Submission 1

Regarding this application for survey I would like to make following submission.

This area is a important area for us for whelk fishing and I'm am afraid this survey will have a negative impact for me to keep running my business.

We fish whelk on the [redacted] from Howth.

Irish Whale and Dolphin Group (IWDG)

Dear Sir or Madam

Re: Foreshore licence application FS007134 Sea Stacks Offshore Wind ESB

The Irish Whale and Dolphin Group (IWDG) was established in December 1990 and is an All-Ireland group *"dedicated to the conservation and better understanding of cetaceans (whales, dolphins and porpoises) in Irish waters through study, education and interpretation".* While the IWDG is primarily concerned with cetaceans we have broadened our comments to include **all marine mammals**.

IWDG welcomes the opportunity to comment on this foreshore licence.

We would like to make the following points regarding the above foreshore application:

1. Page 15 5.2.2.5 – Auditory Injury – "*Southall et al. (2019) does not provide SPLs for non-pulsed sounds*" see Southall et al. (2019) page 154, Table 6 for a description of threshold levels for non-impulsive sounds.
2. Page 18. 7.1.1. "*For all surveys, a monitored zone of 500 m will be employed, i.e. if a marine mammal is observed within 500 m of the sound source* ". This is not correct for boomers, sparkers and airguns where a 1000m mitigation zone is required. Boomers and sparkers are considered SBPs (Sub-Bottom Profiliers) but the Irish guidelines regard these as seismic sources. Of course UHRS (Ultra High Resolution Seismic) and seismic borehole are unquestionably seismic.
3. Page 18 7.1.1 "*If the marine mammals do not leave the area, the survey vessel may alter its course to ensure that the animals are outside the monitored zone when the soft start commences*. " This appears that if animals are in a survey area breeding or feeding the survey vessel need only move further back to commence survey equipment and then proceed through them. While this is permitted by the guidelines it does constitute a deliberate disturbance under the Habitats Directive Article 12 as follows:

   Article 12(1) of that directive states:
   'Member States shall take the requisite measures to establish a system of strict protection for the animal species listed in Annex IV(a) in their natural range, prohibiting:
   - i. all forms of deliberate capture or killing of specimens of these species in the wild;
   - ii. deliberate disturbance of these species, particularly during the period of breeding, rearing, hibernation and migration;
   - iii. deliberate destruction or taking of eggs from the wild;
   - iv. deterioration or destruction of breeding sites or resting places.'

   Additionally it is an offence under the Irish Wildlife Act (1976) to hunt (chase or drive) or willfully interfere with, disturb, or destroy the resting or breeding place of a protected species. Therefore it is suggested that survey vessels should not be allowed to drive animals from their habitat and that a shutdown is in place to prevent this occurring as suggested.

4. Page 18 7.1.2 Ramp-up Procedure. "*once the ramp-up commences, there is no requirement to halt or discontinue the procedure at night-time,* " Survey activity should, where appropriate, terminate at the end of the line and commence again on new line again with a ramp-up where

possible. The lack of a meaningful ramp-up for much of this equipment necessitates a shutdown of equipment for marine mammals within the mitigation zone. Continuous shooting without a demonstrated need for data should be avoided and a mitigation system which allows night time starts is required. In the absence of this the DAHG (2014) guidelines require a shut down effectively if the line change to the next line is greater than 40 minutes.

5. Page 19 7.1.2.1 SBP Surveys – as before this depends on the equipment used according to the guidelines (DAHG, 2014). If Boomer, sparker or airguns the soft start time is 40 minutes, if chirper, pinger, muliti-beam or side scan the soft start time is 20 minutes.

6. Page 19 7.1.3.3 Typo "*SPB*" should be "*SBP*". But again the type of equipment being used needs to be clarified. Boomers and Sparkers are considered SBP and if halted for more than 10 minutes then a full pre-watch and soft start is required.

7. Page 19 7.1.3.4. UHRS and Seismic borehole surveys. "*Where the duration of a survey line or station change is greater than 40 minutes, the activity will, on completion of the line/station being surveyed, either cease (i.e., shut down) or undergo a reduction in energy output to a lower state where the peak sound pressure level from any operating source is 165 - 170 dB re 1 µPa @ 1 m or lower.*" This line is taken from the DAHG (2014) guidelines but is misleading as it is not possible to have a seismic source below 216 dB re 1 µPa @ 1 m, so this option is not available and best ignored.

8. Page 19 7.2. Drilling. The requirement of mitigation for drilling is questionable and it is recommended that measurement of sound levels should occur during drilling to assess the need for mitigation.

9. The survey area includes the Rockabill to Dalkey Island SAC which lists Harbour Porpoise as one of two qualifying interests, but this is not mentioned once in the document. This is a huge oversight. Should a Natura Impact assessment be carried out to assess the impacts on this SAC?

10. There are a number of foreshore licences currently under application, or having been approved, which may impact on the Rockabill to Dalkey Island SAC but there is no mention of these potential cumulative impacts. This is a large oversight.

As a general observation the distinctions made between different SBP equipment in the guidelines is not reflected in the document. Boomers and sparkers are treated as seismic, while pingers and chirpers are treated like multi-beam and side scan. It is not clear how the measures will prevent disturbance of protected species, simply starting further back to remove animals from the habitat as suggested, causes inconvenience to the survey, but has the same outcome in displacement of marine mammals from habitat. Whether such a disturbance is trivial or not is impossible to say but some attention should be given to the document produced by the JNCC (2020) with DAERA and

Natural England on disturbance, which suggests a disturbance zone for 5km for harbour porpoise. While less impact than a seismic survey it is hardly trivial.

It is felt that lack of any apparent knowledge that the survey impacts an SAC with Harbour Porpoise as a qualifying interests, which is now to be subjected to repeated human pressure from survey activity and construction activity for a number of years, renders it unsuitable for approval in its present form. Indeed mitigation within and adjoining the SAC needs to be improved if such activity is to permitted to continue.

Yours sincerely

[redacted]

IWDG MMO Officer

[redacted]@iwdg.ie

References

DAHG (Department of Arts, Heritage and the Gaeltacht) (2014). Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters.

JNCC (2020) Guidance for assessing the significance of noise disturbance against Conservation Objectives of harbour porpoise SACs. JNCC, Natural England and DAERA [online] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/889842/SACNoiseGuidanceJune2020.pdf (accessed 07/01/2022)

Southall B.L., Finneran J., Reichmuth C., Nachtigall P.E., Ketten D.R., Miller J.H., Bowles A. E., Ellison W.T., Nowacek D.P., Tyack P.L., 2019. "Marine Mammal Noise Exposure Criteria: Updated Scientific Recommendations for Residual Hearing Effects." Aquatic Mammals 45(2): 125-23

Objection to Application for Site Investigation Licence ref: FS007134

ESB Wind Development Limited has applied for a Licence to carry out site investigations relating to a possible wind farm on a site named "Sea Stacks Offshore Wind", situated off the coasts of Dublin and Wicklow.

Reasons for my objection are:

- the proposed site investigation is too big, too close to shore and out of line with good international siting practice for a large-scale offshore windfarm
- it is inappropriate and premature for site investigation to be carried out on a site selected by ESB Wind Development, rather than the Irish Government properly defining and managing its offshore resources in the interests of the Irish people and the rich foreshore ecology
- the need for Geophysical and Geotechnical Surveys, Oceanographic & Metocean surveys, Environmental/Ecological & Archaeological Surveys all require the disturbance of the wide-ranging ecology of the foreshore. Such pre-emptive site investigation in Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) would render the Maritime Area Planning Bill 2021 null and void
- any proposal for such a massive industrial development should be within the context of new foreshore legislation being in place and enforceable **prior** to site investigation licences being issued. And once in place, being put out to Tender in line with government contracts. Failing this, it allows developers to drive the development agenda rather than the Irish Government managing its resources on behalf of the Irish people

The Adela-Hare Centenary Commemoration Committee

Please see attached our committee's observations/submission and three pieces of supporting documentation as it relates to the application submitted by ESB Wind Development Limited to undertake site investigations at 'Sea Stacks Offshore Wind' situated off the coasts of County Dublin and County Wicklow.

We hope that the Department of Housing, Local Government and Heritage will give this matter it's full intention and take on board the points raised. We would ask for confirmation that our committee's observations/submission was received as part of the consultation process.

Submission

On the behalf of The Adela-Hare Centenary Commemoration Committee, we wish to make the following observations regarding the application submitted by ESB Wind Development Limited to undertake site investigations at 'Sea Stacks Offshore Wind' situated off the coasts of County Dublin and County Wicklow. These sites investigations include geophysical surveys, geotechnical surveys, oceanographic & metocean surveys and environmental/ecological & archaeological surveys.

Background/Shipwrecks

The Adela-Hare Centenary Commemoration Committee was established in 2017 to commemorate the loss of life associated with the sinking of two Dublin Bay vessels in December of 1917, the S.S Hare (Dublin Bay) and the S.S Adela (Holyhead, Wales). The S.S. Hare is one of the shipwrecks that lies within the foreshore licence application boundary area.

On the 14th of December 1917, the S.S Hare was torpedoed with the loss of twelve lives. Just two weeks later the S.S Adela was torpedoed with the loss of twenty-four lives. The Adela-Hare Centenary Commemoration Committee included family members of those lost, the local Dublin Port community and historians. It worked in conjunction with Dublin City Council to mark the centenary, and forged links with local authorities in Wales and the German Embassy. The actual commemorative events in 2017 were attended by the Lord Mayor of Dublin, the Lord Mayor of Holyhead, and a representative of the German Embassy in Ireland. Our remembrance service was also expanded to include the S.S William Barkley, the first of the iconic Guinness fleet torpedoed on the 12th of October 1917 with the loss of five lives. It too is another shipwreck that lies within the foreshore licence application boundary area.

It is important to note that these vessels still lie on the seabed and in most cases the remains of the crew members lost have never being recovered, and for many families represent the final resting place of their relatives. Attached is a PDF copy of a commemorative publication that our committee published to mark the centenary of the sinking of the S.S Hare and S.S Adela and is entitled 'Within the Seat of War'.

This foreshore licence application, if given the go ahead, has the potential to impact on several known and unknown wrecks. We have grave concerns about the scale of the geotechnical and geophysical site investigations to be undertaken and the potential impact these investigations will have on the existing marine archaeology. We would like to draw your attention to the attached publication entitled 'Archaeological Written Schemes of Investigation for Offshore Wind Farm Projects' dated July 2021 which addresses the issue of offshore windfarms and marine archaeology and is a guidance document from a United Kingdom perspective.

Internationally there is a train of thought regarding legacy shipwrecks with an emerging viewpoint that shipwreck sites offer a potential to be used as memorials and to be recognised as maritime war graves. Shipwreck sites in which there may be human remains need to be treated with dignity and respect. For descendants of those who were lost at sea and went down with the ships to be found in the study area, these shipwreck sites are perceived as grave sites with emotional and psychological connections going back generations. For so many families these wreck sites are all that they have in marking the final resting place of a loved one, whether that be a great-grandfather, a grandfather, an uncle, an aunt, etc.

We would strongly urge that in conducting any works associated with the geotechnical and geophysical site investigations that full respect is shown for not just these vessels/shipwrecks but all vessels/shipwrecks in a comparable situation and that all necessary measures are taken to fully survey known and unknown shipwrecks and to prevent their disturbance.

UNESCO Biosphere Status/Tourism

In 1981 and again in 2015, Dublin Bay was named a biosphere reserve by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) in recognition of Dublin Bay's unique ecological habitat and biological diversity. According to UNESCO, a biosphere reserve is an area of land which protects ecosystems while encouraging local development through nature conservation.

At the time of designation, the then Minister for Jobs, Deputy Richard Bruton T.D., said he hoped that Dublin Bay's new status would "*act as a magnet*" for tourists to visit the heart of the Dublin City and learn about the Dublin Bay's unique wildlife.

Ireland being an island nation has a coastline that attracts both home and oversee visitors to beaches, cliffs, and long-distance paths every year. Distant views out to sea are very much a part of this attraction. Ireland's coastline provides an especially important economic asset for coastal communities that often rely upon it for tourism related activities. The government recognises the need to revitalise coastal communities and the importance of encouraging new and sustainable enterprises. The coastline and sea views help to attract tourist visitors which in turn support these coastal communities and their economies. Not everyone enjoys the sight of industrial machinery, especially offshore wind turbines, in the seascape. Many would prefer to see the natural landscape unblemished and unspoilt.

