

# seafish Kingfisher Information Service

ourradi y 202.

# In this issue:

Successful fishing within wind farms

Cable exposures under the spotlight

What lies beneath: key pipeline issues for fishers Refresh your skills, open doors Floating offshore wind coming to the Celtic Sea?



# Good information is key to successful fishing within wind farms



Back in October, when the Prime Minister announced plans to increase the UK's offshore wind power capacity, many in the fishing industry didn't exactly welcome the news! But despite fishermen's concerns about losing out and the impact on mobile fishing, it seems that pot fishing can continue safely in and around wind farms (WFs), as long as there are sustained efforts on consultation, communication and the supply of good information.

What we need now is for good practice on this to become the norm.

# What can be done to reduce impact?

According to WF developer and operator Ørsted, it puts a strong emphasis on early engagement with the fishing industry. It tries to minimise any potential impacts to fishermen genuinely impacted by the construction phase of a project, and also works with them so that fishing can resume once a project is operational. Examples of its approach include:

Monitoring stocks: When the Westermost Rough WF was planned off the Holderness coast, the site chosen was controversial because it overlaps with the busiest lobster fishing grounds in Europe. The Holderness Fishing Industry Group (HFIG) has liaised with Ørsted since the pre-construction phase, and one mitigation measure agreed was a shellfish monitoring programme. From 2013 HFIG looked at the ecological effects of construction and operation of the WF on lobsters, and six years after the start of the study, published the survey findings. The results show no observable differences in the size, distribution or catch rates of lobsters over the period, and consistent economic returns for fishers.



**Operational phase:** With a number of projects, in order to increase the safety of both industries, Ørsted provides fishermen with more visible gear markers to use when fishing static gear within the wind farm site. The fishermen are encouraged to communicate with the offshore coordination teams, and, among other measures, receive Monthly Notices of Operations to keep them informed about the schedule of routine maintenance works (which would not necessarily be covered by a Notice to Mariners). This allows them to plan fishing activities in advance.

Ørsted says there is static gear in the form of pots - actively fished within almost all its offshore WFs. In addition, it says that in a number of its WFs, mobile fishing takes place, to a lesser extent. The full extent of mobile fishing in WFs is not as easy to monitor and document.

It's worth emphasising that other developers may also have effective measures in place to mitigate the impact of fishing - it's not just Ørsted doing this. It's also important to acknowledge that at every WF, there will always be further scope for improvement: "Any advice or constructive feedback from the fishing industry on how we can better co-exist is welcome," says Courtney French, Commercial Fisheries Manager at Ørsted.

# Operators have to be upfront with information

Crucial to the continuation of fishing at wind farms, and elsewhere, is the early supply of information – both notification of activities, and details about the location of structures.

Developers, operators and owners have to keep the industry forewarned and updated about progress, activity and hazards on all their projects and sites. KIS-ORCA and Kingfisher Bulletin are the recognised industrystandard way of doing this.

With the new Kingfisher Bulletin, it's easy for developers such as Ørsted to issue alerts and notices (and update them too) at

# kingfisherbulletin.org.

Notices are live in minutes and can be shared via social media, with alerts issued almost instantly to fishers' phones and other devices. For fishers, it takes just a few minutes to set up their 'alert areas' on the app or website.

Article continued overleaf >

With KIS-ORCA, developers should provide full information in the annual data call to ensure the positons of cables and structures and any marine hazards are seen by fishers on their on-board plotters.

"It's essential that offshore operators and developers make the positions of their cables and structures and any marine hazards known to the fishing industry well ahead of any activity starting. For fishing safety reasons and to aid co-existence, it's critical that this information is on KIS-ORCA so that fishers can see it on their fishing plotters at sea," says Dale Rodmell, Assistant CEO at NFFO.

Fishers can also promote successful fishing by themselves providing information about hazards or concerns proactively to the Fisheries Liaison Officer (FLO) or Fishing Industry Rep (FIR).

# Local knowledge and relationships

There's no substitute for local knowledge – of fishing grounds, the people who fish them, and how and where they fish. And many developers and operators will readily admit this when it comes to FLO.

However, one area of simmering tension continues to be the use of local (or, rather, non-local) *guard vessels*. The fishing industry believe that here too, there is no adequate substitute for local knowledge, but practice varies widely on this.

Working with local providers when it comes to offshore FLOs and guard vessels also builds trust. It makes communication easier, and can prevent the souring of previous good relationships carefully built over years.

