

3/18 Eagle Wing
Temple Quay House
2 The Square
Bristol, BS1 6PN

Help line: 0303 444 5000
e-mail: ablemarineenergypark@infrastructure.gsi.gov.uk

Sent via email

Our Ref: TR030001

Date: 17 August 2012

Dear Sir/Madam

APPLICATION FOR DEVELOPMENT CONSENT BY ABLE HUMBER PORTS LTD FOR THE PROPOSED ABLE MARINE ENERGY PARK

SECOND ROUND QUESTIONS

The timetable issued for the examination of the above proposal timetable¹ identified that the Panel of Examining Inspectors would issue a second round of written questions on Friday 17 August 2012.

As the lead member of the Panel of Examining Inspectors I am now writing to you to provide you with the detailed questions which the Panel have decided to ask (attached at Annex A). We request that you provide your response to these questions by **Friday 7 September 2012**.

If your submission exceeds 1500 words please ensure that you also provide four unbound paper copies to the postal address above by the deadline.

Yours faithfully

Robert Upton

Robert Upton
Lead member of the Panel of Examining Inspectors

Advice may be given about applying for an order granting development consent or making representations about an application (or a proposed application). This communication does not however constitute legal advice upon which you can rely and you should obtain your own legal advice and professional advice as required.

A record of the advice which is provided will be recorded on the Planning Inspectorate website together with the name of the person or organisation who asked for the advice. The privacy of any other personal information will be protected in accordance with our Information Charter which you should view before sending information to the Planning Inspectorate.

¹ Issued 31 May 2012 and as amended 10 July 2012 and 7 August 2012

Annex A – Second Round of Written Questions

Compensation requirements

For Natural England and RSPB:

Q1. The document by the Institute of Estuarine and Coastal Studies, **Managed Realignment and Regulated Tidal Exchange: Humber Estuary Scenario Briefing Report** 1st August 2012 (Reference No: WR21.1– page 388 of the Applicant's Comments on Written Representations), states that -

"...it is suggested that a more functional approach to seeking compensatory habitat is pursued, whereby, more basic criteria are followed in order to deliver an area that provides a functioning estuarine ecosystem.

Furthermore, saltmarsh habitat has an intrinsic functional value which should be acknowledged, and is able to deliver a series of ecosystem services in its own right. Given that the Humber Estuary has lost a considerable area of such habitat historically, then development of such a habitat should not necessarily be treated as a disbenefit. Finally there needs to be a more realistic and integrated approach to the topic of habitat loss, compensation and realignment provision. There will not always be suitable habitat present to provide compensation in the vicinity of the areas of habitat loss, or if they are available, then direct like for like compensation may not be possible. This needs to be addressed, with either an acknowledgement that the provision of a functional if not identical estuarine ecosystem in the same part of the estuary is acceptable, or an acceptance that in order to provide like for like habitat, provision may have to occur elsewhere within the estuary, and as such, without the same structural community components that are associated with the area lost. This appears to be the approach adopted in the current proposals for the Bristol Port Compensation in the Severn Estuary."

Do Natural England and RSPB agree with this?

Q2. On the basis of the statement made in paragraph 10 of Annex 1 to RSPB's Written Representation, RSPB's view appears to be that compensation provision should be based on replacing the ecological function of habitat lost to development.

(a) What would be the implications of such an approach for the AMEP proposals?

(b) In particular how might the nutritional requirements of Black Tailed Godwits be met during the Autumn moult?

(c) Would an approach specifically directed to meeting the needs of Black Tailed Godwits contribute to the overall aims of maintaining the integrity and coherence of the European sites more or less effectively than an approach based on restoring estuarial habitat at CCS?

(d) Is there evidence of any successful compensation schemes based on such an approach?

For Natural England:

The Humber Estuary is recognised as being a highly dynamic ecosystem. The estuary taken as a whole is under certain pressures: "coastal squeeze" associated with rising sea level and flood defence to prevent marine inundation is one type of pressure involving gradual changes over time while proposals for additional port related development bring with them pressure for more dramatic change in particular localities.

