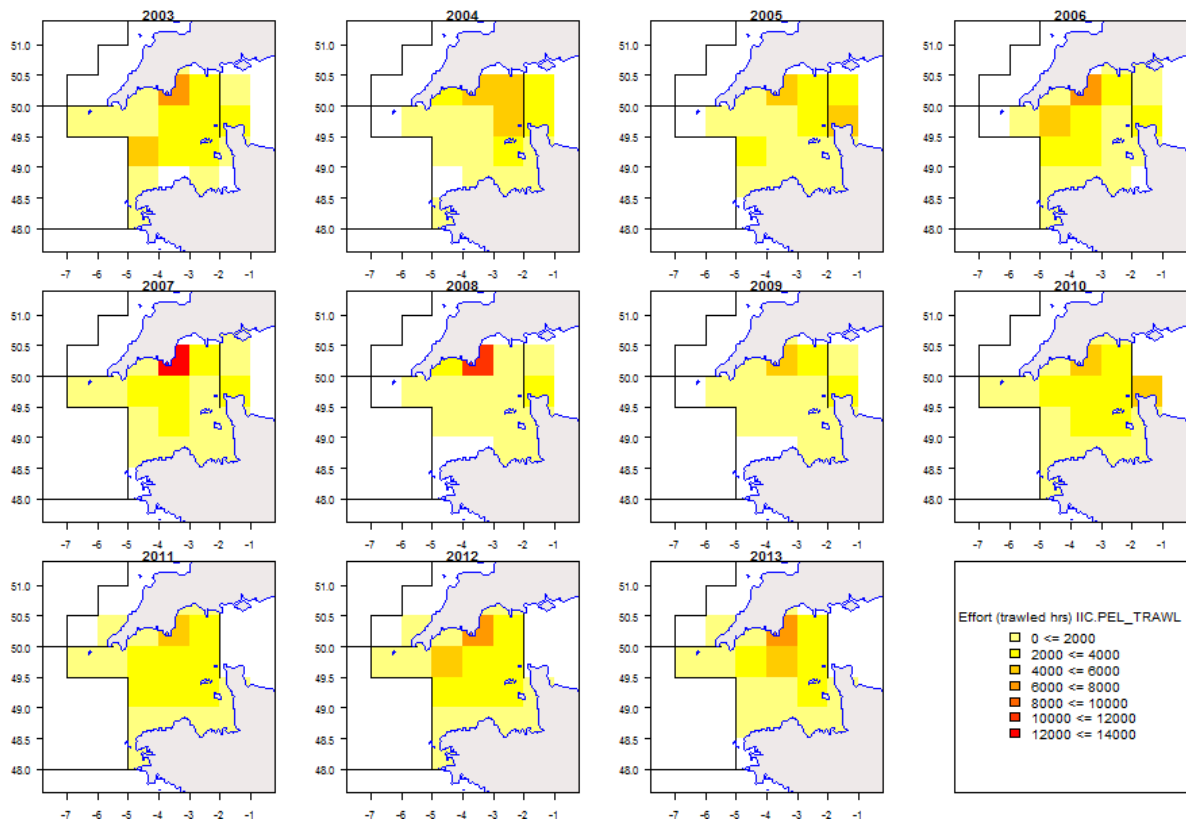


Figure 5.8.7.10. Western Channel. Spatial distribution of effective fishing effort (trawled hours) by ICES statistical rectangle for Pelagic Trawl, 2003-2013.

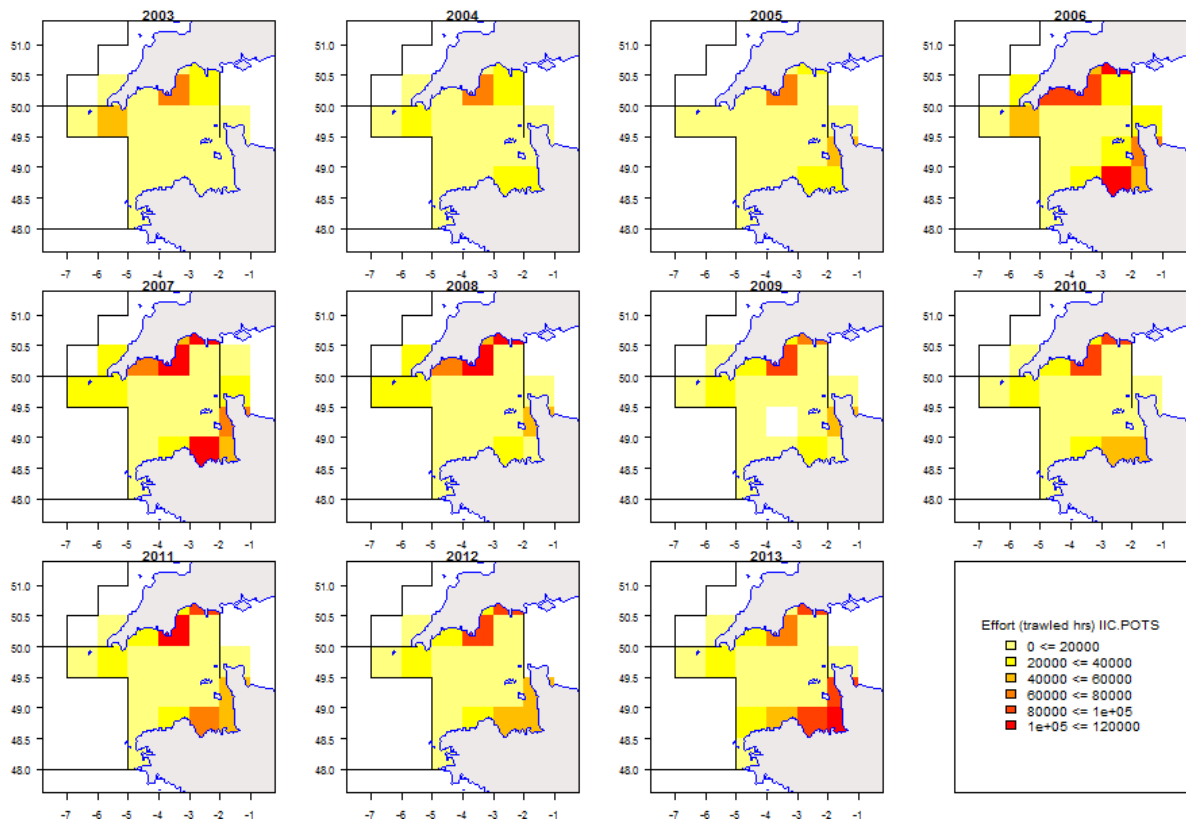


Figure 5.8.7.11. Western Channel. Spatial distribution of effective fishing effort (trawled hours) by ICES statistical rectangle for POTS, 2003-2013.

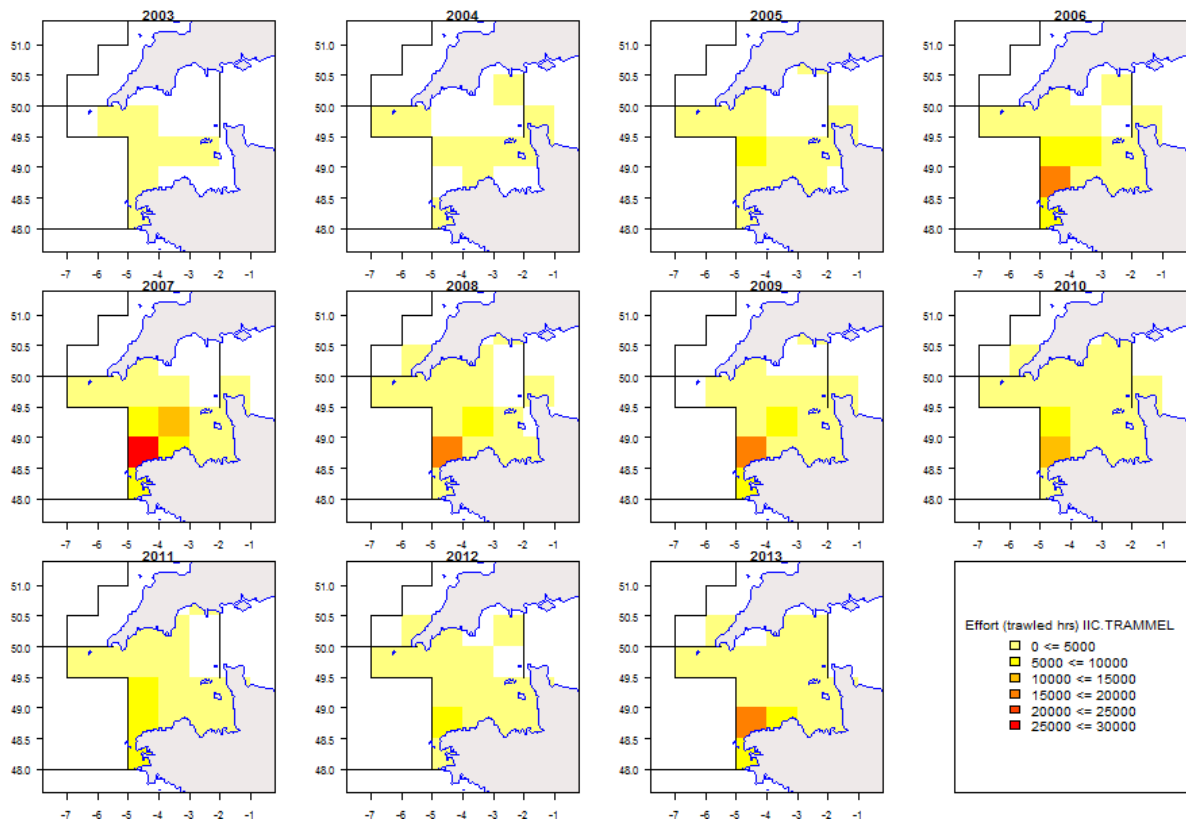


Figure 5.8.7.12. Western Channel. Spatial distribution of effective fishing effort (trawled hours) by ICES statistical rectangle for Trammel nets, 2003-2013.

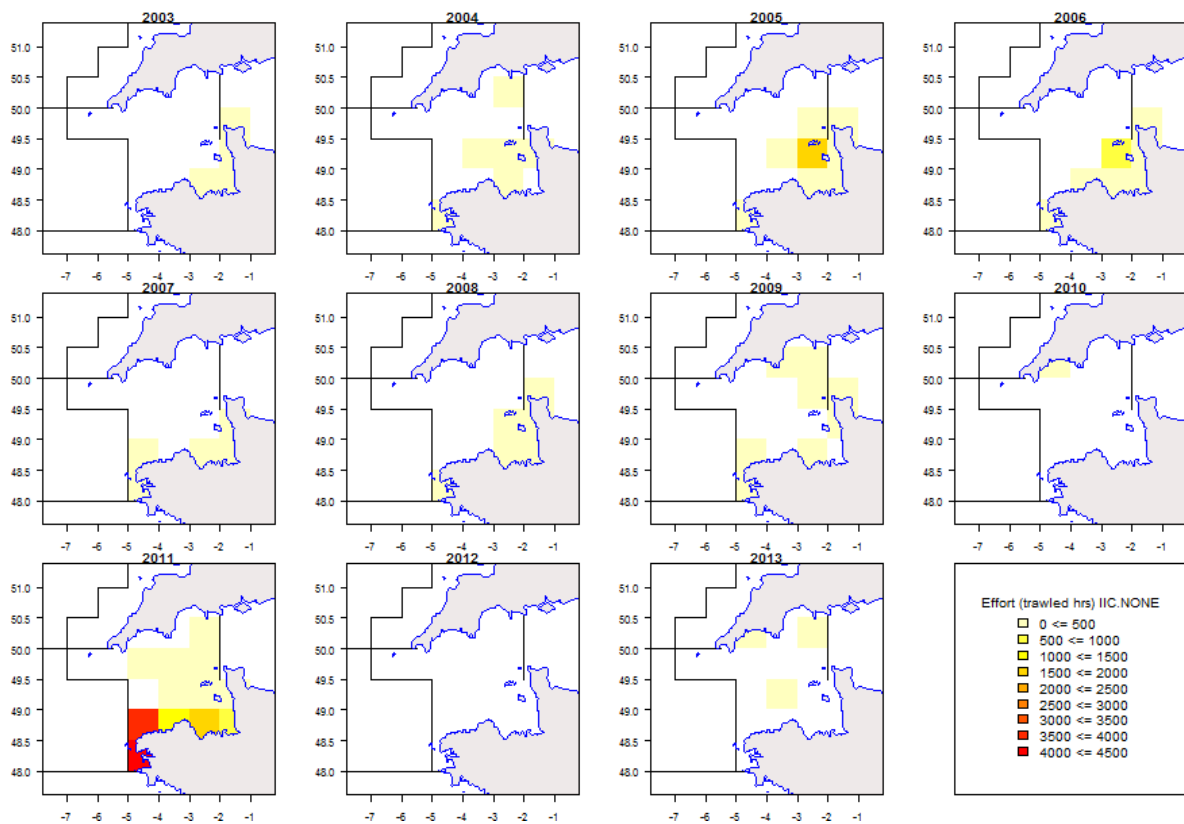


Figure 5.8.7.13. Western Channel. Spatial distribution of effective fishing effort (trawled hours) by ICES statistical rectangle for None (“none-none”), gears without mesh size given, 2003-2013.

5.8.8 ToR 5 Trend in calculated maximum effort of regulated gears and uptake by Member State

Table 5.8.8.1 lists the effort in units of days at sea estimated for the effort regulated and non effort regulated fisheries by Member State. Although, the time series is only considered complete for the four most recent years 2010 to 2013 (data from the French fisheries is only available for the last 4 years), there is information from English and the Belgian regulated beam trawl fleet (3a) and from English regulated static gear (3b) since 2005.

Unlike the situation in the Baltic, the definitions of few fisheries, and specific days at sea allocations to them, allow the assessment of the effort uptake from the numbers of boats using effort regulated gears, assuming no major changes in gears used. Multiple counting of vessels (overestimation) is implied from vessels using more than one regulated gear. The maximum

numbers of days available for such fisheries, i.e. the maximum days at sea per vessel multiplied with the number of vessels, are also given in the Table 5.8.8.1. EWG-14-06 would like to note that the UK has developed a “Days at Sea Scheme” where extra days can be claimed. For 2012, the UK(English) regulated beam trawl fleet (3a) obtained 42 extra days, mounting up to a total days at sea of 206. Therefore the “max-days” in 2012 is not 7216 (164 days x 44 vessels) but 8858 (206 days x 43 vessels) and thus the %-used is not 95% but 75%. In 2013, the UK has obtained 43 extra days for their beam trawl fleet (3a) resulting in a “max-days” of 9108 days (207 days x 44 vessels) and a 67%-use. In 2013, France has obtained 11 extra days for their beam trawl fleet (3a), resulting in a “max-days” of 1050 days (175 days x 6 vessels) and a 29%-use. The French static gear (3b) obtained an extra 14 days for 2013, resulting in a “max-days” of 3382 days (178 days x 19 vessels) and a 35%-use.

For the regulated beam trawl fleet (3a), the English series indicate an increasing uptake from 47% in 2005 to about 80% in 2011 and a levelling of around 70%. The Belgian and the French regulated beam trawl fleet show a stable uptake on a low (around 10%) and high level (around 65%) respectively. However, with the allocation of the extra 11 days by vessel in 2013, the uptake for the French beam trawl fleet was halved to about 30%.

The English regulated static gear (3b) show a slight increase (20%-45%) over time whereas the French regulated static gear show a stable uptake around 50%. Again, it should be noted that the uptake in 2013 was substantially reduced to 35% due to the allocation of 14 extra days by vessel.

Table 5.8.8.1 Western Channel - Trend in days at sea by existing derogations given in Table 1 of Annex IIC (Coun. Reg. 43/2014) and Member State, 2004-2012. Maximum days at sea are calculated from number of vessels multiplied with the maximum days allowed per vessel. Derogations are sorted by gear, special condition (SPECON), and country. Data qualities are summarised in Section 4 of the report.

ANNEX	REG AREA COD	REG GEAR COD	SPECON	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012*	2013**
IIc	7e	3a	none	BEL	57	16080	12528	10560	9408	8448	5084	5412	6068	5412
							670	810	542	174	342	521	534	402
							0.05	0.08	0.06	0.02	0.07	0.10	0.09	0.07
IIc	7e	3a	none	ENG	62	53	51	53	47	43	38	44	43	44
						12720	11016	10176	9024	8256	6232	7216	8858	9108
					6026	5960	6065	6167	6175	4769	5070	5687	6675	6099
						0.47	0.55	0.61	0.68	0.58	0.81	0.79	0.75	0.67
IIc	7e	3a	none	FRA	12	13	20	15	11	10	13	8	6	6
											2132	1312	984	1050
											1271	914	606	303
											0.60	0.70	0.62	0.29
IIc	7e	3a	none	GBU	4	2								
						480								
					333	174								
						0.36								
IIc	7e	3a Total	none		137	134	124	109	98	82	85	86	83	
					29280	23544	20736	18432	16704	13448	13940	15910	15570	
					6134	6735	6977	6717	4943	6683	7122	7815	6804	
										0.50	0.51	0.49	0.44	
IIc	7e	3b	none	ENG	21	17	17	14	12	13	12	12	11	10
						4080	3672	2688	2304	2496	1968	1968	1804	1640
					1211	1047	844	584	566	618	732	724	731	
						0.26	0.23	0.22	0.25	0.26	0.31	0.38	0.40	0.45
IIc	7e	3b	none	FRA	68	62	77	48	34	34	22	22	25	19
											3608	3608	4100	3382
											1830	1780	1951	1182
											0.51	0.49	0.48	0.35
IIc	7e	3b Total	none		79	94	62	46	47	34	34	36	29	
					4080	3672	2688	2304	2496	576	576	5904	5022	
					1047	844	584	566	646	646	2532	2672	1914	
											0.45	0.45	0.38	
IIc	7e	none	none	BEL	3	6	7	6	12	26	23	20	22	
IIc	7e	none	none	DEU	4	3	3		2	1	3	1	2	
IIc	7e	none	none	DNK	1	4	8	1	1	4	34	12	46	
IIc	7e	none	none	ENG	2	40	123	32	27	6	30	24	23	
IIc	7e	none	none	ESP	178	162	170	175	174	156	154	158	158	
					19227	19410	18298	18693	16610	17383	17797	18402	17213	
													5	
													2	
IIc	7e	none	none	FRA	837	943	1114	1259	868	1022	688	654	642	
											52225	54427	51683	
IIc	7e	none	none	GBG	1	2	4	5	4	3				
IIc	7e	none	none	GBJ	226	172	152	245	100	121	277	180	229	
IIc	7e	none	none	IOM	1	1	1	1	1	1	2	3	1	
IIc	7e	none	none	IRL	2	27	88	139	117	140	173	191	62	
													153	
IIc	7e	none	none	LTU	13	5	1	3	2	2	1	2	3	
													2	
IIc	7e	none	none	NIR	1									
					7									
IIc	7e	none	none	NLD	15	13	13	19	15	18	16	17	15	
													16	
IIc	7e	none	none	SCO	23	14	21	16	15	18	18	19	18	
													20	
IIc	7e	none Total	none		1077	1153	1343	1466	1096	1251	910	877	866	
					19464	19649	18714	19112	16858	17674	70537	73680	69881	68221
					1303	1369	1572	1674	1252	1398	1026	996	993	
													986	
IIc	7e	Grand Total	none		27034	26830	26293	26673	24141	23263	79668	83334	80368	76939.71

* = special derogation for UK-3a gear in 2012 obtaining 206 days instead of the basic 164 days.

** = special derogation for UK-3a gear in 2013 obtaining 207 days instead of the basic 164 days.

= special derogation for FR-3a gear in 2013 obtaining 175 days instead of the basic 164 days.

= special derogation for FR-3b gear in 2013 obtaining 178 days instead of the basic 164 days.

5.8.9 ToR 6 Data quality and any unexpected evolutions of the trends in catches and effort by Member State and fisheries

STECF EWG 14-06 reiterates its observation that a relatively high percentage of sole are landed by non-effort regulated gears.

5.8.10 ToR 7 Correlation between partial sole mortality and fishing effort by Member State and fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.9 Deep Sea and Western Waters effort regime evaluations

Details of the Deep Sea Regulations can be found in COUNCIL REGULATION (EC) No 2347/2002.

The format for presenting Deep Sea information was discussed during the July 2009 SGMOS meeting when experts with particular knowledge were present. It was agreed that the most useful presentation would be data summarised on a regional approach so as to identify geographic differences in effort distribution by key member states and important gears. It was decided that regions would be based on ICES areas. It may be the case that similarities between some of these areas would allow areas to be combined in future summaries. Where an ICES area contained waters within EU jurisdiction and waters outside of this, separate summaries are provided where data allow.

In this section of the report tables showing effort by gear groups (regulated and unregulated), area and nation are only summaries. The full tables are available on the JRC website: [REF.](#)

It should be noted that Spain has not provided data for 2010 and 2011. Due to inconsistencies in Portuguese data trends cannot be presented for areas where Portuguese data was reported.

Details of the Western Waters regulations and its geographical extent can be found in the regulation COUNCIL REGULATION (EC) No 1415/2004.

The EWG experienced extreme difficulties in preparing these data and the interpretation of them is confounded by uncertainty in the western waters data summaries for some member states most notably Portugal, France and Spain. **SINCE THESE COUNTRIES OPERATE EXTENSIVELY IN THE WESTERN WATERS AREAS AND ARE LIKELY TO CONTRIBUTE A SIGNIFICANT PROPORTION TO THE OVERALL EFFORT COVERED BY THIS REGULATION, THE DATA SHORTFALL IMPLIES THAT OVERALL EFFORT FIGURES REMAIN UNRELIABLE.**

The EWG database records effort in the areas covered by the Western waters regulation including effort which becomes categorised as 'deep sea'. Since these two regulations are legislated to be non-overlapping, columns are included to show the western waters effort without the deep sea.

Table 5.9.1. COUNCIL REGULATION (EC) No 2347/2002 Annex I and 2 species list:

Code	Annex	Scientific name	Common name
ALF	1	<i>Beryx</i> spp	Alfonsinos
APQ	1	<i>Apristurus laurussonii</i>	Iceland catchark
ARU	1	<i>Argentina silus</i>	Greater silver smelt
BLI	1	<i>Molva dypterygia</i>	Blue ling
BSF	1	<i>Aphanopus carbo</i>	Black scabbard
CFB	1	<i>Centroscyllium fabricii</i>	Black dogfish
CYO	1	<i>Centroscymnus coelolepis</i>	Portuguese dogfish
CYP	1	<i>Centroscymnus crepidater</i>	Longnose velvet dogfish
DCA	1	<i>Deania calcea</i>	Birdbeak dogfish
ETR	1	<i>Etmopterus princeps</i>	Greater lantern shark
ETX	1	<i>Etmopterus spinax</i>	Velvet belly
FOX	1	<i>Phycis blennoides</i>	Forkbeards
GAM	1	<i>Galeus murinus</i>	Mouse catshark
GSK	1	<i>Somniosus microcephalus</i>	Greenland shark
GUP	1	<i>Centrophorus granulosus</i>	Gulper shark
GUQ	1	<i>Centrophorus squamosus</i>	Leafscale gulper shark
HXC	1	<i>Chlamydoselachus anguineus</i>	Frilled shark
ORY	1	<i>Hoplostethus atlanticus</i>	Orange roughy
OXN	1	<i>Oxynotus paradoxus</i>	Sharpback shark
RNG	1	<i>Coryphaenoides rupestris</i>	Roundnose grenadier
SBL	1	<i>Hexanchus griseus</i>	Six-gilled shark
SCK	1	<i>Dalatias licha</i>	Kitefin shark
SHO	1	<i>Galeus melastomus</i>	Blackmouth dogfish
SYR	1	<i>Scymnodon ringens</i>	Knifetooth dogfish
ALC	2	<i>Alepocephalus bairdii</i>	Baird's smoothhead
ANT	2	<i>Antimora rostrata</i>	Blue antimora
BRF	2	<i>Helicolenus dactylopterus</i>	Blue mouth redfish
CMO	2	<i>Chimaera monstrosa</i>	Rabbitfish
COE	2	<i>Conger conger</i>	Conger eel
CYH	2	<i>Hydrolagus mirabilis</i>	Large-eyed rabbitfish
ELZ	2	<i>Lycodes esmarkii</i>	Eelpout
EPI	2	<i>Epigonus telescopus</i>	Black cardinal fish
HPR	2	<i>Hoplostethus mediterraneus</i>	Silver roughy
JAD	2	<i>Dipturus nidarosiensis</i>	Norwegian skate
KEF	2	<i>Chaceon affinis</i>	Deep-water red crab
PHO	2	<i>Alepocephalus rostratus</i>	Risso's smoothhead
RCT	2	<i>Rhinochimaera atlantica</i>	Straightnose rabbitfish
RHG	2	<i>Macrourus berglax</i>	Roughhead grenadier
RIB	2	<i>Mora moro</i>	Common mora
RJG	2	<i>Amblyraja hyperborea</i>	Arctic skate
RJY	2	<i>Rajella fyllae</i>	Round skate
SBR	2	<i>Pagellus bogaraveo</i>	Red (blackspot) seabream
SFS	2	<i>Lepidopus caudatus</i>	Silver scabbard fish
SFV	2	<i>Sebastes viviparus</i>	Small redfish
TJX	2	<i>Trachyscorpia cristulata</i>	Spiny (deep sea) scorpionfish
WRF	2	<i>Polyprion americanus</i>	Wreckfish

5.9.1 ToR 1a Fishing effort by area

DEEP SEA

Effort within the Deep sea and Western waters has been compiled for kW*days-at-sea, GT*days-at-sea, and numbers of vessels. Within the report the focus is on kW*Days at sea. Information on GT*days at sea and numbers of vessels is available via the website: [REF](#)

Overview of spatial distribution of fishing effort data: Collation of data to address questions associated with deepwater fisheries provided an opportunity to present spatial data across wide geographic areas giving a general picture of the distribution of fishing activity.

For each ICES Sub-area, tables are included which show effort by country (and an overall effort for the area) and effort by gear. In addition, figures illustrating trends are included for the most important gears.

Figures 5.9.1.1 to 5.9.1.5 show respectively the distribution of effort for five of the categories of gear; bottom trawl, pelagic trawl, longline, gill nets and beam trawl specified in the Terms of Reference.

Bottom trawl effort is concentrated in ICES Area IVa as well as the Continental shelf and slope to the west and southwest of Ireland and the UK. Bottom trawl effort in the Bay of Biscay, the Cantabrian Sea and off the Portuguese coast increased in 2012 compared to 2010 and 2011. In 2013 effort decreased slightly in areas VIIj and VIIIc but increased in Areas IIa and XIV.

Pelagic trawling was concentrated to the west of Ireland, and to the west and north of Scotland in the mid 2000s. This effort decreased greatly between 2007 and 2009, increased again in 2010, but has reduced again in 2011 and 2012. In 2013 effort increased in Areas IVa and IXa, but decreased in areas VIIIa and VIIIb.

Longline effort was concentrated on the shelf and slope between Shetland and Portugal but has been in decline in recent years. Longline effort from the Azores has shown an increase since 2009. In 2013 longline effort is reduced in areas IXa and Xa, however this is probably just a reflection of the issues with the Portuguese data.

In the mid 2000s gill net effort was concentrated in the Celtic sea and Porcupine Bank. Due to current restrictions in the use of deepwater gill nets much of this effort is now concentrated in the Celtic sea, with some effort in the North sea, west of Scotland and the Bay of Biscay. In 2013 effort increased in areas VIIg and VIb but decreased in area IVb.

Beam trawling is concentrated in the Celtic sea and the western English Channel. While beam trawls are not a deepwater gear some of the species caught are classified under Annex 2.

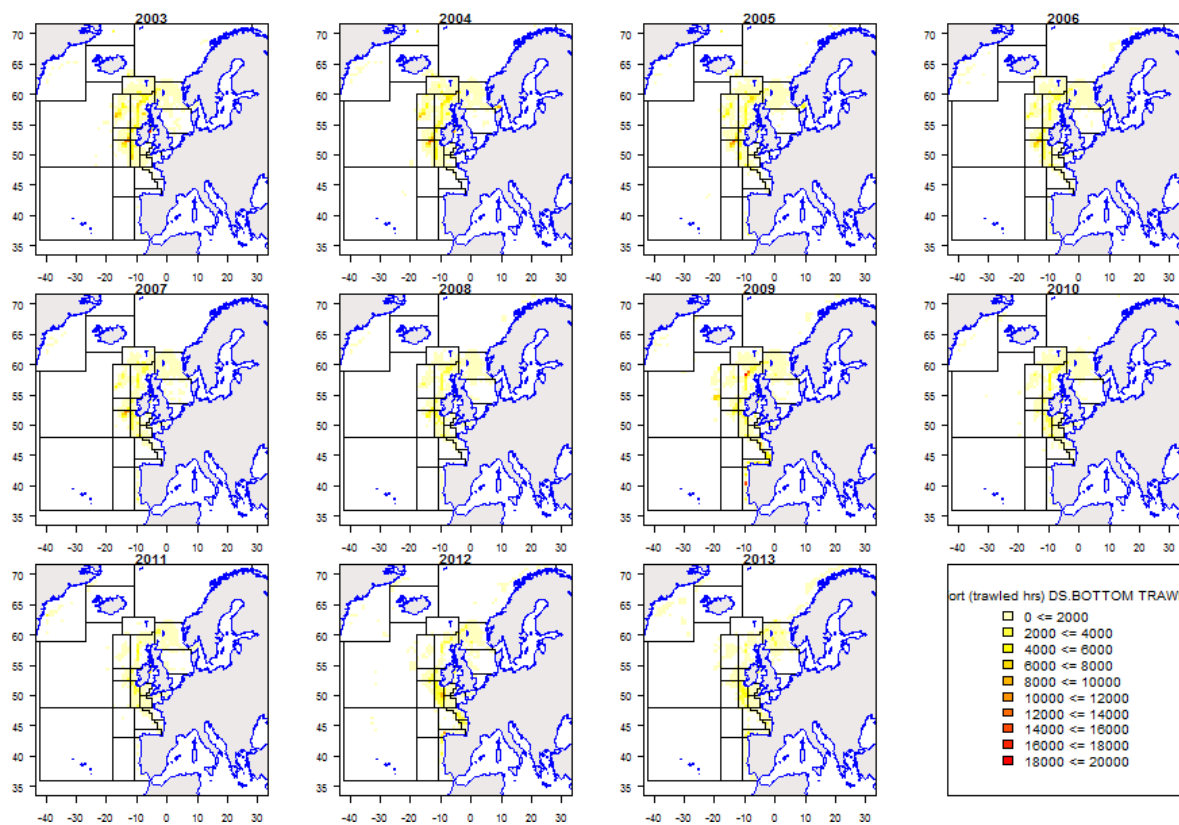


Figure 5.9.1.1 Distribution of bottom trawl effort, (specified as deep sea fisheries), 2003 – 2013.

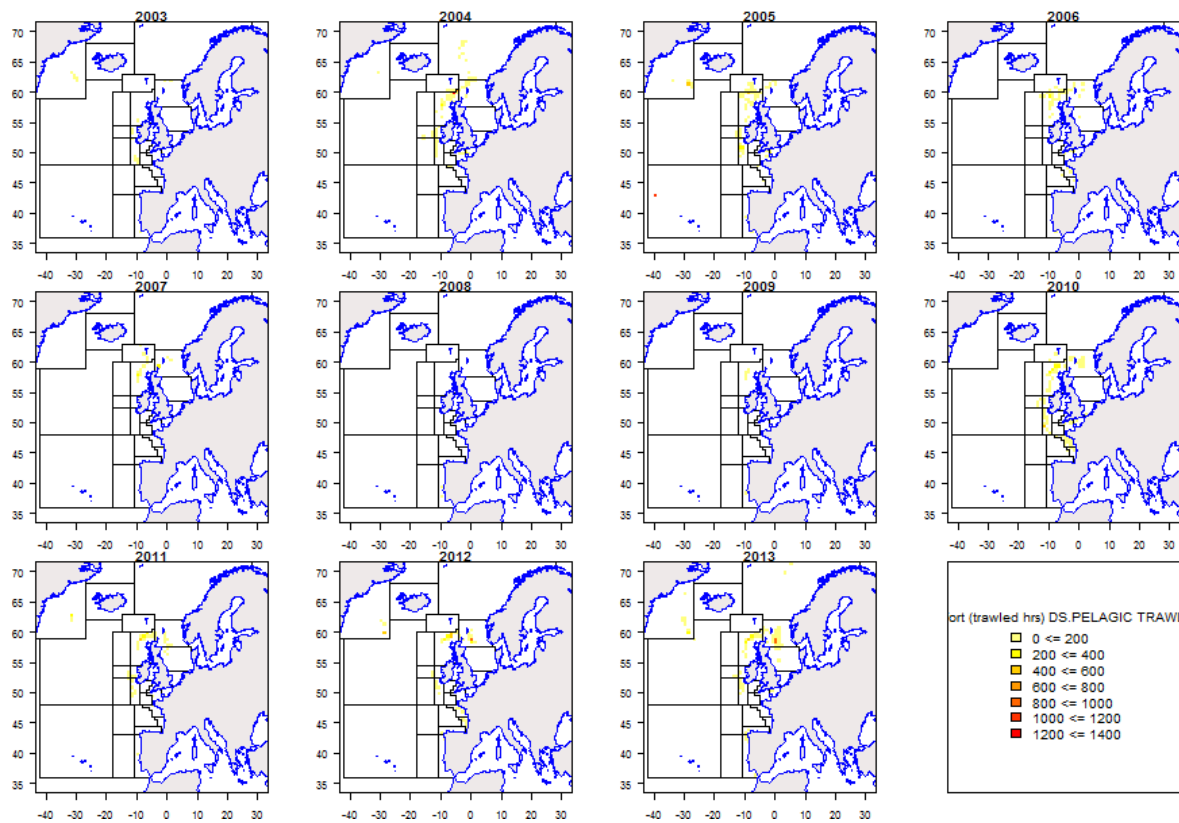


Figure 5.9.1.2 Distribution of pelagic trawl effort, (specified as deep sea fisheries), 2003 – 2013.

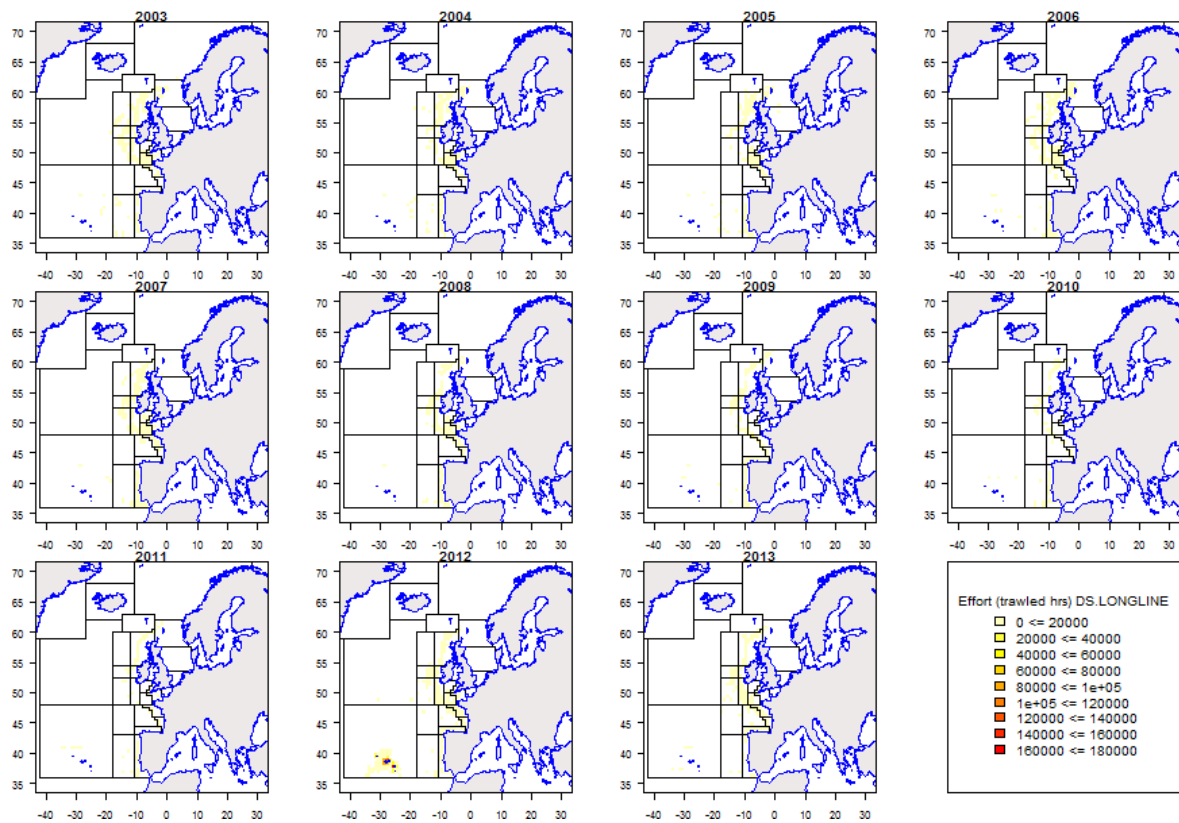


Figure 5.9.1.3 Distribution of longline effort, (specified as deep sea fisheries), 2003 – 2013.

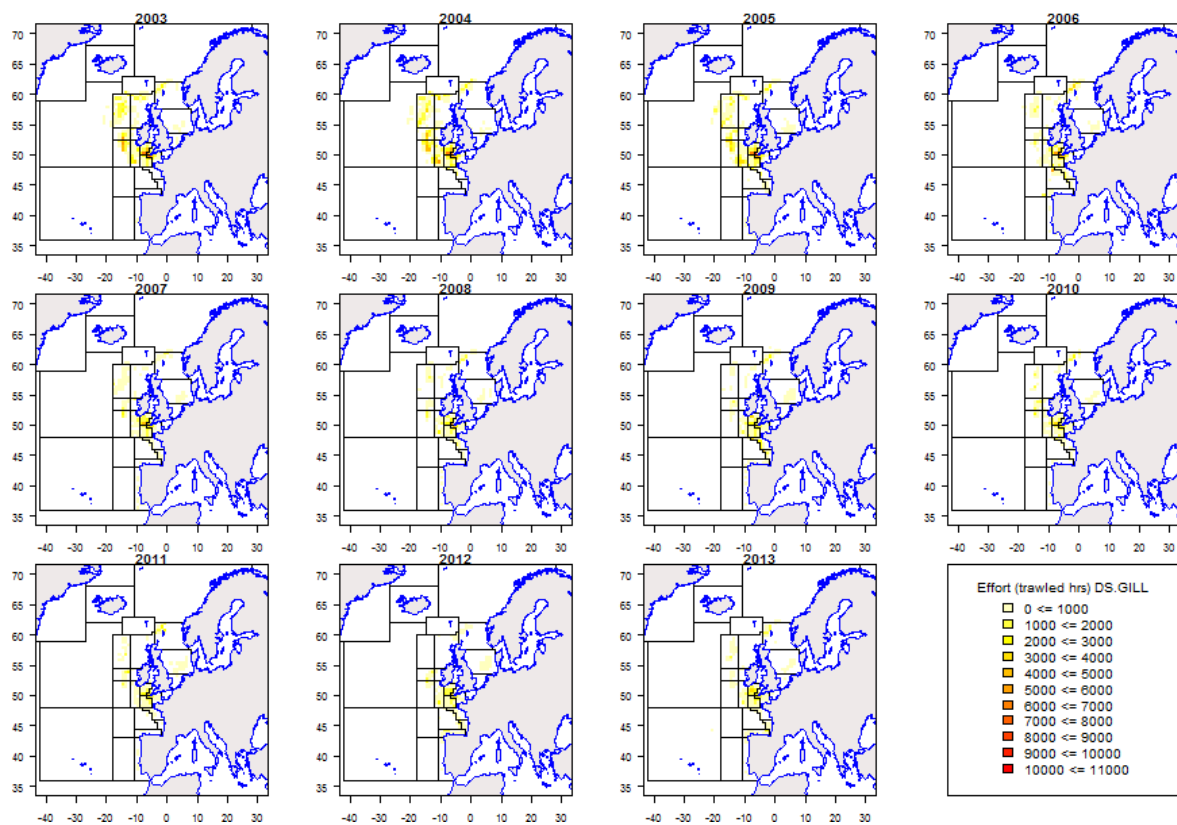


Figure 5.9.1.4 Distribution of gill net effort, (specified as deep sea fisheries), 2003 – 2013.

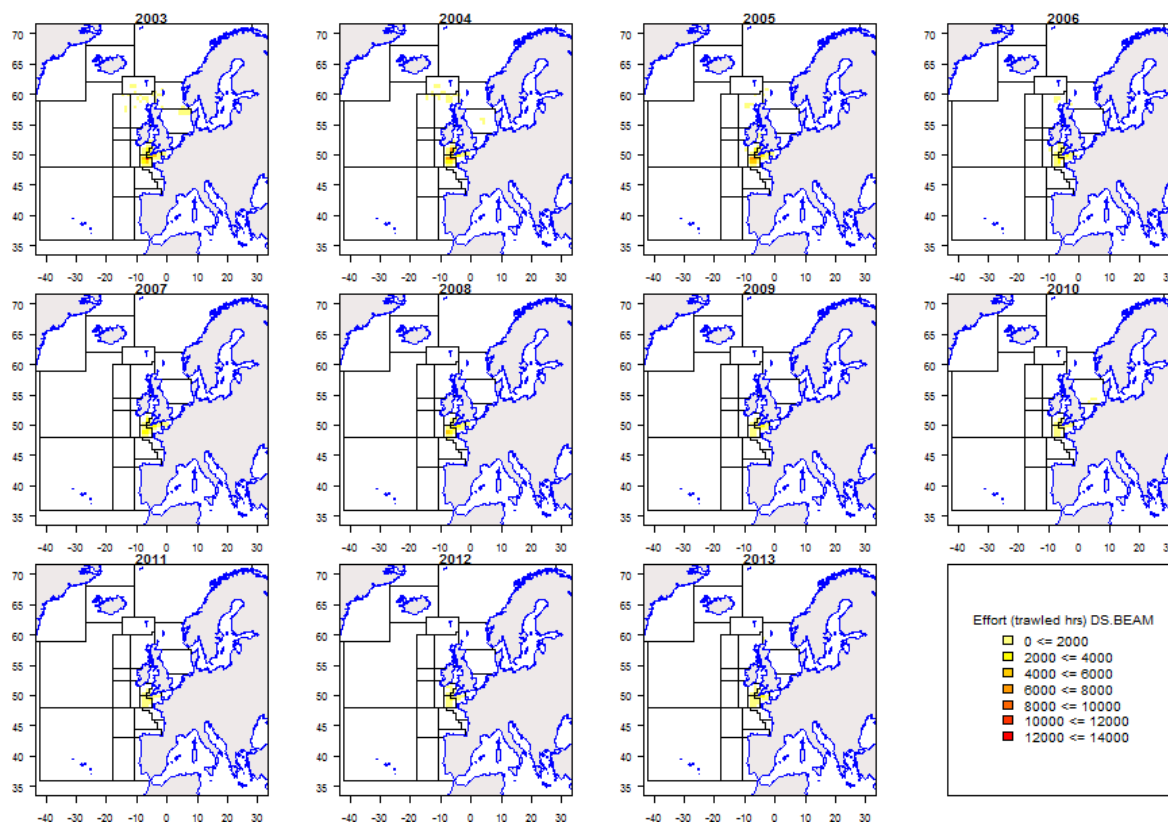


Figure 5.9.1.5 Distribution of beam trawl effort (specified as deep sea fisheries), 2003 – 2013.

WESTERN WATERS

Effort data under the Western Waters regulation is presented by a number of EU and non-EU areas. Where relevant these encompass breakdowns by country, gear and vessel length groups.

5.9.1.1 Fishing effort in ICES area I by fisheries and Member States only linked to Deep Sea species

Area I non-EU

Sparse effort by Germany was reported historically from this area (Tables 5.9.1.1.1, 5.9.1.1.2 and Figure 5.9.1.1.1). However France has reported some effort for bottom trawls for 2012 and 2013. None of this effort is in EU waters.

Table 5.9.1.1.1.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state ICES Sub-area I non-EU.

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1 non EU	FRA										96750	290191
	DEU				70600			2427				
1 non EU Total					70600			2427			96750	290191

Table 5.9.1.1.2.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state ICES Sub-area I non-EU.

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1 non EU	BOTTOM TRAWLS	FRA										96750	290191
1 non EU	BOTTOM TRAWLS	DEU				70600		2427					
1 non EU Total						70600		2427				96750	290191

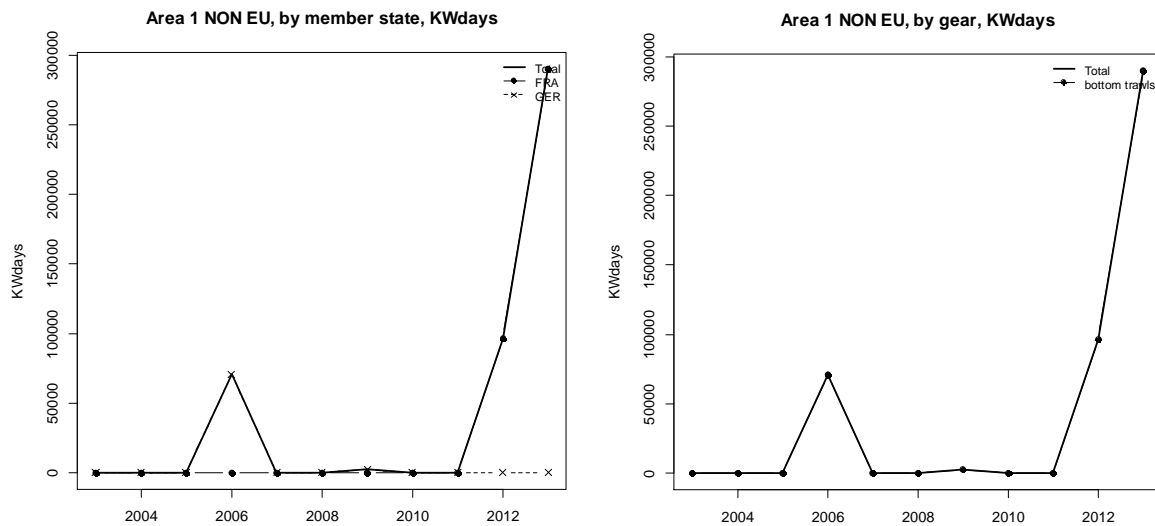


Figure 5.9.1.1.1.- Deep Sea Effort (kW*days) 2003-2013 by member state and by gear ICES Area I non EU.

5.9.1.2 Fishing effort in ICES area II by fisheries and Member States only linked to Deep Sea species

Area II EU

Four countries reported effort in this area with the majority being carried out by two countries, France and UK, with the pattern of each varying through time (Table 5.9.1.2.1). French effort showed a particularly noticeable drop in the mid 2000s, before increasing again from 2006. This effort peaked in 2008 but dropped again to 2011 before increasing again in 2012 and 2013. UK effort has fluctuated throughout the time series, however effort in 2013 was the second highest recorded. It mainly comprises bottom trawl, with some gill net effort. Netherlands pelagic trawl effort stopped in 2007 (Table 5.9.1.2.2). Germany contributed some effort in the mid 2000s. Effort in Sub-area II (EU) shows no obvious trend.

The principal gear used in this Sub-area (Table 5.9.1.2.2, and Figure 5.9.1.2.1) was the otter trawl (by France and UK). UK gill net effort fluctuated between 2002 and 2010 (albeit at a relatively low level). This had ceased in 2010 but effort has been reported again in 2013.

Table 5.9.1.2.1.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state ICES Sub-area II EU.

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
2 EU	FRA	43886	29608	65124	210353	134456	248412	246993	144020	63238	141426	224975
	GER	33516	87864		12000							
	NED	13200	158115									
	UK	66870	26431	12017	200446	97363	79378	73683	71877	19261	80985	115152.94
2 EU Total		157472	302018	77141	422799	231819	327790	320676	215897	82499	222411	340128

Table 5.9.1.2.2.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state ICES Sub-area II EU.

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
2 EU	BOTTOM TRAWLS	FRA	43886	29608	65124	210353	134456	248412	246993	144020	63238	141426	224975	
		GER		4410		12000								
		UK	66870	17755	4661	178712	45144	24171	47637	69845	19261	80985	80038	
			33516	53802										
	GILL	GER		8676	7356	21734	39241	55207	26046	2032				
		UK		29652										
			13200	158115										
	PELAGIC TRAWLS	GER												
		NED												
		UK					12978							
	2 EU Total			157472	302018	77141	422799	231819	327790	320676	215897	82499	222411	340128

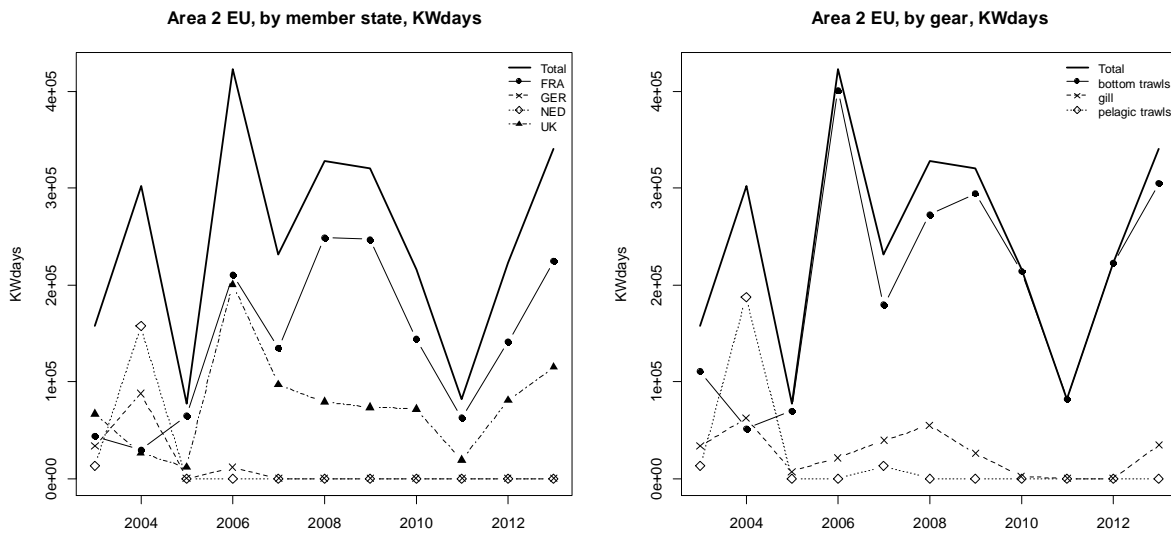


Figure 5.9.1.2.1.- Deep Sea Effort (kW*days) 2003-2013 by member state and by gear ICES Area II EU.

Area II non-EU

Six countries reported effort in this area with the majority being carried out by the UK (Table 5.9.1.2.3). Total effort had decreased since the mid 2000s but is showing an increase again since 2012. UK bottom trawl effort has been in decline since 2005, however effort by France, which started in 2010, is increasing. Netherlands pelagic trawl effort stopped in 2006 (Table 5.9.1.2.4). Germany contributed some effort in the mid 2000s and again in 2013. Spain also reported effort in this area for the first time in 2013.

The principal gear used in this Sub-area (Table 5.9.1.2.4, and Figures 5.9.1.2.2.) is the otter trawl (by UK, France, Germany and Spain). Netherland pelagic trawl effort reached a peak in 2004 but has ceased since 2007, while Spain reported pelagic effort for 2013. Spain also reported a small amount of longline effort for 2013.

Table 5.9.1.2.3.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state ICES Sub-area II non-EU.

