Joint Recommendation regarding the protection of Moderate energy circalittoral rock, Subtidal coarse sediment, subtidal sand, subtidal mud, subtidal mixed sediment and sea-pen and burrowing megafauna communities within the Northwest of Jones Bank Marine Conservation Zone under Article 13(4) of Directive 2008/56/EC and Article 18 of Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy (the Basic Regulation).

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Joint Recommendation

1. Introduction

This joint recommendation contains a proposal for the regulation of fisheries activity and is initiated by the United Kingdom (UK) and submitted to the European Commission jointly by the UK and the following Member States: Spain, France, and Ireland; being those Member States who have a direct management interest affected by the joint recommendation.

The overall aim of this joint recommendation is to ensure the protection of Subtidal coarse sediment (Eunis[1] habitat type A5.1), Subtidal sand (A5.2), Subtidal mud (A5.3), Subtidal mixed sediments (A5.4) and Sea-pen and burrowing megafauna communities (Habitat Feature of Conservation Importance) within the North-west of Jones Bank Marine Conservation Zone (MCZ) from fisheries, thereby contributing to the obligation to recover this habitat type to favourable condition in accordance with the North-west of Jones Bank Marine Conservation Zone Designation Order 2016 in compliance with Article 11 of the Common Fisheries Policy (CFP).

It is the intention of the UK government (as the initiating Member State) to take forward measures in respect to fisheries activities exercised by all vessels including fishing vessels carrying the flag of other Member States of the EU.

2. The Recommendations to be Implemented

The following recommendation is proposed for adoption in the North-west of Jones Bank MCZ:

- the exclusion of demersal trawls and dredges (see Table 1) to protect a proportion of the protected features of the MCZ and an increased reporting zone around the sites management boundary (see Section 8 of Annex B).

Table 1: Gear types that are prohibited in the areas proposed for closure within the site.

Gear Types to be prohibited within the sites management boundary	**Gear code Annex XI in EU Regulation No 404/2011**	**International Standard Classification of Fishing Gears**
Beam Trawl	TBB	TBB
Bottom Trawl/Otter Trawl	OTB, OTT, PTB,TBN,TBS,TB	OTB,OTT,OT,PTB,TB

[1] http://eunis.eea.europa.eu/habitats.jsp

Dredges	DRB	DRB, DRH

The co-ordinates of the site (Table 2) and management boundary (Table 3) are as follows:

Table 2: Site boundary co-ordinates of the North-west of Jones Bank MCZ

Point	Latitude	Longitude
1	50° 00’ 16.142” N	08° 20’ 00.000” W
2	50° 00’ 17.104” N	08° 03’ 16.967” W
3	49° 49’ 30.569” N	08° 03’ 16.232” W
4	49° 49’ 32.506” N	08° 19’ 55.542” W

Table 3: Co-ordinates of the North-west of Jones Bank MCZ management zone boundaries

Point	Latitude	Longitude
1	49° 55' 25.627" N	8° 3' 16.635" W
2	49° 53' 4.839" N	8° 5' 51.797" W
3	49° 49' 31.557" N	8° 11' 45.754" W
4	49° 49' 32.159" N	8° 16' 56.281" W
5	49° 59' 43.974" N	8° 3' 16.928" W
6	50° 0' 16.430" N	8° 14' 59.279" W
7	49° 56' 38.516" N	8° 16' 48.468" W
8	49° 51' 1.391" N	8° 19' 56.157" W
9	50° 0' 16.142" N	8° 20' 00.000" W

3. **Control and enforcement of the proposed fisheries management measures**

Control and enforcement of the proposed fisheries management measures will be based on the risk-based systems in accordance with the model developed by the UK’s Marine Management Organisation (MMO).

Key provisions which should be included in an EC regulation to facilitate control, enforcement and compliance include:

- A prohibition on any demersal trawls and dredges being deployed in the identified management areas of the MCZ. All gear types are permitted to fish in the reporting zone outside the management area with increased VMS reporting.

- Establishment of a 1nm (1.852km) reporting zone around the North-west of Jones Bank MCZ management area. All fishing vessels within this area shall be required to record or report vessel positions at a rate of 10 minute intervals. This area shall be defined by the reporting zone and coordinates displayed in Annex D.

- A requirement for all fishing vessels entering the reporting zone to have a system for recording and reporting vessel position which meets prescribed specifications (see section 8.2 of Annex C for minimal requirements) and is installed and operative. Any fishing vessel entering the North-west of Jones Bank MCZ management area or the reporting zone without such a system will be committing an offence.

- A requirement for all fishing vessels transiting the prohibited area carrying prohibited gears to have all gears on board lashed and stowed.

- A requirement for all fishing vessels transiting the restricted area carrying prohibited gears to ensure that the speed during the transit is not less than 6 knots except in the case of force majeure or adverse conditions[2]. In such cases the master shall immediately inform the fisheries monitoring centre of the flag member state which shall then inform the UK Fisheries Monitoring Centre (FMC).

The proposal on which gear types to prohibit is formulated in terms of Gear Codes in Annex XI in EU Regulation 404/2011 and is explained in more detail in Section 8 of Annex C.

The ongoing management needs of this site will be assessed on an annual basis. If changes to the current management status are required, the UK will coordinate such a requirement in accordance with Articles 11 and 18 of the Basic Regulation and in collaboration with those Member States with a direct management interest in North-west of Jones Bank MCZ.

[2] Article 50 4(b) http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:343:0001:0050:EN:PDF

Joint Recommendation regarding the protection of Subtidal coarse sediment, Subtidal sand, Subtidal mud, Subtidal mixed sediments and Sea-pen and burrowing megafauna communities within the North-west of Jones Bank Marine Conservation Zone under Article 11 necessary for the purpose of complying with obligations under Article 13(4) of Directive 2008/56/EC and Article 18 of Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy (the Basic Regulation).

Supporting Documentation

1. Introduction

1.1 General Remarks

The North-west of Jones Bank site was designated as a Marine Conservation Zone (MCZ) in January 2016. MCZs are designated by the UK government under the Marine and Coastal Access Act 2009 for England and Wales. These zones will contribute to the UK's commitment to have a well-managed and ecologically coherent network of Marine Protected Areas (MPAs) and will also assist in meeting commitments relating to the EU Marine Strategy Framework Directive (MSFD). All MCZs are designated using a separate order; in this case the North-west of Jones Bank Marine Conservation Zone Designation Order 2016.

The conservation objective for North-west of Jones Bank MCZ is to recover all protected features (Subtidal coarse sediment, Subtidal sand, Subtidal mud, Subtidal mixed sediments and sea-pen burrowing megafauna communities) to favourable condition. Commercial fishing has been identified as an activity which could adversely impact the integrity of this site's features and as such required to be assessed and, if necessary, managed to reduce its impact.

As the proposed area of the North-West of Jones Bank site falls beyond 12 nautical miles (nm) of the UK coastline, all Member States have access to the site. However, the UK, France, Ireland, and Spain are currently the only Member States that have an active fishing interest in the site. It is the intention of the UK government (as the initiating Member State) to take forward measures in respect to fisheries activities exercised by all vessels including fishing vessels carrying the flag of other Member States of the EU.

This document covers the 11 information items of the Commission's guidelines from 2008[3] concerning development of proposals for fisheries management measures in marine Natura 2000 areas within the scope of the Common Fisheries Policy (CFP).

1.2 Overall aim of the present proposal

The overall aim of the present proposal is to ensure adequate protection of Subtidal coarse sediment (A5.1), Subtidal sand (A5.2), Subtidal mud (A5.3), Subtidal mixed sediments (A5.4) and Sea-pen and burrowing megafauna communities from fishing activities that could adversely affect feature condition and thereby to contribute to the obligation of recovering all protected features to favourable condition in accordance with the North-West of Jones Bank Marine Conservation Zone Designation Order 2016 and Article 11 of the CFP.

The Conservation Objective for the North-West of Jones Bank MCZ is, subject to natural change, to ensure that Subtidal coarse sediment, Subtidal sand, Subtidal mud, Subtidal mixed sediments and Sea-pen and burrowing megafauna communities are to remain in or be brought into favourable condition. To achieve the conservation objective, general management approaches (i.e. recovery or maintenance of feature condition) have been set out for each protected feature. Except where direct evidence of condition is available, feature condition is typically based on a proxy assessment of feature sensitivity and the presence of activities to which the features may be sensitive. For the North-West of Jones Bank MCZ, the General Management Approaches (GMA) have been set to recover all features to favourable condition.

According to advice provided by the Joint Nature Conservation Committee (JNCC), the UK Government's statutory scientific advisor for offshore habitats, where fishing using demersal towed gears overlaps with the features it may pose a risk to achievement of the conservation objectives for the site.

The UK is proposing to restrict fishing activity with demersal trawls and dredges across a proportion of the site due to the risk posed to the achievement of the conservation objectives. Where there is uncertainty regarding the impacts of fishing on the features, an "adaptive management" approach is proposed, which would allow the site to move toward achieving its conservation objective while providing the opportunity to improve our understanding of the impacts and subsequently adapt management accordingly. The content of the proposed fisheries management measures is explained in more detail in section 7 of Annex B.

[3] http://ec.europa.eu/environment/nature/natura2000/marine/docs/fish_measures.pdf

The proposal has been reviewed by CEFAS (see section 5).

1.3 Recommendation to be implemented

The following recommendations are proposed for adoption:

- the exclusion of demersal trawls and dredges (Table 1) within the proposed management boundary (Figure 1 and co-ordinates in Table 2) to protect the listed features and an increased reporting zone around the management boundary (see Section 8 of Annex B).

Table 1: Gear types to be prohibited within the North-West of Jones Bank MCZ management boundary as shown in Figure 1 (page 12)

Gear Types to be prohibited within the sites management boundary	**Gear code Annex XI in EU Regulation No 404/2011**	**International Standard Classification of Fishing Gears**
Beam Trawl	TBB	TBB
Bottom Trawl/Otter Trawl	OTB, OTT, PTB,TBN,TBS,TB	OTB,OTT,OT,PTB,TB
Dredges	DRB	DRB, DRH

Table 2: Coordinates for the North-West of Jones Bank MCZ management boundary for demersal trawls and dredges.

Point	Latitude	Longitude
1	49° 55' 25.627" N	8° 3' 16.635" W
2	49° 53' 4.839" N	8° 5' 51.797" W
3	49° 49' 31.557" N	8° 11' 45.754" W
4	49° 49' 32.159" N	8° 16' 56.281" W
5	49° 59' 43.974" N	8° 3' 16.928" W
6	50° 0' 16.430" N	8° 14' 59.279" W
7	49° 56' 38.516" N	8° 16' 48.468" W
8	49° 51' 1.391" N	8° 19' 56.157" W
9	50° 0' 16.142" N	8° 20' 00.000" W

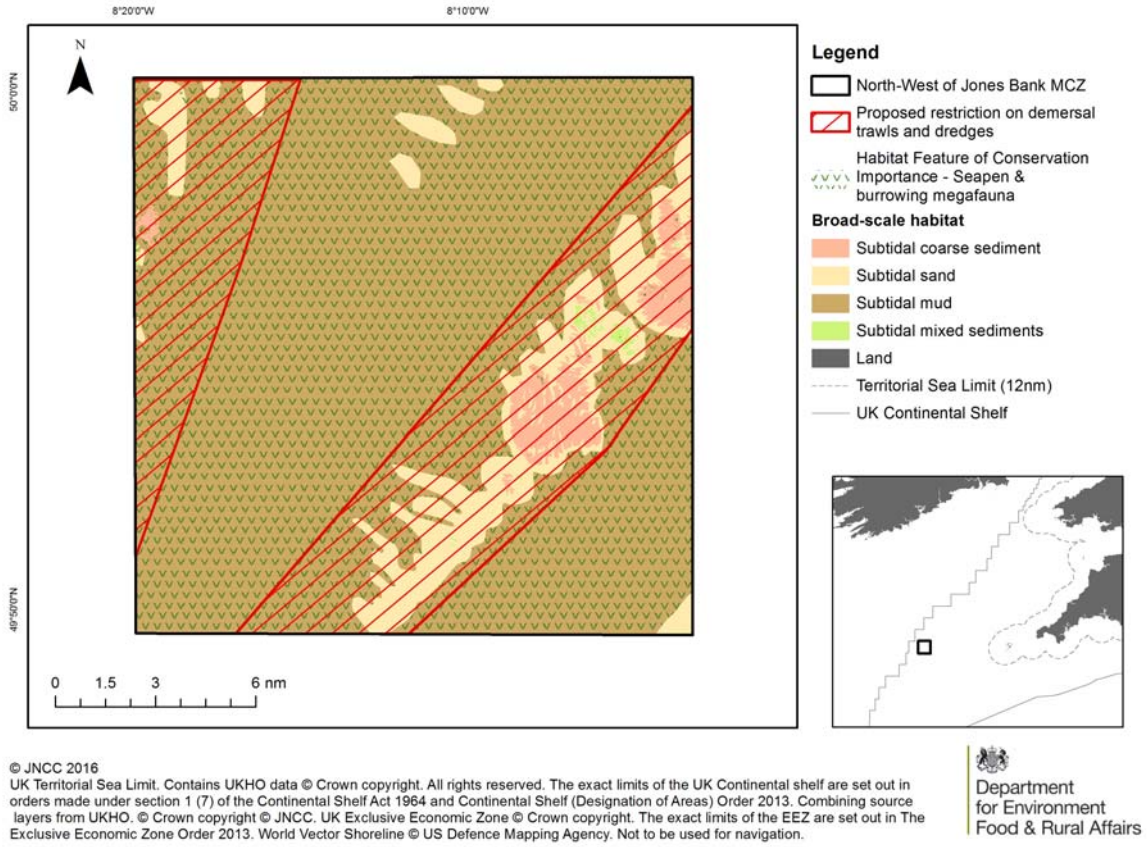


Figure 1: North-west of Jones Bank MCZ site map including protected features for which management is being proposed.

2. Legal framework

2.1 Common Fisheries Policy

The Common Fisheries Policy (Regulation No 1380/2013 (The Basic Regulation) Article 11) states that Member States are empowered to adopt conservation measures not affecting fishing vessels of other Member States that are applicable to waters under their sovereignty or jurisdiction. The UK has an obligation in recovering these habitat types to favourable condition in accordance with the North-west of Jones Bank Marine Conservation Zone Designation Order 2016.

Where a Member State ("initiating Member State") considers that measures need to be adopted for the purpose of complying with the obligations referred to above, and other Member States have a direct management interest in the fishery to be affected by such measures, the European Commission shall be empowered to adopt such measures, upon request, by means of delegated acts. For this purpose cooperation between Member States having a direct management interest is foreseen with a view to formulating a joint recommendation in agreement on draft fisheries management measures to be forwarded to the Commission.

The initiating Member State shall provide the Commission and the other Member States having a direct management interest with relevant information on the measures required, including their rationale, scientific evidence in support and details on their practical implementation and enforcement. Member States shall consult the relevant Advisory Councils.

The initiating Member State and the other Member States having a direct management interest may submit a joint recommendation within six months from the provision of sufficient information. The Commission shall adopt the measures, taking into account any available scientific advice, within three months from receipt of a complete request (Reg 1380/2013, Articles 11 and 18).

The following chapters describe how the UK, as the initiating Member State, has taken the Commission's criteria for decision making into account, as well as the requirements for regional coordination in line with the new Basic Regulation.

2.2 Fisheries Access to the North-west of Jones Bank MCZ

In accordance with the Basic Regulation the following Member States operate demersal gears within the proposed management zone: UK, France, Spain and Ireland.

All four Member States have used demersal towed gear within the proposed management zone in the past four years; from 2010 to 2013 inclusive (details of activity and gear type can be found in table 2.1).

2.3 Designation of the North-west of Jones Bank MCZ

The North-west of Jones Bank site was designated as a Marine Conservation Zone (MCZ) in January 2016 (see Figure 2). MCZs are designated by the UK government under the Marine and Coastal Access Act 2009 for England and Wales. These zones will contribute to the UK's commitment to have a well-managed and ecologically coherent network of MPAs within two years of designation and will also assist in meeting commitments relating to the EC Marine Strategy Framework Directive (MSFD).

A significant way in which MCZs differ from Natura 2000 sites is that social and economic interests, such as commercial fishing, can be considered during their selection and designation process. Providing the ecological basis for an MCZ's designation is met, a site can be preferentially located in areas where impacts on social and economic interests are minimised. In such instances, a more precautionary approach to management can be taken whilst ensuring social and economic interests aren't impacted disproportionately.

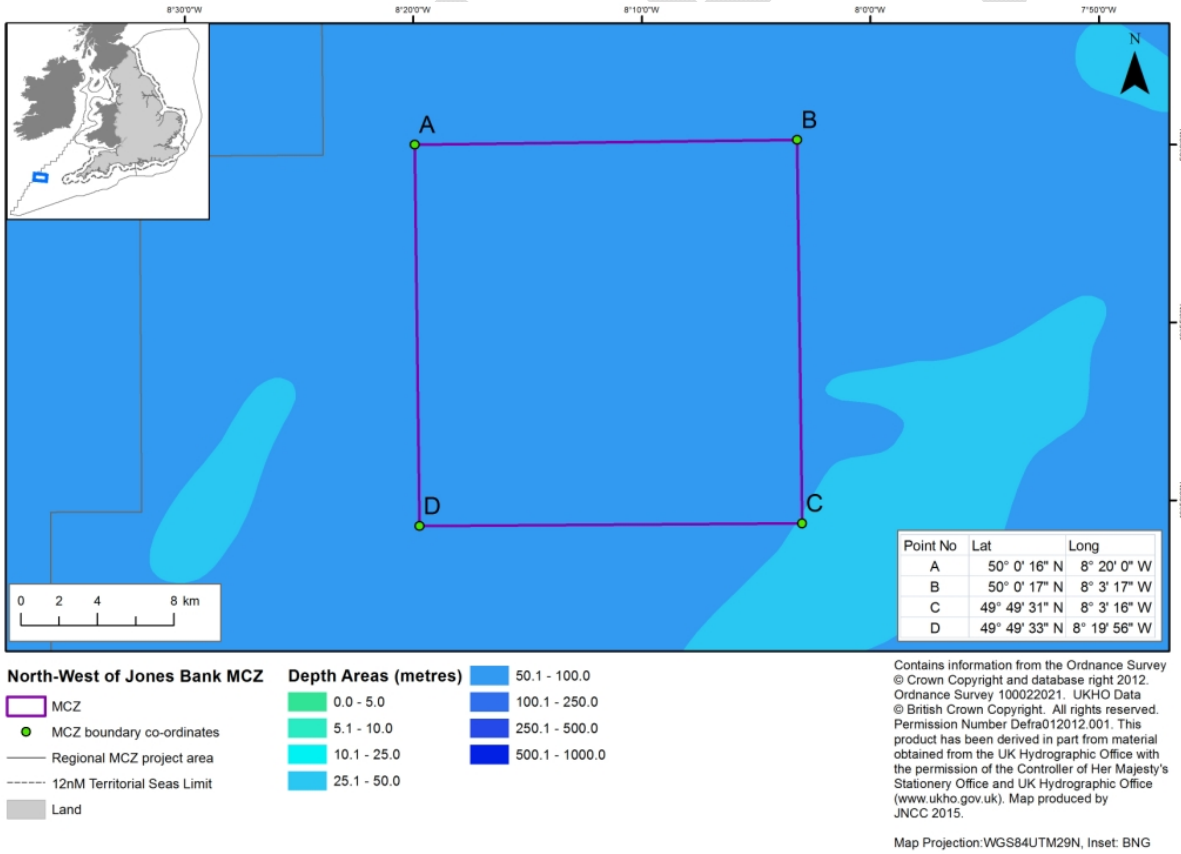


Figure 2: Site boundary for North-West of Jones Bank MCZ.

3. Process

This chapter describes the process from when the initiative to introduce fishery management measures to protect Subtidal coarse sediment, Subtidal sand, Subtidal mud and Subtidal mixed sediments and Sea-pen and burrowing megafauna communities from fisheries activities at North-west of Jones Bank MCZ commenced. A fisheries management workshop in Exeter in May 2016 was jointly hosted by the Department for Environment Food and Rural Affairs (Defra) and the Joint Nature Conservation Committee (JNCC) which will inform the development of fisheries management measures in the form of 'A Joint Recommendation' by the UK, France, Ireland, and Spain,] to the European Commission.

Denmark and The Netherlands have access to the site but only one Danish vessel in one year and two Dutch vessels in one year over the years analysed 2010-2013.

3.1 Stakeholder workshops

A Defra-led workshop was held in Exeter on 18 and 19 May 2016 to discuss fisheries management measures for MPAs in the Channel and the Southwest Approaches with the intention of developing management measures in conjunction with stakeholders. The workshop was attended by French, Irish and UK fisheries representatives as well as delegates from the French, Irish and Spanish governments and the Northwest Waters Advisory Council (NWWAC). There was also representation from Non-Governmental Organisations (NGOs) and conservation organisations.

Ahead of these meetings the UK prepared fisheries management options papers for the sites which discussed the risk to achievement of the conservation objectives associated with a range of management options.

During the meeting It was observed that this is an important fishing ground for the Irish nephrops fleet. This was supported by Scottish fishing representatives. Fishing industry representatives suggested an amended management boundary which whilst widely accepted, in principle needed further adjustment to ensure that there was still reasonable representation of the mud habitat within the site. This will be considered further post-workshop.