South Humber Bank has long been regarded as having special qualities as a result of the proximity of the deep water channel to the southern shore and is identified in the Regional Spatial Strategy (RSS) as reserved for port related development within a special Policy HE1 addressing the Humber Estuary sub-policy area. [RSS Policy HE1 B2: Foster value-added port-related activities and maximise opportunities around the ports and close to the estuary's deep water channel including through safeguarding land north west and south east of Immingham for estuary-related uses]

Within Policy HE1, the RSS included a policy for development of an integrated approach to habitat management [RSS Policy HE1 G5. Develop an integrated approach to habitat management, creation and enhancement across the Humber Estuary, designed to secure positive environmental benefits whilst allowing effective flood management and appropriate development proposals to be progressed]

Policies within the North Lincolnshire Core Strategy (CS1 & CS12) adopted in 2011 and saved policies in the NL Local Plan (B1, B2, B8, IN1-1, IN4 & IN5) bring forward and amplify the RSS policy in relation to development at South Humber Bank.

Evidence so far brought forward, particularly from AMEP's response to the Panel's First Round Q18, suggests that advice given to the applicants by Natural England has influenced strongly the selection and design of compensation proposals that have been brought forward for sites on the north bank of the Humber as part of the AMEP proposals.

The Panel wishes to understand clearly the basis for any advice that has been given. The following questions are therefore directed principally at Natural England.

Q3. *Natural England has a routine monitoring programme which supports reports to the European Commission. Does Natural England also make an assessment of the overall performance over time of the European sites (SACs and SPAs) in the Humber region in relation to their conservation objectives? If so, what does the most recent data show?*

Q4. *If there has not been an assessment of overall performance is there anything authoritative that can be said about changes in the extent of different habitat types, trends in numbers and species of birds recorded and the cumulative results of changes in different types of habitat within different sections of the estuary, including habitats lost to development and created as part of managed retreat?*²

Q5. *Does the applicant's assessment of cumulative effects contained in EX44.1 of the Supplementary Environmental Information address the full range of potential in-combination effects of AMEP with other plans or projects on European site features?*

Q6. *To what extent has Natural England developed an underlying strategy in relation to compensation sites; and to what extent has the approach to compensation in any particular case been determined as a response to the anticipated effects of that individual development on particular habitat types and/or particular species?*

Q7. In the recent case of Green Port Hull, the compensation requirement for direct and indirect intertidal mudflat was 1:1 (Source MMO: MLA/2011/00332 Further clarification on the Green Port Hull alternatives and IROPI statement). This is to be provided at Chowder Ness and Alkborough. ABP's notes on this provision state –

² In this context it is noted that Natural England's response to the Panel's First Round Q 88 (para 5.13 of statement) provided a very broad summary and referred to work by the Environment Agency for completion by early August and also that some figures on numbers for Curlew, Redshank and Black Tailed Godwits are given in a table following para 5.19 of Natural England's written representations.

2. Chowder Ness has been functioning as viable managed retreat for 5 years and has been subjected to comprehensive monitoring to demonstrate its efficacy. For this reason, NE are content to accept that a 1:1 ratio is appropriate as the risk of failure of this compensatory habitat is now negligible.

3. Alkborough – whilst it has been safeguarded under a 2006 agreement between ABP, NE and EA – the land at Alkborough has had less time to become established and still requires some further on-site physical works to fully realise its ecological potential. For this reason NE have taken the view that a 2:1 ratio is appropriate, their comment being “This is because the specific location in question, which is a small area of the Alkborough Flatts Managed Realignment site, is new as far as Habitats Regulations compensation for the GPH development is concerned and a precautionary ratio is appropriate”.

Is this an accurate reflection of Natural England’s general approach?

Q8. In the selection of a site for the provision of new habitat as compensation for habitat lost at Killingholme –

(a) What consideration was given to any particular characteristics of the Killingholme site?

(b) In particular, what attention has been paid to the particular requirements of Black Tailed Godwits?

(c) What weight was given to such factors by Natural England in the assessment of the suitability of Cherry Cobb Sands?

Q9. The Statement of Common Ground with Natural England has a table of meetings held to discuss compensation and lists 2 consecutive meetings one of 18.7.2011 recording “Major underlying principles of compensation scheme agreed” and 9.8.2011 recording “Broad quanta and habitat types of compensation agreed”.

(a) Please provide copies of the minutes of these two meetings.

(b) Are the proposals for development of a compensation site at Cherry Cobb Sands consistent with the principles and broad aims then agreed?