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
2 non EU	ESP											208241
	FRA								81836	115246	183749	375836
	GER	94653	49420	43686	262923			266743				75685
	IRL	1350										
	NED	349335	781113	196020	216254							
	UK	701782	649580	817921	802633	613414	603521	380425	283442	247297	229508	92337.78
2 non EU Total		1147120	1480113	1057627	1281810	613414	603521	647168	365278	362543	413257	752100

Table 5.9.1.2.4.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state ICES Sub-area II non-EU.

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
2 non EU	BOTTOM TRAWLS	ESP											70946	
		FRA								71532	115246	183749	375836	
		GER	94653		43686	262923			266743				75685	
		UK	701782	649580	817921	802633	470655	603521	380425	283442	247297	229508	92338	
	DREDGE	FRA								10304				
		IRL												645.33
	LONGLINE	ESP												
		IRL	1350											
	PELAGIC TRAWLS	ESP												136650
		GER			49420									
		NED	349335	781113	196020	216254								
		UK						142759						
	2 non EU Total		1147120	1480113	1057627	1281810	613414	603521	647168	365278	362543	413257	752100	

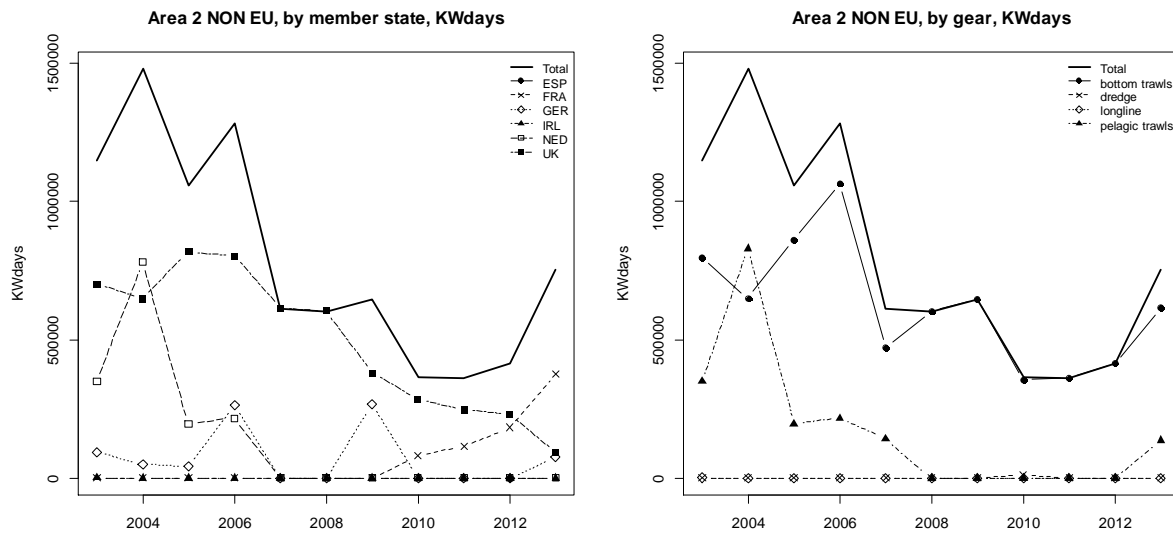


Figure 5.9.1.2.2. Deep Sea Effort (kWdays) 2003-2013 by member state and by gear ICES Area II non EU.

5.9.1.3 Fishing effort in ICES area III by fisheries and Member States only linked to Deep Sea species

Area III no Baltic

All effort takes place in EU waters but is very limited and the majority of the records are for Danish vessels using bottom trawls. German data was reported for 2004 only and France reported a small amount of effort in 2012. No effort data was reported for 2013.

Table 5.9.1.3.1.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state ICES Sub-area III EU no Baltic.

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
3 no Baltic	DEN	231924	529970	383720	155403	4128		8990	2682	17698		
	FRA										1850	
	GER		1470									
3 no Baltic Total		231924	531440	383720	155403	4128		8990	2682	17698	1850	

Table 5.9.1.3.2.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state ICES Sub-area III EU no Baltic.

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
3 no Baltic	BOTTOM TRAWLS	DEN	231924	529970	383720	155403	4128		8990	2682	17698		
		FRA										1850	
		GER		1470									
3 no Baltic Total			231924	531440	383720	155403	4128		8990	2682	17698	1850	

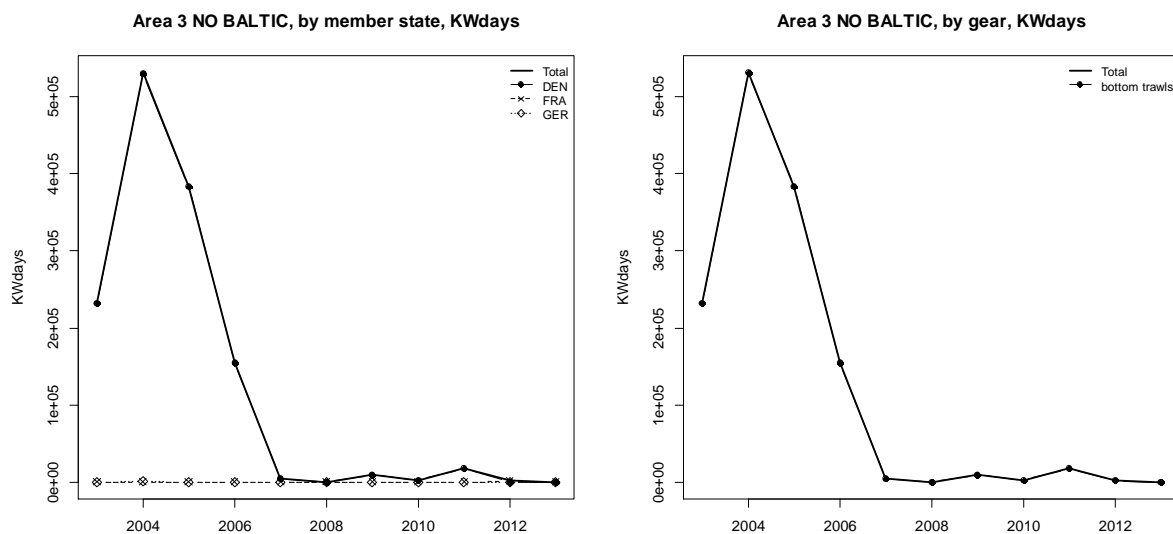


Figure 5.9.1.3.1.- Deep Sea Effort (kwdays) 2003-2013 by member state ICES Area III no Baltic.

5.9.1.4 Fishing effort in ICES area IV by fisheries and Member States only linked to Deep Sea species

Area IV

Six countries have reported effort in this area, all of which occurs in EU waters, with four countries, France, Netherlands, Denmark and UK contributing the most (Tables 5.9.1.4.1 and 5.9.1.4.2). There was a downward trend in overall effort up to 2008 but effort has increased again since 2009 with 2013 recording the second highest effort in the time series. French effort, all for bottom trawl, was reasonably constant before increasing in 2012, although it decreased slightly in 2013. Overall UK effort has stayed reasonably stable through the time series although gill net effort has fluctuated greatly since 2010. While Dutch effort peaked in the mid 2000s. Significant pelagic trawling was again carried out between 2010 and 2012, however very little effort was recorded for 2013. Germany has also contributed sporadic effort but in 2013 reported increased effort for pelagic trawls.

Denmark submitted a revision of historical effort in 2012, which led to a major increase in their previously reported effort for the area. Effort was quite stable up to 2007, when it began to decrease. After reporting no effort in 2011 it has reported a large amount of effort for 2012 and 2013. The majority of this effort was recorded for bottom trawls, with some for pelagic trawls.

Otter trawl was by far the most important gear used, mainly by France, Denmark and the UK. UK gill net effort was stable up to 2006 after which it fluctuated somewhat, particularly since 2010. The UK also used beam trawl and had not reported effort since 2005 before reporting a small amount for 2013. The UK also reports small amounts of longline effort.

Table 5.9.1.4.1.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state ICES Sub-area IV.

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
4	DEN	216490	100543	123079	121490	125089	26555	6215	16297		611372	648978
	FRA	277155	176632	261732	178577	289736	185516	173847	484416	286163	714657	551635
	GER		206302	134099	195941	15600		123550		19416	26586	89346
	IRL		4701									
	NED	619530	537132	500354	195760	222638	40084		106630	117744	201960	11880
	UK	1829589	1258991	1295075	1389745	1017100	996687	1372134	1403279	1482835	908719	1239948
4 Total		2942764	2284301	2314339	2081513	1670163	1248842	1675746	2010622	1906158	2463294	2541787

Table 5.9.1.4.2.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state ICES Sub-area IV.

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
4	BEAM	NED								8826			
		UK	48867	16008	13125								221
	BOTTOM TRAWLS	DEN	216490	100543	123079	121490	125089	26555	6215	16297		424424	533576
		FRA	277155	176632	261732	178577	289736	185516	173847	477056	285427	714657	551635
		GER		39270	61113	108000			123550		19416		
		UK	1429526	879032	937188	943380	803140	796779	1104686	1191459	1122309	816652	1027961
	DREDGE	FRA								7360			
	GILL	GER			3798							26586	
		UK	256434	305549	259341	399093	137976	187529	225293	200637	350642	79475	183986
	LONGLINE	UK	65295	51341	85373	46543	11094	8434	41765	10672	8566	12117	26648
	NONE	UK											1007
	PELAGIC TRAWLS	DEN										186948	115402
		GER		167032	69188	87941	15600						89346
		IRL		4701									
		NED	619530	537132	500354	195760	222638	40084		97804	117744	201960	11880
		UK	28560	7061			64890						
	POTS	UK	907			729		3945	390	212	1153	75	125
	TRAMMEL	FRA									736		
		UK			48					299	165	400	
4 Total			2942764	2284301	2314339	2081513	1670163	1248842	1675746	2010622	1906158	2463294	2541787

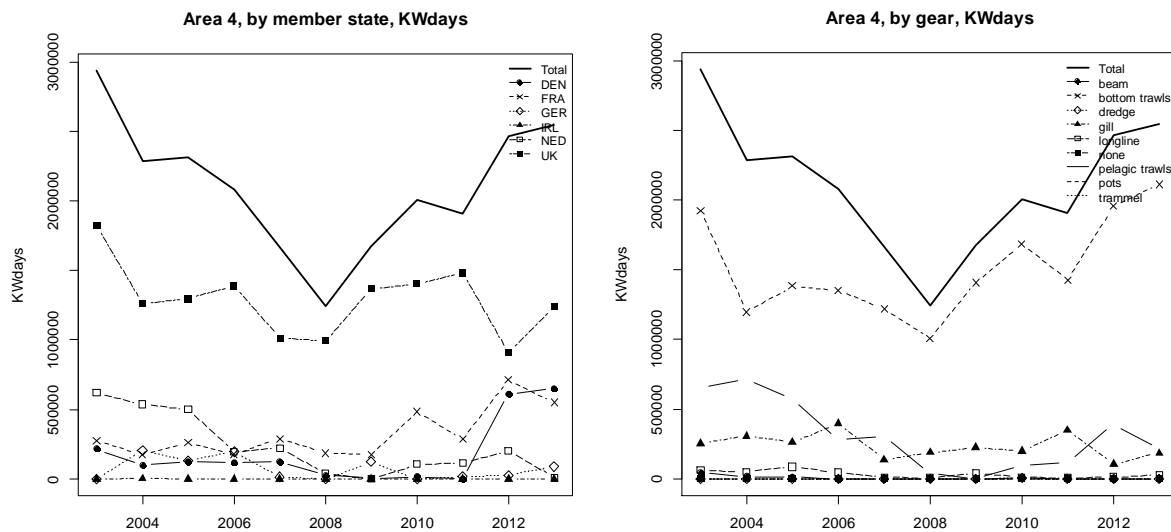


Figure 5.9.1.4.1. Deep Sea fishing effort (kW*days), 2003 – 2013, by member state and by gear, in ICES Sub-area IV EU.

5.9.1.5 Fishing effort in ICES area V

Deepwater V EU

Four countries, France, Netherlands and UK and Germany have contributed effort in this area (Tables 5.9.1.5.1 and 5.9.1.5.2 and Figure 5.9.1.5.1). In the EU portion, French effort has dominated throughout the series and remained high up to 2009. This effort had dropped from historical levels by 90% by 2011 but began to increase again in 2012. UK effort showed a marked decline since 2004 and is now at quite a low level.

The predominant gear used was otter trawl, by France and the UK, but this effort has decreased in recent years. Gill net effort by France ceased in 2009 and by the UK in 2006. Netherlands pelagic trawl effort has decreased during the time period and has ceased reporting effort since 2010. German effort in the middle part of the time series was for both gill nets and pelagic trawls. The UK reported small effort for longlines for 2013.

Table 5.9.1.5.1.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state ICES Sub-area V EU.

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
5 EU	FRA	1231117	1203179	992021	981544	1177248	947792	947792	381100	96200	131350	194758.33
	GER	4851	4942	60375	12742	2600						
	NED	117600	175353	80010	31618	11453	33971		6600			
	UK	187245	250636	59417	23658	296	11228	20837	41132	5877	840	6130
5 EU Total		1540813	1634110	1191823	1049562	1191597	992991	968629	428832	102077	132190	200889

Table 5.9.1.5.2.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state ICES Sub-area V EU.

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
5 EU	BEAM	FRA	1519	12288										
		UK												
	BOTTOM TRAWLS	FRA	1195742	1102571	921365	927080	1111008	793232	793232	381100	96200	131350	194758.33	
		UK	57191	84681	14668	15854	296	11228	20837	37747	5877	840	5883	
	GILL	FRA	33856	88320	70656	54464	66240	154560	154560					
		GER	4851											
	LONGLINE	UK	130054	106655	41530	7804								
		UK			3219						3385			247.5
	PELAGIC TRAWLS	GER			4942	60375	12742	2600						
		NED		117600	175353	80010	31618	11453	33971		6600			
		UK			59300									
	5 EU Total			1540813	1634110	1191823	1049562	1191597	992991	968629	428832	102077	132190	200889

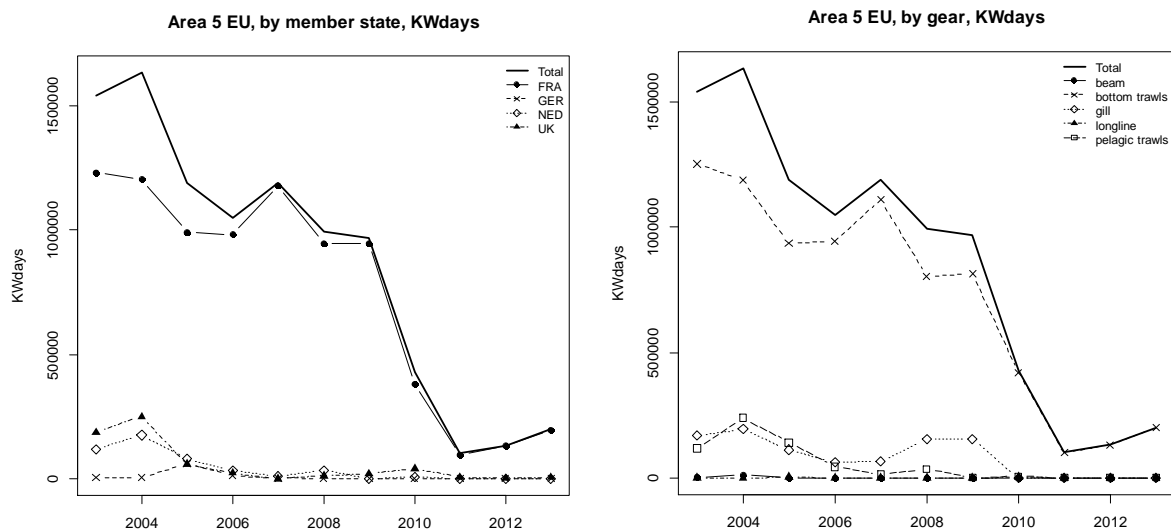


Figure 5.9.1.5.1. Deep Sea fishing effort (kW*days), 2003 – 2013, by member state and by gear, in ICES Sub-area V EU. .

Western Waters V EU

Effort within this area has declined over time, and the pace of decline had quickened in the last number of years. By 2011 effort was only approximately 9% of that recorded for 2007. However a slight increase in effort has been recorded in the last two years. Historically bottom trawls, gill nets and pelagic trawl by France, the UK and the Netherlands accounted for the majority of the effort. Since 2009 pelagic trawl and gill nets have almost ceased, and in 2013 the majority of bottom trawl effort was reported to France, with a small amount by the UK, (Table 5.9.1.5.3. and Figure 5.9.1.5.2). In 2013 the UK also reported a small amount of effort for gill nets and longlines.

Table 5.9.1.5.3.- Effort (kW*days) by country, gear and vessel size group within ICES Sub-area V EU, 2000-2013.

Area	Gear	MS	Vessel length	2003			2004			2005			2006			2007		
				Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
5 EU	beam	FRA	o15m	1519	1519		12288	12288		0	0		0	0		0	0	
	bottom trawls	FRA	o15m	1202423	1195742	6681	1106396	1102571	3825	923573	921365	2208	930601	927080	3521	1117358	1111008	6350
		GER	o15m	0		0	0		0	0		0	5100		5100	0		0
		IRL	o15m	0		0	0		0	0		0	0		0	0		0
		UK	o15m	63203	57191	6012	91748	84681	7067	18087	14668	3419	17835	15854	1981	2566	296	2270
	dredge	UK	o15m	260		260	0		0		0	0		0	0		0	
	gill	FRA	o15m	35328	33856	1472	88320	88320	0	70656	70656	0	54464	54464	0	82432	66240	16192
		GER	o15m	15876	4851	11025	5733	0	5733	0	0	0	0	0	0	0	0	0
		UK	o15m	158890	130054	28836	106655	106655	0	42147	41530	617	7804	7804	0	0	0	0
	longline	ESP	o15m	0		0	0		0		0	0		0		0		0
		UK	o15m	0	0	0	0	0	0	3219	3219	0	0	0	0	0	0	0
	pelagic trawls	FRA	o15m	47104		47104	14720		14720	17664		17664	55936		55936	29440		29440
		GER	o15m	102767	0	102767	4942	4942	0	70965	60375	10590	28639	12742	15897	2600	2600	0
		IRL	o15m	13057		13057	29321		29321	27100		27100	0		0	5880		5880
		NED	o15m	200693	117600	83093	341000	175353	165647	142740	80010	62730	83036	31618	51418	44686	11453	33233
	pots	UK	o15m	52687	0	52687	94966	59300	35666	0	0	0	0	0	0	0	0	0
		UK	u10m	0		0	0		0	0		0	0		0	0		0
		UK	o15m	0		0	744		744	0		0	1744		1744	0		0
5 EU Total				1893807	1540813	352994	1896833	1634110	262723	1316151	1191823	124328	1185159	1049562	135597	1284962	1191597	93365

2008			2009			2010			2011			2012			2013		
Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
0	0		0	0		0	0		0	0		0	0		0	0	
793232	793232	0	793232	793232	0	381100	381100	0	96200	96200	0	131350	131350	0	194758	194758	0
0		0	0		0	0		0	0		0	0		0	0		0
0		0	0		0	0		0	0		0	0		0	375		375
12661	11228	1433	0	20837	-20837	0	37747	-37747	21118	5877	15241	0	840	-840	2778	5883	-3105
0		0	0		0	0		0	0		0	0		0	0		0
154560	154560	0	154560	154560	0	0	0	0	0	0	0	846	0	846	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	559	0	559	4851	0	4851
0		0	0		0	0		0	0		0	412		412	0		0
0	0	0	0	0	0	3681	3385	296	238	0	238	0	0	0	248	248	0
17664		17664	17664		17664	0		0	0		0	0		0	0		0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0		0	0		0	0		0	2800		2800	0		0	0		0
48530	33971	14559	43560	0	43560	6600	6600	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	16120	0	16120	0	0	0	0	0	0	0	0	0
0		0	0		0	92		92	0		0	0		0	0		0
0		0	0		0	231		231	0		0	0		0	0		0
1026647	992991	33656	1009016	968629	40387	407824	428832	-21008	120356	102077	18279	133167	132190	977	203010	200889	2121

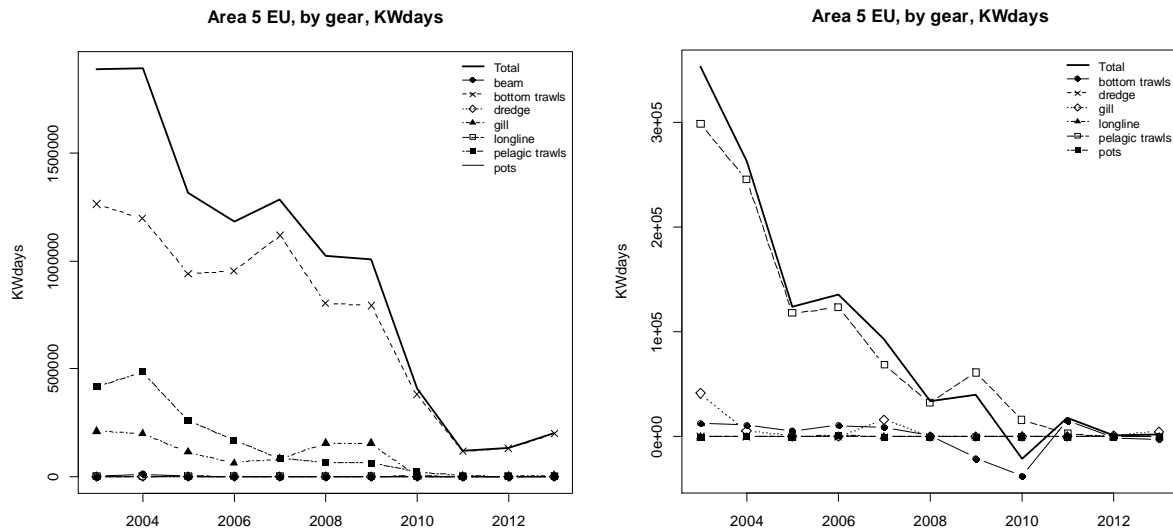


Figure 5.9.1.5.2.- Effort (kW*days) reported within ICES Sub-area V EU by gear type, 2000-2013, with (left) and without (right) reported deepwater effort.

Deepwater V non-EU

In this area bottom trawl effort of both France and the UK peaked in 2004 and has decreased slowly since. The UK reported no effort since 2010 and France has not recorded effort for 2012. German effort dropped from the mid 2000s before bottom trawl effort began rising in 2009. This effort has continued to 2013, albeit with a decrease reported this year. Germany and the Netherlands recorded pelagic trawl effort up to 2007, but this has since stopped, bar 2010 effort recorded for the Netherlands.

Table 5.9.1.5.4.- Deep Sea fishing effort (kW*days) 2000 – 2013 by member state ICES Sub-area V non-EU.

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
5 non EU	FRA	664525	776742	381706	325531	294664	219992	219992	44400	7400		
	GER	256560	194758	446140	274286	23400	7281	103500	385062	244500	231906	121326
	NED	271601	15850	154495	26765	47559			7428			
	UK	917320	1071860	885811	422340	272851	114920	128263	232011			
5 non EU Total		2110006	2059210	1868152	1048922	638474	342193	451755	668901	251900	231906	121326

Table 5.9.1.5.5.- Deep Sea fishing effort (kW*days) 2000 – 2013 by gear and member state ICES Sub-area V non-EU.

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
5 non EU	BEAM	FRA	6077	7400									
	BOTTOM TRAWLS	FRA	658448	769342	381706	325531	294664	219992	219992	44400	7400		
		GER	256560	174990	339900	249060		7281	103500	385062	244500	231906	121326
		UK	917320	1071860	885811	422340	272851	114920	128263	232011			
	PELAGIC TRAWLS	GER		19768	106240	25226	23400						
NED			271601	15850	154495	26765	47559		7428				
5 non EU Total			2110006	2059210	1868152	1048922	638474	342193	451755	668901	251900	231906	121326

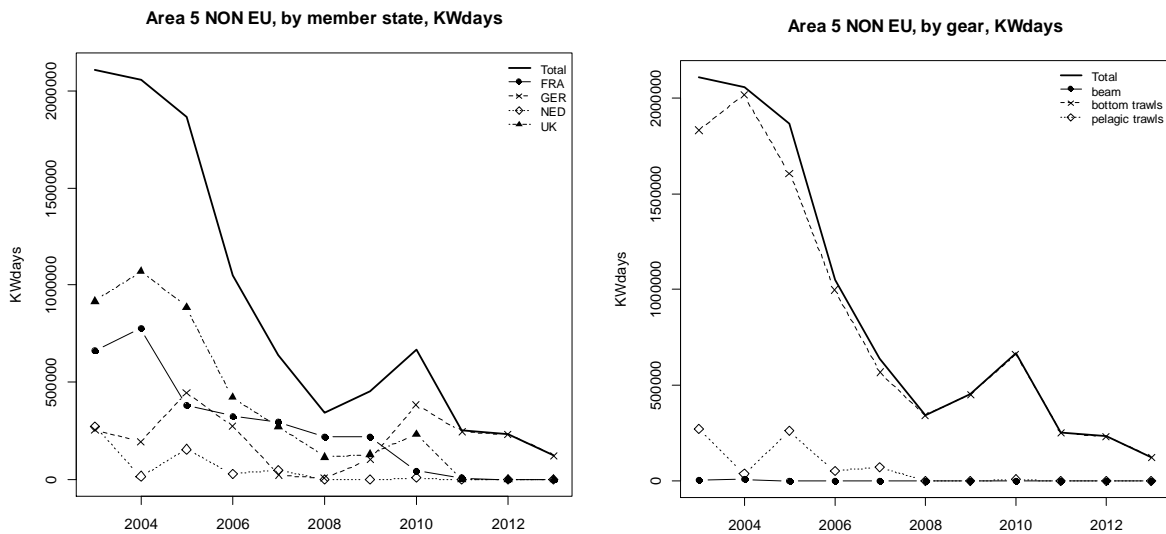


Figure 5.9.1.5.3. Deep Sea fishing effort (kW*days), 2003 – 2013, by member state and by gear, in ICES Sub-area V non-EU.

Western Waters V non-EU

Overall effort within this area has declined over time, having previously been fished by a number of nations utilising bottom and pelagic trawls (Table 5.9.1.5.6. and Figure 5.9.1.5.4).

The majority of fishing effort within the area is directed toward fisheries not covered by the western waters regulation. Fishing was principally carried out by Germany, the Netherlands, and the UK. Bottom trawling is the primary gear within the area, much of which targets deepwater fisheries. Only bottom trawl effort has been reported for 2013 primarily by Germany, with a small amount by the UK.

Pelagic trawl effort, conducted mainly by Scotland and the Netherlands, fluctuated between 2003 and 2005, at which stage effort started declining. Pelagic effort ceased in 2010.

Table 5.9.1.5.6.- Effort (kW*days) by country, gear and vessel size group within ICES Sub-area V non EU, 2000-2013.

Area	Gear	MS	Vessel length	2003			2004			2005			2006			2007		
				Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
5 NON EU	beam	FRA	o15m		6077			7400			0			0			0	
	bottom trawls	DEN	o15m	0		0	0		0	0	0	0	0	0	0	0	0	
		FRA	o15m	58750	658448	-599698	29974	769342	-739368	7979	381706	-373727	12989	325531	-312542	23690	294664	-270974
		GER	o15m	369090	256560	112530	208425	174990	33435	342960	339900	3060	250260	249060	1200	137210	0	137210
		UK	o15m	1323286	917320	405966	1493053	1071860	421193	1386813	885811	501002	864014	422340	441674	569668	272851	296817
	gill	FRA	u10m	0		0	0		0	0	0	0		0	0	0	0	
		FRA	o10t15m	0		0	0		0	0	0	0		0	0	0	0	
		FRA	o15m	2944		2944	0		0	0	0	0		0	0	0	0	
	longline	UK	o15m	3608		3608	0		0	0	0	0		0	0	0	0	
	pelagic trawls	DEN	o15m	40568		40568	0		0	0	0	0		0	0	0	0	
		FRA	o15m	23552		23552	41216		41216	52992		52992	23552		23552	17664	17664	
		GER	o15m	167013	0	167013	19768	19768	0	106240	106240	0	57020	25226	31794	23400	23400	0
		NED	o15m	522811	271601	251210	89936	15850	74086	385028	154495	230533	53530	26765	26765	81918	47559	34359
		UK	o15m	15888		15888	46080		46080	8353		8353	28980		28980	82287	82287	
	pots	FRA	u10m	0		0	0		0	0	0	0		0	0	0	0	
5 NON EU Total				2527510	2110006	423581	1928452	2059210	-123358	2290365	1868152	422213	1290345	1048922	241423	935837	638474	297363

2008			2009			2010			2011			2012			2013		
Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
0	0	0	0	0	0	0	0	0	26413	7400	26413	0	0	0	0	0	0
1850	219992	-218142	1850	219992	-218142	60422	44400	16022	8872	7400	1472	0	0	0	0	0	0
7281	7281	0	130500	103500	27000	385062	385062	0	244500	244500	0	231906	231906	0	121326	121326	0
319704	114920	204784	414088	128263	285825	475549	232011	243538	1540	0	1540	0	0	0	1214	0	1214
0	0	0	0	0	0	438	438	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	292	292	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20800	0	20800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	7428	7428	0	0	0	0	0	0	0	0	0	0
68337	68337	0	0	0	0	28120	28120	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	33	33	0	0	0	0
417972	342193	75779	546438	451755	94683	957019	668901	288118	281617	251900	29717	231939	231906	33	122540	121326	1214

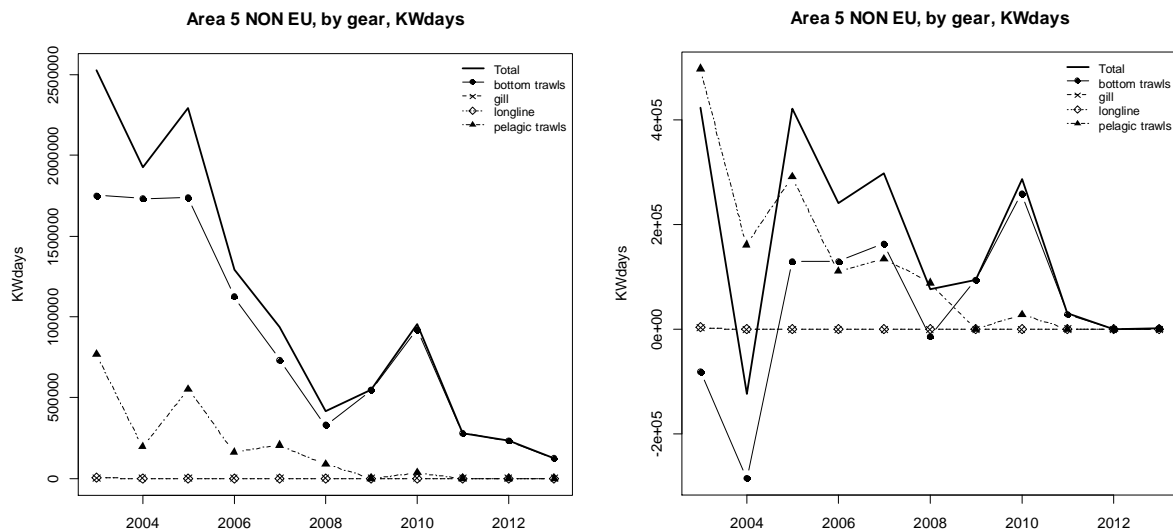


Figure 5.9.1.5.4.- Effort (kW*days) reported within ICES Sub-area V non-EU by gear type, 2000-2013, with (left) and without (right) reported deepwater effort.

5.9.1.6 Fishing effort in ICES area VI

Deepwater VI EU

Several countries fish in this area (Tables 5.9.1.6.1 and 5.9.1.6.2 and Figure 5.9.1.6.1). French, Dutch and UK effort dominated throughout the series. French effort has been in decline since 2004 but seems to have stabilised in the last three years. UK effort has decreased since a peak in 2003 but has also stabilised in the last four years. Bottom trawl is the predominant gear used in area VI followed by pelagic trawling and gill nets.

In addition to otter trawl, UK effort comprises all the other gear types. UK gill net activity had declined up to 2010 but showed an increase again in 2011, with similar effort for 2013. UK longline effort, which had declined between 2008 and 2009, has begun to increase again since 2010.

Irish effort is primarily for bottom trawl, with some effort recorded for pelagic trawl between 2000 and 2004. Bottom trawl effort decreased after 2005 and has fluctuated since.

Dutch effort, which consisted entirely of pelagic trawls, fluctuated during the early 2000s. This stabilised between 2006 and 2010 even though no effort was recorded in 2009. This effort decreased in 2011 and 2012 but has increased again in 2013. German effort has been sporadic, originally concentrated between 2003 and 2007, with gill nets and pelagic trawls being used. In

2010 German effort was recorded for gill nets and in 2012 and 2013 was recorded for pelagic trawls.

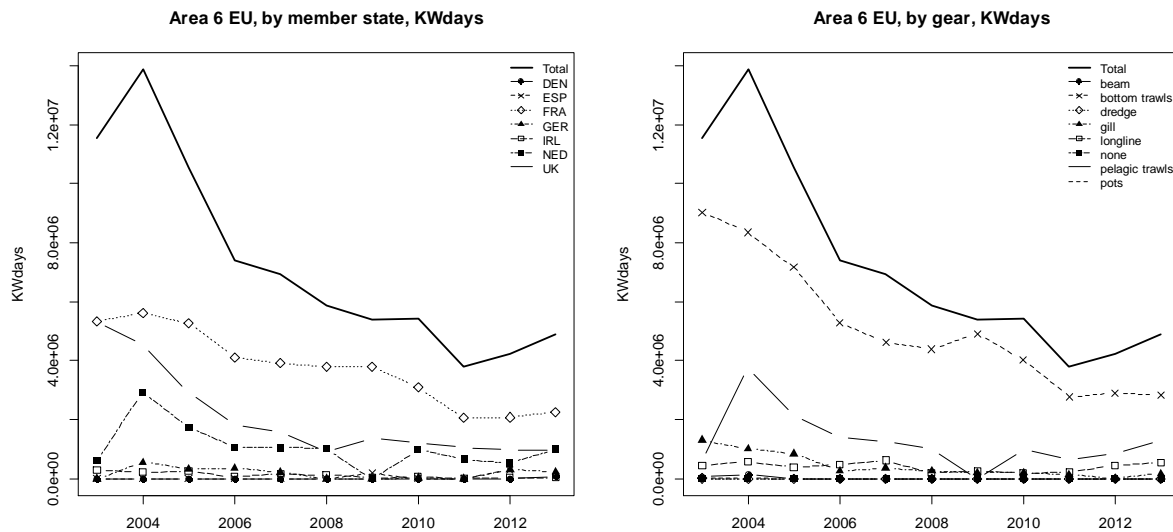
Spain reported effort for 2009, 2012 and 2013, for bottom trawls and longlines. As Spain did not provide data for 2010 and 2011 we are unable to comment on trends. Denmark reported pelagic trawl effort for the first time in 2013.

Table 5.9.1.6.1.- Deep Sea fishing effort (kW*days) 2000 – 2013 by member state ICES Sub-area VI EU.

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
6 EU	DEN											87421
	ESP							199237			294198	285864
	FRA	5332009	5605366	5279115	4105642	3912664	3795716	3795716	3097857	2063204	2082197	2267419
	GER	441	557611	335978	356344	215066			34839		312000	234342
	IRL	306629	220854	254537	63679	160602	132217	32282	81929	16578	34122	38285
	NED	604027	2937769	1737822	1054019	1061055	1013096		988482	658560	529201	1000450
	UK	5298339	4552120	2924540	1834797	1574207	925284	1362479	1221865	1064186	972123	972770
6 EU Total		11541445	13873720	10531992	7414481	6923594	5866313	5389714	5424972	3802528	4223841	4886550

Table 5.9.1.6.2.- Deep Sea fishing effort (kW*days) 2000 – 2013 by gear and member state ICES Sub-area VI EU.

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
6 EU	BEAM	FRA	54693	95526									
		UK	17964	50267	14625								
	BOTTOM TRAWLS	ESP							142583			150200	109230
		FRA	4967172	5355877	5116610	3995234	3543821	3594454	3594454	2997921	2046576	2063044	2224731
		GER		12530									
		IRL	299429	192885	253337	63679	148902	132217	32282	81929	16578	33413	38285
		UK	3765838	2782751	1794175	1225019	942905	665645	1145465	959278	712339	652372	463276
	DREDGE	UK	12688										
	GILL	FRA	307424	111848	124528	100472	286283	161800	161800	99936	16628	19153	42688
		GER	441	66848	29540	15192				34839			
		UK	1013475	841609	690287	147742	90561	105292	50425	69752	123079	272	125143
	LONGLINE	ESP							56654			143998	176634
		FRA				9936	82560	39462	39462				
		IRL	7200	17000	1200		11700						
		UK	439338	561125	387085	462036	531318	149543	166589	192835	228768	319479	375287
	NONE	IRL										709	
		UK											9063
	PELAGIC TRAWLS	DEN											87421
		FRA	2720	42115	37977								
		GER		478233	306438	341152	215066					312000	234342
		IRL		10969									
		NED	604027	2937769	1737822	1054019	1061055	1013096		988482	658560	529201	1000450
		UK	5120	297769	38368								
	POTS	UK	43916	18599			9423	4804					
6 EU Total			11541445	13873720	10531992	7414481	6923594	5866313	5389714	5424972	3802528	4223841	4886550



Western Waters VI EU

There has been a gradual decline in effort within Area VI EU over the period (Table 5.9.1.6.3. and Figure 5.9.1.6.2.)

The influence of deepwater fisheries in Area VI EU is less than in Area V, here the majority of annual effort is directed to non-deepwater fisheries. A variety of nations operate within this area.

Figure 5.9.1.6.1. Deep Sea fishing effort (kW*days), 2003 – 2013, by country and by gear, in ICES Sub-area VI EU.

Bottom trawling and pelagic trawling are the primary gear categories within this area, with pots being the next most important.

Bottom trawling effort has declined throughout the time series although it appears to have stabilised in the last four years; the UK continues to dominate bottom trawl effort, with large contributions from France (directed toward deepwater fisheries), and to a lesser extent Ireland.

Pelagic trawl effort peaked in 2004 and was in decline until 2010. Effort levels increased again in 2013 however. Historically pelagic effort was dominated by the Netherlands, with major additional effort from UK, Germany and Ireland. Lithuania provided pelagic effort data for 2009 and 2011.

Pots provide the third highest level of effort. Effort has been quite stable through the time series. The UK provides the greatest effort, with further contributions from Ireland, and to a small extent Germany. A number of other gear categories are reported from this area, occurring at comparatively low levels. These include, dredging, longlines and gillnets. Gillnetting previously

showed higher levels of effort, the majority of which was associated with deepwater fisheries, which have subsequently declined since 2006 to low levels. UK, France and Germany carry out demersal gillnetting at lower levels.

Table 5.9.1.6.3.- Effort (kW*days) by country, gear and vessel size group within ICES Sub-area VI EU, 2000-2013.

Area	Gear	MS	Vessel length	2003			2004			2005			2006			2007			
				Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	
6 EU	beam	UK	o10t15m	442		442	0		0	0		0	0		0	0		0	
		BEL	o15m	19005		19005	18103		18103	8566		8566	4415		4415	2356		2356	
		FRA	o15m	25827	54693	-28866	37257	95526	-58269	0	0	0	0	0	0	0	0	0	
		IRL	o15m	0		0	38963		38963	5068		5068	6335		6335	0		0	
		UK	o15m	149173	17964	131209	263075	50267	212808	146527	14625	131902	101694	0	101694	1803	0	1803	
	bottom trawls	UK	u10m	531160		531160	502089		502089	487586		487586	572478		572478	513245		513245	
		FRA	o10t15m	23547		23547	0		0	0		0	0		0	0		0	
		IRL	o10t15m	93897		93897	61003		61003	31160		31160	18456		18456	13467		13467	
		UK	o10t15m	1897472	0	1897472	1860586	6994	1853592	1733081	0	1733081	1743881	0	1743881	1807461	0	1807461	
		BEL	o15m	0		0	0		0	0		0	1766		1766	795		795	
		DEN	o15m	162941		162941	98707		98707	0		0	11520		11520	0		0	
		ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		FRA	o15m	4829354	4967172	-137818	4713492	5355877	-642385	5117917	5116610	1307	4263214	3995234	267980	3942141	3543821	398320	
		GER	o15m	19191	0	19191	12530	12530	0	35586	0	35586	22797	0	22797	23652	0	23652	
		IRL	o15m	2053249	299429	1753820	1544175	192885	1351290	1290918	253337	1037581	1412180	63679	1348501	1396292	148902	1247390	
		NED	o15m	9840		9840	0		0	0		0	0		0	0		0	
		UK	o15m	12711745	3765838	8945907	10536993	2775757	7761236	7965045	1794175	6170870	6617907	1225019	5392888	6685368	942905	5742463	
		dredge	UK	u10m	87909		87909	104545		104545	80489		80489	38429		38429	42186		42186
			FRA	o10t15m	7332		7332	1128		1128	0		0			0			0
			IRL	o10t15m	680		680	397		397	397		397	556		556	884		884
	UK		o10t15m	247725		247725	275102		275102	252443		252443	181612		181612	131230		131230	
	IRL		o15m	10260		10260	19884		19884	0		0	0		0	19404		19404	
	UK	o15m	1690118	12688	1677430	1401835	0	1401835	1257717	0	1257717	979503	0	979503	759475	0	759475		
	gill	UK	u10m	0		0	0		0	56		56	468		468	1800		1800	
		IRL	o10t15m	735		735	1711		1711	192		192	2379		2379	7351		7351	
		UK	o10t15m	5005		5005	246		246	2038		2038	1044		1044	553		553	
		FRA	o15m	109888	307424	-197536	159958	111848	48110	268726	124528	144198	276528	100472	176056	228799	286283	-57484	
		GER	o15m	138094	441	137653	134492	66848	67644	132800	29540	103260	56548	15192	41356	161064	0	161064	
	longline	FRA	u10m	0		0	0		0	0		0			0			0	
		UK	u10m	25		25	0		0	0		0	51		51	241		241	
		FRA	o10t15m	0		0	0		0	0		0	0		0	0		0	
		IRL	o10t15m	0		0	0		0	0		0	0		0	0		0	
		UK	o10t15m	0		0	0		0	1574		1574	0		0	0		0	
	none	ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		FRA	o15m	0	0	0	0	0	0	0	0	0	163130	9936	153194	445344	82560	362784	
		IRL	o15m	7200	7200	0	18400	17000	1400	3000	1200	1800	0	0	0	11700	11700	0	
		UK	o15m	507464	439338	68126	610216	561125	49091	621156	387085	234071	684262	462036	222226	844213	531318	312895	
		UK	u10m	110078		110078	125306		125306	120513		120513	163399		163399	124414		124414	
	pelagic trawls	IRL	o10t15m	172		172	0		0	320		320	4320		4320	2512		2512	
		UK	o10t15m	0		0	157		157	0		0	0		0	0		0	
		DEN	o15m	74864	0	74864	289874	0	289874	180965	0	180965	820379	0	820379	132815	0	132815	
		FRA	o15m	379243	2720	376523	437400	42115	395285	197616	37977	159639	305922	0	305922	324841	0	324841	
		GER	o15m	682432	0	682432	762402	478233	284169	638384	306438	331946	1143771	341152	802619	1161097	215066	946031	
	pots	IRL	o15m	2591699	0	2591699	2755700	10969	2744731	1534869	0	1534869	1754981	0	1754981	1463653	0	1463653	
		NED	o15m	2400041	604027	1796014	6156392	2937769	3218623	5544240	1737822	3806418	4327834	1054019	3273815	4430203	1061055	3369148	
		UK	o15m	6255758	5120	6250638	6537021	297769	6239252	5085116	38368	5046748	3494402	0	3494402	3280592	0	3280592	
		LIT	o40m	0		0	0		0	0		0	0		0	0		0	
		UK	u10m	2754689	0	2754689	2779505	0	2779505	3090630	0	3090630	3766452	0	3766452	3726681	22	3726659	
	trammel	IRL	o10t15m	42987		42987	51068		51068	19007		19007	123069		123069	201366		201366	
		UK	o10t15m	1284817		1284817	1421250		1421250	1532009		1532009	1595331		1595331	1875227		1875227	
		GER	o15m	24696		24696	49833		49833	55125		55125	98384		98384	92176		92176	
		IRL	o15m	619014	619014	0	631838	0	631838	584531	0	584531	441124	0	441124	462973	0	462973	
		UK	o15m	818174	43916	774258	627435	18599	608836	636592	0	636592	663098	0	663098	1032399	9401	1022998	
	6 EU Total	UK	o15m	27508		27508	0		0	12000		12000	0		0	0		0	
		IRL	o15m	0		0	0		0	0		0			0	0		0	
		UK	o15m	27508		27508	0		0	12000		12000	0		0	0		0	
		UK	o15m	27508		27508	0		0	12000		12000	0		0	0		0	
	6 EU Total			44567587	11541445	33026142	45929372	13873720	32055652	39494184	10531992	28962192	36151600	7414481	28737119	35577370	6923594	28653776	

2008			2009			2010			2011			2012			2013		
Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6660	0	6660
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	302	0	302
504922	504922	454757	454757	454757	424256	424256	377364	377364	425621	425621	407540	407540	407540	407540	407540	407540	407540
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16261	16261	6016	6016	6016	12798	12798	7903	7903	6682	6682	9586	9586	9586	9586	9586	9586	9586
1646968	0	1646968	1527038	531	1526507	1421357	0	1421357	1270111	0	1270111	1337110	0	1337110	1226980	0	1226980
0	0	0	0	0	1176	1176	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	142583	-142583	0	0	0	0	0	174309	150200	24109	145901	109230	36671	36671
3963300	3594454	368846	3963300	3594454	368846	3095528	2997921	97607	2151504	2046576	104928	2143724	2063044	80680	2328765	2224731	104034
3060	0	3060	4854	0	4854	6957	0	6957	0	0	0	1103	0	1103	0	0	0
1195738	132217	1063521	801585	32282	769303	919701	81929	837772	825742	16578	809164	692905	33413	659492	701682	38285	663397
0	0	0	0	0	0	0	0	0	5464	5464	884	884	884	884	0	0	0
6931684	665645	6266039	7319198	1144934	6174264	6838428	959278	5879150	6705986	712339	5993647	6832479	652372	6180107	5938301	463276	5475025
67896	67896	52079	52079	52079	54703	54703	64477	64477	94262	94262	64449	64449	64449	64449	64449	64449	64449
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	640	640	12798	12798	12798	12798	12798	12798	12798
169174	169174	158632	158632	158632	165979	165979	170670	170670	245252	245252	169221	169221	169221	169221	169221	169221	169221
7938	7938	0	0	0	0	0	0	0	0	0	0	0	0	0	221	221	221
898415	0	898415	912479	0	912479	836840	0	836840	740982	0	740982	1116828	0	1116828	1054098	0	1054098
6493	6493	0	0	0	0	0	0	0	0	0	0	0	0	0	464	464	464
5421	5421	1140	1140	1140	551	551	2075	2075	75	75	9845	9845	9845	9845	9845	9845	9845
9057	9057	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
649678	161800	487878	649678	161800	487878	375934	99936	275998	633039	16628	616411	494285	19153	475132	532422	42688	489734
141492	0	141492	91269	0	91269	114683	34839	79844	107771	0	107771	65261	0	65261	102750	0	102750
4528	4528	2135	2135	2135	0	0	0	0	0	0	0	0	0	0	2745	2745	2745
186312	105292	81020	150938	50425	100513	192879	69752	123127	218743	123079	95664	177571	272	177299	211226	125143	86083
0	0	0	0	0	1419	1419	0	0	0	0	0	0	0	0	0	0	0
740	740	730	730	730	410	410	2215	2215	1296	1296	2934	2934	2934	2934	2934	2934	2934
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110	110	110
0	0	0	0	0	1397	1397	7470	7470	3471	3471	2082	2082	2082	2082	2082	2082	2082
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	56654	-56654	0	0	0	0	0	0	459895	143998	315897	376685	176634	200051
277750	39462	238288	277750	39462	238288	189072	0	189072	172250	0	172250	205044	0	205044	145920	0	145920
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
406839	149543	257296	703396	166589	536807	719384	192835	526549	694754	228768	465986	523092	319479	203613	435885	375288	60597
116648	116648	164375	164375	164375	182992	182992	210052	210052	208226	208226	224580	224580	224580	224580	224580	224580	224580
218	218	0	0	0	835	835	0	0	69	69	192	192	192	192	192	192	192
47721	47721	50969	50969	50969	43058	43058	41387	41387	57776	57776	73247	73247	73247	73247	73247	73247	73247
0	0	0	0	0	0	0	0	0	0	0	13315	709	12606	6381	0	6381	6381
20908	0	20908	48410	0	48410	55669	0	55669	57503	0	57503	47269	0	47269	20243	9063	11180
2092	2092	640	640	640	1488	1488	12652	12652	4097	4097	5451	5451	5451	5451	5451	5451	5451
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99889	0	99889	0	0	0	0	0	0	119982	0	119982	94838	0	94838	44114	87421	-43307
257796	0	257796	257796	0	257796	233392	0	233392	138664	0	138664	39480	0	39480	211232	0	211232
684150	0	684150	484479	0	484479	367736	0	367736	1073742	0	1073742	739578	312000	427578	1714512	234342	1480170
1645492	0	1645492	1580228	0	1580228	1385132	0	1385132	1637878	0	1637878	2075984	0	2075984	1692466	0	1692466
3824546	1013096	2811450	2815153	0	2815153	1557718	988482	569236	1258498	658560	599938	1667234	529201	1138033	2428638	1000450	1428188
2237211	0	2237211	2583861	0	2583861	2163861	0	2163861	2471226	0	2471226	2078499	0	2078499	2477459	0	2477459
0	0	0	29520	0	29520	0	0	0	150400	150400	0	0	0	0	0	0	0
3317460	0	3317460	3455920	0	3455920	3601096	0	3601096	3215981	0	3215981	3092543	0	3092543	3166100	0	3166100
165038	165038	175838	175838	175838	207251	207251	145184	145184	165707	165707	168204	168204	168204	168204	168204	168204	168204
1822401	1822401	1846775	1846775	1846775	2055192	2055192	1760528	1760528	1747966	1747966	1644036	1644036	1644036	1644036	1644036	1644036	1644036
34398	34398	46978	46978	46978	75535	75535	63157	63157	7991	7991	3954	3954	3954	3954	3954	3954	3954
394266	394266	327243	327243	327243	297001	297001	209050	209050	130315	130315	144229	144229	144229	144229	144229	144229	144229
629975	4804	625171	601583	0	601583	711649	0	711649	728133	0	728133	549722	0	549722	509354	0	509354
0	0	0	0	0	610	610	342	342	225	225	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	359	359	0	0	0	0	64	64	64
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32393875	5866313	26527562	31546742	5389714	26157028	28313667	5424972	22888695	27453878	3802528	23651350	27734781	4223841	23510940	28411230	4886551	23524679

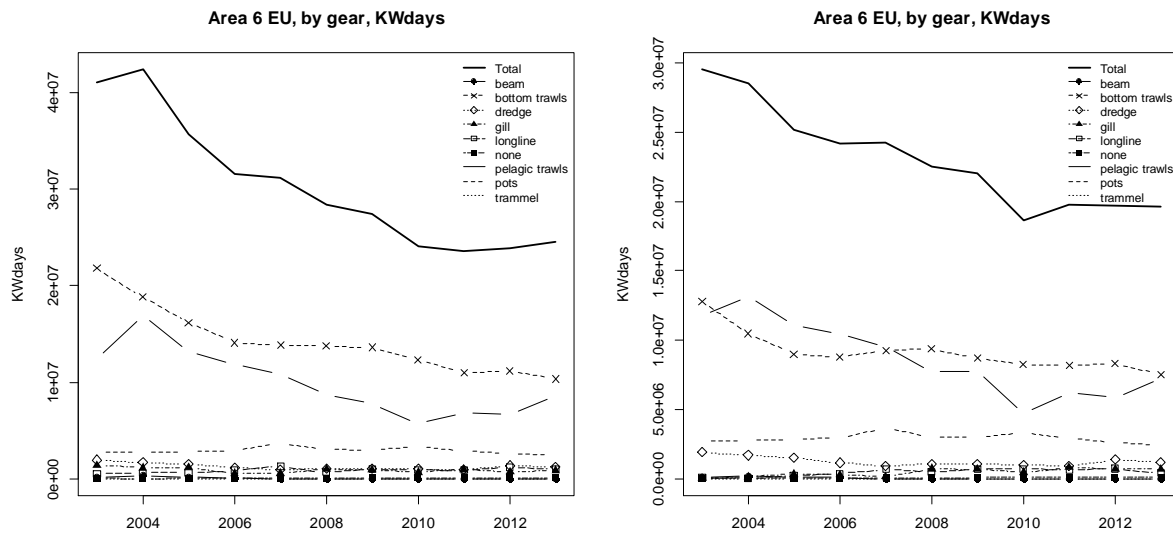


Figure 5.9.1.6.2.- Effort (kW*days) reported within ICES Sub-area VI EU by gear type, 2000-2013, with (left) and without (right) reported deepwater effort.