The site specific discussion from the report of the meeting is at Annex A.

3.2 Consultation on management proposals

Draft proposals for fisheries management measures were developed using feedback from the stakeholder workshops as well as advice from the UK's statutory nature conservation bodies, the JNCC and Natural England, and offshore fisheries regulator, the MMO. Fisheries management

measures were developed in close coordination with other Member States with a direct management interest in the sites.

Draft management proposals were subject to a six week period of consultation with Member States with a direct management interest in the sites and the Northwest Waters Advisory Council.

Finalised management proposals were then presented to other Member States with a direct management interest in the sites for agreement that sufficient information had been provided in order to commence the formal agreement of the proposals as Joint Recommendations. [Following this, ad hoc meetings of the Northwest Waters Article 11 sub-group were held to start formal agreement proceedings for the Joint Recommendations. Any outstanding issues were then addressed before agreement was reached on the Joint Recommendations by members of the Northwest Waters High-Level Group and they were submitted to the European Commission for adoption.]

3.3 Formal agreement of Joint Recommendations

[To be added following completion of Art.11 procedure]

3.4 Involvement of the North West Waters Advisory Council

The NWWAC attended the workshop in Exeter in May 2016 where initial proposals for management were discussed and the UK presented its rationale behind the measures proposed. The UK then attended a NWWAC meeting in February 2017 to present and discuss these proposals. There were no specific comments on this site.

At this stage concerns were put forward that the VMS data (2010 – 2013) included for the site does not consider the emerging fishery that has developed in the area since 2015, and therefore that this has not been taken into account in the process of developing management measures. The UK responded by noting that there must be a cut-off date for when data can be considered for MPAs and associated management measures. The papers contain VMS and fisheries data from 2010 to 2015, where received.

4 Rationale

While the site predominantly consists of Subtidal mud and its component habitat Feature of Conservation Importance, Sea-pen and burrowing megafauna communities there are also a range of other sediment types represented within the site including Subtidal Sand as well as Subtidal coarse and mixed sediments. These habitats are known to support a range of animal species, including those which live within the sediment and those that live on the surface of the seabed. The site is characterised by stable plains of fine mud, which provide a suitable habitat for burrowing animals

such as Norway lobster (*Nephrops norvegicus*) and a variety of sea-pens like the slender sea-pen (*Virgularia mirabilis*) and phosphorescent sea-pen (*Pennatula phosphorea*) that protrude from the seabed. In conjunction with the neighbouring Greater Haig Fras MCZ, North-west of Jones Bank MCZ contributes one of the largest areas of Subtidal mud habitat in the Southwest approaches.

Impacts of demersal towed gears (including scallop dredges, beam trawls, otter trawls and seine nets)

Whilst it is unlikely that demersal towed gears can affect the long-term natural distribution of the protected features within the site, there is some evidence to indicate that the use of demersal trawls and dredges can impact the structure and function of the habitat and the long term survival of its associated species. This site covers a broad range of habitats and biological communities which is likely to be reflected in an equally broad range of sensitivities to demersal trawl and dredge activity. It is expected that such activities could result in some degradation of the associated benthic communities relative to the un-impacted state particularly with a reduction in the abundance of fragile long lived species. Stable sediments are likely to be more susceptible to disturbance from demersal towed fishing gears while in higher energy areas much of the natural fauna will be well adapted to recover from disturbance. There is evidence that severity of impact over certain habitats may be cumulative and may be less severe where fishing pressure is low. As with demersal trawls and dredges, demersal seines may impact the structure and function of sedimentary habitats and the long term survival of their associated species. However, demersal seines (Danish and Scottish seines) lack the heavy gear components of other mobile demersal gears, such as otter doors and trawl shoes (Suuronen et al. 2012; Donaldson et al. 2010), so the risk of impact to sedimentary features and thus to achieving the conservation objective for the site is likely to be lower.

Impacts of static demersal gears (including gillnets, trammel nets, longlines, pots and traps)

It is not expected that demersal static gears will have a significant impact on sedimentary features within the site, however, the impacts of repeated exposure to these types of fishing gear at high levels of fishing activity are unknown.

5. Principles

Based on scientific advice from JNCC considering the risk associated with a range of management options and the consideration of socio-economic interests the UK has decided to protect Subtidal coarse sediment (A5.1), Subtidal sand (A5.2), Subtidal mud (A5.3), Subtidal mixed sediments (A5.4) and Sea-pen and burrowing megafauna communities (HFCI) in North-west of Jones Bank MCZ from physical disturbance due to demersal trawl and dredge activity.

When formulating the Joint Recommendations, the following principles were applied:

1) Sound scientific basis

This proposal for fisheries management measures is based on available scientific evidence. JNCC has provided scientific advice in relation to the risk to achieving the conservation objective for the site. The proposal has also been reviewed by Cefas. The advice from Cefas was that this approach reduces the pressures from demersal trawls and dredges sufficiently to contribute to long term progress in recovering the features towards favourable condition.

2) Stakeholder involvement

An important element of the process of formulating fisheries management measures has been the involvement of stakeholders. This has been outlined in further detail in sections 3.1 and 3.2.

3) Transparency

In this proposal the UK has been transparent on the data being used, the steps being taken and the methodology used, as well as the involvement of stakeholders.

4) Proportionality

An approach was sought that would deliver a regulatory proposal that delivers a key contribution to the achievement of the conservation objectives while minimising the effect on the fishing industry. A key safeguard in the process to deliver such an outcome was to follow the European Commission guidance in this regard, which described a proportional approach towards balancing sustainable exploitation of resources and the need to conserve important habitats, including a precautionary approach to fisheries management.

5) Non discrimination

The proposal will need to ensure that measures are not applied in a discriminatory manner. A coordinated approach between Member States is the only way of ensuring non-discrimination for fleets affected by the proposed measures. Ultimately, a proposal is presented to the European Commission for regulation in the framework of the Common Fisheries Policy, ensuring a fair outcome across the fishing sector affected.

6. Proposal scope

The proposed management boundary for a closure to demersal trawls and dredges encompasses approximately 40% of the site. Of the areas to be considered for management for the designated

features, approximately 30% for Subtidal mud (and Sea-pen and burrowing megafauna communities), 89% of the Subtidal sand and in excess of 98% for the Subtidal coarse and mixed sediment area are included.

List of Annexes:

Annex A – Meeting note from the May 2016 workshop in Exeter.

Annex B – Overview of the 11 information items in the Commission's guidelines from 2008

Annex C – Map of English MPA network

Annex D – Map and Coordinates for the North-west of Jones Bank MCZ reporting zone with increased reporting

Annex E – References

Annex A – Meeting note from the May 2016 workshop in Exeter

North-west of Jones Bank MCZ

Whilst levels of fishing activity were relatively low it was observed that vessels often trawl through the site and then continue on to Greater Haig Fras MCZ.

It was noted that there had been a high increase in Irish fishing activity in the site from 2015 onwards, most notably from otter trawls, and the Scottish fishing industry also predicts a high increase as a result of displacement from Scottish and Irish fishing grounds (e.g. the Porcupine). In contrast it was observed that French activity was declining in this site.

It was observed that this is an important fishing ground for the Irish nephrops fleet. This was supported by Scottish fishing representatives.

Fishing industry representatives suggested an amended management boundary which whilst widely accepted, in principle needed further adjustment to ensure that there was still reasonable representation of the mud habitat within the site. This will be considered further post-workshop.

Annex B – Overview of the 11 information items in the Commission's guidelines from 2008

The Commission has issued guidance on a consistent approach to requests for fisheries management measures under the Common Fisheries Policy[4]. Accordingly, this document provides the scientific and technical information required to support a formal request to the Commission for fisheries regulation under the Common fisheries Policy.

1 Comprehensive description of the natural features including distribution within the site

North-West of Jones Bank MCZ is situated approximately 165km offshore from the south-west of England. The site covers 398 km^2 of continental shelf, of which 339 km^2 consists of Subtidal mud.

The sea bed in North-West of Jones Bank MCZ comprises a variety of broad scale habitats such as. Subtidal sand, Subtidal mixed sediments and Subtidal coarse sediment (Figure 1 - images). These habitats support a range of species, including polychaete worms, veneroid molluscs and echinoderms such as starfish and urchins. However, the area predominantly consists of Subtidal mud and its component habitat Feature of Conservation Importance; Sea-pen and burrowing megafauna communities, which is also an OSPAR Threatened and / or Declining habitat across the North-east Atlantic. This feature consists of stable plains of fine mud, which provide a suitable habitat for burrowing animals such as Norway lobster (Nephrops norvegicus) and a variety of sea-pens like the slender sea-pen (Virgularia mirabilis) and phosphorescent sea-pen (Pennatula phosphorea) that protrude from the sea bed. The burrowing activity of crustaceans such as the Norway lobster has an important functional role, allowing oxygen penetration deeper into the sediment, releasing nutrients, and increasing the structural complexity of the habitat. Although characterised by Nephrops and sea-pen, this habitat also supports a rich community of animals living within the sediment.

North-West of Jones Bank MCZ is situated approximately 132 km north west from South-West Deeps (West) MCZ, and 240km north west of The Canyons MCZ. All of these sites contribute to the connectivity and representativity of sea bed features within the Western Channel and Celtic Sea biogeographic area**.**

[4] http://ec.europa.eu/environment/nature/natura2000/marine/docs/fish_measures.pdf

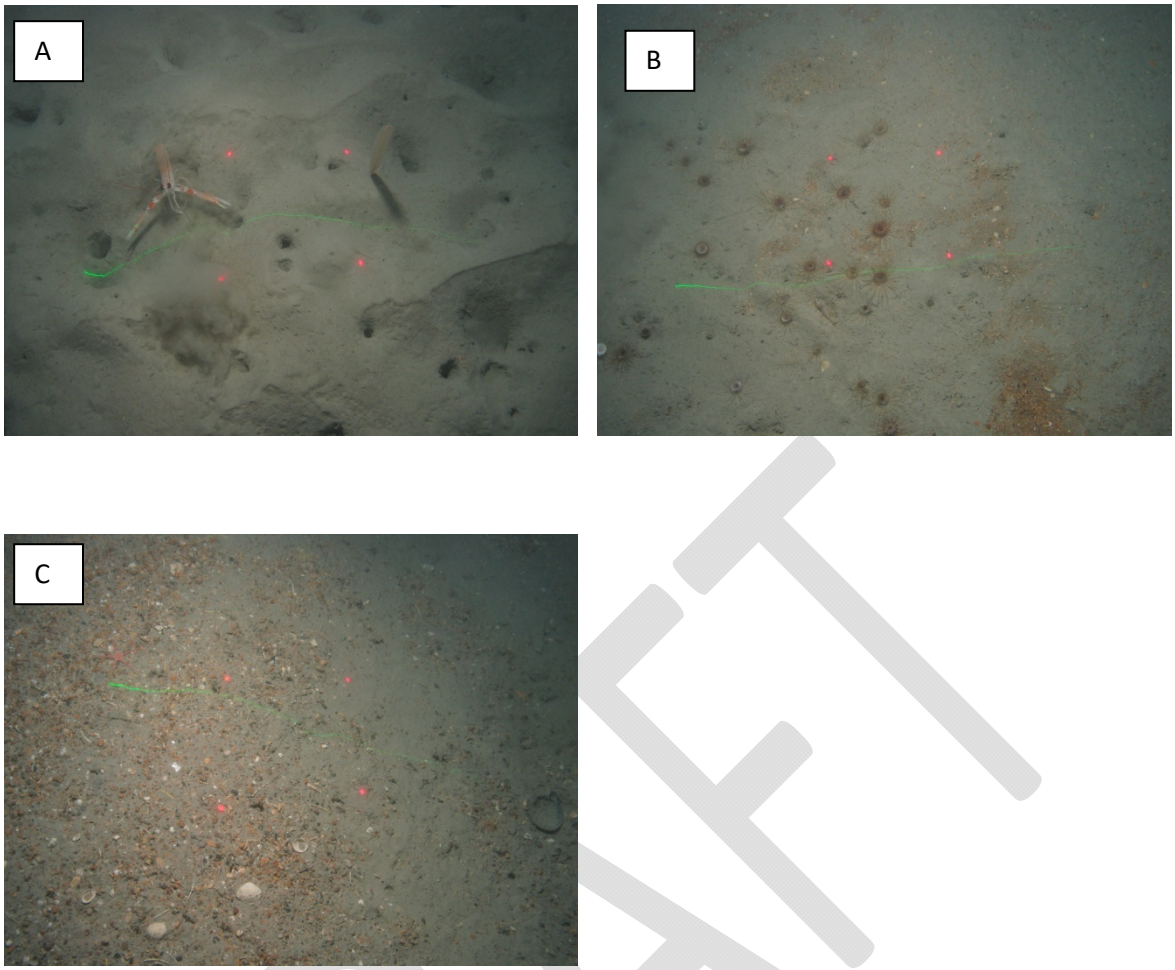


Figure 1. Photographs taken from the MB0120 survey of North-West of Jones Bank MCZ

A: Subtidal mud/Seapen and burrowing megafauna communities (seapen *virgularia* and *nephrops* on burrowed mud)

B: Subtidal mud (burrowing anemones in sandy mud)

C: Subtidal mixed sediments (tusk shells (scaphopoda) and brittlestar (ophiuroidea) on sand and gravel sediment)

2 Scientific rationale for the sites' selection in accordance with the information provided in the Marine Conservation Zone Designation Order. Intrinsic value of its features. Specific conservation objectives

The UK has committed to the development of an MPA network designed to protect a range of nationally important marine species and habitats which will be central to achieving Good Environmental Status (GES) by 2020 under the Marine Strategy Framework Directive (MSFD). Such a network is also consistent with the UK's obligations under the OSPAR Convention. Due to the large number of individual habitats and species in UK waters, features were grouped into Broad-scale Habitats. To ensure that the full range of biodiversity in UK seas is conserved, representative

examples of Broad-scale Habitats and specific features of conservation importance were designated within the MCZ network.

Selection guidelines for MCZs were laid out by Defra to support the initial identification of sites through four regional stakeholder projects. The guidance covers the aim of the network; the involvement of stakeholders; the principles for design of an MPA network; principles for the identification of sites and also the setting of conservation objectives.

Site recommendations were based around the seven design principles laid out in the Ecological Network Guidance (ENG) :

- Representativity
- Replication
- Adequacy
- Viability
- Connectivity
- Protection
- Best available evidence

South-west Deeps (West) is included in the MPA network for its contribution to the conservation of the broad-scale habitats of Subtidal coarse sediment (EUNIS habitat type A5.1), Subtidal sand (EUNIS habitat type A5.2, Subtidal mud (EUNIS habitat type A5.3) and Subtidal mixed sediments (EUNIS habitat type A5.4). It also provides a contribution to the conservation of the species feature of conservation importance Fan mussel.

2.1 Conservation objectives

Conservation objectives set out the desired state for the protected feature(s) of an MPA.

To achieve the conservation objectives a general approach to management for each designated feature has been set by JNCC based on current knowledge of condition. This approach considers whether management should be adopted to maintain the feature in its existing condition or whether some form of recovery is necessary to bring the feature into favourable condition.

The General Management Approach (GMA) for the protected features of North-west of Jones Bank MCZ are:

- **Subtidal coarse sediments** - Recover to favourable condition
- **Subtidal mud** – Recover to favourable condition
- **Subtidal sand** – Recover to favourable condition.
- **Subtidal mixed sediments** - Recover to favourable condition
- **Sea-pen and burrowing megafauna communities** – Recover to favourable condition

Further information on the conservation objectives and GMA for the site can be found on the relevant JNCC Site Information webpage[5].

3 Basis for the spatial extent of the site boundary clearly justified in terms of conservation objectives

The North-West of Jones Bank MCZ is a simple rectangle following North-South and East-West lines. Therefore, the boundary is in accordance with the MCZ Ecological Network Guidance, which advises using a minimum number of simple lines to delineate the site.

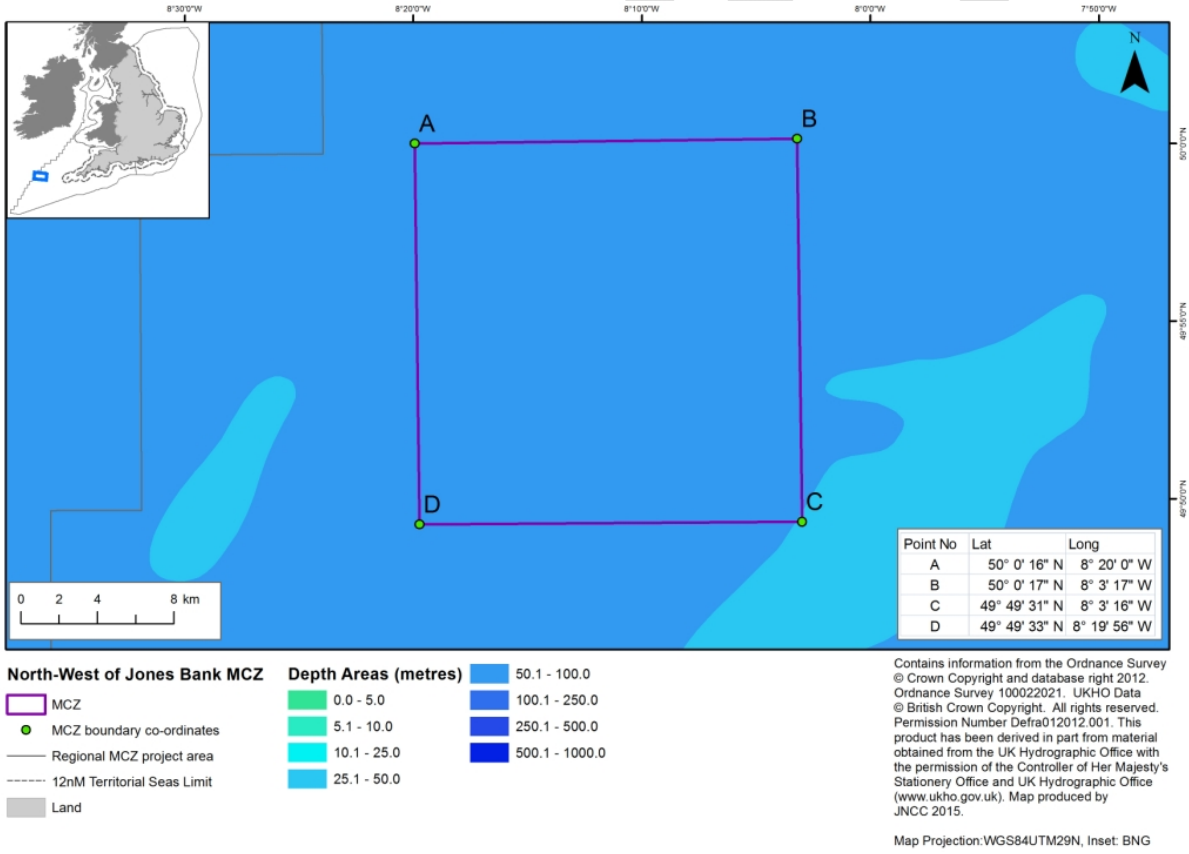


Figure 2. Site boundary for North-West of Jones Bank MCZ (co-ordinates rounded to nearest second)

[5] JNCC Site Information Centres: http://jncc.defra.gov.uk/default.aspx?page=6895

4 Threats to the long-term natural distribution, structure and functions of the habitats and the long-term survival of associated species from different types of fishing gear. List of other human activities in the area that could damage the habitats

4.1 All demersal towed gears (including scallop dredges, beam trawls and otter trawl)

It is unlikely that demersal trawls and dredges can affect the long-term natural distribution of **Subtidal mud, Subtidal sand, Subtidal coarse sediment, Subtidal mixed sediment and Seapen and burrowing megafauna communities.** However, there is evidence to indicate that their use can impact the structure and function of the habitats and the long term survival of their associated species.

The broad scale habitat **Subtidal mud** covers a range of habitats and biological communities on muds and sandy muds. While some variability in sensitivity is to be expected at this broad scale, many instances of this habitat occur in sheltered areas characterised by undisturbed muddy sediments with a rich and diverse fauna. The stable nature of the sediments makes them generally susceptible to disturbance from demersal towed gears. Subtidal mud habitats may contain the Feature of Conservation Importance **Seapen and burrowing megafauna communities.** Fishing with demersal towed gears over this feature can reduce habitat complexity and species diversity can decrease (Greathead et al. 2007; Hinz et al. 2009). There is evidence that severity of impact is cumulative (Hinz et al. 2009) so may be less severe where fishing pressure is low (Ball et al. 2000; OSPAR, 2010). *Nephrops* may be an important component of the benthic community, so fisheries that greatly alter its abundance or size composition may be seen to have a negative impact.

