

Dogger Bank Fisheries Working Group to go ahead

Representatives from relevant national, regional and transboundary international fisheries organisations will be invited to join a Fisheries Working Group which will be established by Forewind to hold collaborative meetings throughout the Dogger Bank project lifecycles.

The group will be coordinated by fisheries liaison coordinators, Stephen Appleby and Nigel Proctor and will continue through the pre and post consent and construction phase of the project life cycles as well as during the operational phase.

The need for a Fisheries Working Group, which was highlighted in fishing industry consultation meetings for both Dogger Bank Creyke Beck and Dogger Bank Teesside, has now gained approval to proceed.

It will be a way to disseminate project updates, including survey, construction and operations and maintenance schedules; and develop construction management plans and best practices, as well as a platform to discuss mitigation options.

As requested by the fishing industry during consultation meetings, Forewind, alongside the lead operators of each project once allocated, will be involved with the working group to ensure consistency throughout.

At least two meetings will be held each year, in early spring so that summer survey or construction plans and schedules can be discussed; and autumn for debriefing and lessons learned.



The Fisheries Working Group will enable relevant fisheries representatives to discuss common issues.

Fisheries liaison contacts

Any queries about Forewind's activity can be directed to:

Nigel Proctor
Fisheries Liaison Coordinator
Cable corridor
+44 7702 730 891
n.proctor@precisionmarine.co.uk

Stephen Appleby
Fisheries Liaison Coordinator
Wind farm zone
+44 7887 777 001
sja@brownmay.com

Martin Goff
Offshore Project Developer
+44 7867 355935
martin.goff@forewind.co.uk

Melissa Read
Consent and Stakeholder Manager
+44 7818 597851
melissa.read@forewind.co.uk

Andrew Guyton
Consent and Stakeholder Manager
+44 7818 597849
andrew.guyton@forewind.co.uk

Freepost RSLY-HK GK-HEBR
Forewind
Davidson House
Forbury Square
Reading
RG1 3EU

Email: info@forewind.co.uk
Freephone: 0800 975 5636

forewind.co.uk

Met mast maintenance contract awarded

Forewind's two meteorological masts will be operated and maintained by UK firm RES Offshore following the signing of a services contract in August.

The met mast sites are the furthest offshore of any in the UK and RES will maintain both the structures and instrumentation systems, which includes all work on the masts together with project management and procurement of vessels and subcontractors.

Forewind Head of Operations, Simon Franey said that the appointment represents a milestone for the organisation in its aim to acquire quality and consistent wind data from the Dogger Bank Zone.

Dogger Bank Met Mast East was installed in February this year while the installation of Dogger Bank Met Mast West is on schedule to take place in the autumn.

Load-out of the foundation and meteorological mast will be from Harland & Wolff in Belfast with the 132m jack-up



Dogger Bank Met Mast East provides valuable data for use in the development of the zone.

vessel *Brave Tern* most likely to carry out the operation.

As well as meteorological data, the masts will also record marine traffic data to help inform the impact assessments for shipping and navigation along with commercial fisheries.

To receive copies of this newsletter electronically, please register at www.forewind.co.uk

Fisheries Update 2

Fisheries related feedback from Creyke Beck consultation

Feedback from the fisheries industry on Forewind's final stage of pre-application consultation for Dogger Bank Creyke Beck will help shape the application, which was lodged with the Planning Inspectorate at the end of the summer.

The consultation for the 2.4 gigawatt (GW) offshore wind development ended in June and resulted in valuable responses from individual fishermen, as well as from representatives from fishing groups.

Forewind's Head of Offshore Development, Gareth Lewis said that all the responses will be reviewed, questions addressed and comments considered and incorporated where possible.

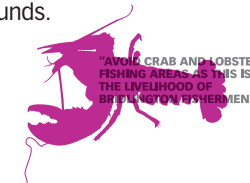
Several issues were common to a number of fisheries-related consultees and these included:

Electric and magnetic fields impact
Concerns were raised over the effects of electric and magnetic fields (EMFs) on marine life during consultation and Forewind has subsequently prepared a factsheet summarising this issue. Wherever conditions are suitable, offshore cables will be buried below the seabed. Where conditions are

not suitable, cables will be adequately protected. The cables proposed for the Dogger Bank projects would be insulated with metallic screens, significantly reducing EMF emissions. The proposed high voltage direct current export cables are likely to be bundled so would emit a very low level of magnetic field, well within industry guidelines.

Construction impacts on crab and lobster breeding grounds

Forewind will continue to work closely with the fishing community to ensure impacts during the installation of the export cable are minimised. Following feedback from earlier consultation, the plans for the Dogger Bank Creyke Beck export cable route have avoided the most sensitive crab and lobster breeding grounds.