Deepwater VI non-EU

The effort in Area VI non-EU peaked in 2004 and has been in decline since, (Tables 5.9.1.6.4, 5.9.1.6.5 and Figure 5.9.1.6.3). This effort has been dominated by the UK, however UK effort has dropped by more than 99% since its peak in 2004. In 2012 Spain recorded effort in this area for bottom trawls for the first time, and has again reported effort for 2013.

Bottom trawl was the most important method, with some gill net effort being reported up to 2007 by the UK. Netherlands carried out pelagic trawls for a number of years early in the time series but this ceased in 2004.

Table 5.9.1.6.4.- Deep Sea fishing effort (kW*days) 2000 – 2013 by member state ICES Sub-area VI non-EU.

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
6 non EU	ESP										215918	135632
	EST			12656	18080							
	FRA											3700
	NED	4398	139938									
	PRT											
	UK	1222142	1398142	706837	529460	367291	170600	99545	135929	41990	8514	28982
6 non EU Total		1226540	1538080	719493	547540	367291	170600	99545	135929	41990	224432	168313

Table 5.9.1.6.5.- Deep Sea fishing effort (kW*days) 2000 – 2013 by gear and member state ICES Sub-area VI non-EU.

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
6 non EU	BOTTOM TRAWLS	ESP				12656	18080					215918	135632	
		EST												
		FRA												3700
		UK	871779	1024477	548210	451499	316165	151087	99545	135929	41990	8514	12302	
	GILL	UK	342362	373665	158627	77961	51126						16680	
	LONGLINE	PRT												
		UK	8001											
	PELAGIC TRAWLS	NED	4398	139938										
	POTS	UK						19513						
	6 non EU Total			1226540	1538080	719493	547540	367291	170600	99545	135929	41990	224432	168313

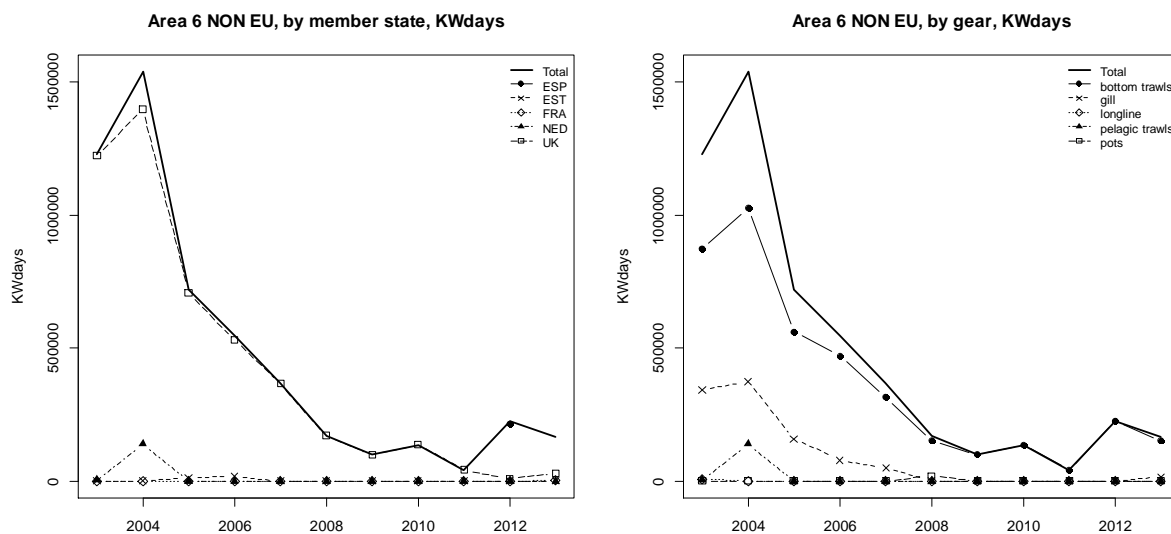


Figure 5.9.1.6.3. Deep Sea fishing effort (kW*days), 2000 – 2013, by country and by gear, in ICES Sub-area VI non-EU.

Western Waters VI non-EU

Effort has been declining within this area over time, having peaked in 2004. Effort had increased slightly between 2008 and 2010, and has stabilised since (Table 5.9.1.6.6. and Figure 5.9.1.6.4.).

Bottom trawling is the primary activity, primarily carried out by UK vessels, but Spain reported effort for 2012 and 2013. Early in the time series much of this trawl effort had been directed towards deepwater fisheries, however this trend has reversed since 2009. UK effort, which had decreased to 2008, increased between 2009 and 2010, but has been in decline since.

At the beginning of the time series, gillnetting also occurred, carried out by UK and Portugal, and much of this effort was directed toward deepwater fisheries. Since 2006 effort within this category has been minimal with the UK only reporting data for 2009 and 2013. A period of

pelagic trawling which occurred between 2003 and 2005 has ceased. Effort by Germany using pots from 2010 to 2013 seems to be directed at deep-water red crab

Table 5.9.1.6.6.- Effort (kW*days) by country, gear and vessel size group within ICES Sub-area VI non-EU, 2000-2013.

Area	Gear	MS	Vessel length	2003			2004			2005			2006			2007		
				Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
6 NON EU	bottom trawls	DEN	o15m	6371		6371	0		0	0		0	0		0	0		0
		ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		FRA	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		UK	o15m	972479	871779	100700	1079860	1024477	55383	553154	548210	4944	473999	451499	22500	365187	316165	49022
		EST	o40m		0			0			12656			18080			0	
		LIT	o40m	0		0	0		0	0		0	0		0		0	
	gill	FRA	o15m	0		0	0		0	0		0		0		0		0
		PRT	o15m															
		UK	o15m	353686	342362	11324	373665	373665	0	163450	158627	4823	77961	77961	0	125577	51126	74451
	longline	PRT	o15m															
		UK	o15m	8001	8001	0	0	0	0	0	0	0	0	0	0	0	0	0
	pelagic trawls	GER	o15m	9884		9884	0		0	0		0		0		0		0
		NED	o15m	214451	4398	210053	254730	139938	114792	88605	0	88605	0	0	0	0	0	0
		UK	o15m	154562		154562	0		0		0		0		0		0	
	pots	GER	o15m	0		0	0		0	0		0		0		0		0
		UK	o15m	24797	0	24797	0	0	0	0	0	0	0	0	0	35364	0	35364
6 NON EU Total				1744231	1226540	517691	1708255	1538080	170175	805209	719493	98372	551960	547540	22500	526128	367291	158837

2008			2009			2010			2011			2012			2013		
Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
0		0	0		0	0		0	0		0	0		0	0		0
0	0	0	0	0	0	0	0	0	0	0	0	230572	215918	14654	142820	135632	7188
0	0	0	0	0	0	2427	0	2427	0	0	0	0	0	0	3700	3700	0
159661	151087	8574	215958	99545	116413	435594	135929	299665	285077	41990	243087	68660	8514	60146	83835	12302	71533
	0			0			0			0			0			0	
0		0	0		0	0		0	0		0	53718		53718	0		0
0		0	0		0	0		0	0		0	818		818	0		0
0	0	0	15317	0	15317	0	0	0	0	0	0	0	0	0	16680	16680	0
0	0	0	0	0	0	0	0	0	0	0	0	645	0	645	0	0	0
0		0	0		0	0		0	0		0	0		0	0		0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0		0	0		0	0		0	0		0	0		0	0		0
0		0	0		0	39709		39709	91296		91296	23101		23101	44149		44149
19513	19513	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179174	170600	8574	231275	99545	131730	477730	135929	341801	376373	41990	334383	377514	224432	153082	291184	168314	122870

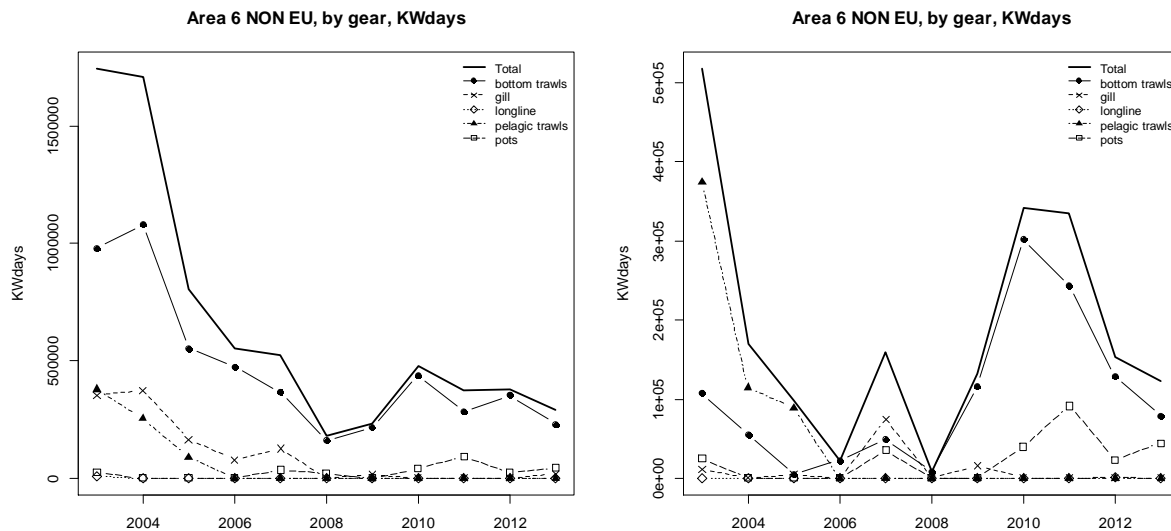


Figure 5.9.1.6.4.- Effort (kW*days) reported within ICES Sub-area VI non-EU by gear type, 2003-2013, with (left) and without (right) reported deepwater effort.

5.9.1.7 Fishing effort in ICES area VII excluding VIId

Deepwater VII EU no VIId

Six countries supplied data indicating activity in this area (Tables 5.9.1.7.1, 5.9.1.7.2 and Figure 5.9.1.7.1). Germany provided data from 2003 to 2007 and 2013, while Spain provided data for 2009, 2012 and 2013. UK, France and Ireland were the main countries providing data for bottom trawl effort with the Netherlands also reporting pelagic trawl effort in this area throughout the time series

This area has been broken up into Area VII (EU no VIId), EU VIId, and non EU. EU VIId is the eastern English channel and is often associated with the North Sea as much as the English Channel.

With the exception of the UK, effort of most of the other nations has dropped dramatically. For the UK effort peaked in 2004 at 7.5 million KWdays before it began dropping. However UK effort has been relatively stable since 2009. French effort has also declined by just over 60% in the time period and for Ireland it is even more striking, down from 1.6 million KWdays to just under 300,000 KWdays.

The main effort in this area is recorded for UK bottom trawl effort, followed by France and Ireland. Gill net effort in France and the UK has been declining since reaching a peak in 2004. While UK gill net effort has stabilised since 2006 French effort has continued to decline with

very low effort reported for 2013. Between 2006 and 2008 the UK longline effort was nearly as important as gill nets. This effort decreased quickly between 2009 and 2011, before showing an increase again since 2012. Spain also reported considerable longline effort for 2012 and 2013.

The UK reported effort by beam trawls and trammel nets. After decreasing between 2003 and 2008 UK beam effort has been relatively stable since 2009. UK trammel net effort reached a series low in 2010 but has been increasing again since.

The Netherlands has been responsible for most of the pelagic trawling. This effort fluctuated between 2000 and 2005, and became intermittent at low levels after that. The Netherlands reported quite high effort again for 2010 which subsequently decreased again in 2011 and 2012, but has increased once more in 2013. Small amounts of pelagic trawl effort have been reported by France for 2010 and 2011 and by Germany in 2013.

Table 5.9.1.7.1.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state ICES Sub-area VII EU no VIId.

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
7 EU no 7d	ESP							374808			3827062	2874481
	FRA	1544420	1236669	1591217	1633554	1424224	993960	983409	966107	688285	827899	824853
	GER	111935	318242	344403		8398						9023
	IRL	3290922	2495796	2236290	1158833	811713	607795	128419	107778	130793	192751	295831
	NED	150544	636250	299936	22652		53536		482503	225060	111619	601920
	UK	7421777	7144301	6443025	4882918	5278743	4267208	2883553	3025967	2701090	2359831	2580782
7 EU no 7d Total		12519598	11831258	10914871	7697957	7523078	5922499	4370189	4582355	3745228	7319162	7186890

Table 5.9.1.7.2.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state ICES Sub-area VII EU no VIId.

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
7 EU no 7d	BEAM	IRL			17507								1547	
		UK	1780538	1655828	1630596	910940	974833	788631	434315	333813	322008	381556	406900	
	BOTTOM TRAWLS	ESP							154898			2528775	1750355	
		FRA	1142499	944045	1027472	1228501	1011353	705892	695341	757599	576611	680547	802220	
		IRL	3036176	2473880	2187958	1127858	749478	603370	128419	107778	130793	181987	295831	
		NED									3385			
		UK	3186308	2848303	2726378	2661087	2918861	2046945	1813503	1873506	1761370	1073435	1206521	
	DREDGE	FRA								110				
		ESP							8985				1588	
	GILL	FRA	396953	261655	555657	351137	245631	219877	219877	130161	107213	136084	922	
		GER	111935	185086	189137		8398							
		IRL	165956	18916	11875	30975	30385	4425						
		UK	1922008	2268567	1663355	640941	670043	663504	518530	610101	538261	628324	602699	
		ESP								210925			1281762	1124126
	LONGLINE	FRA		21409	1133	46139	167240	66761	66761	72518		9338	20773	
		IRL	73800	3000	18950		31850							
		UK	458361	305559	352532	616562	693957	749007	113545	179173	73740	247636	313396	
		ESP											14937	
	NONE	IRL										9217		
		FRA	4968	5912	3355	2479				1620	1768			
		GER		133156	155266									9023
		IRL	14990											
		NED	150544	636250	299936	22652		53536		479118	225060	111619	601920	
	UK	FRA	34271	41484	50625					27309				
		IRL												
		UK	3542	8376	895		37	15155	1028	953	218	182	392	
	POTS	FRA		3648						3087			140	
		UK												
		FRA												
	TRAMMEL	FRA			3600	5298		1430	1430	1012	2693	1790	938	
		UK	36749	16184	18644	53388	21012	3966	2632	1112	5493	28698	50874	
		UK												
7 EU no 7d Total		12519598	11831258	10914871	7697957	7523078	5922499	4370189	4582355	3745228	7319162	7186890		

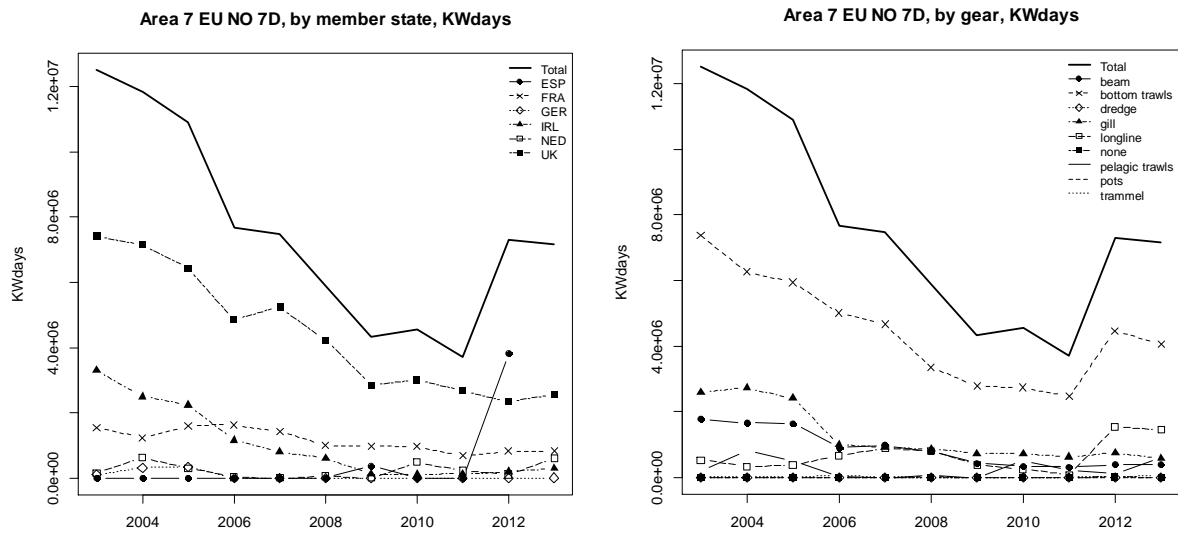


Figure 5.9.1.7.1. Deep Sea fishing effort (kW*days), 2003 – 2013, by country and by gear, in ICES Sub-area VII EU no VIIId.

VII EU no VIIId Western Waters

Within EU waters of Area VII, excluding VIIId, a wide variety of activity occurs incorporating a number of nations. Overall effort has been relatively constant throughout the time series. A relatively small proportion of effort is directed to deepwater fisheries (Table 5.9.1.7.3 and Figure 5.9.1.7.2).

The main gear in use is the bottom trawl, with France the primary contributor followed by Ireland and the UK. Bottom trawl effort which had been decreasing between 2006 and 2008 has increased again and is back near historical high values. French effort has been stable through the time series while that of Ireland and UK has dropped. In 2012 and 2013 Spain has reported large effort.

Pelagic trawling is dominated by the Netherlands and with smaller amounts by Ireland, UK, France and Germany. Pelagic trawl effort peaked in 2010 and has stabilised at a lower level since. Effort by Netherlands has fluctuated through the time series while that of Germany and France has been stable, and that of Ireland has begun to increase since 2008.

Beam trawling, mainly carried out by England, Belgium and Ireland, has declined from a peak in 2003. This is likely due to a number of decommissioning schemes removing vessels from the fleet. Effort seems to have stabilised since 2007.

Dredging effort (by France, Scotland, England and Ireland) has remained stable through the time series. Effort for pots peaked in 2008, 2009 but has been stable since. Similar effort is also

directed toward gillnets, particularly by France. Longline effort, which had been stable, increased greatly in 2012 and 2013. This new effort was reported by Spain.

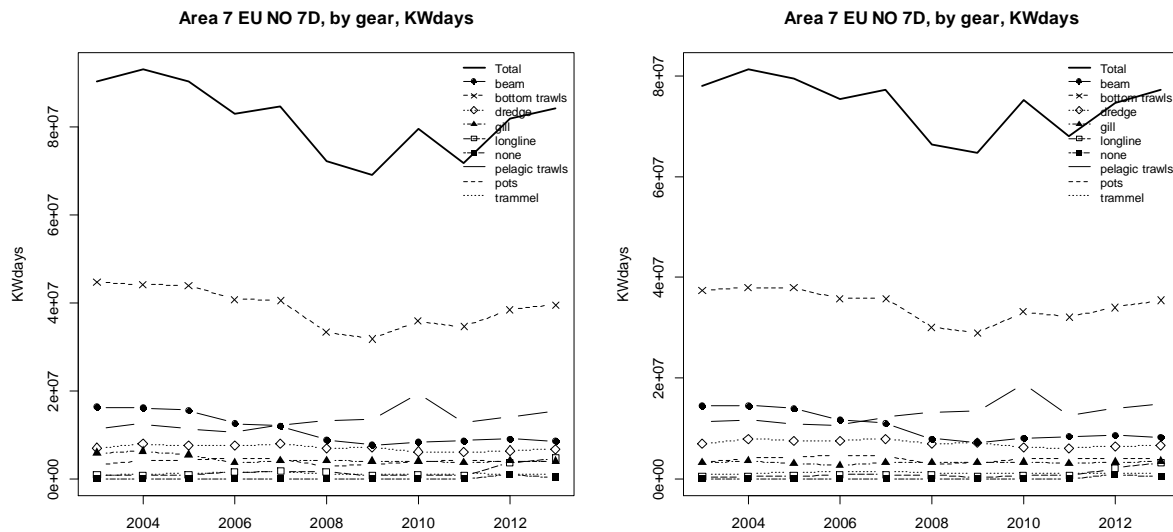


Figure 5.9.1.7.2.- Effort (kW*days) reported within ICES Sub-area VII EU no VIId by gear type, 2003-2013, with (left) and without (right) reported deepwater effort.

Deepwater VII non-EU

Prior to 2011 Area VII non EU effort was confined to the UK and was made up of bottom trawling and gill netting. This effort stopped in 2004. In 2011 France reported a small amount of bottom trawl effort and in 2012 and 2013 Spain reported small amounts of bottom trawl and longline effort.

Table 5.9.1.7.4.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state ICES Sub-area VII non-EU.

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
7 non EU	ESP										3074	4421
	FRA									442		
	UK	906	2519									
7 non EU Total		906	2519							442	3074	4421

Table 5.9.1.7.5.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state ICES Sub-area VII non-EU.

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
7 non EU	BOTTOM TRAWLS	ESP										1419	720
		FRA									442		
		UK	906	2519									
	GILL	UK			2519								
LONGLINE	ESP										1655	3701	
7 non EU Total		906	2519							442	3074	4421	

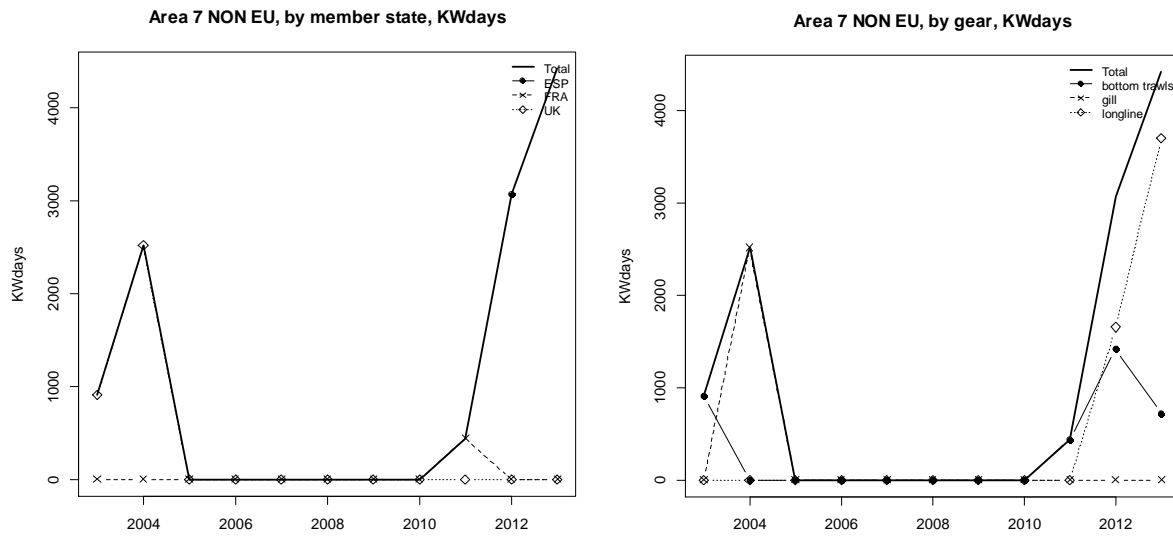


Figure 5.9.1.7.3. Deep Sea fishing effort (kW*days), 2003 – 2013, by country and by gear, in ICES Sub-area VII non-EU.

Western Waters VII non-EU

No effort was recorded in this area between 2006 and 2008, (Table 5.9.1.7.6). Prior to that there was some effort for Netherlands in pelagic trawl, and sporadic effort in bottom trawls, gill nets and longlines.

Since 2009 small amounts of bottom trawl effort have been recorded by France, Spain and UK. Longline effort was reported from 2010 to 2013 by France and UK again, but in 2012 and 2013 the major longline effort was reported by Spain. Occasional pelagic trawl effort has been reported by Germany, France, Spain and the Netherlands.

Table 5.9.1.7.6.- Effort (kW*days) by country, gear and vessel size group within ICES Sub-area VII non-EU, 2003-2013

Area	Gear	MS	Vessel length	2003			2004			2005			2006			2007			
				Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	
7 NON EU	bottom trawls	ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		FRA	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		UK	o15m	906	906	0	308	0	308	0	0	0	0	0	0	0	0	0	0
	gill	ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		FRA	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		UK	o15m	0	0	0	2519	2519	0	0	0	0	0	0	0	0	0	0	0
	longline	ESP	o10t15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		FRA	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		UK	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	none	ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	pelagic trawls	ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		FRA	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		GER	o15m	10598	10598	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		NED	o15m	301413	301413	0	43510	43510	0	43510	222896	0	222896	0	0	0	0	0	0
		UK	o15m	28928	28928	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7 NON EU Total				341845	906	340939	46337	2519	43818	222896	0	222896	0	0	0	0	0	0	

2008			2009			2010			2011			2012			2013		
Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
0	0	0	0	0	0	0	0	0	0	0	0	4160	1419	2741	720	720	0
0	0	0	0	0	0	8232	0	8232	442	442	0	810	0	810	4036	0	4036
0	0	0	7875	0	7875	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	1102	0	1102	7268	0	7268
0	0	0	0	0	0	0	0	0	0	0	0	1104	0	1104	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	478	0	478	4034	0	4034
0	0	0	0	0	0	0	0	0	0	0	0	136266	1655	134611	122416	3701	118715
0	0	0	0	0	0	8722	0	8722	4420	0	4420	9810	0	9810	3580	0	3580
0	0	0	0	0	0	28325	0	28325	14713	0	14713	1432	0	1432	22256	0	22256
0	0	0	0	0	0	0	0	0	0	0	0	1940	0	1940	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	4520	0	4520	1710	0	1710
0	0	0	0	0	0	57930	0	57930	10328	0	10328	71233	0	71233	55563	0	55563
0	0	0	0	0	0	36000	0	36000	0	0	0	0	0	0	0	0	0
0	0	0	75820	0	75820	0	0	0	26164	0	26164	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	83695	0	83695	139209	0	139209	56067	442	55625	232855	3074	229781	221583	4421	217162

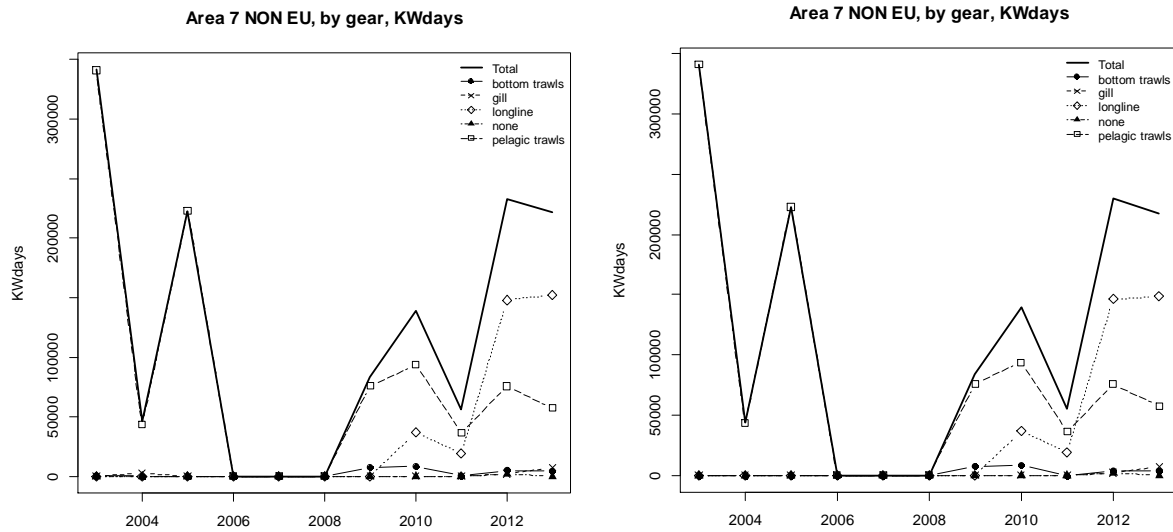


Figure 5.9.1.7.4.- Effort (kW*days) reported within ICES subarea 7 non EU by gear type, 2003-2013, with (left) and without (right) reported deepwater effort.

5.9.1.8 Fishing effort in ICES area VIId

Deepwater VIId

Area VII EU VIId effort is primarily from UK and France and this effort fluctuates greatly from year to year.

2006 marked a change in UK effort from English beam to Scottish bottom trawl. Bottom trawl effort has been in decline since its peak in 2008, (Figure 5.9.1.8.1). This effort was mainly reported by UK although between 2010 and 2012 France has also reported some effort.

From 2003 to 2004, and again in 2013 the Netherlands reported some pelagic effort, and in 2010 and 2011 also reported some bottom trawl effort. France reported pelagic effort from 2003 to 2006.

Table 5.9.1.8.1.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state ICES Sub-area VIId.

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
7d	FRA	9090	27425	44199	5530	4517	1716	1716	12762	21014	12848	
	NED	68230	141760						2708	6000		72000
	UK	42719	14231	22041	1264	36346	127143	59913	19436	16070	1875	1774
7d Total		120039	183416	66240	6794	40863	128859	61629	34906	43084	14723	73774

Table 5.9.1.8.2.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state ICES Sub-area VIIId.

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
7d	BEAM	UK	41808	14231	22041	1264	17015	6524					221	
	BOTTOM TRAWLS	FRA				1997	4517				11930	20231	12025	
		NED									2708	6000		
		UK						19289	120493	59626	19436	14506	1875	1393
	GILL	FRA											264	
		UK						42	126	287		22		160
	LONGLINE	FRA							1716	1716	221		221	
		UK		911								1542		
	PELAGIC TRAWLS	FRA		9090	27425	44199	3533						220	
		NED		68230	141760									72000
		FRA										141		
	POTS	FRA									611	422	338	
	TRAMMEL	FRA												
7d Total			120039	183416	66240	6794	40863	128859	61629	34906	43084	14723	73774	

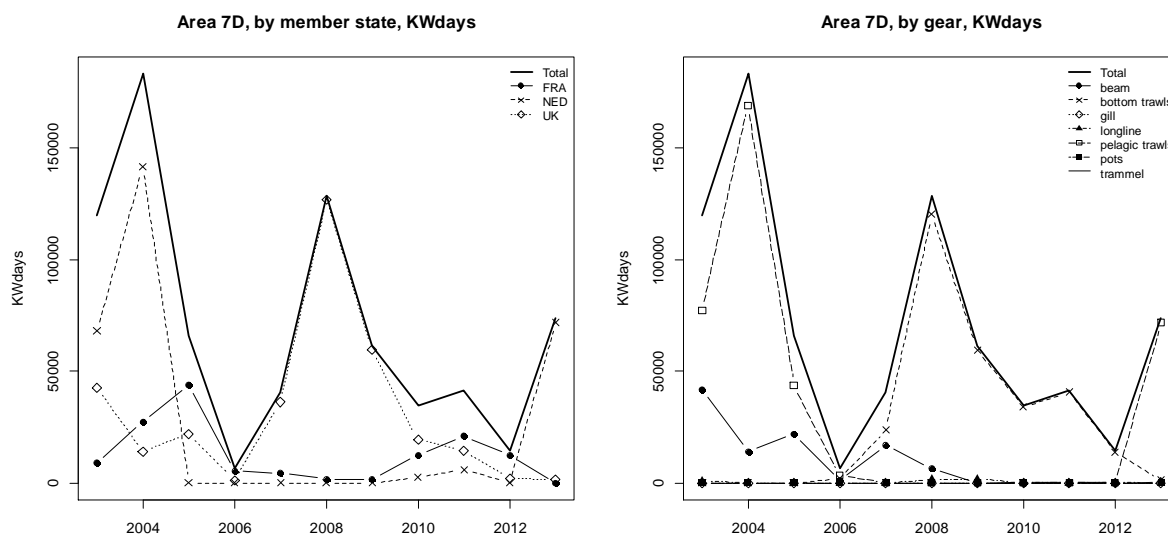


Figure 5.9.1.8.1. Deep Sea fishing effort (kW*days), 2003 – 2013, by country and by gear, in ICES Sub-area VIIId.

Western Waters VIIId

Effort within Area VIIId had been increasing up to 2006, after which it began to decline. Over the last four years however effort has appeared to stabilise. France is the principal nation operating within this area, driving the overall trends, followed by UK, Netherlands and Belgium. There is essentially no effort associated with deepwater fisheries (Table 5.9.1.8.3 and Figure 5.9.1.8.2).

The main effort reported for this area is bottom trawling, particularly by France, with much lower levels reported by the UK. Effort levels have slowly decreased from a peak in 2007. Dredging, mainly by France and the UK and pelagic trawls, Netherlands and France, provide the

next highest levels of effort. Both of these methods have stayed relatively stable throughout the time period. Beam trawling is mainly by Belgium, with small effort from France and UK, and the majority of trammel net effort is by France. Both methods were in decline since peaks in the mid 2000s but both have stabilised in the last four years.

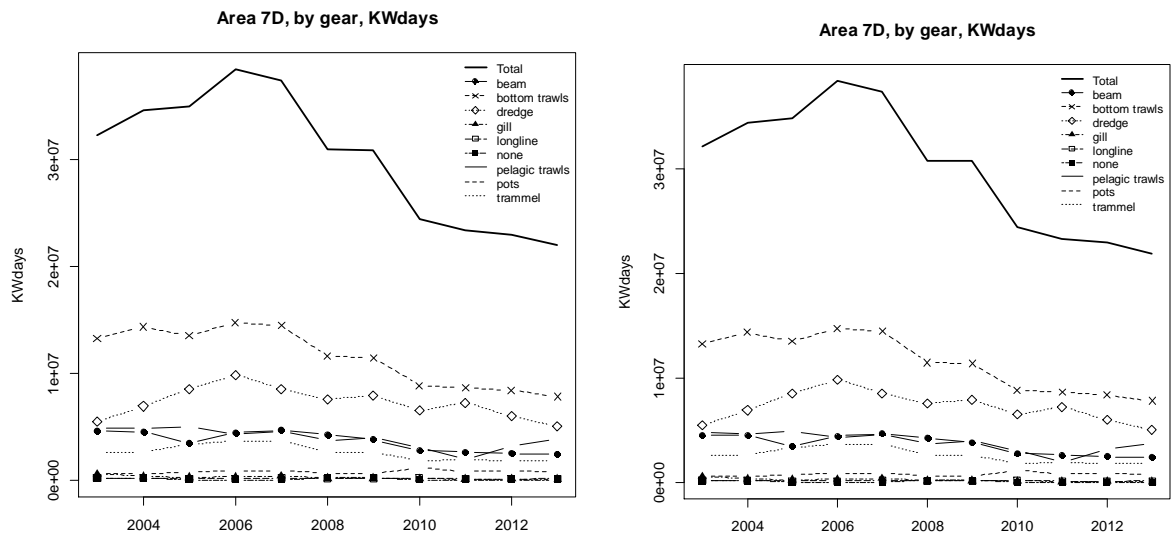


Figure 5.9.1.8.2.- Effort (kW*days) reported within ICES Sub-area VIIId by gear type, 2003-2013, with (left) and without (right) reported deepwater effort.

5.9.1.9 Fishing effort in the Biologically Sensitive Area

From a peak in 2003 there was a gradual decline until 2006 after which effort fluctuated. (Table 5.9.1.9.1 and Figure 5.9.1.9.1). Overall, bottom trawl effort predominates within the area, in common with the picture for the wider EU waters of Area VII. Ireland provides the majority of this effort, followed by France and the UK. Prior to 2009 Ireland and France contributed similar amounts but since 2010 Irish effort has increased while France has decreased, although French effort increased in 2013. In 2012 and 2013 Spain reported similar levels of bottom trawl effort as UK for this area.

Pelagic trawls effort had increased in recent years, in particular by Irish and German vessels, while effort from the Netherlands has stayed constant. Since 2012 Ireland has provided the highest effort..

Gillnetting, by France, Ireland and UK, shows a decline in effort in recent years. This is primarily down to a reduction of French effort. Beam trawling, carried out almost exclusively by Ireland, showed a pronounced decline until 2008 after which effort stabilised. There was a drop in Irish effort in 2011 but this increased again since 2012.

The use of pots and dredges in the area is low and both gears are used almost exclusively by Ireland.

2008			2009			2010			2011			2012			2013		
Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
0		0	0		0	0		0	0		0	206		206	0		0
0		0	0		0	2017		2017	3755		3755	176		176	504		504
0		0	0		0	1598		1598	0		0	0		0	0		0
695074	695074	695074	653053		653053	662489		662489	356556		356556	542399		542399	632707		632707
3848	3848	3848	23408		23408	60723		60723	105041		105041	63437		63437	65727		65727
0		0	0		0	667		667	4276		4276	7492		7492	5248		5248
8283	8283	3151	3151		1038	1038		1038	0		0	0		0	0		0
6991	6991	5961	5961		9246	9246		9246	17885		17885	5654		5654	8649		8649
452538	452538	524788	524788		596883	596883		596883	520615		520615	611242		611242	550736		550736
468	468	0	0		0	0		0	0		0	0		0	0		0
0		0	0		0	0		0	0		0	1604600		1604600	1605768		1605768
4607029	4607029	4567101	4567101		2984866	2984866		2984866	2413727		2413727	2561634		2561634	3600820		3600820
4560695	4560695	4675826	4675826		4775122	4775122		4775122	4192362		4192362	4392921		4392921	4961603		4961603
0		0	1530		708	708		708	0		0	4221		4221	500		500
1578080	1578080	1471186	1471186		1844838	1844838		1844838	1705841		1705841	1839845		1839845	1639206		1639206
0		0	0		574	574		574	0		0	0		0	0		0
310	310	0	0		573	573		573	0		0	0		0	0		0
7596	7596	7596	7596		17964	17964		17964	17333		17333	12033		12033	0		0
16726	16726	15758	15758		22500	22500		22500	31239		31239	18939		18939	20119		20119
0		0	0		0	0		0	0		0	144		144	0		0
5781	5781	5781	5781		16595	16595		16595	30191		30191	10211		10211	0		0
58134	58134	109653	109653		78890	78890		78890	71995		71995	123961		123961	101238		101238
5379	5379	0	0		972	972		972	0		0	0		0	894		894
0		0	0		3068	3068		3068	0		0	0		0	1748		1748
24	24	0	0		0	0		0	0		0	0		0	0		0
6391	6391	6391	6391		0	0		0	500		500	654		654	0		0
115964	115964	142545	142545		121066	121066		121066	86583		86583	99457		99457	107703		107703
7015	7015	11998	11998		20617	20617		20617	15542		15542	15678		15678	20229		20229
0		0	0		0	0		0	0		0	1161		1161	1470		1470
707073	707073	707073	707073		404952	404952		404952	515920		515920	534552		534552	455153		455153
0		0	0		0	0		0	0		0	0		0	0		0
382348	382348	370007	370007		351139	351139		351139	331027		331027	362297		362297	339634		339634
162279	162279	193309	193309		168904	168904		168904	145293		145293	153746		153746	202512		202512
0		0	0		500	500		500	0		0	0		0	0		0
0		0	0		0	0		0	0		0	0		0	92		92
0		0	0		1345	1345		1345	103		103	173		173	990		990
11421	11421	18772	18772		11702	11702		11702	8148		8148	7943		7943	4582		4582
0		368	368		0	0		0	0		0	0		0	0		0
0		0	0		0	0		0	0		0	278659		278659	349620		349620
104854	104854	104854	104854		19111	19111		19111	75389		75389	176197		176197	453419		453419
699	699	2856	2856		7030	7030		7030	1645		1645	4573		4573	0		0
94507	94507	11281	11281		5909	5909		5909	0		0	73270		73270	94476		94476
275	275	0	0		52	52		52	0		0	0		0	896		896
0		0	0		0	0		0	0		0	1291		1291	0		0
0		0	0		0	0		0	1912		1912	0		0	0		0
0		0	0		0	0		0	0		0	462591		462591	178197		178197
0		0	0		596	596		596	0		0	0		0	0		0
1064	1064	1064	1064		5465	5465		5465	3130		3130	1285		1285	4233		4233
3788	3788	10466	10466		5704	5704		5704	10503		10503	39899		39899	28424		28424
0		0	0		0	0		0	0		0	0		0	162		162
156242	156242	156242	156242		321813	321813		321813	162453		162453	207397		207397	84081		84081
221226	221226	607073	607073		336430	336430		336430	617935		617935	577869		577869	480923		480923
1158363	1158363	1668613	1668613		2058997	2058997		2058997	594843		594843	1836806		1836806	1739561		1739561
1560452	1560452	1778313	1778313		1506957	1506957		1506957	1598172		1598172	1380269		1380269	1377586		1377586
474383	474383	859531	859531		1292740	1292740		1292740	442094		442094	203808		203808	255244		255244
0		0	0		2003	2003		2003	1993		1993	1779		1779	4819		4819
0		7832	7832		0	0		0	0		0	0		0	0		0
148	148	148	148		2031	2031		2031	4793		4793	1245		1245	2132		2132
170391	170391	177863	177863		217068	217068		217068	193864		193864	189063		189063	173276		173276
0		0	0		0	0		0	0		0	189		189	0		0
441	441	441	441		2210	2210		2210	400		400	800		800	0		0
0		0	0		0	0		0	0		0	0		0	0		0
7893	7893	6637	6637		5131	5131		5131	0		0	0		0	1231		1231
0		0	0		0	0		0	0		0	0		0	0		0
0		0	0		6398	6398		6398	3239		3239	1720		1720	92		92
0		0	0		138	138		138	268		268	0		0	0		0
19152	19152	19152	19152		16751	16751		16751	19183		19183	3805		3805	4331		4331
21941	21941	28328	28328		30554	30554		30554	27097		27097	23899		23899	19681		19681
410	410	1531	1531		1025	1025		1025	4100		4100	2067		2067	4193		4193
20679	20679	20679	20679		8525	8525		8525	11844		11844	4599		4599	15504		15504
22125	22125	7800	7800		35120	35120		35120	23000		23000	49028		49028	15628		15628
1886	1886	2052	2052		4198	4198		4198	11413		11413	25404		25404	36553		36553
17440366	17440366	18988011	18988011		18053512	18053512		18053512	14383202		14383202	18522288		18522288	19652094		19652094

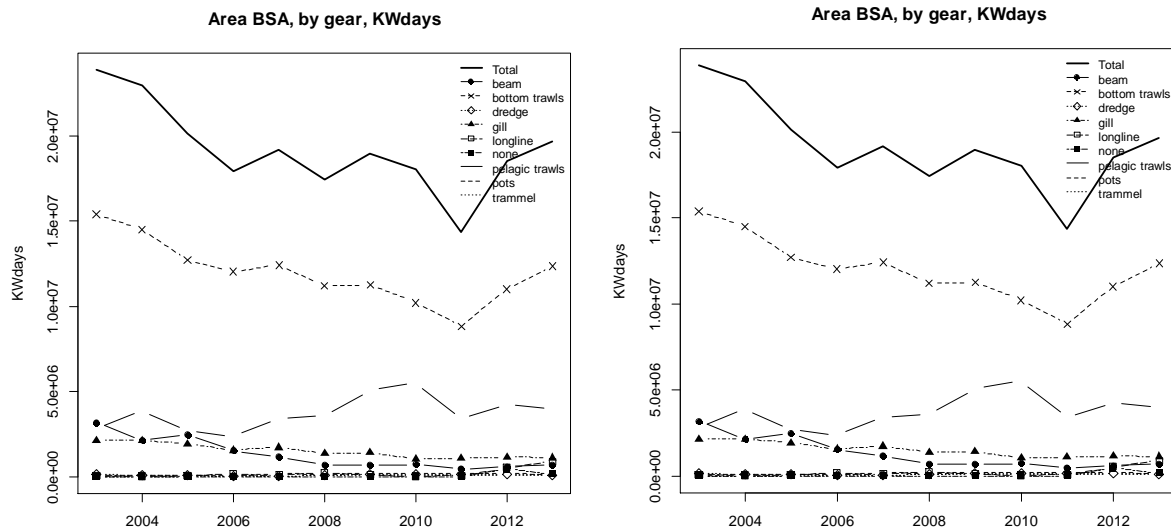


Figure 5.9.1.9.1.- Effort (kW*days) reported within the BSA by gear type, 2003-2013, with (left) and without (right) reported deepwater effort.

5.9.1.10 Fishing effort in ICES area VIII

Deepwater VIII EU

Most of the effort in this area was contributed by four countries, UK, France, Spain and Netherlands, as shown in Tables 5.9.1.10.1 and 5.9.1.10.2. Small amounts of effort were reported from Ireland, Portugal and Germany on occasion.

Netherlands effort, entirely for pelagic trawl, declined to zero in 2007, but some was recorded again in 2010. Netherlands effort comprised the majority of the pelagic trawling effort.

UK and French effort increased to the mid 2000s but has since declined. Spanish effort was stable at low levels between 2002 and 2008, before recording a major increase in 2009. After this peak Spain reported no data in this area until 2012, however the 2012 and 2013 effort is roughly three times the previous highest effort.

Figure 5.9.1.10.1 shows trends in effort by country and by main gears illustrating that bottom trawls were the most important followed by pelagic trawls, gill nets and longlines. In general the pattern of peak effort in the mid 2000s followed by decline is evident in all gears. There was a small peak of effort in both bottom trawl and longlines in 2009 but this had decreased again in 2010 and 2011. The effort reported for 2012 and 2013 are by far the highest in the time series.

Bottom trawl was the predominant gear used in this region, with, historically, 92% of the effort reported by France. This was reversed in 2012 with Spain reporting 90% of the effort. Gill net

effort was initially confined to France but since 2004 the UK has been contributing 50%. In 2013 Spain again reported the majority of the effort.

In the mid 2000s the majority of the longline effort came from the UK with France reporting increased effort for the last six years. Spain however reported large effort for 2009, and increased that effort in 2012 and 2013. The majority of trammel net effort is reported by France.

Table 5.9.1.10.1.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state ICES Sub-area VIII EU.

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
8 EU	ESP	191014	119988	142950	142037	199227	158387	971345			2796825	2195759
	FRA	289751	289300	573858	563460	330069	330114	326333	297108	222426	152795	238393
	GER		22626									
	NED	49974	22284	26400	35596					67980		
	PRT											
	UK	87112	195594	131379	351815	108637	102356	29684	84663	106929	6887	22407
8 EU Total		617851	649792	874587	1092908	637933	590857	1327362	449751	329355	2956507	2456559

Table 5.9.1.10.2.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state ICES Sub-area VIII EU.

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
8 EU	BEAM	UK						880						
		ESP	147836	78301	59641	75924	133403	84600	285745			1404693	1256437	
	BOTTOM TRAWLS	FRA	177729	229630	473093	424001	194049	280599	276818	173856	147863	114434	142544	
		PRT												
	DREDGE	UK									6943	9166	287	5697
		FRA										73		
	GILL	ESP	10091	8707	20233	17137	2638	3814	129719				196134	138264
		FRA	95204	53378	78282	117246	121418	20269	20269	28215	21244	14077	8522	
		UK		89612	67015	278374	57053	58969	29684	51073	18881	6600	16145	
	LONGLINE	ESP	24830	31131	60298	48533	61414	63745	538568				1073844	794652
		FRA		2024	2297	2674	407	19486	19486	76154	41262	14347	82246	
		PRT												
	NONE	UK	87112	105982	64364	73441	51584	41960		12761	78882		565	
		ESP	8196	1849	2778	358	1544	3889	11863				90933	
	PELAGIC TRAWLS	ESP							2273	5406			5341	680
		FRA	8225		7442	10239	6521				13619	882	3730	
		GER		22626										
		NED	49974	22284	26400	35596					67980			
		UK									13886			
	POTS	ESP											24107	3499
		FRA			1596						2464			
	TRAMMEL	ESP	61			85	228	66	44				1773	2226
		FRA	8593	4268	11148	9300	7674	9760	9760	2800	11102	6207	5082	
		UK						547						
	8 EU Total		617851	649792	874587	1092908	637933	590857	1327362	449751	329355	2956507	2456559	

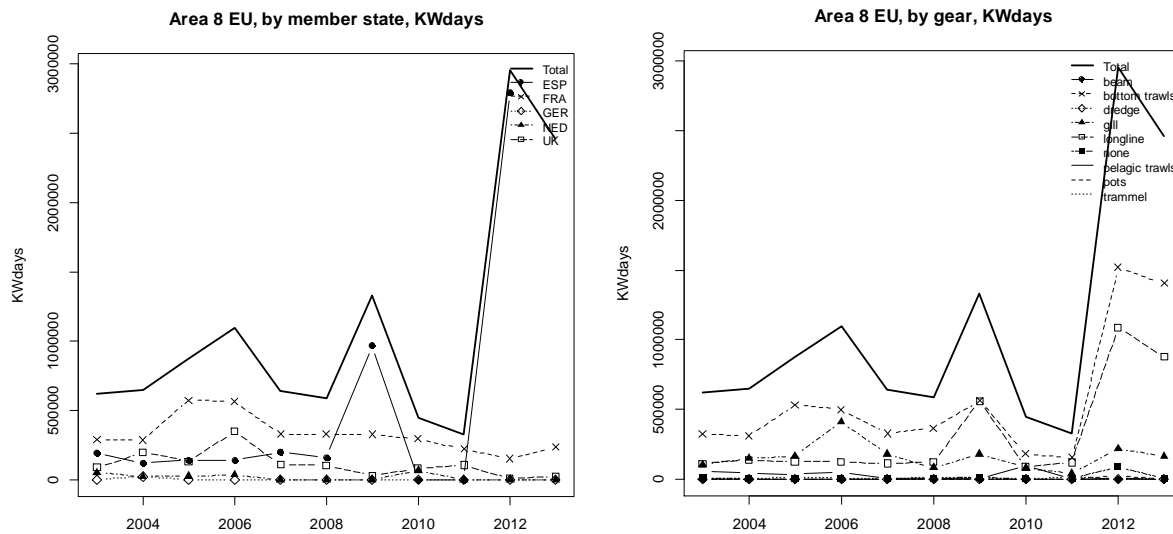


Figure 5.9.1.10.1. Deep Sea fishing effort (kW*days), 2003 – 2013, by country and by gear, in ICES Sub-area VIII EU.

Western Waters VIII EU

Two nations primarily fish this area, France and Spain. The overall trend has fluctuated within this area with greatest effort around 2006/2007 following increased French effort. With the lack of Spanish data in 2010 and 2011 it is impossible to provide proper analysis of recent effort trends. Spanish effort has been reported again for 2012 and 2013 however which has led to the increase in recorded effort. Little effort is associated with deepwater fisheries (Table 5.9.1.10.3 and Figure 5.9.1.10.2).

Most effort occurs with bottom trawling gear, dominated by France. French bottom trawl effort peaked in 2007 but has been in decline since. Spanish effort for 2012 and 2013 is slightly lower than that reported for 2008 and 2009. A small (1-2%) proportion of effort is contributed by Portugal.

Pelagic trawling accounts for around 12-15% of effort within the area, again primarily by France and Spain. French effort had been stable at a low level since 2008 despite a slight increase in 2012.

Other gears are used within the area to lesser extents, with trammel and gillnetting accounting for around 10% each. France is again the dominant nation using both gear classes, particularly within the trammel category. French trammel net effort however, which was stable until 2009, has since decreased by approximately 90%. French gill net effort peaked in 2006 but has been relatively stable in recent years.

In 2012 and 2013 Spain reported large longline effort, well in excess of that reported by France. French effort has been stable for the last four years after increasing, in 2010, from a period of lower, stable, effort.