The extent to which mobile gear impacts on **Subtidal sand** communities can vary considerably, according to the type of gear, the intensity of fishing and the sediment composition. Trawling and dredging tend to cause increased mortality of fragile and long lived species and favour opportunistic, disturbance-tolerant species (Bergman & Van Santbrink, 2000; Eleftheriou & Robertson, 1992). Some particularly sensitive species may disappear entirely (Bergman & Van Santbrink, 2000). The net result is benthic communities modified to varying degrees relative to the un-impacted state (Bergman & Van Santbrink, 2000; Kaiser et al. 2006). In higher energy locations, for example the sandy bank tops or wave and/or tide exposed areas the associated fauna tend to be well adapted to disturbance and as a result are more tolerant of fishing-related disturbance (Dernie et al. 2003; Hiddink et al. 2006). The habitat may be maintained in a modified state; however modification is likely to be low relative to natural variation. In lower energy locations, such as muddy sands and sand in deep water, or on the flanks and towards troughs between banks, sediments tend to be more stable and their

associated fauna less tolerant of disturbance (Kaiser et al. 2006; Hiddink et al. 2006). The habitat may be maintained in a modified state with reduced abundance of fragile, long lived species.

As with sandy habitats, the broad scale habitat **Subtidal coarse sediment** includes sub-habitats with a wide range of sensitivities to trawling. Communities on unstable coarse sediments are considered to contain relatively robust fauna which are not believed to be greatly impacted by surface abrasion (Hall et al 2008). More stable gravels may support a 'turf' of fragile species which are easily damaged by trawling and recover slowly (Collie et al 2005, Foden et al 2010). Trawling may result in a modified benthic community with reduced abundance of fragile long lived species. Recovery time from dredging is longer than from trawling (Foden et al 2010).

The broad scale habitat **Subtidal mixed sediments** covers a wide range of different types of sediment from muddy, gravely sands to mosaics of cobbles and pebbles in or on a sand, gravel or mud seabed. Areas of mixed sediments may also include instances where waves or ribbons of sand form on the surface of a gravel bed (Anon, 2010). These different habitats can be expected to vary greatly in their sensitivity to fishing impacts (Roberts et al. 2010). However, as there are very few studies that directly evaluate fishing impacts on subtidal mixed sediments it is not possible to give general advice for this broad scale habitat. In the absence of specific advice, a reasonable proxy may be to consider the advice given for other, similar constituent habitats, outlined in the information above.

4.2 All demersal static gears (including gillnets, trammel nets, longlines, pots and traps)

It is unlikely that demersal static gears will have a significant effect on the long-term natural distribution of **Subtidal mud, Subtidal sands, Subtidal coarse sediment or Subtidal mixed sediment**, or on the structure and function of their associated biological communities. Studies on the impacts of potting on seapens have shown little or no adverse effect from a *single* fishing operation (Eno et al. 1996; Eno at al. 2001; Kinnear et al. 1996). However, the impacts of repeated exposure to these types of fishing gear at high levels of fishing activity are unknown (Eno et al. 2001). Targeted potting may be expected to result in a reduction in *Nephrops* and hence their burrows**.** *Nephrops* may be an important component of the benthic community so fisheries that greatly reduce its abundance may be seen to have a negative impact.

4.3 Other Human activities

The information within this section represents current knowledge of the nature and extent of activities taking place within or close to the site.

One active cable intersects the site. Also, Ministry of Defence (MoD) training and exercises may take place in or around the site. The MoD have incorporated all designated MPAs into their

Environmental Protection Guidelines (Maritime) and wider Marine Environmental and Sustainability Assessment Tool.

5 Fleet activity in the area and in the region, distribution of fleets (by nation, gear, and species), and information on target and bycatch species over 6 years from 2010 to 2015 inclusive.

5.1 Validity of data

In the section below relevant fleet statistics for the years 2010-2013 are provided as requested by the European Commission guidance. The UK, as the initiating Member State, analysed fishing from Member States active in the North-west of Jones Bank MCZ over a six year period. This approach is consistent with other management proposal methodology across Member States. A four year dataset is considered to be representative of the contemporary fisheries carries out in the area and thus valid for the purpose of underpinning the current proposal.

Overall, fisheries have been changing since the early 2000s as a result of changes in economic and regulatory conditions, e.g. fuel prices and engine efficiencies, the introduction of individual transferable quota (ITQ) systems[6] in various forms. Fishing fleets have been reduced in terms of the number of vessels and fishing effort has decreased. Fishing opportunities are dictated by stock status, market conditions, fuel prices and technological opportunities, as well as quota availability. In addition, policy decisions on alternative use of marine habitat, sustainable exploration and environmental policies will influence fishing opportunities.

The fisheries are dynamic and sound judgement is required when using the data. However, more recent datasets are expected to improve our understanding of the structure of fisheries.

Vessels from six Member States have been present within the relevant area according to VMS reports or “pings”. However, French vessels routinely report every hour and not every two hours like all other Member States’ vessels. The data concerning the number of French vessels will be accurate but their activity through pings may appear distorted. To maintain consistency across all vessels and Member States’ data, the information on French vessels has been displayed as it was received into the MMO Fisheries Monitoring Centre (FMC); therefore it has not been altered to reflect possible one hour vessel pings as this could alter the validity of the data further. To establish which vessels specifically report at a higher level would require additional processing and information.

[6] Individual transferable quotas (ITQs) are a type of catch share system, which is a tool used by some governments to manage fisheries

To note, unknown gear classification relates to a specific VMS report which does not have valid corresponding log book information.

5.1.1 Data analysis

Data presented has been analysed by applying the standard methodology used to identify whether or not vessels have been fishing in a specified spatial area. VMS reports ("pings") were used to indicate vessel fishing activity based on the speed of the vessel as contained within the VMS report. Each ping was classified as indicative of fishing activity if the speed was greater than or equal to zero knots and less than or equal to six knots[7].

Each speed filtered VMS ping (0-6 knots) received from a vessel in ICES statistical rectangle 28E1 (the ICES rectangle location of the site) was extracted from the UK VMS system. Each ping will hold the following information: the vessel identity (CFR) number, position and speed; and the date and time of that ping. These fishing pings from the rectangle concerned are then processed in GIS software to identify whether the position was inside or outside the North-west of Jones Bank MCZ or the proposed management area(s). This provides a proportion of pings falling within the area for the vessels of each Member State. A very small area of this site clips the edge of ICES statistical rectangle 29E1. Due to the small area that this covers we are unable to identify any VMS reports in this portion of the site so have not included this ICES rectangle in any of our analysis.

This proportion was then applied to landings data to allow estimates of landings value and quantity derived from within the North-west of Jones Bank MCZ or proposed management areas by non-UK vessels.

5.1.2 Data limitations

The data provided in this section is subject to the following limitations:

1. Data is only available from vessels that are required to carry EU VMS systems (i.e. vessels 12 metres and above in length). As such their pattern of activity may differ from vessels of less than 12 metres in length.

2. Vessel numbers derived from VMS can suggest an increase over the years analysed, however it is important to note that during this period VMS was introduced to the 12m and above fleet, in addition to the 15m and above fleet.

3. Unless stated otherwise, all data shown is over a six year period 2010 - 2015.

4. The speed thresholds (0-6 knots) used to make assumptions as to whether a vessel is fishing or not only provide indications, not definitive proof of fishing and may not be equally valid for all gear types.

5. The proportion of activity inside an area is based on the number of pings as opposed to actual fishing time.

[7] Article 50 of Council Regulation (EC) No 1224/2009 : http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:343:0001:0050:EN:PDF

6. VMS reports are sent by every fishing vessel at 2 hourly intervals, with the exception of the French VMS activity. This was witnessed at an hourly rate.

7. No Spanish landing information has been supplied to the UK.

5.2 Fleet activity by state

From 2010 to 2015 vessels from six Member States were active within and around the North-west of Jones Bank MCZ (see table 1). Of these, the most significant activity was from French and Irish vessels, with lower, but substantive, levels of activity from UK and Spanish vessels (see table 1).

Table 1: Number of vessels and pings (0-6knots) associated with the North-west of Jones Bank MCZ by year and Member State.

Nationality		2010	2011	2012	2013	2014	2015
Denmark	Number of vessels	1	0	0	0	0	0
	Number of pings	1	0	0	0	0	0
France	Number of vessels	25	22	24	29	16	18
	Number of pings	2393	2106	1729	1026	677	390
Ireland	Number of vessels	23	23	26	30	49	51
	Number of pings	142	361	1208	1416	2205	2453
Netherlands	Number of vessels	0	0	2	0	0	0
	Number of pings	0	0	2	0	0	0
Spain	Number of vessels	3	3	8	7	3	3
	Number of pings	9	4	14	44	45	7
UK	Number of vessels	8	10	14	9	9	12
	Number of pings	67	228	133	136	127	185

* French VMS reporting is on average hourly, all other Member States' reporting is on average two hourly.

5.3 Landings values

As shown in Tables 2.1 and 2.2 the gear groups of major importance in terms of effort (tonnage) and economic importance (value) include (1) Beam Trawls directed at demersal fish (flatfish), (2) Otter board bottom trawls for demersal fish, (3) otter board bottom trawls for demersal and semi pelagic fish. Fishing for these species occurs in the Southern Irish Sea, Celtic Sea and North East Atlantic.

Table 2.1: Vessel size and gear type for vessels operating in the ICES rectangles 28E1 by year and Member State showing effort (tonnage caught)

Sum of Quantity Tonnes (28E1)		YEAR			
Nationality	**Gear**	**2010**	**2011**	**2012**	**2013**
FRA	Gillnets unspecified	0.56	0.81	12.09	0.00
	Long Lines	0.50	0.00	0.00	0.00
	Otter Trawl bottom	74.56	55.35	125.90	96.50
	Otter Trawl twin	418.64	504.81	367.66	181.04
	Pair Trawl midwater	0.00	0.00	0.00	0.00
	Danish Seine	1.34	18.02	14.97	5.32
	Beam Trawl	0.00	0.00	0.00	0.00
FRA Total		**495.60**	**578.99**	**520.63**	**282.86**
IRL	Bottom trawls	168.16	94.69	282.87	476.63
	Fly shooting seine	0.00	0.00	0.00	0.00
	Nets	0.00	0.00	0.90	3.67
	Pelagic trawls	2,900.00	0.00	150.00	5,362.50
IRL Total		**3,068.16**	**94.69**	**433.78**	**5,842.80**
UK	Beam trawls	0.00	0.00	0.00	0.00
	Gillnets (all)	19.15	11.48	18.77	24.10
	Nephrops trawls	0.00	0.00	0.00	1.18
	Otter trawls (Bottom and not specified)	735.04	248.79	180.89	292.83
	Otter twin trawls	0.00	0.00	0.55	3.17
	Pair trawls – mid water	0.00	0.00	0.00	0.00
	Pots	0.00	0.00	0.00	0.00
	Trammel nets	1.62	0.00	0.00	0.00
UK Total		**755.81**	**260.28**	**200.20**	**321.28**
Grand Total		**4,319.57**	**933.96**	**1,154.61**	**6,446.94**

Table 2.2: Vessel size and gear type for vessels operating in the ICES rectangles 28E1 by year and Member State showing landing values

Sum of Value £ (28E1)		YEAR			
Nationality	**Gear**	**2010**	**2011**	**2012**	**2013**
FRA	Gillnets unspecified	£1,017	£1,543	£21,971	£0
	Long Lines	£951	£0	£0	£0
	Otter Trawl bottom	£246,329	£107,173	£231,941	£196,833
	Otter Trawl twin	£895,300	£1,002,349	£682,305	£357,617
	Pair Trawl midwater	£0	£0	£0	£4
	Danish Seines	£1,848	£16,684	£19,880	£6,057
	Beam Trawls	£0	£0	£0	£0
FRA Total		**£1,145,445**	**£1,127,748**	**£956,097**	**£560,512**
IRL	Bottom trawls	£359,340	£203,046	£702,178	£1,251,608
	Fly shooting seine	£0	£0	£0	£0
	Nets	£0	£0	£927	£3,840

	Pelagic trawls	£217,297	£0	£14,256	£538,832
IRL Total		**£576,636**	**£203,046**	**£717,362**	**£1,794,280**
UK	Beam trawls	£0	£0	£0	£0
	Gillnets (all)	£90,148	£64,111	£54,068	£74,666
	Nephrops trawls	£0	£0	£0	£3,224
	Otter trawls (Bottom and not specified)	£1,054,884	£715,872	£652,393	£757,201
	Otter twin trawls	£0	£0	£2,424	£6,164
	Pair trawls – mid water	£0	£0	£0	£0
	Pots	£0	£0	£0	£0
	Trammel nets	£6,358	£0	£0	£0
UK Total		**£1,151,390**	**£779,983**	**£708,885**	**£841,254**
Grand Total		**£2,873,471**	**£2,110,778**	**£2,382,343**	**£3,196,045**

5.4 Annual variation in fishing activity

Fishing effort is indicated by the number of VMS reports at speeds indicative of fishing (from 0 to 6 knots) received by the UK Fisheries Monitoring Centre. Reports are sent by every fishing vessel at 2 hourly intervals.

VMS Activity

Over the years analysed (2010-2015), through VMS, the total volume of vessels fishing in the Offshore Overfalls MCZ from other Member States are 490 and 62 from the UK, making a total of 552 (an average of 92 vessels per year). However, vessels have been counted more than once if they enter the MCZ in separate years. See Table 1.

French VMS activity suggests a decrease on vessels numbers in recent years, from 25 vessels in 2010, down to 18 in 2015. This mirrors in the number of VMS pings, dramatically decreasing from a peak of 2,393 in 2010, down to just 390 in 2015. In the past the activity has swept across the majority of the site, however in 2014 and 2015 the reduction of pings has shown the recent activity to be generally outside of the proposed closures.

Irish VMS activity suggests a greater increase on vessel numbers in recent years, from a low of 23 vessels in 2010, up to 51 in 2015. This is reflected in the number of VMS pings, dramatically increasing from 142 in 2010, up to 2,453 in 2015. The activity has occurred across the site with the majority of pings focussed across the centre of the site, outside the proposed closures.

Spanish VMS activity suggests that there was a peak of activity between 2013 and 2014. In 2010 there were 3 vessels recorded in 2010, this rose to 7 vessels in 2013 before dropping back to 3 vessels again in 2015. Again this mirrors in the number of VMS pings, with 9 in 2010, rising to 44 and 45 pings in 2013 and 2014 before resuming back down to 7 pings. The activity suggests that the Spanish vessels have favoured to operate to the west of the site with some pings entering the north western section of the site, inside the proposed closure.

UK VMS activity suggests a fluctuation over recent years, from 8 vessels in 2010, rising to 14 vessels in 2012, dropping to 9 in 2013 before rising back to 12 vessels in 2015. This reflected in the number of VMS pings, starting with 67 pings in 2010, rising to 228 in 2011, dropping to 133 in 2012 before rising again at 185 in 2015. The activity had swept across the majority of the site, however recent activity is seen to be generally within the centre of the site outside of the proposed closures.

Landings information

The values (£) and landings (tonnes) effort taken within ICES rectangle 28E1 vary between each member state.

French Landings within ICES rectangle 28E1 has decreased over the recent years in terms of tonnes landed and value taken. In 2010 there was 495 tonnes landed with an approximate value of £1.1million, this did rise to 578 tonnes the following year in 2012 with an approximate value of £1.1million. However this then steadily decreased each year with before reaching down to 177 tonnes in 2015 with an approximate value of £329,497. The gears types commonly used in this ICES

rectangle are from Bottom Otter trawling (OTB) and unspecified Otter trawling (OTT) and to a lesser degree Beam trawling (TBB).

Irish Landings within ICES rectangle 28E1 has fluctuated over recent years in terms of tonnes landed and value taken. In 2010 there was 3,068 tonnes landed with an approximate value of £576,676, the following in 2011 the landings dropped to 94 tonnes with an approximate value of £203,046 (to note there were no pelagic trawl landings captured in 2011). In 2013 there was a dramatic increase recorded with 5,842 tonnes and an approximate value of £1.7million, before dropping again down to 865 tonnes and £1.5million. This has predominately been generated through the Bottom trawls, but also through fluctuating levels of Pelagic trawls.

UK Landings within ICES rectangles 28E1 has fluctuated over recent years in terms of tonnes landed and value taken. In 2010 (peak year) there was 755 tonnes landed with an approximate value of £1.1million, this decreased to 200 tonnes in 2012 with an approximate value of £708,885, before rising to 519 tonnes in 2014 with an approximate value of £1million. The landings then decreases to 291 tonnes and £804,391 in 2015. The gears types commonly used in this ICES rectangle are from bottom and non-specified Otter trawls.

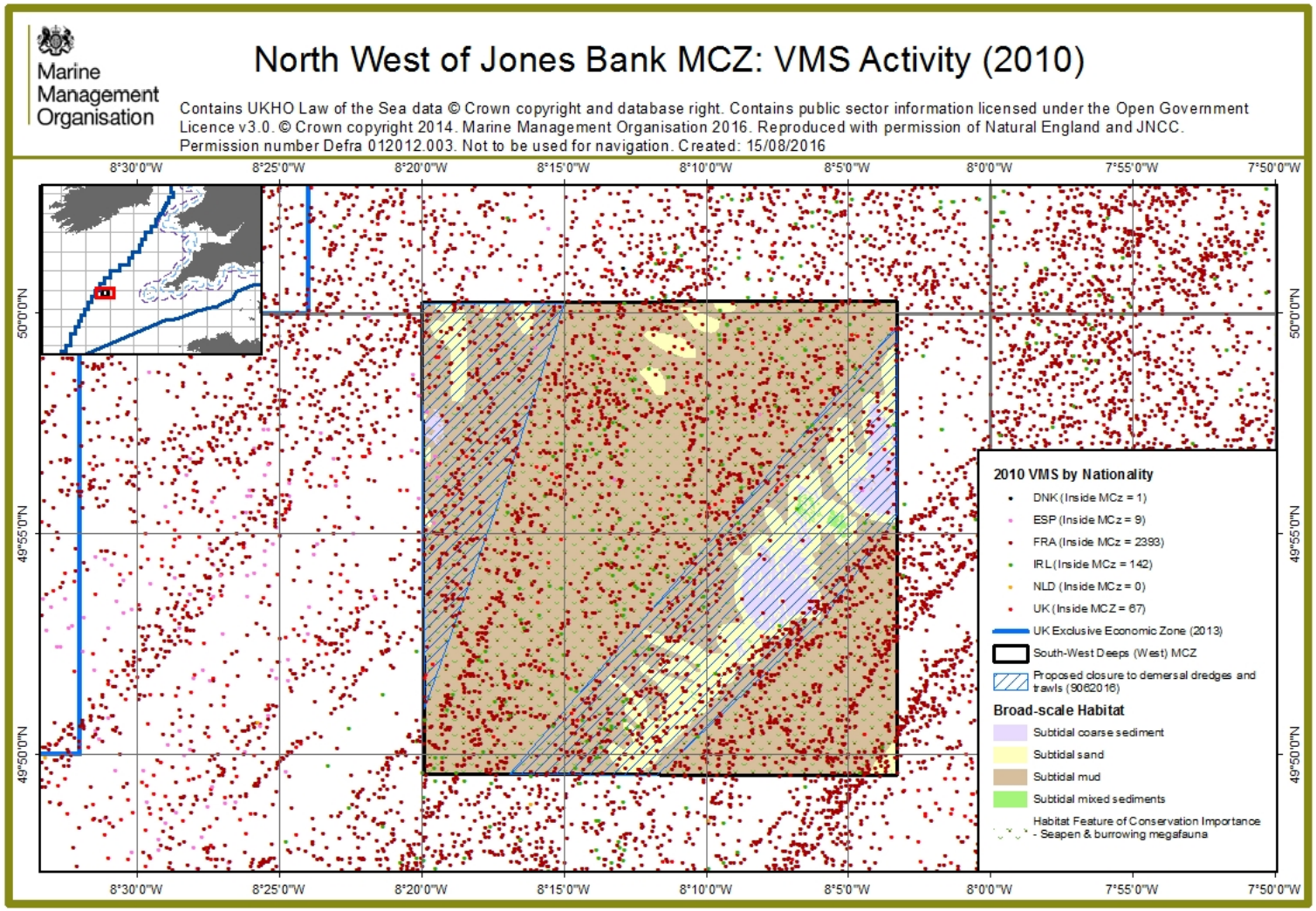


Figure 3: VMS reports indicating all fishing activity in the North-west of Jones Bank MCZ 2010 by Nationality