(c) If they are not consistent with those principles and broad aims in what way do they diverge and what are the reasons for such divergence?

Q10. Appendix B to AMEP’s June 2012 response to the Panel’s First Round Questions is an “NLC Assessment of Mitigation Requirements for Killingholme Marshes” which focuses on Lapwing and Curlew as “... the only species using the area in significant numbers”.

(a) What is the origin of this report and who is it by?

(b) Is this study concerned with the foreshore at Killingholme or with the terrestrial area of mixed arable and pasture fields between the Humber Sea Terminal and Immingham Dock: in the Environmental Statement Volume 1 Chapter 11-10 the former is given the name Killingholme Marshes and the latter Killingholme Fields.

Q11. The Panel has been presented with a report by Roger Morris of Bright Angel Coastal Consultants Ltd, formerly of Natural England, which concludes in paragraph 9.8 that -

... it would be extremely unwise to consider the proposed realignment at Cherry Cobb Sands as a viable measure to offset the loss of feeding grounds used by 66% of the

internationally important population of Black-tailed Godwit that visit the Humber Estuary each year.

Has information emerged or policy changed such that it is no longer appropriate to seek compensation in accord with the principles agreed in July 2011?

Killingholme Marshes

For Natural England:

Q12. The reference to the foreshore at Killingholme as providing “feeding grounds used by 66% of the internationally important population of Black-tailed Godwit that visit the Humber Estuary each year” is reflected in the table following para 6.13 of Natural England’s written representations.

What is the origin of this figure and how reliable is it?

Q13. *What modelling or other work has been carried out to establish what would happen over the long term to the inter-tidal mudflats at Killingholme in the absence of any further development?*

Q14. *When making counts of large flocks of Black Tailed Goodwits, at roost and when feeding, what level of certainty is there in standard methodology that double counting is not taking place?*

Q15. Recorded numbers of Black Tailed Godwits making seasonal visits to the Humber have increased from a very low level 40 years ago.

Should this affect the view taken of the significance for the conservation objectives of the European sites of disturbance to feeding patterns of Black Tailed Godwits likely to result from development on the Killingholme foreshore?

Q16. The Panel notes the evidence from Dr Steve Percival submitted as part of AMEP’s Comments on Written Representations (para 17.11 *et seq*).

(a) Is there more evidence on the extent to which Black Tailed Godwit flocks move around the estuary and display opportunistic behaviour as well as being loyal to particular sites?

(b) If so, does this increase or decrease confidence that Black Tailed Godwits will use the compensation site for roosting and foraging? Does it increase or decrease confidence that they will continue to use North Killingholme Haven Pits?

Adaptive behaviour and management

For Natural England:

This concept is a significant feature of EC Guidance on the implementation of the EU nature legislation in estuaries and coastal zones (see the January 2011 document providing sector specific guidance on the implementation of the Birds and Habitats Directives in estuaries and coastal zones³.)

http://ec.europa.eu/environment/nature/natura2000/management/docs/guidance_doc.pdf It is described under the heading “Dealing with uncertainties

Q17. *Is there currently sufficient evidence from observation of Black Tailed Godwits to make predictions about the likely adaptive behaviour to a loss of a favoured feeding ground located close to a particularly favoured roost during the autumn moult?*

Q18. *How much reliance can be placed on Adaptive Management for dealing with uncertainties relating to adaptive behaviour of Black Tailed Godwits?*

Q19. *Are there sufficient monitoring requirements in the current proposals to support an Adaptive Management approach?⁴*

Q20 *Should reliance be placed on such measures to respond to specific uncertainties in relation to, e.g., future feeding patterns of Black Tailed Godwits currently feeding at Killingholme Marshes?*

Q21 *If there can be such reliance, should it be with or without the compensation habitat being proposed for Cherry Cobb Sands?*

Cherry Cobb Sands - Regulated Tidal Exchange

For Natural England:

Q22. The Morris Report and Natural England's Written Representation (29 June 2012, paragraph 8.6 to 8.9) are based on a review of the managed retreat design.

A new design based on a Regulated Tidal Exchange is now being put forward by Black & Veatch (August 2012), in line with recommendations from the RSPB and the EA.

What level of certainty is there that this new design would deliver adequate compensation for –

(a) The foraging requirements and possibly roosting requirements of migratory birds?