Table 5.9.1.10.3.- Effort (kW*days) by country, gear and vessel size group within ICES Sub-area VIII EU, 2003-2013.

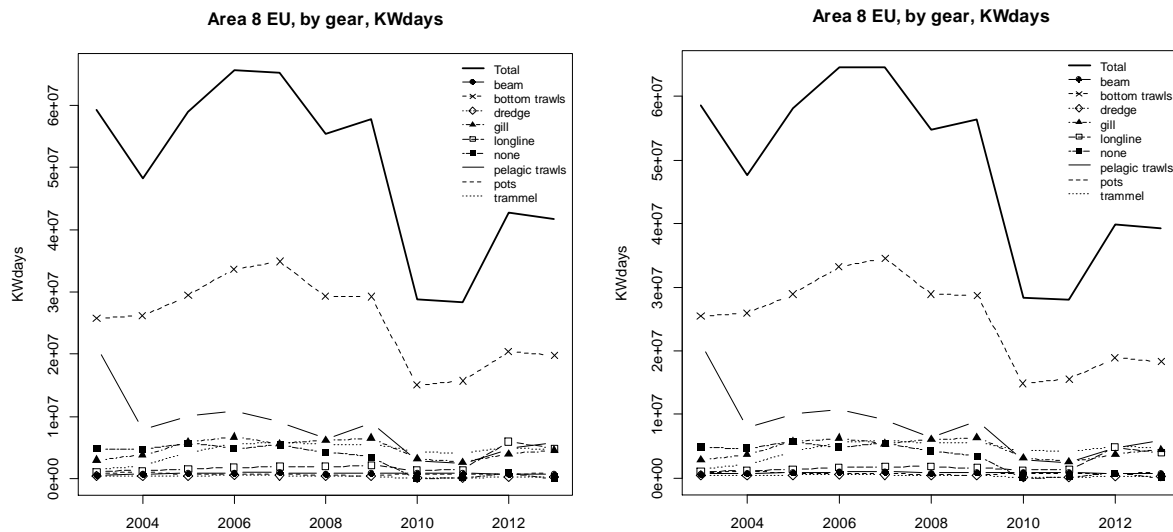


Figure 5.9.1.10.2.- Effort (kW*days) reported within ICES Sub-area VIII EU by gear type, 2003-2013, with (left) and without (right) reported deepwater effort.

Deepwater VIII non-EU

Fishing effort in Area VIII non EU was minimal. The UK has some historical effort for gill nets and pots, and France conducted a small amount of bottom trawl in 2011. Spain reported bottom trawl and longline effort for 2012 and 2013.

Table 5.9.1.10.4.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state ICES Sub-area VIII non-EU.

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
8 non EU	ESP										2397	1577
	FRA									497		
	UK				34994		5376					
8 non EU Total					34994		5376			497	2397	1577

Table 5.9.1.10.5.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state ICES Sub-area VIII non-EU.

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
8 non EU	BOTTOM TRAWLS	ESP										1985	1374
		FRA										497	
	GILL	UK				34994							
	LONGLINE	ESP										412	202
POTS	UK						5376						
8 non EU Total						34994		5376		497	2397	1577	

Western Waters VIII non-EU

Prior to 2007 effort was minimal within this area, Table 5.9.1.10.6. In 2013 Spain reported effort in all categories except pots. Longlines provided the main effort in the area. France and UK were the main contributors in 2010 and 2011, with Spain contributing the most in 2012 and 2013. Without this Spanish effort total effort in 2012 and 2013 in this area would have decreased compared to 2010 and 2011.

Table 5.9.1.10.6.- Effort (kW*days) by country, gear and vessel size group within ICES Sub-area VIII non-EU, 2003-2013.

Area	Gear	MS	Vessel length	2003			2004			2005			2006			2007			
				Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	
8 NON EU	bottom trawls	FRA	o10t15m	0		0	0		0	0		0	0		0	0		0	
		ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		FRA	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		PRT	o15m																
	gill	ESP	o15m	0		0	0		0	0		0	0		0	0		0	0
		FRA	o15m	0		0	0		0	0		0	0		0	0		0	0
		UK	o15m	0	0		0	0		0	0		34994	34994		0	0		0
	longline	FRA	u10m	0		0	0		0	0		0	0		0	0		0	0
		ESP	o10t15m	0		0	0		0	0		0	0		0	0		0	0
		ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		FRA	o15m	0		0	0		0	0		0	0		0	0		0	0
	UK	o15m	0		0	0		0	0		0	0		0	0		0	0	0
		ESP	o15m	0		0	0		0	0		0	0		0	0		0	0
	none	ESP	o15m	0		0	0		0	0		0	0		0	0		0	0
	pelagic trawls	ESP	o15m	0		0	0		0	0		0	0		0	0		0	0
		FRA	o15m	0		0	0		0	0		0	0		0	0		0	0
	pots	FRA	u10m	0		0	0		0	0		0	0		0	0		0	0
		UK	o15m	0	0		0	0		0	0		0	0		0	0		0
trammel	FRA	o10t15m	0		0	0		0	0		0	0		0	0		0	0	
	ESP	o15m	0		0	0		0	0		0	0		0	0		0	0	
8 NON EU Total				0	0	0	0	0	0	0	0	0	0	34994	34994	0	0	0	

2008			2009			2010			2011			2012			2013		
Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
0		0	0		0	2804		2804	294		294	0		0	0		0
0	0	0	0	0	0	0	0	0	0	0	0	4559	1985	2574	1374	1374	0
0	0	0	0	0	0	0	0	0	6121	497	5624	662	0	662	600	0	600
0		0	0		0	0		0	0		0	0		0	4353		4353
0		0	0		0	0		0	3825		3825	2995		2995	0		0
0	0		0	0		0	0		0	0		0	0		0	0	
0		0	0		0	860		860	0		0	0		0	0		0
0		0	0		0	0		0	0		0	2177		2177	4212		4212
0	0		0	0		0	0		0	0		188404	412	187992	112201	202	111999
0		0	0		0	30301		30301	14876		14876	10298		10298	1380		1380
0		0	0		0	73754		73754	66928		66928	9452		9452	8655		8655
0		0	0		0	0		0	0		0	3131		3131	0		0
0		0	0		0	0		0	0		0	4737		4737	1441		1441
0		0	0		0	52118		52118	71356		71356	7282		7282	8245		8245
0		0	0		0	0		0	0		0	0		0	296		296
5376	5376		0	0		0	0		0	0		0	0		0	0	
0		0	0		0	573		573	158		158	0		0	0		0
0		0	0		0	0		0	0		0	94		94	0		0
5376	5376	0	0	0	0	160410	0	160410	163558	497	163061	233791	2397	231394	142757	1576	141181

5.9.1.11 Fishing effort in ICES area IX

Deepwater IX EU

Due to inconsistencies in Portuguese data trends cannot be presented for this area. A data resubmission will be reanalysed at the second meeting of this group in the autumn. The tables and graphs presented below show the effort reported by the other member states fishing in this area, (Table 5.9.1.11.1 and 5.9.1.11.2 and Figure 5.9.1.11.1).

Table 5.9.1.11.1.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state ICES Sub-area IX EU. (not including data from Portugal)

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
9 EU	ESP	161165	94341	98119	136223	280696	148213	100673			451033	415352
	FRA						1472	1472		588		
	PRT											
	UK				138797	11906						
9 EU Total		161165	94341	98119	275020	292602	149685	102145		588	451033	415352

Table 5.9.1.11.2.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state ICES Sub-area IX EU. (not including data from Portugal)

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
9 EU	BOTTOM TRAWLS	ESP	159002	88954	84697	117280	266955	135644	88673			285478	252794	
		FRA									588			
		PRT												
	DREDGE	ESP												349
		PRT												
	GILL	ESP	351				159	210	1372				10935	8204
		FRA							1472	1472				
		PRT												
		UK					130733	11906						
	LONGLINE	ESP		1264	6112	14148	13531	10249	12000				64224	96516
		PRT												
		UK					4928							
	NONE	ESP	1812	4123	7310	4612		948					6989	
		PRT											693	1539
	PELAGIC TRAWLS	ESP												
		PRT												
		ESP											80785	55163
	POTS	PRT												
		UK					3136							
	TRAMMEL	ESP						24					1929	786
PRT														
9 EU Total		161165	94341	98119	275020	292602	149685	102145		588	451033	415352		

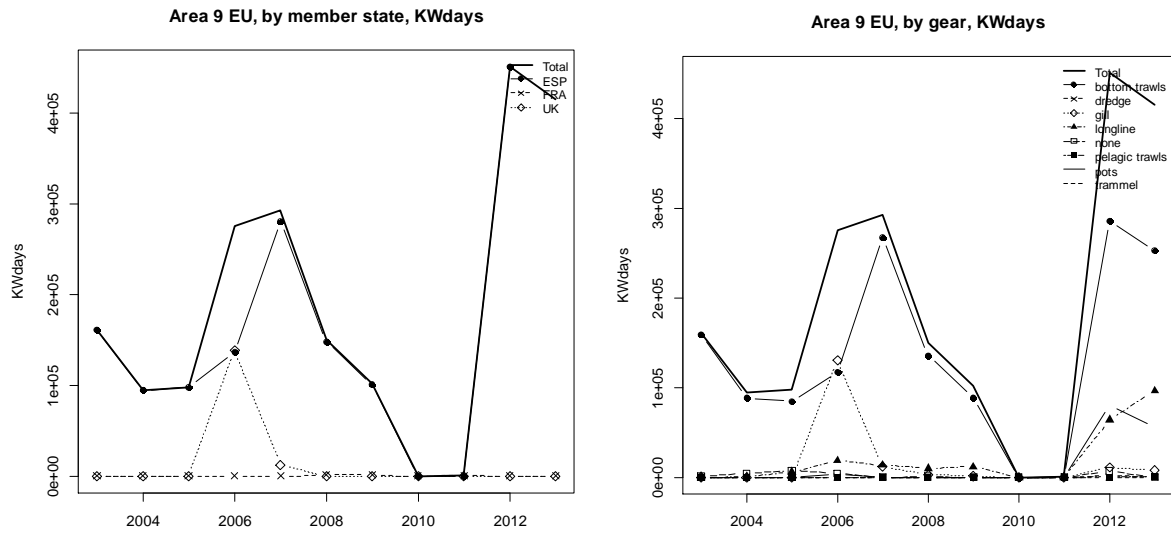


Figure 5.9.1.11.1. Deep Sea fishing effort (kW*days), 2003 – 2013, by country and by gear, in ICES Sub-area IX EU. (not including data from Portugal)

Western Waters IX EU

Due to inconsistencies in Portuguese data trends cannot be presented for this area. A data resubmission will be reanalysed at the second meeting of this group in the autumn. The tables and graphs presented below show the effort reported by the other member states fishing in this area, (Table 5.9.1.11.3 and Figure 5.9.1.11.2).

Table 5.9.1.11.3.- Effort (kW*days) by country, gear and vessel size group within ICES Sub-area IX EU, 2003-2013. (not including data from Portugal)

Area	Gear	MS	Vessel length	2003			2004			2005			2006			2007		
				Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
9 EU	beam	ESP	none	11804		11804	25121		25121	25154		25154	25077		25077	28021		28021
		ESP	o10t15m	0		0	0		0	0		0	0		0	0	0	
	bottom trawls	ESP	none	3181331	159002	3022329	4915147	88954	4826193	3627423	84697	3542726	3455782	117280	3338502	2997130	266955	2730175
		ESP	o10t15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		IRL	o10t15m	0		0	0		0	0		0	0		0	0	0	0
		PRT	o10t15m	0		0	0		0	0		0	0		0	0	0	0
		ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		FRA	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	dredge	IRL	o15m	4208		4208	0		0	0		0	0		0	0	0	0
		PRT	o15m	0		0	0		0	0		0	0		0	0	0	0
		ESP	none	10357		10357	23443		23443	24996		24996	26099		26099	30039		30039
		ESP	u10m	0		0	0		0	0		0	0		0	0	0	0
	gill	ESP	o10t15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		PRT	o10t15m	0		0	0		0	0		0	0		0	0	0	0
		ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		ESP	none	418068	351	417717	538314	0	538314	635597	0	635597	576359	159	576200	699429	210	699219
		ESP	u10m	0		0	0		0	0		0	0		0	0	0	0
		ESP	o10t15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PRT		o10t15m	0		0	0		0	0		0	0		0	0	0	0	
ESP		o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FRA		o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PRT		o15m	0		0	0		0	0		0	0		0	0	0	0	
longline	UK	o15m	0	0	0	0	0	0	0	0	0	130733	130733	11906	11906			
	ESP	none	166152	0	166152	223019	1264	221755	409605	6112	403493	842183	14148	828035	395164	13531	381633	
	ESP	u10m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ESP	o10t15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	FRA	o10t15m	0		0	0		0	0		0	0		0	0	0	0	
	PRT	o10t15m	0		0	0		0	0		0	0		0	0	0	0	
	ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	PRT	o15m	0		0	0		0	0		0	0		0	0	0	0	
none	UK	o15m	0	0	0	0	0	0	0	0	0	4928	4928	0	0	0	0	
	ESP	none	252817	1812	251005	327183	4123	323060	326040	7310	318730	309026	4612	304414	315969	0	315969	
	PRT	u10m	0		0	0		0	0		0	0		0	0	0	0	
	ESP	o10t15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
pelagic trawls	ESP	none	1998361		1998361	3483303		3483303	3067963		3067963	2802865		2802865	2872281		2872281	
	ESP	u10m	0		0	0		0	0		0	0		0	0	0	0	
	ESP	o10t15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	PRT	o10t15m	0		0	0		0	0		0	0		0	0	0	0	
	ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	FRA	o15m	0		0	0		0	0		0	0		0	0	0	0	
pots	IRL	o15m	0		0	0		0	0		0	0		0	0	0	0	
	PRT	o15m	0		0	0		0	0		0	0		0	0	0	0	
	ESP	none	856098		856098	1168353		1168353	667483		667483	632260		632260	718759		718759	
	ESP	o10t15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	PRT	o10t15m	0		0	0		0	0		0	0		0	0	0	0	
trammel	GER	o15m	0		0	0		0	0		0	0		0	7272		7272	
	PRT	o15m	0		0	0		0	0		0	0		0	0	0	0	
	UK	o15m	0	0	0	0	0	0	0	0	0	3136	3136	26201	0	26201		
	ESP	none	174174	0	174174	298351	0	298351	314811	0	314811	275258	24	275234	276624	0	276624	
	ESP	u10m	0		0	0		0	0		0	0		0	0	0	0	
9 EU Total	ESP	o10t15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ESP	o10t15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	PRT	o10t15m	0		0	0		0	0		0	0		0	0	0	0	
	PRT	o15m	0		0	0		0	0		0	0		0	0	0	0	
9 EU Total			7073370	161165	6912205	11002234	94341	10907893	9099072	98119	9000953	9083706	275020	8808686	8378795	292602	8086193	

2008			2009			2010			2011			2012			2013		
Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
18232		18232	16275		16275	0		0	0		0	0		0	0		0
0		0	0		0	0		0	0		0	40016		40016	16775		16775
2872653	135644	2737009	2754960	0	2754960	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	103890	244	103646	151675	140	151535
0		0	0		0	82		82	0		0	0		0	0		0
0	0	0	0	88673	-88673	0	0	0	0	0	0	4649351	285234	4364117	5301382	252654	5048728
0	0	0	0	0	0	0	0	0	588	588	0	810	0	810	0	0	0
746		746	0		0	0		0	0		0	0		0	0		0
33876		33876	58241		58241	0		0	0		0	0		0	0		0
0		0	0		0	0		0	0		0	0		0	3311		3311
0	0	0	0	0	0	0	0	0	0	0	0	643	0	643	685731	349	685382
0		0	0		0	0		0	0		0	1128		1128	93028		93028
755203	1372	753831	1032701	0	1032701	0	0	0	0	0	0	0	0	0	0	0	0
0		0	0		0	0		0	0		0	7541		7541	8798		8798
0	0	0	0	0	0	0	0	0	0	0	0	407218	966	406252	516344	2361	513983
0	0	0	0	0	0	0	0	0	0	0	0	170152	9969	160183	173819	5843	167976
0	1472	-1472	0	1472	-1472	0	0	0	736	0	736	3054	0	3054	0	0	0
0		0	0		0	0		0	0		0	0		0	0		0
330491	10249	320242	456484	0	456484	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	147	27	120	0	0	0
0	0	0	0	675	-675	0	0	0	0	0	0	100570	25818	74752	124938	68185	56753
0		0	0		0	0		0	684		684	0		0	0		0
0	0	0	0	11325	-11325	0	0	0	0	0	0	174436	38379	136057	217328	28331	188997
0		0	0		0	0		0	0		0	0		0	0		0
380804	948	379856	563673	0	563673	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	16029	1213	14816	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	250614	5776	244838	0	0	0
3041047		3041047	3346249		3346249	0		0	0		0	0		0	0		0
0		0	0		0	0		0	0		0	339		339	99		99
0	0	0	0	0	0	0	0	0	0	0	0	356919	345	356574	461109	1188	459921
0	0	0	0	0	0	0	0	0	0	0	0	895370	348	895022	1379792	351	1379441
0		0	0		0	0		0	0		0	323		323	0		0
0		0	0		0	0		0	0		0	0		0	736		736
873801		873801	927395		927395	0		0	0		0	0		0	0		0
0	0	0	0	0	0	0	0	0	0	0	0	113379	79226	34153	582624	55115	527509
0	0	0	0	0	0	0	0	0	0	0	0	1866	1559	307	30433	48	30385
0		0	0		0	14544		14544	14948		14948	0		0	5612		5612
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
352813	0	352813	359209	0	359209	0	0	0	0	0	0	0	0	0	0	0	0
0		0	0		0	0		0	0		0	1277		1277	0		0
0	0	0	0	0	0	0	0	0	0	0	0	355735	1869	353866	325117	786	324331
0	0	0	0	0	0	0	0	0	0	0	0	79352	60	79292	28052	0	28052
8659666	149685	8509981	9515187	102145	9413042	14626	0	14626	16956	588	16368	7730159	451033	7279126	10106703	415351	9691352

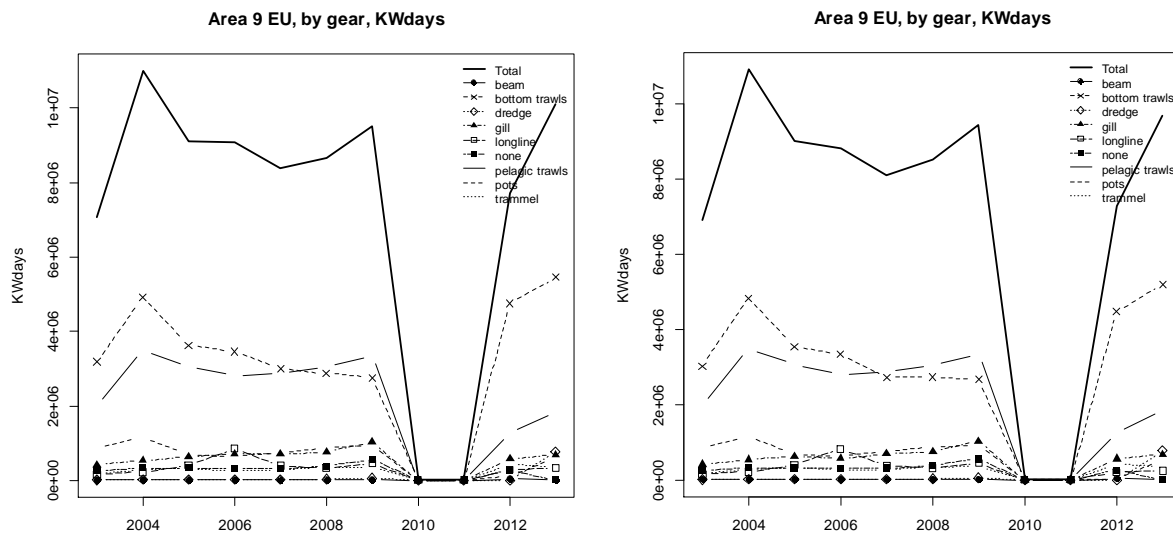


Figure 5.9.1.11.2.- Effort (kW*days) reported within ICES Sub-area IX EU by gear type, 2003-2013, with (left) and without (right) reported deepwater effort. (not including data from Portugal)

Deepwater IX non-EU

Due to inconsistencies in Portuguese data trends cannot be presented for this area. A data resubmission will be reanalysed at the second meeting of this group in the autumn. The tables and graphs presented below show the effort reported by the other member states fishing in this area, (Table 5.9.1.11.4 and 5.9.1.11.5 and Figure 5.9.1.11.3).

Table 5.9.1.11.4.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state ICES Sub-area IX non-EU.

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
9 non EU	ESP										1687	3896
	PRT											
9 non EU Total											1687	3896

Table 5.9.1.11.4.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state ICES Sub-area IX non-EU.

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
9 non EU	BOTTOM TRAWLS	ESP										1687	2911
	GILL	PTR											
	LONGLINE	ESP											985
		PTR											
	PELAGIC TRAWLS	PTR											
	TRAMMEL	PTR											
9 non EU Total											1687	3896	

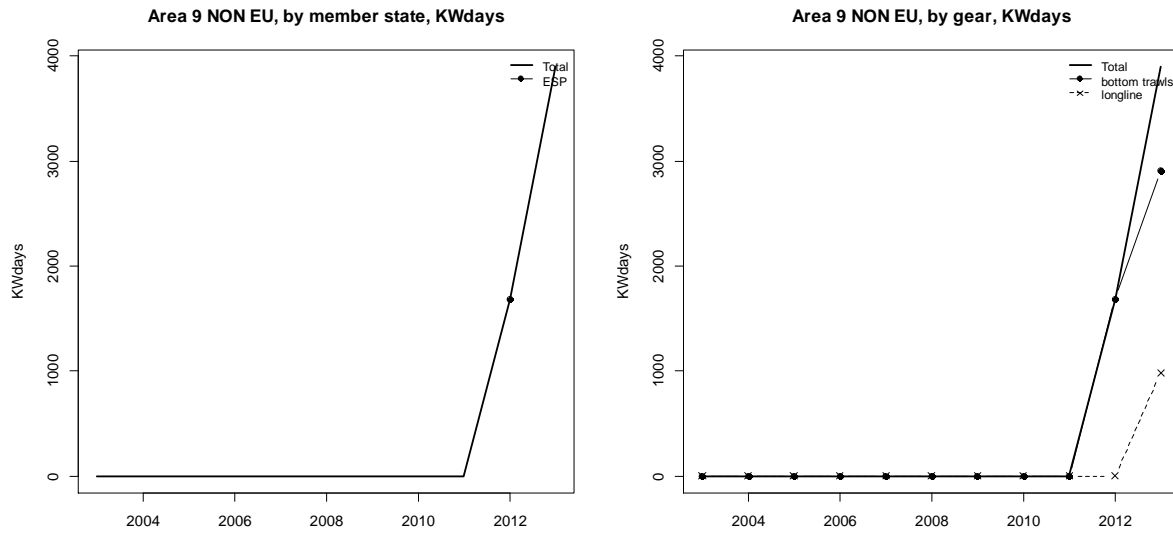


Figure 5.9.1.11.3. Deep Sea fishing effort (kW*days), 2003 – 2013, by country and by gear, in ICES Sub-area IX non-EU. (not including data from Portugal)

Western Waters IX non-EU

Due to inconsistencies in Portuguese data trends cannot be presented for this area. A data resubmission will be reanalysed at the second meeting of this group in the autumn. The tables and graphs presented below show the effort reported by the other member states fishing in this area, (Table 5.9.1.11.6. and Figure 5.9.1.11.4.).

Table 5.9.1.11.6.- Effort (kW*days) by country, gear and vessel size group within ICES Sub-area IX non-EU, 2003-2013.(not including data from Portugal)

Area	Gear	MS	Vessel length	2003			2004			2005			2006			2007			
				Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	
9 NON EU	bottom trawls	ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		PRT	o15m																
	gill	ESP	o10t15m	0		0	0		0	0		0		0		0		0	
		PRT	o10t15m																
		PRT	o15m																
	longline	PRT	o10t15m																
		ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		PRT	o15m																
	none	ESP	o15m	0		0	0		0	0		0		0		0		0	
		PRT	o15m																
	pelagic trawls	ESP	o15m	0		0	0		0	0		0		0		0		0	
		PRT	o15m																
		LIT	o40m	0		0	0		0	0		0		0		0		0	
	pots	PRT	o10t15m																
PRT		o15m																	
trammel	PRT	o10t15m																	
	PRT	o15m																	
9 NON EU Total				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Effort	2008			2009			2010			2011			2012			2013		
	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
0	0	0	0	0	0	0	0	0	0	0	0	0	37661	1687	35974	103058	2911	100147
0			0	0		0	0		0	0		0			0	96		96
0	0	0	0	0	0	0	0	0	0	0	0	0	40340	0	40340	63221	985	62236
0		0	0	0		0	0		0		0	3961		3961	0			0
0		0	0	0		0	0		0		0	1808		1808	625			625
0		0	0	0		0	0		0		0	10304		10304	0			0
0	0	0	0	0	0	0	0	0	0	0	0	94074	1687	92387	167000	3896	163104	

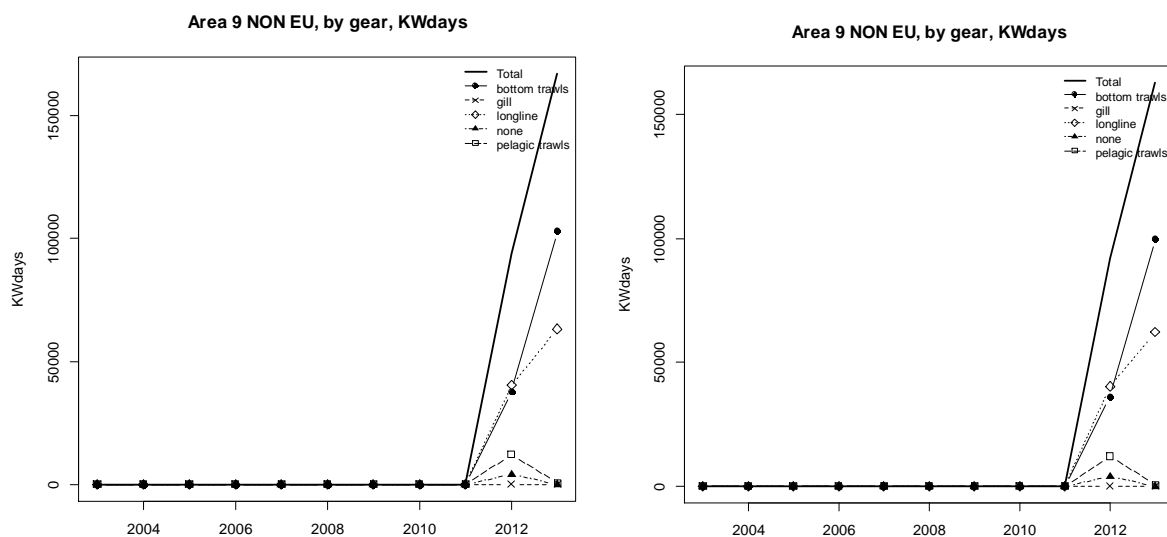


Figure 5.9.1.11.4.- Effort (kW*days) reported within ICES Sub-area IX non-EU by gear type, 2003-2013, with (left) and without (right) reported deepwater effort. (not including data from Portugal)

5.9.1.12 Fishing effort in ICES area X

Deepwater X EU

Due to inconsistencies in Portuguese data trends cannot be presented for this area. A data resubmission will be reanalysed at the second meeting of this group in the autumn. The tables and graphs presented below show the effort reported by the other member states fishing in this area, (Table 5.9.1.12.1 and 5.9.1.12.2 and Figure 5.9.1.12.1).

Table 5.9.1.12.1.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state ICES Sub-area X EU. (not including data from Portugal)

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
10 EU	ESP										1440	1970
	PRT											
10 EU Total											1440	1970

Table 5.9.1.12.2.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state ICES Sub-area X EU. (not including data from Portugal)

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
10 EU	BOTTOM TRAWLS	ESP										1058	
	LONGLINE	ESP										382	1970
		PRT											
10 EU Total												1440	1970

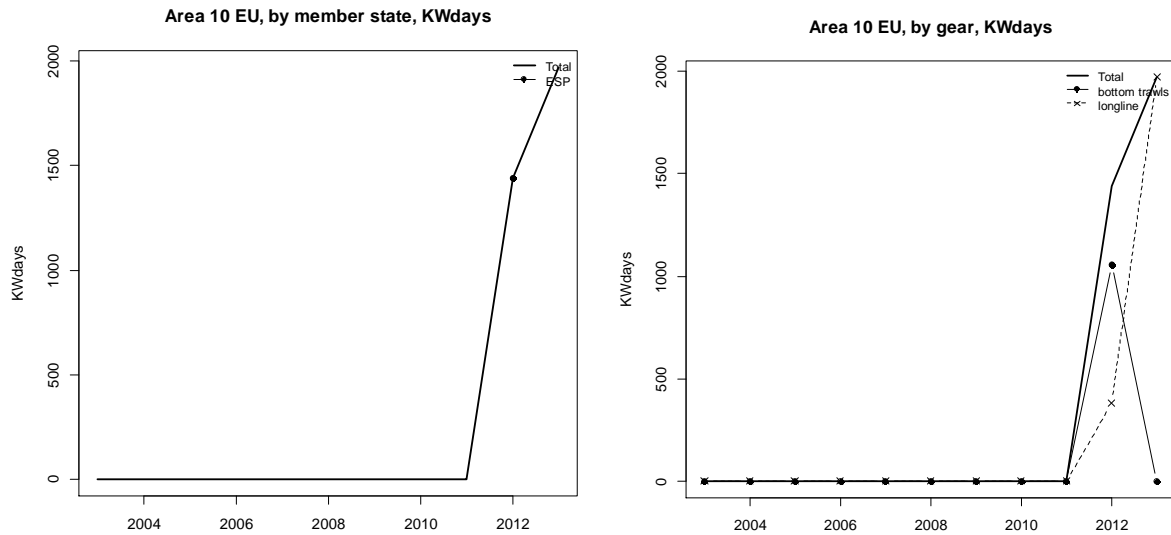


Figure 5.9.1.12.1. Deep Sea fishing effort (kW*days), 2003 – 2013, by country and by gear, in ICES Sub-area X EU. .(not including data from Portugal)

Western Waters X EU

Due to inconsistencies in Portuguese data trends cannot be presented for this area. A data resubmission will be reanalysed at the second meeting of this group in the autumn. The tables and graphs presented below show the effort reported by the other member states fishing in this area, (Table 5.9.1.12.3 and Figure 5.9.1.12.2).

Table 5.9.1.12.3.- Effort (kW*days) by country, gear and vessel size group within ICES Sub-area X EU, 2003-2013 (not including data from Portugal)

Area	Gear	MS	Vessel length	2003			2004			2005			2006			2007		
				Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
10 EU	bottom trawls	FRA	u10m	0			0			0			0			0		
		ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		PRT	o15m															
	gill	ESP	o10t15m	0		0	0		0	0		0	0		0	0		0
		ESP	o15m	0		0	0		0	0		0	0		0	0		0
	longline	PRT	u10m															
		ESP	o10t15m	0		0	0		0	0		0	0		0	0		0
		PRT	o10t15m															
		ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		FRA	o15m	0		0	0		0	0		0	0		0	0		0
	none	PRT	o15m															
		ESP	o15m	0		0	0		0	0		0	0		0	0		0
	trammel	FRA	o10t15m	0		0	0		0	0		0	0		0	0		0
10 EU Total				0	0	0	0	0	0	0	0	0	0	0	0	0	0	

2008			2009			2010			2011			2012			2013		
Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
0		0	0		0	605		605	0		0	0		0	0		0
0	0	0	0	0	0	0	0	0	0	0	0	1256	1058	198	0	0	0
0		0	0		0	0		0	0		0	74		74	0		0
0		0	0		0	0		0	0		0	1374		1374	351		351
0		0	0		0	0		0	0		0	77		77	0		0
0	0	0	0	0	0	0	0	0	0	0	0	101864	382	101482	130123	1970	128153
0		0	0		0	0		0	0		0	442		442	0		0
0		0	0		0	0		0	0		0	11752		11752	0		0
0		0	0		0	0		0	184		184	0		0	0		0
0	0	0	0	0	0	605	0	605	184	0	184	116839	1440	115399	130474	1970	128504

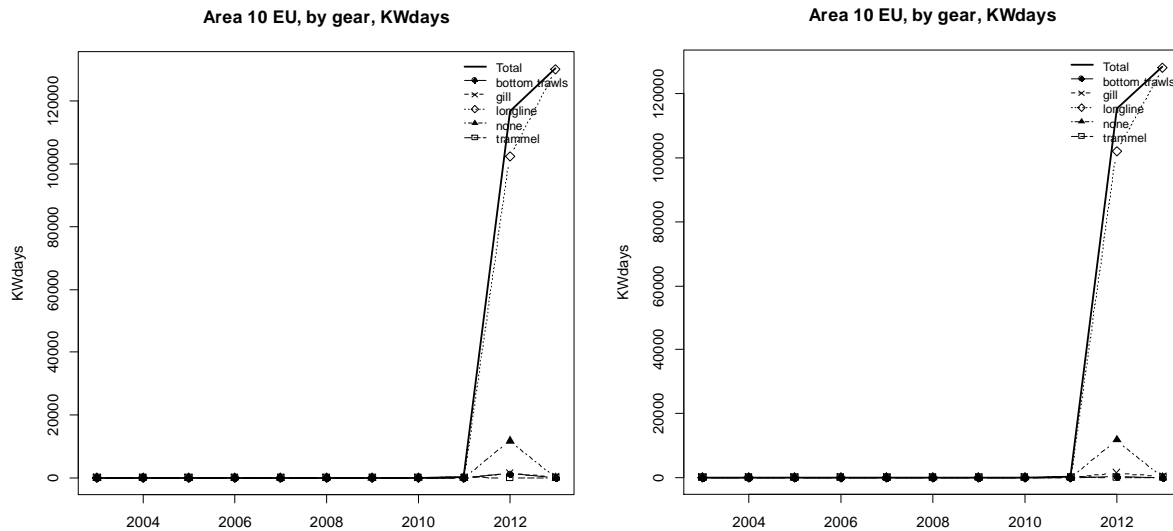


Figure 5.9.1.12.2.- Effort (kW*days) reported within ICES Sub-area X EU by gear type, 2003-2013, with (left) and without (right) reported deepwater effort (not including data from Portugal).

Deepwater X non-EU

Due to inconsistencies in Portuguese data trends cannot be presented for this area. A data resubmission will be reanalysed at the second meeting of this group in the autumn. The tables and graphs presented below show the effort reported by the other member states fishing in this area, (Table 5.9.1.12.4 and 5.9.1.12.5 and Figure 5.9.1.12.3).

Table 5.9.1.12.4.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state ICES Sub-area X non-EU(not including data from Portugal).

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
10 non EU	ESP											
	IRL		31378	8656							169	1183
	PRT											
10 non EU Total			31378	8656							169	1183

Table 5.9.1.12.5.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state ICES Sub-area X non-EU(not including data from Portugal).

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
10 non EU	BOTTOM TRAWLS	IRL		31378	8656								
	GILL	ESP											125
	LONGLINE	ESP										169	1058
		PTR											
	PELAGIC TRAWLS	PTR											
10 non EU Total				31378	8656							169	1183

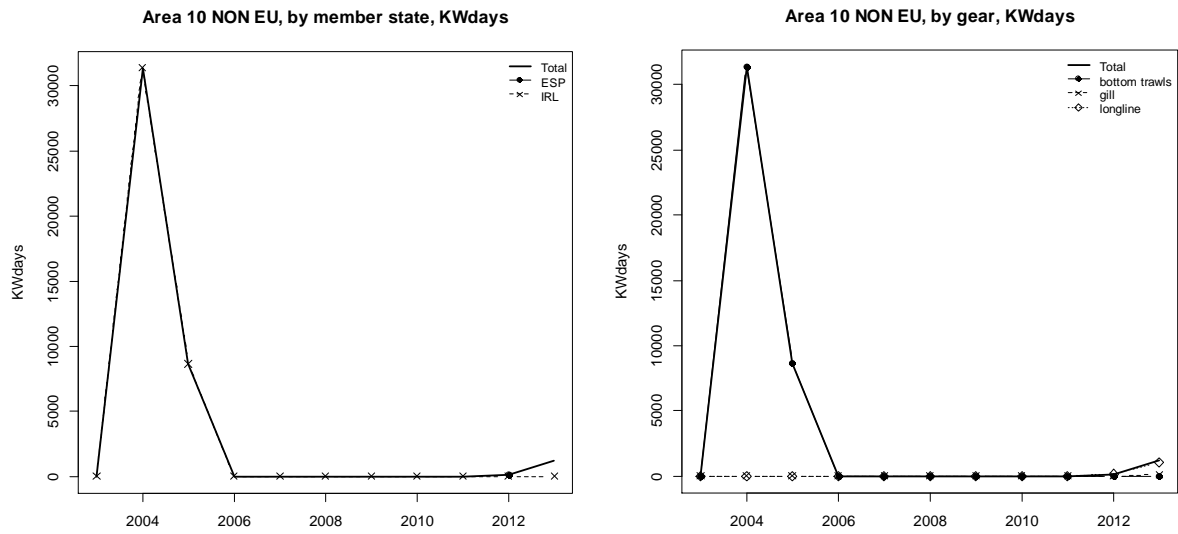


Figure 5.9.1.12.3. Deep Sea fishing effort (kW*days), 2003 – 2013, by country and by gear, in ICES Sub-area X non-EU.

Western Waters X non-EU

Due to inconsistencies in Portuguese data trends cannot be presented for this area. A data resubmission will be reanalysed at the second meeting of this group in the autumn. The tables and graphs presented below show the effort reported by the other member states fishing in this area, (Table 5.9.1.12.6. and Figure 5.9.1.12.4.).

Table 5.9.1.12.6.- Effort (kW*days) by country, gear and vessel size group within ICES Sub-area X non-EU, 2003-2013(not including data from Portugal).

Area	Gear	MS	Vessel length	2003			2004			2005			2006			2007		
				Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
10 NON EU	bottom trawls	FRA	u10m	0		0	0		0	0		0	0		0	0		0
		FRA	o10t15m	0		0	0		0	0		0	0		0	0		0
		ESP	o15m	0		0	0		0	0		0	0		0	0		0
		FRA	o15m	0		0	0		0	0		0	0		0	0		0
		IRL	o15m	0	0		31378	31378		8656	8656		0	0		0	0	
	dredge	FRA	u10m	0		0	0		0	0		0	0		0	0		0
		FRA	o10t15m	0		0	0		0	0		0	0		0	0		0
	gill	FRA	u10m	0		0	0		0	0		0	0		0	0		0
		FRA	o10t15m	0		0	0		0	0		0	0		0	0		0
		ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		FRA	o15m	0		0	0		0	0		0	0		0	0		0
	longline	FRA	u10m	0		0	0		0	0		0	0		0	0		0
		ESP	o10t15m	0		0	0		0	0		0	0		0	0		0
		FRA	o10t15m	0		0	0		0	0		0	0		0	0		0
		ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		FRA	o15m	0		0	0		0	0		0	0		0	0		0
		PRT	o15m	0		0	0		0	0		0	0		0	0		0
	none	FRA	u10m	0		0	0		0	0		0	0		0	0		0
		ESP	o15m	0		0	0		0	0		0	0		0	0		0
	pelagic trawls	FRA	o10t15m	0		0	0		0	0		0	0		0	0		0
		ESP	o15m	0		0	0		0	0		0	0		0	0		0
		FRA	o15m	0		0	0		0	0		0	0		0	0		0
		IRL	o15m	0		0	0		0	0		0	0		0	0		0
		PRT	o15m	0		0	0		0	0		0	0		0	0		0
	pots	FRA	u10m	0		0	0		0	0		0	0		0	0		0
		FRA	o10t15m	0		0	0		0	0		0	0		0	0		0
		PRT	o15m	0		0	0		0	0		0	0		0	0		0
trammel	FRA	u10m	0		0	0		0	0		0	0		0	0		0	
	FRA	o10t15m	0		0	0		0	0		0	0		0	0		0	
	FRA	o15m	0		0	0		0	0		0	0		0	0		0	
10 NON EU Total			0	0	0	31378	31378	0	8656	8656	0	0	0	0	0	0	0	

	2008			2009			2010			2011			2012			2013		
Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	
0		0	0		0	2376		2376	0		0	880		880	246		246	
0		0	0		0	1059		1059	2594		2594	5362		5362	680		680	
0		0	0		0	0		0	0		0	3671		3671	2205		2205	
0		0	0		0	1964		1964	810		810	1176		1176	600		600	
0	0		0	0		0	0		0	0		0	0		0	0		
0		0	0		0	913		913	0		0	0		0	0		0	
0		0	0		0	0		0	0		0	220		220	134		134	
0		0	0		0	1522		1522	604		604	0		0	517		517	
0		0	0		0	111		111	765		765	0		0	0		0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13302	125	13177	
0		0	0		0	0		0	660		660	0		0	0		0	
0		0	0		0	11797		11797	10262		10262	2900		2900	0		0	
0		0	0		0	0		0	0		0	0		0	10660		10660	
0		0	0		0	5698		5698	133		133	1233		1233	550		550	
0	0	0	0	0	0	0	0	0	0	0	0	634674	169	634505	856848	1058	855790	
0		0	0		0	0		0	4464		4464	7072		7072	6768		6768	
0		0	0		0	0		0	0		0	0		0	55399		55399	
0		0	0		0	0		0	2251		2251	0		0	0		0	
0		0	0		0	0		0	0		0	22800		22800	0		0	
0		0	0		0	1575		1575	0		0	0		0	0		0	
0		0	0		0	0		0	0		0	10517		10517	15514		15514	
0		0	0		0	2106		2106	1986		1986	0		0	21967		21967	
0		0	0		0	0		0	0		0	0		0	131830		131830	
0		0	0		0	28		28	241		241	114		114	0		0	
0		0	0		0	0		0	73		73	110		110	0		0	
0		0	0		0	2483		2483	600		600	0		0	0		0	
0		0	0		0	1483		1483	4676		4676	309		309	450		450	
0		0	0		0	323		323	1221		1221	0		0	0		0	
0	0	0	0	0	0	33438	0	33438	31340	0	31340	691038	169	690869	1117670	1183	1116487	

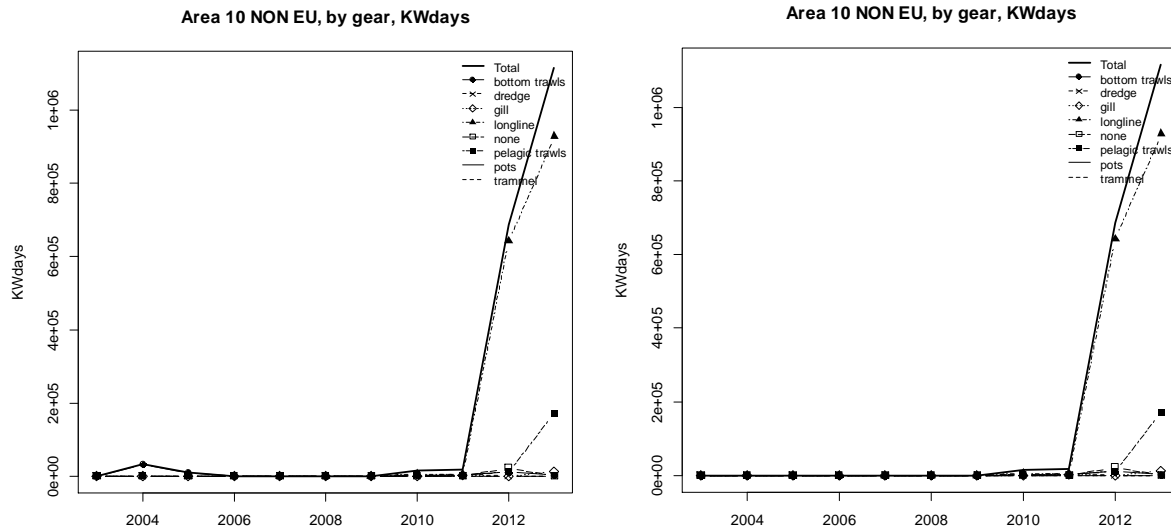


Figure 5.9.1.12.4.- Effort (kW*days) reported within ICES Sub-area X non-EU by gear type, 2003-2013, with (left) and without (right) reported deepwater effort.

5.9.1.13 Fishing effort in ICES area XII by fisheries and Member States only linked to Deep Sea species

Overall effort from ICES area XII is shown in Tables 5.9.1.13.1., 5.9.1.13.2 and Figure 5.9.1.13.1. Historically effort was reported by a number of countries, particularly UK. This effort covered bottom trawls, gill nets and pelagic trawls. In recent years, 2009, 2012 and 2013, Spain reported effort for bottom trawl, with France also reporting a very small amount in 2010 and 2011. Spain also reported small effort for pelagic trawl in the same years.

Table 5.9.1.13.1.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state ICES Sub-area XII non-EU(not including data from Portugal).

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
12 non EU	ESP							2361476			289766	212066
	EST			2712	28024	35328						
	FRA								5141	5530		
	GER	21000	22932	9708								
	IRL	29509										
	NED		14420	22944								
	PRT											
	UK	102568	49670	113809	2356	4480	9359					
12 non EU Total		153077	87022	149173	30380	39808	9359	2361476	5141	5530	289766	212066

Table 5.9.1.13.2.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state ICES Sub-area XII non-EU(not including data from Portugal).

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
12 non EU	BOTTOM TRAWLS	ESP				2712	28024	35328	1896092			287490	210596	
		EST												
		FRA									5141	5530		
		IRL	28159											
		UK	12768	3310	9255									
	GILL	UK	87514	46360	104554	2356								
		ESP											1232	
	LONGLINE	IRL	1350											
		PRT												
		NONE	ESP							241944				
	PELAGIC TRAWLS	ESP								223440			1044	1470
		GER	21000	22932	9708									
		NED		14420	22944									
	POTS	UK	2286					4480	9359					
12 non EU Total			153077	87022	149173	30380	39808	9359	2361476	5141	5530	289766	212066	

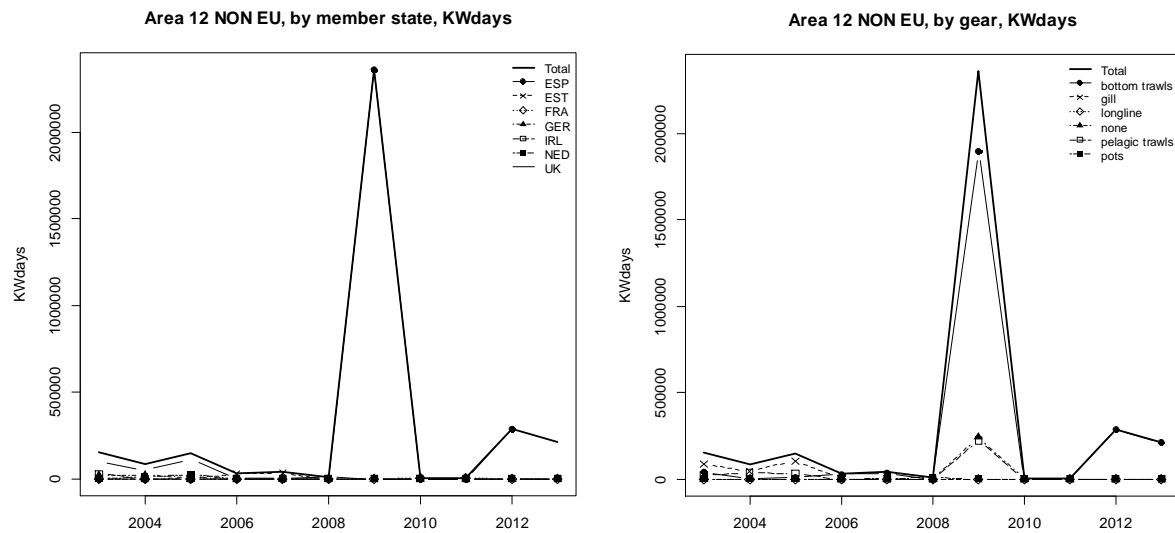


Figure 5.9.1.13.1. Deep Sea fishing effort (kW*days), 2003 – 2013, by country and by gear, in ICES Sub-area XII non-EU.

5.9.1.14 Fishing effort in ICES area XIV by fisheries and Member States only linked to Deep Sea species

Effort in ICES Area XIV (Tables 5.9.1.14.1, 5.9.1.14.2 and Figure 5.9.1.14.1), is mainly fished outside EU waters by Germany and the UK using otter trawls. UK effort peaked in 2004 but has since declined while German effort rose in the mid 2000s and remains at a relatively high level. Spain has reported otter trawl effort for 2009 with a smaller amount reported for 2012 and 2013. German pelagic trawling took place in the mid 2000s with effort also reported for 2011. Spain has also reported pelagic effort for 2012 and 2013.

Table 5.9.1.14.1.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state ICES Sub-area XIV non-EU(not including data from Portugal).

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
14 non EU	ESP							194085			211076	288164
	GER	1067316	1975374	1349730	1248640	1427857	1719689	1960922	1694549	2419111	1754268	2088597
	PRT											
	UK	801239	609192	261337		143075	96501	250077	186300	189933	105092	111520
14 non EU Total		1868555	2584566	1611067	1248640	1570932	1816190	2405084	1880849	2609044	2070436	2488281

Table 5.9.1.14.2.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state ICES Sub-area XIV non-EU(not including data from Portugal).

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
14 non EU	BOTTOM TRAWLS	ESP							194085			41329	107637	
		GER	1016316	1963026	1232628	1248640	1427857	1719689	1960922	1694549	2313211	1754268	2088597	
		UK	801239	609192	261337		143075	96501	250077	186300	189933	105092	111520	
	LONGLINE	PTR												
		ESP											169747	180527
	PELAGIC TRAWLS	ESP												
		GER		51000	12348	117102						105900		
	14 non EU Total			1868555	2584566	1611067	1248640	1570932	1816190	2405084	1880849	2609044	2070436	2488281

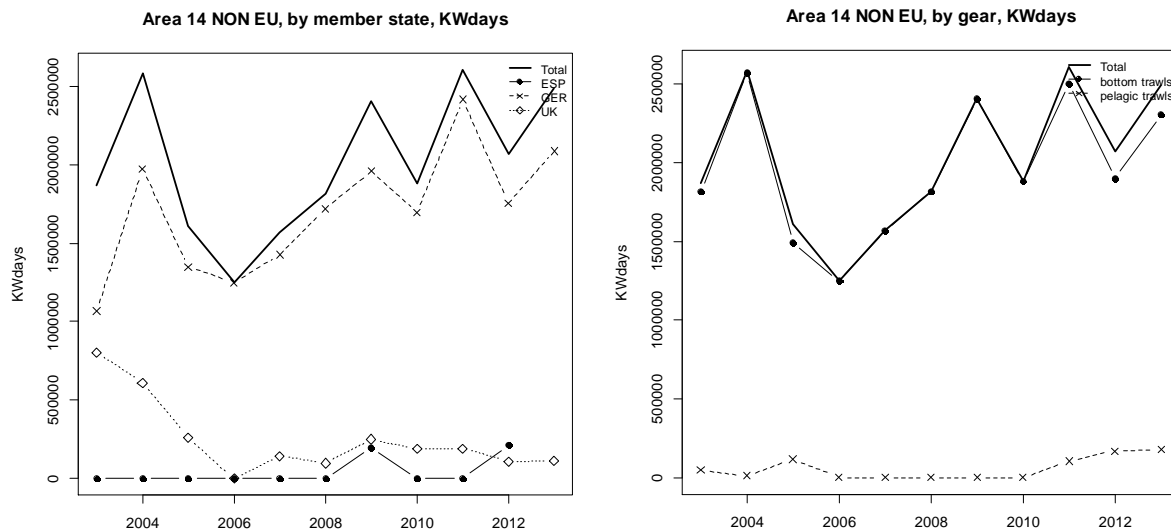


Figure 5.9.1.14.1. Deep Sea fishing effort (kW*days), 2003 – 2013, by country and by gear, in ICES Sub-area XIV non-EU.