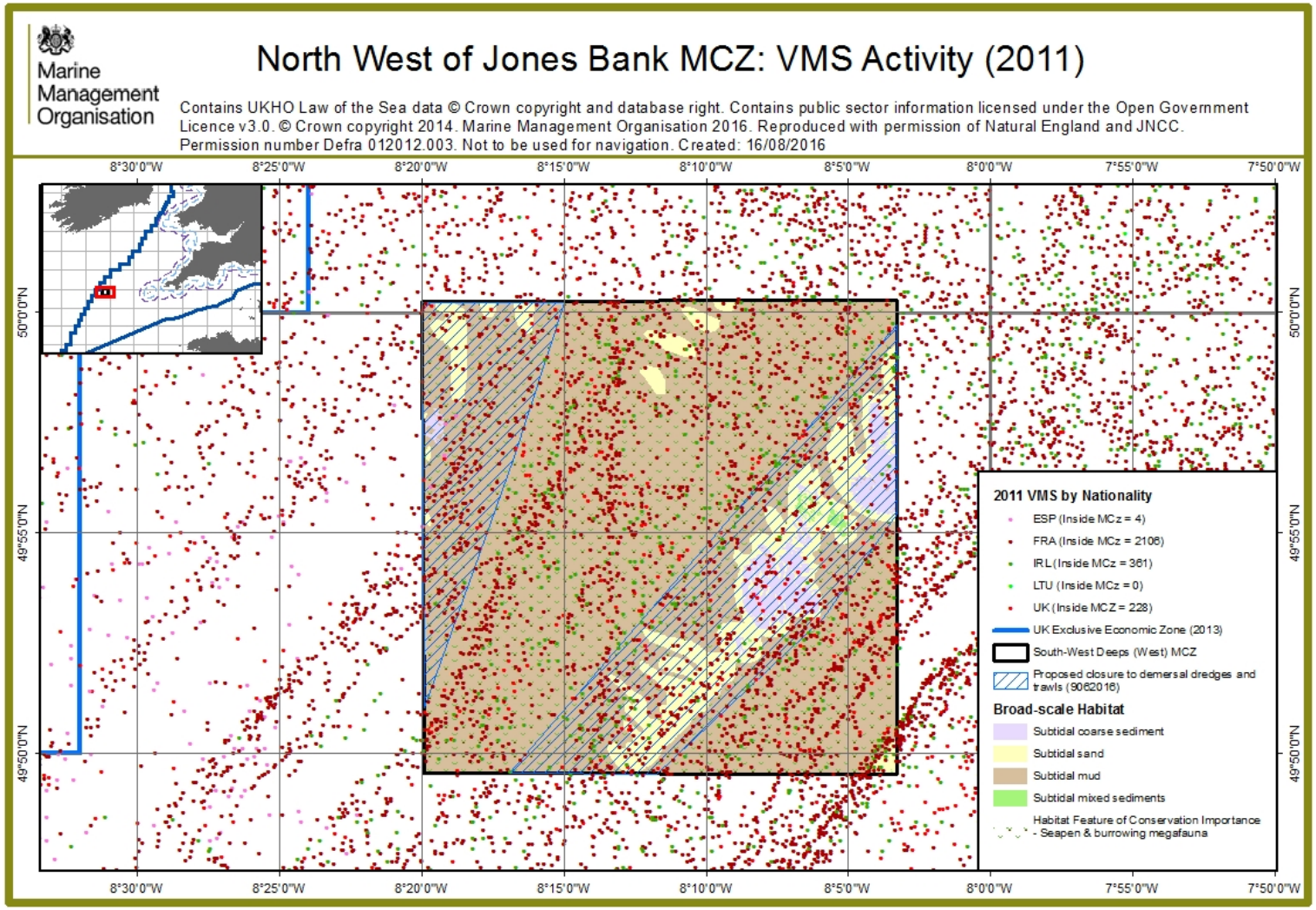


Figure 4: VMS reports indicating all fishing activity in the North-west of Jones Bank MCZ 2011 by Nationality

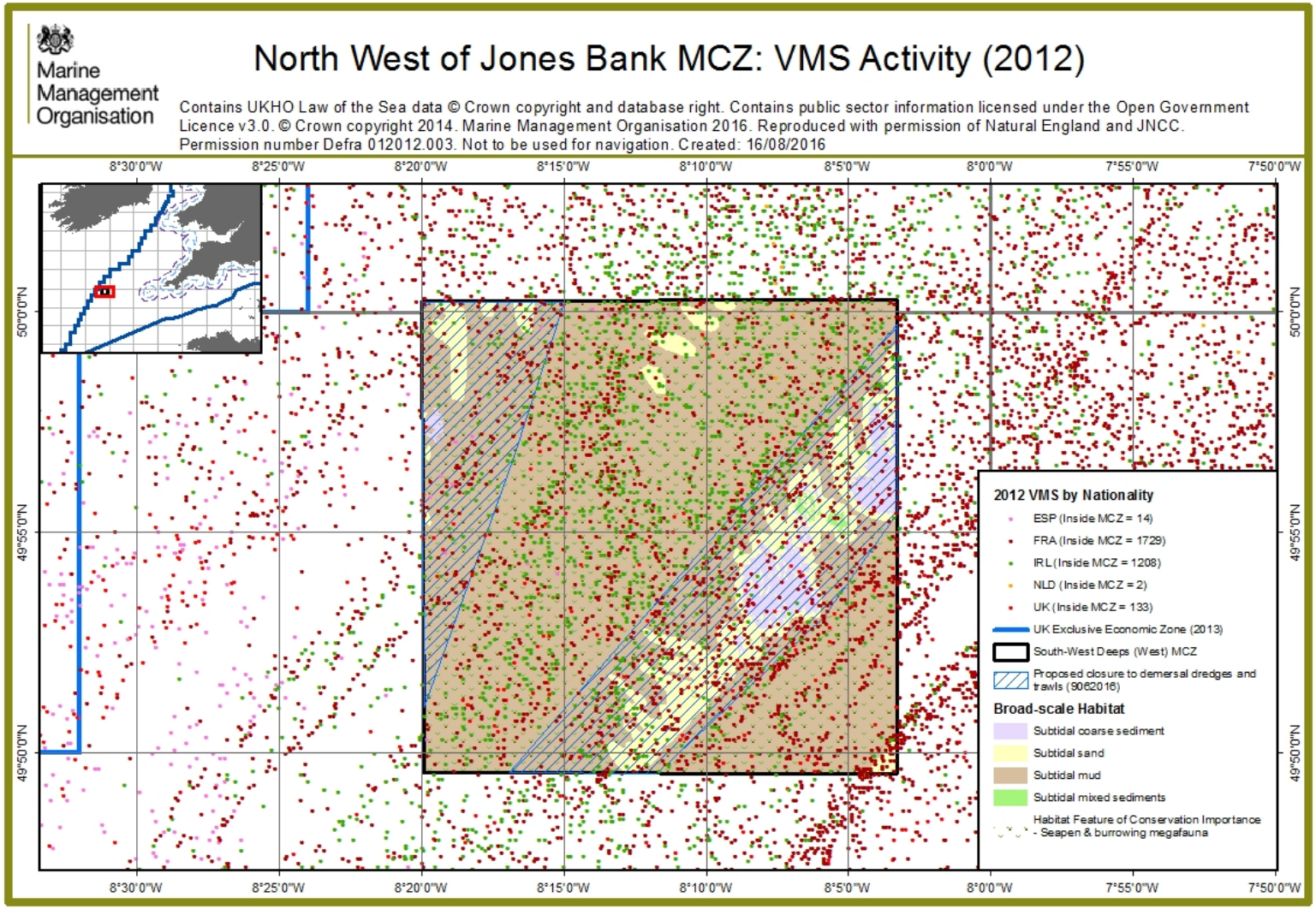


Figure 5: VMS reports indicating all fishing activity in the North-west of Jones Bank MCZ 2012 by Nationality

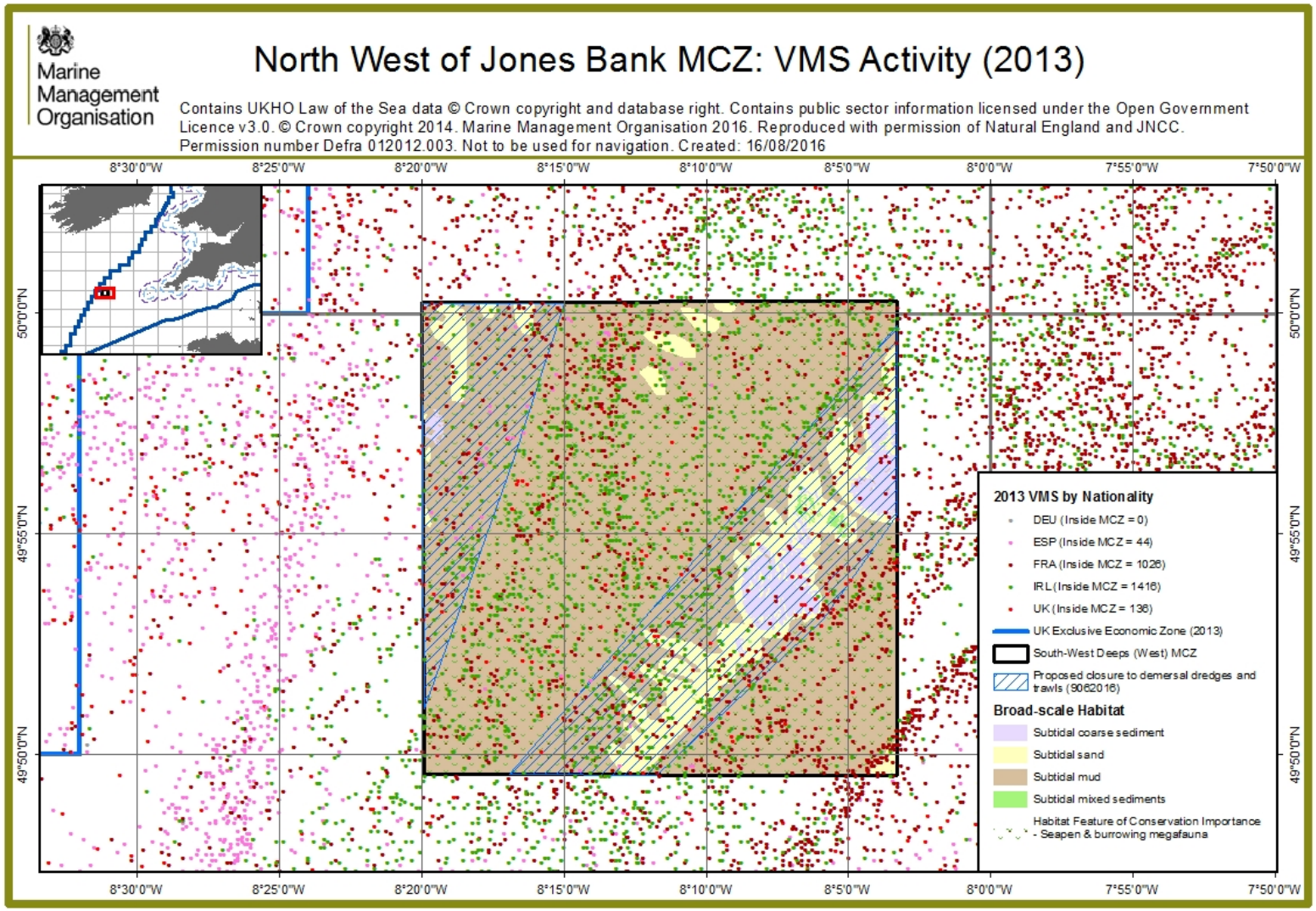


Figure 5: VMS reports indicating all fishing activity in the North-west of Jones Bank MCZ 2013 by Nationality

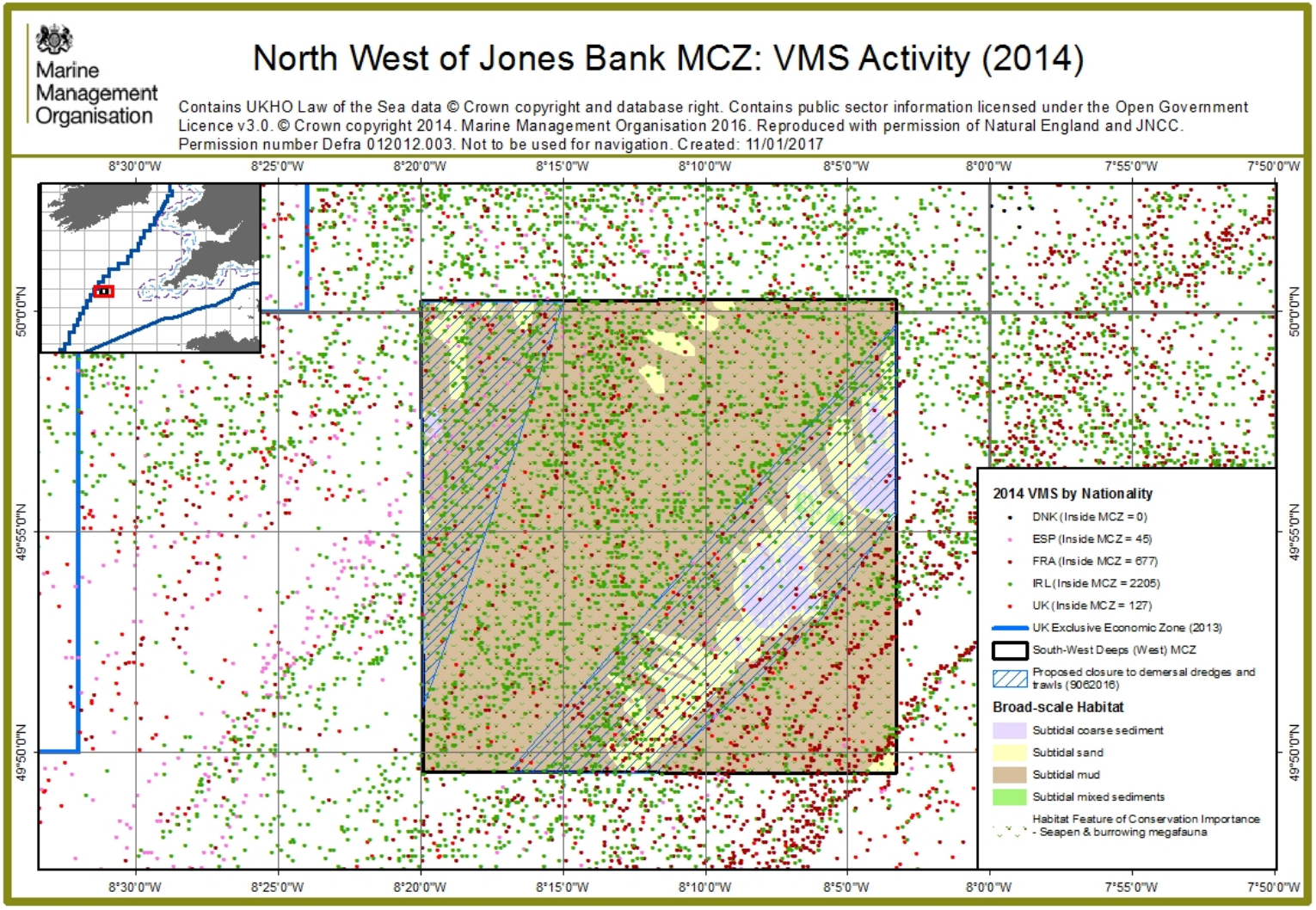


Figure 6: VMS reports indicating all fishing activity in the North-west of Jones Bank MCZ 2014 by Nationality

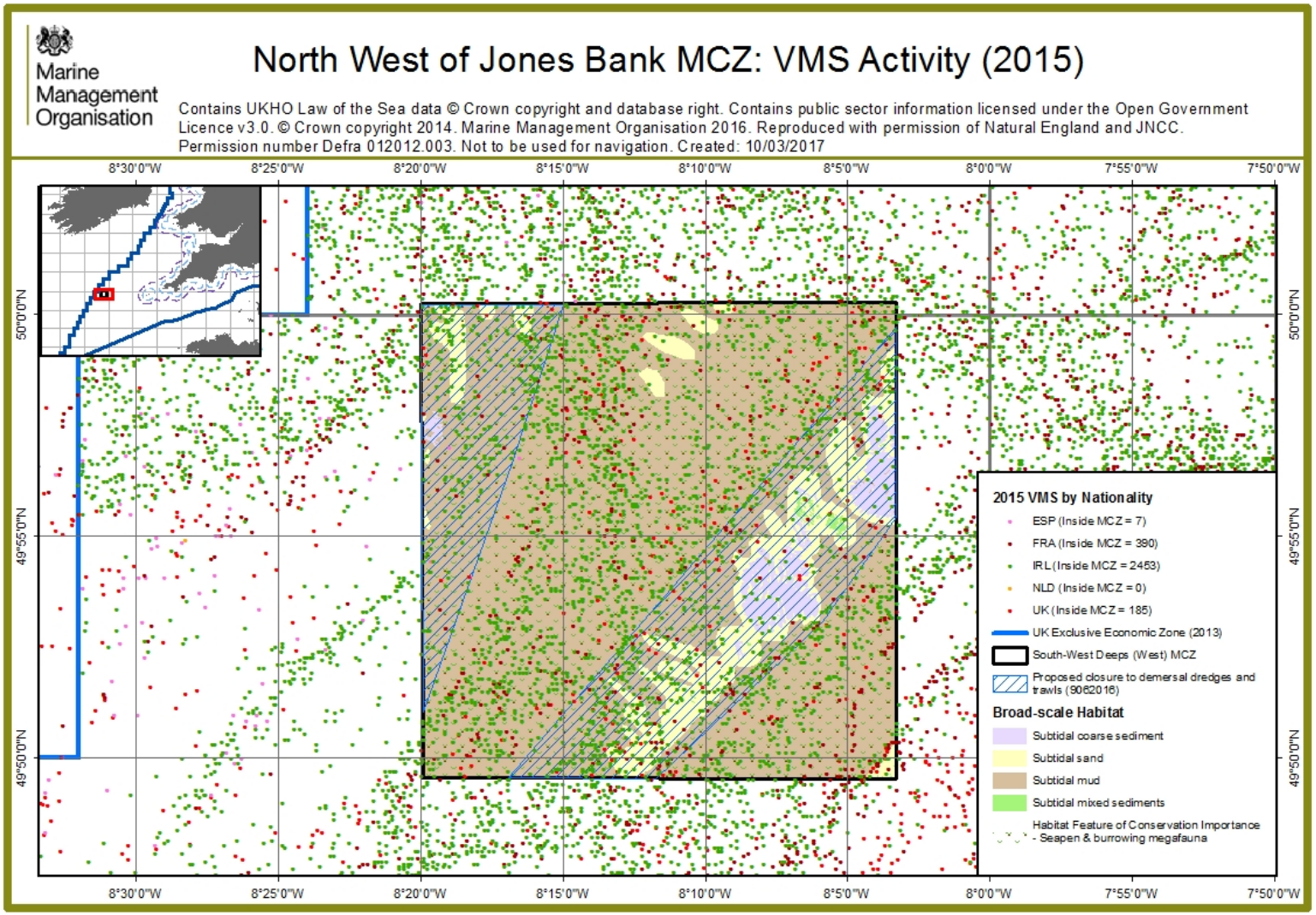


Figure 7: VMS reports indicating all fishing activity in the North-west of Jones Bank MCZ 2015 by Nationality

5.5 Fleet activity by gear group – Geographical distribution

In the charts depicted in Section 5.6, demersal gears have been classed as all gear types which are to be excluded from the closed area(s) as stipulated in the gear table on page 7. The charts show all demersal and non-demersal gear types for each year and each Member State and where possible, the specific gear type recorded has been included.