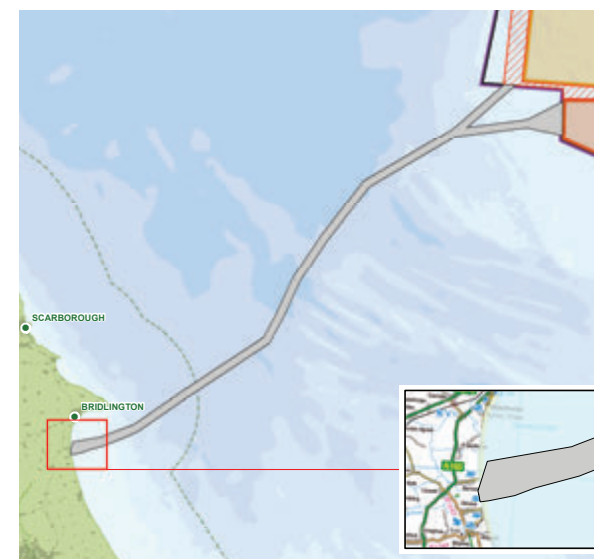
Establishment of a single marine coordination body

While officially the remit of the lead operators, those who will construct and run the wind farms, the concept of a single marine coordination body for all the Dogger Bank projects will be further considered with

there perhaps being an independent marine control centre for each project but with a unified offshore emergency resource.

Cable installation timeframe

A number of consultees addressed the issue of the timeframe for the cable installation, particularly



in relation to the avoidance of herring spawning periods. While Forewind believes restrictions may not be necessary due to the minimal footprint impact of cable laying activities, there is sensitivity to this issue. The construction timeframe issue will be progressed by the lead operators in liaison with the fisheries industry and it is highly likely additional fish ecology surveys will be required.

Once the Planning Inspectorate has accepted the application, all the documents will be available to download online and to view at local libraries. The Planning Inspectorate has 28 days to validate and accept the application, then Forewind anticipates it will take up to 15 months, until the end of 2014, to examine and determine the consent.

Stakeholder engagement, which has been key during the pre-application process, will continue throughout the examination phase to ensure as many issues are addressed prior to construction as feasible.

Issue highlights

This is the second edition of Fisheries Update – Forewind's newsletter aimed at providing the commercial fishing industry with the latest news on the development of the Dogger Bank Zone. The first issue, published in May this year, was so well received that some fishing groups have said that the information provided has removed the need for face-to-face update meetings with Fisheries Liaison Coordinators for the time being.

Further editions will be produced to coincide with milestone dates in the development and consenting calendar. If you would like to receive copies electronically, please email your request and contact details to info@forewind.co.uk.

Dealing with archaeological discoveries

British fishing vessels have been responsible for some of the most important archaeological discoveries of the past 40 years, with fishing gear having snagged or dredged up everything from Palaeolithic flints to modern shipwrecks.

To help fishermen deal with any archaeological finds that may emerge from the sea in their fishing gear, Wessex Archaeology, working on behalf of English Heritage, developed a Fishing Industry Protocol for Archaeological Discoveries (FIPAD). As part of the work, a specially designed website – www.fipad.org - was launched, featuring downloadable resources with information on identifying archaeological finds, how to report them and what to do with a discovery once found.

The protocol covers two main types of discovery:

Artefact: An object brought to the surface with a catch could indicate an archaeological site on the seabed. This could be anything from small worked flint to aircraft propellers.

Site: If equipment snags on an obstruction on the seafloor this may indicate an unknown wreck site.

Working in collaboration with the Sussex Inshore Fisheries Conservation Authority the FIPAD was run as a pilot project with fishermen reporting any archaeological finds uncovered in the course of their activity.

The successful pilot is hoped to be rolled out nationally and all fishermen are encouraged to report discoveries by going to the FIPAD website and using the 'Report Now' button, or by telephoning +44 (0) 1722 326867 and asking for the Fishing Protocol Team.

The Fishing Protocol Team is at hand to deal with any reports and will make sure new discoveries are highlighted on the FIPAD website. Fishermen with any questions or queries can contact the team by email: fipad@wessexarch.co.uk or on the phone number above.

For further information please visit <http://fipad.org/>



This medieval stone statue was found by a lobster fisherman in Chichester Harbour.

Dogger Bank gives clues to Ice Age Britain

Peat and wood has been discovered on the seafloor during survey work on Dogger Bank and its reporting and analysis will help archaeologists improve the understanding of Ice Age Britain.



Analysis of underwater archaeological finds helps us to better understand Ice Age Britain.

Like the Fishing Industry Protocol for Archaeological Discoveries (story above), an Offshore Renewables Protocol for Archaeological Discoveries (ORPAD) has also been established to help protect archaeological discoveries made during work offshore.

The Crown Estate initiative, introduced three years ago and managed by Wessex Archaeology through its Implementation Service, ensures that finds are reported and assessed and wherever possible added to national databases. The samples from Dogger Bank have been valuable in revealing specific details about the former land environments in this area where peat was a feature.

Toby Gane, Project Manager with Wessex Archaeology said that peat – which forms when plant material degrades in conditions without oxygen – can preserve plant and insect remains, pollen, seeds, charcoal and small artefacts for tens of thousands of years.

"Many samples of peat have been brought to the surface during Dogger Bank surveys," he said.

Studying this material allows archaeologists to determine the environment, climatic conditions and landscape features such as whether an area was fairly open or heavily wooded. This in turn helps to determine how the world inhabited by prehistoric people and animals may have looked.