5.9.1.15 Fishing effort in CECAF area 34.1.1

Deepwater 34.1.1 EU

Due to inconsistencies in Portuguese data trends cannot be presented for this area. A data resubmission will be reanalysed at the second meeting of this group in the autumn. The tables

and graphs presented below show the effort reported by the other member states fishing in this area, (Tables 5.9.1.15.1 and 5.9.1.15.2 and Figure 5.9.1.15.1).

Table 5.9.1.15.1.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state CECAF area 34.1.1 EU(not including data from Portugal).

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
34.1.1 EU	ESP											5412
	PRT											
34.1.1 EU Total												5412

Table 5.9.1.15.2.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state CECAF area 34.1.1 EU(not including data from Portugal).

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
34.1.1 EU	LONGLINE	ESP											4951
		PTR											
	TRAMMEL	ESP											
PTR													
34.1.1 EU Total												5412	

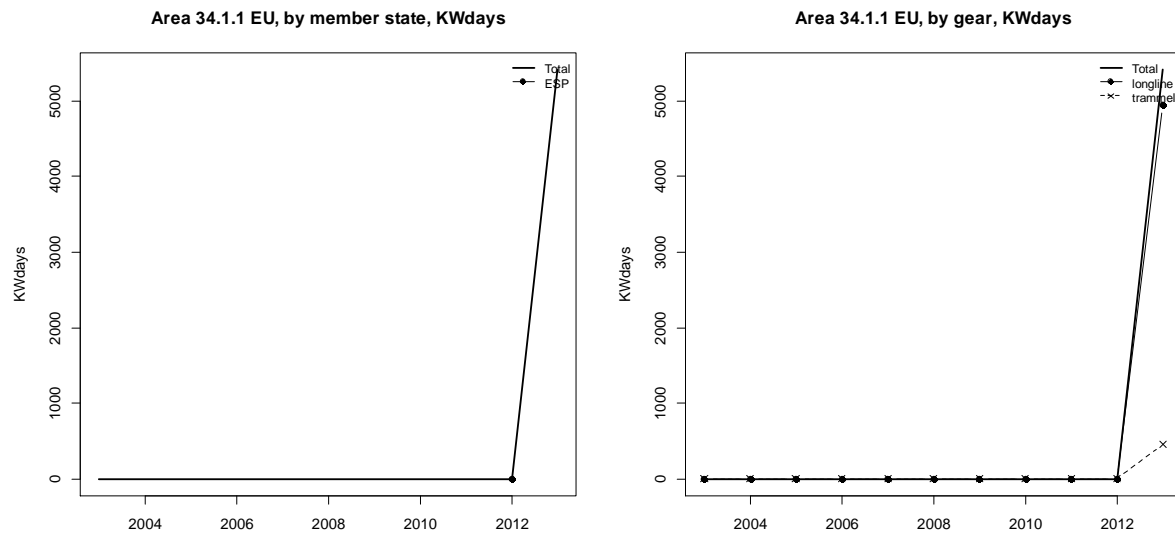


Figure 5.9.1.15.1. Deep Sea fishing effort (kW*days), 2003 – 2013, by country and by gear, in CECAF area 34.1.1 EU.

Western Waters 34.1.1 EU

Due to inconsistencies in Portuguese data trends cannot be presented for this area. A data resubmission will be reanalysed at the second meeting of this group in the autumn. The tables and graphs presented below show the effort reported by the other member states fishing in this area, (Table 5.9.1.15.3 and Figure 5.9.1.15.2).

Table 5.9.1.15.3.- Effort (kW*days) by country, gear and vessel size group within CECAF area 34.1.1 EU, 2003-2013(not including data from Portugal).

Area	Gear	MS	Vessel length	2003			2004			2005			2006			2007		
				Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
34.1.1 EU	bottom trawls	PRT	o15m															
	longline	ESP	u10m	0		0	0		0		0		0		0		0	
		PRT	o10t15m															
		ESP	o10t15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		ESP	o15m	0		0	0		0		0		0		0		0	
		PRT	o15m															
	pelagic trawls	ESP	o15m	0		0	0		0		0		0		0		0	
	trammel	ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	PRT	o15m																
34.1.1 EU Total				0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Effort	2008		2009		2010		2011		2012		2013			
	Deep Effort	Excluding Deep Effort	Deep Effort	Excluding Deep Effort	Deep Effort	Excluding Deep Effort	Deep Effort	Excluding Deep Effort	Deep Effort	Excluding Deep Effort	Deep Effort	Excluding Deep Effort		
0		0	0	0	0	0	0	0	106	106	63	63		
0	0	0	0	0	0	0	0	0	0	0	7888	4951	2937	
0		0	0	0	0	0	0	0	13032	13032	201121	201121		
0		0	0	0	0	0	0	0	81	81	8996	8996		
0	0	0	0	0	0	0	0	0	0	0	4455	461	3994	
0	0	0	0	0	0	0	0	0	13219	0	13219	222523	5412	217111

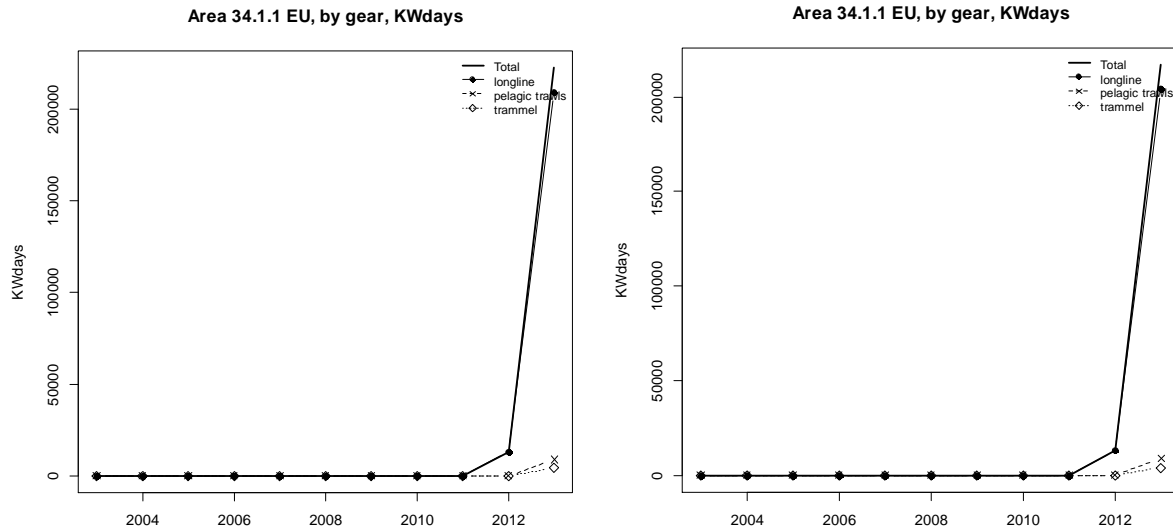


Figure 5.9.1.15.2.- Effort (kW*days) reported within CECAF area 34.1.1 EU by gear type, 2003-2013, with (left) and without (right) reported deepwater effort (not including data from Portugal).

Western Waters 34.1.1 non-EU

Due to inconsistencies in Portuguese data trends cannot be presented for this area. A data resubmission will be reanalysed at the second meeting of this group in the autumn. The tables and graphs presented below show the effort reported by the other member states fishing in this area, (Table 5.9.1.15.4 and Figure 5.9.1.15.3).

Table 5.9.1.16.4.- Effort (kW*days) by country, gear and vessel size group within CECAF area 34.1.1 non-EU, 2003-2013(not including data from Portugal).

Area	Gear	MS	Vessel length	2003			2004			2005			2006			2007			
				Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	
34.1.1 NON EU	bottom trawls	ESP	o15m	0		0	0		0	0		0	0		0	0		0	
		PRT	o15m																
	longline	ESP	u10m	0		0	0		0	0		0	0		0	0		0	0
		ESP	o10t15m	0		0	0		0	0		0	0		0	0		0	0
		PRT	o10t15m																
		ESP	o15m	0		0	0		0	0		0	0		0	0		0	0
	pelagic trawls	LIT	o40m	0		0	0		0	0		0	0		0	0		0	0
		trammel	ESP	o15m	0		0	0		0	0		0	0		0	0		0
34.1.1 NON EU Total			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Effort	2008		2009			2010			2011			2012			2013		
	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
0		0	0		0	0		0	0		0	0		0	503		503
0		0	0		0	0		0	0		0	0		0	44		44
0		0	0		0	0		0	0		0	0		0	920		920
0		0	0		0	0		0	0		0	309		309	9522		9522
0		0	0		0	365424		365424	0		0	0		0	6329628		6329628
0		0	0		0	0		0	0		0	0		0	614		614
0	0	0	0	0	0	365424	0	365424	0	0	0	309	0	309	6341231	0	6341231

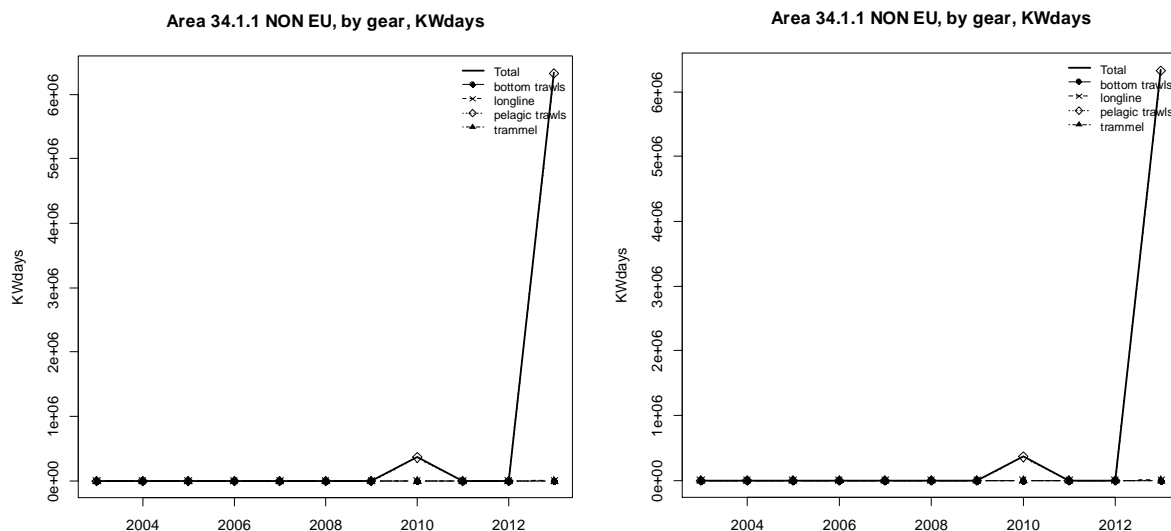


Figure 5.9.1.15.3.- Effort (kW*days) reported within CECAF area 34.1.1 non-EU by gear type, 2003-2013, with (left) and without (right) reported deepwater effort (not including data from Portugal).

5.9.1.16 Fishing effort in CECAF area 34.1.2

Deepwater 34.1.2.EU

Due to inconsistencies in Portuguese data trends cannot be presented for this area. A data resubmission will be reanalysed at the second meeting of this group in the autumn. The tables and graphs presented below show the effort reported by the other member states fishing in this area, (Tables 5.9.1.16.1 and 5.9.1.16.2 and Figure 5.9.1.16.1).

Table 5.9.1.16.1.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state CECAF area 34.1.2 EU (not including data from Portugal).

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
34.1.2 EU	ESP											4640
	PRT											
34.1.2 EU Total												4640

Table 5.9.1.16.2.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state CECAF area 34.1.2 EU (not including data from Portugal).

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
34.1.2 EU	LONGLINE	ESP											3332
		PRT											
	PELAGIC TRAWLS	ESP											34
	POTS	ESP											1273
34.1.2 EU Total													4640

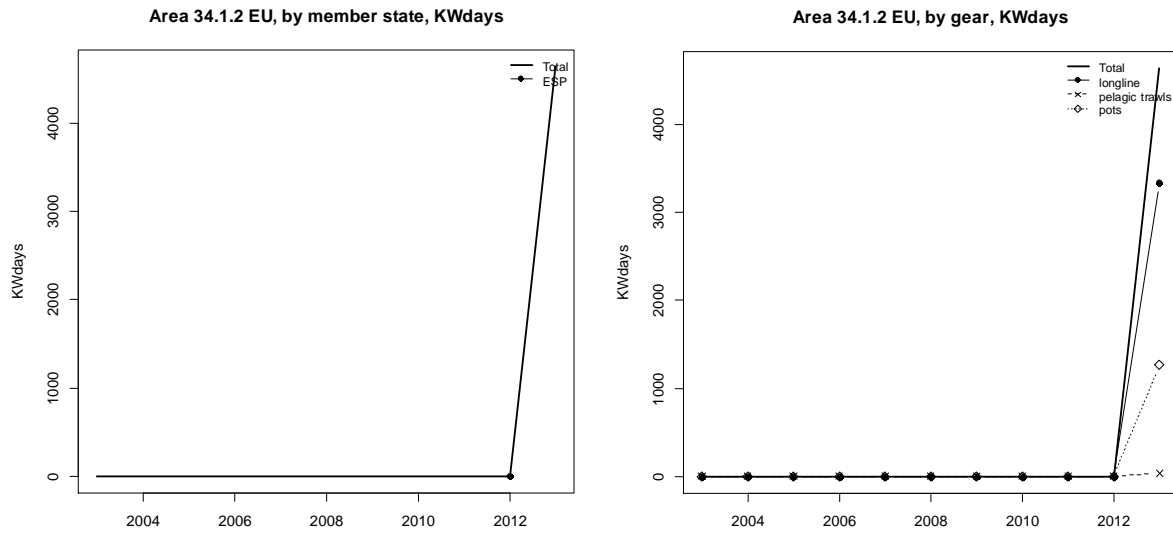


Figure 5.9.1.16.1. Deep Sea fishing effort (kW*days), 2003 – 2013, by country and by gear, in CECAF area 34.1.2 EU (not including data from Portugal).

Western Waters 34.1.2.EU

Due to inconsistencies in Portuguese data trends cannot be presented for this area. A data resubmission will be reanalysed at the second meeting of this group in the autumn. The tables and graphs presented below show the effort reported by the other member states fishing in this area, (Table 5.9.1.16.3 and Figure 5.9.1.16.2).

Table 5.9.1.16.3.- Effort (kW*days) by country, gear and vessel size group within CECAF area 34.1.2 EU, 2003-2013 (not including data from Portugal).

Area	Gear	MS	Vessel length	2003			2004			2005			2006			2007			
				Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	
34.1.2 EU	bottom trawls	ESP	o15m	0		0	0		0	0		0	0		0	0		0	
	dredge	ESP	o10t15m	0		0	0		0	0		0	0		0	0		0	
	gill	ESP	o10t15m	0		0	0		0	0		0	0		0	0		0	
	longline	ESP	u10m	0		0	0		0	0		0	0		0	0		0	
		PRT	u10m																
		ESP	o10t15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		PRT	o10t15m																
		ESP	o15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		PRT	o15m																
	none	ESP	o15m	0		0	0		0	0		0	0		0	0		0	
	pelagic trawls	ESP	o10t15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		ESP	o15m	0		0	0		0	0		0	0		0	0		0	
	pots	ESP	u10m	0		0	0		0	0		0	0		0	0		0	
		ESP	o10t15m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRL		o10t15m	0		0	0		0	0		0	0		0	0		0		
trammel	PRT	o15m																	
34.1.2 EU Total			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

	2008			2009			2010			2011			2012			2013		
Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	
0		0	0		0	0		0	0		0	0		0	747		747	
0		0	0		0	0		0	0		0	0		0	18		18	
0		0	0		0	0		0	0		0	0		0	294		294	
0		0	0		0	0		0	0		0	0		0	9383		9383	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	157971	165	157806	
0	0	0	0	0	0	0	0	0	0	0	0	43967	0	43967	626949	3168	623781	
0		0	0		0	0		0	0		0	1484		1484	0		0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	121980	34	121946	
0		0	0		0	0		0	0		0	0		0	45401		45401	
0		0	0		0	0		0	0		0	0		0	7820		7820	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41315	1273	40042	
0		0	0		0	0		0	90		90	0		0	0		0	

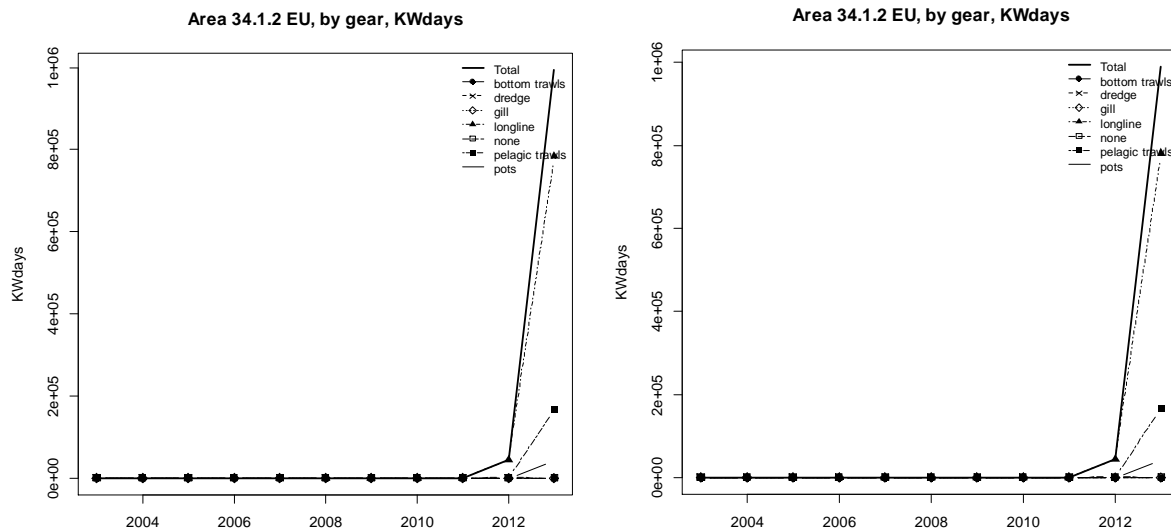


Figure 5.9.1.16.2.- Effort (kW*days) reported within CECAF area 34.1.2 EU by gear type, 2003-2013, with (left) and without (right) reported deepwater effort (not including data from Portugal).

Western Waters 34.1.2 non-EU

Spain has reported some effort for 2012 and 2013, (Table 5.9.1.16.4 and Figure 5.9.1.16.3).

Table 5.9.1.16.4.- Effort (kW*days) by country, gear and vessel size group within CECAF area 34.1.2 non-EU, 2010-2013.

Area	Gear	MS	Vessel length	2010		2011		2012		2013	
				Effort	Excluding Deep Effort	Effort	Excluding Deep Effort	Effort	Excluding Deep Effort	Effort	Excluding Deep Effort
34.1.2 NON EU	longline	ESP	o10t15m	0	0	0	0	0	0	128	128
		ESP	o15m	0	0	0	0	1253	1253	6528	6528
	none	ESP	o15m	0	0	0	0	3308	3308	0	0
	pelagic trawls	ESP	o15m	0	0	0	0	0	0	316	316
34.1.2 NON EU Total				0	0	0	0	4561	4561	6972	6972

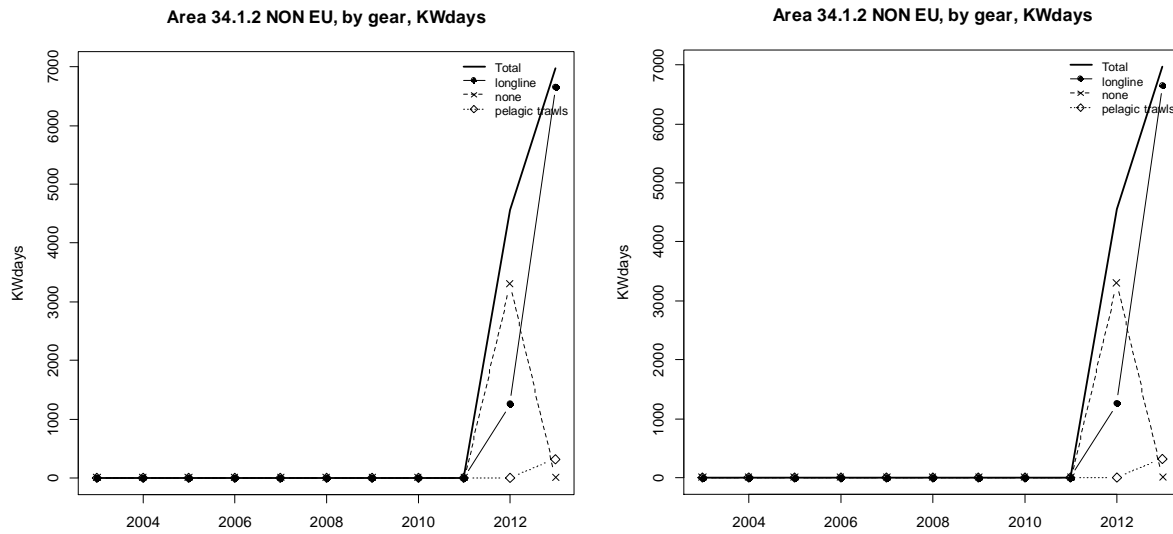


Figure 5.9.1.16.3.- Effort (kW*days) reported within CECAF area 34.1.2 non EU by gear type, 2003-2013, with (left) and without (right) reported deepwater effort.

5.9.1.17 Fishing effort in CECAF area 34.1.3

Deepwater and Western Waters 34.1.3 EU

No effort was submitted within this area.

Deepwater 34.1.3 non-EU

Very little effort has been recorded for this area. The Netherlands recorded some pelagic trawl effort for 2004, and Spain recorded bottom trawl effort for 2012 and 2013, (Tables 5.9.1.17.1 and 5.9.1.17.2 and Figure 5.9.1.17.1).

Table 5.9.1.17.1.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state CECAF area 34.1.3 non-EU.

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
34.1.3 non EU	ESP										304166	111250
	NED		22944									
34.1.3 non EU Total			22944								304166	111250

Table 5.9.1.17.2.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state CECAF area 34.1.3 non-EU.

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
34.1.3 non2 EU	BOTTOM TRAWLS	ESP										304166	111250
	PELAGIC TRAWLS	NED		22944									
34.1.3 non EU Total				22944								304166	111250

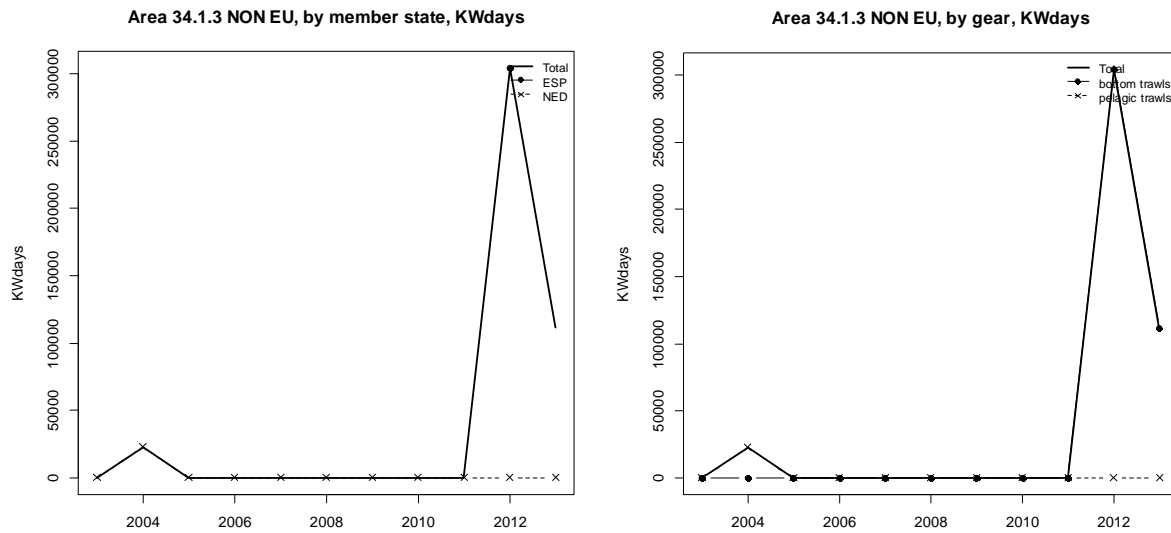


Figure 5.9.1.17.1. Deep Sea fishing effort (kW*days), 2003 – 2013, by country and by gear, in CECAF area 34.1.3 non-EU.

Western Waters 34.1.3 non-EU

Effort data is very sparse for this area. The Netherlands made a submission of deepwater effort in 2004, and in 2012 and 2013 Spain also submitted deepwater effort, (Table 5.9.1.17.3).

Table 5.9.1.17.3.- Western Waters fishing effort (kW*days) 2003 – 2013 by gear and member state CECAF area 34.1.3 non-EU.

Area	Gear	MS	Vessel length	2003		2004		2005		2006		2007	
				Effort	Excluding Deep Effort	Effort	Excluding Deep Effort	Effort	Excluding Deep Effort	Effort	Excluding Deep Effort	Effort	Excluding Deep Effort
34.1.3 NON EU	bottom trawls	ESP	015m		0		0		0		0		0
	pelagic trawls	NED	015m		0		22944		0		0		0
34.1.3 NON EU Total					0		22944		0		0		0

Effort	2008		2009			2010			2011			2012			2013		
	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
	0			0			0			0			304166			111250	
	0			0			0			0			0			0	
	0			0			0			0			304166			111250	

5.9.1.18 Fishing effort in CECAF area 34.2

Deepwater 34.2.0 EU

Due to inconsistencies in Portuguese data trends cannot be presented for this area. A data resubmission will be reanalysed at the second meeting of this group in the autumn.

Western Waters 34.2.0 EU

Due to inconsistencies in Portuguese data trends cannot be presented for this area. A data resubmission will be reanalysed at the second meeting of this group in the autumn. The tables and graphs presented below show the effort reported by the other member states fishing in this area, (Table 5.9.1.18.1 and Figure 5.9.1.18.1).

Table 5.9.1.18.1.- Effort (kW*days) by country, gear and vessel size group within CECAF area 34.2.0 EU, 2008-2013.

Area	Gear	MS	Vessel length	2008			2009			2010			2011			2012			2013		
				Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
34.2.0 EU	longline	PRT	o10t15m																		
		ESP	o15m	0		0	0		0	0		0		0	38360		38360	42893		42893	
		PRT	o15m																		
	none	ESP	o15m	0		0	0		0	0		0		588		588	0		0		0
	pelagic trawl	IRL	o10t15m	291		291	0		0	0		0		0		0	0		0		0
34.2.0 EU Total				291	0	291	0	0	0	0	0	0	0	38948	0	38948	42893	0	42893	0	42893

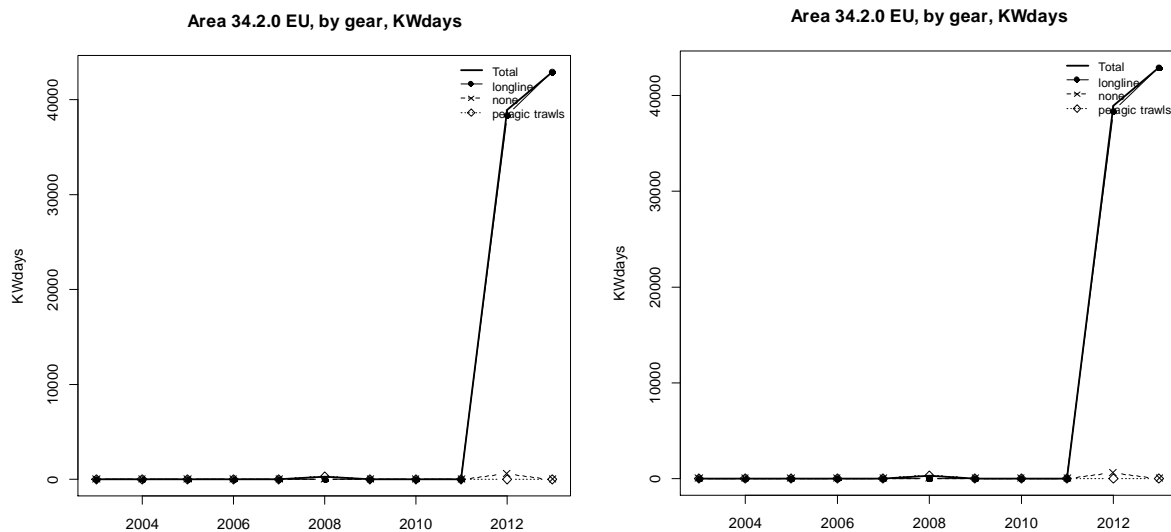


Figure 5.9.1.18.1.- Effort (kW*days) reported within CECAF area 34.2.0 EU by gear type, 2003-2013, with (left) and without (right) reported deepwater effort (not including data from Portugal).

Deepwater 34.2.0 non-EU

Due to inconsistencies in Portuguese data trends cannot be presented for this area. A data resubmission will be reanalysed at the second meeting of this group in the autumn. The tables presented below show the effort reported by the other member states fishing in this area, (Table 5.9.1.18.2, Table 5.9.1.18.3)

Table 5.9.1.18.2.- Deep Sea fishing effort (kW*days) 2003 – 2013 by member state CECAF area 34.2.0 non-EU (not including data from Portugal).

Area	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
34.2.0 non EU	ESP											2955
	PRT											
34.2.0 non EU Total												2955

Table 5.9.1.18.3.- Deep Sea fishing effort (kW*days) 2003 – 2013 by gear and member state CECAF area 34.2.0 non-EU (not including data from Portugal).

Area	Gear	MS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
34.2.0 non EU	LONGLINE	ESP											2955
		PRT											
34.2.0 non EU Total												2955	

Western waters CECAF Area 34.2.0 non-EU

Due to inconsistencies in Portuguese data trends cannot be presented for this area. A potential data resubmission will be reanalysed at the second meeting of this group in the autumn. The tables and graphs presented below show the effort reported by the other member states fishing in this area, (Table 5.9.1.18.4, Figure 5.9.1.18.2).

Table 5.9.1.18.6.- Effort (kW*days) by country, gear and vessel size group within CECAF area 34.2.0 non-EU, 2009-2013 (not including data from Portugal).

Area	Gear	MS	Vessel length	2009			2010			2011			2012			2013		
				Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort	Effort	Deep Effort	Excluding Deep Effort
34.2.0 NO	bottom tr	ESP	o15m	0		0	0		0		0	0		0		1367		1367
	longline	ESP	o15m	0	0	0	0	0	0	0	0	542704	0	542704	534468	2955	531513	
		PRT	o15m															
	none	ESP	o15m	0		0	0		0		0	12201		12201	0		0	
	pelagic tra	ESP	o15m	0		0	0		0		0	0		0	65268		65268	
		LIT	o40m	0		0	0		0		0	20608		20608	0		0	
	trammel	ESP	o15m	0		0	0		0		0	0		0	331		331	
34.2.0 NON EU Total				0	0	0	0	0	0	0	0	575513	0	575513	601434	2955	598479	

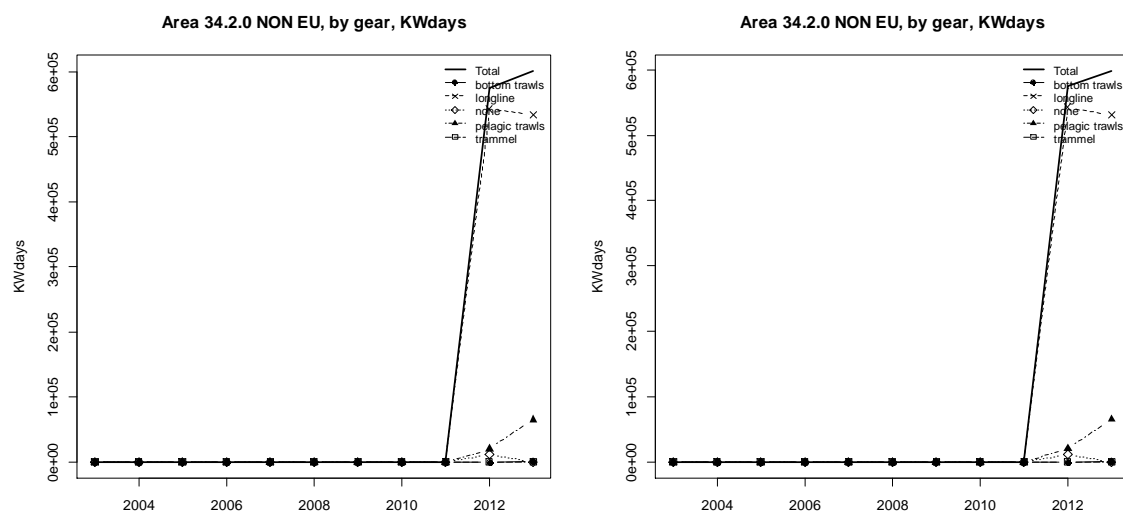


Figure 5.9.1.18.2.- Effort (kW*days) reported within CECAF area 34.2.0 non-EU by gear type, 2003-2013, with (left) and without (right) reported deepwater effort (not including data from Portugal).

5.9.2 ToR 1b Catches (landings and discards) by area

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.9.3 ToR 1c CPUE and LPUE (landings and discards) by area

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.9.4 ToR 2 Extent to which linking VMS and logbook data could improve the accuracy and precision of Deep Sea and Western Waters fisheries effort and catch estimation

STECF EWG 14-06 has not addressed this ToR due to time constraints.

5.9.5 ToR 3 Recent effort trends in pelagic fisheries, with emphasis on ICES areas XI, X and CECAF areas

STECF EWG 14-06 has not addressed this ToR due to time constraints. Respective data on effort trends in pelagic fisheries are available on the website: <http://stecf.jrc.ec.europa.eu/web/stecf/ewg1406>

5.9.6 ToR 5 Comments on data quality and unexpected effects in Deep Sea and Western Waters fisheries data

STECF EWG 14-06 has no specific comments.

5.10 Bay of Biscay effort regime evaluation in the context of Council Regulation (EC) No 388/2006)

5.10.1 ToR 1.a Fishing effort in kWdays, GTdays and number of vessels by Member State and fisheries

Catch and effort data have been provided by all Member States. Spanish data have been provided only for 2012 & 2013. Spanish data provided the previous years on the period before 2012 are now under revision, effort and catch time series need to be reconsidered before further complete analysis of the activity in this area.

All analyses consider the 2012 & 2013 Spanish data, the only years for which Spanish data are available.

STECF-EWG-14-06 decided only to provide effort trends graphically starting from 2004 (10 years) onwards. Following the ToRs, all analyses were made for 8a and 8b separately as in 2013.

In 8a-BoB, 90% of 2013 effort is French, 7% Spain, 1% Belgium and 1% Netherlands. The main French fisheries are otter trawl, trammel and gill net and pelagic trawl. The main Spain fisheries are longline, otter trawl and gill net. Only Belgium beam trawl fleet and Netherlands pelagic trawl fleet are operational in 8a-BoB (Figure 5.10.1.2). In comparison with 2012 (Figure 5.10.1.1) Netherlands pelagic trawl fleet is a new fleet operational in 8a-BoB. Effort from Spain and French otter trawl fleet in 8a-BoB has decreased.

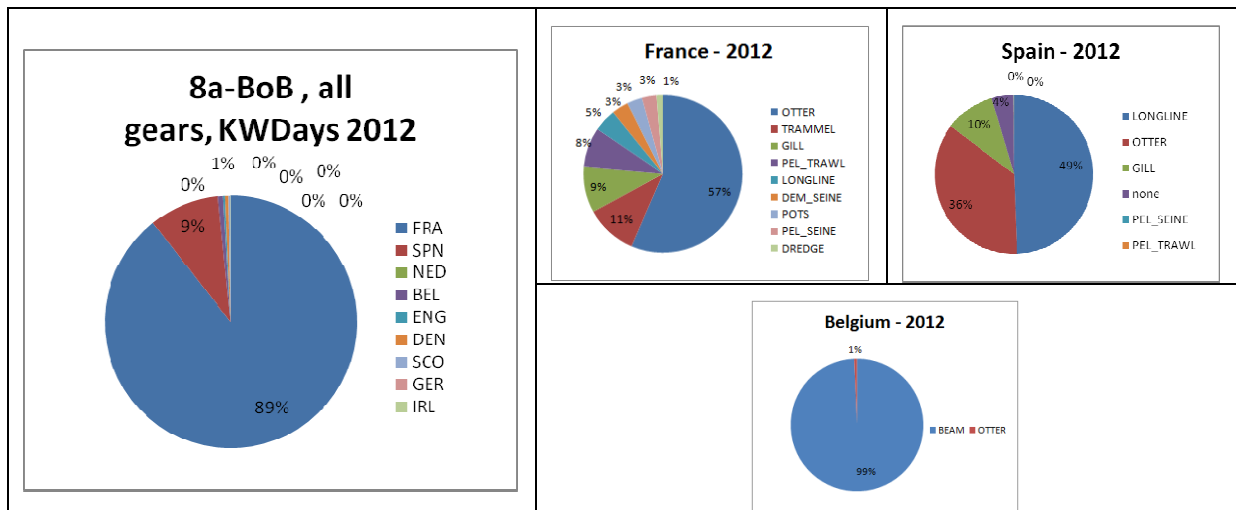


Figure 5.10.1.1: 8a-BoB, Distribution per country (and gear) of the nominal effort (kWdays) in 2012.

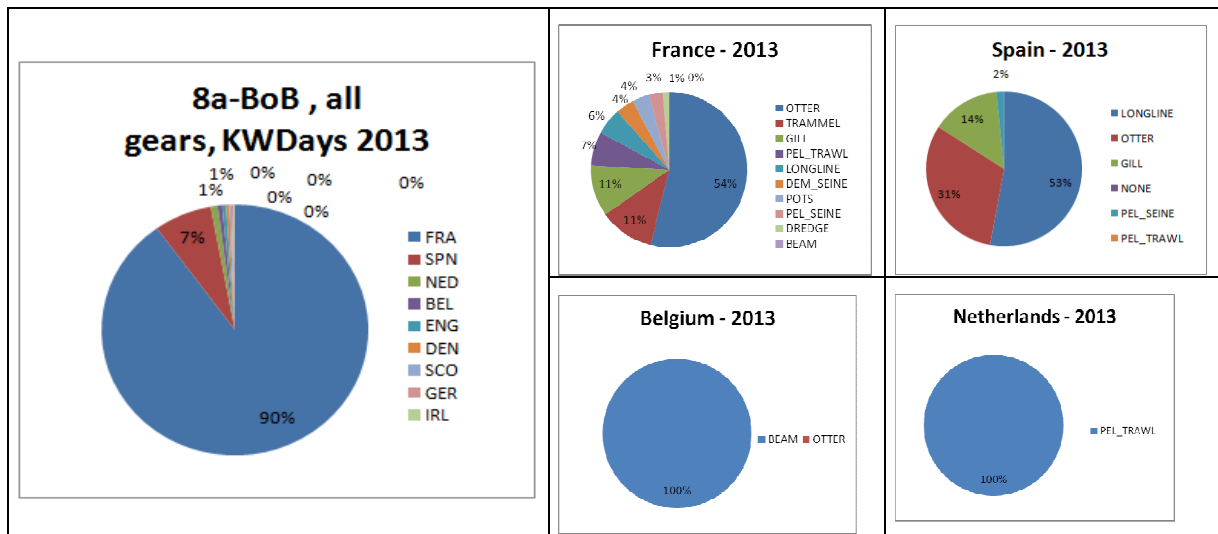


Figure 5.10.1.2: 8a-BoB, Distribution per country (and gear) of the nominal effort (kWdays) in 2013.

In 8b-BoB, 67% of effort in 2013 is French, 25% Spain, 6% Belgium and 1% Netherlands and England. The main French fisheries are otter trawl, trammel and gill net, longline and pelagic trawl. The main Spanish fisheries are otter trawl, pelagic seine and longline. Only Belgium beam trawl fleet and Netherlands and England pelagic trawl fleets are operational in 8b-BoB (Figure 5.10.1.4). In comparison with 2012 (Figure 5.10.1.3) Netherlands and England pelagic trawl fleets are new fleets operational in 8b-BoB. Spanish longline fleet effort reduced while Spanish pelagic seine fleet effort increased.

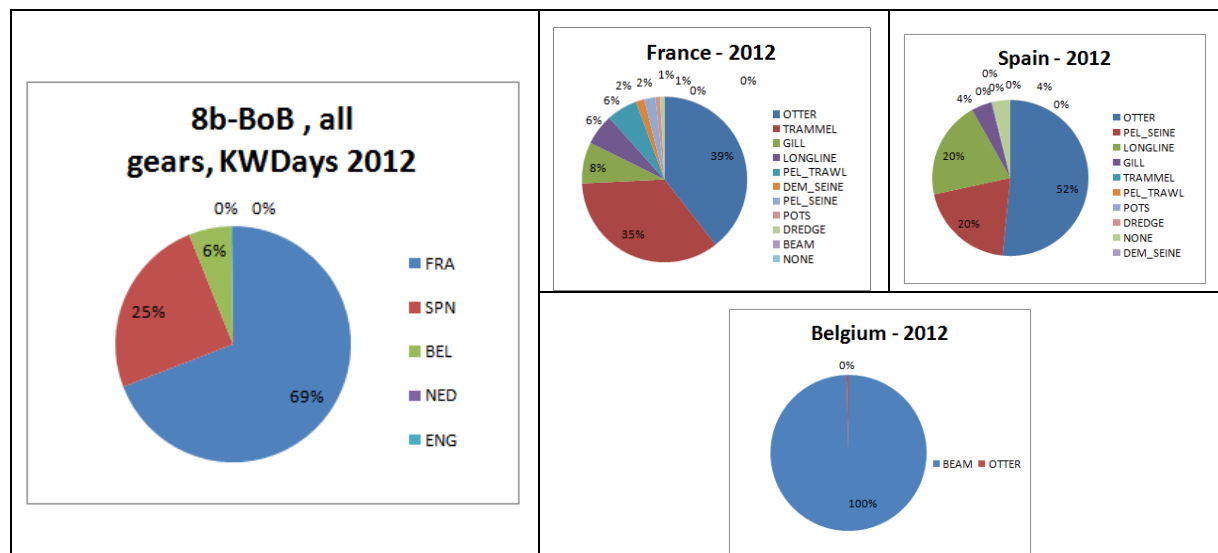


Figure 5.10.1.3: 8b-BoB, Distribution per country (and gear) of the nominal effort (kWdays) in 2012.

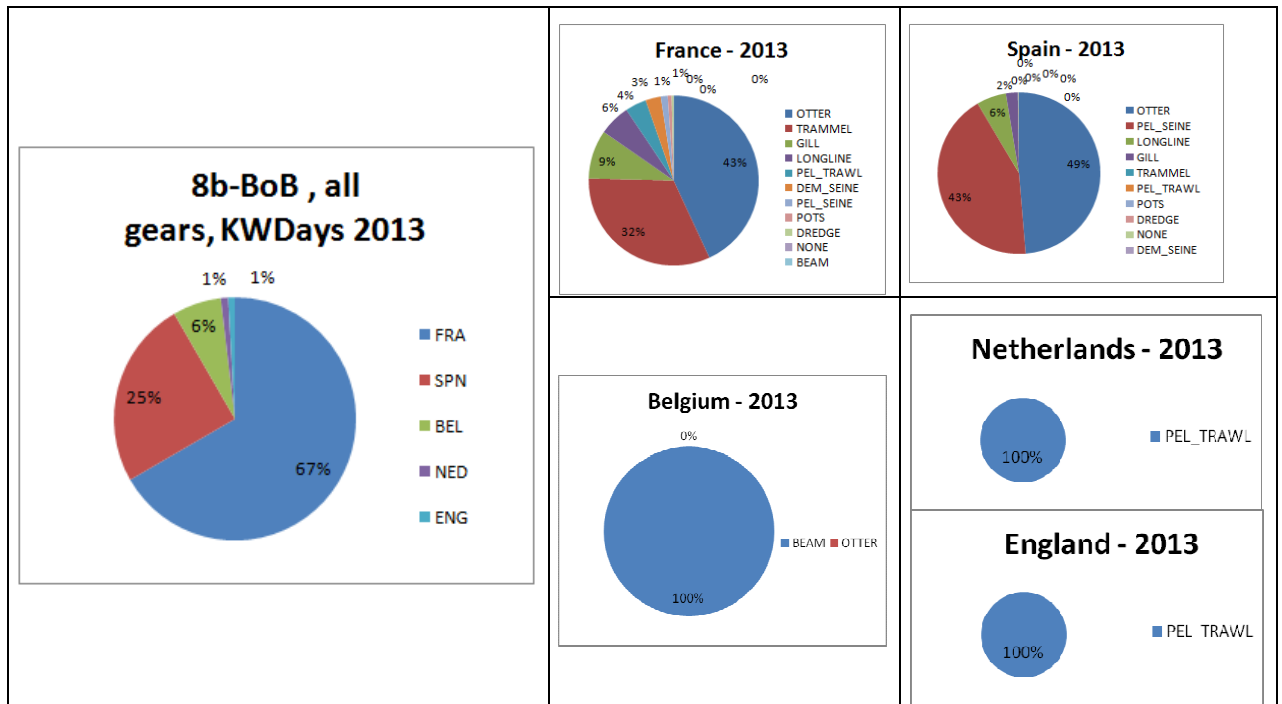


Figure 5.10.1.4: 8b-BoB, Distribution per country (and gear) of the nominal effort (kWdays) in 2013.

All 2012&2013 figures presented below take into account the Spanish data (only provided for these years). This issue must be kept in mind before any firm conclusions are drawn.

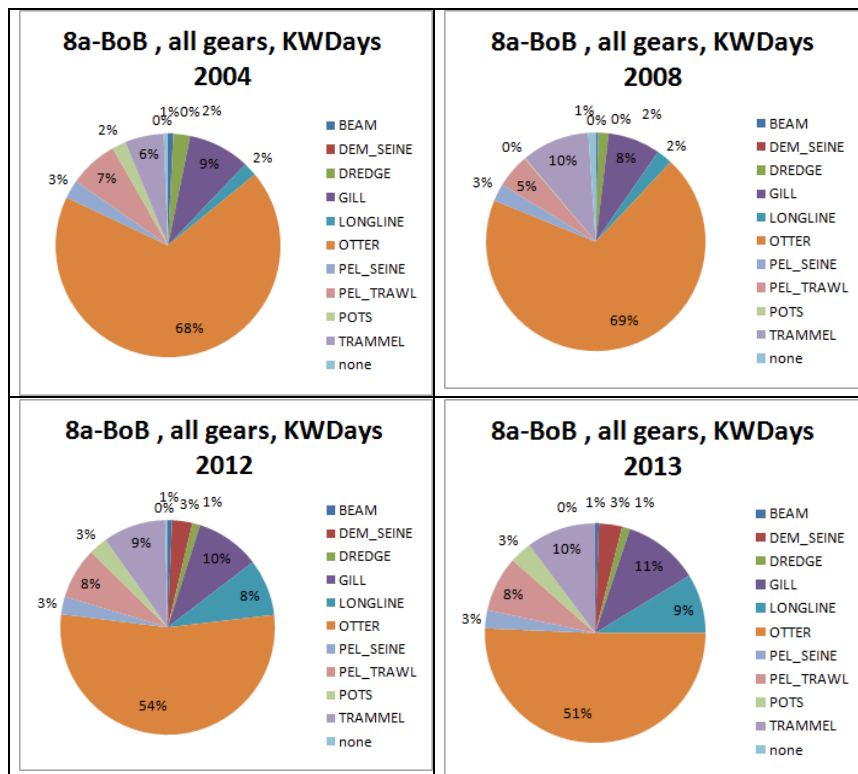


Figure 5.10.1.5: 8a-BoB, Trend in the distribution per gear of the nominal effort (KWDays).

The French otter trawl fleet being by far the dominating fleet with percentages around 60% of the effort deployed in the last 10 years in 8a-BoB (Table 5.10.1.1 and Figures 5.10.1.5).

The other fleets involved are the French trammel and gill nets with about 10% of the effort deployed in the last few years.

The French pelagic trawl was predominantly before 2004 (around 50% in 2000) but went down to around 7% in the last 10 years following a large decommissioning due to the anchovy crisis. New Netherlands pelagic trawl account for about 1% of the effort in 2013.

The Belgian beam trawl fleet accounts only for about 1% of the effort in 8a-BoB.

The Spanish and French longline fleet represent together 9% of the effort in 2012&2013.

Demersal seine is a new gear which appears the last four years.

Information on the nominal effort of the specific condition SBCIIIART5 is given in Tables 5.10.1.1 5.10.1.5 and 5.10.1.6. This information has only been provided for the full time series by Belgian. It has only been provided for the 2010-2013 period for French vessels. This results in an apparent shift in effort for the main gear type from the “none” category to the specon “SBCIIIART5”. The specon “SBCIIART5” was not provided for Spanish data. **Following these considerations, no firm conclusion could be drawn based on the figures 5.10.1.7 presented below.**

As a quality check, STECF routinely compares the data currently submitted with the data submitted during the previous year, as is displayed in Table 5.10.1.3. Compared to the data submitted in 2013, no differences appear between the two datasets.

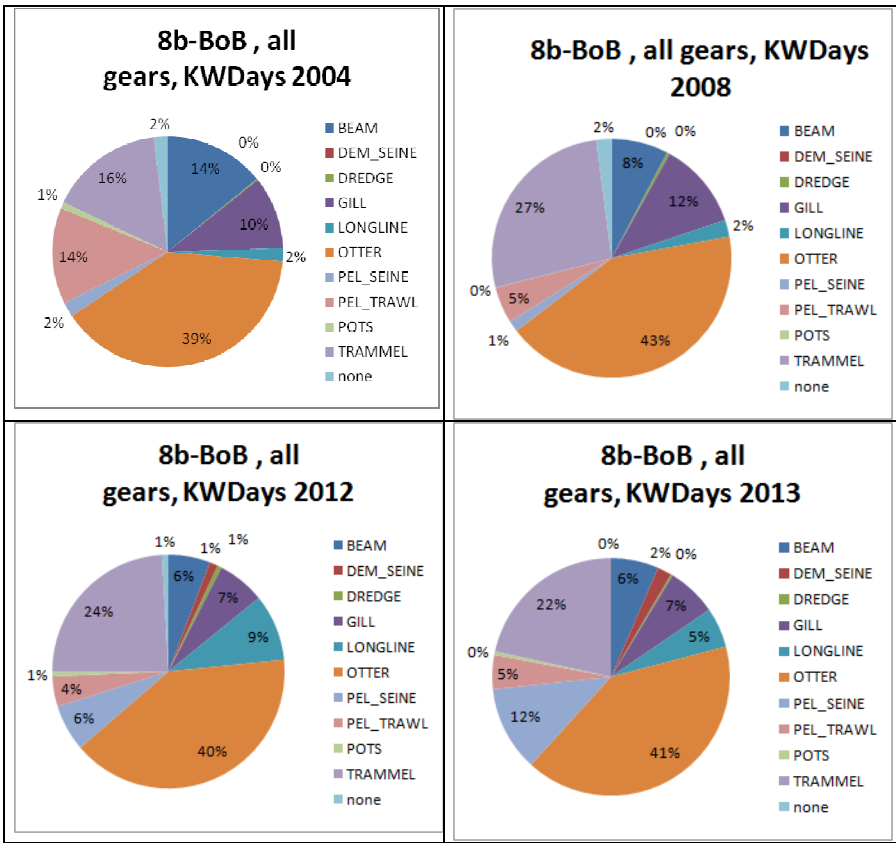


Figure 5.10.1.6: 8b-BoB, Trend in the distribution per gear of the nominal effort (kWdays).

The French otter trawl fleet being by far the dominating fleet with percentages around 40% of the effort deployed in all the period in 8b-BoB (Table 5.10.1.2 and Figures 5.10.1.6). The percentage increase a little in the last two years adding the Spanish otter trawl fleet.