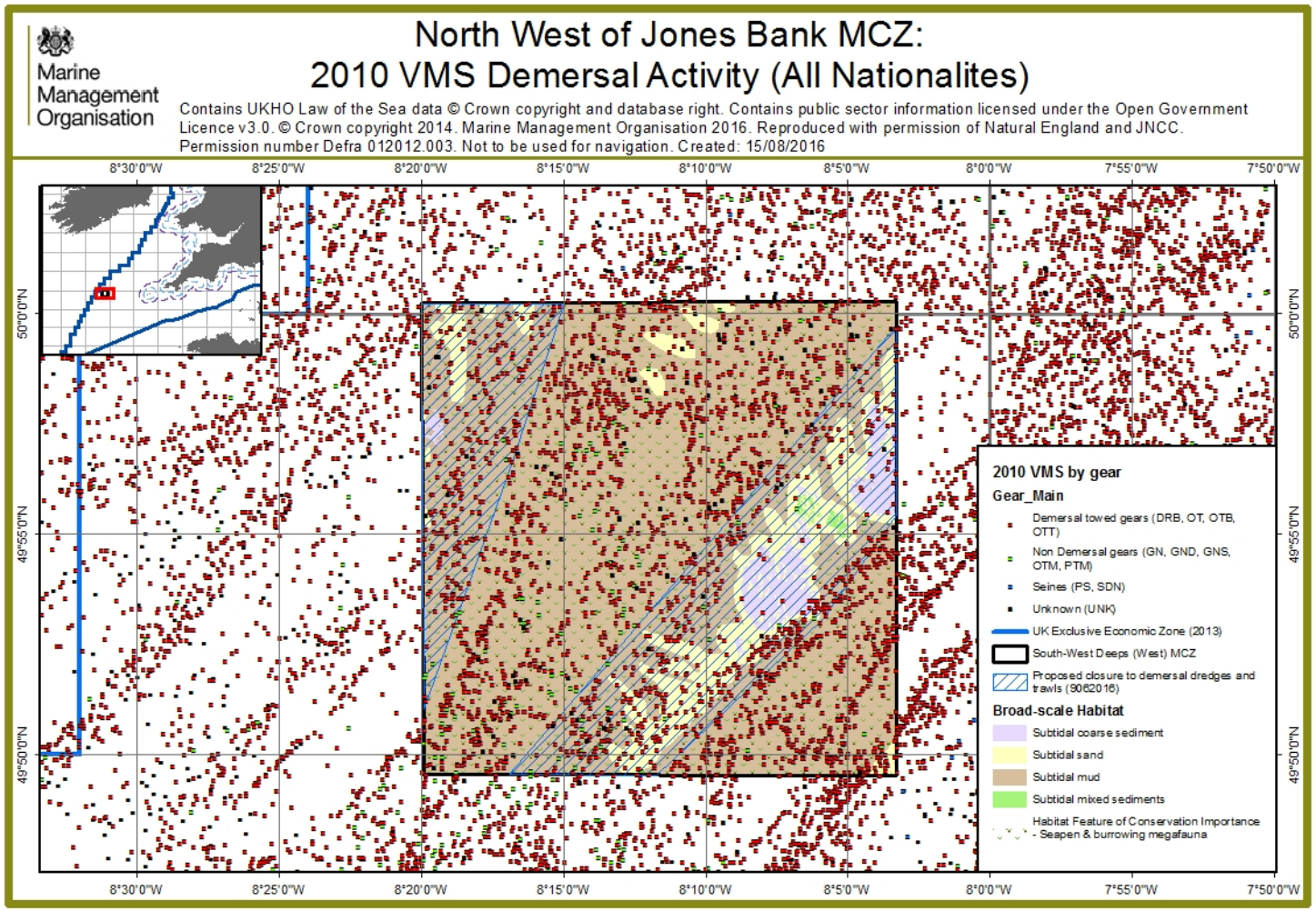


Figure 8: VMS reports indicating demersal activity in North-west of Jones Bank MCZ 2010 by Member State

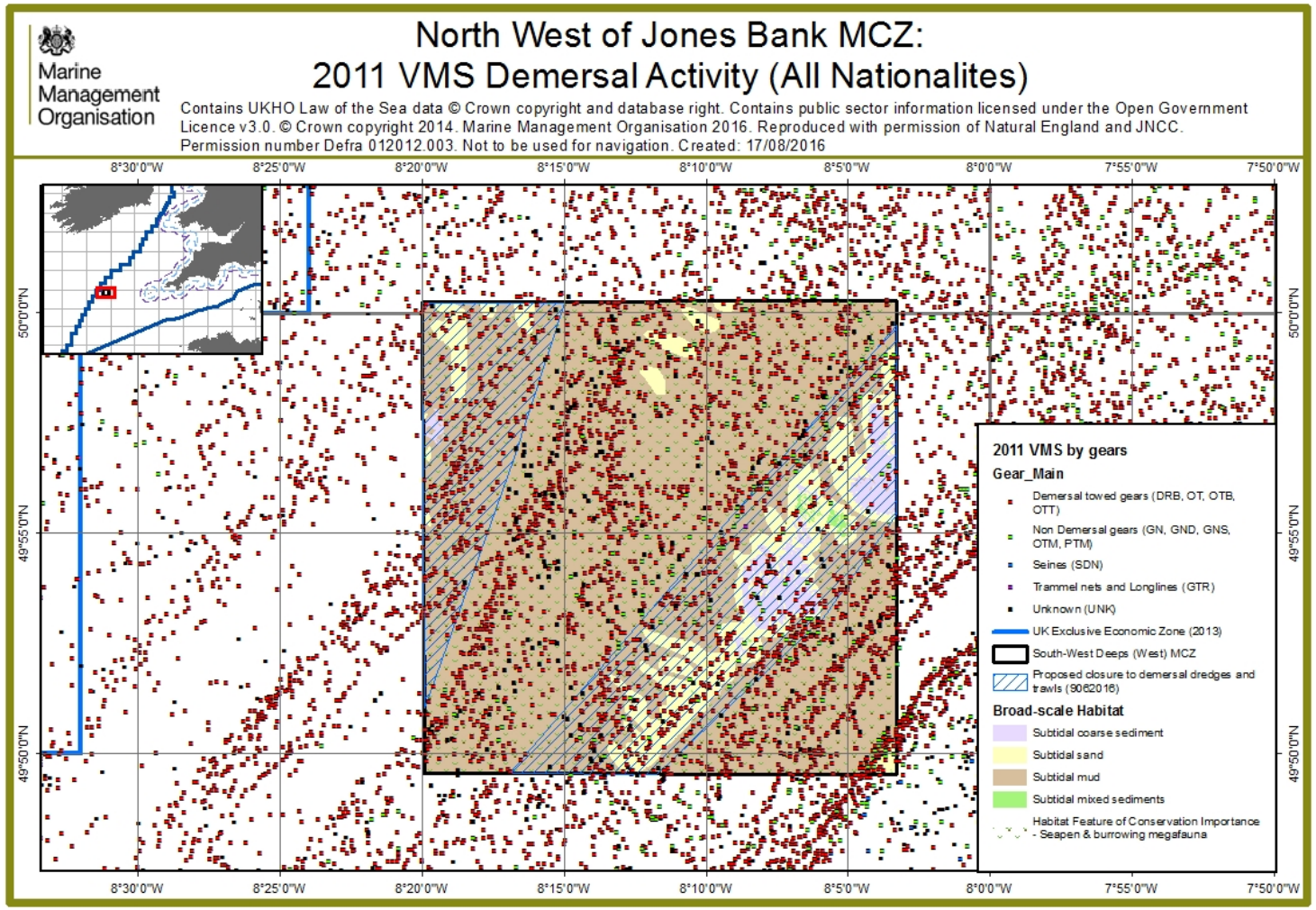


Figure 9: VMS reports indicating demersal activity in North-west of Jones Bank MCZ 2011 by Member State

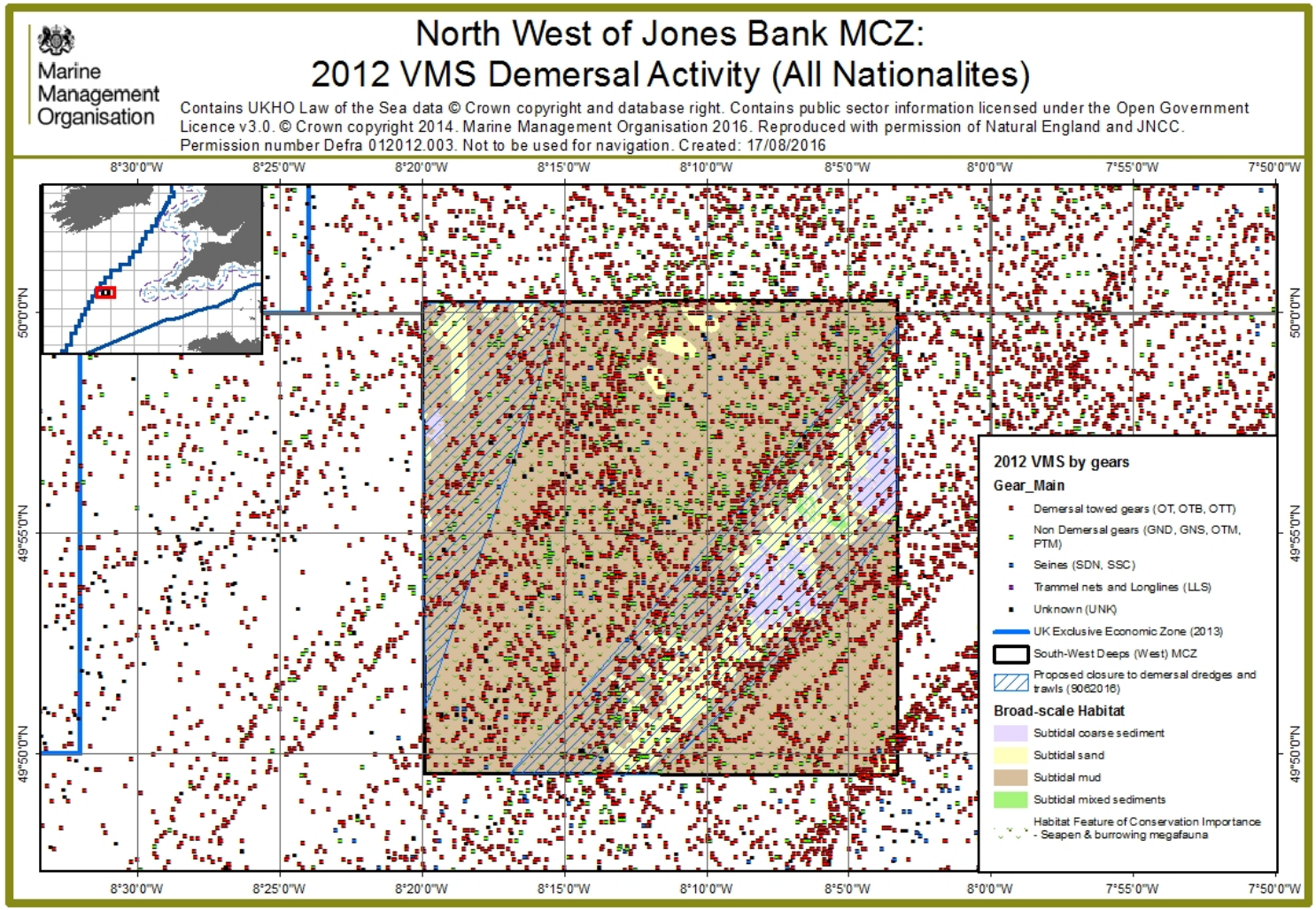


Figure 10: VMS reports indicating demersal activity in North-west of Jones Bank MCZ 2012 by Member State

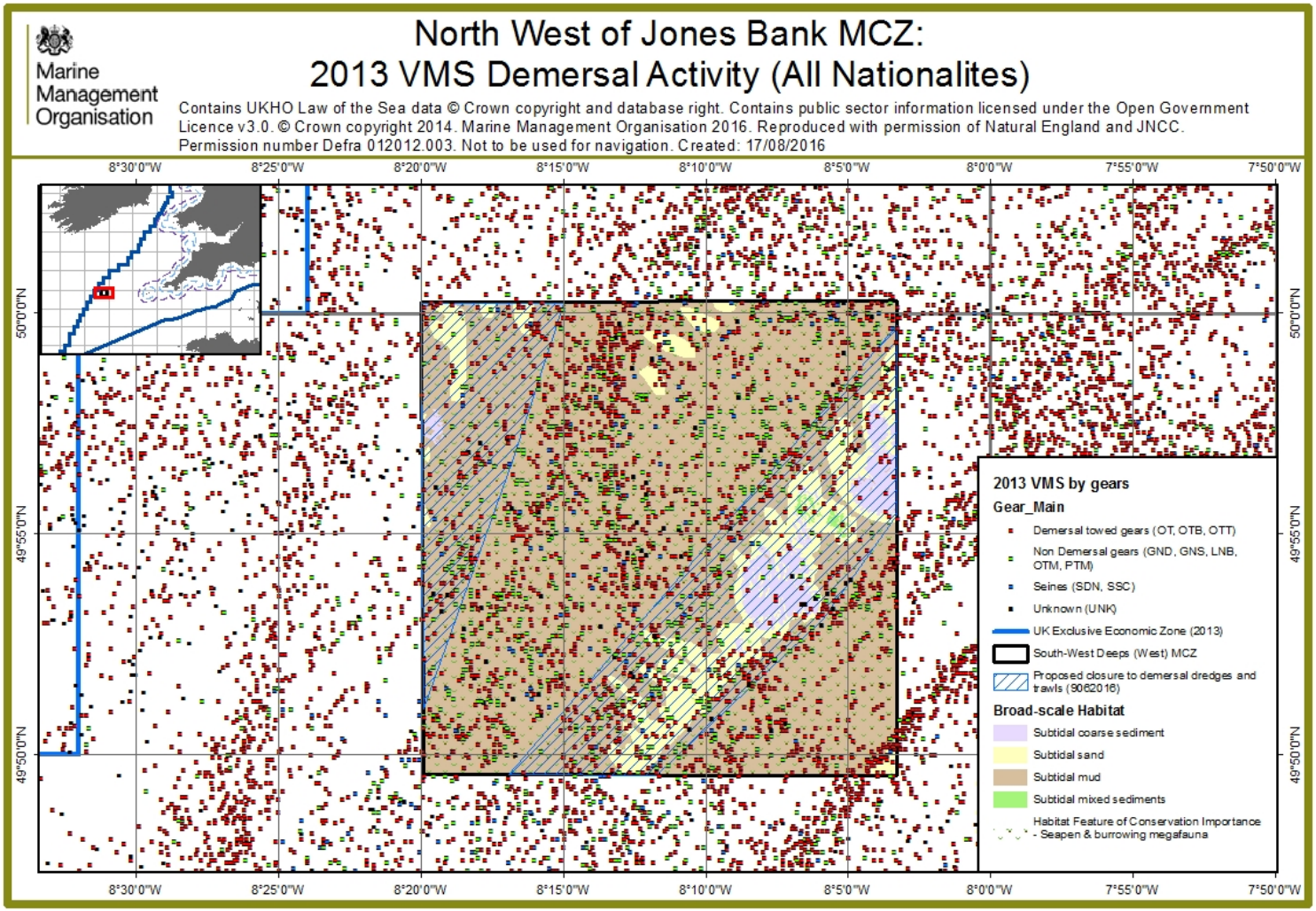


Figure 11: VMS reports indicating demersal activity in North-west of Jones Bank MCZ 2013 by Member State

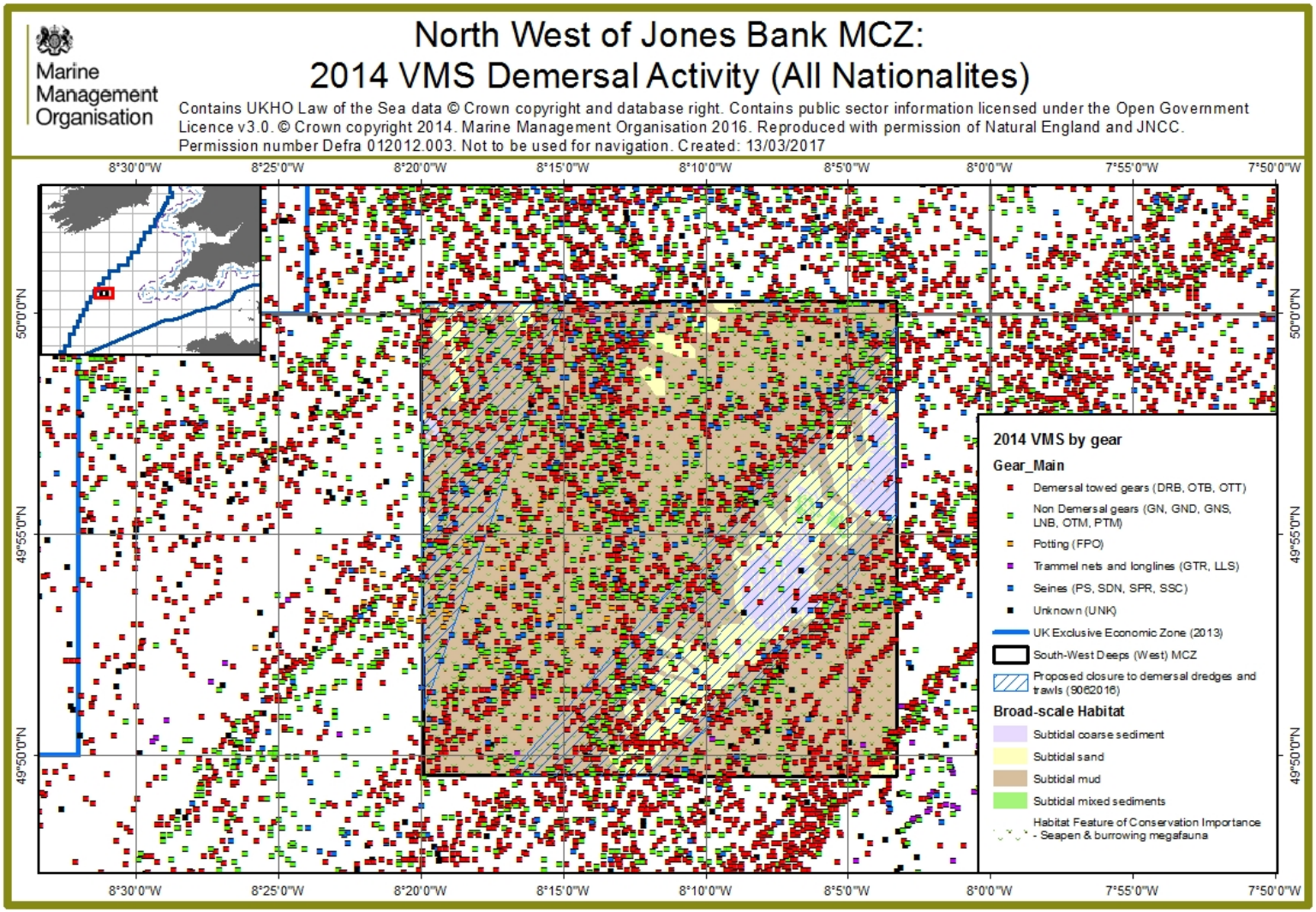


Figure 12: VMS reports indicating demersal activity in North-west of Jones Bank MCZ 2014 by Member State

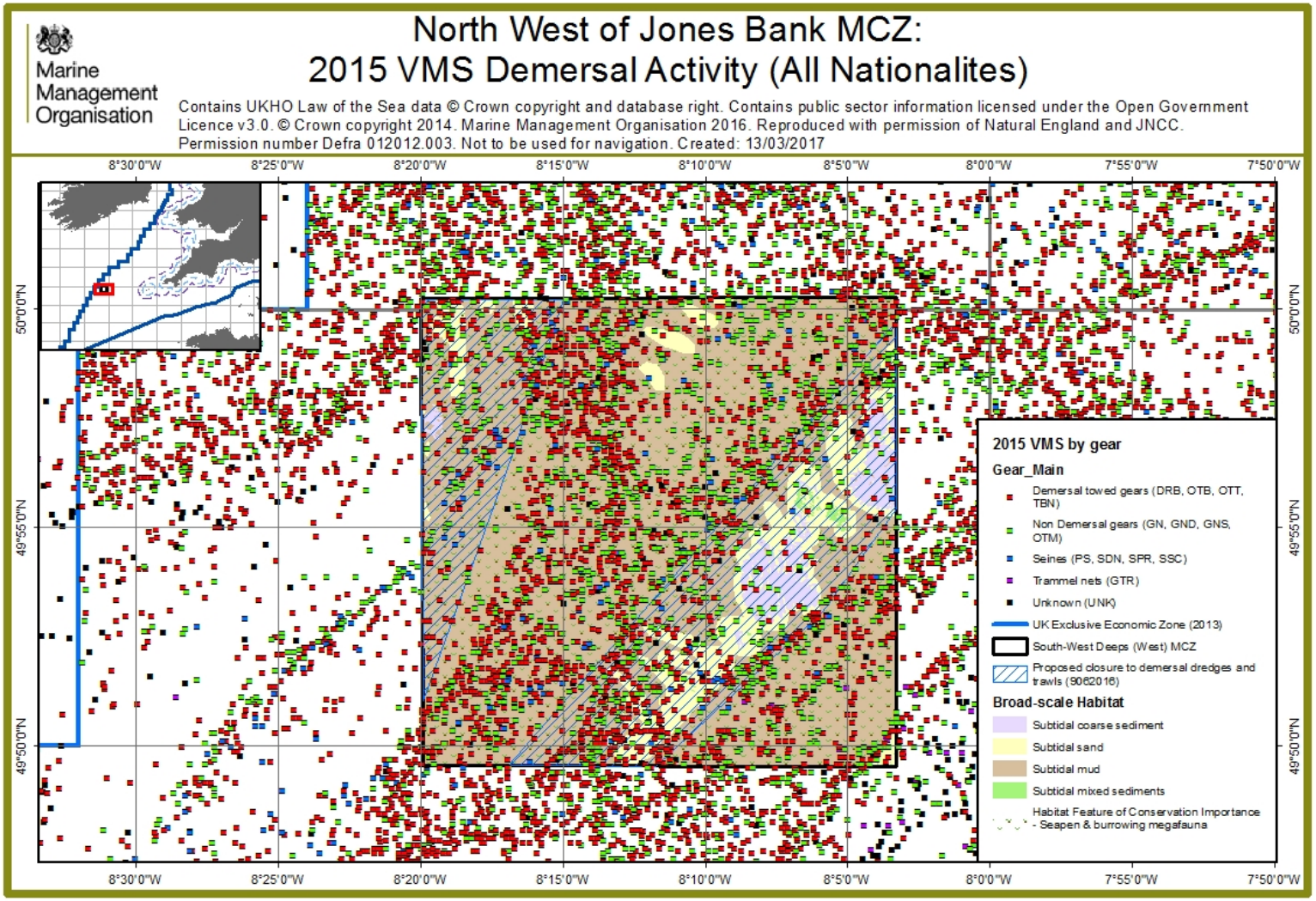


Figure 13: VMS reports indicating demersal activity in North-west of Jones Bank MCZ 2015 by Member State

5.6 By-catch

Both mid-water (pelagic) and bottom (demersal) trawling using otter trawls are the most common activities by taking place in the site based on landings. Beam and bottom otter board trawl land a number of other species as by-catch (e.g. cod, lemon sole). Where these species are landed these are included in the total gross landing value statistics. Additional species may also be caught as bycatch but are not landed and there are no current systematic statistics available for these catch components. France and Spain have focused on bottom trawling (OTB) over the past years analysed, although at a declining rate over the years (see charts 6.2 and 6.4), whereas Ireland's bottom trawling (OTB) activity has increased over the years (see charts 6.3).

The fishery focuses on both demersal and pelagic species.

- UK Demersal top species landed in terms of weight are Megrim, Anglerfish (Monkfish), Hake, Conger Eels, Cod and Skate, Mackerel being the only pelagic species.
- Other member states generally land Hake, Megrim, Anglerfish (Monkfish), Haddock, Skate and Cod (along with other species at smaller numbers). Mackerel being the pelagic species landed.