These geotechnical and geophysical site investigations will no doubt in time will assist the follow on offshore wind farm development and thus it is important to question what will be the impact from a tourism, ecological and maritime perspective.

Ecological/Biodiversity

It is our committee's concern that the proposed geotechnical and geophysical site investigations and follow on offshore wind farm development have the potential to cause permanent damage to the fragile sand banks and the associated ecology/biodiversity to be found in the Irish Sea.

According to ESB Wind Development Limited the eventual 'Sea Stacks Offshore Wind' development will be located 12km offshore from the shoreline. This is far closer than the norm across the EU when it comes to similar offshore windfarm development projects. The visual impact of offshore wind turbines within 12km of the shoreline would be a significant issue from both a visual and tourism perspective.

This investigative foreshore licence application for geotechnical and geophysical site investigations would impact negatively on the following Natura 2000 conservation sites:

- Howth Head Coast SPA [004113]
- South Dublin Bay and River Tolka Estuary SPA [004024]
- North Bull Island SPA [004006]
- Dalkey Islands SPA [004172]
- The Murrough SPA [004186]
- Howth Head SAC [000202]
- South Dublin Bay SAC [000210]
- North Dublin Bay SAC [000206]
- Rockabill to Dalkey Island SAC [003000]
- Bray Head SAC [000714]
- The Murrough Wetlands SAC [002249]

The proposed geotechnical and geophysical site investigations and follow on offshore wind farm development have the potential to cause permanent damage to the fragile sand banks off the east coast of Ireland thus impacting on the above Natura 2000 conservation sites and their associated ecology/biodiversity status. the coastline would be under serious threat from loss of the protection that the sand banks offer the coastline

The disturbance of placing turbine foundations so close to sensitive protected conservation sites and species along the coast has potential to create difficulties when it comes to the installation of cables necessary to get the power ashore. The sea bottom preparation for wind turbine foundations and cable laying activities during the eventual construction phase will cause destruction and disturbance of the local benthic fauna and flora.

Indeed, we would like to draw your attention to the attached publication entitled ‘Problems and Benefits Associated with the Development of Offshore Wind-Farms’ OSPAR Commission 2004 and to pages 15 to 18 in which it summarises possible impacts of offshore wind farms on the different parts of the environment including biodiversity are described in general.

The proposed geotechnical and geophysical site investigations and the eventual construction and operation of an offshore wind-farm can potentially have an impact on the hydrography and the geomorphology surrounding the offshore windfarm area. An offshore wind farm may change the water flow and the sediment properties in the area. The resistance from the foundations of wind turbines may influence the current and wave conditions in the wind farm area and this may influence the rate of erosion and deposition of sediment in the area which could have a bearing on the surrounding ecosystem and marine archaeology, in particular shipwreck sites. The potential impacts on local hydrography may also affect the coastal morphology in the area, due to changes in current conditions and erosion and deposition of material.

Consultation Process

We do note that prior to submitting the investigative foreshore licence application, ESB Wind Development Limited, have not undertaken any consultation process specifically with any consenting authorities such as planning authorities, Commission for Energy Regulation, etc., in relation to the scope of this foreshore licence application. This seems very particular, and one wonders if their current investigative foreshore licence application is somewhat premature in purpose.

Conclusion

In conclusion, we believe this foreshore licence application and as such should be disregarded as ESB Wind Development Limited have not undertaken any consultation process with any consenting authorities such as planning authorities, Commission for Energy Regulation, etc., which is a legal requirement. These geotechnical and geophysical site investigations will impact on very important NATURA 2000 conservation sites and will undermine the importance status of Dublin Bay as a UNESCO Biosphere.

We believe also that the proposed development of offshore wind farms at this time is premature given the lack of an up-to-date legal and governmental framework for such development and should be put on hold until such a framework is in place.

We would therefore ask that this foreshore licence application be refused accord

Documents attached to submission:

1. OSPAR Commission 2004, "Problems and Benefits Associated with the Development of Offshore Wind-Farms" available at URL: https://www.ospar.org/documents?v=6991
2. The Crown Estate 2021, "Archaeological Written Schemes of Investigation for Offshore Wind Farm Projects" available at URL: https://www.thecrownestate.co.uk/media/3917/guide-to-archaeological-requirements-for-offshore-wind.pdf
3. The Adela-Hare Centenary Commemoration Committee 2017, "Within the seat of war"

Submission 5

Cllr. Derek Mitchell

I support this licence application in principle. The documents are written as if this is off Co Dublin. In fact the main visual impact of the completed wind farm is off Co. Wicklow. The impacts and the approach need to be guided by that fact.

Impact on onshore vistas; Greystones 59 degrees Arc of View, Bray 63, Killiney 63, Dun Laoghaire 18, Howth 47. The turbines probable area is closest, 12 km, to Greystones, closer than Howth or any Dublin Area. In addition from Greystones the Arc of View of the Dublin Array proposal is 65 degrees and Codling 48 degrees. In combination this would result in a 113 degree line of turbines off Greystones taking up most of the sea view, the worst visual degradation of any town. See chart below for details.

These turbines are likely to be 310m tall, much higher than the main visual feature of the area, Bray Head, which is 240m high. The Foreshore licence needs to insist on a gap of at least a 15 degree Arc of View Gap, viewed from Greystones, between the wind farms to reduce the visual impact.

Other aspects, indicate a Dublin only approach;

- Accompanying Report; 1.1 states located East of Co Dublin.
- Section 4 lists all Sailing/Yacht Clubs, all in Dublin but not mention Greystones. There are also many other marine leisure users here.
- Documents not in Greystones Garda station only Bray. Both Codling & Dublin Array displayed in Greystones.
- No presentation made to Greystones Municipal District unlike the other 2 proposals.
- Bray Head is an area of Outstanding National Beauty, a Special Area of Conservation, a Special Amenity Area Order and a proposed National Heritage Area. It is not mentioned in the application unlike such areas in Dublin.

The Foreshore Licence for the survey should strongly encourage use of Greystones Harbour by under 30m vessels. Both Codling & Dublin Array kept some survey vessels in Greystones. There is a need to establish a connection and a benefit to the town in terms of business, jobs and trade if we have to have the turbines imposed in a prominent part of the vista.

Arc of View of Wind Farms from Towns in degrees

	Greystones	Bray	Killiney	Dun Laoghaire	Howth	Wicklow Town
Sea Stacks	59	63	63	18	47	
Dublin Array	65	68	68	18	30	Plus 16
Codling	48	32	26	0	Plus 6	44
Combined	**113**	**100**	**94**	**18**	**53**	**60**

Relationship to Dublin Array. The visual impact of this is hard to separate from that of Dublin Array in view of it location, it is strange that the State is being asked to issue 2 Foreshore Licences for almost the same location.

Cable Survey routes. The plan is to survey cable routes into Dublin. The benefit of 'Green power' should be used to help Wicklow in view of so much of the turbines being off Co.Wicklow. At NewtownmountKennedy, by the 230kv ESB line, there is full planning permission for a data centre which probably has no grid connection offer. A route should be surveyed there for the cable. That site could also be planned to have emergency generating facilities. This would provide an economic benefit to the area in compensation for the visual loss.

General. Windfarms encounter local resistance in very many communities, including loud campaigns against them in Wicklow and other counties. Previous thermal power stations had major local benefits including jobs, trade, substantial rates to provide local services and giving the communities a sense of purpose. This is lacking in offshore wind which will provide few jobs, except where the base is, but will have a large visual effect on a wide area. Communities need to feel connected to it, need to see the benefit locally from the particular wind farm and be persuaded to accept it, even like it. A sense of ownership not imposition is needed.

This is best done through local involvement especially in the early stages through the planning and building phases. I represent Greystones, Kilcoole & Newcastle with about 30,000 population, most of whom will see the turbines. About 1,000 people use boats for leisure. 500 or more swim in the sea regularly and 1,000s walk beside it. About 5 people, including skipper & crew, are commercial fishers. The needs of this very small group should not distort the consultation and benefits to be given to the local population.

The Sea Stack wind farm is near the centre of demand for electricity and thus economical. Consequently they are near to and will be seen by large numbers of people unlike most on shore ones which are remote. The towns of Greystones & Bray have invested much in creating promenades, boardwalks and harbours, it is very much a central part of their offering. This proposal must not damage that.

Submission 6

Augustus Cullen Law on behalf of East Coast Fishers (24 listed/named Fishers with 23 vessels)

Reference is quoted in the submission header: Reference Number: FS007134 ESB Wind Development Limited Site Investigations at Sea Stacks Offshore Wind off Dublin and Wicklow

East Coast Fishers Objection to ESB Wind Development Limited Site Investigations at Sea Stacks Offshore Wind off Dublin and Wicklow

Dear Sirs,

We are instructed to file this objection on behalf of East Coast Fishers including the following: (1) [redacted] of [redacted] , (2) [redacted] of [redacted], (3) [redacted] of [redacted],(4) [redacted] of [redacted] ,(5) [redacted] of [redacted], (6) [redacted] of [redacted] , (7) [redacted] of [redacted] , (8) [redacted] of [redacted] and (9) Irish Popcorn & Snackfood Co. Ltd of [redacted] and [redacted]. (11) [redacted] of [redacted], (12) [redacted] of [redacted] ,(14) [redacted] of [redacted], (15) [redacted] of [redacted] , (16) [redacted] of [redacted], (17) [redacted] of [redacted] (18) [redacted] of [redacted] and (19) [redacted] of [redacted] (20) [redacted] of [redacted] (21) [redacted] of [redacted] "East Coast Fishers" (22) [redacted] and [redacted] of [redacted] and [redacted] (23) [redacted] (24) [redacted].

RE: Application of windfarms Survey in the Irish Sea ESB Wind Development Limited Site Investigations at Sea Stacks Offshore Wind off Dublin and Wicklow

Primary Concern

We have been retained by the fishermen whose names and vessels are set out [Above] fishermen primarily from the East coast Sea Stacks, Dublin Array, Kish ,Wicklow, and Arklow area. Our clients are increasingly concerned at the far reaching proposals for wind farms in the Irish Sea. They see major lacunae and neglect in the approach of the sponsoring companies to their opportunity, income and livelihoods in fishing in the Irish Sea.

National policy implications

The nature and extent of this application and related adjacent applications by other Wind Farm

Companies are of such a scale that a comprehensive framework is required if these developments are to proceed in a manner consistent with the interests and constitutional rights of traditional fishermen, navigation and the community generally.

The development of wind energy is important strategically and economically. It requires an coherent and joined up approach which gives due regard to the interests not just of wind power developers and the exigencies of energy planning, but also to the impacts on the marine environment, on fishing activity and the livelihoods of the fishermen who have traditionally made their livelihood from fishing in the area.

The following issues arise:

1. Nature and extent of the applications
2. Stages of Development: surveys, construction, development and operation.
3. Impact on fishers - fisheries impact assessments
4. Impacts on Environment
5. Exploitation of marine resources.