The other fleets involved are the French trammel and gill nets with stable trends from about 25% and 10% in all the period.

The French pelagic trawl was important before 2004 (around 20% in 2000-2003 period) and went down to less than 5% in the last few years following a large decommissioning due to the anchovy crisis. New Netherlands and England pelagic trawl account for about 1% of the effort in 2013.

The Belgian beam trawl fleet accounts for about 8% of the effort in the last nine years.

The French longline fleet increase the last few years from less than 1% up to around 7% in the last few years. Spanish longline fleet was important in 2012 (5% of the effort) but represent only 1% of the effort in 2013.

Demersal seine is a new gear which appears the last four years.

The Spanish pelagic seine fleet was 6% of the effort in 2012 and increase up to 12% in 2013.

Information on the nominal effort of the specific condition SBCIIIART5 is given in Tables 5.10.1.2, 5.10.1.7 and 5.10.1.8. This information has only been provided for the full time series by Belgian. It has only been provided for the 2010-2013 period for French vessels. This results in an apparent shift in effort for the main gear type from the “none” category to the specon “SBCIIIART5”. The specon “SBCIIART5” was not provided for Spanish data. **Following these considerations, no firm conclusion could be drawn based on the figures 5.10.1.8 presented below.**

As a quality check, STECF routinely compares the data currently submitted with the data submitted during the previous year, as is displayed in Table 5.10.1.4. Compared to the data submitted in 2013, no differences appear between the two datasets.

Table 5.10.1.1 – Bay of Biscay – 8a - Trend in nominal effort (kW*days at sea) by existing derogations stated in article 5 of Coun. Reg. 388/2006 and Member State, 2004-2013. Derogations are sorted by gear, special condition (SPECON), and country (o. 10m length vessels). Data qualities are summarised in Section 4 of the report.

REG AREA COD	REG GEAR COD	SPECON	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
8a-BoB	BEAM	none	BEL	105 779	123 376								
8a-BoB			ENG					880					
8a-BoB			FRA	26 032	35 522	4 104					1 111		412
8a-BoB	BEAM	none	Total	131 811	158 898	4 104	-	880	-	-	1 111	-	412
8a-BoB	BEAM	SBcIIart5	BEL			241 716	226 017	91 076	108 412	152 261	150 812	136 302	102 233
8a-BoB			FRA							588			
8a-BoB	BEAM	SBcIIart5	Total			241 716	226 017	91 076	108 412	152 849	150 812	136 302	102 233
8a-BoB	DEM_SEINE	NONE	FRA							331 067	612 472	99 372	142 166
8a-BoB			NED						6 152				
8a-BoB	DEM_SEINE	none	Total						6 152	331 067	612 472	99 372	142 166
8a-BoB	DEM_SEINE	SBcIIIart5	FRA								215	542 371	500 008
8a-BoB	DEM_SEINE	SBcIIIart5	Total								215	542 371	500 008
8a-BoB	DREDGE	none	FRA	414 407	420 148	533 612	468 381	377 579	366 074	90 026	122 145	176 601	138 424
8a-BoB			IRL										
8a-BoB	DREDGE	none	Total	414 407	420 148	533 612	468 381	377 579	366 074	90 026	122 145	176 601	138 424
8a-BoB	DREDGE	SBcIIart5	FRA							22 677	8 443	70 603	83 465
8a-BoB	DREDGE	SBcIIart5	Total							22 677	8 443	70 603	83 465
8a-BoB	GILL	none	ENG	48 409	32 606	121 744	39 301	18 347	44 662	60 023	63 140	52 447	59 504
8a-BoB			ESP									189 434	188 616
8a-BoB			FRA	1 420 988	2 128 437	2 396 764	1 821 041	1 790 230	1 765 262	1 534 146	1 274 483	981 798	977 793
8a-BoB			SCO	58 729	78 826	33 150	54 702	93 152	29 681	49 473	21 850	28 060	45 553
8a-BoB	GILL	none	Total	1 528 126	2 239 869	2 551 658	1 915 044	1 901 729	1 839 605	1 643 642	1 359 473	1 251 739	1 271 466
8a-BoB	GILL	SBcIIart5	FRA							575 670	471 754	776 035	821 799
8a-BoB	GILL	SBcIIart5	Total							575 670	471 754	776 035	821 799
8a-BoB	LONGLINE	none	ENG	97 728	69 064	57 542	33 853	14 941					
8a-BoB			ESP									920 724	700 131
8a-BoB			FRA	241 134	365 723	656 098	621 551	546 023	546 023	603 895	701 468	710 982	750 393
8a-BoB			IRL		842	2 105							
8a-BoB			SCO			6 797	1 378	20 726		9 337	58 942	2 024	5 652
8a-BoB	LONGLINE	none	Total	338 862	435 629	722 542	656 782	581 690	546 023	613 232	760 410	1 633 730	1 456 176
8a-BoB	LONGLINE	SBcIIart5	FRA							72 918	43 375	151 567	183 221
8a-BoB	LONGLINE	SBcIIart5	Total							72 918	43 375	151 567	183 221
8a-BoB	OTTER	none	DEN				11 850		42 920				
8a-BoB			ENG	11 033		41 472			7 920	3 240	26 490		
8a-BoB			ESP									675 020	412 947
8a-BoB			FRA	11 645 225	14 681 996	18 526 531	20 544 828	17 065 302	16 945 895	6 396 041	6 287 764	4 506 741	3 573 180
8a-BoB			IRL	985		1 209							
8a-BoB			NIR						1 624				
8a-BoB			SCO									10 723	328
8a-BoB	OTTER	none	Total	11 657 243	14 681 996	18 569 212	20 556 678	17 065 302	16 998 359	6 399 281	6 314 254	5 192 484	3 986 455
8a-BoB	OTTER	SBcIIart5	BEL									950	
8a-BoB			FRA							5 344 311	5 556 913	6 068 276	5 545 005
8a-BoB	OTTER	SBcIIart5	Total							5 344 311	5 556 913	6 069 226	5 545 005
8a-BoB	PEL_SEINE	none	ESP									2 202	21 538
8a-BoB			FRA	459 144	447 532	591 583	611 037	637 343	637 028	684 055	744 393	556 022	475 353
8a-BoB	PEL_SEINE	none	Total	459 144	447 532	591 583	611 037	637 343	637 028	684 055	744 393	558 224	496 891
8a-BoB	PEL_SEINE	SBcIIart5	FRA							828		588	7 055
8a-BoB	PEL_SEINE	SBcIIart5	Total							828		588	7 055
8a-BoB	PEL_TRAWL	none	DEN			38 027	181 719	146 452	181 440	29 240	7 123	89 296	74 238
8a-BoB			ENG	139 716	119 686	92 445	36 288	155 677	170 025	44 490	24 501		26 812
8a-BoB			ESP									1 323	
8a-BoB			FRA	768 951	2 022 315	2 499 642	2 148 883	482 127	441 705	1 203 385	1 033 030	1 178 408	832 171
8a-BoB			GER	122 593	263 370	169 488		85 325	20 800	41 237	11 025		51 374
8a-BoB			IRL	65 951	52 942	37 511	27 652		4 028	15 000		13 439	25 397
8a-BoB			NED	114 007	512 294	428 503	94 666	367 306	166 742	99 986	11 880		156 320
8a-BoB			NIR										
8a-BoB			SCO										
8a-BoB	PEL_TRAWL	none	Total	1 211 218	2 970 607	3 265 616	2 489 208	1 236 887	1 004 777	1 433 338	1 087 559	1 282 466	1 166 312
8a-BoB	PEL_TRAWL	SBcIIart5	FRA							101972	108910	337915	370111
8a-BoB	PEL_TRAWL	SBcIIart5	Total							101 972	108 910	337 915	370 111
8a-BoB	POTS	none	ENG	10 185									
8a-BoB			FRA	312 543	173 870	153 118	126 862	22 195	22 195	619 138	551 436	451 463	469 818
8a-BoB			GER	21 168		13 631	11 500	7 056					
8a-BoB	POTS	none	Total	343 896	173 870	166 749	138 362	29 251	22 195	619 138	551 436	451 463	469 818
8a-BoB	POTS	SBcIIart5	FRA							20 990	71 587	134 265	138 784
8a-BoB	POTS	SBcIIart5	Total							20 990	71 587	134 265	138 784
8a-BoB	TRAMMEL	none	ENG					547					
8a-BoB			FRA	965 787	1 615 492	2 530 660	2 961 192	2 471 064	2 471 064	355 544	307 538	249 151	257 476
8a-BoB	TRAMMEL	none	Total	965 787	1 615 492	2 530 660	2 961 192	2 471 611	2 471 064	355 544	307 538	249 151	257 476
8a-BoB	TRAMMEL	SBcIIart5	FRA							1 703 794	1 677 072	1 721 983	1 667 735
8a-BoB	TRAMMEL	SBcIIart5	Total							1 703 794	1 677 072	1 721 983	1 667 735
8a-BoB	none	none	ESP									82 250	
8a-BoB			FRA	103 586	74 578	155 533	172 530	268 115	268 115		70 220		
8a-BoB	none	none	Total	103 586	74 578	155 533	172 530	268 115	268 115		70 220	82 250	-
8a-BoB	none	SBcIIIart5	FRA								4 324		
8a-BoB	none	SBcIIIart5	Total								4 324	-	

Table 5.10.1.2 – Bay of Biscay – 8b - Trend in nominal effort (kW*days at sea) by existing derogations stated in article 5 of Coun. Reg. 388/2006 and Member State, 2004-2013. Derogations are sorted by gear, special condition (SPECON), and country (o. 10m length vessels). Data qualities are summarised in Section 4 of the report.

REG AREA COD	REG GEAR COD	SPECON	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
8b-BoB	BEAM	none	BEL	550 314	712 933								
8b-BoB			FRA				438				147	440	
8b-BoB	BEAM	none	Total	550 314	712 933		438				147	440	-
8b-BoB	BEAM	SBcIIart5	BEL			701 274	754 024	684 939	815 860	760 585	747 810	586 698	664 369
8b-BoB	BEAM	SBcIIart5	Total			701 274	754 024	684 939	815 860	760 585	747 810	586 698	664 369
8b-BoB	DEM_SEINE	none	ESP									368	
8b-BoB			FRA							52 079	137 008		51 302
8b-BoB			NED						6 624	8 936		1 472	
8b-BoB	DEM_SEINE	none	Total						6 624	61 015	137 008	53 142	49 733
8b-BoB	DEM_SEINE	SBcIIart5	FRA									64 490	148 786
8b-BoB	DEM_SEINE	SBcIIart5	Total									64 490	148 786
8b-BoB	DREDGE	none	ESP									441	393
8b-BoB			FRA	7 536	52 315	64 803	36 614	33 423	33 423	29 311	18 220	47 724	19 096
8b-BoB	DREDGE	none	Total	7 536	52 315	64 803	36 614	33 423	33 423	29 311	18 220	48 165	19 489
8b-BoB	DREDGE	SBcIIart5	FRA							3 598	7 395	12 098	7 717
8b-BoB	DREDGE	SBcIIart5	Total							3 598	7 395	12 098	7 717
8b-BoB	GILL	none	ENG		2 893	40 108	15 076						
8b-BoB			ESP									104 564	59 802
8b-BoB			FRA	394 579	1 217 137	1 429 468	1 173 159	1 044 466	1 044 466	550 893	388 953	199 981	176 307
8b-BoB			SCO	3 306				3 270		6 789	836		
8b-BoB	GILL	none	Total	397 885	1 220 030	1 469 576	1 188 235	1 047 736	1 044 466	557 682	389 789	304 545	236 109
8b-BoB	GILL	SBcIIart5	FRA							199 718	249 443	364 334	457 294
8b-BoB	GILL	SBcIIart5	Total							199 718	249 443	364 334	457 294
8b-BoB	LONGLINE	none	ENG	12 428	2 582	9 426	20 748	5 296					
8b-BoB			ESP									507 639	150 965
8b-BoB			FRA	59 324	235 437	260 702	236 924	194 503	194 503	460 343	424 089	301 524	269 932
8b-BoB			IRL				1 263						
8b-BoB			SCO					1 434					
8b-BoB	LONGLINE	none	Total	71 752	238 019	270 128	258 935	201 233	194 503	460 343	424 089	809 163	420 897
8b-BoB	LONGLINE	SBcIIart5	FRA							37 755	56 927	121 611	136 345
8b-BoB	LONGLINE	SBcIIart5	Total							37 755	56 927	121 611	136 345
8b-BoB	OTTER	none	ENG	118 061	78 252	62 964					10 967	24 444	
8b-BoB			ESP									1 293 234	1 246 021
8b-BoB			FRA	1 413 043	3 780 100	3 828 101	4 114 702	3 789 258	3 781 816	640 861	985 186	626 927	741 434
8b-BoB			IRL			3 645							
8b-BoB	OTTER	none	Total	1 531 104	3 858 352	3 894 710	4 114 702	3 789 258	3 781 816	640 861	996 153	1 944 605	1 987 455
8b-BoB	OTTER	SBcIIart5	BEL									2 499	
8b-BoB			FRA							1 976 798	1 745 826	2 130 614	2 202 399
8b-BoB	OTTER	SBcIIart5	Total							1 976 798	1 745 826	2 133 113	2 202 399
8b-BoB	PEL_SEINE	none	ESP									500 912	1 095 587
8b-BoB			FRA	81 363	121 441	165 202	134 820	132 961	132 961	124 892	85 470	151 911	89 714
8b-BoB	PEL_SEINE	none	Total	81 363	121 441	165 202	134 820	132 961	132 961	124 892	85 470	652 823	1 185 301
8b-BoB	PEL_SEINE	SBcIIart5	FRA										662
8b-BoB	PEL_SEINE	SBcIIart5	Total										662
8b-BoB	PEL_TRAWL	none	ENG	67 346	8 055				47 280				91 982
8b-BoB			ESP									2 132	1 808
8b-BoB			FRA	367 024	1 126 082	1 576 779	975 175	406 269	386 776	361 874	195 840	293 078	101 937
8b-BoB			GER			12 065							6 194
8b-BoB			IRL	92 485	72 948	62 235	39 547	20 000					
8b-BoB			NED			32 360		11 452			7 920		101 350
8b-BoB	PEL_TRAWL	none	Total	526 855	1 207 085	1 683 439	1 014 722	437 721	434 056	361 874	203 760	295 210	303 271
8b-BoB	PEL_TRAWL	SBcIIart5	FRA							45 250	75 157	128 099	172 874
8b-BoB	PEL_TRAWL	SBcIIart5	Total							45 250	75 157	128 099	172 874
8b-BoB	POTS	none	ESP									1 124	1 362
8b-BoB			FRA	35 213	2 981	34 432	38 021	2 716	2 716	28 349	28 015	13 444	8 757
8b-BoB	POTS	none	Total	35 213	2 981	34 432	38 021	2 716	2 716	28 349	28 015	14 568	10 119
8b-BoB	POTS	SBcIIart5	FRA							24 946	24 870	52 304	41 565
8b-BoB	POTS	SBcIIart5	Total							24 946	24 870	52 304	41 565
8b-BoB	TRAMMEL	none	ESP									3 792	2 683
8b-BoB			FRA	623 795	1 943 385	2 474 068	2 293 981	2 398 241	2 396 111	124 925	87 703	147 220	134 814
8b-BoB	TRAMMEL	none	Total	623 795	1 943 385	2 474 068	2 293 981	2 398 241	2 396 111	124 925	87 703	151 012	137 497
8b-BoB	TRAMMEL	SBcIIart5	FRA							2 077 736	1 996 776	2 286 383	2 069 605
8b-BoB	TRAMMEL	SBcIIart5	Total							2 077 736	1 996 776	2 286 383	2 069 605
8b-BoB	none	none	ESP									91 180	
8b-BoB			FRA	75 689	116 764	192 933	106 136	181 700	181 700		76 984		
8b-BoB			IRL		25 000								
8b-BoB	none	none	Total	75 689	141 764	192 933	106 136	181 700	181 700		76 984	91 180	-
8b-BoB	none	SBcIIart5	FRA								8 615		
8b-BoB	none	SBcIIart5	Total								8 615		

Table 5.10.1.3 – Bay of Biscay – 8a – Percentage difference in effort (kW*days at sea) by existing derogations stated in article 5 of Coun. Reg. 388/2006 and Member State, 2004-2012 between the data provided in 2013 and 2014. Derogations are sorted by gear, special condition (SPECON), and country (o. 10m length vessels). Data qualities are summarised in Section 4 of the report.

reg_area_cod	reg_gear_cod	country	specon	vessel_length	2004	2005	2006	2007	2008	2009	2010	2011	2012
8A-BOB	BEAM	BEL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	BEAM	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	BEAM	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	BEAM	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	BEAM	NED	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	BEAM	BEL	SBCIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	BEAM	FRA	SBCIIART5	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	DEM_SEINE	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	DEM_SEINE	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	DEM_SEINE	NED	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	DEM_SEINE	FRA	SBCIIART5	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	DEM_SEINE	FRA	SBCIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	DREDGE	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	DREDGE	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	DREDGE	IRL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	DREDGE	SCO	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	DREDGE	FRA	SBCIIART5	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	DREDGE	FRA	SBCIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	GILL	ENG	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	GILL	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	GILL	ESP	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	GILL	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	GILL	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	GILL	SCO	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	GILL	FRA	SBCIIART5	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	GILL	FRA	SBCIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	LONGLINE	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	LONGLINE	ESP	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	LONGLINE	ESP	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	LONGLINE	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	LONGLINE	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	LONGLINE	IRL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	LONGLINE	SCO	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	LONGLINE	FRA	SBCIIART5	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	LONGLINE	FRA	SBCIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	NONE	ESP	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	NONE	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	NONE	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	NONE	FRA	SBCIIART5	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	OTTER	DEN	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	OTTER	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	OTTER	ESP	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	OTTER	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	OTTER	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	OTTER	IRL	NONE	NONE	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	OTTER	IRL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	OTTER	NIR	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	OTTER	SCO	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	OTTER	BEL	SBCIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	OTTER	FRA	SBCIIART5	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	OTTER	FRA	SBCIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	PEL_SEINE	ESP	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	PEL_SEINE	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	PEL_SEINE	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	PEL_SEINE	FRA	SBCIIART5	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	PEL_SEINE	FRA	SBCIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	PEL_TRAWL	DEN	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	PEL_TRAWL	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	PEL_TRAWL	ESP	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	PEL_TRAWL	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	PEL_TRAWL	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	PEL_TRAWL	GER	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	PEL_TRAWL	IRL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	PEL_TRAWL	NED	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	PEL_TRAWL	NIR	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	PEL_TRAWL	SCO	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	PEL_TRAWL	FRA	SBCIIART5	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	PEL_TRAWL	FRA	SBCIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	POTS	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	POTS	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	POTS	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	POTS	GER	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	POTS	FRA	SBCIIART5	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	POTS	FRA	SBCIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	TRAMMEL	ENG	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	TRAMMEL	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	TRAMMEL	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	TRAMMEL	FRA	SBCIIART5	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8A-BOB	TRAMMEL	FRA	SBCIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%

Table 5.10.1.4 – Bay of Biscay – 8b – Percentage difference in effort (kW*days at sea) by existing derogations stated in article 5 of Coun. Reg. 388/2006 and Member State, 2004-2012 between the data provided in 2013 and 2014. Derogations are sorted by gear, special condition (SPECON), and country (o. 10m length vessels). Data qualities are summarised in Section 4 of the report.

reg_area_cod	reg_gear_cod	country	specon	vessel length	2004	2005	2006	2007	2008	2009	2010	2011	2012
8B-BOB	BEAM	BEL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	BEAM	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	BEAM	NED	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	BEAM	BEL	SBCIIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	DEM_SEINE	ESP	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	DEM_SEINE	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	DEM_SEINE	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	DEM_SEINE	NED	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	DEM_SEINE	FRA	SBCIIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	DREDGE	ESP	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	DREDGE	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	DREDGE	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	DREDGE	FRA	SBCIIIART5	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	DREDGE	FRA	SBCIIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	GILL	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	GILL	ESP	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	GILL	ESP	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	GILL	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	GILL	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	GILL	SCO	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	GILL	FRA	SBCIIIART5	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	GILL	FRA	SBCIIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	LONGLINE	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	LONGLINE	ESP	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	LONGLINE	ESP	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	LONGLINE	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	LONGLINE	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	LONGLINE	IRL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	LONGLINE	SCO	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	LONGLINE	FRA	SBCIIIART5	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	LONGLINE	FRA	SBCIIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	NONE	ESP	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	NONE	ESP	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	NONE	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	NONE	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	NONE	IRL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	NONE	FRA	SBCIIIART5	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	NONE	FRA	SBCIIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	OTTER	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	OTTER	ESP	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	OTTER	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	OTTER	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	OTTER	IRL	NONE	NONE	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	OTTER	IRL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	OTTER	BEL	SBCIIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	OTTER	FRA	SBCIIIART5	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	OTTER	FRA	SBCIIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	PEL_SEINE	ESP	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	PEL_SEINE	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	PEL_SEINE	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	PEL_TRAWL	ENG	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	PEL_TRAWL	ESP	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	PEL_TRAWL	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	PEL_TRAWL	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	PEL_TRAWL	GER	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	PEL_TRAWL	IRL	NONE	NONE	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	PEL_TRAWL	IRL	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	PEL_TRAWL	IRL	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	PEL_TRAWL	NED	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	PEL_TRAWL	FRA	SBCIIIART5	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	PEL_TRAWL	FRA	SBCIIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	POTS	ESP	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	POTS	ESP	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	POTS	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	POTS	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	POTS	FRA	SBCIIIART5	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	POTS	FRA	SBCIIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	TRAMMEL	ESP	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	TRAMMEL	ESP	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	TRAMMEL	FRA	NONE	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	TRAMMEL	FRA	NONE	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	TRAMMEL	FRA	SBCIIIART5	O10T15M	0%	0%	0%	0%	0%	0%	0%	0%	0%
8B-BOB	TRAMMEL	FRA	SBCIIIART5	O15M	0%	0%	0%	0%	0%	0%	0%	0%	0%

Table 5.10.1.5 – Bay of Biscay – 8a - Trend in nominal effort (kW*days at sea) 2004-2013 by derogations stated in article 5 of Coun. Reg. 388/2006. Derogations are sorted by gear and special condition (SPECON) (o. 10m length vessels). Relative changes between 2012 and 2013 are presented. Data qualities are summarised in Section 4 of the report.

REG AREA COD	REG GEAR COD	SPECON	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Rel.C 13-12	
8A-BOB	BEAM	NONE	131 811	158 898	4 104	880				1 111		412	-25%	
8A-BOB	BEAM	SBCHIARTS			241 716	226 017	91 076	108 412	152 849	150 812	136 302	102 233	-25%	
8A-BOB	DEM_SEINE	NONE						6 152	331 067	612 472	99 372	142 166	43%	
8A-BOB	DEM_SEINE	SBCHIARTS								215	542 371	500 008	-8%	
8A-BOB	DREDGE	NONE	414 407	420 148	533 612	468 381	377 579	366 074	90 026	123 145	176 901	138 424	-22%	
8A-BOB	DREDGE	SBCHIARTS							22 677	8 443	70 603	83 465	18%	
8A-BOB	GILL	NONE	1 528 126	2 239 869	2 551 658	1 915 044	1 901 729	1 839 605	1 643 642	1 359 473	1 251 739	1 271 466	2%	
8A-BOB	GILL	SBCHIARTS							575 670	471 754	776 035	821 799	6%	
8A-BOB	LONGLINE	NONE	338 862	435 629	722 542	656 782	581 690	546 023	613 232	760 410	1 633 730	1 456 176	-11%	
8A-BOB	LONGLINE	SBCHIARTS							72 918	43 375	151 567	183 221	21%	
8A-BOB	OTTER	NONE	11 657 243	14 681 996	18 569 212	20 556 678	17 065 302	16 998 359	6 399 281	6 314 254	5 192 484	3 986 455	-23%	
8A-BOB	OTTER	SBCHIARTS							5 344 311	5 556 913	6 069 226	5 545 005	-9%	
8A-BOB	PEL_SEINE	NONE	459 144	447 532	591 583	611 037	637 343	637 028	684 055	744 393	558 224	496 891	-11%	
8A-BOB	PEL_SEINE	SBCHIARTS							828	388	588	7 055	1100%	
8A-BOB	PEL_TRAWL	NONE	1 211 218	2 970 607	3 265 616	2 489 208	1 236 887	1 004 777	1 433 338	1 087 559	1 262 466	1 166 312	-9%	
8A-BOB	PEL_TRAWL	SBCHIARTS							101 972	108 910	337 915	370 111	10%	
8A-BOB	POTS	NONE	343 896	173 870	166 749	138 362	29 251	22 195	619 138	551 436	451 463	469 818	4%	
8A-BOB	POTS	SBCHIARTS							20 990	71 587	134 265	138 784	3%	
8A-BOB	TRAMMEL	NONE	965 787	1 615 492	2 530 660	2 961 192	2 471 611	2 471 064	355 544	307 538	249 151	257 476	3%	
8A-BOB	TRAMMEL	SBCHIARTS							1 703 794	1 677 072	1 677 072	1 721 983	-3%	
8A-BOB	NONE	NONE	103 586	74 578	155 533	172 530	268 115	268 115			70 220	82 250	-100%	
8A-BOB	NONE	SBCHIARTS									4 324			
Sum			17 154 080	23 218 619	29 332 985	30 195 231	24 661 463	24 267 804	20 165 332	20 024 416	20 918 335	18 805 012	-10%	

Table 5.10.1.6 – Bay of Biscay – 8a - Trend in nominal effort (kW*days at sea) 2004-2013 by derogations stated in article 5 of Coun. Reg. 388/2006. Derogations are sorted by gear (o. 10m length vessels). Relative changes between 2012 and 2013 are presented. Data qualities are summarised in Section 4 of the report.

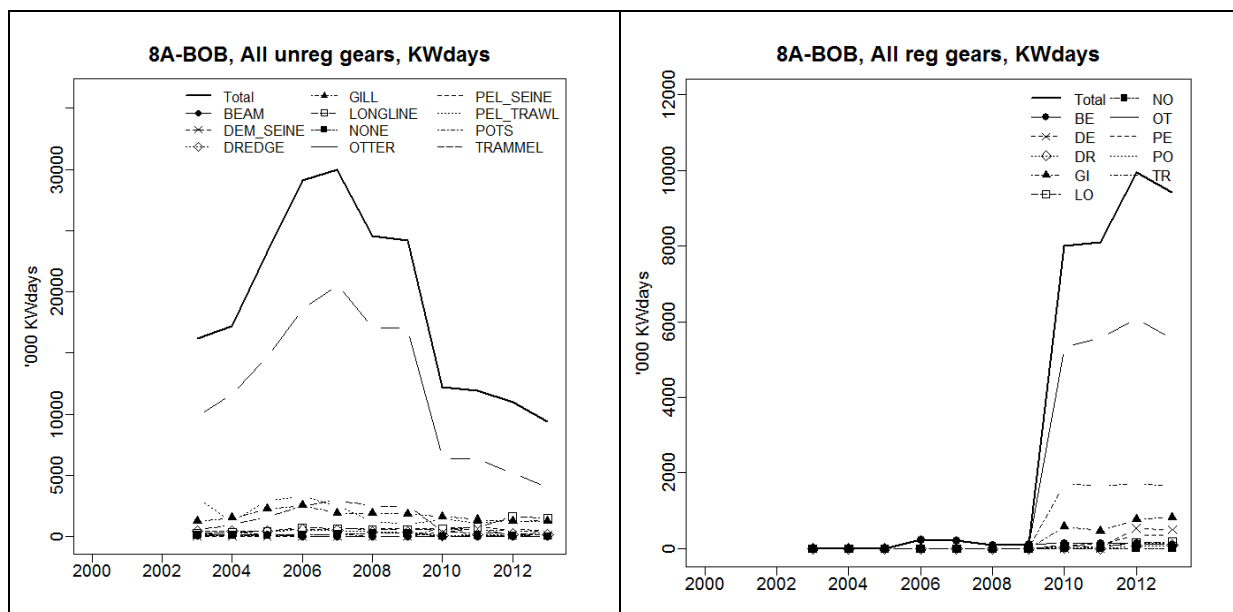
Length Class	REG AREA COD	REG GEAR COD	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Rel.C 13-12
o. 10m.	8A-BOB	BEAM	131 811	158 898	245 820	226 017	91 956	108 412	152 849	151 923	136 302	102 645	-25%
	8A-BOB	DEM_SEINE						6 152	331 067	612 687	641 743	642 174	0%
	8A-BOB	DREDGE	414 407	420 148	533 612	468 381	377 579	366 074	112 703	130 588	247 204	221 889	-10%
	8A-BOB	GILL	1 528 126	2 239 869	2 551 658	1 915 044	1 901 729	1 839 605	1 331 222	1 331 222	2 027 774	2 093 365	3%
	8A-BOB	LONGLINE	338 862	435 629	722 542	656 782	581 690	546 023	686 150	803 785	1 785 297	1 639 397	-6%
	8A-BOB	OTTER	11 657 243	14 681 996	18 569 212	20 556 678	17 065 302	16 998 359	11 743 590	11 871 167	11 261 710	9 531 460	-15%
	8A-BOB	PEL_SEINE	459 144	447 532	591 583	611 037	637 343	637 028	684 883	744 393	558 812	503 946	-10%
	8A-BOB	PEL_TRAWL	1 211 218	2 970 607	3 265 616	2 489 208	1 236 887	1 004 777	1 535 310	1 196 469	1 620 381	1 536 423	-5%
	8A-BOB	POTS	343 896	173 870	166 749	138 362	29 251	22 195	640 128	623 023	585 738	608 602	4%
	8A-BOB	TRAMMEL	965 787	1 615 492	2 530 660	2 961 192	2 471 611	2 471 064	2 059 338	1 984 611	1 971 134	1 925 211	-2%
	8A-BOB	NONE	103 586	74 578	155 533	172 530	268 115	268 115		74 544	82 250		-100%
	Sum o. 10m.		17 154 080	23 218 619	29 332 985	30 195 231	24 661 463	24 267 804	20 165 332	20 024 416	20 918 335	18 805 012	-10%

Table 5.10.1.7 – Bay of Biscay – 8b - Trend in nominal effort (kW*days at sea) 2004-2013 by derogations stated in article 5 of Coun. Reg. 388/2006. Derogations are sorted by gear and special condition (SPECON) (o. 10m length vessels). Relative changes between 2012 and 2013 are presented. Data qualities are summarised in Section 4 of the report.

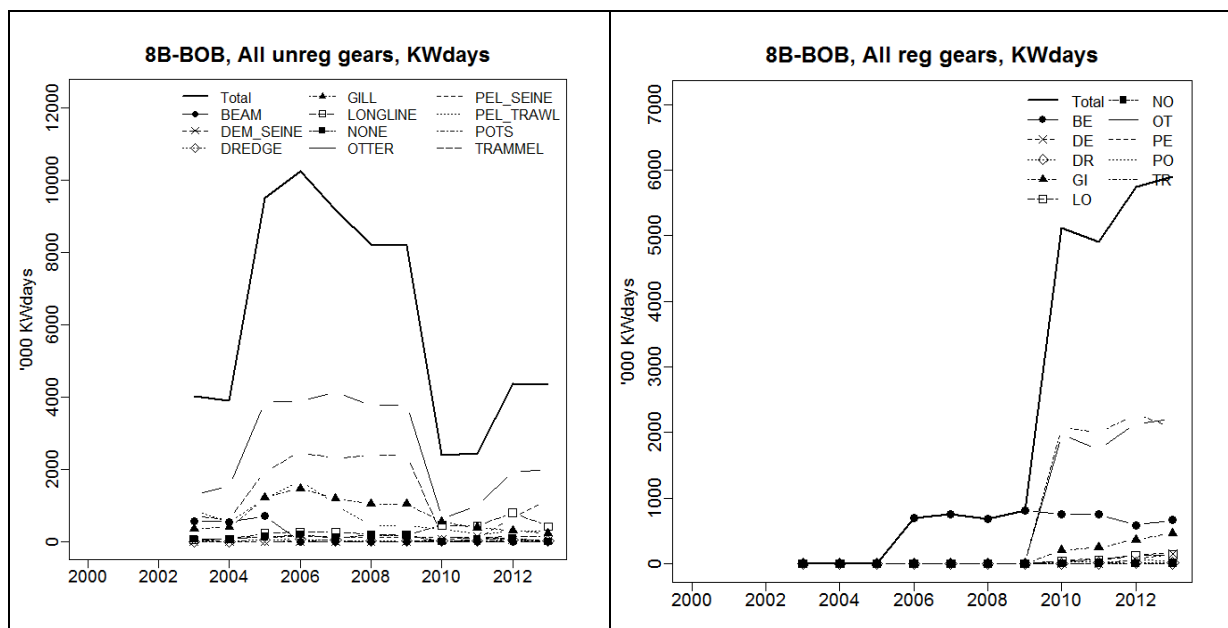
REG AREA COD	REG GEAR COD	SPECON	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Rel.C 13-12	
8B-BOB	BEAM	NONE	550 314	712 933		438				147	440		-100%	
8B-BOB	BEAM	SBCHIARTS			701 274	754 024	684 939	815 860	760 585	747 810	586 698	664 369	13%	
8B-BOB	DEM_SEINE	NONE						6 624	61 015	137 008	53 142	49 733	-6%	
8B-BOB	DEM_SEINE	SBCHIARTS									64 490	148 786	131%	
8B-BOB	DREDGE	NONE	7 536	52 315	64 803	36 614	33 423	33 423	29 311	18 220	48 165	19 489	-60%	
8B-BOB	DREDGE	SBCHIARTS							3 596	7 395	12 098	7 717	-30%	
8B-BOB	GILL	NONE	397 885	1 220 030	1 469 576	1 188 235	1 047 736	1 044 466	557 682	389 789	304 545	236 109	-22%	
8B-BOB	GILL	SBCHIARTS							199 718	249 443	364 334	452 294	26%	
8B-BOB	LONGLINE	NONE	71 752	238 019	270 128	258 935	201 233	194 503	460 343	424 089	809 163	420 897	-48%	
8B-BOB	LONGLINE	SBCHIARTS							37 555	56 927	121 611	136 345	12%	
8B-BOB	OTTER	NONE	1 531 104	3 858 352	3 894 710	4 114 702	3 789 258	3 781 816	640 861	996 153	1 944 605	1 987 455	2%	
8B-BOB	OTTER	SBCHIARTS							1 976 798	1 745 826	2 133 113	2 202 399	3%	
8B-BOB	PEL_SEINE	NONE	81 363	121 441	165 202	134 820	132 961	132 961	124 892	85 470	652 823	1 185 301	82%	
8B-BOB	PEL_SEINE	SBCHIARTS										662		
8B-BOB	PEL_TRAWL	NONE	526 855	1 207 085	1 683 439	1 014 722	437 721	434 056	361 874	203 760	295 210	303 271	3%	
8B-BOB	PEL_TRAWL	SBCHIARTS							45 250	75 157	128 099	172 874	35%	
8B-BOB	POTS	NONE	35 213	2 981	34 432	38 021	2 716	2 716	28 349	28 015	14 568	10 119	-31%	
8B-BOB	POTS	SBCHIARTS							24 946	24 870	52 304	41 565	-21%	
8B-BOB	TRAMMEL	NONE	623 795	1 943 385	2 474 068	2 293 981	2 398 241	2 396 111	124 925	87 703	151 012	137 497	-9%	
8B-BOB	TRAMMEL	SBCHIARTS							2 077 736	1 996 776	2 286 383	2 069 605	-9%	
8B-BOB	NONE	NONE	75 689	141 764	192 933	106 136	181 700	181 700			76 984	91 180	-100%	
8B-BOB	NONE	SBCHIARTS									8 615			
Sum			3 901 506	9 498 305	10 950 565	9 940 628	8 909 928	9 024 236	7 515 638	7 360 157	10 113 983	10 251 487	1%	

Table 5.10.1.8 – Bay of Biscay – 8b - Trend in nominal effort (kW*days at sea) 2004-2013 by derogations stated in article 5 of Coun. Reg. 388/2006. Derogations are sorted by gear (o. 10m length vessels). Relative changes between 2012 and 2013 are presented. Data qualities are summarised in Section 4 of the report.

Length Class	REG AREA COD	REG GEAR COD	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Rel.C 13-12
o. 10m.	8B-BOB	BEAM	550 314	712 933	701 274	754 462	684 939	815 860	760 585	747 957	587 138	664 369	13%
	8B-BOB	DEM_SEINE						6 624	61 015	137 008	117 632	196 519	69%
	8B-BOB	DREDGE	7 536	52 315	64 803	36 614	33 423	33 423	29 309	25 615	60 263	27 206	-55%
	8B-BOB	GILL	397 885	1 220 030	1 469 576	1 188 235	1 047 736	1 044 466	574 000	639 232	688 979	693 403	4%
	8B-BOB	LONGLINE	71 752	238 019	270 128	258 935	201 233	194 503	488 098	481 016	930 774	537 242	-40%
	8B-BOB	OTTER	1 531 104	3 858 352	3 894 710	4 114 702	3 789 258	3 781 816	2 617 659	2 741 799	4 077 718	4 189 854	3%
	8B-BOB	PEL_SEINE	81 363	121 441	165 202	134 820	132 961	132 961	124 892	85 470	652 823	1 185 963	82%
	8B-BOB	PEL_TRAWL	526 855	1 207 085	1 683 439	1 014 722	437 721	434 056	407 124	278 917	423 309	476 145	12%
	8B-BOB	POTS	35 213	2 981	34 432	38 021	2 716	2 716	53 295	52 885	66 672	51 684	-23%
	8B-BOB	TRAMMEL	623 795	1 943 385	2 474 068	2 293 981	2 398 241	2 396 111	2 202 661	2 084 479	2 437 395	2 207 102	-9%
	8B-BOB	NONE	75 689	141 764	192 933	106 136	181 700	181 700			85 599	91 180	-100%
	Sum o. 10m.		3 901 506	9 498 305	10 950 565	9 940 628	8 909 928	9 024 236	7 515 638	7 360 157	10 113 983	10 251 487	1%



Figures 5.10.1.7 – Bay of Biscay – 8a -Trend in nominal effort (kW*days at sea) sorted by gear for unregulated (without special condition SBcIIIart5) and regulated gears (with special condition SBcIIIart5) by derogations stated in article 5 of Coun. Reg. 388/2006, 2003-2013 (o. 10m length vessels). Data qualities are summarised in section 4 of the report.



Figures 5.10.1.8 – Bay of Biscay – 8b -Trend in nominal effort (kW*days at sea) sorted by gear for unregulated (without special condition SBcIIIart5) and regulated gears (with special condition SBcIIIart5) by derogations stated in article 5 of Coun. Reg. 388/2006, 2003-2013 (o. 10m length vessels). Data qualities are summarised in section 4 of the report.

Information on trend in GT*days at sea and in the number of vessels active in the Bay of Biscay are also presented below in this report by ICES division 8a and 8b.

Table 5.10.1.9 – Bay of Biscay – 8a - Trend in GT*days at sea by existing derogations stated in article 5 of Coun. Reg. 388/2006 and Member State, 2004-2013. Derogations are sorted by gear, special condition (SPECON), and country (o. 10m length vessels). Data qualities are summarised in Section 4 of the report.

REG AREA COD	REG GEAR COD	SPECON	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
8a-BoB	BEAM	none	BEL	41 119	47 383								
8a-BoB			ENG					548					
8a-BoB			FRA	4 067	4 350	1 044					146		56
8a-BoB	BEAM	none	Total	45 186	51 733	1 044		548			146		-
8a-BoB	BEAM	SBcIIIart5	BEL			84 980	78 171	30 580	37 476	51 580	51 331	45 998	35 068
8a-BoB			FRA							96			
8a-BoB	BEAM	SBcIIIart5	Total			84 980	78 171	30 580	37 476	51 676	51 331	45 998	35 068
8a-BoB	DEM_SEINE	none	FRA							121 045	192 333	46 306	67 833
8a-BoB			NED					2 480					
8a-BoB	DEM_SEINE	none	Total					2 480		121 045	192 333	46 306	67 833
8a-BoB	DEM_SEINE	SBcIIIart5	FRA								12	151 467	150 621
8a-BoB	DEM_SEINE	Total									12	151 467	150 621
8a-BoB	DREDGE	none	FRA	47 879	60 998	63 565	52 729	39 468	38 281	9 016	12 977	16 524	14 820
8a-BoB			IRL										
8a-BoB	DREDGE	none	Total	47 879	60 998	63 565	52 729	39 468	38 281	9 016	12 977	16 524	14 820
8a-BoB	DREDGE	SBcIIIart5	FRA							1 944	952	7 271	9 214
8a-BoB	DREDGE	Total								1 944	952	7 271	9 214
8a-BoB	GILL	none	ENG	22 584	15 212	58 807	19 279	7 817	23 963	37 567	39 130	34 343	29 765
8a-BoB			ESP									103 797	105 890
8a-BoB			FRA	297 024	458 835	531 454	371 124	402 673	398 498	587 038	463 989	368 113	365 546
8a-BoB			SCO	30 885	43 990	22 249	36 714	54 169	19 920	25 475	11 785	15 134	24 654
8a-BoB	GILL	none	Total	350 503	518 037	612 510	427 117	464 659	442 381	650 080	514 904	521 387	535 855
8a-BoB	GILL	SBcIIIart5	FRA							151 266	120 581	192 041	211 658
8a-BoB	GILL	Total								151 266	120 581	192 041	211 658
8a-BoB	LONGLINE	none	ENG	37 943	27 567	22 450	12 957	5 661					
8a-BoB			ESP									567 484	477 247
8a-BoB			FRA	44 383	54 037	90 504	87 531	81 705	81 705	85 398	122 373	157 138	161 982
8a-BoB			IRL		356	890							
8a-BoB			SCO			3 198	636	7 929		4 171	26 339	958	2 076
8a-BoB	LONGLINE	none	Total	82 326	81 960	117 042	101 124	95 295	81 705	89 569	148 712	725 580	641 905
8a-BoB	LONGLINE	SBcIIIart5	FRA							8 554	5 809	15 733	17 826
8a-BoB	LONGLINE	Total								8 554	5 809	15 733	17 826
8a-BoB	OTTER	none	DEN				6 160		17 864				
8a-BoB			ENG	4 036		20 419			3 900	1 602	12 863		
8a-BoB			ESP									556 724	326 238
8a-BoB			FRA	2 124 410	2 751 523	3 539 780	3 937 325	3 319 519	3 298 580	1 308 360	1 303 437	906 942	703 649
8a-BoB			IRL	396		477							
8a-BoB			NIR						624				
8a-BoB			SCO									3 113	177
8a-BoB	OTTER	none	Total	2 128 842	2 751 523	3 560 676	3 943 485	3 319 519	3 320 968	1 309 962	1 316 300	1 466 779	1 040 064
8a-BoB	OTTER	SBcIIIart5	BEL									284	
8a-BoB	OTTER	SBcIIIart5	FRA							1 049 209	1 071 172	1 194 394	1 062 537
8a-BoB	OTTER	Total								1 049 209	1 071 172	1 194 394	1 062 537
8a-BoB	PEL_SEINE	none	ESP									831	8 843
8a-BoB			FRA	81 644	79 879	132 720	126 012	135 533	135 533	112 289	127 523	99 753	83 409
8a-BoB	PEL_SEINE	none	Total	81 644	79 879	132 720	126 012	135 533	135 533	112 289	127 523	100 584	92 252
8a-BoB	PEL_SEINE	SBcIIIart5	FRA							96		128	2 210
8a-BoB	PEL_SEINE	Total								96		128	2 210
8a-BoB	PEL_TRAWL	none	DEN			17 148	87 669	65 290	80 888	13 036	3 175	39 809	27 896
8a-BoB			ENG	83 912	71 904	61 750	17 867	85 125	109 659	23 130	14 193		18 461
8a-BoB			ESP									1 314	
8a-BoB			FRA	170 849	490 569	622 968	445 413	161 027	153 527	250 029	203 482	308 445	200 136
8a-BoB			GER	166 460	327 390	203 520		102 668	25 448	46 031	12 112		55 252
8a-BoB			IRL	41 571	28 516	15 056	11 858		4 372	6 564		5 899	14 584
8a-BoB			NED	89 502	423 345	377 857	74 323	301 717	138 260	75 620	9 822		156 465
8a-BoB			NIR						208				
8a-BoB			SCO						5 660				
8a-BoB	PEL_TRAWL	none	Total	552 294	1 341 724	1 298 299	637 130	715 827	518 022	414 410	242 784	355 467	482 794
8a-BoB	PEL_TRAWL	SBcIIIart5	FRA							20 694	16 214	64 715	72 735
8a-BoB	PEL_TRAWL	Total								20 694	16 214	64 715	72 735
8a-BoB	POTS	none	ENG	7 423									
8a-BoB			FRA	67 891	47 060	45 699	32 605	5 260	5 260	133 328	111 089	104 635	120 227
8a-BoB			GER	9 540		6 150	5 190	3 184					
8a-BoB	POTS	none	Total	84 854	47 060	51 849	37 795	8 444	5 260	133 328	111 089	104 635	120 227
8a-BoB	POTS	SBcIIIart5	FRA							2 581	7 844	13 901	16 645
8a-BoB	POTS	Total								2 581	7 844	13 901	16 645
8a-BoB	TRAMMEL	none	ENG					108					
8a-BoB			FRA	175 397	290 396	436 957	531 259	435 546	435 546	40 030	34 867	26 100	39 450
8a-BoB	TRAMMEL	none	Total	175 397	290 396	436 957	531 259	435 654	435 546	40 030	34 867	26 100	39 450
8a-BoB	TRAMMEL	SBcIIIart5	FRA							388 781	368 905	377 620	346 481
8a-BoB	TRAMMEL	Total								388 781	368 905	377 620	346 481
8a-BoB	none	none	ESP									44 652	
8a-BoB			FRA	19 301	16 958	23 034	23 268	30 893	30 893		8 473		
8a-BoB	none	none	Total	19 301	16 958	23 034	23 268	30 893	30 893		8 473	44 652	
8a-BoB	none	SBcIIIart5	FRA								575		
8a-BoB	none	SBcIIIart5	Total								575		

Table 5.10.1.10 – Bay of Biscay – 8b - Trend in GT*days at sea by existing derogations stated in article 5 of Coun. Reg. 388/2006 and Member State, 2004-2013. Derogations are sorted by gear, special condition (SPECON), and country (o. 10m length vessels). Data qualities are summarised in Section 4 of the report.

REG AREA COD	REG GEAR COD	SPECON	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
8b-BoB	BEAM	none	BEL	219 108	278 855								
8b-BoB			FRA				24				25	70	
8b-BoB	BEAM	none	Total	219 108	278 855	-	24	-	-	-	25	70	-
8b-BoB	BEAM	SBcIIIart5	BEL			261 668	266 987	229 616	266 078	246 721	251 746	194 669	224 392
8b-BoB	BEAM	SBcIIIart5	Total	-	-	261 668	266 987	229 616	266 078	246 721	251 746	194 669	224 392
8b-BoB	DEM_SEINE	none	ESP									104	
8b-BoB			FRA							21 909	43 928	23 852	24 131
8b-BoB			NED						2 016	3 116		448	
8b-BoB	DEM_SEINE	none	Total	-	-	-	-	-	2 016	25 025	43 928	24 404	24 131
8b-BoB	DEM_SEINE	SBcIIIart5	FRA									20 995	48 025
8b-BoB	DEM_SEINE	SBcIIIart5	Total	-	-	-	-	-	-	-	-	20 995	48 025
8b-BoB	DREDGE	none	ESP									262	160
8b-BoB			FRA	977	7 562	7 898	3 831	4 195	4 195	3 405	1 550	4 474	1 889
8b-BoB	DREDGE	none	Total	977	7 562	7 898	3 831	4 195	4 195	3 405	1 550	4 736	2 049
8b-BoB	DREDGE	SBcIIIart5	FRA							513	809	1 781	989
8b-BoB	DREDGE	SBcIIIart5	Total	-	-	-	-	-	-	513	809	1 781	989
8b-BoB	GILL	none	ENG		1 350	21 684	8 151						
8b-BoB			ESP									58 914	31 203
8b-BoB			FRA	76 740	199 742	209 516	181 784	182 323	182 323	162 668	93 898	62 761	59 119
8b-BoB			SCO	1 524				1 456	3 662		451		
8b-BoB	GILL	none	Total	78 264	201 092	231 200	189 935	183 779	182 323	166 330	94 349	121 675	90 322
8b-BoB	GILL	SBcIIIart5	FRA							28 799	34 174	45 208	77 878
8b-BoB	GILL	SBcIIIart5	Total	-	-	-	-	-	-	28 799	34 174	45 208	77 878
8b-BoB	LONGLINE	none	ENG	4 768	991	3 617	7 960	2 032					
8b-BoB			ESP									191 071	58 688
8b-BoB			FRA	11 176	30 294	34 170	35 334	24 677	24 677	89 333	90 663	63 770	48 707
8b-BoB			IRL				534						
8b-BoB			SCO					550					
8b-BoB	LONGLINE	none	Total	15 944	31 285	37 787	43 828	27 259	24 677	89 333	90 663	254 841	107 395
8b-BoB	LONGLINE	SBcIIIart5	FRA							4 439	6 705	12 110	14 236
8b-BoB	LONGLINE	SBcIIIart5	Total	-	-	-	-	-	-	4 439	6 705	12 110	14 236
8b-BoB	OTTER	none	ENG	42 681	28 110	31 001					4 786	10 668	
8b-BoB			ESP									1 132 888	1 109 394
8b-BoB			FRA	321 613	729 816	729 838	814 028	772 189	770 900	142 103	249 768	180 412	206 059
8b-BoB			IRL			1 450							
8b-BoB	OTTER	none	Total	364 294	757 926	762 289	814 028	772 189	770 900	142 103	254 554	1 323 968	1 315 453
8b-BoB	OTTER	SBcIIIart5	BEL									747	
8b-BoB			FRA							378 130	296 298	395 077	404 213
8b-BoB	OTTER	SBcIIIart5	Total	-	-	-	-	-	-	378 130	296 298	395 077	404 213
8b-BoB	PEL_SEINE	none	ESP									197 401	432 935
8b-BoB			FRA	41 802	34 345	56 725	28 751	26 699	26 699	23 314	14 786	30 027	16 125
8b-BoB	PEL_SEINE	none	Total	41 802	34 345	56 725	28 751	26 699	26 699	23 314	14 786	227 428	449 060
8b-BoB	PEL_SEINE	SBcIIIart5	FRA										76
8b-BoB	PEL_SEINE	SBcIIIart5	Total	-	-	-	-	-	-	-	-	-	76
8b-BoB	PEL_TRAWL	none	ENG	33 162	6 093				23 279				47 890
8b-BoB			ESP									1 982	1 671
8b-BoB			FRA	85 132	251 242	383 614	247 545	112 229	108 524	88 266	59 344	96 555	39 610
8b-BoB			GER			12 080							7 893
8b-BoB			IRL	53 739	45 144	26 261	16 751	8 752					
8b-BoB			NED			26 250		9 668			6 548		74 342
8b-BoB	PEL_TRAWL	none	Total	172 033	302 479	448 205	264 296	130 649	131 803	88 266	65 892	98 537	171 406
8b-BoB	PEL_TRAWL	SBcIIIart5	FRA							9 008	11 120	19 838	33 163
8b-BoB	PEL_TRAWL	SBcIIIart5	Total	-	-	-	-	-	-	9 008	11 120	19 838	33 163
8b-BoB	POTS	none	ESP									246	240
8b-BoB			FRA	5 910	2 106	3 877	5 674	306	306	2 208	2 630	1 451	651
8b-BoB	POTS	none	Total	5 910	2 106	3 877	5 674	306	306	2 208	2 630	1 697	891
8b-BoB	POTS	SBcIIIart5	FRA							3 383	2 478	6 415	4 197
8b-BoB	POTS	SBcIIIart5	Total	-	-	-	-	-	-	3 383	2 478	6 415	4 197
8b-BoB	TRAMMEL	none	ESP									785	519
8b-BoB			FRA	156 696	363 199	402 465	375 874	373 502	373 038	23 479	20 151	49 844	37 489
8b-BoB	TRAMMEL	none	Total	156 696	363 199	402 465	375 874	373 502	373 038	23 479	20 151	50 629	38 008
8b-BoB	TRAMMEL	SBcIIIart5	FRA							367 288	373 075	436 472	427 911
8b-BoB	TRAMMEL	SBcIIIart5	Total	-	-	-	-	-	-	367 288	373 075	436 472	427 911
8b-BoB	none	none	ESP	51 452	69 122	24 471	14 195	21 166	21 166		8 645	40 841	
8b-BoB			FRA										
8b-BoB			IRL		15 840								
8b-BoB	none	none	Total	51 452	84 962	24 471	14 195	21 166	21 166	-	8 645	40 841	-
8b-BoB	none	SBcIIIart5	FRA									1 110	
8b-BoB	none	SBcIIIart5	Total	-	-	-	-	-	-	-	-	1 110	-

Table 5.10.1.11 – Bay of Biscay – 8a - Trend in Number of vessels concerned by existing derogations stated in article 5 of Coun. Reg. 388/2006 and Member State, 2004-2013. Derogations are sorted by gear, special condition (SPECON), and country (o. 10m length vessels). Data qualities are summarised in Section 4 of the report.