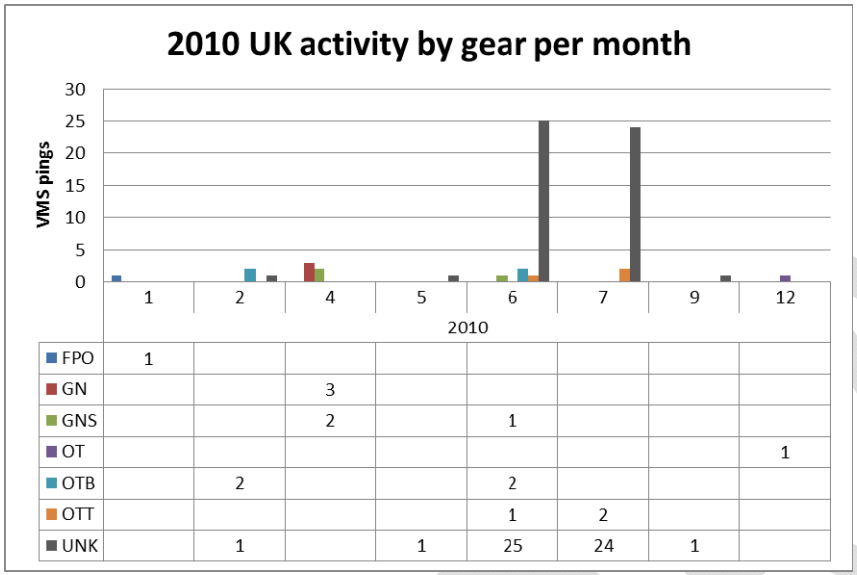
With the introduction of Common Fisheries Policy reform, which includes a landing obligation(namely a ban on the discard of certain species by certain vessels/within certain circumstances), it could become possible in the future to collate information on bycatch that could contribute to the overall catch and landings statistics in certain areas. A ban on demersal fish discards was introduced at the end of 2015, following a discard ban on pelagic fish introduced at the end of 2014, with a ban on discarding all other quota species by 2016.[8]

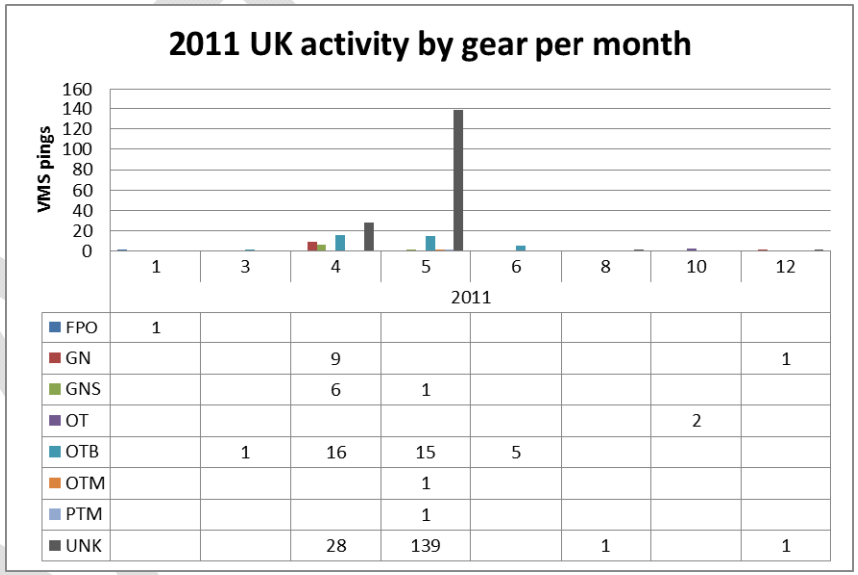
[8] http://ec.europa.eu/fisheries/reform/docs/discards_en.pdf

Seasonal trends in fisheries over years 2010 to 2015 inclusive.

During the period analysed, 2010-2015, only one Danish vessel was recorded in January 2010 and two Dutch vessels in March 2012.

Charts 6.1: UK seasonal fishing activity (all gears) in North-west of Jones Bank MCZ 2010 – 2015





2012 UK activity by gear per month

	1	2	3	4	5	6	7	9	10	11	12
GN						7			5		
GNS			2	1		8			3		
OT		45					1				
OTB		5	16		4					2	
OTM				1							
OTT				4							
PTM			2								
UNK	1		1	1		1		1		3	19

2013 UK activity by gear per month

	2	4	5	6	7	9	10	11	12
GNS		1	7	11		1	2	1	2
OT			1						
OTB	4	5	2		1			2	3
OTT			13						
UNK	1		70				3	2	4

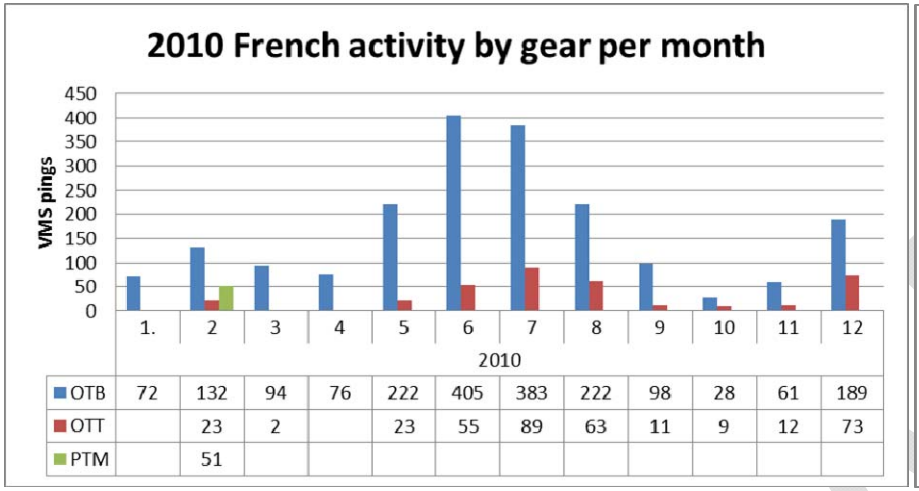
2014 UK activity by gear per month

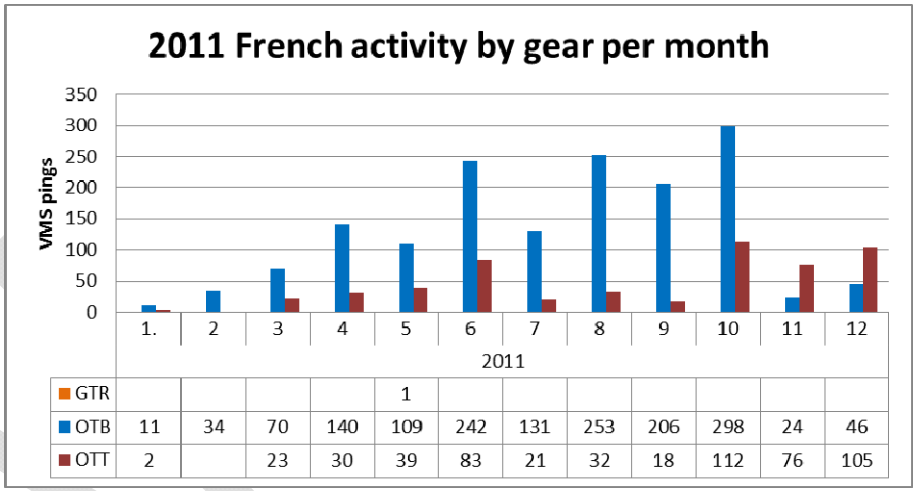
	1	3	4	5	6	7	8	11	12
GN									1
GNS							3	6	23
GTR				1	2	2			
OTB	4		4						
OTT				31					
UNK		6	1	16	10	5		3	9

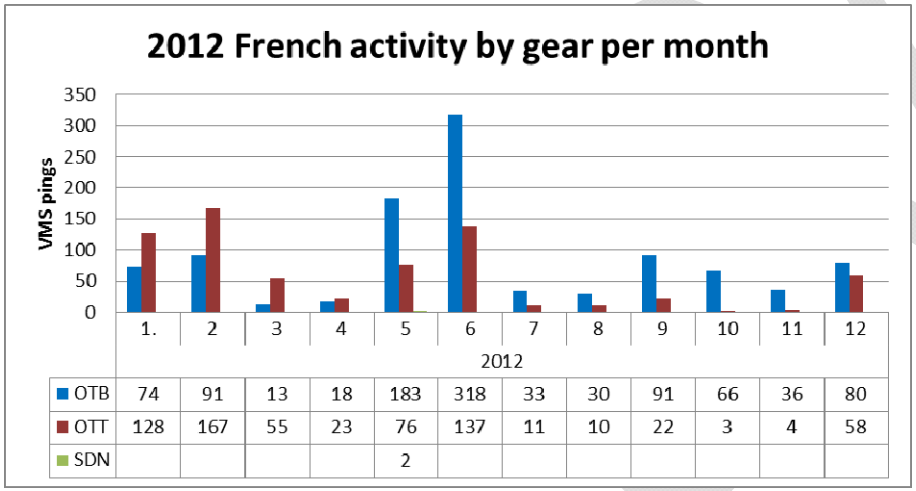
2015 UK activity by gear per month

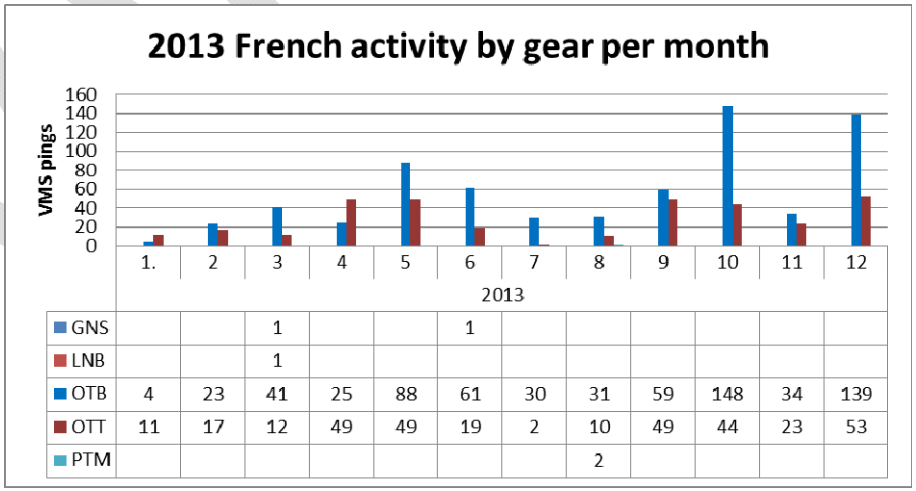
	2	4	5	6	8	11
GN		3				
GTR			7			
OTB	3		34	4		
OTT			47	4		
TBN			2			
UNK	2	2	66	1	1	9

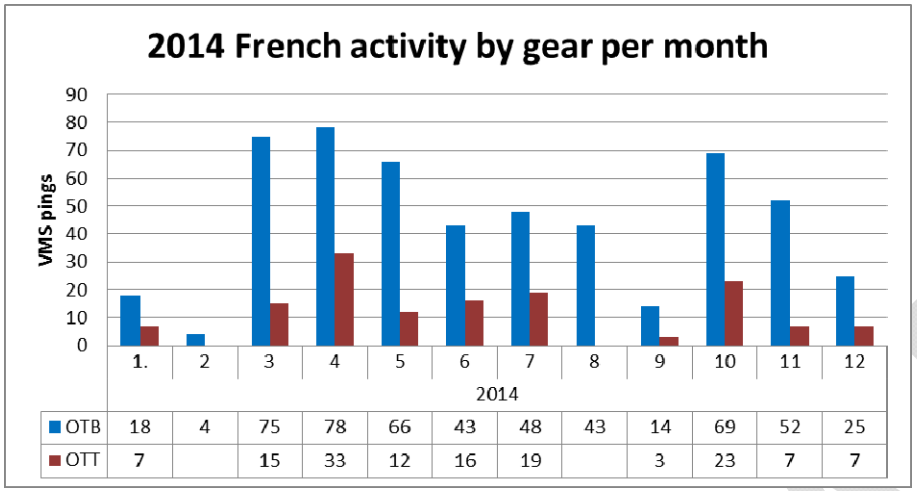
Charts 6.2: French seasonal fishing activity (all gears) in North-west of Jones Bank MCZ 2010 – 2015

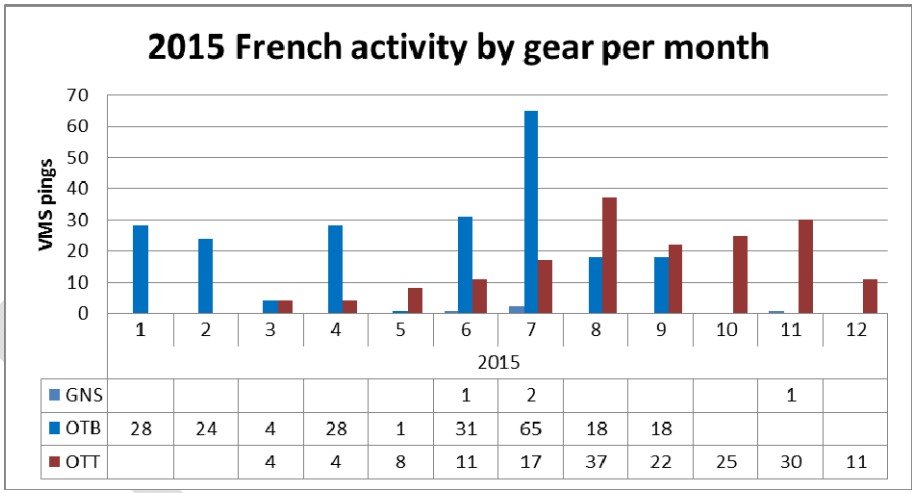




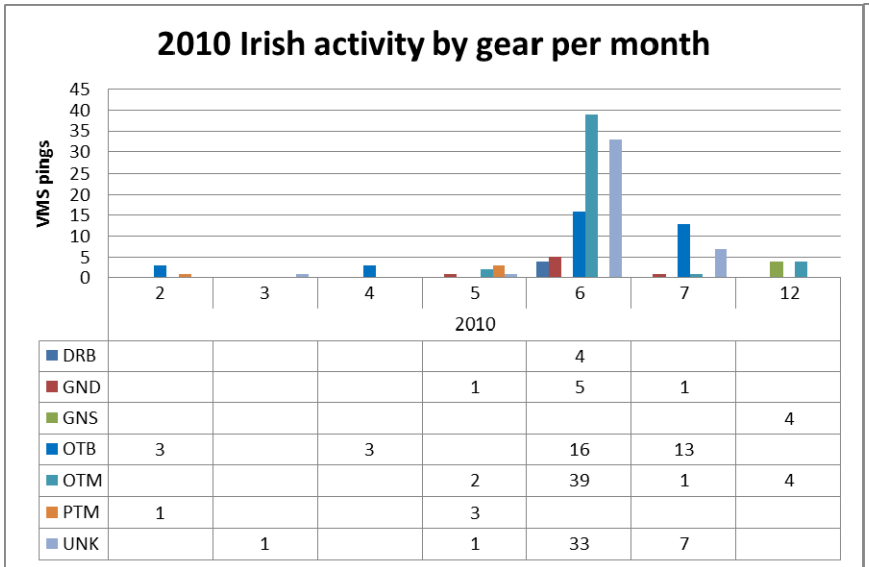




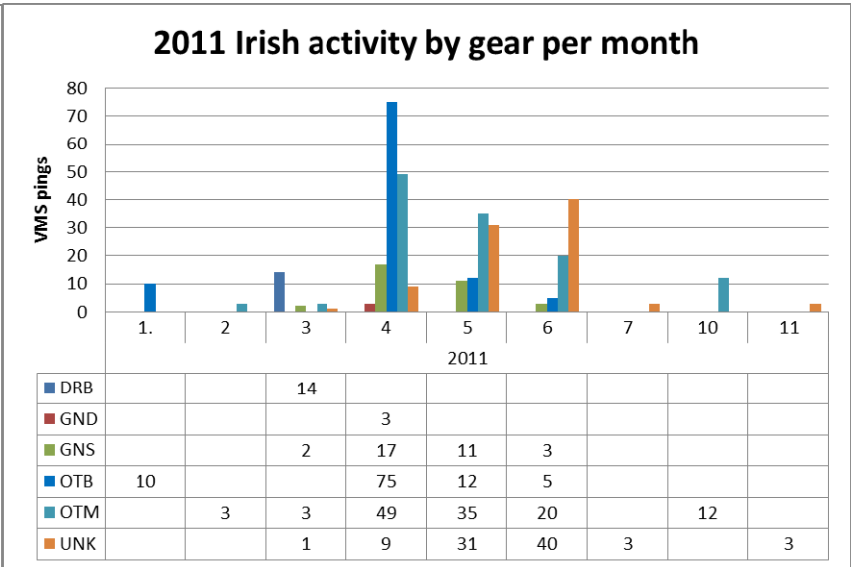

2014 French activity by gear per month
VMS pings
90
80
70
60
50
40
30
20
10
0
1. 2 3 4 5 6 7 8 9 10 11 12
2014
OTB 18 4 75 78 66 43 48 43 14 69 52 25
OTT 7 15 33 12 16 19 3 23 7 7


2015 French activity by gear per month
VMS pings
70
60
50
40
30
20
10
0
1 2 3 4 5 6 7 8 9 10 11 12
2015
GNS 1 2 1
OTB 28 24 4 28 1 31 65 18 18
OTT 4 4 8 11 17 37 22 25 30 11

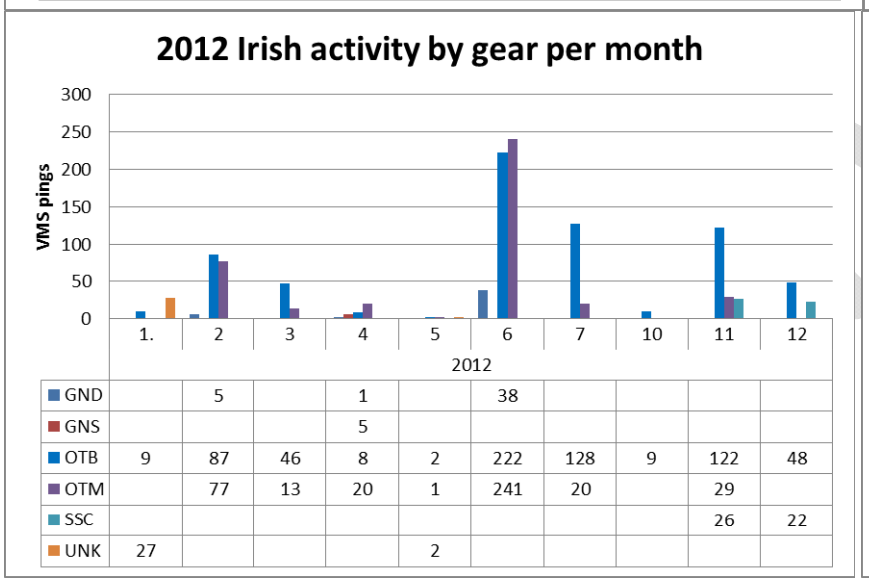
Charts 6.3: Irish seasonal fishing activity (all gears) in North-west of Jones Bank MCZ 2010 - 2015



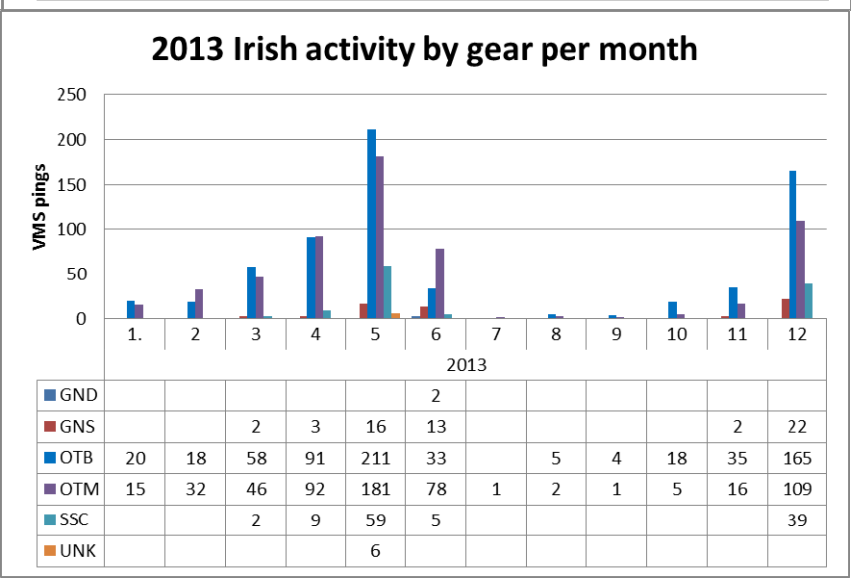
	2	3	4	5	6	7	12
DRB					4		
GND				1	5	1	
GNS							4
OTB	3		3		16	13	
OTM				2	39	1	4
PTM	1			3			
UNK		1		1	33	7	