1. Nature and extent of applications

The applications for foreshore licences cover substantial areas in the immediate vicinity of the East Coast of Ireland and in particular in this application Sea Stacks, Dublin Array , Bray Banks and Kish. It is also clear that significant areas of the Exclusive economic zone outside the foreshore area may be absorbed or impacted by wind farms. They are included in this geotechnical surveys. If the true impact of these developments is to be assessed, then it should not be done on a piece meal basis, but it should be done in an integrated way. This will involve both the Foreshore Acts 1933 as amended and the Continental Shelf Acts. It appears that some of the proposed development and surveys may extend beyond the Foreshore and into Ireland's exclusive economic zone on the Continental Shelf and require careful statutory processes to avoid an ultra vires situation. It must take into account the MARA Act and National and EU policy documentation and Marine Spatial Plans

2. Stages of Development

The proposed developments will have different impacts as they progress. It is necessary to distinguish four stages as follows (a) the surveys stage, (b) the physical planning stage, (c) development stage and construction, and (d) the operating stage. It is suggested that a coherent and consistent approach to the each of these stages should be mapped out, so that all those concerned and affected by these major developments are in a position to take an informed view. In what follows below we concentrate on the fisheries and environmental aspects

3. Impacts on fishers.

Of critical concern to us is that the current daily users of the Irish Sea, the fishermen we represent, who use it as a workplace have not been consulted adequately in the process to date. Their concerns relate to the impacts of each of the stages of large-scale development identified in paragraph 2 above. These impacts concern (i) the potential loss of opportunity to fish, (ii) the loss of income and, (iii) ultimately the loss of livelihood. If these developments are to proceed in a manner consistent with established rights of local fishers, it is imperative that the agencies of the state ensure that mechanisms are put in place to vindicate the fisher's rights. We believe that inter alia, this requires an independent assessment of the impacts in paragraph 3 on fishers at each of the stages mentioned at paragraph 2. We believe that to expedite development the most effective means would be to put in place a mediation process to compensate for those losses at each stage. Ideally a national strategy and framework would be negotiated and agreed.

4. Impacts on the environment.

A major consideration in assessing these applications must be evaluation of the likely impact of developments of this scale on the spawning beds and fishery grounds in the area being assessed for proposed development. It is suggested that the parameters of the exploratory work should be in partnership with the existing users, and not independently of them and their ongoing activities. Our fisher client report to us that they catch since the last RWE survey is down 40% to 70% . This devastating damage to whelk and other fish stocks since the last survey needs to be independently investigated . Our fisher clients firmly believe this reduction is a consequence of the last RWE survey . Our clients are willing to liaise with the evidence of their reduced turnover with an investigation by you. Our client's experience is that after each sonic survey the whelk disappear from the surveyed area for at least 2 years . The loss and damage from construction and operation stage is likely to be far greater. Our clients experience of the existing underwater power cables is that there is no fish life within a half mile of each side of the existing power cables . When Turbines are constructed safety regulations and 4.5 knot tides make it too dangerous for fishermen to operate near or between turbines. Evidence of the decline of fish stocks caused by the surveys is the reduction of the fish factories (Sofimar and Errigal) from 7 days per week to 5 days per week.

5. Exploitation of wind resource.

The offshore wind resource is a national marine resource in much the same manner as fish or hydrocarbons. It therefore raises issues regarding exploitation and distribution of benefit.

Proposal for a way forward

We have identified the following as critical:

1. Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 envisages maritime spatial planning as a cross-cutting policy tool enabling public authorities and stakeholders to apply a coordinated, integrated and trans-boundary approach. At the core should be a national strategy, a National Marine Spatial plan, drawn up in consultation with the competing economic interests, and those effected by the possible or probable Marine development. Members of the public should be afforded the opportunity to input and comment on any draft plan. The adoption of such approach would be a matter for government, as well as EU level, much as the County Development Plans are a matter for local authorities. Such an approach could consider in a holistic way, not just the distribution of economic benefits, but also environmental impacts, the impacts on fishing communities, impacts on Navigation, the impacts of exclusion zones and so forth.

2. Financial and compensatory arrangements in relation to the short, medium and longer term should be independently assessed and developed to address the loss of opportunity to current economic players , and in particular fishermen for their loss of opportunity during exploratory work , and their loss of income during development, and any loss of livelihood consequent on operation of the wind projects. It is our clients' sincerely held view that their traditional fishing industry , particularly whelks, crabs and lobsters will cease to exist because these fish stocks will be wiped out .Their traditional livelihoods will be ended . The new wind industry will displace and destroy this traditional whelk , crab and lobster fishing industry . Such displacement and destruction is not authorised by Marine Spatial Plan but unless duly considered it will happen by stealth and neglect. Any good wind developer must be asked as part of their survey application be asked to take on board the likely demise of this fishing industry.

3. Appropriate environmental studies should be identified in conjunction with fishers and scientists and concluded before embarking of elements of these projects which might have unassessed impacts.

Conclusion

It is of concern to our fishing clients that consents are being considered and granted on a piecemeal basis without due consideration for our clients' industry interests as stakeholders in the Irish Sea.

The projects now being contemplated involve a major incursion into the Irish Marine area. As such it would be appropriate to agree an overall approach and principles. A collaborative consultative process with the fishers being impacted could be used to guide developments and take proper and timely account of impacts, and avoid the dislocation and delays which failure to involve the affected

fishermen will trigger.

On behalf of our fishers clients, we would ask to be included in a meaningful process in relation to the impacts on our clients, with a view to a mediated resolution of the income and opportunity issues which these proposed developments raise for our clients.

There is a parallel between the manner in which it was necessary to articulate a policy in relation to offshore hydrocarbon exploration. It is pointed out that the environment and economic implications of wind power development could be at least as significant - possibly even more so.

This is an opportunity for the relevant Departments to take a leadership role and balance and mediate a pragmatic co-existence relationship and financial framework between the fishermen and the Windfarm developers.

We look forward to hearing from you.

Irish South and East Fish Producers Organisation

As a representative of the fishing industry which is by far the most adversely affected sector in the development of offshore wind energy. I am asking you to make as a condition of any foreshore license granted that the fishing industry should be consulted at every stage of the survey and development process.

Yours Faithfully

[redacted]

CEO

Irish South and East Fish Producers Organisation

Submission 8

Consenting Observation Submission

FLA Sea Stacks Offshore FS007134,

for Site Investigation Works, by

ESB Wind Development Limited (ESB)

Prepared by:	Reviewed by:	Accepted by:
OCEAN WINDS, Development Consenting Unit Ocean Winds Ireland: Osprey Business Centre, Devoy Quarter, Naas, Co. Kildare, W91 X40K		

Revision	Date	Purpose of the revision	Updates
Final	28/01/2022	Final Submission	

Contents

1.0 Introduction

1.1 On behalf of the Ocean Winds and its Irish affiliate ("**OW Ireland**") and Réalt na Mara Offshore Wind Farm (previously named Cailleach Offshore Windfarm Ltd, "we hereby wish to make a Consenting Observation Submission to the Foreshore Licence application (FLA) Sea Stacks Offshore application (reference: **FLA SS FS007134 Application**"). This submission is in accordance with the provisions under the Foreshore Act 1933, and advertised statutory public consultation period: 23rd December 2021 and 30th January 2022, as submitted to the Department of Housing Local Government and Heritage (DHLGH), Foreshore Unit, by the applicant ESB Wind Development Limited ("**ESB**").

In March 2021, Ocean Winds submitted an application to DHLGH for a Foreshore Licence to undertake marine site investigation activities consisting of surveys, including geophysical, geotechnical, environmental, metocean campaigns (FLA application reference: **FS007330**). Ocean Winds welcomes this opportunity to make a submission on the FLA Sea Stacks Offshore FS007134 application for a consent for Site Investigation Works. OW Ireland is proposing the development a 1.6GW offshore wind project as further described in Réalt na Mara Offshore FS007330 Application (the "**Réalt na Mara Project**").

1.2 Ocean Winds wish to acknowledge the proposed development survey works. It is submitted that OW and the applicant ESB, have a shared interest in the strategic development of offshore wind in Ireland and specific to the subject FLA SS FS007134 Application area.

1.3 OW Ireland is a contributor to and active member of the Offshore Renewable Energy industry in Ireland and in neighbouring Scotland, Europe and Globally. OW Ireland along with our fellow industry members, is an advocate and proponent who fundamentally support's Ireland's decarbonisation agenda in accordance with national and EU targets. OW supports the transition to a cleaner energy supply for Ireland in line with the Offshore Renewable Energy Development Plan (OREDP, 2014), Climate Action Plan (2021) and the National Marine Planning Framework (Project Ireland 2040) (NMPF, 2020). The NMPF Chapter 13: Energy Offshore Renewables sets out the key objectives and ORE (Offshore Renewable Energy) Policies including the following objectives:

- *Support the development of ORE in Ireland as a driver to significantly reduce greenhouse gas emissions and accelerate the move to cleaner energy in line with national and EU policy.*
- *Increase the sustainable ORE use of our extensive marine resource in an efficient and co-ordinated manner identifying, where possible, potential for synergies and opportunities for multi-use of our shared maritime area.*
- *Support Ireland's decarbonisation journey through increased use of ORE while delivering significant and sustained benefits, import substitution, fiscal return, national and local economic development and technology learning.*
- *Support the strategic growth of the ORE industry recognising the potential to derive benefits particularly for Ireland's coastal communities.*
- *Provide enhanced security of energy supply for Ireland in the short and medium term, in accordance with the Climate Action Plan.*

1.4 With specific reference to FLA Sea Stacks Offshore FS007134 Application, it appears that ESB proposes to use the Site Investigation to inform and as part of their planned bottom fixed Offshore Wind project for development at the subject location. Under our Réalt na Mara FS007330 Application mentioned above, Ocean Winds, has also submitted (in March 2021) an FLA application that primarily overlaps and exceeds beyond the application area that is the subject of the FLA SS FS007134 Application. In addition, OW Ireland will be subject to the future grant of applicable permissions to undertake surveys to as part of the development and progression of the Réalt na Mara offshore wind farm Project.

See Figure 1.1 and Figure 1.2 below for the Réalt na Mara Project and the ESB Foreshore Licence Applications Areas, respectively.

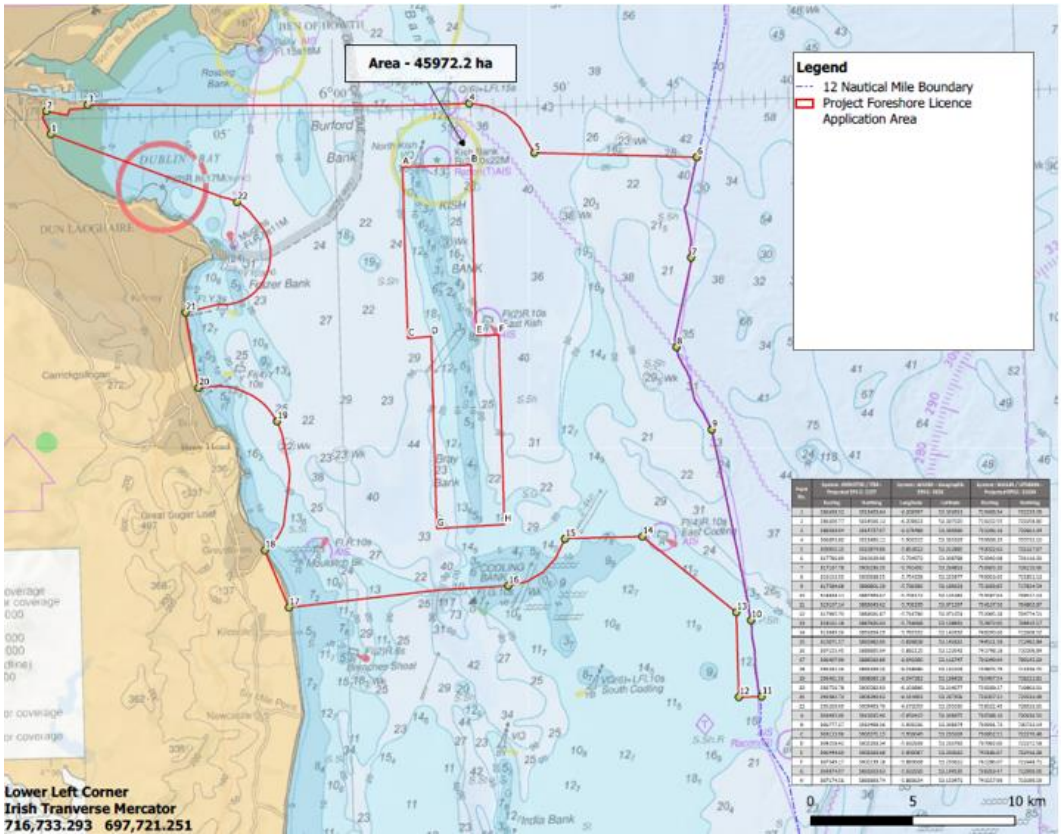

Figure 1.1 - Foreshore Licence Area proposed by Ocean Winds (in red) for the Réalt na Mara Offshore Wind Farm