REG AREA COD	REG GEAR COD	SPECON	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
8a-BoB	BEAM	none	BEL	19	20								
8a-BoB			ENG					1					
8a-BoB			FRA	4	1	1					2		1
8a-BoB	BEAM	none	Total	23	21	1		1			2	-	1
8a-BoB	BEAM	SBCIIART5	BEL			18	20	14	18	13	15	14	13
8a-BoB			FRA							1			
8a-BoB	BEAM	SBCIIART5	Total			18	20	14	18	14	15	14	13
8a-BoB	DEM_SEINE	NONE	FRA						1	5	5	2	4
8a-BoB			NED						1				
8a-BoB	DEM_SEINE	none	Total						1	5	5	2	4
8a-BoB	DEM_SEINE	SBCIIART5	FRA							1	5	7	
8a-BoB	DEM_SEINE	SBCIIART5	Total							1	5	7	
8a-BoB	DREDGE	none	FRA	117	136	80	84	102	92	61	61	56	65
8a-BoB			IRL										
8a-BoB	DREDGE	none	Total	117	136	80	84	102	92	61	61	56	65
8a-BoB	DREDGE	SBCIIART5	FRA							9	10	27	28
8a-BoB	DREDGE	SBCIIART5	Total							9	10	27	28
8a-BoB	GILL	none	ENG	1	1	3	3	3	3	3	1	3	1
8a-BoB			ESP									8	9
8a-BoB			FRA	63	67	92	72	75	74	36	36	23	27
8a-BoB			SCO	2	1	1	1	1	1	1	1	1	1
8a-BoB	GILL	none	Total	66	69	96	76	79	78	40	38	35	38
8a-BoB	GILL	SBCIIART5	FRA							20	18	23	26
8a-BoB	GILL	SBCIIART5	Total							20	18	23	26
8a-BoB	LONGLINE	none	ENG	2	3	2	2	1					
8a-BoB			ESP									111	26
8a-BoB			FRA	28	29	55	50	49	33	41	38	34	37
8a-BoB			IRL		1	1							
8a-BoB			SCO			1	1	2		1	2	1	1
8a-BoB	LONGLINE	none	Total	30	33	59	53	52	33	42	40	146	64
8a-BoB	LONGLINE	SBCIIART5	FRA							8	7	16	20
8a-BoB	LONGLINE	SBCIIART5	Total							8	7	16	20
8a-BoB	OTTER	none	DEN				1		2				
8a-BoB			ENG	2		2			2	1	2		
8a-BoB			ESP									10	10
8a-BoB			FRA	276	326	470	457	334	276	128	117	94	93
8a-BoB			IRL	1		1							
8a-BoB			NIR						1				
8a-BoB			SCO									1	1
8a-BoB	OTTER	none	Total	279	326	473	458	334	281	129	119	105	104
8a-BoB	OTTER	SBCIIART5	BEL									1	
8a-BoB			FRA							85	77	95	91
8a-BoB	OTTER	SBCIIART5	Total							85	77	95	91
8a-BoB	PEL_SEINE	none	ESP									2	11
8a-BoB			FRA	26	18	18	18	14	14	13	21	21	15
8a-BoB	PEL_SEINE	none	Total	26	18	18	18	14	14	13	21	23	26
8a-BoB	PEL_SEINE	SBCIIART5	FRA							1		1	1
8a-BoB	PEL_SEINE	SBCIIART5	Total							1	-	1	1
8a-BoB	PEL_TRAWL	none	DEN			1	9	1	1	1	1	1	3
8a-BoB			ENG	4	3	2	2	3	4	3	2		2
8a-BoB			ESP									1	
8a-BoB			FRA	103	104	77	76	21	27	35	38	38	30
8a-BoB			GER	3	4	4		2	1	2	2		3
8a-BoB			IRL	1	2	2	1		1	1		2	2
8a-BoB			NED	4	6	8	2	3	2	2	1		4
8a-BoB			NIR										
8a-BoB			SCO						1				
8a-BoB	PEL_TRAWL	none	Total	115	119	94	90	30	38	44	44	42	44
8a-BoB	PEL_TRAWL	SBCIIART5	FRA							12	8	15	21
8a-BoB	PEL_TRAWL	SBCIIART5	Total							12	8	15	21
8a-BoB	POTS	none	ENG	1									
8a-BoB			FRA	16	12	16	11	4	4	40	39	27	29
8a-BoB			GER	1		2	2	1					
8a-BoB	POTS	none	Total	18	12	18	13	5	4	40	39	27	29
8a-BoB	POTS	SBCIIART5	FRA							4	9	13	14
8a-BoB	POTS	SBCIIART5	Total							4	9	13	14
8a-BoB	TRAMMEL	none	ENG					1					
8a-BoB			FRA	62	67	87	109	116	131	23	21	15	14
8a-BoB	TRAMMEL	none	Total	62	67	87	109	117	131	23	21	15	14
8a-BoB	TRAMMEL	SBCIIART5	FRA							72	70	70	69
8a-BoB	TRAMMEL	SBCIIART5	Total							72	70	70	69
8a-BoB	none	none	ESP	41	41	41	41	59	59			11	
8a-BoB			FRA								38		
8a-BoB	none	none	Total	41	41	41	41	59	59	-	38	11	-
8a-BoB	none	SBCIIART5	FRA									5	
8a-BoB	none	SBCIIART5	Total									5	

Table 5.10.1.12 – Bay of Biscay – 8b - Trend in Number of vessels concerned by existing derogations stated in article 5 of Coun. Reg. 388/2006 and Member State, 2004-2013. Derogations are sorted by gear, special condition (SPECON), and country (o. 10m length vessels). Data qualities are summarised in Section 4 of the report.

REG AREA COD	REG GEAR COD	SPECON	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
8b-BoB	BEAM	none	BEL	19	23								
8b-BoB			FRA				1				1	1	
8b-BoB	BEAM	none	Total	19	23		1				1	1	-
8b-BoB	BEAM	SBcIIart5	BEL			16	19	14	18	13	15	13	13
8b-BoB	BEAM	SBcIIart5	Total			16	19	14	18	13	15	13	13
8b-BoB	DEM_SEINE	none	ESP									1	
8b-BoB			FRA							4	5	3	4
8b-BoB			NED						1	1		1	
8b-BoB	DEM_SEINE	none	Total						1	5	5	5	4
8b-BoB	DEM_SEINE	SBcIIart5	FRA									4	6
8b-BoB	DEM_SEINE	SBcIIart5	Total									4	6
8b-BoB	DREDGE	none	ESP									1	1
8b-BoB			FRA	8	28	19	24	31	31	17	23	20	18
8b-BoB	DREDGE	none	Total	8	28	19	24	31	31	17	23	21	19
8b-BoB	DREDGE	SBcIIart5	FRA							5	8	10	9
8b-BoB	DREDGE	SBcIIart5	Total							5	8	10	9
8b-BoB	GILL	none	ENG		1	1	1						
8b-BoB			ESP									9	8
8b-BoB			FRA	31	56	60	55	55	56	28	20	16	18
8b-BoB			SCO	1				1		1	1		
8b-BoB	GILL	none	Total	32	57	61	56	56	56	29	21	25	26
8b-BoB	GILL	SBcIIart5	FRA							19	17	23	27
8b-BoB	GILL	SBcIIart5	Total							19	17	23	27
8b-BoB	LONGLINE	none	ENG	1	1	1	1	1					
8b-BoB			ESP									106	54
8b-BoB			FRA	11	26	35	25	24	15	31	27	21	21
8b-BoB			IRL				1						
8b-BoB			SCO					1					
8b-BoB	LONGLINE	none	Total	12	27	36	27	26	15	31	27	127	75
8b-BoB	LONGLINE	SBcIIart5	FRA							7	9	17	19
8b-BoB	LONGLINE	SBcIIart5	Total							7	9	17	19
8b-BoB	OTTER	none	ENG	2	2	2					1	1	
8b-BoB			ESP									15	12
8b-BoB			FRA	74	123	155	138	135	158	44	39	33	29
8b-BoB			IRL				1						
8b-BoB	OTTER	NONE	Total	76	125	158	138	135	158	44	40	49	41
8b-BoB	OTTER	SBcIIart5	BEL									1	
8b-BoB			FRA							45	48	62	61
8b-BoB	OTTER	SBcIIart5	Total							45	48	63	61
8b-BoB	PEL_SEINE	none	ESP									83	82
8b-BoB			FRA	10	8	13	7	7	7	6	6	6	3
8b-BoB	PEL_SEINE	none	Total	10	8	13	7	7	7	6	6	89	85
8b-BoB	PEL_SEINE	SBcIIart5	FRA										1
8b-BoB	PEL_SEINE	SBcIIart5	Total	-	-	-	-	-	-	-	-	-	1
8b-BoB	PEL_TRAWL	none	ENG	2	1				2				3
8b-BoB			ESP									1	1
8b-BoB			FRA	93	158	178	80	32	44	22	23	16	11
8b-BoB			GER			1							1
8b-BoB			IRL	2	3	2	2	1					
8b-BoB			NED			1		1			1		4
8b-BoB	PEL_TRAWL	none	Total	97	162	182	82	34	46	22	24	17	20
8b-BoB	PEL_TRAWL	SBcIIart5	FRA							7	9	11	11
8b-BoB	PEL_TRAWL	SBcIIart5	Total							7	9	11	11
8b-BoB	POTS	none	ESP									3	1
8b-BoB			FRA	5	2	11	5	2	2	11	11	5	7
8b-BoB	POTS	none	Total	5	2	11	5	2	2	11	11	8	8
8b-BoB	POTS	SBcIIart5	FRA							4	6	6	7
8b-BoB	POTS	SBcIIart5	Total							4	6	6	7
8b-BoB	TRAMMEL	none	ESP									3	2
8b-BoB			FRA	54	66	90	103	111	104	12	13	7	11
8b-BoB	TRAMMEL	none	Total	54	66	90	103	111	104	12	13	10	13
8b-BoB	TRAMMEL	SBcIIart5	FRA							61	67	77	74
8b-BoB	TRAMMEL	SBcIIart5	Total							61	67	77	74
8b-BoB	none	none	ESP									30	
8b-BoB			FRA	76	95	81	47	61	61		29		
8b-BoB			IRL		1								
8b-BoB	none	NONE	Total	76	96	81	47	61	61		29	30	-
8b-BoB	none	SBcIIart5	FRA								4		
8b-BoB	none	SBcIIart5	Total								4		

5.10.2 ToR 1.b Fishing capacity in GT of relevant vessels by Member State and fisheries

Fishing capacity trends in GT is only available for Belgian vessels since 2004 consequently trend in fishing capacity GT is only represented for the Belgium beam trawl fleet. STECF 14-06 observed a relative stability of fishing capacity in the period for this fleet in the two ICES division 8a and 8b.

STECF 14-06 noted that fishing capacity was provided by Spain in 2012 only in GT and for French in 2012 and 2013 but in kW as this field is asked as kW or GT depending on the area and then has difficulties to be filled in (see Section 4 of the report).

Table 5.10.2.1 – Bay of Biscay 8a - Trend in Fishing capacity (GT) concerned by existing derogations stated in article 5 of Coun. Reg. 388/2006 and Member State, 2004-2013. Derogations are sorted by gear, special condition (SPECON), and country (o. 10m length vessels). Data qualities are summarised in Section 4 of the report.

REG AREA COD	REG GEAR COD	SPECON	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
8a-BoB	BEAM	none	BEL	6 945	7 526								
8a-BoB	BEAM	SBCIIIart5	BEL			6 611	7 237	5 118	6 957	4 946	5 661	5 197	5 207
8a-BoB	OTTER	SBCIIIart5	BEL									284	

Table 5.10.2.2 – Bay of Biscay 8b - Trend in Fishing capacity (GT) concerned by existing derogations stated in article 5 of Coun. Reg. 388/2006 and Member State, 2004-2013. Derogations are sorted by gear, special condition (SPECON), and country (o. 10m length vessels). Data qualities are summarised in Section 4 of the report.

REG AREA COD	REG GEAR COD	SPECON	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
8b-BoB	BEAM	none	BEL	6 944	8 226								
8b-BoB	BEAM	SBCIIIart5	BEL			5 781	6 871	5 118	6 591	4 946	5 661	4 913	5 207
8b-BoB	OTTER	SBCIIIart5	BEL									284	

5.10.3 ToR 1.c Catches (landings and discards) of common sole in weight and numbers at age by fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.10.4 ToR 1.c Catches (landings and discards) of non-sole species in weight and numbers at age by fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.10.5 ToR 2 Information on small boats (<10m)

5.10.5.1 Fishing effort of small boats by Member State

An overview of the fishing effort of small boats by Member State, Gear and SPECON for the ICES division 8a and 8b is presented below. Comparison with the large vessels (>10m) is, as well, proposed.

Almost all effort of small boats is French. No Spanish, Belgium nor Netherlands data are available for small boats. English data for small boats are very scarce.

Small boats represent, the last four years, almost 20% of the effort deployed by the large vessels in 8a and 10% in 8b. Relative stability is observed for the last four years. Main fleets involved in 8a are the longline fleet, the pots fleet, the gill and trammel net fleets and the otter trawl fleet. In 8b, the main fleets are the gill and trammel net fleets, the longline fleet and the pots fleet.

The effort data available for small boats before 2010 seem to be incomplete and the “none” gear category represent a large part of this effort. **So care is required in the use of these data to draw firm conclusions about trends of effort of small boats before 2010.**

Table 5.10.5.1.1 – Bay of Biscay – 8a – Overview of fishing effort in kW*days by fisheries for vessels <10m, comparison with the vessels >=10m, 2004- 2013. Relative changes between 2012 and 2013 are presented.

Length Class	REG AREA COD	REG GEAR COD	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Rel.C 13-12
o. 10m.	Sum o. 10m.		17 154 080	23 218 619	29 332 985	30 195 231	24 661 463	24 267 804	20 165 332	20 024 416	20 918 335	18 805 012	-10%
u. 10m.	8a-BoB	BEAM				2 552			2 376	352	1 320	4 656	253%
	8a-BoB	DREDGE	112 020	151 406	211 597	119 511	87 829	87 829	93 547	84 866	178 770	185 551	4%
	8a-BoB	GILL	477 770	521 942	667 053	673 044	420 628	420 628	1 003 414	847 894	759 362	757 515	0%
	8a-BoB	LONGLINE	215 468	322 477	763 802	879 977	439 161	439 161	1 202 923	1 156 425	1 072 205	981 638	-8%
	8a-BoB	OTTER	271 622	286 328	471 349	496 698	274 566	274 566	537 787	534 402	491 967	471 176	-4%
	8a-BoB	PEL SEINE			990	4 070			1 059	2 507	135	108	-20%
	8a-BoB	PEL TRAWL	2 131	4 753	5 254		1 419	1 419	72 779	54 653	164 960	64 946	-61%
	8a-BoB	POTS	99 366	122 577	281 297	335 691	244 027	244 027	742 131	786 223	842 154	786 049	-7%
	8a-BoB	TRAMMEL	293 150	403 805	653 788	726 655	558 403	558 403	343 896	348 578	322 189	246 189	-24%
	8a-BoB	none	711 793	674 676	665 668	830 807	759 604	759 604		158 845			
	Sum u. 10m		2 183 320	2 487 964	3 720 798	4 069 005	2 785 637	2 785 637	3 999 912	3 974 745	3 833 062	3 497 828	-9%
	% u.10m		13%	11%	13%	13%	11%	11%	20%	20%	18%	19%	

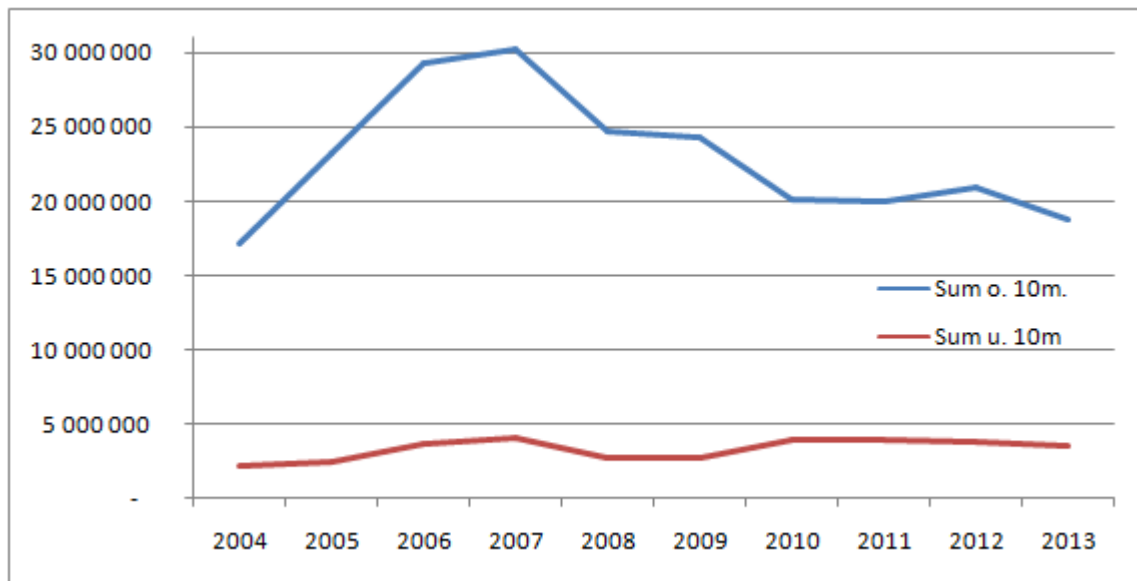


Figure 5.10.5.1.1 – Bay of Biscay – 8a – Overview of fishing effort in kW*days by <10m and >=10m vessels, 2004- 2013.

Table 5.10.5.1.2 – Bay of Biscay – 8b – Overview of fishing effort in kW*days by fisheries for vessels <10m, comparison with the vessels >=10m, 2004- 2013. Relative changes between 2012 and 2013 are presented.

Length Class	REG AREA COD	REG GEAR COD	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Rel.C 13-12
o. 10m.	Sum o. 10m.		3 901 506	9 498 305	10 950 565	9 940 628	8 909 928	9 024 236	7 515 638	7 360 157	10 113 983	10 251 487	1%
u. 10m.	8b-BoB	DREDGE	1 804	5 500	6 859	2 741	2 118	2 100	25 048	28 716	14 825	29 299	98%
	8b-BoB	GILL	268 817	352 259	307 297	300 720	301 690	301 690	359 179	310 881	379 396	481 166	27%
	8b-BoB	LONGLINE	77 924	52 621	70 753	73 665	95 834	95 730	88 463	126 485	197 647	191 515	-3%
	8b-BoB	OTTER	28 601	31 766	28 532	38 190	15 737	15 737	7 087	3 942	2 096	259	-88%
	8b-BoB	PEL_SEINE							705	4 230	2 585	3 878	-50%
	8b-BoB	PEL_TRAWL		1 890	2 155	198			10 898	4 172	14 250	2 743	-81%
	8b-BoB	POTS	15 057	9 182	24 967	24 376	6 753	6 753	105 023	121 021	117 988	76 882	-35%
	8b-BoB	TRAMMEL	82 380	84 760	155 626	149 630	193 300	193 300	263 329	267 340	276 240	274 331	-1%
	8b-BoB	none	86 194	87 607	107 822	65 968	71 801	71 801		258 790			
		Sum u. 10m		560 777	625 585	704 011	655 488	687 233	687 111	859 732	1 125 577	1 005 027	1 060 073
	% u.10m		14%	7%	6%	7%	8%	8%	11%	15%	10%	10%	

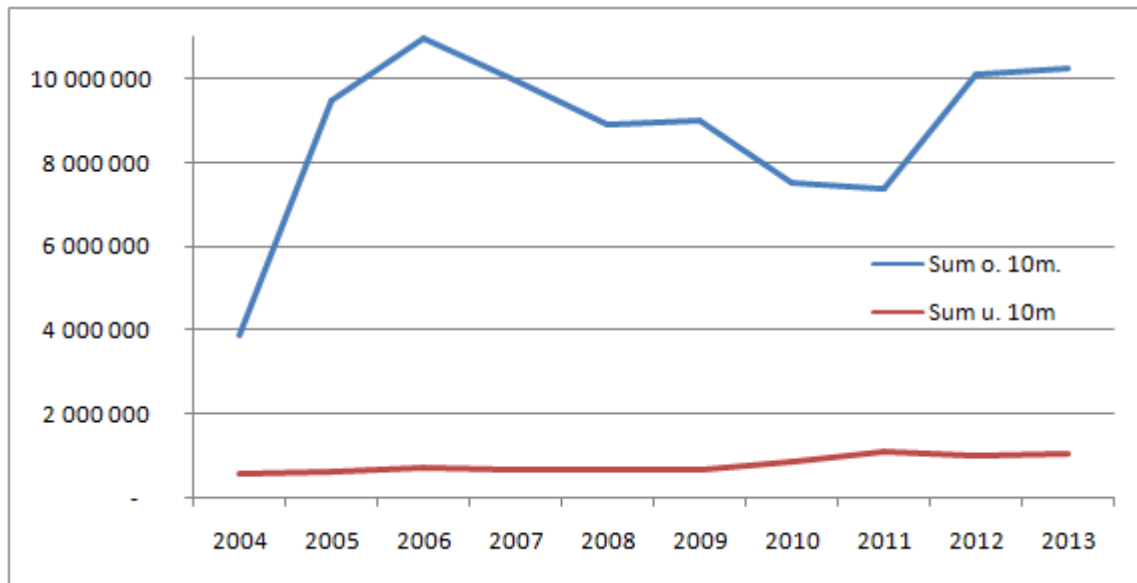


Figure 5.10.5.1.2 – Bay of Biscay – 8b – Overview of fishing effort in kW*days by <10m and >=10m vessels, 2004- 2013.

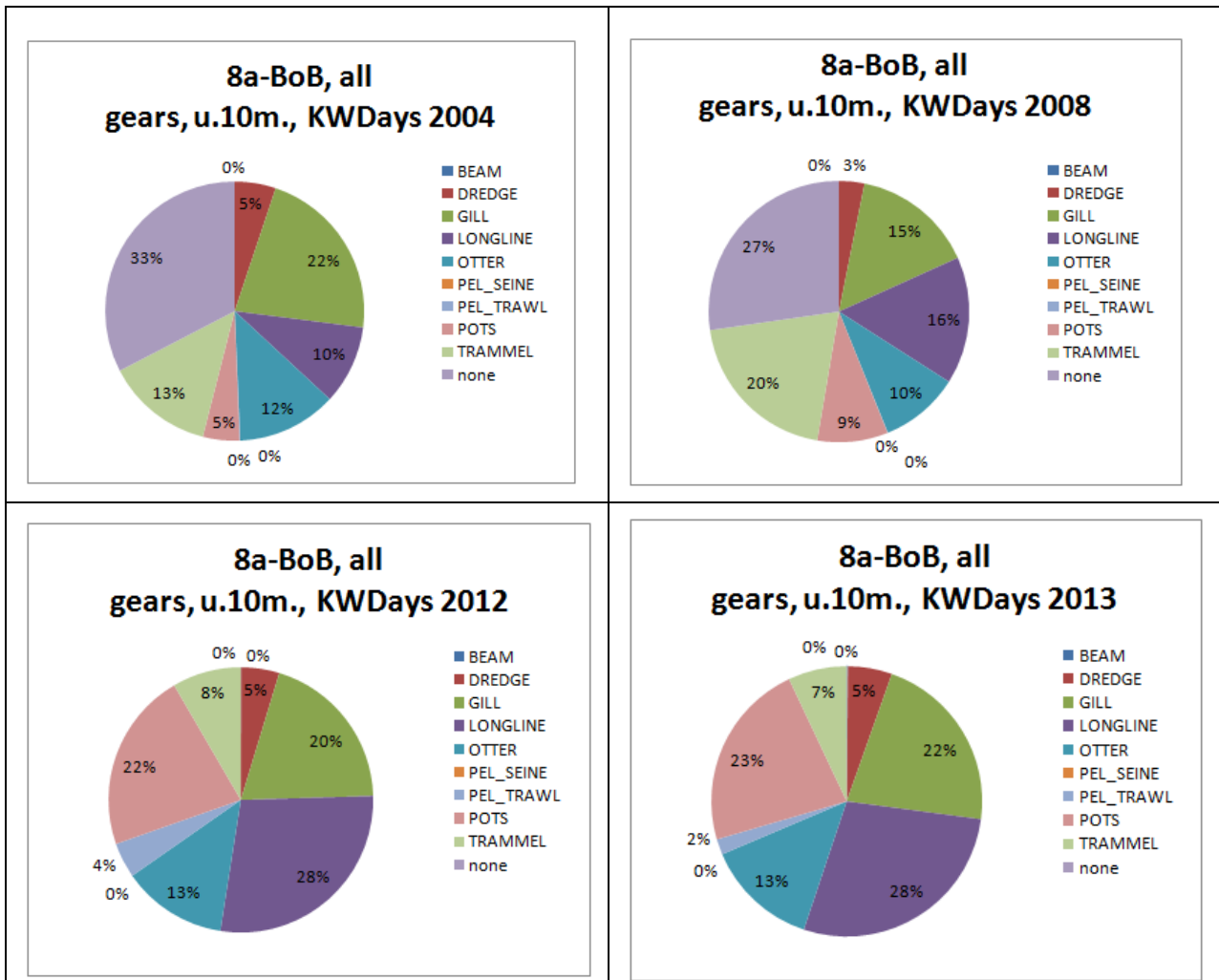


Figure 5.10.5.1.3 Bay of Biscay – 8a, Trend in the distribution per gear of the nominal effort (KWDays) for vessels <10m., 2004, 2008, 2012 and 2013.

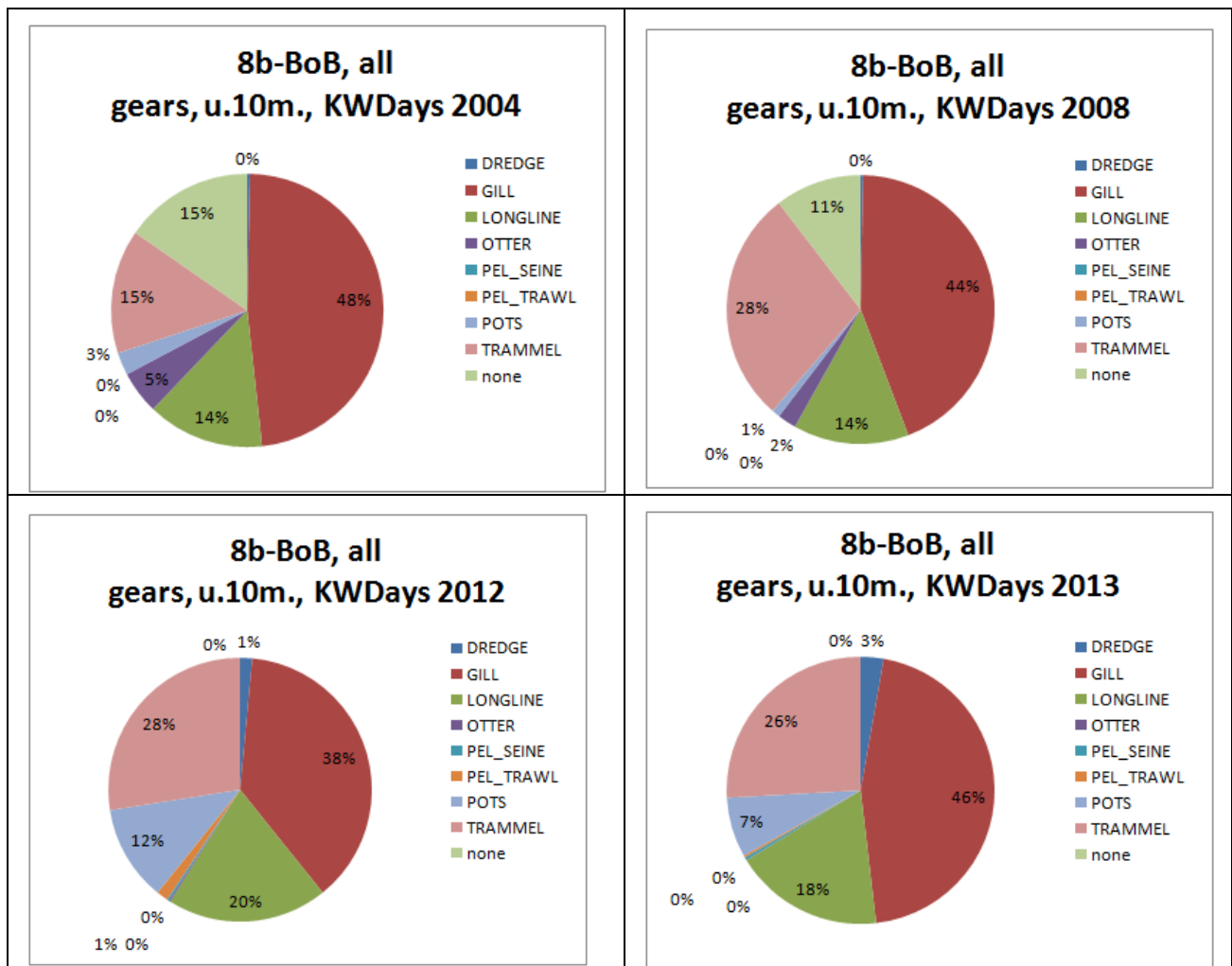


Figure 5.10.5.1.4 Bay of Biscay – 8b, Trend in the distribution per gear of the nominal effort (KWDays) for vessels <10m., 2004, 2008, 2012 and 2013.

Table 5.10.5.1.3 – Bay of Biscay – 8a - Trend in nominal effort (kW*days at sea) by existing derogations stated in article 5 of Coun. Reg. 388/2006 and Member State, 2004-2013. Derogations are sorted by gear, special condition (SPECON), and country (u. 10m length vessels). Data qualities are summarised in Section 4 of the report.

REG AREA COD	REG GEAR COD	SPECON	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
8a-BoB	BEAM	none	FRA				2 552			2 376	352	1 320	4 656
8a-BoB	Total	none					2 552			2 376	352	1 320	4 656
8a-BoB	DREDGE	none	FRA	112 020	151 406	211 597	119 511	87 829	87 829	90 477	84 206	168 998	169 600
8a-BoB	Total	none		112 020	151 406	211 597	119 511	87 829	87 829	90 477	84 206	168 998	169 600
8a-BoB	DREDGE	SBcIIart5	FRA							3 070	660	9 772	15 951
8a-BoB	Total	SBcIIart5								3 070	660	9 772	15 951
8a-BoB	GILL	none	FRA	477 770	521 942	667 053	673 044	420 628	420 628	897 110	690 117	722 851	719 922
8a-BoB	Total	none		477 770	521 942	667 053	673 044	420 628	420 628	897 110	690 117	722 851	719 922
8a-BoB	GILL	SBcIIart5	FRA							106 304	157 777	36 511	37 593
8a-BoB	Total	SBcIIart5								106 304	157 777	36 511	37 593
8a-BoB	LONGLINE	none	FRA	215 468	322 477	763 802	879 977	439 161	439 161	1 179 563	1 098 648	1 011 852	918 257
8a-BoB	Total	none		215 468	322 477	763 802	879 977	439 161	439 161	1 179 563	1 098 648	1 011 852	918 257
8a-BoB	LONGLINE	SBcIIart5	FRA							23 360	57 777	60 353	63 381
8a-BoB	Total	SBcIIart5								23 360	57 777	60 353	63 381
8a-BoB	OTTER	none	FRA	271 622	286 328	471 349	496 698	274 566	274 566	396 595	388 428	469 747	434 536
8a-BoB	Total	none		271 622	286 328	471 349	496 698	274 566	274 566	396 595	388 428	469 747	434 536
8a-BoB	OTTER	SBcIIart5	FRA							141 192	145 974	22 220	36 640
8a-BoB	Total	SBcIIart5								141 192	145 974	22 220	36 640
8a-BoB	PEL_SEINE	none	FRA			990	4 070			1 059	2 507	135	108
8a-BoB	Total	none				990	4 070			1 059	2 507	135	108
8a-BoB	PEL_TRAWL	none	FRA	2 131	4 753	5 254		1 419	1 419	70 283	53 964	136 696	48 941
8a-BoB	Total	none		2 131	4 753	5 254		1 419	1 419	70 283	53 964	136 696	48 941
8a-BoB	PEL_TRAWL	SBcIIart5	FRA							2 496	689	28 264	16 005
8a-BoB	Total	SBcIIart5								2 496	689	28 264	16 005
8a-BoB	POTS	none	FRA	99 366	122 577	281 297	335 691	244 027	244 027	734 696	757 161	828 204	764 327
8a-BoB	Total	none		99 366	122 577	281 297	335 691	244 027	244 027	734 696	757 161	828 204	764 327
8a-BoB	POTS	SBcIIart5	FRA							7 435	29 062	13 950	21 722
8a-BoB	Total	SBcIIart5								7 435	29 062	13 950	21 722
8a-BoB	TRAMMEL	none	FRA	293 150	403 805	653 788	726 655	558 403	558 403	304 466	275 906	290 364	206 909
8a-BoB	Total	none		293 150	403 805	653 788	726 655	558 403	558 403	304 466	275 906	290 364	206 909
8a-BoB	TRAMMEL	SBcIIart5	FRA							39 430	72 672	31 825	39 280
8a-BoB	Total	SBcIIart5								39 430	72 672	31 825	39 280
8a-BoB	none	none	FRA	711 793	674 676	665 668	830 807	759 604	759 604			152 175	
8a-BoB	Total	none		711 793	674 676	665 668	830 807	759 604	759 604			152 175	
8a-BoB	none	SBcIIart5	FRA								6 670		
8a-BoB	Total	SBcIIart5									6 670		

Table 5.10.5.1.4 – Bay of Biscay – 8b - Trend in nominal effort (kW*days at sea) by existing derogations stated in article 5 of Coun. Reg. 388/2006 and Member State, 2004-2013. Derogations are sorted by gear, special condition (SPECON), and country (u. 10m length vessels). Data qualities are summarised in Section 4 of the report.

REG AREA COD	REG GEAR COD	SPECON	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
8b-BoB	DREDGE	none	ENG					18					
		none	FRA	1 804	5 500	6 859	2 741	2 100	2 100	24 196	28 716	13 476	29 157
8b-BoB	Total	none		1 804	5 500	6 859	2 741	2 118	2 100	24 196	28 716	13 476	29 157
8b-BoB	DREDGE	SBcIIIart5	FRA							852		1 349	142
8b-BoB	Total	SBcIIIart5								852	-	1 349	142
8b-BoB	GILL	none	ENG			76	50						
		none	FRA	268 817	352 259	307 221	300 670	301 690	301 690	294 270	289 009	327 223	408 207
8b-BoB	Total	none		268 817	352 259	307 297	300 720	301 690	301 690	294 270	289 009	327 223	408 207
8b-BoB	GILL	SBcIIIart5	FRA							64 909	21 872	52 173	72 959
8b-BoB	Total	SBcIIIart5								64 909	21 872	52 173	72 959
8b-BoB	LONGLINE	none	ENG					104					
		none	FRA	77 924	52 621	70 753	73 665	95 730	95 730	88 463	126 485	188 146	184 532
8b-BoB	Total	none		77 924	52 621	70 753	73 665	95 834	95 730	88 463	126 485	188 146	184 532
8b-BoB	LONGLINE	SBcIIIart5	FRA									9 501	6 983
8b-BoB	Total	SBcIIIart5										9 501	6 983
8b-BoB	OTTER	none	FRA	28 601	31 766	28 532	38 190	15 737	15 737	7 087	3 942	2 096	259
8b-BoB	Total	none		28 601	31 766	28 532	38 190	15 737	15 737	7 087	3 942	2 096	259
8b-BoB	PEL_SEINE	none	FRA							705	4 230		
8b-BoB	Total	none								705	4 230	-	
8b-BoB	PEL_SEINE	SBcIIIart5	FRA									2 585	3 878
8b-BoB	Total	SBcIIIart5										2 585	3 878
8b-BoB	PEL_TRAWL	none	FRA		1 890	2 155	198			10 898	4 172	14 250	2 743
8b-BoB	Total	none			1 890	2 155	198			10 898	4 172	14 250	2 743
8b-BoB	POTS	none	ENG			592				59			
		none	FRA	15 057	9 182	24 375	24 376	6 753	6 753	104 964	121 021	107 936	72 022
8b-BoB	Total	none		15 057	9 182	24 967	24 376	6 753	6 753	105 023	121 021	107 936	72 022
8b-BoB	POTS	SBcIIIart5	FRA									10 052	4 860
8b-BoB	Total	SBcIIIart5										10 052	4 860
8b-BoB	TRAMMEL	none	FRA	82 380	84 760	155 626	149 630	193 300	193 300	156 110	184 901	169 929	177 542
8b-BoB	Total	none		82 380	84 760	155 626	149 630	193 300	193 300	156 110	184 901	169 929	177 542
8b-BoB	TRAMMEL	SBcIIIart5	FRA							107 219	82 439	106 311	96 789
8b-BoB	Total	SBcIIIart5								107 219	82 439	106 311	96 789
8b-BoB	none	none	FRA	86 194	87 607	107 822	65 968	71 801	71 801		258 636		
8b-BoB	Total	none		86 194	87 607	107 822	65 968	71 801	71 801		258 636		
8b-BoB	none	SBcIIIart5	FRA								154		
8b-BoB	Total	SBcIIIart5									154		

Table 5.10.5.1.5 – Bay of Biscay – 8a - Trend in Number of vessels concerned by existing derogations stated in article 5 of Coun. Reg. 388/2006 and Member State, 2004-2013. Derogations are sorted by gear, special condition (SPECON), and country (u. 10m length vessels). Data qualities are summarised in Section 4 of the report.

REG AREA COD	REG GEAR COD	SPECON	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
8a-BoB	BEAM	none	FRA				1			1	1	1	1
8a-BoB	Total	none					1			1	1	1	1
8a-BoB	DREDGE	none	FRA	27	32	38	25	15	15	23	14	40	39
8a-BoB	Total	none		27	32	38	25	15	15	23	14	40	39
8a-BoB	DREDGE	SBcIIIart5	FRA							2	1	2	6
8a-BoB	Total	SBcIIIart5								2	1	2	6
8a-BoB	GILL	none	FRA	30	29	49	48	35	35	58	57	48	57
8a-BoB	Total	none		30	29	49	48	35	35	58	57	48	57
8a-BoB	GILL	SBcIIIart5	FRA							5	7	2	2
8a-BoB	Total	SBcIIIart5								5	7	2	2
8a-BoB	LONGLINE	none	FRA	55	62	150	153	91	90	171	168	161	154
8a-BoB	Total	none		55	62	150	153	91	90	171	168	161	154
8a-BoB	LONGLINE	SBcIIIart5	FRA							3	7	5	6
8a-BoB	Total	SBcIIIart5								3	7	5	6
8a-BoB	OTTER	none	FRA	19	14	36	50	27	27	28	31	37	29
8a-BoB	Total	none		19	14	36	50	27	27	28	31	37	29
8a-BoB	OTTER	SBcIIIart5	FRA							9	10	3	2
8a-BoB	Total	SBcIIIart5								9	10	3	2
8a-BoB	PEL_SEINE	none	FRA			2	1			1	2	1	1
8a-BoB	Total	none				2	1			1	2	1	1
8a-BoB	PEL_TRAWL	none	FRA	1	1	4		1	1	123	50	85	89
8a-BoB	Total	none		1	1	4		1	1	123	50	85	89
8a-BoB	PEL_TRAWL	SBcIIIart5	FRA							5	2	2	1
8a-BoB	Total	SBcIIIart5								5	2	2	1
8a-BoB	POTS	none	FRA	25	26	58	66	49	49	130	135	129	138
8a-BoB	Total	none		25	26	58	66	49	49	130	135	129	138
8a-BoB	POTS	SBcIIIart5	FRA							3	5	2	5
8a-BoB	Total	SBcIIIart5								3	5	2	5
8a-BoB	TRAMMEL	none	FRA	31	29	56	78	68	65	32	29	31	33
8a-BoB	Total	none		31	29	56	78	68	65	32	29	31	33
8a-BoB	TRAMMEL	SBcIIIart5	FRA							2	4	3	3
8a-BoB	Total	SBcIIIart5								2	4	3	3
8a-BoB	none	none	FRA	345	367	320	364	311	311		149		
8a-BoB	Total	none		345	367	320	364	311	311		149		
8a-BoB	none	SBcIIIart5	FRA								7		
8a-BoB	Total	SBcIIIart5									7		

Table 5.10.5.1.6 – Bay of Biscay – 8b - Trend in Number of vessels concerned by existing derogations stated in article 5 of Coun. Reg. 388/2006 and Member State, 2004-2013. Derogations are sorted by gear, special condition (SPECON), and country (u. 10m length vessels). Data qualities are summarised in Section 4 of the report.

REG AREA COD	REG GEAR COD	SPECON	COUNTRY	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
8b-BoB	DREDGE	none	ENG					1					
		none	FRA	1	3	2	2	1	1	3	7	7	4
8b-BoB	Total	none		1	3	2	2	2	1	3	7	7	4
8b-BoB	DREDGE	SBcIIIart5	FRA							1		1	1
8b-BoB	Total	SBcIIIart5								1	-	1	1
8b-BoB	GILL	none	ENG			2	1						
		none	FRA	34	27	28	33	21	21	28	24	20	26
8b-BoB	Total	none		34	27	30	34	21	21	28	24	20	26
8b-BoB	GILL	SBcIIIart5	FRA							2	2	4	3
8b-BoB	Total	SBcIIIart5								2	2	4	3
8b-BoB	LONGLINE	none	ENG					1					
		none	FRA	20	15	18	17	19	18	27	31	30	34
8b-BoB	Total	none		20	15	18	17	20	18	27	31	30	34
8b-BoB	LONGLINE	SBcIIIart5	FRA									2	4
8b-BoB	Total	SBcIIIart5										2	4
8b-BoB	OTTER	none	FRA	2	3	3	3	2	2	3	1	2	1
8b-BoB	Total	none		2	3	3	3	2	2	3	1	2	1
8b-BoB	PEL_SEINE	none	FRA							1	1		
8b-BoB	Total	none								1	1		
8b-BoB	PEL_SEINE	SBcIIIart5	FRA									1	1
8b-BoB	Total	SBcIIIart5										1	1
8b-BoB	PEL_TRAWL	none	FRA		1	7	1			14	8	12	11
8b-BoB	Total	none			1	7	1			14	8	12	11
8b-BoB	POTS	none	ENG			1				1			
		none	FRA	2	1	2	2	4	4	37	45	46	47
8b-BoB	Total	none		2	1	3	2	4	4	38	45	46	47
8b-BoB	POTS	SBcIIIart5	FRA									2	1
8b-BoB	Total	SBcIIIart5										2	1
8b-BoB	TRAMMEL	none	FRA	10	7	13	13	14	14	15	32	21	24
8b-BoB	Total	none		10	7	13	13	14	14	15	32	21	24
8b-BoB	TRAMMEL	SBcIIIart5	FRA							4	3	6	6
8b-BoB	Total	SBcIIIart5								4	3	6	6
8b-BoB	none	none	FRA	59	81	64	40	42	42		65		
8b-BoB	Total	none		59	81	64	40	42	42		65		
8b-BoB	none	SBcIIIart5	FRA								1		
8b-BoB	Total	SBcIIIart5									1		

5.10.5.2 Catches (landings and discards) of common sole and associated species by small boats by Member State

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

5.10.6 ToR 3 Spatio-temporal patterns in effective effort by fisheries

Figures 5.10.6.1 to 5.10.6.11 show the spatial distribution of the effective fishing effort for all the different fisheries operating in the Bay of Biscay during the period 2003 to 2013. The pattern seems similar for the whole period for most of the fleets.

The effort is mostly distributed all across the gulf with somewhat higher values close to the estuaries (Gironde, Baie de vilaine).

For trammel and otter, that are the two fisheries for which the effort increased between 2003 and 2007, the spatial effort allocation seems to follow the same trends, starting mainly in south Brittany and increasing in all the area in the following years.

The demersal seine fishery started in 2009 and increased since 2010.

Spanish fleets, included in the 2012&2013 figures, operate mainly in the >12milles' ICES rectangles.

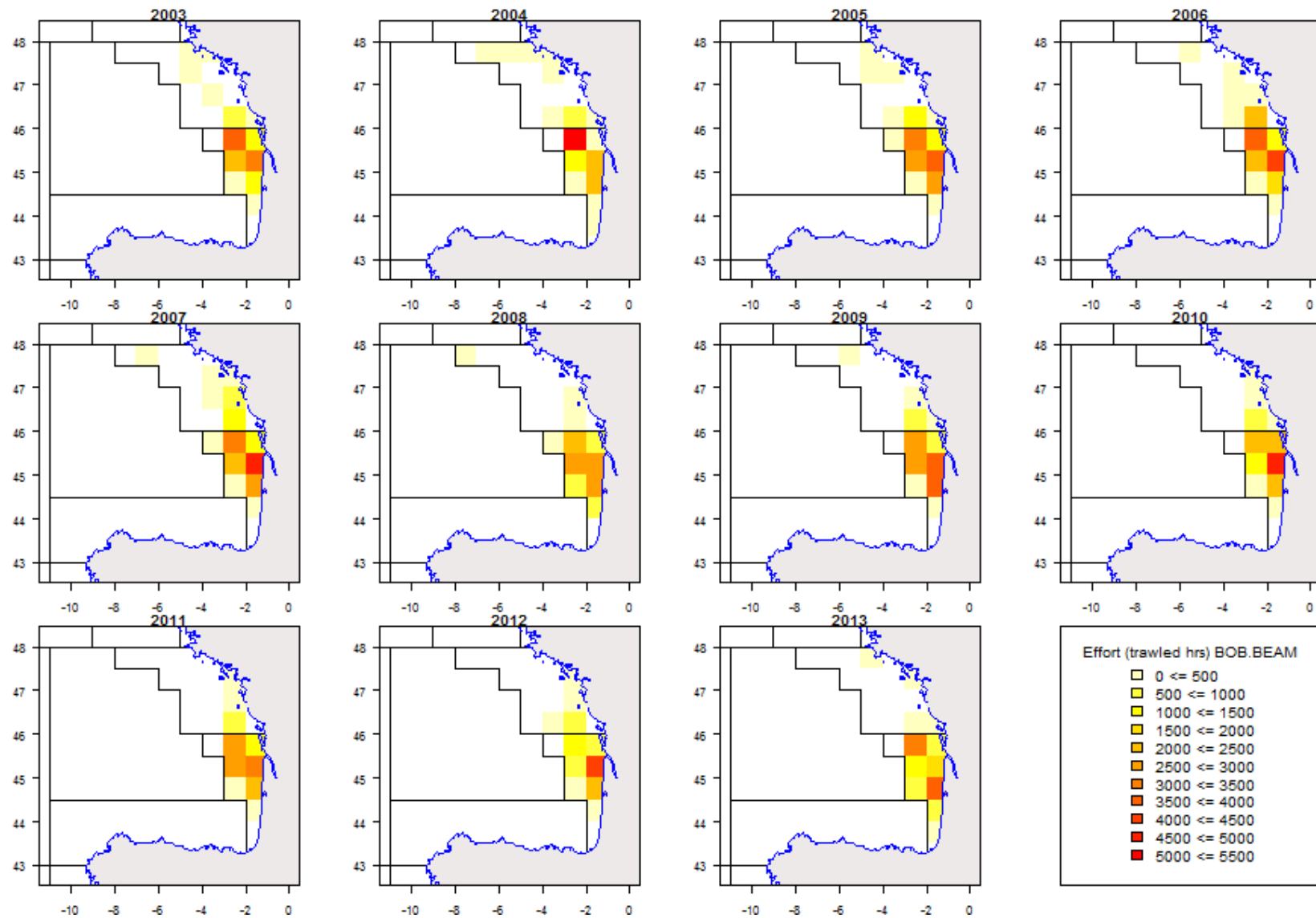


Figure 5.10.6.1. Bay of Biscay. Spatial distribution of effective fishing effort (fished hours) by ICES statistical rectangle for the Beam trawl gear, 2003-2013.

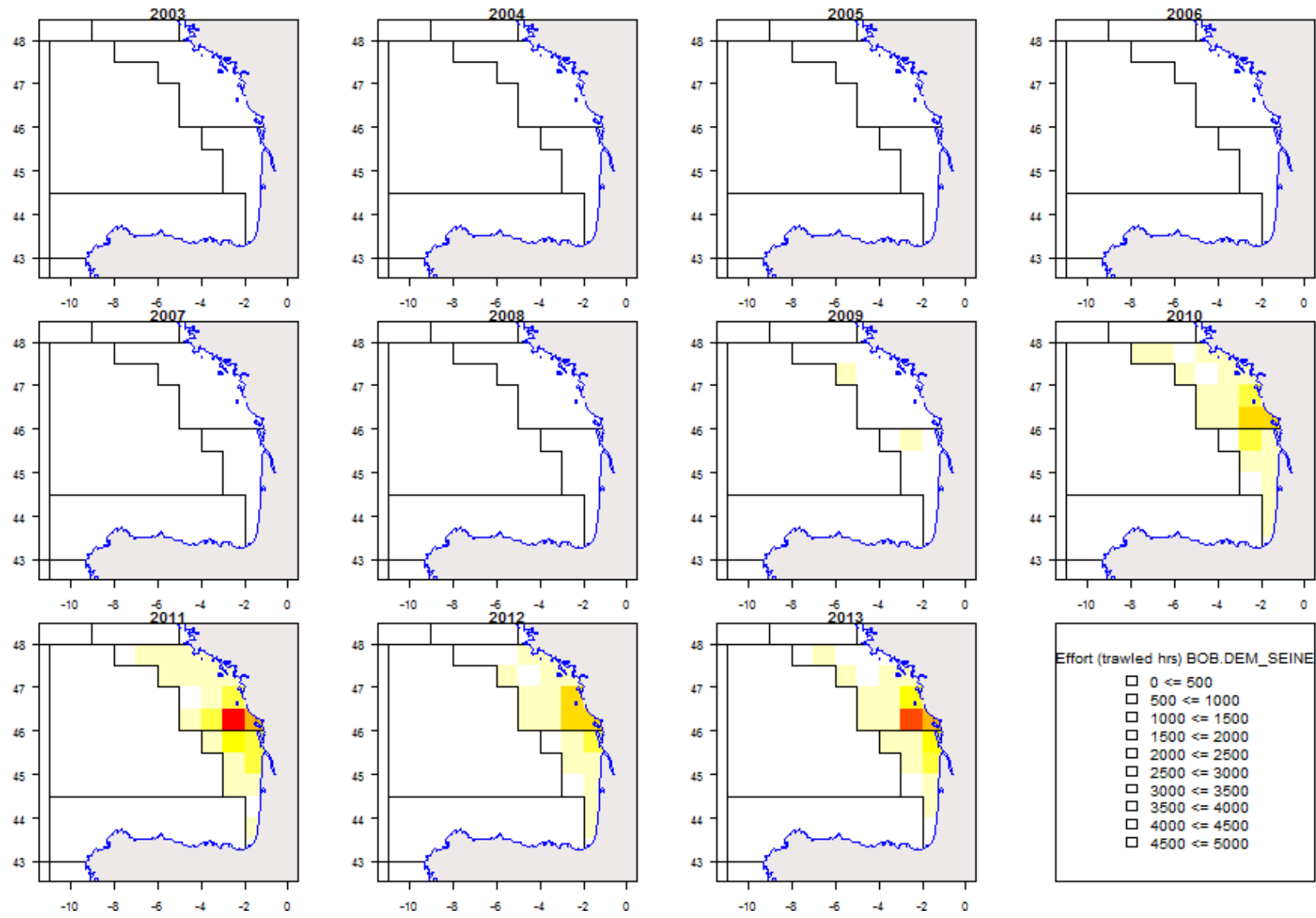


Figure 5.10.6.2. Bay of Biscay. Spatial distribution of effective fishing effort (fished hours) by ICES statistical rectangle for Demersal Seine gear, 2003-2013.