(b) Other possible compensation requirements related to the SAC, SPA and Ramsar sites?

(c) What further assessment does Natural England consider necessary to prove or support this new proposal?

Mitigation Sites

For the applicant:

Q23. Paragraph 4.5.18 of Report EX44.1 in the Supplementary Environmental Information states that the DRAX Heron Renewable Energy Plant site overlaps with proposed Mitigation Site A, and that if the DRAX project proceeds on its current basis then it may affect the viability of Site A. There is a suggestion in paragraph 4.5.19 that the impacts on Site A could be avoided by appropriate phasing of the AMEP project.

Please confirm (i) what point the discussions with DRAX have reached and (ii) how the viability of Site A would be ensured if the discussions with DRAX were not successful?

Q24. *What progress has been made in discussion with Natural England about the specification and production of Ecological Monitoring and Mitigation Plans?*

⁴ Paragraph 3.4 of the EC Guidance

Q25. *How does AMEP propose to provide access for Conoco Phillips so they can inspect and maintain their pipelines over Mitigation 'A' site? As this may involve large machinery (changing a section of pipeline for example) how will the integrity of the site be maintained in terms of the wildlife?*

Old Little Humber Farm

For the applicant:

Q26. *It is now proposed that at Old Little Humber Farm embankments should be put round the utilities to keep them dry. How is water to be prevented from coming up underneath?*

Q27. *What is the contingency plan for Old little Humber Farm in the event of a dry winter?*

For the Internal Drainage Board:

Q28. *In the light of the concerns in the East Riding's Local Impact Report, is the IDB confident of being able to maintain water levels in the local dykes at a suitable level?*

The Killingholme Branch and Loop

In the Panel's first round questions we asked (Q46) –

What would be the implications for the construction and operation of the proposed development if the compulsory acquisition of the Network Rail land was not approved?

AMEP's answer then was -

Network Rail has stated that if the line remains within the network and on its current alignment, grade separated crossings will be required to cross it. This is not reasonably practicable for the intended purpose of the site and is not essential for the site specific conditions, viz. a freight only line where speed restrictions can be imposed without detriment to operations.

In its comments on the 'Applicant's written summary' dated 1 August Network Rail has stated that –

NR explained that the precise nature of the works were unclear and that although the explanatory memorandum referred to there being no physical works, the masterplan drawings showed several level crossings which Network Rail could not agree to for safety reasons. The Applicant commented that draft DCO contained provisions for creating a new railway and that this would allow them to create new sidings. Network Rail consider this to be physical works. At the hearing, Network Rail reiterated its fundamental objection to new level crossings detailed in the Written Representation, which are against the policy of both Network Rail and the Office of Rail Regulation (Network Rail's safety regulator).

For the applicant:

Q29. *Given this apparently clear statement, if the Killingholme Branch remains within the National Rail network is the development of the Marine Energy Park on the scale and extent proposed a viable proposition?*

Q30. *Has AMEP developed specific proposals in relation to level crossings and other possible requirements for discussion with Network Rail?*

For Network Rail:

Q31. *Is it correct that Network Rail is now prepared to offer a lease on the section of track running through the AMEP site?*

Q32. *If Network Rail is being governed by the principle that ability to operate the railway line through the AMEP site must be preserved, what restrictions or protection would Network Rail need to seek or impose around the track?*

Q33. *Would there be any practical difference in terms of Network Rail's requirements if the line were limited to less than the 60 m.p.h. goods line said to be the basis of current planning?*

Q34. *Does Network Rail consider that the Killingholme Loop is a necessary requirement to accommodate projected growth at Immingham and other Humber ports?*

Q35. *If so, in Network Rail's estimate, when is this likely to become necessary, or alternatively what event might trigger it?*

Q36. *Is the Killingholme Loop necessary (or only necessary) to permit the operation of 'merry-go-round' trains?*

Q37. *Has a business case been prepared for discussion with government about the funding of the Killingholme Loop? What priority does the scheme have within Network Rail's programmes?*

Q38. *Does Network Rail consider that the Killingholme Loop is consistent with ABP's head-shunt proposal?*

The impact on ABP's operations and planned development

For ABP:

Q39. *Please clarify the current status of any Consultation Draft Master Plan for the Port of Immingham. Specifically –*

(a) Would this have any status other than as a public statement of ABP's intentions?