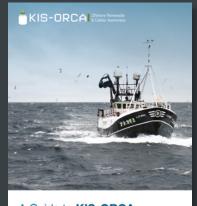
"As wind farm development often affects local fishers the greatest, we passionately believe in using local fishers for FLO and guard boat work. Not only do they have excellent local knowledge of their grounds and vessels that are likely to be encountered, but their relationship with other fishers in the area benefits all, not least the developer," says Dale Rodmell of NFFO.

With more offshore wind farms due to be built around the UK coast, it's crucial that the two industries work together on successful co-existence. Both rely on the same area of sea, so both need to map out ways to co-exist as safely as possible.

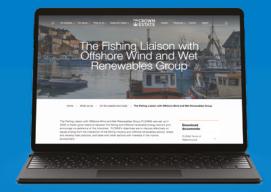
# KIS-ORCA: full and timely information is key

There's a data call for KIS-ORCA in October each year, asking owners and operators to provide the latest information about their cables and structures. "It's important for fishing awareness and safety that we get data ahead of activity, and not just during or afterwards," says Matthew Frow, Kingfisher Information Manager. "When it comes to protecting lives and equipment, and successful co-existence. early information is a 'musthave', not a 'nice to have'".

To find out about the KIS-ORCA data call, see https://kis-orca.eu/wp-content/uploads/2020/10/KIS-ORCA\_Guide\_2020\_Web\_v1.pdf



A Guide to **KIS-ORCA** and the Data Call



The FLOWW (Fishing Liaison with Offshore Wind and Wet Renewables) Group has done great work in producing sensible best practice guidelines for this (and it is also currently drafting a best practice document on cables). For both fishers and operators, they're worth reading – and following.

www.thecrownestate.co.uk/media/1775/ei-km-in-pc-fishing-012014-floww-best-practice-guidance-for-offshore-renewables-developments-recommendations-for-fisheries-liaison.pdf www.thecrownestate.co.uk/media/1776/floww-best-practice-guidance-disruption-settlements-and-community-funds.pdf

# Refresh your skills and open doors

Seafish has funding available for safety training and other qualifications. As well as maintaining your fishing skills, these could help to open the door for guard vessel services and other contracts.

Seafish funding for refresher courses and other qualifications is available to any commercial fishermen who have completed their basic safety training courses, and worked on a UK-registered fishing vessel for at least 60 days in the past two years. The funding covers course fees.

## What courses to apply for?

The choice of training is fairly wide, helping fishermen not just refresh safety training but also comply with the skills requirements of other offshore industries for potential guard boat and other work. Funding is available for refresher courses such as STCW basic safety training, but also for advanced qualifications such as Master 200 gross tonnes training, which is not required for fishing but may be required by other offshore industries.

According to Derek Cardno, Marine Safety and Training Officer at SFF. "There are no additional



requirements in respect of fishermen's training for when vessels are on hire to SFF Services Limited, but we would always encourage fishermen to refresh their mandatory courses to maintain their skills." However, some offshore providers may require qualifications above and beyond the fishing mandatory training, and this makes the wider range of courses covered by Seafish funding very useful.

The opportunities opened up by the training have been welcomed by the NFFO: "The NFFO supports and recognises the importance of the Seafish training programme,

which assists crew members to gain certification, not only for working on board fishing vessels, but also guard vessels sailing under load line or SWBC crewing rules and regulations," says its Assistant CEO, Dale Rodmell.

"The funding we've secured for fishermen's training is primarily intended to improve worker safety. However, if it can also open up opportunities for fishermen to supplement their income from fishing, by undertaking work with the offshore industries, that's an added bonus," says Simon Potten, Seafish's Head of Safety & Training.

# How to apply

The funding is available across the UK. You have to apply to Seafish for approval before doing any training - so if you've done it already, you can't be funded retrospectively.

To undertake training with a Seafish Approved Training Provider, you can contact them directly. They'll check your eligibility, help you apply for funding, arrange your training and recover the cost on your behalf from Seafish. To undertake training with a different provider (perhaps Seafish Approved Training Providers do not offer the course you want), you must apply direct to Seafish. If approved, you can book yourself onto the course and reclaim the fees after completion.

Funding is limited – in terms of both amounts and cut-off dates. And to complicate things, the amounts and cut-off dates vary depending on whether you're working in England, Scotland, Wales or Northern Ireland. Since all the funding is first-come, first-served, it's best to move quickly on this one.

For more details about the funding and courses available, and how to apply, go to: www.seafish.org/safety-and-training/seagoing-training/funding-for-safety-training



There are two facts of life worth remembering when it comes to subsea cables.