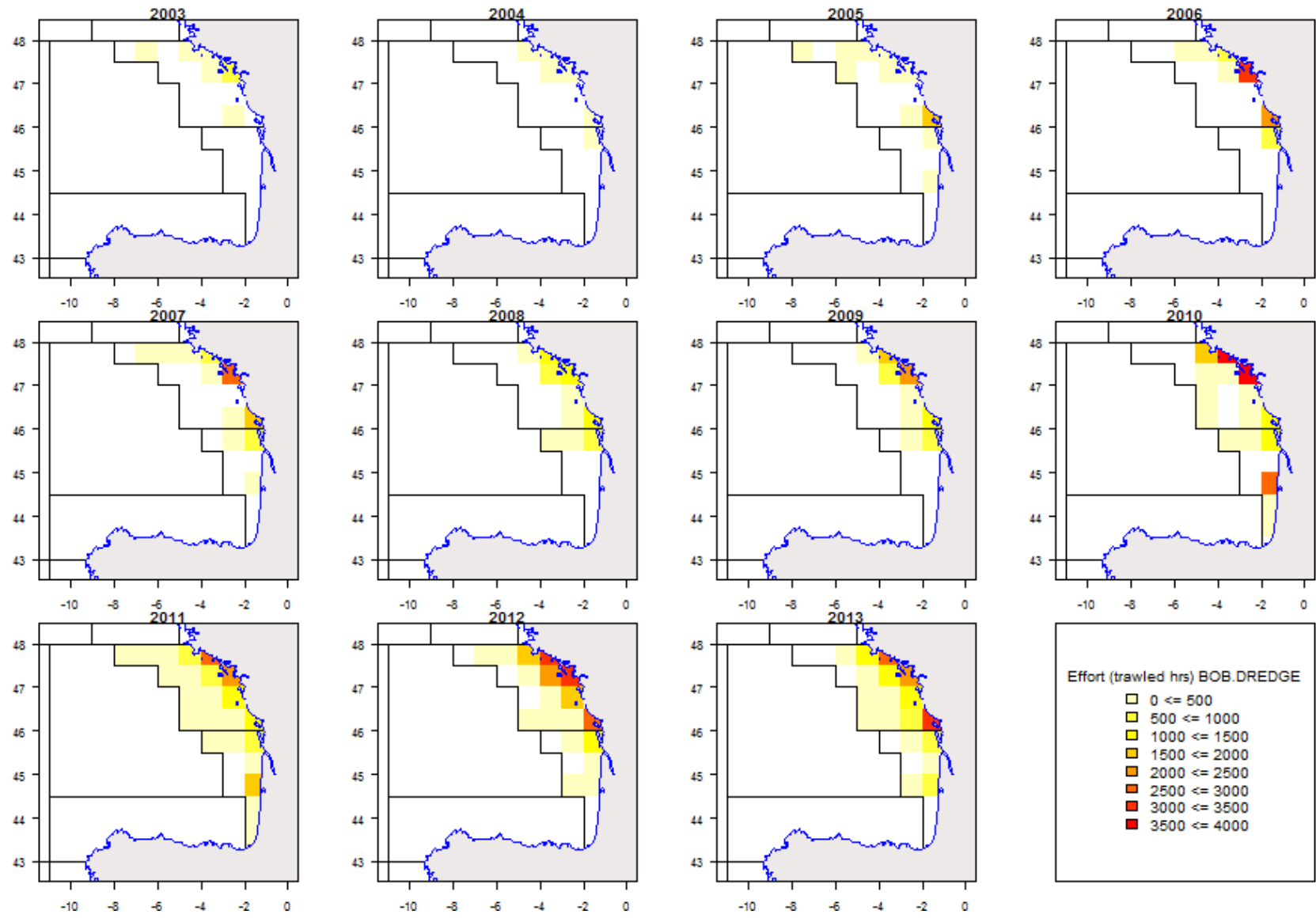


Figure 5.10.6.3. Bay of Biscay. Spatial distribution of effective fishing effort (fished hours) by ICES statistical rectangle for Dredge gear, 2003-2013.

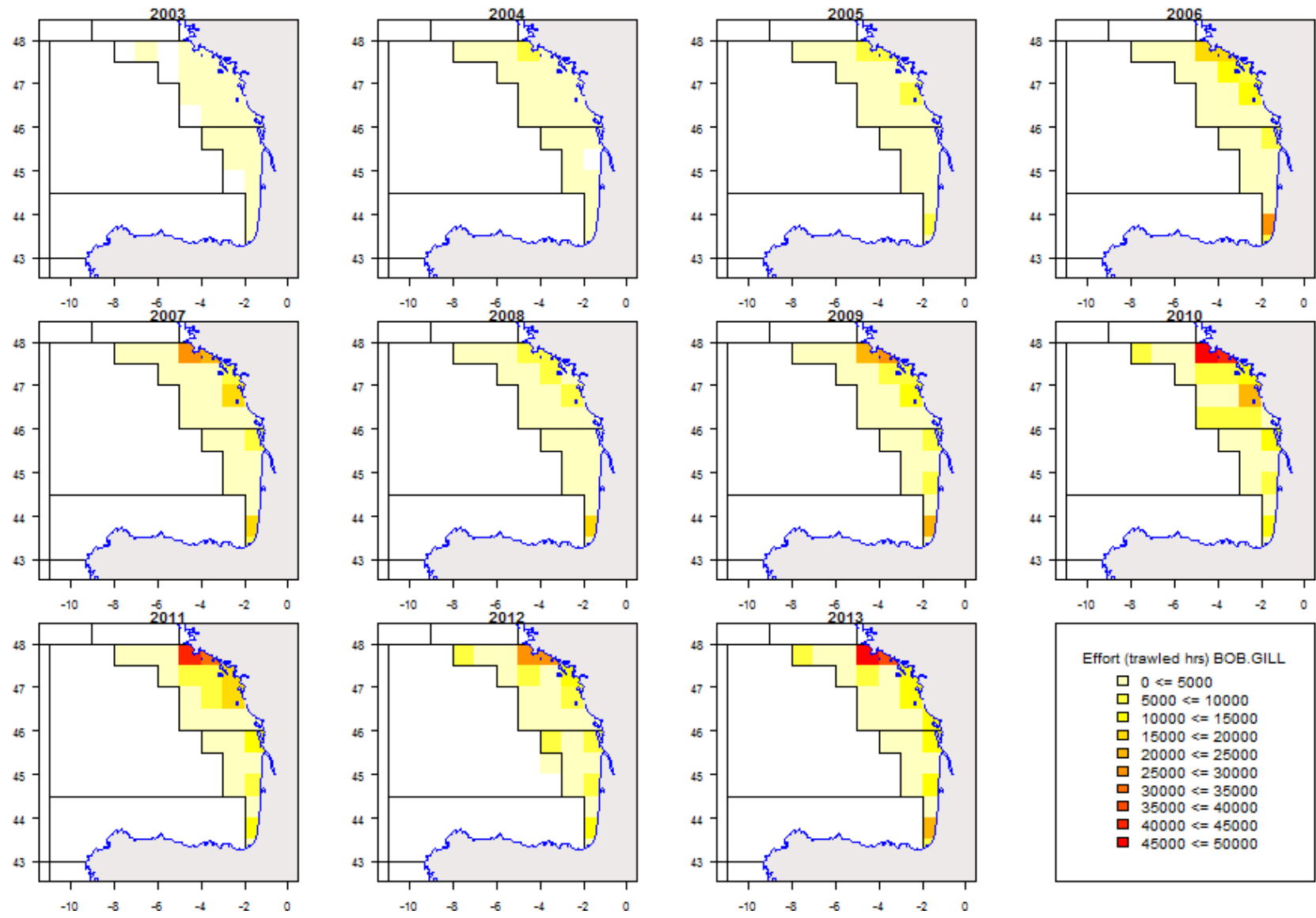


Figure 5.10.6.4. Bay of Biscay. Spatial distribution of effective fishing effort (fished hours) by ICES statistical rectangle for Gill net gear, 2003-2013.

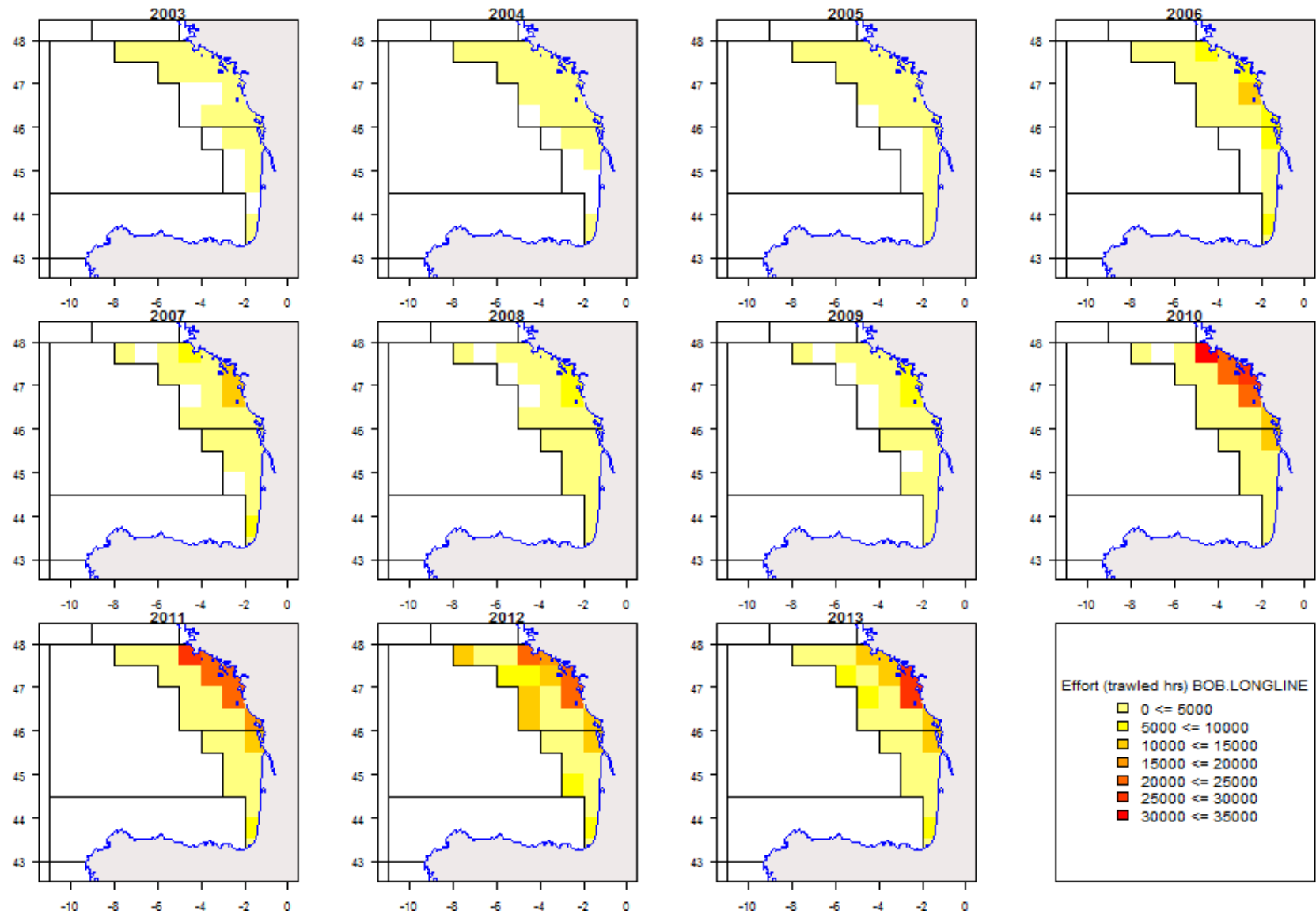


Figure 5.10.6.5. Bay of Biscay. Spatial distribution of effective fishing effort (fished hours) by ICES statistical rectangle for Longline gear, 2003-2013.

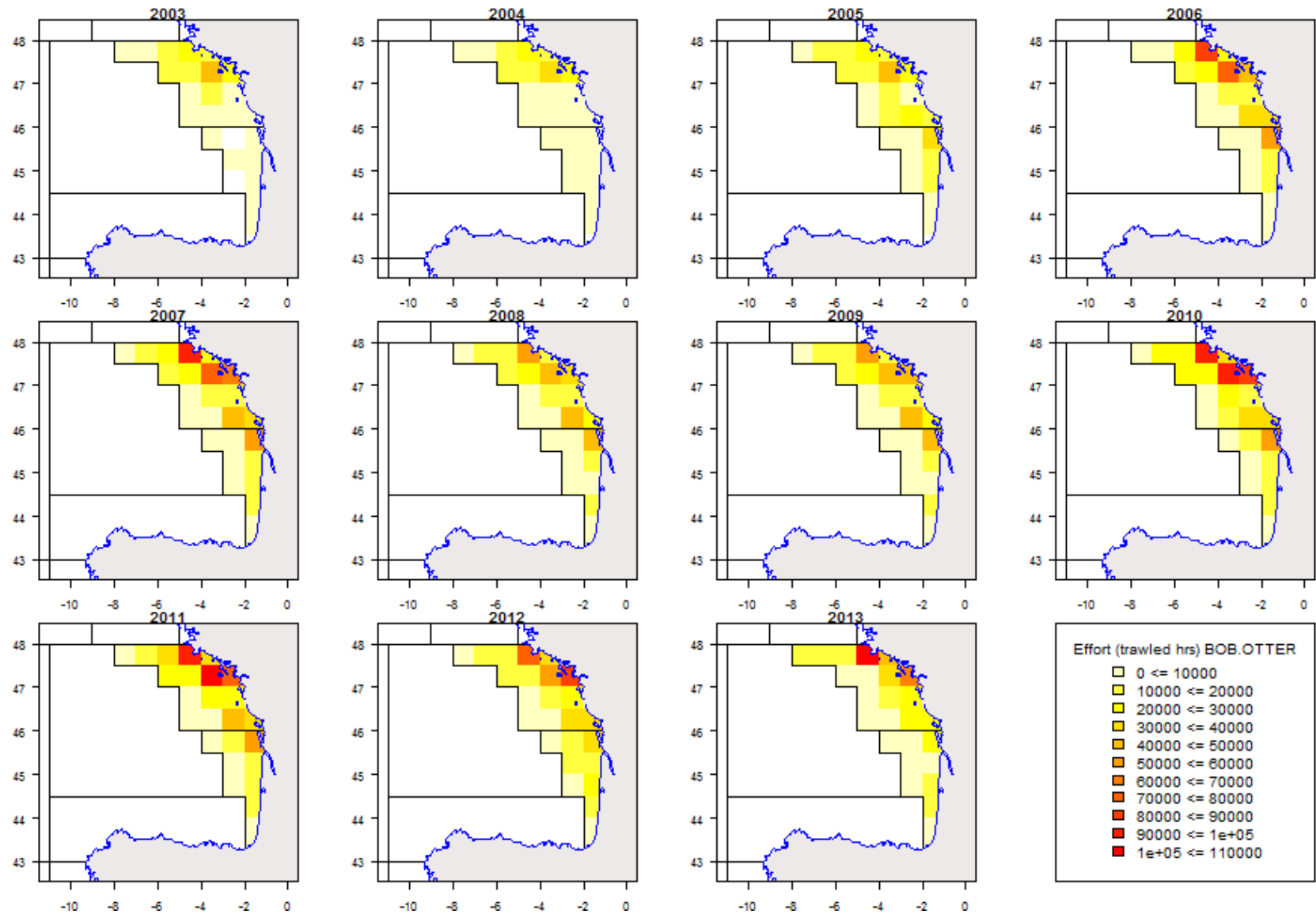


Figure 5.10.6.6. Bay of Biscay. Spatial distribution of effective fishing effort (fished hours) by ICES statistical rectangle for Otter Trawl gear, 2003-2013.

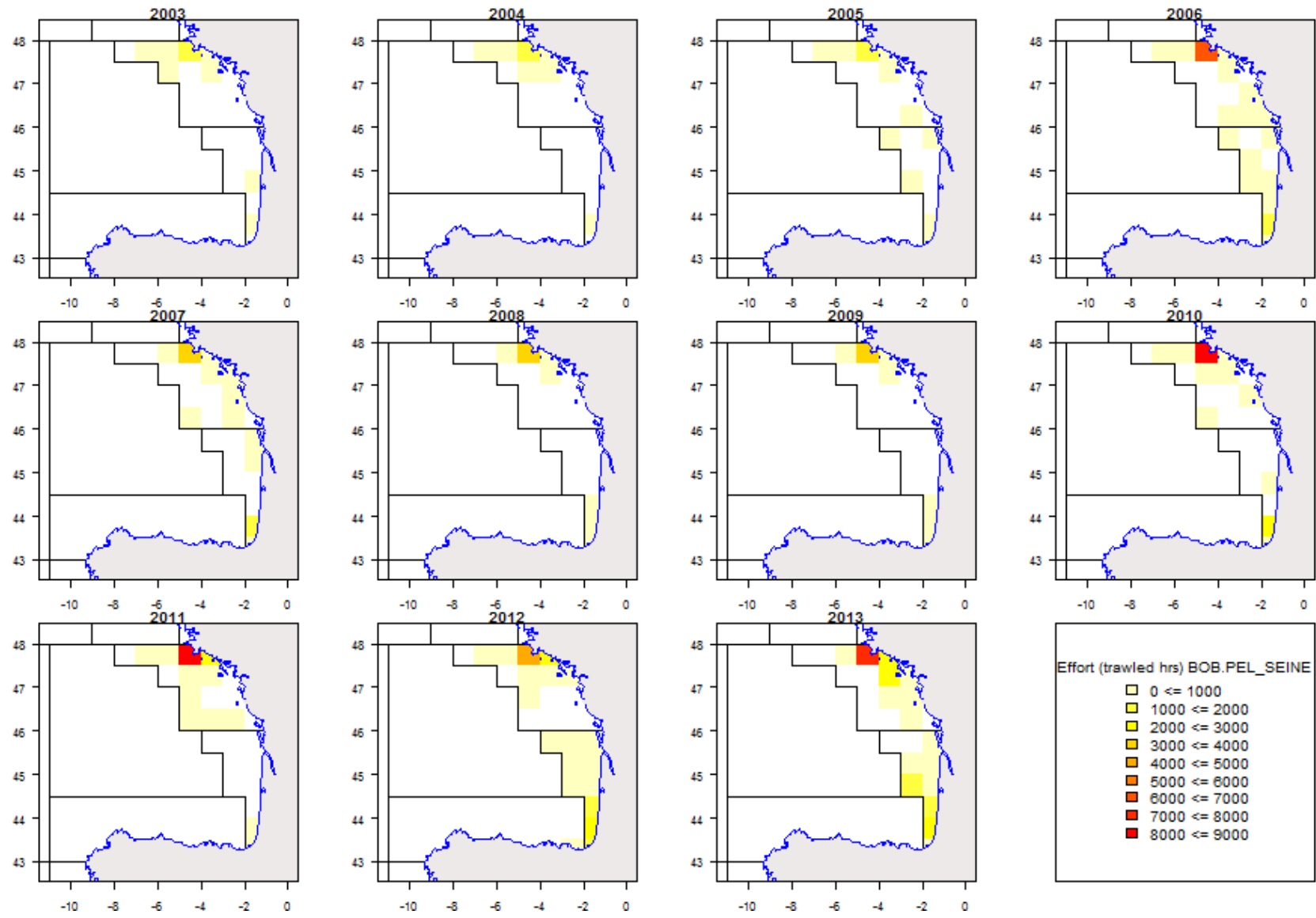


Figure 5.10.6.7. Bay of Biscay. Spatial distribution of effective fishing effort (fished hours) by ICES statistical rectangle for Pelagic Seine gear, 2003-2013.

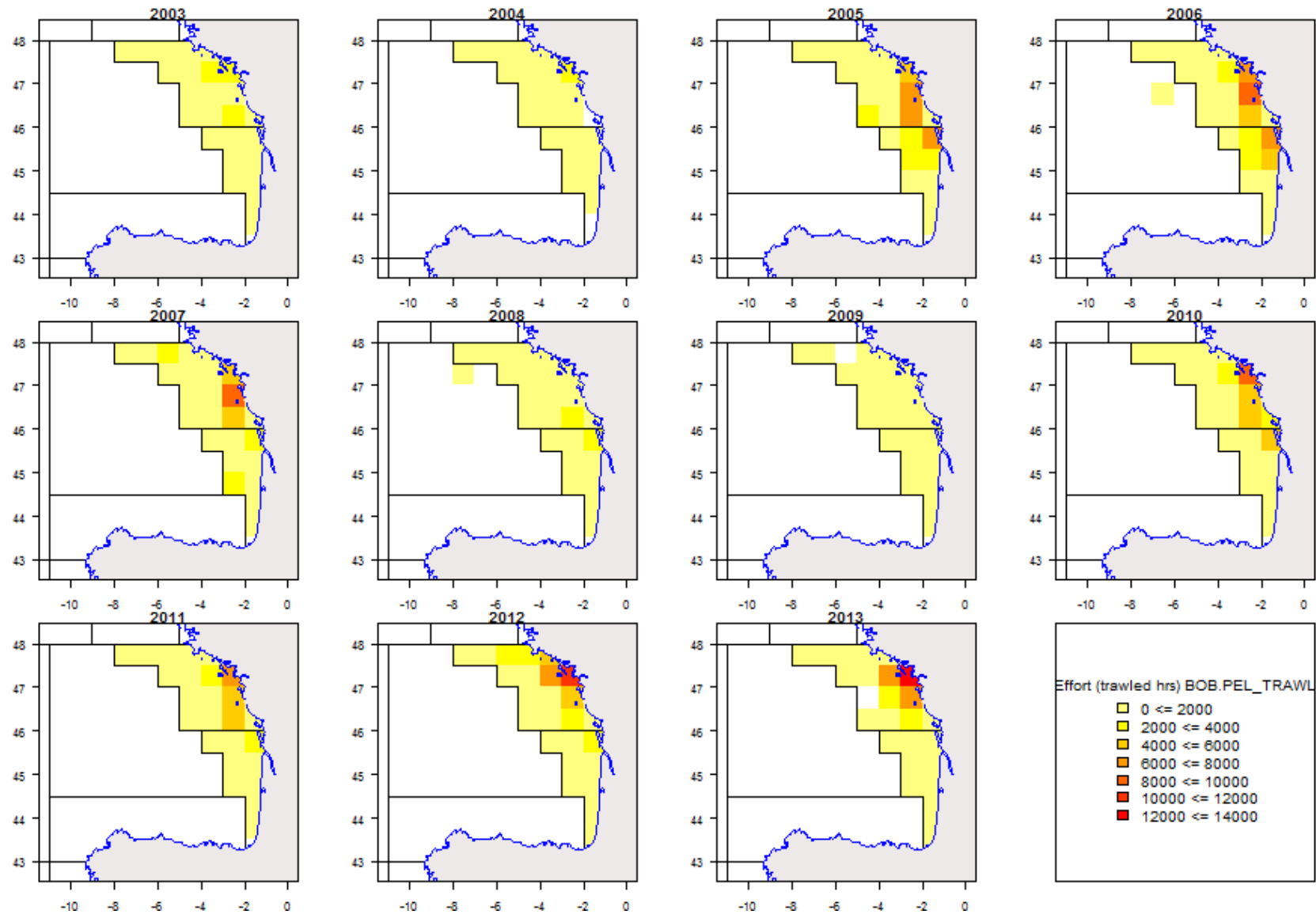


Figure 5.10.6.8. Bay of Biscay. Spatial distribution of effective fishing effort (fished hours) by ICES statistical rectangle for Pelagic Trawl gear, 2003-2013.

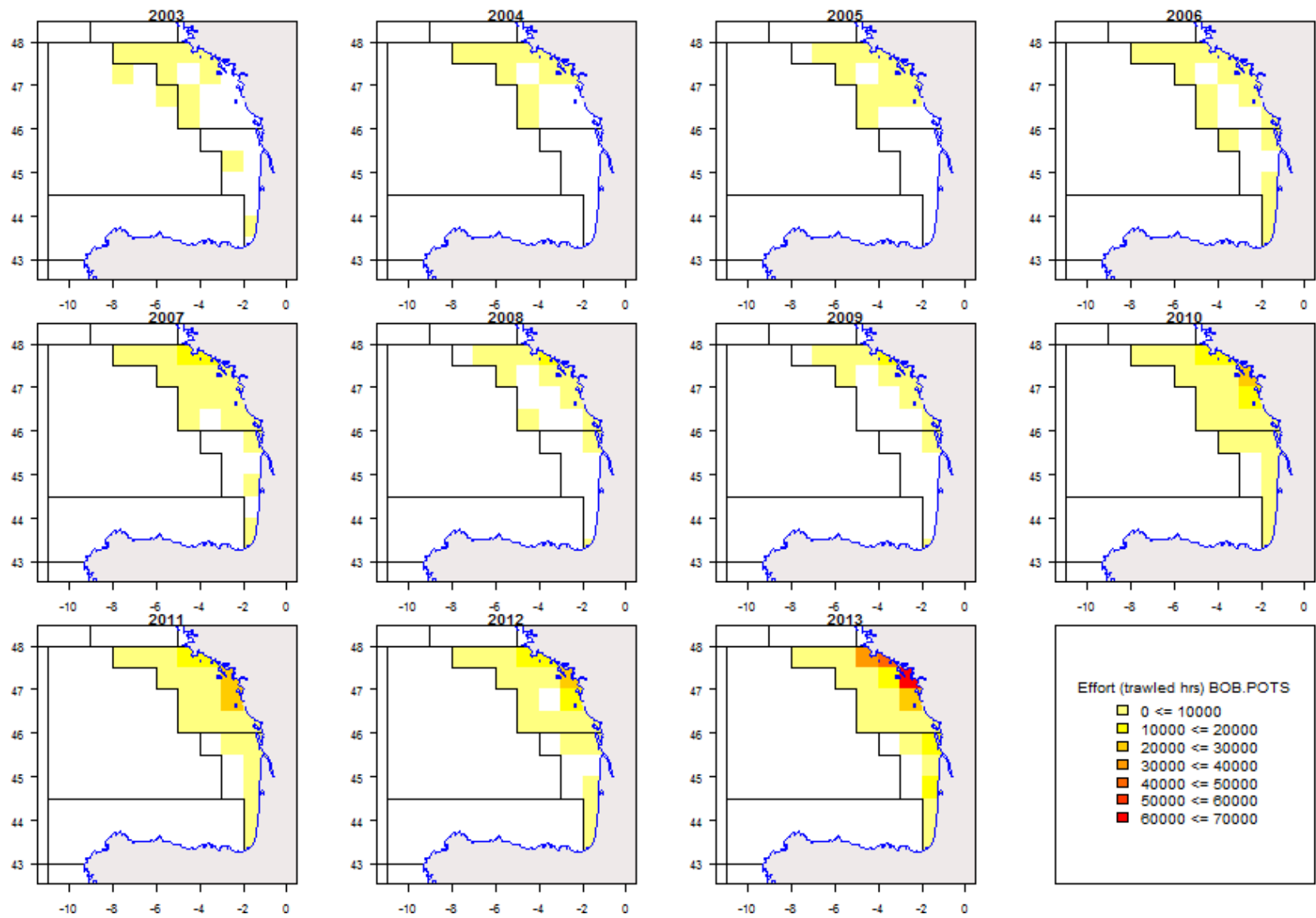


Figure 5.10.6.9. Bay of Biscay. Spatial distribution of effective fishing effort (fished hours) by ICES statistical rectangle for Pot gear, 2003-2013.

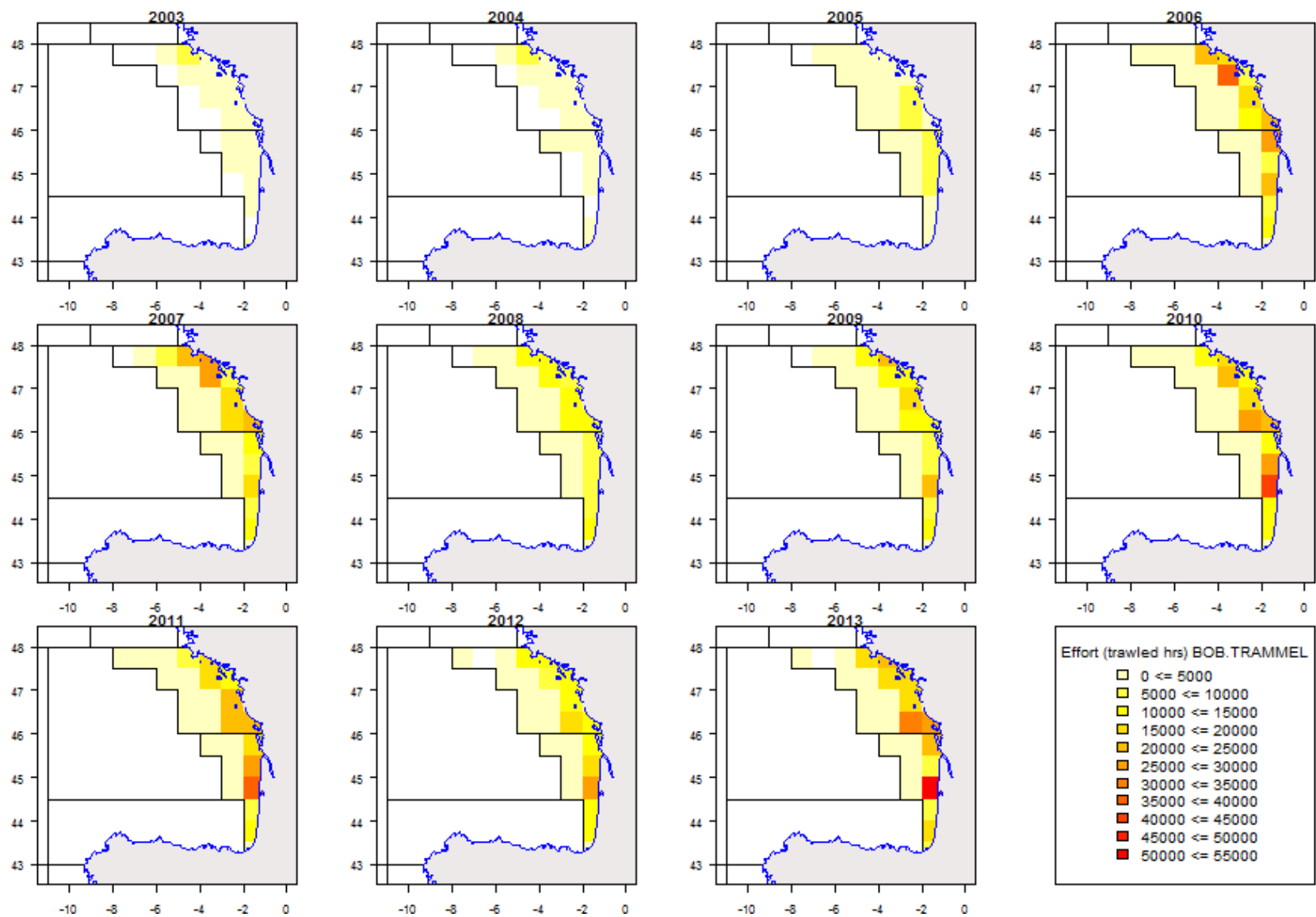


Figure 5.10.6.10. Bay of Biscay. Spatial distribution of effective fishing effort (trawled hours) by ICES statistical rectangle for Trammel net gear, 2003-2013.

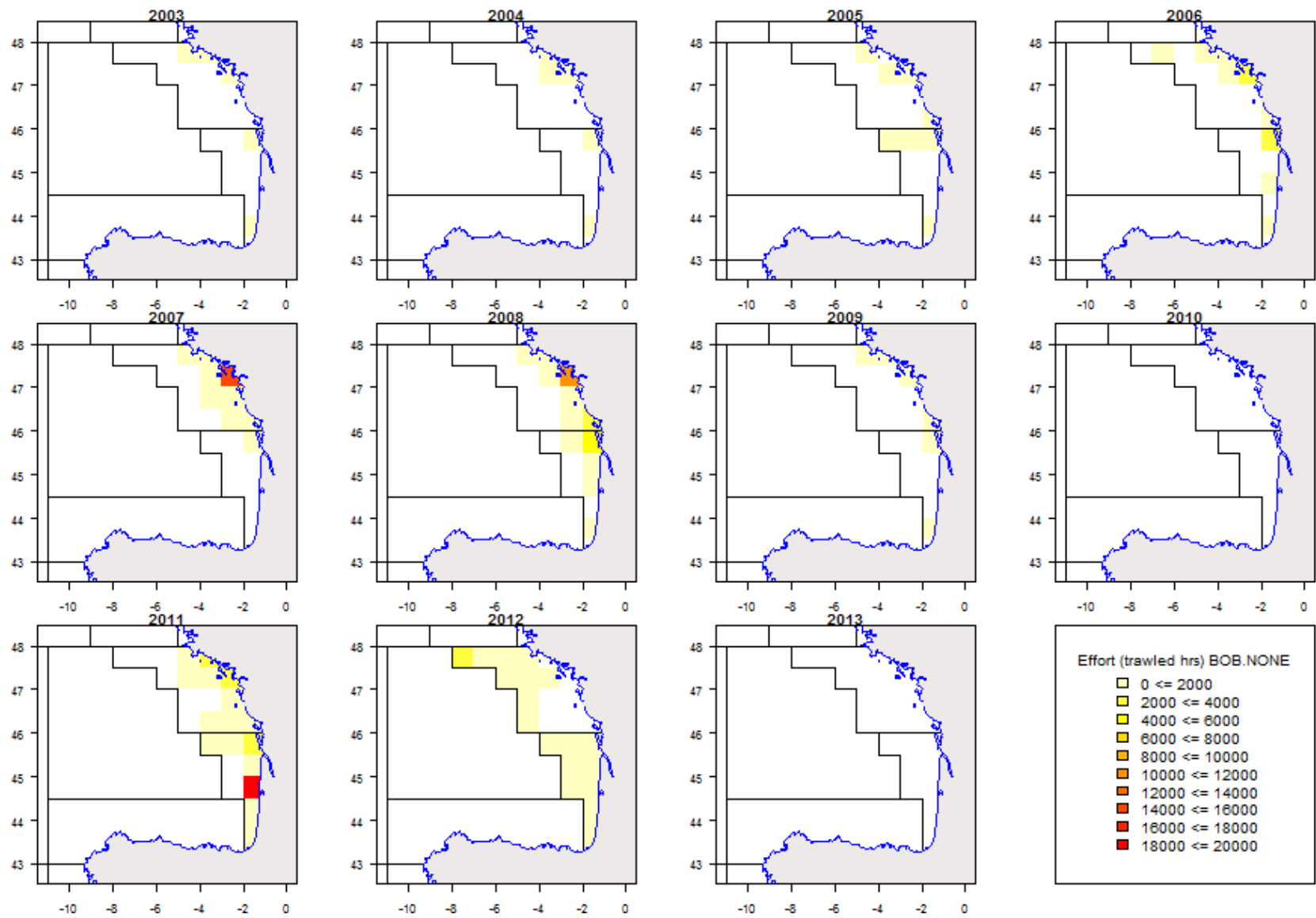


Figure 5.10.6.11. Bay of Biscay. Spatial distribution of effective fishing effort (trawled hours) by ICES statistical rectangle for none gear, 2003-2013.

5.10.7 ToR 4 Comments on data quality and any unexpected evolutions of the trends in catches and effort by Member State and fisheries

No further comment, see sections before where comments on data quality and any unexpected evolutions of the trends in catches and effort by Member State and fisheries have been made.

5.10.8 ToR 5 Correlation between partial sole mortality and fishing effort by Member State and fisheries

Because of software problems when aggregating data it was not possible for the EWG to review catch data or undertake ToR based on catch data. This ToR will be addressed during the second meeting.

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7 CONTACT DETAILS OF STECF MEMBERS AND EWG-14--06 PART 1: LIST OF PARTICIPANTS, X=PRESENT, Y=BY CORRESPONDENCE

1 - Information on STECF members and invited experts' affiliations is displayed for information only. In some instances the details given below for STECF members may differ from that provided in Commission COMMISSION DECISION of 27 October 2010 on the appointment of members of the STECF (2010/C 292/04) as some members' employment details may have changed or have been subject to organisational changes in their main place of employment. In any case, as outlined in Article 13 of the Commission Decision (2005/629/EU and 2010/74/EU) on STECF, Members of the STECF, invited experts, and JRC experts shall act independently of Member States or stakeholders. In the context of the STECF work, the committee members and other experts do not represent the institutions/bodies they are affiliated to in their daily jobs. STECF members and invited experts make declarations of commitment (yearly for STECF members) to act independently in the public interest of the European Union. STECF members and experts also declare at each meeting of the STECF and of its Expert Working Groups any specific interest which might be considered prejudicial to their independence in relation to specific items on the agenda. These declarations are displayed on the public meeting's website if experts explicitly authorized the JRC to do so in accordance with EU legislation on the protection of personnel data. For more information: <http://stecf.jrc.ec.europa.eu/adm-declarations>

STECF members:

Name	Address ¹	Tel.	Email
STECF members			
Abella, J. Alvaro (vice-chair)	ARPAT – AREA MARE Agenzia Regionale per la Protezione Ambientale della Toscana Articolazione Funzionale RIBM Risorse Ittiche e Biodiversità Marina Via Marradi 114, 57126 Livorno – Italia	Tel. 0039-0555- 3206956	alvarojuan.abella@arpat.toscana.it
Andersen, Jesper Levring (vice- chair)	Department of Food and Resource Economics (IFRO) Section for Environment and Natural Resources University of Copenhagen Rolighedsvej 25 1958 Frederiksberg Denmark	Tel.dir.: +45 35 28 68 92	jla@ifro.ku.dk
Bailey, Nicholas	Fisheries Research Services Marine Laboratory, P.O Box 101 375 Victoria Road, Torry Aberdeen AB11 9DB UK	Tel: +44 (0)1224 876544 Direct: +44 (0)1224 295398 Fax: +44 (0)1224 295511	baileyn@marlab.ac.uk n.bailey@marlab.ac.uk
Bertignac, Michel	Laboratoire de Biologie Halieutique IFREMER Centre de Brest BP 70 - 29280 Plouzane, France	tel : +33 (0)2 98 22 45 25 - fax : +33 (0)2 98 22 46 53	michel.bertignac@ifremer.fr

Name	Address ¹	Tel.	Email
STECF members			
Cardinale, Massimiliano	Föreningsgatan 45, 330 Lysekil, Sweden	Tel: +46 523 18750	massimiliano.cardinale@slu.se
Curtis, Hazel	Sea Fish Industry Authority 18 Logie Mill Logie Green Road Edinburgh EH7 4HS	Tel: +44 (0)131 558 3331 Fax: +44 (0)131 558 1442	H_Curtis@seafish.co.uk
Delaney, Alyne	Innovative Fisheries Management, -an Aalborg University Research Centre, Postboks 104, 9850 Hirtshals, Denmark	Tel.: +45 9940 3694	ad@ifm.aau.dk
Daskalov, Georgi	Laboratory of Marine Ecology, Institute of Biodiversity and Ecosystem Research, Bulgarian Academy of Sciences	Tel.: +359 52 646892	gmdaskalov@yahoo.co.uk
Döring, Ralf	Thünen Bundesforschungsinstitut, für Ländliche Räume, Wald und Fischerei, Institut für Seefischerei - AG Fischereiökonomie, Palmaille 9, D-22767 Hamburg, Germany	Tel.: 040 38905-185 Fax.: 040 38905-263	ralf.doering@ti.bund.de
Gascuel, Didier	AGROCAMPUS OUEST 65 Route de Saint Brieu, bat.4 CS 84215, F-35042 RENNES Cedex France	Tel:+33(0)2.23.48.55.3 4 Fax: +33(0)2.23.48.55.35	Didier.Gascuel@agrocampus-ouest.fr
Graham, Norman (chair)	Marine Institute, Fisheries Science Services (FSS), Rinville, Oranmore, Co. Galway, Ireland	Tel: + 353(0) 91 87200	norman.graham@marine.ie
Garcia Rodriguez, Mariano	Instituto Español de Oceanografía, Servicios Centrales, Corazón de María 8, 28002, Madrid, Spain		Mariano.Garcia@md.ieo.es
Gustavsson, Tore Karl-Erik	Independent Consultant, Göteborg, Sweden		tore.gustavsson@hotmail.com
Jennings, Simon	CEFAS Lowestoft Laboratory, Pakefield Road, Lowestoft Suffolk, UK NR33 0HT	Tel.: +44 1502562244 Fax: +44 1502513865	simon.jennings@cefass.co.uk
Kenny, Andrew	CEFAS Lowestoft Laboratory, Pakefield Road, Lowestoft Suffolk, UK NR33 0HT	Tel.: +44 1502562244 Fax: +44 1502513865	andrew.kenny@cefass.co.uk

Name	Address ¹	Tel.	Email
STECF members			
Kraak, Sarah	University College Cork Based at: Marine Institute, Rinville, Oranmore, Co Galway, Ireland	Tel: +353 (0)91 387392 Fax +353 (0)91 387201	Sarah.kraak@marine.ie
Kuikka, Sakari	University of Helsinki, Department of Environmental Sciences, P.O. Box 65 (Viikinkaari 1), FI-00014 University of Helsinki, FINLAND	Tel.: +358 50 3309233 Fax. +358-9-191 58754	skuikka@mappi.helsinki.fi
Martin, Paloma	CSIC Instituto de Ciencias del Mar PasseigMarítim, 37-49 08003 Barcelona Spain	Tel: 34.93.2309500 direct line : 34.93.2309552 Fax: 34.93.2309555	paloma@icm.csic.es
Malvarosa, Loretta	NISEA S.c.a.r.l.		malvarosa@nisea.eu
Murua, Hilario	AZTI - Tecnalia / Unidad de Investigación Marina, Herrera kaia portualdea z/g 20110 Pasaia (Gipuzkoa), Spain	Tel: 0034 667174433 Fax: 94 6572555	hmurua@azti.es
Nord, Jenny	Southeast Asian Fisheries Development Centre SEAFDEC		jenny@seafdec.org
Nowakowski, Piotr	Maritime University of Szczecin. – Faculty of Food Science and Fisheries, Department of Fishing Technique, Szczecin		npfgd@poczta.onet.pl
Prelezzo, Raul	AZTI - Tecnalia / Unidad de Investigación Marina Txatxarramendi Ugarteia z/g 48395 Sukarrieta (Bizkaia), Spain	Tel: 94 6029400 Ext: 406- Fax: 94 6870006	rprelezzo@suk.azti.es
Sala, Antonello	Fishing Technology Unit National Research Council (CNR) Institute of Marine Sciences (ISMAR) - Fisheries Section Largo Fiera della Pesca, 1 60125 Ancona - Italy	Tel: +39 071 2078841 Fax: +39 071 55313	a.sala@ismar.cnr.it
Scarcella, Giuseppe	Environmental Management Unit National Research Council (CNR) Institute of Marine Sciences (ISMAR) - Fisheries Section Largo Fiera della Pesca, 1 60125 Ancona - Italy	Tel: +39 071 2078846 Fax: +39 071 55313	g.scarcella@ismar.cnr.it
Somarakis, Stylianios	Department of Biology University of Crete VassilikaVouton P.O. Box 2208 71409 Heraklion Crete Greece	Tel.: +30 2610 394065, +30 6936566764	somarak@biology.uoc.gr

Name	Address ¹	Tel.	Email
STECF members			
Stransky, Christoph	Thünen Institute [TI-SF] Federal Research Institute for Rural Areas, Forestry and Fisheries, Institute of Sea Fisheries, Palmaille 9, D-22767 Hamburg, Germany	Tel. +49 40 38905-228 Fax: +49 40 38905-263	christoph.stransky@ti.bund.de
Theret, Francois	Scapêche 17 Bd Abbé Le Cam 56100 Lorient France		ftheret@comata.com
Ulrich, Clara	DTU Aqua, National Institute of Aquatic Resources, Technical University of Denmark, Charlottenlund Slot, Jægersborg Allé 1, 2920 Charlottenlund, Denmark		cu@aqu.dtu.dk
Vanhee, Willy	ILVO - Institute for Agricultural and Fisheries Research Unit Animal Sciences - Fisheries Ankerstraat 1, B-8400 Oostende, Belgium	Tel 00-32-59-34-22-55 Fax 00-32-59-33-06-29	willy.vanhee@ilvo.vlaanderen.be
van Oostenbrugge, Hans	LandbouwEconomisch Instituut-LEI, Fisheries Section, Burg. Patijnlaan 19 P.O.Box 29703 2502 LS The Hague The Netherlands	Tel:+31 (0)70 3358239 Fax: +31 (0)70 3615624	Hans.vanOostenbrugge@wur.nl

EWG-14-06 participants:

Name	Address	Email	Part 1
STECF Members			
Ulrich Rescan, Clara	DTU-Aqua Charlottenlund Castle, 2920 Charlottenlund, Denmark	clu@difres.dk	X
Vanhee, Willy	ILVO Hospitaalstraat, 8400 Oostende, Belgium	wvanhee@pandora.be	X
Invited Experts			
Carlshamre, Sofia	SLU- Inst. of Marine Research, Turistgatan 5, 453 30 Lysekil, Sweden	sofia.carlshamre@slu.se	X
Davie, Sarah	Marine Institute, Rinville, Oranmore, Ireland	sarah.davie@marine.ie	X
Demaneche, Sebastiene	IFREMER B.P. 70, 29280, Plouzané, France	sdemanec@ifremer.fr	X
Dolder, Paul	Cefas Pakefield Road NR33 0HT Lowestoft, United Kingdom	paul.dolder@cefes.co.uk	X
Gil Herrera, Juan	Instituto Español de Oceanografía - C.O. de Cádiz, Spain	juan.gil@cd.ieo.es	X
Gonzales Herraiz, Isabel	Instituto Español de Oceanografía, Paseo Marítimo, Alcalde Francisco Vázquez, 10, 15001 A Coruña, Spain	isabel.herraiz@co.ieo.es	Y
Kempf, Alexander	Institute of Sea Fisheries, Palmaille 9, 22767 Hamburg, Germany	alexander.kempf@vti.bund.de	X
Ligas, Alessandro	AFBI, 18a Newforge Lane, Belfast BT9 5PX UK	ligas@cibm.it	X

Name	Address	Email	Part 1
O'Hea, Brendan	Marine Institute, Rinville, Oranmore, Ireland	brendan.ohea@marine.ie	Y
Ozernaja, Olga	Institute of Food Safety, Animal Health and Environment "BIOR", 8 Daugavgrivas Str., Riga, LV-1048, Latvia	olga.ozernaja@bior.gov.lv	X
Radtke, Krzysztof	Sea Fisheries Institute, Poland	krzysztof.radtke@mir.gdynia.pl	X
Raid, Tiit	Estonian Marine Institute, University of Tartu, Estonia	tiit.raid@ut.ee	X
Reilly, Thomas	Fisheries Research Services, Victoria Road, Aberdeen, United Kingdom	Thomas.Reilly@scotland.gsi.gov.uk	X
Ribeiro Santos, Ana	Cefas Pakefield Road NR33 OHT Lowestoft, United Kingdom	ana.ribeirosantos@cefas.co.uk	X
Van der Kamp, Peter HJ	IMARES Haringkade 1, 1976 CP, IJmuiden, Netherlands	peter.vanderkamp@wur.nl	X
Vermard, Youen	IFREMER 150, Quai Gambetta, 62200 Boulogne sur mer, France	youen.vermard@ifremer.fr	Y
Williamson, Kevin		kevin.williamson@mfa.gsi.gov.uk	X
Zolubas, Tomas	Fisheries Service under Ministry of Agriculture, Naujoji uosto 8, LT-92119 Klaipeda, Lithuania	TomasZ@zum.lt	X
JRC Expert			
Holmes, Steven (chair)	Joint Research Centre (IPSC)	steven.holmes@jrc.ec.europa.eu	X
Castro Ribeiro, Cristina	Joint Research Centre (IPSC)	Cristina.Ribeiro@jrc.ec.europa.eu	X

European Commission			
Holmes, Steven	Joint Research Centre (IPSC), STECF secretariat	stecf-secretariat@jrc.ec.europa.eu	X
Observer			
Wichmann, Niels	NSRAC, Nordensvej 3, DK-7000, Fredericia, Denmark	nw@dkfisk.dk	X

8 LIST OF BACKGROUND DOCUMENTS

Background documents are published on the meeting's web site on:

<http://stecf.jrc.ec.europa.eu/web/stecf/ewg1406>

List of background documents:

1. EWG-14-06 – Doc 1 - Declarations of invited and JRC experts.
2. EWG-14-06 – Doc 2 – Digital appendixes (EXCEL spreadsheets) to the present report: Fisheries specific parameters (fishing effort).

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Authors:

STECF members: Abella, J. A., Andersen, J., Bailey, N., Bertignac, M., Cardinale, M., Curtis, H., Daskalov, G., Delaney, A., Döring, R., Garcia Rodriguez, M., Gascuel, D., Graham, N., Gustavsson, T., Jennings, S., Kenny, A., Kraak, S., Kuikka, S., Malvarosa, L., Martin, P., Murua, H., Nord, J., Nowakowski, P., Prelezo, R., Sala, A., Scarcella, G., Somarakis, S., Stransky, C., Theret, F., Ulrich, C., Vanhee, W. & Van Oostenbrugge, H.

EWG-14-06 members: Carlshamre, S., Davie, S., Demaneche, S., Dolder, P., Gil Herrera, J., Holmes, S., Kempf, A., Ligas, A., Ozernaja, O., Radtke, K., Raid, T., Reilly, T., Ribeiro, C., Ribeiro Santos, A., Ulrich, C., Van der Kamp, P., Vanhee, W., Williamson, K., Zolubas, T.

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Abstract

STECF notes that it has addressed the effort data related ToR regarding the requested fishing effort regime evaluations in the

1. Eastern and Western Baltic,
2. the Kattegat,
3. the Skagerrak, North Sea, European waters in ICES Div.2 and the Eastern Channel,
4. to the West of Scotland,
5. Irish Sea,
6. Celtic Sea,
7. Atlantic waters off the Iberian Peninsula,
8. Western Channel,
9. Western Waters and Deep Sea
10. and the Bay of Biscay,

Remaining terms of reference will be addressed at the forthcoming STECF EWG 14-13 fishing effort regime evaluations part 2. It is noted that compilations of fisheries specific data by fishing effort management regime and Member State are provided as electronic appendixes and can be downloaded at <http://stecf.jrc.ec.europa.eu/web/stecf/ewg1406> in order to facilitate transparent dissemination of the information and further use.

Due to the complexity of the fisheries information provided, interested users are advised to consult the data quality notes and data notations provided in the present report.

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The Scientific, Technical and Economic Committee for Fisheries (STECF) has been established by the European Commission. The STECF is being consulted at regular intervals on matters pertaining to the conservation and management of living aquatic resources, including biological, economic, environmental, social and technical considerations.