(b) When was the most recent consultation draft produced and circulated?

(c) Is that draft an accurate reflection of ABP's current intentions?

(d) Where does it show provision for the replacement gas jetty?

Q40. *What are ABP's current intentions for the 'western deep water jetty' site? Specifically:*

(a) Is it solely to replace the existing Immingham Gas Jetty to allow the development of a third solid fuel berth ('HIT3')?

(b) If so, what is the status of HIT3 in terms of the acquisition of necessary consents?

(c) Has a Harbour Revisions Order been prepared or submitted to the Marine Management Organisation, and what is its current progress?

(d) Is there a current Environmental Statement; how does it assess the impacts of development on the 'triangle' site; and how does it propose to mitigate or compensate for them?

Marine operations

For C.RO:

Q41. Is C.RO now satisfied that enough simulations have been carried out to demonstrate that the AMEP development would pose no undue problems for the berthing and un-berthing of vessels at its facility?

Q42. In respect of the scheduled arrivals at the C.RO facility, how reliable are the arrival times especially in the winter months?

Q43. In respect of the scheduled departures at the C.RO facility, do the ships shut out cargo and always sail on time or do they wait to complete loading before sailing?

Q44. How often does C.RO carry out hydrographic surveys of its berths and approach channel and on average how many times a year does C.RO find it necessary to dredge? Does C.RO use contractors for this work or ABP's services?

For the Harbour Master, Humber:

Q45. Is the Harbour Master now satisfied that enough simulations have been carried out to demonstrate that the AMEP development would pose no undue problems for the berthing and un-berthing of vessels at the C.RO facility or at the AMEP development itself?

Q46. Do the modelling reports given in the Supplementary Environmental Information (SEI) EX 8.5, EX 8.7 and EX 8.8 allay any fears as to the sedimentation and flow impacts?

Q47. Does the Harbour Master agree with the MMO and their reasoning that erodible arisings should be deposited in HU080 and non-erodible arisings should be deposited in HU082? If not, why not?

Q48. Is the Harbour Master satisfied with the conclusion reached in EX 8.7 of the Supplementary Environmental Information as regards the Sunk Dredged Channel?

Q49. Does the Harbour Master agree with the conclusions in EX 8.6 of the Supplementary Environmental Information concerning Maintenance Dredging Requirements?

Q50. In terms of Maintenance Dredging what is the total annual tonnage the Harbour Master is licensed to dredge by the MMO and what Spoil Grounds do the MMO require to be used at the present time?

For the applicant:

Q51. How does AMEP propose to deal with the predicted build up of silt at the outfall/intakes of Centrica and E.ON in the long term?

Q52. How does AMEP propose to deal with the predicted siltation and erosion at the dolphins south east of the development?

Compulsory acquisition - provisions

For the applicant:

Q53. None of the sources identified as being responsible for funding are a direct party to the application. *Could the applicant therefore confirm how sufficient, necessary funds are to be secured, guaranteed and drawn upon within the terms of any compulsory acquisition provisions incorporated within the draft Development Consent Order?*

Q54. *In particular, does the applicant intend to secure a formal legal agreement with the Elba Group covering covenants to AMEP from Elba Group for compensation payments or possible claims for blight?*

Q55. *Given that the cost of the project as estimated by AMEP is £450m, and the Elba Group's assets are estimated as in excess of £300m, how are the necessary assets over liabilities to be maintained and demonstrated to be maintained?*

Q56. Acknowledging the Secretary of State's role under article 13 in consenting any transfer, *what provisions are proposed to secure and maintain funds for compulsory acquisition in the event that it became necessary or desirable for the Elba Group to seek to dispose of AMEP and thus transfer the benefit or partial benefit of any DCO granted?*

Q57. *To what extent is the funding dependent on a contribution from the Regional Growth Fund and the European Regional Development Fund?*

Compulsory Acquisition – land requirements

For the applicant:

Q58. *Please provide an update on any negotiations for purchase of land in the book or reference.*

Q59. *In the light of the Specific Issue hearing on the draft Development Consent Order or any other developments, does the applicant wish to make any changes to the land required?*

Q60. *Are there any plots previously shown as required for permanent acquisition for which temporary acquisition and occupation might now be appropriate?*

Bethany Jayne Ltd

On Land Plan Sheet 3 two plots (the former Killingholme station house and an associated yard) are shown adjacent to lots 03004, 03010, 03011, 03012, 03013 and 03014. These sites are apparently owned by Bethany Jayne Ltd, and are not proposed for compulsory acquisition.