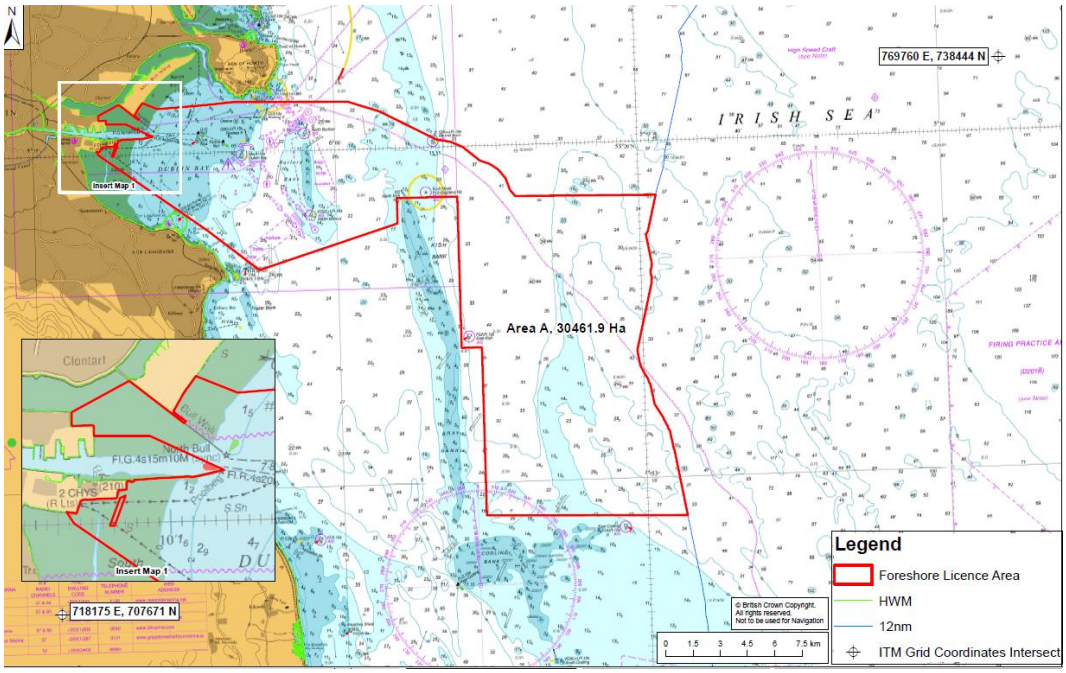

Figure 1.2 - Foreshore Licence Area proposed by ESB Wind Development Limited (in red)

1.5 It is submitted that circa 80% of the Foreshore Licence Area proposed by ESB (see Figure 1.2) under the FLA SS FS007134 Application overlaps with the Foreshore Licence Area proposed by Ocean Winds (see Figure 1.1) under the Réalt na Mara FS007330 Application. Specifically, the array investigation area proposed by ESB falls wholly within the Foreshore Licence Area proposed by OW Ireland for the Réalt na Mara Project under the Réalt na Mara FS007330 Application. In addition, the cable investigation area proposed by ESB covers a significant portion of one of the potential cable route options for the Réalt na Mara Project located in the Northern Area at Poolbeg Substation.

1.6 Please note that OW Ireland are open to and welcomes ongoing discussion with DHLGH as and when requested, and to develop proactive and engaging relationship with all stakeholders, including ESB, DECC, MARA (when established) and other relevant Licence/ Leaseholders to coordinate marine investigation activities. Such engagement will of course be without prejudice to the DHLGH's ongoing decision-making processes and any future investigation surveys, or the granting of relevant consents and licences.

2.0 Who We Are – Ocean Winds?

2.1 Ocean Winds is the result of a 2019 joint venture by EDP Renewables (EDPR) and ENGIE. Both companies share the vision in which renewables, particularly offshore wind, play a key role in the global energy transition. That is why they created a 50-50 joint venture for offshore wind. All the existing and pipeline offshore wind projects portfolio of both companies have been included in the new Ocean Winds company, with a total of 1.5 GW under construction and 4.0 GW currently under development. Ocean Winds aim to reach 5 to 7 GW of projects in operation or under construction and have 5 to 10 GW under advanced development by 2025. The Ocean Winds business mainly targets markets in Europe, the United States and also in selected locations in Asia.

2.2 Recent successes of Ocean Wind and our partners in neighbouring Scotland include the construction, commissioning and operation of the 950MW Moray East Offshore Wind Farm in June 2021, the Development of Morray West and the circa 860MW Morray West Offshore Wind Farm and the 1GW award as part of the Scotwind Seabed Auction for the new bottom fixed 1GW Caledonia Offshore Wind Farm located in the outer Moray Firth, in Scotland.

Joint Venture Company Information: About EDPR

2.3 EDPR has a portfolio of 12.6 GW of installed renewable energy capacity spread across 13 geographies. Its wind operations are headquartered in Edinburgh, Scotland, which was established in 2010. EDPR has been developing the Moray East Offshore Wind Farm in the Moray Firth, Scotland, which is currently in construction and has a capacity of 950 MW, with completion aimed at 2022. The Moray West Wind Farm Project, adjacent to Moray East has an expected future output of 800MW, was awarded the required consents and is at the stage of refining engineering and evaluating a route to market in advance of commencing construction. Other EDPR international projects involved development of offshore wind projects in France, Poland, the USA and Korea. EDPR also had a pioneering role in the development of floating offshore wind, through a project off the coast of Portugal, WindFloat Atlantic, which represented the first floating offshore wind turbine in the Atlantic Ocean and has continued to support the development of floating offshore wind e.g. by developing further pilot projects in France and Portugal and securing floating offshore wind projects in the USA and Korea.

Joint Venture Company Information: About ENGIE

2.4 ENGIE is a global energy company operating in almost 70 countries and having launched several wind projects around the world, with approximately 33 GW of installed capacity in renewables by 2021. ENGIE is currently investing in major offshore wind projects, both bottom-fixed and floating with the aim of leading in renewable technologies, such as offshore wind energy. The company is both an energy trader and a licensed supplier selling to business customers in the United Kingdom. Its power purchase included Scottish windfarms, including the largest community owned renewables project - Point & Sandwick Trust. ENGIE projects in France include developments offshore of Le Tréport, Yeu and Noirmoutier islands and Dunkirk. It is also part of a consortium selected by the French government to develop and install two offshore wind farms with a total capacity of approximately 1,000 MW.

3.0 Context - Réalt na Mara Offshore Windfarm

3.1 In progressing the Réalt na Mara Project, OW Ireland submitted the Foreshore licence investigation application (FS007330) Application in March 2021 to the DHLGH (Foreshore Unit). The purpose of the FS007330 Application is to investigate the feasibility of developing an offshore bottom-fixed wind farm in the west Irish Sea, off the coast of Wicklow and areas under the local authority management of Dun Laoghaire-Rathdown,

Dublin City, Wicklow and Fingal County Councils. The Project will include studies of areas both inside and outside of the 12 nautical mile (NM) territorial limit. In that respect we refer you to the specific geographic areas set out in Réalt na Mara Offshore FS007330 Application; the licence application relates to the area within the 12 Nautical Mile limit only (i.e., within the foreshore). The Réalt na Mara Project is a key part of OW's wider portfolio of strategic offshore wind developments in Ireland.

3.2 Three potential landfall locations were included under the Réalt na Mara Offshore FS007330 Application, including the Northern Area (located at Poolbeg Substation). As noted earlier in the report overlaps with the subject FLA SS FS007134 Application cable route area, the other two landfall locations include the Central Area (located in Shankill area – south of Killiney and north of Bray), and Southern Area (located south of Greystones). Figure 3.1 shows the entire array investigation area and the location of these landfall options for the Réalt na Mara Project export cables and the resultant Proposed Cable Route Area. See Figure 3.1 and note that they only represent potential and indicative routes and are for illustrative purposes only.

3.3 Since 2019, Ocean Winds Ireland has been progressing the development of the Réalt na Mara Project. The company is fully committed to the future development of the Réalt na Mara Project and has made significant commitments, investments and resources available to facilitate preparatory studies, surveys and work to date. The OW Ireland, Réalt na Mara Offshore FS007330 Application is anticipated to go on public display in the near term.

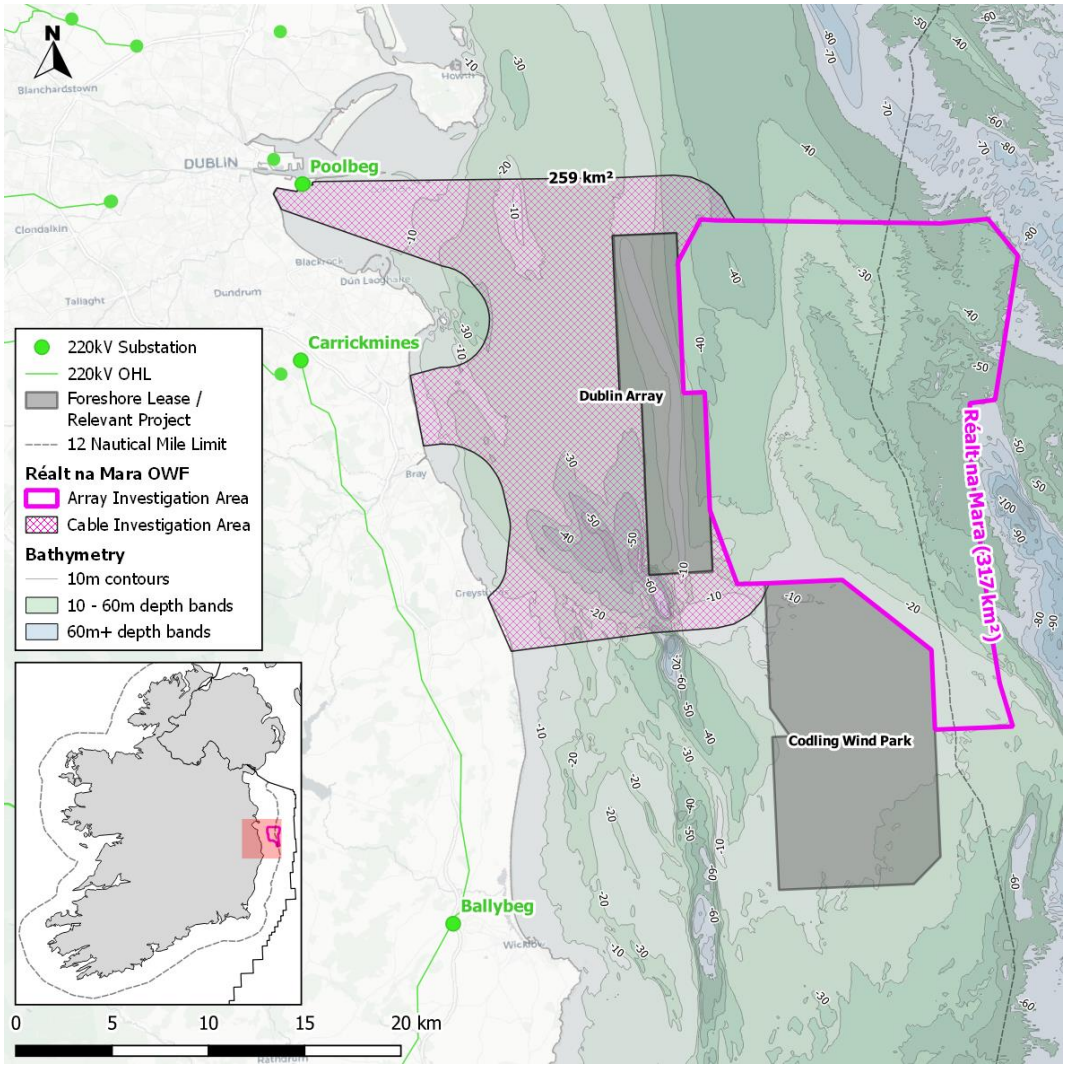

Figure 3.1 – Location of the Réalt na Mara Offshore Wind Farm. Note that the image above presents potential and indicative cable routes and is only for illustrative purposes

Policy Background and Réalt na Mara Alignment

3.4 In November 2021, the Climate Action Plan by the Irish government, announced the target to achieve 80% of electricity production from renewables by 2030, including an increased target of up to 5 GW of offshore wind energy. This will be supported by the Renewable Electricity Support Scheme (RESS) which has been developed to support renewable technologies and is key to achieving the target of electricity production from renewable sources by 2030 as set out in the Climate Action Plan, with first Offshore RESS auction planned for 2022 and subsequent auctions estimated in 2024-2025. OW and the Réalt na Mara Wind Farm project development can be a clear and significant contributor to this policy target and the Climate Action Plan.

