

Impact Assessment Screening

Summary	
Site name:	Scanner Pockmark
Designation type:	Special Area of Conservation
Summary of change:	Amendment to existing site boundary to reflect a change in understanding of the extent and distribution of the interest feature.
Conclusion:	No more detailed Impact Assessment needed
Justification:	Total estimated costs of the proposed boundary amendment equate to less than £100,000 per year for the private sector and £200,000 per year for the public sector. Plans for the implementation of fisheries management measures within the site already account for the proposed boundary amendment and there are no active oil and gas extraction activities that are currently planned. We conclude that an Impact Assessment is not required.

1. Basic Screen

1.1 Site background and reason for boundary change

The UK submitted the Scanner Pockmark candidate Special Area of Conservation (cSAC) to the European Commission in 2008 for the protection of the Annex I habitat 'Submarine structures made by leaking gases'; the European Commission confirmed the site as a Site of Community Importance (SCI) in 2009 and the site was subsequently formally designated as a SAC in 2015.

Previous surveys between 1983 and 2006 identified the existence of methane derived authigenic¹ carbonate (MDAC) in the site (Hovland and Sommerville, 1985; Dando *et al.*, 1991; Judd *et al.*, 1994; Judd, 2001; Dando, 2001; Judd and Hovland, 2007). Images of MDAC were obtained along with methane recorded in sediment samples and evidence of bacterial mats and gas seeps.

Additional survey work commissioned by JNCC in 2012 collected multibeam echo-sounder data, backscatter, side scan sonar data, drop camera footage and sediment grab samples (Rance *et al.*, 2016). JNCC commissioned the British Geological Survey (BGS) to compare survey data from 2012 with earlier geological data to assess changes in pockmark morphology and condition (Gafeira and Long, 2015). The study confirmed the presence of 61 pockmarks within Scanner Pockmark SAC, four of which measured over 72,000 m² with a depth of greater than 12 m below the surrounding seabed. However, the study also identified the presence of six additional clusters/individual pockmarks on the western side of the site where Gafeira and Long (2015) noted strong acoustic reflections that are indicative of the presence of the interest feature in the majority of the pockmarks identified.

JNCC reviewed these new data and concluded that the pockmarks outside the site are likely represent examples of the Annex I feature Submarine structures made by leaking gases and meet the criteria to be included within a SAC. JNCC advise that the boundary of the current

¹ An authigenic sedimentary rock deposit is one that was generated where it is found or observed. Sedimentary authigenic minerals include calcium carbonate.

SAC should be amended to better reflect the more recent evidence on the presence and extent of the interest feature in the area.

The proposed revised SAC boundary is a polygon enclosing the minimum area necessary to ensure protection of the Annex I habitat feature, following the known extent of the habitat feature as closely as possible in line with JNCC's marine SAC boundary definition guidelines (JNCC, 2012). The area within the existing site boundary is currently 3.35km² but if the proposed boundary amendment is approved then this will increase by 3.39km² or approximately 100%.

It is particularly important that the additional potential occurrence of the feature to be incorporated in the site boundary from an ecological point of view because it is a continuation of the Annex I feature outwith the current boundary and this feature is known to be sensitive to activities currently taking place. Submarine structures made by leaking gases have a restricted distribution in European waters due, in part, to their relationship to sources of shallow gas.

2. Detailed screen

2.1 Summary of original Impact Assessment

JNCC consulted on the first seven offshore SACs between December 2007 and March 2008, including Scanner Pockmark SAC. There were 114 responses from 38 individuals and organisations contacted for sites covered by the consultation. As a result of the general comments received during the consultation on these seven possible offshore SACs, JNCC modified the recommended boundaries to five of these, including Scanner Pockmark, to reduce the area of seabed included within the site boundary which was not known to be Annex I habitat. An Impact Assessment was undertaken for the original site consultation².