"We identified a sample of birch found during an otter trawl conducted by the Jubilee Spirit, and as we know this is a deciduous tree which grows in open conditions we could determine it is likely to be from the early Mesolithic period, some 10,000 years ago, when conditions warmed following the arctic phase," he said.

This was an enigmatic time before written records so information is not readily accessible. Therefore some of the best resources for learning about the Palaeolithic or Old Stone Age actually lie under the sea and far offshore.

For more on ORPAD contact the Implementation Service on +44 (0) 1722 326867 or email protocol@wessexarch.co.uk.

Fish ecology survey complete



The latest fish ecology survey for Dogger Bank was completed at the end of July with one final survey planned for the autumn.

The 21 metre *MFV Jubilee Spirit* began work earlier in the month, using otter and scientific beam trawls to gather data on fish populations including species, age (maturity), size and distribution. The work is part of Forewind's environmental impact assessment for the third development tranche, Tranche C.

Onboard *MFV Jubilee Spirit* for the fish ecology survey.

Consultation process for Dogger Bank Teesside A & B

Work is on track for the second and final phase of pre-application consultation for Dogger Bank Teesside A & B to be held later this year.

This phase will include a series of public exhibitions as well as specific meetings with fisheries groups, and will be the main opportunity for stakeholders to have input and help shape the development proposals Dogger Bank Teesside A & B.

In May 2012, Forewind published a Statement of Community Consultation (SoCC) for Dogger Bank Teesside, a development comprising four offshore wind farms. In November 2012, when the project boundaries for the initial two projects, Dogger Bank Teesside A & B, were identified, a decision was made to split the development into two applications which will be consulted separately. A new SoCC specific to each application will be produced.

Fisheries organisations will receive direct invitations to attend meetings although fishermen are also welcome at the public exhibitions. Dates and locations for these will be published in the next Fisheries Update, and also on www.forewind.co.uk.

Dogger Bank Teesside C & D will follow the same process in 2014.

Two new project boundaries identified

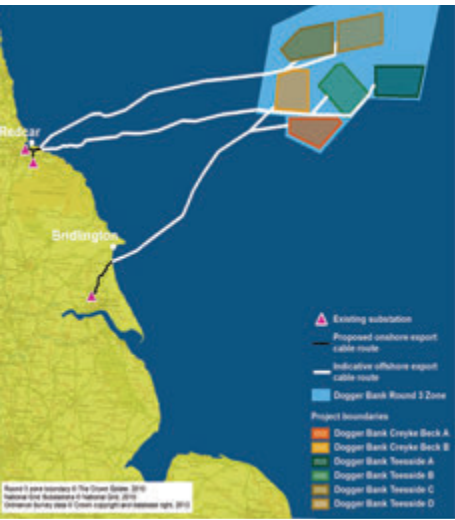
The proposed boundaries for the two projects which comprise third stage of Forewind's development of Dogger Bank have been finalised. Surveys and assessments considered environmental, engineering, commercial and consenting factors.

Called Dogger Bank Teesside C and D, the two wind farms, each with a maximum installed capacity of 1.2GW, are expected to connect to the national grid in Teesside, just south of the Tees Estuary. Both Dogger Bank Teesside C and Dogger Bank Teesside D have areas of 560km².

In its environmental impact assessment work for Dogger Bank Teesside C and D, Forewind will incorporate the impacts it has already assessed for the earlier Dogger Bank development stages, Dogger Bank Croyke

During the surveys, archaeological finds have also been brought to the surface and analysis of them should help to characterise the ancient environment on Dogger Bank. At the time of going to print, 33 locations had been surveyed with finds including peat, twigs, wood, stone and a vertebra, believed to be from a marine mammal.

The appointed Fisheries Liaison Coordinators will give regular updates regarding any upcoming works but they can be contacted at any time with queries.



Beck A and B, and Dogger Bank Teesside A and B.

Dogger Bank Teesside C is 157 kilometres from shore at its closest point and its boundary coordinates are:

	Easting	Northing	Longitude	Latitude
	(metres)		(Decimal Degrees)	
1	420367.9081	6131015.5581	1° 44.707' E	55° 19.144' N
2	443031.7571	6134805.8045	2° 6.086' E	55° 21.376' N
3	443031.7571	6116639.168	2° 6.307' E	55° 11.583' N
4	413484.2499	6111697.7156	1° 38.556' E	55° 8.662' N
5	407054.427	6118583.293	1° 32.370' E	55° 12.303' N

Dogger Bank Teesside D is 192 kilometres from shore at its closest point and its boundary coordinates are:

	Easting	Northing	Longitude	Latitude
	(metres)		(Decimal Degrees)	
1	446674.9026	6135415.0752	2° 9.527' E	55° 21.729' N
2	477510.4612	6140571.9382	2° 38.687' E	55° 24.652' N
3	477510.4612	6122405.3016	2° 38.775' E	55° 14.858' N
4	446674.9026	6117248.4387	2° 9.734' E	55° 11.936' N

A report explaining the selection of the proposed boundaries for the wind farms, as well as the sites for the final two Dogger Bank tranches - C and D – is now available to download.