4.0 The Maritime Area Planning Act 2021 and The Maritime Area Consent (MAC) Process

4.1 The FLA SS FS007134 Application for Site Investigation Works application, by ESB Wind Development Limited (ESB) has been submitted in accordance with the provisions under the Foreshore Act 1933.

4.2 In June 2021, the Irish government published the National Marine Planning Framework (NMPF). In December the Maritime Area Planning Act 2021 ("**MAP**") passed into law and is now the key legislation for the future consenting and permitting of offshore wind projects in Ireland.

4.3 The Marine Planning and Development Management Bill (2021) and the MAP will result in a new consenting process for the maritime area; replacing the Foreshore Acts 1933 to streamline arrangements on the basis of a single consent principle i.e. one state consent (Maritime Area Consent) to enable occupation of the Maritime Area and one development consent (planning permission), with a single environmental assessment. The MPDM Bill incorporates a forward planning model, with decisions to be taken in a manner that secures the objectives of the National Marine Planning Framework (NMPF) which provides the spatial and policy context for decisions about the maritime area.

4.4 We note the publication on 20 December 2021, by the Department of the Environment, Climate and Communications of the Offshore Wind Phase 2 - Consultation process https://www.gov.ie/en/consultation/b19b1-offshore-wind-phase-two-consultation/ (the "**Phase 2 Consultation**")

4.5 The Phase 2 Consultation outlines a series of potential options that may apply to offshore wind projects targeting completion by 2030; we assume that the Sea Stacks Offshore Wind project will be progressing as Phase 2 project.

4.6 The incoming (yet to be set up) Maritime Area Regulatory Authority (MARA) will play a key role in consenting offshore wind projects in Ireland. In due course, we anticipate and plan to apply for a MAC in respect of the Réalt na Mara Project. Although we will respond to the Phase 2 Consultation under separate cover, it is important that due regard is given to the role of MARA and the criteria outlined in the Phase 2 Consultation.

4.7 We wish to highlight the intent and longer-term importance of Phase 2 Consultation (and the outlined options). As is the case with the Réalt na Mara Project, the Sea Stacks Offshore Wind project is early phase and should be assessed in the round.

5.0 ESB Site Investigation Works and Objectives

5.1 According to the Schedule of Works submitted by ESB, the Site Investigation Works proposed under this Foreshore Licence application includes geophysical surveys, geotechnical surveys, metocean surveys, environmental/ ecological and archaeological surveys. Works are anticipated to be undertaken from 2022 to 2024.

5.2 The SI works proposed by ESB under this Foreshore Licence application includes the following high-level objectives:

- *To gather further information on seabed and sub-seabed information.*
- *To gather sufficient geotechnical data to allow the characterisation of the sub-seabed strata.*
- *To collect accurate wind and metocean (wave, current, tide and water levels) information.*
- *To provide the project team with baseline information on the environmental conditions at the site, including marine ecology.*
- *To provide the project team with information on the archaeological conditions at the site.*

5.3 As noted, the FLA SS FS007134 Application area overlaps the Réalt na Mara Project Foreshore Licence Application area and there could potentially in future be spatial and or temporal overlap with the activities proposed under this application, subject to the grant of licenses in the future. Should the need arise Ocean Wind Ireland will be open to engage with the department, the subject applicant and others that may be relevant.

5.4 Ocean Winds support the objectives of the FLA SS FS007134 Application for Site Investigation Works and wish to have an engaging relationship with ESB to coordinate marine activities in this area as appropriate prior to undertaking any survey work. Ocean Winds will be keen engage with ESB as the applicant under the FLA SS FS007134 Application.

Dublin Port Company – Harbour Master

Introduction

This submission from Dublin Port Company (DPC) to the ESB Sea Stacks Foreshore consultation report is intended to positively contribute to maintaining safe and efficient access by vessels to Dublin Port.

Dublin Port is the primary route for the movement of goods into and out of Ireland.

Dublin Port occupies c. 260 ha. of land in Dublin City and also controls c. 44 ha. of land at St. Margaret's, County Dublin, where the Dublin Inland Port is located.

Significance of Dublin Port

Trans-European Network for Transport

Dublin Port is a core port on the *Trans-European Network for Transport* (TEN-T) network and a designated node on the North Sea-Mediterranean Core Network Corridor. Development of the TEN-T is supported by means of grant aid and financing through the European Investment Bank. Infrastructural investments at the port being implemented through *inter alia* the Alexandra Basin Redevelopment Project (Board Ref. PL 29N.PA0034) and the MP2 Project (Board Ref. PL29N.304888) will help to future-proof the port and provide for increased capacity. These projects are consistent with the objectives of TEN-T for the North Sea-Mediterranean Corridor and the designated role of Dublin Port.

National Ports Policy

National Ports Policy 2013 is the statement of national policy underpinning the development and operation of Ireland's ports. Ports are divided into Ports of National Significance (Tier 1), Ports of National Significance (Tier 2) and Ports of Regional Significance. Within the Irish Ports Policy, Dublin Port is a Port of National Significance (Tier 1). Tier 1 ports are designated as such where they are responsible for 15% to 20% of overall tonnage through Irish ports and they have clear potential to lead the development of future port capacity in the medium and long term, when and as required.

Three ports are included in the TEN-T core network: Dublin, Cork and Shannon Foynes. These ports are also identified in National Ports Policy as Ports of National Significance (Tier 1). The policy document states:

"The continued commercial development of these three Ports of National Significance (Tier 1) is a key objective of National Ports Policy." (page 25)

Referring specifically to the Dublin Port Masterplan, National Ports Policy states:

"The Government endorses the core principles underpinning the company's Masterplan and the continued commercial development of Dublin Port Company is a key strategic objective of National Ports Policy". (page 25)

The planning, financing and development of large scale infrastructure projects, such as major port capacity proposals, requires significant organisational, operational and financial resources. It is

important that, in the State commercial ports sector, bodies bringing forward significant port capacity developments have the resources required to ensure that the State's and the public's interest is protected and enhanced. It is the Government's position that those ports considered to be of national significance must be capable of the type of port capacity required to ensure continued access to both regional and global markets for our trading economy. In this regard National Ports Policy states that:

"The provision of adequate and efficient capacity into the future is a crucial Government strategic objective." (page 43)

The *Dublin Port Masterplan 2040 (Reviewed 2018)* envisages the capacity of the port being increased to its ultimate level of 77 million gross tonnes per annum over the next 20 years.

Project Ireland 2040

Project Ireland 2040 is the government's long-term overarching development strategy for the state. The plan seeks to align investment in public infrastructure with a well-thought-out and defined development strategy. The *National Development Plan* (NDP) and the *National Planning Framework* (NPF) combine to form Project Ireland 2040. The NPF sets the vision and strategy for the development to 2040 and the NDP provides enabling investment to implement the strategy.

National Strategic Outcome 6 "*High-Quality International Connectivity"* of the NDP seeks to target continued investment in port and airport connections to the UK, the EU and the rest of the world. Given that Ireland is an island this is considered by the NDP to be integral to underpinning international competitiveness. It is also central to responding to the challenges as well as the opportunities arising from Brexit.

It is envisaged by the NDP that investment will strongly support the continued development and improvement in Ireland's ports and State airports by the relevant responsible commercial State Owned Enterprises (SOEs), consistent with sectoral priorities already defined through *National Ports Policy* and *National Aviation Policy*. The NDP continues that significant investment in Ireland's airports and ports will play a major role in safeguarding and enhancing Ireland's international connectivity which is fundamental to Ireland's international competitiveness, trading performance in both goods and services and enhancing its attractiveness to foreign direct investment. The NDP clearly states that the importance of this objective cannot be understated in the context of the UK's exit from the EU in 2019.

The NPF highlights that Ireland's port and shipping services play an important role as 'enablers of economic growth' and are critical infrastructure for international trade, with over 90% of our international trade moving by sea. The NPF confirms that as an island nation:

"We depend on the quality and efficiency of our ports to a far greater extent than many of our trading partners. To maintain economic growth, we must be capable of delivering additional port capacity in a timely and predictable manner". (page 94)

Given Ireland's island nature, infrastructure is based on the effectiveness of airport and port connections. The NPF acknowledges *National Ports Policy* and the national hierarchy or tiering of ports recognising the long-term international trend in ports and shipping towards increased consolidation of resources in order to achieve optimum efficiencies of scale. This, the NPF notes, has knock-on effects in terms of vessel size, the depths of water required at ports and the type and scale of port hinterland transport connections.

The NPF confirms that the role of Tier 1 ports (which include Dublin Port) will be considered in tandem with long-term infrastructural requirements as part of the *Regional Spatial and Economic Strategy* and *Metropolitan Area Strategic Plan* processes through National Policy Objective 40 which states:

"Ensure that the strategic development requirements of Tier 1 and Tier 2 Ports, ports of regional significance and smaller harbours are addressed as part of Regional Spatial and Economic Strategies, metropolitan area and city/county development plans, to ensure the effective growth and sustainable development of the city regions and regional and rural areas". (page 103)

A key objective to enable growth of Dublin and nationally is infrastructure pertaining to Dublin Port looks towards:

"Facilitating the growth of Dublin Port through greater efficiency, limited expansion into Dublin Harbour and improved road access, particularly to/ from the southern port area". (page 57&142)

Regional Spatial and Economic Strategy for the Greater Dublin Area 2019-2031

The *Regional Spatial and Economic Strategy* (RSES) for the Eastern and Midland Region including the *Metropolitan Area Spatial Plan* (MASP) for Dublin was published in June 2019. Prepared in accordance with the NPF, the RSES sets the context for each local authority within the region to develop county and city development plans in a manner that will ensure national, regional and local plans align.

With respect to the profile of the region the RSES notes that the Dublin region is the main global gateway to Ireland, with Dublin Airport one of the fastest growing in Europe and continued growth both in the import and export of goods through Dublin Port. The RSES states that as Ireland's only international city of scale, Dublin acts as the global gateway to Ireland and its influence extends well beyond its administrative boundaries. Growth Enablers for Dublin City and Metropolitan Area include:

"Protect and improve access to the global gateways of Dublin Airport and Dublin Port for the Region and to serve the Nation, and safeguard and improve regional accessibility and service by rail, road and communication, with a key focus on the Dublin-Belfast Economic Corridor." (page 34)

To achieve the vision the MASP identifies a number of Guiding Principles for the sustainable development of the Dublin Metropolitan Area. With respect to Dublin Port these include:

"Dublin as a Global Gateway – In recognition of the international role of Dublin, to support and facilitate the continued growth of Dublin Airport and Dublin Port, to protect and improve existing access and support related access improvements." (page 101)

The RSES repeats the NPF National Strategic Outcome 40 and recognises the crucial role that the provision of National Strategic Outcome 6 High-Quality International Connectivity has for overall international competitiveness and addressing opportunities and challenges from Brexit through investment in our ports and airports, in line with sectoral priorities already defined through National Ports Policy and National Aviation Policy and signature projects such as the second runway for Dublin Airport and major redevelopment at Dublin Port.

The RSES recognises that Dublin Port is one of five major ports classified as Tier 1 / Tier 2 ports in National Port Policy, is categorised as a core port in the EU's TEN-T network, is a critical national facility, is a key economic driver for the region and the nation and is an i

Dublin Port Masterplan 2040 (Reviewed 2018)

The *Dublin Port Masterplan 2040 (Reviewed 2018)* envisages the capacity of the port being increased to its ultimate level of 77 million gross tonnes per annum over the next 20 years. The continued growth in the volume of trade and the limited capacity within Dublin Port lands at waterside mean there is a need to utilise innovative approaches to facilitate port related activities.