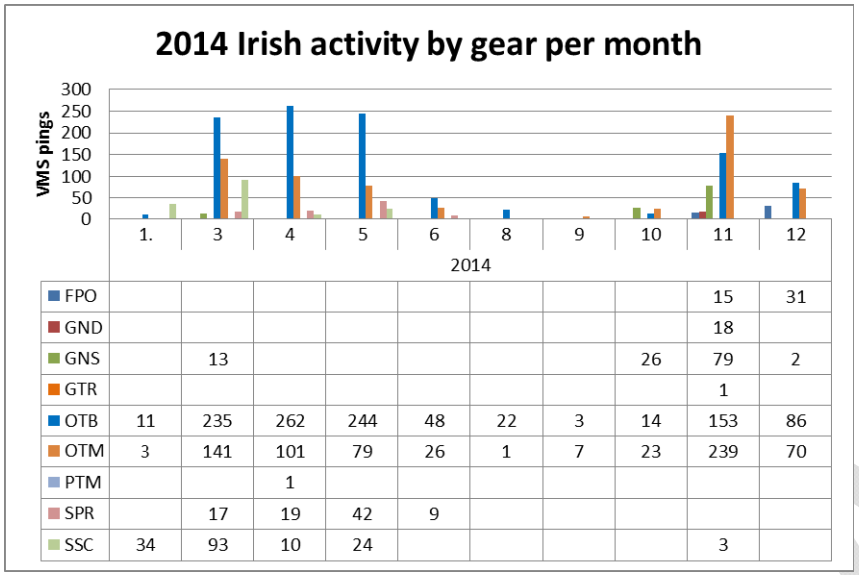
	1.	2	3	4	5	6	7	10	11
DRB			14						
GND				3					
GNS			2	17	11	3			
OTB	10			75	12	5			
OTM		3	3	49	35	20		12	
UNK			1	9	31	40	3		3



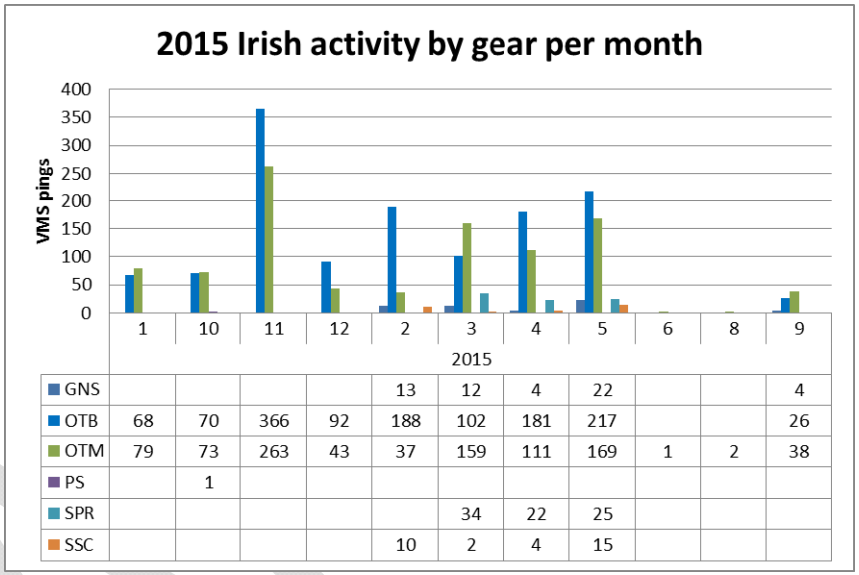
	1.	2	3	4	5	6	7	10	11	12
GND		5		1		38				
GNS				5						
OTB	9	87	46	8	2	222	128	9	122	48
OTM		77	13	20	1	241	20		29	
SSC									26	22
UNK	27				2					



	1.	2	3	4	5	6	7	8	9	10	11	12
GND						2						
GNS			2	3	16	13					2	22
OTB	20	18	58	91	211	33		5	4	18	35	165
OTM	15	32	46	92	181	78	1	2	1	5	16	109
SSC			2	9	59	5						39
UNK					6							

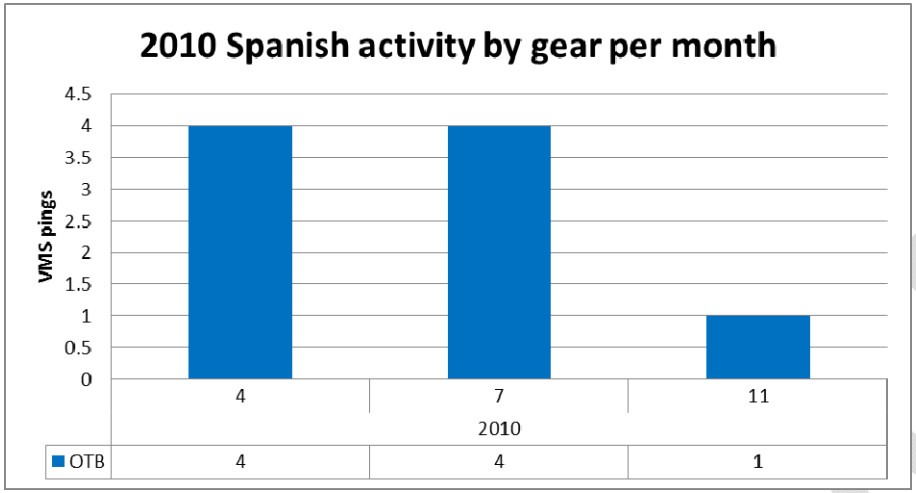


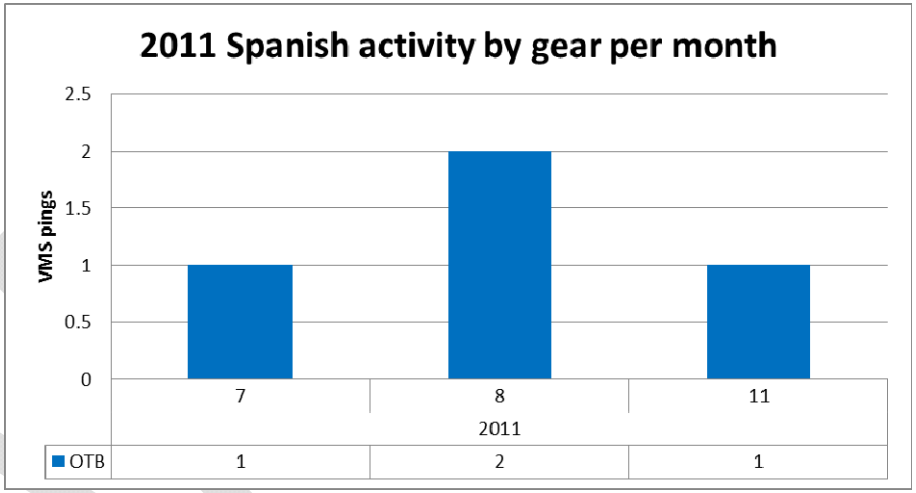
	1.	3	4	5	6	8	9	10	11	12
FPO									15	31
GND									18	
GNS		13						26	79	2
GTR									1	
OTB	11	235	262	244	48	22	3	14	153	86
OTM	3	141	101	79	26	1	7	23	239	70
PTM			1							
SPR		17	19	42	9					
SSC	34	93	10	24					3	

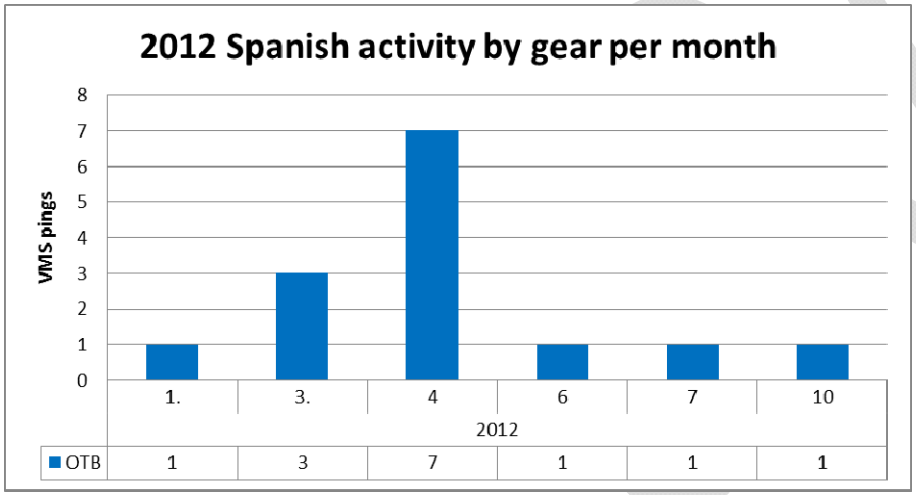


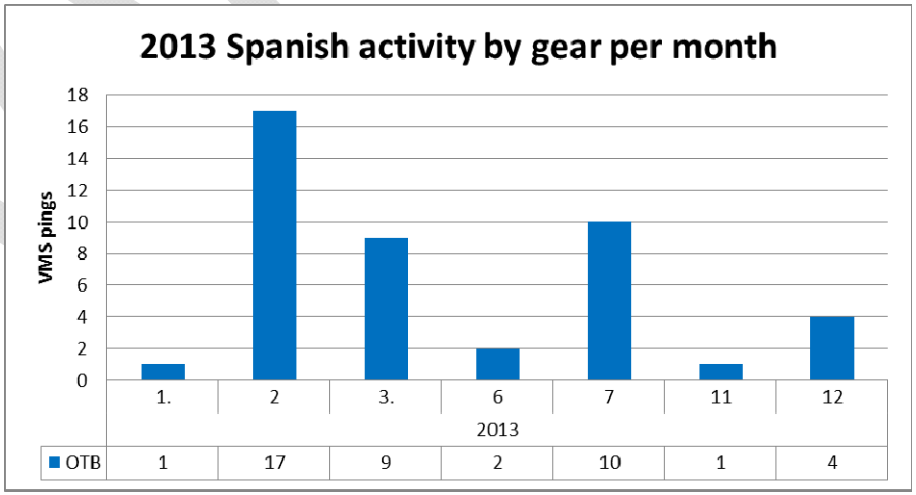
	1	10	11	12	2	3	4	5	6	8	9
GNS					13	12	4	22			4
OTB	68	70	366	92	188	102	181	217			26
OTM	79	73	263	43	37	159	111	169	1	2	38
PS		1									
SPR						34	22	25			
SSC					10	2	4	15			

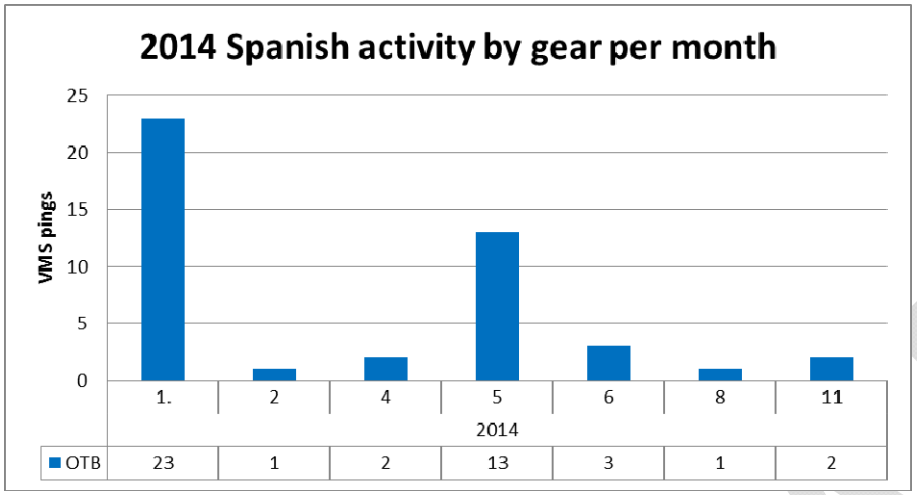
Charts 6.4: Spanish seasonal fishing activity (all gears) in North-west of Jones Bank MCZ 2010 – 2015

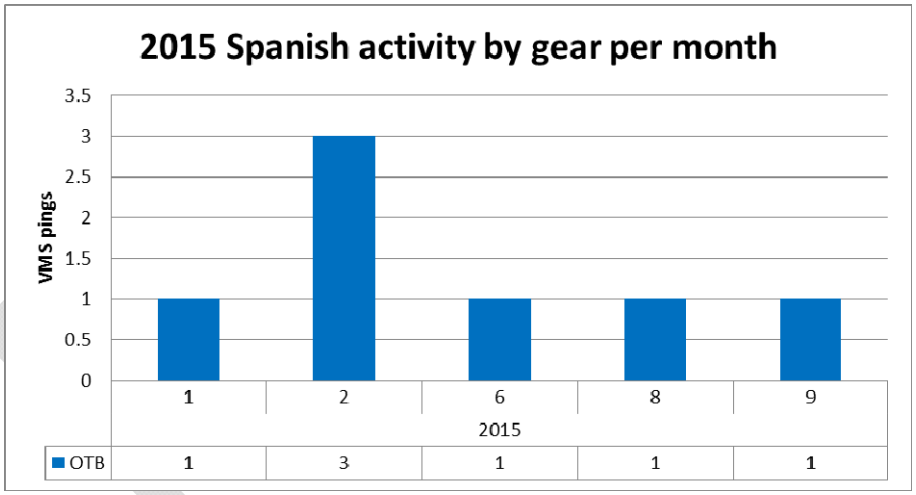









2014 Spanish activity by gear per month
VMS pings
25
20
15
10
5
0
1.
2
4
5
6
8
11
2014
OTB
23
1
2
13
3
1
2


2015 Spanish activity by gear per month
VMS pings
3.5
3
2.5
2
1.5
1
0.5
0
1
2
6
8
9
2015
OTB
1
3
1
1
1

7 Proposed fisheries management measures to recover the habitat features in favourable condition. Are they proportionate and enforceable? Other conservation measures that apply to the areas

7.1 Options for fisheries management

A range of MPA fisheries management options are available to managers, differing in the degree of restriction they would play on fishing operations, and the risk they would pose to achieving the conservation objectives. These have been grouped into three broad categories of possible management: No additional management, additional management to reduce/limit pressures and additional management to remove pressures.

Although it is not generally possible to quantify the degree of risk to achieving the conservation objectives posed by each option, it is possible to identify where risks may exist, and where this could be reduced through the introduction of management measures.

Risks have been evaluated using existing data and information on protected features and our understanding of the relationships between the feature and relevant activities.

Broad management options categories

1) **No additional management** – where fisheries managers choose to apply no additional site specific fisheries management within a site. For some gear/feature combinations, where the feature is not considered sensitive to the pressures associated with demersal fishing activity, this management option may pose little or no risk to achievement of the conservation objectives. For features which are considered sensitive to the pressures associated with certain demersal fishing activities, the risk posed to achieving the conservation objectives will increase as the sensitivity of the feature increases. As outlined in the features fisheries impacts section, this will vary between features and gear types.

2) **Additional management to reduce/limit pressures** – where fisheries managers may wish to consider a range of measures that could be used to reduce the risk posed by fishing activity to achieving the conservation objectives. These could include:

    - Area restrictions: This would involve closing some or all of a specific feature's area. Restrictions could be permanent in some cases or temporary/adaptive in others. The risk of the conservation objectives not being met will increase as the size of areas restricting pressure decrease, or if the pressure reduction across the site relative to natural change is low.
    - Gear restrictions: This could involve restricting the use of gears to which a feature is more sensitive.

    In situations where there is high uncertainty regarding the impacts of fishing on features, management measures to reduce/limit pressures could be "adaptive", i.e. changes in the feature's condition following the introduction of management measures will be monitored and future management may be adapted accordingly.

3) **Additional management to remove pressures** – where managers choose to exclude fishing activities known to adversely affect a feature. Such exclusions may apply to the parts of the site

where the feature is present, or to an entire site. This would reduce the risk of not achieving the conservation objectives to the lowest possible level.

7.2 Proposed management option

Management measures proposed for North-west of Jones Bank MCZ

The proposed management option is to reduce/limit pressure by restricting fishing activity with demersal trawls and dredges across a proportion of the site to include each protected feature (Figure 10).

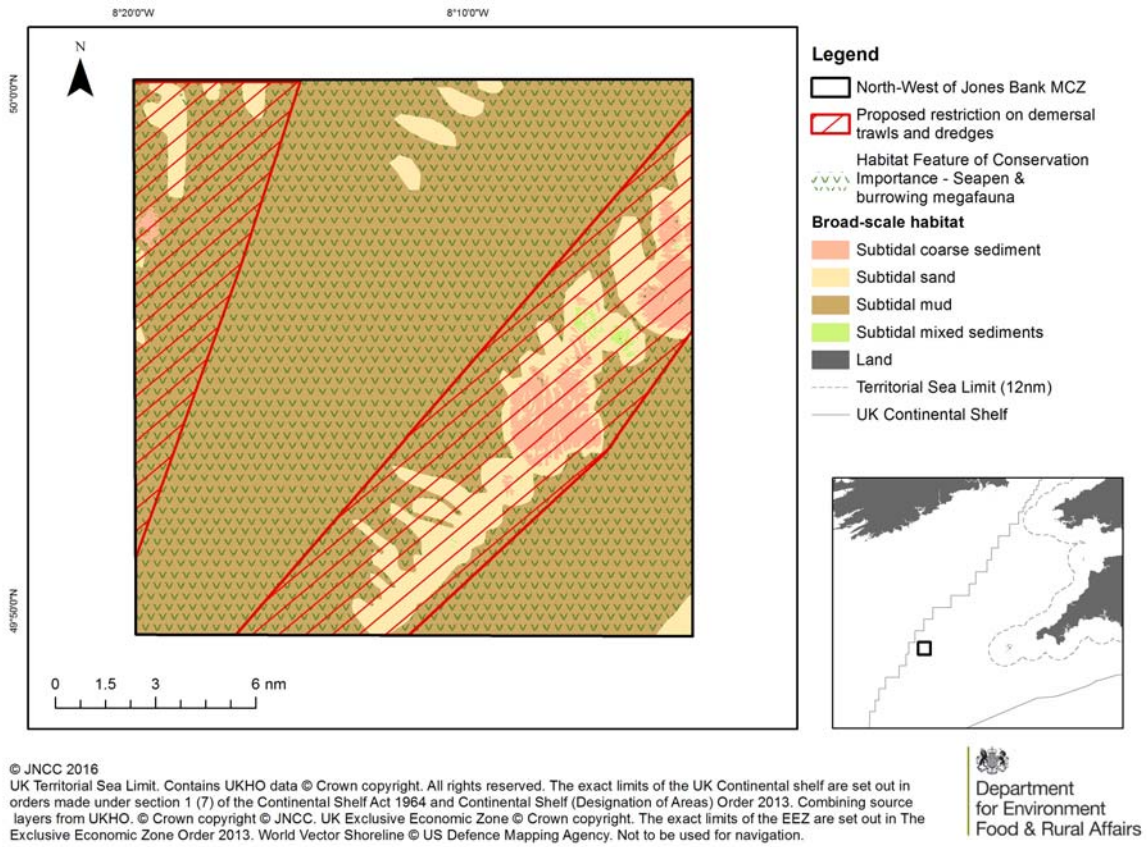


Figure 10: North-west of Jones Bank MCZ site map including protected features for which management is being proposed.

7.3 Other fisheries measures which apply to the sites

North West of Jones Bank MCZ is in within a Biological Sensitive Area which is a technical recovery measure for Hake protection. This is a seasonal restriction for fishing gear mesh sizes[9].

[9] Article 5 and Article 6: http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1475761115067&uri=CELEX:32002R0494

8 Control measures envisaged by the Member State, possible ecological and control buffer zones to ensure site protection and/or effective control and monitoring measures

8.1 Measures envisaged by Member states for Control, Enforcement and Compliance

The proposed control, enforcement and compliance regime for North-west of Jones Bank MCZ consists of a reporting zone around the prohibited zone, increased reporting within zones, remote monitoring of vessel position and at-sea surveillance measures. Such a regime would be in line with future control and enforcement challenges of the Common Fisheries Policy.

8.1.1 Surface surveillance

Surface surveillance of North-west of Jones Bank MCZ will be continued under the existing surveillance plans for the English Channel and Celtic Sea. These plans will coordinate the at-sea surveillance capacity of the UK (which may include Navy fisheries protection vessels, or other enforcement vessels and aerial response). Changes to surveillance will be in line with the MMO's risk based compliance and enforcement strategy.

8.1.2 Remote Vessel Monitoring

Increased Positioning Reporting

Vessels entering the North-west of Jones Bank MCZ prohibited zone will be subject to increased vessel position reporting (every 10 minutes).

EU fishing vessels over 12m in length are required to report, through satellite, every two hours. Reports can be viewed in real time but this reporting frequency would allow vessels to cross the prohibited area of the MCZ without being identified between the two hourly reporting times. Increased reporting within the prohibited zone will reduce this risk.

Vessels will be allowed to transit the prohibited zone. Increased reporting will also allow the MMO FMC to identify fishing or transiting patterns and identify non-compliance.

Increased reporting zone

Vessels fishing within 1nm of the prohibited zone will be subject to 10 minute reporting.

Fishing patterns are likely to result in vessels 'clipping' the prohibited zone, or cutting across a corner rather than transiting across the entire site. A reporting zone which surrounds the prohibited area adds additional feature protection and ensures non-compliant vessels can be identified.