Access to the sites is along 03009, identified as owned by Bethany Jayne, and shown as land in relation to which it is proposed to extinguish easements, servitudes and/or other private rights.

AMEP state in the Comments on Written Representations that (a) it intends to 'grant rights to all those who currently use it ... including Bethany Jayne'; and (b) that 'Able is in negotiation with Bethany Jayne to acquire its land by agreement'.

Q61. *Would the applicant please explain why, if the access road is to be available to Bethany Jayne Ltd and (presumably) to other users legitimately seeking access to Bethany Jayne Ltd, it is (a) necessary and (b) in the public interest for 03009 to be subject to compulsory acquisition?*

Q62. If, in the alternative, compulsory acquisition is necessary and in the public interest, then *how would it be possible for such an order to be made before the conclusion of an appropriate access agreement with Bethany Jayne Ltd, since that might have the effect of making the land remaining in Bethany Jayne Ltd's ownership deprived of any prospect of beneficial use?*

Residential property to remain unoccupied

In the Statement of Reasons (paragraph 5.11) plots 03012, 03024, 03025 are identified as 'residential property to remain unoccupied'.

The Category 1 owners for these properties are identified respectively as Lee Savill, Gillian Harper and Danny Revill.

Para 5.12 of the Statement of Reasons indicates that the residential properties are being acquired compulsorily because "...without them the harm to the ...residents of those properties ...would be unacceptable".

Q63. *Please explain further how this claim supports the argument that the land is required to facilitate the development. If it is possible to grant and maintain access to the land owned by Bethany Jayne so that it can be maintained outside the works boundary, is it possible to grant and maintain access to these plots?*

Associated British Ports Land

AMEP requires the consent of the Secretary of State for Transport under s.127 for the compulsory acquisition of 03020, 03021 and 03022 belonging to ABP, a statutory undertaker.

ABP has sought to explain in its Written Representation why this land is important to its growth plans; AMEP has sought in its Comments on that Written Representation to refute this case.

Q64. *Does AMEP submit that its case for acquisition should stand on –*

(a) The extent to which its plans for the use of this land can be demonstrated to be more advanced than those of ABP might be;

(b) The importance or significance of its proposed use of the land as an NSIP compared with the plans of ABP;

(c) The ability of ABP to find alternative sites for its proposed use within its existing estate?

Cherry Cobb Sands

Natural England has indicated (para 8.27 of its Written Representations) that there may be alternative land already available to the applicant (on the south bank of the river) that might provide a suitable compensation site in place of Cherry Cobb Sands.

Q65. If there is land already available to the applicant that might provide the required compensation measures, *please explain –*

(a) What investigation has been made of this to satisfy the requirement to explore reasonable alternatives to compulsory acquisition?

(b) How the tests of necessity and public interest for the acquisition of the land at Cherry Cobb Sands can be satisfied (the agreement of the Crown Estates notwithstanding)?

Other Impacts

For North Lincolnshire Council, North East Lincolnshire Council and NHS North Lincolnshire:

Section 4.3.4 of the National Policy Statement for Ports states that:

'Where a port development is likely to lead to a substantial net increase in employment (of 5,000 or more) which would require inward migration to the area, the effect on demand for local public services (such as affordable housing, education and healthcare) should be assessed.'

Para 9.2.3 of the North Lincolnshire Council Local Impact Report assesses that the project would create 4,271 jobs. This is in addition to the 5,100 the Council believes will be created at the consented Logistics Park.

Q66. How do the respective Councils' Local Development Framework/emerging Local Plan and NHS North Lincolnshire's strategy for the area take account of the potential demand for affordable housing, education and healthcare?

Q67. Have the Councils given joint consideration within their spatial planning activities as to how housing demand would be met if both developments were implemented?

Other information

For Natural England, Marine Management Organisation and the Environment Agency

In the SoCG between your organisations and the applicant a number of issues remain unresolved because you have not been able to fully consider additional information supplied by the applicant.

Q68. What is your position now on the additional information?

Q69. To what extent does it address the issues raised in your Relevant Representations or Written Representations on the potential impacts on European sites?