DPC is delivering a number of significant upgrades to Dublin Port facilities at the c. 260 ha. lands in Dublin City in order to deliver increased capacity in accordance with the Masterplan including:

The Alexandra Basin Redevelopment Project - ABR Project - which has been consented and is under construction (Ref. PL29N.PA0034); and

The second Masterplan project - MP2 Project - which has been consented with construction works due to commence in 2022 (Ref. ABP-304888-19).

The third and final Masterplan – 3FM Plan- the scope of which is set out in the masterplan; 3FM Project - Dublin Port . This involves the development of Port lands on the Poolbeg peninsula and the construction of a new bridge to provide for the southern port access route. This project will enable the provision of the final tranche of Port capacity required to bring Dublin Port to its ultimate capacity of 77m tonnes by 2040.

The large scale infrastructural works and other planned works in Dublin Port lands in Dublin City on their own will not deliver 2040 capacity requirements as set out in the Masterplan. DPC also controls c. 44 ha. of land in two holdings in Fingal at St. Margaret's, County Dublin as shown in **Figure 1**. Permission has been granted for the full development of the western land holding of 22ha of Dublin Inland Port (under Reg. Refs. F16A/04598, F18A0139, FW19A/0101, FW20A/0021 and FW20A/0097).

Dublin Inland Port will be utilised primarily to relocate non-core port users from Port lands in Dublin City, making them available for use for freight transit. Construction work is underway for the first phase of this development which will facilitate a new empty container yard. It is envisaged that future developments on DPC lands will provide for check in facilities and laden container yards to ensure greater land usage within Dublin Port. The development of Dublin Port facilities at St. Margaret's, County Dublin is vital to the continued operation of the port in accordance with the Masterplan.

DPC response

Dublin Port volumes continue to grow, and while pandemic related throughput meant no growth in 2020, indications are that the Port will return to positive growth in 2022. Against this backdrop and the policy context outlined above, it is important that any peripheral development adjoining DPC lands must take account of the DPC plans when undertaking assessment.

DPC will continue to engage with the developers, as it has continued to do on the maritime issues as they arise. However all proposals must take account of our strategic objectives in continuing to developing Port capacity, to meet Irelands growth needs to 2040.

Shipping and navigation

The area described in Figure 1.1 Project Location of the NIS overlaps the Dublin Port Company jurisdiction and the Dublin Port Pilotage District. Dublin Port facilitates circa 17,000 ship movements per year into and out of the DPC jurisdiction. Approximately 25% of vessels board marine pilots at the extremities of the DPC jurisdiction and with the pilotage district. Investigation vessels will require DPC approval and to work with the Harbour Office to ensure the safety of all vessels.

Section 2 of the Schedule of Works details the operation of unmanned vessels should they be approved by the MSO. Within the DPC jurisdiction approval by the Harbour Master will be required for the operation of such craft. Dublin Port is an area of high commercial and leisure traffic density.

Dublin Port supports the correct marking and promulgation of offshore projects such that access to and from Dublin Port by shipping is maintained in a safe and sustainable manner. The decisions of ship masters in matters of ship safety and routing to and from the Port should not be negatively affected such that negative outcomes are brought to bear on the wind farm or the vessel concerned.

The potential array area lies outside of the DPC jurisdiction. Notwithstanding this, the area outlined provides for a northern border that runs east west and proximate to the most direct line between Dublin and Holyhead used by RORO / passenger ferries operating to and from Dublin Port. The development and existence of the array will impact ship routing particularly during periods of southerly sea and weather conditions.

Assuming this potential array t area may become part of the planning proposal the existence of windfarm infrastructure to such an eastern extent and as far north as the entrance to Dublin Bay via the Kish Lighthouse will reduce the decision-making options of ships masters when arriving / departing from Dublin Port. Ships leaving Dublin Port and proceeding south in the Irish Sea will therefore be exposed to rough southerly swell and wind-wave conditions without being able to alleviate the movement of the vessel and its cargo by steaming southeastwards, due to the presence of the windfarm.

Additionally the extent of the project area eastwards will require ships sailing northwards in the Irish Sea to route further north before they can alter course towards Dublin Port.

Submission 10

I am very concerned about proposed site so near the Kish and BrayBanks It will totally ruin. our beautiful seascape a view that every one heretreasures. Not to forget about our fabulous marine life. I am beggingyou please. don't grant this Licence

Submission 11

I have concerns about how the Baseline Environmental surveys for this project will be conducted over the five year licence period.

While establishing an up to date ecological baseline is essential for Site Investigation, this emphasis gets vague later in the application.

From page 10 of ESB SI Report

- *To gather further information on seabed and sub-seabed information.*
- *To provide the project team with baseline information on the environmental conditions at the site, including marine ecology.*

In the 'Screening for Appropriate Assessment Document' later we are told that the works **may include** ecological surveys. Only 'may', so full reassurance that such surveys will take place needs to be provided. This suggests that the expected level of “survey” may not be undertaken at all and undermines the stated aims in the Site Investigation Document preamble. It appears to be inconsistent. With the pace of applications for foreshore licences and Climate Change impacts up to date information is vital for planning and data from even a decade ago may no longer represent the true picture or provide a realistic baseline. A professional standard of updated survey needs to be one of the terms and conditions applied to the granting of this licence.

(from “Supporting Information: Screening for Appropriate Assessment”, page 10):

The works may include the following: Benthic sampling, Static acoustic monitoring, walkover surveys, Ornithology surveys, Marine mammal surveys*, Fisheries, fish and shellfish surveys*, Shipping and navigation surveys*, Archaeological survey*

- *Outside scope of Foreshore Investigation Application but included for completeness*

Along with the impacts of Climate Change, and particularly the increase in the strength of storms in Dublin Bay there are cumulative pressures from other surveys and projects in the Site Investigation Area predicted and referenced below, in addition to the regular Dublin Port dredging works and problems due to the overloaded Ringsend Wastewater Treatment Plant with well documented incidents of sewage spillage at times. Other onshore projects such as the building of a Dublin Port pontoon will also be in progress.

(From “ESB SI Report”, section 3.3.6)

ESB are aware of a number of other determined Foreshore Licence(s) / Lease (s) in the vicinity of the proposed application area as well as a number of other third party applications currently either in the “Application” or “Consultation” phase.

The question of the scale of proposed windfarm developments for the bay is not included in this foreshore application but will have long term implications when more turbines are layered further east and probably beyond the 12 mile nautical limit, in addition to any construction of those proposed already for the Kish and East Codling sandbanks (Dublin Array and East Codling)

This will bring a concentration of cable link routes from different companies into the already congested Poolbeg area.

Proposed Cable Link Routes and Cable Link landfall site at Poolbeg.

The area of Shelley Banks and the intertidal mudflats and sands will be included in this survey.

'Walkover' assessment is essential along with a review mechanism thoughout the five year period of the survey in order to take into account any shoreline changes after the Baseline is established.

While much of the proposed licence includes survey by planes (which had to be switched to a Denmark base post Brexit I understand) or by boat, there is a need for 'ground truth' and not just a reliance on aerial surveys, photographs or deskstop studies. Onshore observation will be especially importance in the monitoring and control of Treadrd Vehicles on shore and intertidal areas. The shoreline area is question is not very extensive, so this can easily be managed.

'Walkover' assessments are required to provide up to date seasonal information on the annual drift line vegetation, shifting embryonic sand-dunes, and impacts of erosion and pollution. At Poolbeg it is known that blanket seaweed cover can sometimes obscure the presence of onshore biota.

Vibration impacts on benthic organisms can cause them the retreat of the mobile species or the 'inward retreat' of tubal biota which may reduce their feeding feeding patterns.

With forthcoming changes in shoreline governance the local authorities will be tasked with some of the enforcement of protection measures and this raises the issue of resources so this can be done consistently.

While some stakeholders have already been consulted in advance of this application I could see no reference to local authorities or relevant NGO's especially Birdwatch Ireland who have extensive experience of surveying Dublin Bay seabird populations. There is no reference to the Dublin Bay Biosphere. While a Fisheries Liaison Officer is available for the ESB along with an onshore clerk of works and a community liaison officer for the course of the work, extra (and independent) supervision may be required for a project of this size.

The foreshore licence application acknowledges that the survey area cuts through the Rockabill to Dalkey Island SAC which protects the harbour porpoise. This needs to be highlighted. Porpoise along with many of the marine species can be impacted by both under and over water sound levels.

Expecting them to keep shifting out the way to facilitate a number of simultaneous survey and seabed construction projects at an accelerated pace over the next eight years (up to and after 2030) is bound to have an impact on the well being of the species and diminish the viability of established habitats.

There is a danger of fragmentation of eco systems which may ultimately reduce the food chains and reduce Biodiversity. The Precautionary Principle needs to be applied to conserve the existing ecological baseline.

More detailed Environmental Impact Statements at a later stage in this project, especially in regard to migratory species, fish spawning grounds, fish nursery areas etc will no doubt be required. (The Poolbeg Planning Scheme EIS from 2009 is helpful in this regard, but would require updating)

Frequently we are told in the application that recovery times for impacts from survey processes on biota will be rapid, which may not be the case when there is little opportunity for respite before further interference and disturbance over sustained periods. Borehold tests for instance, may last for a number of hours.

Extra siltation as a result of seabed disturbance, along with that of predicted storm forces will increase marine pressures. In the Poolbeg area there is also the question of possible disturbance of contaminated sediments or dump leakage through rock armour due to coastal erosion The application acknowledges Information Gaps (especially in the foraging range of seals, mammals and some of the bird populations) but tends to assume that mitagation measures will compensate for any lack of long term resiliance.

Connectivity of protected marine sites is mentioned but there are also transitional zones that must be taken into consideration. The sensitive bed of Zostera seagrass in the South Dublin SPA needs to be prioritised along with embryonic dunes and Salicornia at Merrion and the Booterstown Marsh Conservation Area. The Dollymount shore end of Bull Island and inner Bull estuary will be extra vulnerable.

Auditory impacts on marine species are mentioned along with the danger of collision with working vessels, with the assumption that the project vessels will be working at slower speeds so posing less of a threat. A highspeed survey vessel was visible to shore users during a period of windfarm developer survey work in the Killiney Bay area in 2021, which criss-crossed the waters both repeatedly and rapidly. What authority will monitor speed limits, and will there be a 7 day hotline to an appropriate enforcement authority for anyone with concerns? Provision of reliable information to the public will encourage interest and engagement.

Wide stakeholder and public consultation will be essential at an early stage in this project, especially with the expanding demands for coastal water activities, shoreline demands for recreational space, and the long acclaimed visitor attractions of our capital city. Public discussion and debate has been suppressed due to pandemic restrictions for two years but will help bring a consensus, provided that accurate information is made available.

In order to meet the urgent ORE targets of our country by the end of this decade, east coast windfarm development is being fast tracked. This can still be achieved with minimum loss of biodiversity and in a sustainable manner.

As the ESB are already familiar with the Poolbeg area, they can offer key knowledge and expertise that would be an advantage in the development of wind energy resources.

I hope you will take my concerns into account.

Submission 12

I wish to make a submission in relation to the proposed application being made by the ESB for Offshore Wind Licence. I am not opposed to renewable energy but believe that such major industrial development as is proposed in the near-shore zone (6-13Km from shore) all along the east coast from Dundalk Bay to Carnsore Point is out of line with best practice in the EU and internationally, and risks damaging the very environment it purports to protect.

The proposed site is just east of the Kish and Bray banks and close to the Codling Bank, on which other wind farm developments are proposed together with the cumulative effects of these proposed developments would inevitably have major impacts on Dublin and Killiney Bays, Bray Head, Howth Head etc.

I am opposed to this application and due to its size and the negative impact on the environment.

Coastal Concern Alliance - Submission 1

Coastal Concern Alliance (CCA) wish to object to the granting of an investigative licence (FS007134) for site investigation relating to proposed development of a wind farm on an area of the Irish Sea to the east of the Kish and Bray Banks, the proposed array area being approximately 12km from shore at nearest point.

The EIA Directive - Consideration of alternatives

Article IV of the EIA Directive as amended by Directive 2014/52/EU states that information provided in an Environmental Impact Assessment Report (EIAR) should include a description of the reasonable alternatives studied by the developer which are relevant to the project and its specific characteristics and an indication of the main reasons for the option chosen, taking into account the environmental effects. The consideration of alternatives typically refers to alternative design, technology, location, size and scale.