One, they are increasing in number, being critical for bringing power ashore from offshore renewable sources and for providing the internet backbone around the world. Two, the seabed moves. Which occasionally leads to cables becoming exposed – especially in dynamic areas such as the southern North Sea

These two facts mean it's worth knowing a few more things too, such as:

- the size of typical exposures and why they happen
- what they mean for fishing and how you will know about them
- what the offshore industries do to cover or protect an exposure

Having this in your head will help protect your gear and your safety, and prevent cables being damaged.

# What do we mean by 'exposed'?

When we talk about a cable exposure, we're covering a wide range of situations.

It could be 3-4 metres of cable no longer fully buried, or an exposure measuring 1 km or more, or a 'cable span' where the cable is suspended, unsupported, between two points. The cables involved could be export or array cables from wind farms, telecoms cables, or interconnector power cables.

# How does it happen?

When cables are laid, the depth of burial required is calculated using risk factors at the site such as seabed mobility, currents, scour and so on. A burial depth of around 1 metre is common, but less or more may be required in certain areas. Where burial is not possible, the cables may be protected by rock placements or 'mattresses'.

A 'post-lay' survey may check the lay, burial, crossings and rock placements. But even where cables are buried to the specified depth, they can still become exposed – and not through anyone's 'fault'.

Exposures could occur when:

- seabed mobility, currents and waves are higher than anticipated; meaning that sand waves occur or sediment erodes. This is most likely in areas where the seabed is sandier and the waters shallower, such as the southern North Sea
- cables cross each other, as it may be more difficult to bury or protect the crossing

- bottom-trawling, dredging or dropped / dragged anchors expose or move a buried cable
- a cable repair has taken place, which can be more difficult to re-bury

According to Merlin Jackson, who acts as Fisheries Liaison Officer (FLO) for several wind farms in South East England, the majority of exposures he has dealt with have been caused by weather and tide, but mechanical issues with cable laying and burial depths have also been responsible in some cases.

# What do exposures mean for fishing?

Any cable could be exposed at any point in time, so fishing over cables is not advised. An exposed cable creates increased risks in terms of snagging, loss or gear and cable damage, so any known exposure should be treated with great caution.

"I find fishermen are rightly cautious when fishing close to any subsea cable or structure and they do appreciate how this risk increases with exposures. Export cables in particular are very large and essentially immovable, especially for smaller inshore vessels," says Merlin.

# How do fishers know about them?

Exposures may be identified through surveys. On finding one, operators should notify Kingfisher so an alert can be put out on the Kingfisher Bulletin advising fishers to avoid the area. However, in dynamic areas especially, exposures can occur between surveys. With two exposures Merlin Jackson has liaised on, both issues were first spotted by a fisherman who knew the fishing grounds well and noticed changes on the seabed. He told Merlin, who alerted the operator.

# How are they fixed?

The type of remedial work used for exposures depends on the site and nature of the exposure. The possible fixes could include:

- remedial trenching to increase burial depth
- additional rock placement to cover the exposure, with the type and size of rock aiming to reduce risk to fishing gear
- installation of concrete or polyurethane mattresses to cover the exposure or protect a crossing against scour - e.g. 'frond mattresses' (with polyurethane fronds resembling seaweed) or tapered-edge mattresses that are designed to be overtrawlable
- buoys may also be used to highlight the area to fishers

Although the cable owner, or contractor, will have the expertise to decide on the most appropriate option, there should ideally be consultation with fishermen over which of these fixes is used. since each has pros and cons for different types of fishing.

In one case, says Merlin, a buoy close to an exposure on the Nemo Interconnector was moved after fishing liaison, so that it no longer blocked a drift area used by fishermen. In another case, an offshore transmission owner (OFTO) has agreed to trial frond mattresses to cover a cable exposure, rather than the original plan of rock berms which would have impeded bottom drifting.

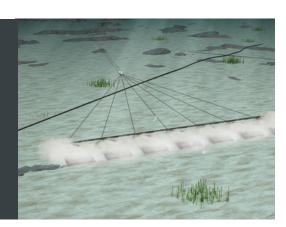
"In this case, the developers understood they needed to have those conversations with the fishermen before they decided what remedial measure they were going to use. But, in my experience, those conversations don't happen on every project, and it's important they do. The FLOs must be able to engage long before engineers make decisions," concludes Merlin Jackson.

# Stay alert

To protect fishers' lives and gear, and the cables themselves, it's vital to let people know if you become aware of - or suspect - an exposed cable.