Vessels will still be allowed to fish in the increased reporting zone.

8.2 Vessel position monitoring system requirements

Increasing the frequency of vessel position reporting is integral to the preferred control, enforcement and compliance plan.

Increased reporting can be set up using geofences[10] recognised by the vessel's VMS devices, which would trigger higher frequency reporting if a vessel enters the reporting zone.

In order to improve monitoring and compliance, fishing vessels within North West of Jones Bank MCZ and the reporting zone should be required to carry a system capable of:

- Recording high frequency position reports (up to one report per ten minute interval) when within the prohibited area or reporting zone for the site.
- Transmitting position reports via GPRS/GSM[11](when available)
- When GPRS/GSM signal is not available: storing positions and forwarding stored reports when the signal is available
- Recreate prohibited area and reporting zone coordinates and associated reporting frequency rules in the form of geofences
- Transmitting an email and/or text message alert via GPRS/GSM (when signal available) to the flag state and MMO FMC when a vessel enters a reporting or prohibited zone for the site.
- High frequency reporting would end when a vessel leaves the reporting area for the site.

  Increased reporting via GPRS/GSM is recommended to reduce the reporting cost (which will be borne by the fishing vessels) as charges are made per report. Satellite reporting, currently used, is costly at high frequency.
  Mobile network signal is not currently widely available for offshore sites; enforcement action using this system will therefore be retrospective.

[10] A geofence is a spatial virtual barrier. Programs that incorporate geofencing allow an administrator to set up triggers such as increased reporting so when a device enters (or exits) the boundaries defined by the administrator it performs the trigger and if required a text message or email alert.

[11] General Packet Radio System (GPRS) and Global System for Mobile communications (GSM): These are types of mobile phone technology which meet European telecommunications standards.

Mobile network signal is not currently widely available for offshore sites; enforcement action using this system will therefore be retrospective.

In the UK, vessels which are fitted with a VMS+ device can meet all the above system requirements. The VMS+ device is capable of transmitting increased reporting either through satellite or GPRS/GSM. There is also development work on another device known as I-VMS (inshore vessel monitoring system), which although designed primarily for the English inshore fleet (those vessels under 12m in length), can also meet the above requirements.

Estimation of the increased reporting costings for offshore Marine Protected Areas in English waters.

This information relates to the UK estimates of the increased reporting proposals.

The cost of a VMS report through GPRS[12] is approximately **$0.06**[13] (As of April 2015). Please find below a table of the total cost of increased after a period of X minutes.

GPRS Costs	Total duration cost after X minutes					
Reporting rate (X minutes)	**60**	**120**	**180**	**240**	**300**	**360**
1 minute	$3.60	$7.20	$10.80	$14.40	$18.00	$21.60
10 minutes	**$0.36**	**$0.72**	**$1.08**	**$1.44**	**$1.80**	**$2.16**
30 minutes	$0.12	$0.24	$0.36	$0.48	$0.60	$0.72
60 minutes	$0.06	$0.12	$0.18	$0.24	$0.30	$0.36

To note: The UK proposes a reporting rate of ten minutes.

Increased reporting caveats:

- These costs are based on a 'pay as you go' (PAYG) service and correct as April 2015.
- Costs will vary depending individual member states VMS service providers.
- GRPS Network roaming may affect overall costs

[12] General Packet Radio System (GPRS) and Global System for Mobile communications (GSM): These are types of mobile phone technology which meet European telecommunications standards.

[13] GPRS values are presented in US dollars

It should be noted that fishing vessels affected by the proposed closures may potentially modify or change their activities, along with fishing patterns as a result of the implementation of an increased reporting zone.

8.3 Key provisions to include in EC regulation to manage the North-west of Jones Bank MCZ

Key provisions which should be included in an EC regulation to facilitate control enforcement and compliance include:

- A prohibition on any demersal trawls and dredges being deployed in the management area of the MCZ.
- Establishment of a 1 nm (1.852 km) reporting zone around the management area of the North-west of Jones Bank MCZ. All fishing vessels within this area shall be required to record or report vessel positions at 10 minute intervals. This area shall be defined by the reporting zone and coordinates displayed in Annex F.
- A requirement for all fishing vessels entering the reporting zone to have a system for recording and reporting vessel position which meets prescribed specifications (see Section 8.2 for minimal requirements) and is installed and operative. Any fishing vessel entering the management area of the North-west of Jones Bank MCZ or the reporting zone without such a system will be committing an offence.
- A requirement for all fishing vessels transiting the restricted area carrying prohibited gears to have all gears on board lashed and stowed.
- A requirement for all fishing vessels transiting the restricted area carrying prohibited gears to ensure that the speed during transit is not less than 6 knots except in the case of force majeure or adverse conditions. In such cases, the master shall immediately inform the fisheries monitoring centre of the flag member state which shall then inform the UK FMC.

The proposal on which gears to prohibit is formulated in terms of Gear Codes in Annex XI in EU Regulation 404/2011. In general prohibited gear types are demersal towed gears and dredges. Formulation of the regulation requires clear and precise definitions which distinguish allowed gear types from prohibited gear types. This includes, for trawls which can be operated both with and without bottom contact, distinguishing between these different gear riggings (if such a distinction is not feasible, these gears should be prohibited).

Management measures for the site will be periodically reviewed in line with advancements in technology, specifically the development of improved remote vessel monitoring and gear in/out technologies.

9 Measures to monitor and assess the maintenance and/or recovery of the features within the sites

Cefas/JNCC are currently leading a research and development programme to develop an integrated system of monitoring for marine biodiversity. The ambition is to cost-effectively encompass Defra's policy and statutory obligations, such as the:

- Marine and Coastal Access Act
- OSPAR Convention;
- EC Habitats Directive; and
- EC Marine Strategy Framework Directive (MSFD)

For benthic marine habitats, the task of developing monitoring options is extremely complex. The UK has 48 offshore Marine Protected Areas designated for benthic habitats covering an area of over 126,000 km^2. This presents a challenge due to the diversity of benthic habitats occurring in UK waters and the number, size and geographic spread of offshore MPAs, the paucity of data on the range, extent and condition of many habitat types (especially in the offshore environment) and the underdeveloped nature of suitable state and pressure indicators for monitoring.

The draft offshore habitats monitoring options evaluate the risk of damage to habitats in UK offshore MPAs, assess the type of monitoring required for each MPA and estimate the indicators, equipment and number of samples required to assess change in the condition of the habitats within MPAs. Due to the number of UK offshore MPAs, the area of seabed encompassed within the offshore MPAs, the diversity of offshore habitats and the cost of offshore monitoring surveys, it may not be possible to monitor every MPA within a single reporting cycle. In certain cases, monitoring studies to assess the effectiveness of management measures in one MPA may be used as a proxy for assessing the effectiveness of management measures in MPAs with similar features and management measures in the same regional sea.

10 Coordination with neighbouring Member States as appropriate

Draft proposals for fisheries management measures were developed using feedback from the stakeholder workshops as well as advice from the UK's statutory nature conservation bodies, the JNCC and Natural England, and offshore fisheries regulator, the MMO. Fisheries management measures were developed in close coordination with other Member States with a direct management interest in the sites.

Draft management proposals were subject to a six week period of consultation with Member States with a direct management interest in the sites and the Northwest Waters Advisory Council.

Finalised management proposals were then presented to other Member States with a direct management interest in the sites for agreement that sufficient information had been provided in order to commence the formal agreement of the proposals as Joint Recommendations. [Following this, ad hoc meetings of the Northwest Waters Article 11 sub-group were held to start formal agreement proceedings for the Joint Recommendations. Any outstanding issues were then addressed before agreement was reached on the Joint Recommendations by members of the Northwest Waters High-Level Group and they were submitted to the European Commission for adoption.]

11 Evaluation of possible displacement of fishing effort and impact on new areas

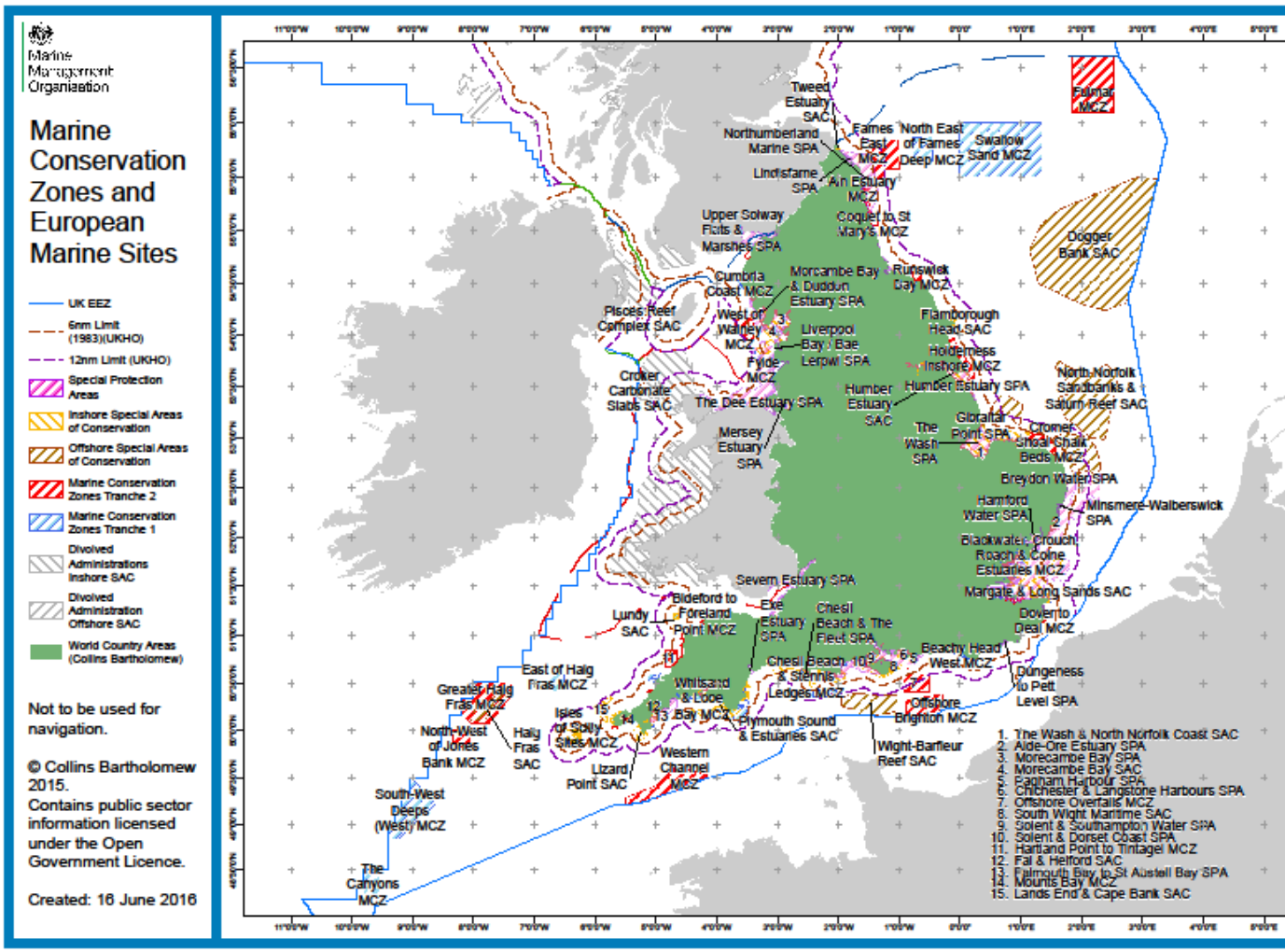
As the MCZ will be closed to demersal trawls and dredges, some displacement is likely to occur both within and outside the MCZ.

Displacement is difficult to quantify, and it is impossible to predict where exactly activities will be displaced to. As a result of stakeholder input in the management process, many of the areas currently fished within the site will remain open to fishing thus reducing the potential for displacement.

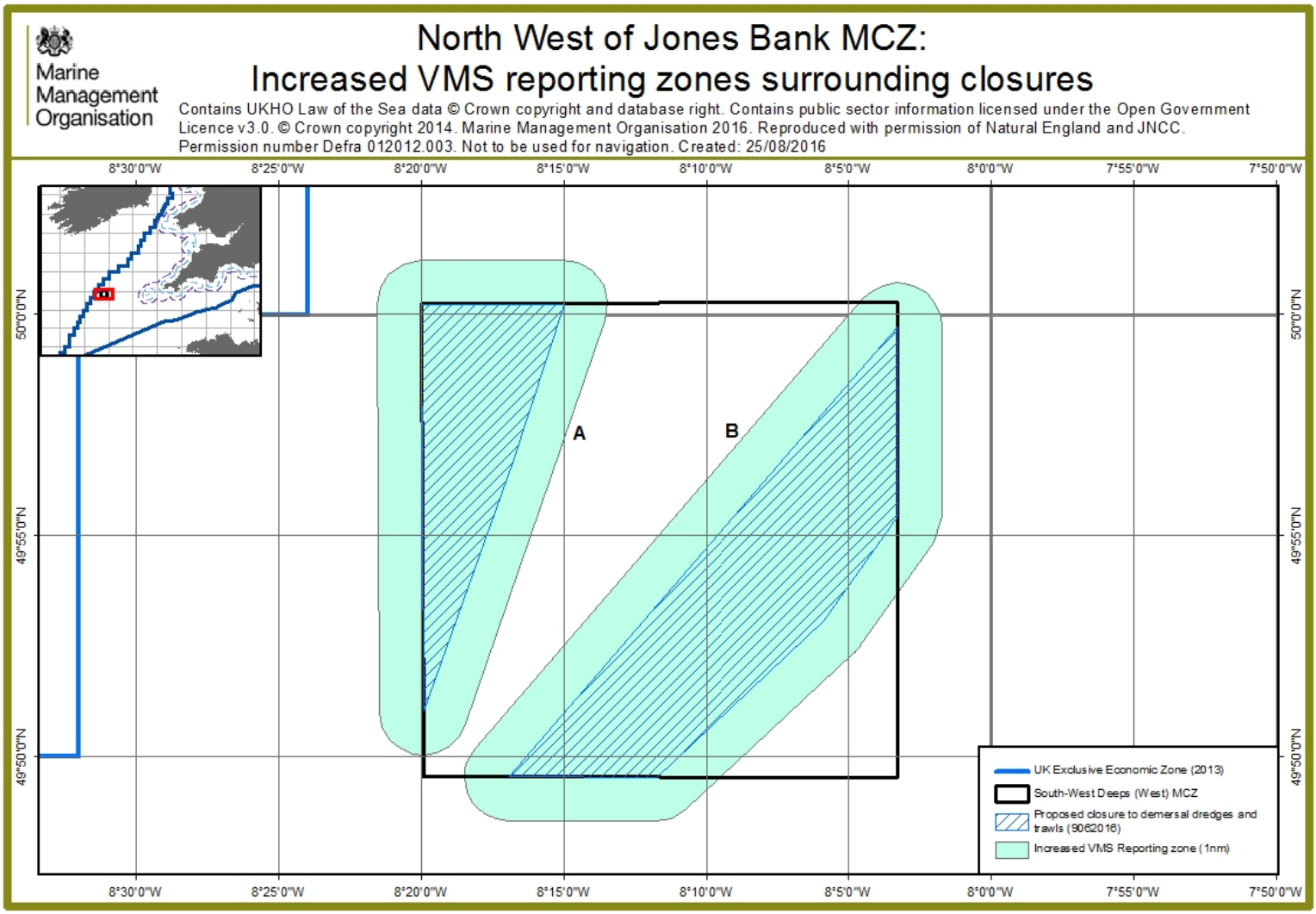
Displacement is dependent on the intensity and distribution of fishing activities within the site before the closure and on external factors (such as fish distribution, TAC/quota, fuel prices, other spatial claims).

As part of the MMOs risk-based enforcement, regular monitoring of fishing activity is collated on a Monitoring Control and Surveillance System (MCSS). MCSS does not analyse fishing trends and activity, but stores information, which can be accessed at any time. The MMOs monitoring of activity in each site could assist in any future considerations relating to displacement and could be used to indicate any changes in fishing trends and activity.

Annex B – Map of English MPA network



Annex C – Map and coordinates for the North-west of Jones Bank MCZ increased reporting zone



Annex D – Coordinates for the North-west of Jones Bank MCZ reporting zone with increased reporting

Reporting Zone A:

	Degrees Minutes		Degrees Minutes Seconds	
Point	**Lat**	**Lon**	**Lat**	**Lon**
1	49°48.53040'	-008°11.77680'	49°48'31.8240"	-008°11'46.6080"
2	49°48.54060'	-008°16.95060'	49°48'32.4360"	-008°16'57.0360"
3	49°48.57780'	-008°17.37780'	49°48'34.6680"	-008°17'22.6680"
4	49°48.66840'	-008°17.70600'	49°48'40.1040"	-008°17'42.3600"
5	49°48.79140'	-008°17.97420'	49°48'47.4840"	-008°17'58.4520"
6	49°48.94260'	-008°18.18900'	49°48'56.5560"	-008°18'11.3400"
7	49°49.11900'	-008°18.35100'	49°49'07.1400"	-008°18'21.0600"
8	49°49.31340'	-008°18.45300'	49°49'18.8040"	-008°18'27.1800"
9	49°49.53720'	-008°18.49020'	49°49'32.2320"	-008°18'29.4120"
10	49°49.72140'	-008°18.46140'	49°49'43.2840"	-008°18'27.6840"
11	49°49.93680'	-008°18.35520'	49°49'56.2080"	-008°18'21.3120"
12	49°50.18040'	-008°18.11580'	49°50'10.8240"	-008°18'06.9480"
13	50°00.34980'	-008°04.50000'	50°00'20.9880"	-008°04'30.0000"
14	50°00.52860'	-008°04.20960'	50°00'31.7160"	-008°04'12.5760"
15	50°00.66120'	-008°03.84180'	50°00'39.6720"	-008°03'50.5080"
16	50°00.72840'	-008°03.29340'	50°00'43.7040"	-008°03'17.6040"

17	50°00.66420'	-008°02.72460'	50°00'39.8520"	-008°02'43.4760"
18	50°00.48540'	-008°02.25600'	50°00'29.1240"	-008°02'15.3600"
19	50°00.26700'	-008°01.96320'	50°00'16.0200"	-008°01'57.7920"
20	50°00.00360'	-008°01.78140'	50°00'00.2160"	-008°01'46.8840"
21	49°59.71920'	-008°01.72500'	49°59'43.1520"	-008°01'43.5000"
22	49°55.43280'	-008°01.72200'	49°55'25.9680"	-008°01'43.3200"
23	49°54.85560'	-008°02.00880'	49°54'51.3360"	-008°02'00.5280"
24	49°52.50960'	-008°04.59540'	49°52'30.5760"	-008°04'35.7240"
25	49°52.35660'	-008°04.80300'	49°52'21.3960"	-008°04'48.1800"
26	49°48.80280'	-008°10.70220'	49°48'48.1680"	-008°10'42.1320"
27	49°48.59700'	-008°11.20200'	49°48'35.8200"	-008°11'12.1200"

Then re-join to point 1.

Reporting Zone B:

	Degrees Minutes		Degrees Minutes Seconds	
Point	**Lat**	**Lon**	**Lat**	**Lon**
1	49°50.06520'	-008°19.52160'	49°50'03.9120"	-008°19'31.2960"
2	49°50.02800'	-008°19.93320'	49°50'01.6800"	-008°19'55.9920"
3	49°50.06160'	-008°20.34480'	49°50'03.6960"	-008°20'20.6880"
4	49°50.17440'	-008°20.75460'	49°50'10.4640"	-008°20'45.2760"
5	49°50.35800'	-008°21.09660'	49°50'21.4800"	-008°21'05.7960"
6	49°50.65920'	-008°21.38700'	49°50'39.5520"	-008°21'23.2200"
7	49°51.01320'	-008°21.48900'	49°51'00.7920"	-008°21'29.3400"
8	50°00.21900'	-008°21.55740'	50°00'13.1400"	-008°21'33.4440"
9	50°00.61740'	-008°21.43140'	50°00'37.0440"	-008°21'25.8840"
10	50°00.90720'	-008°21.13500'	50°00'54.4320"	-008°21'08.1000"
11	50°01.12440'	-008°20.67300'	50°01'07.4640"	-008°20'40.3800"
12	50°01.22460'	-008°19.99200'	50°01'13.4760"	-008°19'59.5200"
13	50°01.22400'	-008°15.08760'	50°01'13.4400"	-008°15'05.2560"
14	50°01.17060'	-008°14.49780'	50°01'10.2360"	-008°14'29.8680"
15	50°00.98940'	-008°13.99920'	50°00'59.3640"	-008°13'59.9520"

16	50°00.66840'	-008°13.60980'	50°00'40.1040"	-008°13'36.5880"
17	50°00.29460'	-008°13.45620'	50°00'17.6760"	-008°13'27.3720"
18	49°59.89860'	-008°13.54440'	49°59'53.9160"	-008°13'32.6640"
19	49°50.69340'	-008°18.47340'	49°50'41.6040"	-008°18'28.4040"
20	49°50.44260'	-008°18.67980'	49°50'26.5560"	-008°18'40.7880"
21	49°50.20440'	-008°19.05780'	49°50'12.2640"	-008°19'03.4680"

Then re-join to point 1.

Annex E – References

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