The primary obligation under Article 5(1)(d) of the EIA Directive is upon the developer to provide a description of the 'reasonable alternatives' considered in the course of the application process.

In this regard, the Directive states as follows:

(d) *a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment;*

Site selection/Location

In their Foreshore Licence application, ESB state that they have '*identified a number of preferred projects which they will now seek to take to the next stage in the process; the undertaking of more detailed investigations, surveying and consultation in order assist in making a decision on whether a feasible development opportunity exists. One such project is Sea Stacks Offshore Wind, the subject of this Foreshore Licence application. Sea Stacks Offshore Wind is not dependent on any other suitable site, functionally, legally or otherwise'.*

Their Natura Impact Statement states '*The suitability criteria considered in identifying this potential development site included available area, water depth, seabed slope, designated nature conservation sites, planning/environmental constraints, access to the national grid, port facilities, navigation channels and cable landing locations*.' There is no reference to the consideration of alternatives.

ESB are required, *inter alia,* to consider alternative sites demonstrating that, with regard to the site selected, alternatives sites have been considered. As it is emphasised that this site is not dependant on any other and there is no reference to alternatives considered, it is apparent that this requirement has not been met.

Other alternatives

Neither does the current Licence Application appear to consider technological alternatives, although alternative technologies are available or to explore options in relation to size and scale.

National Marine Planning Framework

In their Accompanying Report, ESB reference the National Marine Planning Framework (NMPF), adopted in July 2021, and its objectives for offshore wind development, and use this as justification for their current Foreshore Licence application.

The NMPF has clear stipulations with regard to site selection and environmental protection, although these are not referenced in the current application.

It states:

1. *'There is an important role for route and site selection at all phases of planning and development to avoid environmental impacts.'* (NMPF, page 10) This is a watered-down version of the strong emphasis on site selection contained in the Strategic Environmental Assessment of the draft NMPF, which stated ''*There is potential for negative impacts for all environmental receptors where ORE infrastructure has not had the benefit of a robust site selection process which explicitly includes consideration of benthic habitats, marine mammals, birds and visual receptors as a minimum*'. The watered-down phrase is regrettable but it is, nonetheless, an assertion that route and site selection are important considerations in avoiding environmental impacts.
2. '*Routing and site selection are important tools in ensuring that impacts on seascape and landscape are minimised and mitigated. This should be a factor in early stages of plan or policy development or before beginning formal application / permitting as appropriate. Response to this policy should include reference to any material matters set out in relevant land-based plans such as coastal county development plans, e.g. coastal views and prospects.'* (NMPF, page 97)

   It is clear that this current application is '*in early stages of plan or policy development'.* However, there is no evidence of independent oversight of site selection, nor does it appear that environmental impacts of a future windfarm development on this site have been addressed, with consideration of impacts on protected (and non-protected) habitats and species or on seascape and landscape, in what is one of the most widely used areas of the Irish coastline.

   The proposed site crosses two bays, Dublin Bay and Killiney Bay and runs close to shore along the coastline of Wicklow, the totality of which is designated Coastal Area of Outstanding Natural Beauty in Wicklow County Development Plan 2016-2022.

3. *Robust site selection and relevant appropriate environmental assessment (such as Appropriate Assessment, Environmental Impact Assessment and/or Ecological Impact Assessment (EcIA) should be used to inform decisions on land-based infrastructure that facilitates marine activity*. (NMPF page 83)

   The current ESB licence application proposes to bring cables ashore through the Rockabill to Dalkey SAC, the most important location for harbour porpoise in Ireland, and through the Poolbeg intertidal area, an area that is already subject to multiple environmental pressures.

The critical importance of site selection is also acknowledged internationally as THE KEY to avoiding environmental impacts of both wind and solar developments (International Union for the

Conservation of Nature, 2021), yet in Ireland to date government has taken no role in managing site selection, as is evident in the current Foreshore Licence proposal.

It is clear that this Foreshore Licence application fails to meet the requirements specified in the NMPF, adopted only last year and ignores international best practice with regard to site selection and environmental protection.

Offshore Renewable Energy Development Plan (OREDP)

The Accompanying Report also quotes the 2014 Offshore Renewable Energy Development Plan (OREDP) as justification for this Foreshore Licence application.

The Strategic Environmental Assessment (SEA) of the draft OREDP (2010) acknowledged the numerous data and knowledge gaps that were inherent in the plan. These serious shortcomings were also highlighted by both statutory (e.g. An Taisce) and non-statutory consultees (e.g. Coastal Concern Alliance) prior to the adoption of the Plan.

As is stated in their Foreshore Licence application by ESB, an Interim Review of the OREDP was undertaken in 2017 and published in 2018. What is not stated is that the Interim Review was to be followed by a Full Review of both the Plan and its accompanying SEA, due to be completed in 2020. In spite of numerous enquiries as to the status of this required Full Review, no information has been provided as to when they will be completed and focus appears to have moved to OREDP II.

OREDP II appears to focus only on the Exclusive Economic Zone, i.e. outside the 12nm limit, and therefore is not addressing the fact that the 2014 OREDP is now outdated and a new Plan and SEA are two years overdue.

The relevance of this failure to update the OREDP relates to the following facts:

(a) A wide range of data and knowledge gaps undermined the original OREDP and this Plan is certainly not now fit-for-purpose

(b) Major advances in technology, e.g. floating wind, provide new opportunities in the offshore environment, opportunities that did not exist ten years ago.

(c) Significantly increased awareness of value of the marine environment itself in helping to mitigate the impacts of climate change need to be prioritised.

(d) The adoption by the Irish government in May 2019 of a climate and biodiversity emergency, placing biodiversity protection and restoration on a par with climate for consideration in Ireland.

(e) Acknowledgement that with regard to protection of our marine environment, only 2% of the required 30% required by 2030 is currently designated for protection, an issue that needs to be urgently addressed.

With regard to *Effects on Seascape from Offshore Developments*, the OREDP 2014 states the following:

- Consideration should be given to locating devices at a maximum distance from the shore/coast (within technological constraints)
- Wind farms should not be sited where they appear to block or close the entrance to bays/loughs/narrows/sounds or where they separate a bay from the open sea

- Wind farms should not be sited where they have the potential to fill a bay. The open, expansive nature of the water surface area should be allowed to continue to dominate
- Wind farms should be avoided where they conflict with the scale and subtleties of complex, indented coastal forms
- Consideration should be given to locating devices in already industrialised and developed seascapes.

Clearly, with reference to the current application these requirements have not been met.

Project splitting

Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment (EIA Directive), as amended by Council Directive No 97/11/EC of 3 March 1997 and Directive No 2003/35/EC, provides that Member States must ensure that, before development consent is given, projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to an assessment of their environmental effects. These projects are defined in Article 4 which refers to Annex I and II of the Directive.

The Commission considers that the abovementioned objective of the EIA directive should not be circumvented. In particular, projects which are likely to have significant effects on the environment, and that would require an EIA under the directive, should not be split into sub-projects so that each of them, taken individually, is determined not to have significant environmental effects and thus escapes the obligations set out by the directive. This practice is in breach of the EIA Directive.

The ESB seek in their Foreshore Licence application to split the environmental impacts of the site investigation work from the environmental impacts of the whole development. This is in breach of the EIA Directive as outlined above.

In the Glossary to their document Screening for Appropriate Assessment they explain that Export Cable Corridors means 'Area within which the export cables will lie' and WTG array area as 'Area within which the wind turbine generators will lie'. These definitions demonstrate that far from being related 'to proposed Site Investigation (SI) works only' and being 'temporary and short term in nature' the proposed site investigation works are an integral part of a plan to develop an 800MW wind farm with fixed bottom turbines 12Km from the Irish Coast in an area that has numerous Natura 2000 designations to protect habitats and species. In addition, the Foreshore Licence is submitted under a planning regime that is long acknowledged by all political parties to be outdated and unfit-for-purpose. We observe that this Foreshore Licence application was submitted on the same day on which the President signed the new Maritime Area Planning Act into law, 23rd December 2021.

This application refers to a portion of a whole development and is therefore 'project splitting', given that NO consideration at all has been given to potential impacts of the project as a whole.

Impacts of the whole project alone and in combination with other proposed developments.

No Screening, comprehensive environmental assessment or Natura Impact Assessment has been carried out to assess, for example, impacts on cetaceans in general and harbour porpoise in

particular, of the noise from the pile driving that is proposed as a means of erecting the fixed-bottom turbines.

No assessment has been made of the potential cumulative impacts on birds that would result from construction of the proposed turbines in combination with those proposed in adjacent locations, Kish and Bray Banks, Codling Bank, Arklow Bank and the numerous proposals to the north of Dublin stretching to the north of Dundalk Bay.

No assessment has been made to assess the visual impact on adjoining coastlines around the whole of Dublin Bay of the proposed turbines either with or without consideration of cumulative impacts.

No assessment of extensive cumulative environmental, visual, heritage, archaeological has been undertaken, either in relation to the investigative activities or of the whole proposed development with regard to numerous other applications for development in this general area.

Impacts of proposed site investigation works

Marine Mammals

The NPWS Site Conservation Objectives for the Rockabill to Dalkey Island SAC, designated for harbour porpoise and reefs states:

'Individual porpoises of all ages use sound as their primary sensory tool in order to navigate, communicate, avoid predators, or locate and facilitate the capture of prey under water. Group sizes tend to be small (i.e. in single figures, more commonly 2 to 3 individuals) although larger aggregations may occasionally be recorded, particularly in the summer months.

Harbour porpoise breed annually in Ireland, predominantly during the months of May to September. The principal calving period in Irish waters is thought to occur in the months of May and June, although it may extend throughout the summer months and into early autumn. Newborn calves are weaned before they are one year old. Mating commonly occurs several weeks after the calving season.'

This designated area along the east coast of Ireland is the most important location for harbour porpoise in Ireland although the range of the species clearly extends beyond the boundaries of the SAC. With the vast areas now being targeted for site investigation for wind farms, all proposing noise-generating surveys within the SAC, the multiple sources that would contribute to the noise generated and the critical importance of sound to the survival of the harbour porpoise and other marine mammals, the conclusion drawn those impacts can be mitigated, is at the very least questionable.

It is striking that this week there has been an outcry in Ireland in relation to the potential impacts on fish and marine mammals that would be generated by military exercises 240Km from shore in Ireland's EEZ. Objections raised by the Minister and fishers have led to the moving of the operation to outside of Ireland's territorial water. This is in stark contrast to the apparent tolerance for noise pollution and seabed disturbance that is proposed 0-17Km from shore along the Dublin and Wicklow coastline.

Birds

All species of wild bird that occur naturally in Ireland are fully protected at all times by the Wildlife Act and relevant amending legislation. Similarly, all birds naturally occurring in the wild state are protected by the EU Birds Directive.

Numerous seabirds, many of which are on the IUCN red and amber lists of threatened species, frequent the area in the vicinity of the Kish and Bray Banks and, on that basis, earlier scientific investigation of birds concluded that the area is unsuitable for the location of wind turbines.

Impacts of the site investigation works proposed in the current Foreshore Licence application have screened out numerous bird species that we contend should have been screened in. (Details in associated submission).

The availability of food source has significant measurable impacts on a species' ability to survive and reproduce successfully. All tern species are known to rely heavily on sandeels, sprat and juvenile herring. In a study by Newton and Crowe, 2000, sandeels were found to provide between 60 and 95% of the diet of terns. Sandeels are a predominant species associated with east coast sandbanks and the Kish and Bray Banks are a breeding and spawning ground for herring. *However, the Annexe IV assessment in the current application states that 'environmental and ecological surveys to be carried out 'may include' fisheries, fish and shellfish surveys'* suggesting that these surveys are not seen as mandatory.

Given the proposals to carry out geophysical, geotechnical, bore hole, vibrocore and grab sampling, core penetration tests, down the hole testing, benthic sampling etc, all in the vicinity of the Kish and Bray Bank it seems that the risk of significant impacts from these activities on the Annexe 1 sandbank habitat (Kish and Bray Banks) and on the fish spawning ground associated with this habitat cannot be optional, but must be mandatory.