Fishers should alert Fishing Liaison Officers if you think something's not quite right.

Operators / developers should alert the Kingfisher Bulletin at www.kingfisherbulletin.org/submit-notice



# What lies beneath: key pipeline issues for fishers

At any one time, you're likely to see a dozen or more notices on FishSAFE and Kingfisher Bulletin about pipeline activity and hazards. This is how the issues can occur and why you need to take them seriously.

The North Sea has around 45,000km of oil and gas pipelines – more than enough to do a complete circuit of the Earth. These pipes vary massively in size – measuring anything from approx. 4in to 4ft in diameter – and they may be laid onto the seabed, put in a trench or fully buried.

There's a never-ending programme of work activity that goes with these pipelines even after they are laid, including surveying them, maintaining them, replacing parts of them and, possibly, decommissioning them.

All of which affects fishing to a lesser or greater degree.

Here's a quick guide to some of the key issues around how pipelines are laid, and how they could affect you.

# How pipelines are laid - configurations on the seabed

## Surface-laid

The pipeline rests on the seabed fully exposed (or partly exposed if natural sediment or 'embedment' occurs).

### **Trenched**

The pipeline sits in a trench below the level of the seabed, fully or mainly exposed.

# Trenched and backfilled

The pipeline trench is 'backfilled', either naturally or mechanically, and the top of the pipe is below the ambient seabed level.

### **Buried**

The pipe is fully buried below the seabed, using either natural or plough backfilling.









Note that changes on the seabed can change the configuration of a pipeline – either burying it over time or partially uncovering it.

It's often believed that all pipelines with a diameter of 16in or less are buried, while those larger than that are surface-laid. There is some truth to this but, in reality, there are many different factors to consider when planning the installation of a subsea pipeline, including size, seabed, other oil and gas structures

in the area, and whether the area is fished. Therefore, each installation is different.

# **Trenching and burial**

There are various techniques available to trench and bury a pipeline. Commonly, a subsea plough digs a V-shaped trench; the pipeline is laid into it; and then the spoil from the trench is replaced using a backfill plough. Another method – used where the sand /soil are looser – is to lay the pipeline, then jet, plough or cut a trench under it. Natural or ploughed backfill should level the surface over it. During pipeline laying and trenching operations, fishing vessels are usually asked to maintain a 500m distance.

# Pipeline protection and hazards

In an ideal world, the seabed would be easily trenched, and then returned to its former shape. But that's not always the case. Sometimes trenching and burial are impractical, such as when:

- there are crossings along its length
- structures nearby mean it's not possible to get a plough into the available space

Then it's necessary to look at other ways to protect a surface-laid or partly-exposed pipe from being damaged, and to protect fishers from snagging risks. It's useful to understand the different types of protection used, in order to understand their implications for fishing.

It's also critical to understand the hazards that can exist – either as a result of the pipelaying techniques used, or where pipelines have become exposed.

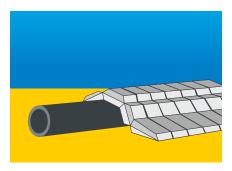
# **Protection**



# **Rock placement / berms**

When a pipeline cannot be trenched, it's common to protect it with rock. This could be along extended lengths, at specific spots, or at crossings. The idea is to create a stable 'bridge' structure, with sloping slides and a smooth profile. The design should mean rocks are not washed away by currents, and there should be nothing for gear to snag on, meaning it's overtrawlable.

**Disruption to fishing:** You'll see notices on FishSAFE / Kingfisher Bulletin about rock placement activity with details about safety, locations and timing. There are occasional cases of rock being placed wrongly, but post-lay surveys should reveal this.



### **Mattresses**

These are used to cover pipelines, generally for shorter lengths of, say, 50-100m, crossings and tie-in spools or jumpers (which connect a pipeline to a well). Back in the 1970s, these used to be bags filled with bitumen, but now they're concrete blocks connected together by polypropylene rope. Tapered edges are intended to make them fishingfriendly and overtrawlable. They are not normally used outside 500 metre Safety Zones; if they are used, they are usually covered with rock.

Disruption to fishing: You'll see FishSAFE and Kingfisher Bulletin notices about them being installed, or moved, but they're relatively easy to install so disruption should not be lengthy. You may occasionally see an alert where a mattress has been dropped or the edges have not bedded in properly, leading to a snagging risk.



## **Grout bags**

Sealed bags of grout, sand or gravel are used to fill gaps (including between mattresses), support pipe spans (see above), stabilise pipelines, or prevent problems with scour. They're usually positioned by divers and can come in different sizes smaller ones around the size of the sandbags used to protect homes against flooding through to larger bags around 1-2 tonnes in weight, and measuring 1m x 2m or more.