2.2 Overview of activities capable of affecting the protected feature of the site

JNCC have used best available data to evaluate the activities taking place within, or in close proximity to, the Scanner Pockmarks SAC against our understanding of the sensitivity of Submarine structures made by leaking gases to pressures associated with these activities:

Bottom-contact fishing

Fisheries activities data (2009-2015) from Vessel Monitoring Systems (VMS) indicate that the feature has been exposed to pressures to which it is sensitive. The VMS data show that demersal trawling has occurred within the current site boundary and within the proposed boundary amendment. The level of exposure to the activity appears to be moderate and the 2012 survey indicated trawl scars and sidewall slumping which may be due to anthropogenic or natural factors (Rance *et al.*, 2016).

JNCC advise that bottom-contact fishing practices would need to be managed within the existing and proposed extension to the site boundary.

Licensable activities

The south-east corner of the SAC overlaps with the Blenheim oil field (production ceased) and two abandoned, explorative oil wells occur within the site from 1984. There are acoustic anomalies at the well sites, most likely to be due to the deposition of cuttings and anchoring of the rig, which are still prevalent due to low sedimentation rates in the area (Gafeira and

² SAC consultation December 2007 to March 2008. Documentation available online here: <http://jncc.defra.gov.uk/page-4169>

Long, 2015). There are currently no active licensable activities taking place within or in close proximity to the existing or proposed extension to the site boundary. However, the area is within a single oil and gas license block – suggesting activity may take place in the future and therefore may be subject to management.

Shipping

There is low density of commercial shipping in this area, but due to its offshore location vessel anchorage is unlikely. As such, JNCC do not consider that shipping activity requires management.

2.3 Estimate of maximum likely impact

Private Sector (total cost per annum should not exceed £100,000)

Bottom-contact fishing

Marine Scotland have assessed the estimated value of fishing activity occurring within the existing site boundary and proposed boundary amendment to estimate the cost to the fishing industry for the proposed boundary amendment. The methodology used is outlined in the Marine Scotland Northern North Sea proposal³. Fishing effort was analysed for each gear type using Vessel Monitoring System (VMS) data reports (2011-2015) and calculated as an annual average. The total effort for each ICES rectangle and the subsequent fishing within MPAs was calculated by country and gear type. From these analyses, the estimated value of fishing activities within both the existing site boundary and the proposed boundary amendment is £2,500. As the proposed boundary amendment is approximately 50% of the total area of the proposed amended site, then the value of only the extension area is estimated as approximately £1,250 in terms of loss of earnings to the fishing sector as a result of the proposed boundary amendment per annum.

TOTAL ESTIMATED COST: £1,250

Licensable activities

There are no licensable activities currently occurring within either the existing site boundary nor the proposed boundary amendment. In the initial Impact Assessment conducted for the site in 2008 there were no proposed future developments. However, the existing and proposed boundary is encompassed in a licensed oil and gas production block (15/25c) and if licensable activities were to occur within the site, there would be additional cost to industry. In the initial Impact Assessment conducted for the site in 2008 there were no proposals for future developments within the existing site boundary. However, now that the site lies within a licensing block, an additional cost has been estimated based on the cost associated with the Braemar Pockmarks SAC boundary amendment. The potential additional cost to the industry is therefore estimated at £35,000 based upon the costs of additional EIA or monitoring within the boundary if developments were to take place.

TOTAL ESTIMATED COST: £35,000

Public Sector (total cost per annum should not exceed £200,000)

³ Marine Scotland Northern North Sea Proposal, April 2017. Available online: <http://www.gov.scot/Resource/0051/00516433.pdf>

Monitoring and enforcement

This cost is already associated with the Impact Assessment conducted for the original site and therefore additional cost to monitoring and enforcement is considered to be negligible with regards to the proposed boundary amendment.

TOTAL ESTIMATED COST: £0

3. Conclusion

JNCC have reviewed available information on activities taking place within the existing SAC and the area of the proposed boundary amendment. We conclude that there will be an additional cost to the private sector of £36,250 per annum as a result of combined costs to the fisheries sector and oil and gas industry. Costs to the public sector are considered to be already covered by the original site Impact Assessment and any additional costs associated with the boundary amendment would be negligible.

Overall – there are unlikely to be costs in excess of £100,000 in any one year for the private sector and £200,000 for the public sector and therefore we conclude that a full impact assessment is not required for the proposed boundary amendment.

4. References

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