**Disruption to fishing:** You may see notices about them being installed (along with rock or mattresses), but in the main, their size means they're not a hazard.

Article continued overleaf >

# **Hazards**



# **Clay berms**

These are mounds of spoil pushed up after ploughing, and running alongside the pipeline (on both sides, or just one side). In some cases, the current will displace them in the months after trenching, but not always or only in places.

**Risks to fishing:** In the worst cases, trawl gear could foul on them, damaging the gear or spoiling the catch. Mechanical removal of the berms may be necessary if currents don't disperse them.



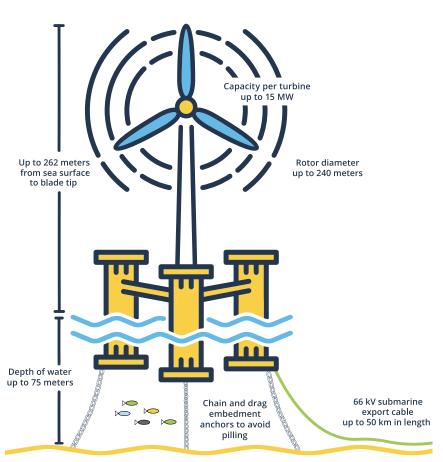
# Pipe spans or free spans

These are unsupported sections of pipe, where the seabed is irregular, or where sediment has eroded or scoured. What's done about them depends on the length of the span, size of the pipe, waves and currents, and whether the area is highly fished. Common solutions using grout bags and rock to fill the gap, support the pipeline and perhaps cover it.

Risks to fishing: Can be severe because trawl doors and towed gear can snag under them, causing damage to gear and threats to safety. You may see hazard notices on FishSAFE and Kingfisher Bulletin about spans that are unsafe for fishers, warning you to exercise caution in their area – it's a warning to take seriously! You may also see activity notices about work to remedy them.

# Floating offshore wind coming to the Celtic Sea?

Wales may be set to get its first floating offshore wind farm, after The Crown Estate awarded Blue Gem Wind the seabed rights to develop the Erebus demonstration project.



Drawing © David Jones

### **Timeline**





The WF will feature 7 to 10 turbines on WindFloat platforms, each secured to the seabed by anchors and chains.

The 'agreement for lease' area covers 43.5km<sup>2</sup>, though the developers say they plan to use 32km<sup>2</sup> or less. It's a 'demonstration project' to show the deployment of floating offshore wind (FLOW) at pre-commercial scale.

# **Consultation with** fishing industry

Floating wind is still very new for the UK's fishing industry. After all, it was only in 2017 that the world's first floating offshore farm opened, and that was the Hywind project off the north-east coast of Scotland. Given the newness, it's not surprising that fishers feel some trepidation about floating wind. This includes fears that fishing will be disrupted, or gear snagged or damaged on anchors or mooring cables for floating turbines.

Developer Blue Gem Wind (a joint venture between Total and Simply Blue Energy) is aware of these concerns and of the FLOWW (Fishing Liaison with Offshore Wind and Wet Renewables) Group's best practice guidelines. It says that fishing activity was a key consideration when designing the project, and data on commercial fishing activity was included in site selection.

It has appointed a local Fisheries Liaison Officer (FLO) to build relationships with local stakeholders, including Welsh and north Devon fishing organisations and individual fishermen, and local consultants are leading the offshore elements of the environmental impact assessment.

A public consultation began in November 2020 and runs until mid-December 2020. Due to Covid-19 restrictions, this has been done with a virtual exhibition room, rather than in-person events.

Current planned timelines include start of construction in January 2026, and of operations in January 2027.

### What can fishers do?

As with any offshore wind development, there will likely be some disruption to fishing during surveying and construction. So, what can you do?

### **Short term**

**Stay informed:** the project website (in English and Welsh), at www.bluegemwind.com. has plenty of information, including timelines and relevant planning and environmental impact paperwork.

**Get involved:** engaging with project consultations now will increase understanding of where and how you fish around the relevant area. This can feed into mitigation planning.

### Longer term

Be safe: watch out for information about the farm and any activity on KIS-ORCA and Kingfisher Bulletins. The Blue Gem website also has copies of all Notices to Mariners issued.



# Helping you keep watch.

Hazards, notices and personalised live alerts, all on your mobile. Sign up at **kingfisherbulletin.org** or **download the app** today.