With reference to the feeding habits of terns, a further consequence of such narrow habitat and environmental preferences, combined with a limited dispersal propensity of adults, is that sandeels are unlikely to be able to relocate in response to changing conditions, making it critical to protect the food sources of these protected species.

Detailed submission in relation to the impacts relating to birds and environmental impacts around the proposed Poolbeg landfall site are provided in separate submissions.

Methane release and geogenic reefs.

The Codling Fault Zone, (Habitat 1180), is an area of methane-derived authigenic carbonate (MDAC) in the Irish Sea, within which it acknowledged that site investigation will take place. Methane generated in sub-seabed sediments is only able to migrate towards the seabed if there is a suitable migration pathway. Three potential pathways are recognised in the Irish Sea and include faults as is found in the Codling Zone. Oil industry data have indicated the presence of gas around some Irish

Sea faults and, in particular, in association with the Codling Fault Zone

However, in the ESB Natura Impact Statement it is stated that '*to ensure no adverse effects on the conservation objective of the SAC, mitigation will be put in place to ensure that no extractive survey methods (or placement of anchors or jack up legs) cause damage to these QIs. This will be achieved by using geophysical survey data to identify the locations of potential Annex I habitat. Any areas of potential reef will be avoided through micro-siting of equipment or survey location'*.

Gas that is contained within this area of reef is predominantly methane. The impact of the atmospheric concentration of this gas, generated from ruminants, is a major reason why the farming industry in Ireland is under sustained pressure to adapt and reduce emissions. It seems inexplicable that ANY risk would be acceptable in this SAC where the potential exists for release of significant

methane into the atmosphere. On this basis we propose that no site investigation that has the potential to impact on the reefs of the Codling Fault Zone should be permitted.

In addition, the micro-siting of equipment in an offshore mobile environment cannot be relied upon as a reliable mitigation.

Conclusion

On the basis of the information contained in this and associated submissions, CCA propose that this application for a Foreshore Licence should be refused.

Coastal Concern Alliance is an independent voluntary citizens' group, set up in 2006 to campaign for reform of Foreshore Legislation and for the introduction of Marine Spatial Planning to balance competing interests in our seas and conserve marine wildlife, habitats and coastal landscapes. We are supportive of the development of offshore renewable energy to meet climate and energy targets when developments are properly sited, to a proper scale and managed under a democratic fit-for-purpose marine planning regime. We have no affiliation with any political party or industry group

Coastal Concern Alliance – Submission 2

ESB Sea Stacks license application FS007134 - Observations

General Comments:

The FS007134 license application states that "*extensive site selection process where they assessed the entire coast of the Republic of Ireland (RoI), in order to identify potentially suitable sites for the development*". For the purposes of public transparency and to allow accurate, informed interpretation of the environmental data within this application the developer should have outlined the reasons for selection of this particularly environmentally sensitive site. The license application should include some depth on ecological factors governing site selection; in particular the applicant indicates that it is considering sites suitable for both fixed and floating foundation wind turbine technology. Further information would be most welcome on the reasons for the current site selection and would better inform the public as to the benefits as well as the deficits of the selected site. Site selection is the most critical factor in preventing ecological damage and cannot be ignored.

Geophysical data for the proposed area has already been documented by INFORMAR and carried out for multiple other projects in the area. There is no justification presented for this further investigation.

1. Remaining Risks/Lack of Robust Scientific Data:

   Granting of this license would contravene article 6(3) of Directive 92/43/EEC ('the Habitats Directive') by failing to contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works.

   - Fish (particularly non-commercial variety), bird species and cetaceans in and around the site location and impact on the same has not been adequately assessed. This may result in a contravention of the Birds Directive (Directive 2009/147/EC) as well as the habitats directive (92/43/EEC).
   - It is not an appropriate or accurate finding that at stage 1 AA, no LSE on marine mammals (auditory injury, disturbance and collision) exist.
   - "*FS007134 Risk Assessment for Annex IV Species*" (p. 15) states that
     "*Instantaneous, rather than cumulative, PTS was considered because information on SPLs, rather than SELs, was available from equipment manufacturers*".
     This is inadequate and onsite or analogous assessment of the sound source should be carried out to appropriately assess the risk of these sound sources to marine mammals.
   - "*FS007134 Risk Assessment for Annex IV Species*" (p. 15) compares the geotechnical survey proposed to pin pile drilling at another location, in (generally speaking) deeper water (see chart license application p.22). This is not an adequate comparison to the noise sources which pose a risk in this license application (*e.g.* USBL, UHRS and MBES). Therefore, these comparisons should be struck from the assessment. Sufficient analytical and simulation approaches exist to assess the transmission loss of sound sources and should be implemented here to examine the LSE and to provide an appropriate assessment.

   - Within the *Supporting Information: Screening for Appropriate Assessment* (p.13), the applicant states in relation to hearing damage thresholds for marine mammals:

"*SPL thresholds have been used because information on SPLs, rather than SELs, was available (both in the 'Site Investigation – Schedule of Works' document and from equipment manufacturers)*"

The arguments presented here are unacceptable for the use of SPL assessment of noise levels over the use of the current gold standards, SEL. The recent license application on Arklow Bank (FS007339) successfully calculated noise levels using SEL technique and there is no technical reason why this could not also be adopted by this developer. The availability of 'easy calculate figures' in the literature does not represent a reasonable excuse for not developing figures where they are lacking. This does not represent an appropriate assessment.

- "*FS007134 Risk Assessment for Annex IV Species*" (p. 10) states that:
  "*Lethal effects may occur where peak to peak levels exceed 240 dB re 1 µPa, and physical injury may occur where peak to peak levels exceed 220 dB re 1 µPa (Parvin et al., 2007)".*

  This source is outdated. The most up-to-date scientific data should be regarded in the assessment of LSE on European Protected Species (EPS).

- "*FS007134 Risk Assessment for Annex IV Species*" (p. 12) states that:
  "*The threshold for lethal effects resulting in the death of an individual is 240 dB re 1 µPa (Parvin et al., 2007). The SPLs identified for the proposed equipment for the geophysical surveys (Table 5.4) are all lower than this lethal threshold. As the proposed geophysical surveys do not reach high enough SPLs, no lethal effects are anticipated*."

  However, Table 5.4 outlines the maximum SPL for Ultra-high Resolution Seismic (UHRS) – Boomer/Sparker to occur at up to **226dB** re 1 µPa at 300 Hz – 5 kHz, which is within the audible range of the harbour porpoise, Minke whale and bottlenose dolphin and would cause PTS to the harbour porpoise at 202dB re 1µPa (Southall et al. 2019). As harbour porpoises use hearing for navigation and feeding purposes, they cannot survive without hearing and would equate to death. Therefore, the lethal threshold for this species should be considered to be 202dB re 1µPa.

- "*FS007134 Risk Assessment for Annex IV Species*" (p. 12) states that:

  "*standard mitigation measures, as detailed by "Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters (DAHG, 2014)… will be implemented*".

  Therefore, the potential for physical injury as a result of the SBP and UHRS equipment is considered to be negligible." This does not comprise an adequate two-stage Appropriate Assessment. Similar statements are presented in "5.2.1.2. Auditory Injury" (p13), which are equally invalid, and risks have not been adequately assessed with mitigation measures in place.

- "*FS007134 Risk Assessment for Annex IV Species*" (p. 13) references Thompson *et al.* (2013), who observed "harbour porpoise responses to geophysical (seismic) survey vessels in the Moray Firth were observed over ranges of 5 to 10 km" and then goes on to say "for the purposes of this assessment, an impact range of 5 km is considered appropriate to represent the worst-case for UHRS and SBP systems."

However, no quantitative reasoning for this halving of the observations of Thompson *et al.* (2013) is presented and therefore the assessment does not contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works.

- "*FS007134 Risk Assessment for Annex IV Species*" Table 5.5 (p. 13) attempts to quantify the percentage population which has the potential to be affected by a temporary displacement due to noise produced during the proposed works. However, exactly what population the "reference population" (apparently 63,077 porpoises) refers to is not outlined and so cannot be scrutinised. Regardless, this 1% rule has no legal basis, as shown in Sweetman vs An Board Pleanála (case C-258/11, CJEU judgement, 11 April 2013).
- "*FS007134 Risk Assessment for Annex IV Species*" Table 5.5 (p. 13) takes the abundance of Harbour porpoises as "greatest animal density estimates found in Hammond *et al*. (2021) and Rogan *et al*. (2018)", which appears to be based on ~1.04 Harbour porpoises/km2, however, the worst-case scenario should be taken in which the density within the *Rockabill to Dalkey Island SAC* was estimated as 1.87 Harbour porpoises per km2 (O'Brien and Berrow, 2016).
- "*FS007134 Risk Assessment for Annex IV Species*" (p. 15) states that
  "*There is no potential for lethal effects or physical injury (for which the thresholds are 240 dB re 1 µPa and 220 dB re 1 µPa respectively; see section 5.1) from any of the equipment used for geotechnical surveys (see Table 5.6)*" as well as "*The maximum source pressure levels of all equipment (Table 5.6) do not have the potential to induce the onset of PTS even at very close range*"

  However, during these operations, either a jack-up vessel or a vessel containing Ultra-short baseline (USBL) acoustic positioning system will be required, which is a pulsed sound source. If a vessel containing Ultra-short baseline (USBL) acoustic positioning system may be used for these Geotechnical surveys then the risk associate with them should be included here. As outlined in the "FS007134 Schedule of Works" (Table 2: Summary of noise sources Noise Source) USBL operates at 18-30 kHz and 170 – 220 dB, which is both within the audible range of marine mammals and operates at an amplitude exceeding the PTS threshold of 202dB re 1 µPa. This risk is not sufficiently assessed.

- "*FS007134 Risk Assessment for Annex IV Species*" (p. 15) section "*5.3 Increased Collision Risk*" states:
  "*Marine mammals occur at relatively low abundance in the area of the Project*".

  Given the fact that the proposed license intersects with the *Rockabill to Dalkey Island SAC*, where qualifying interest is the Harbour Porpoise, at an abundance of 1.87/km2 (O'Brien & Berrow, 2016), this seems like a very inappropriate comment. Within the same "*Increased Collision Risk*" assessment there is no attempt to quantify the risk of induced Temporary Threshold Shift (TTS) by the proposed license on Harbour Porpoises which reside within the *Rockabill to Dalkey Island SAC*, which also encompasses a busy (Dublin Port) shipping lane. TTS, a temporary audible deficit, results in marine mammals, such as porpoises being unable to adequately navigate and poses a likely significant risk of collision. As a 5km radius of TTS is proposed by the developer this would result in a significant number of porpoises at risk.

- Regardless of the % of Annex II species (harbour porpoises, Minke whale, Bottlenose dolphin, Risso's dolphin) experiencing a LSE, it appears that a LSE remains on both the Annex II species within the license area, as well as a LSE on the Qualifying Interest (QI) of *Rockabill*

to Dalkey Island SAC (harbour porpoises). As such a derogation license would be required for the proposed survey.

- "*FS007134 Risk Assessment for Annex IV Species*" (p. 21, conclusion) states that:

  "*Therefore, the surveys will not significantly affect the FCS of any marine Annex IV species as defined in the Habitats Directive and corresponding European Communities (Birds and Natural Habitats) Regulations 2011 - 2021, and it is considered that a derogation licence is not required for the surveys described*."

  However, this is contradictory to the legal requirements outlined on page 5 of the same document, which states that Favourable Conservation Status (FCS) is only assessed whereby a derogation license is required. Favourable Conservation Status (FCS) has not been assessed in this document to this point and as such this is a false conclusion. The purpose of this assessment is to determine if there is a Likely Significant Effect (LSE) on any European Protected Species (EPS).

- Assessment of LSE contains no quantitative or semi-quantitative estimates and statements such as "*the level of noise expected from survey activities above and below water is not considered to be significantly greater than existing vessel noise*" are akin to saying "*ah it'll be grand*"; this is not the level of quality of assessment that is appropriate, given the ecologically sensitive nature of the area of the proposed site and is not what is expected under Article 6(3) of the Habitats Directive. Background noise at Dublin Port has been estimated to be approximately 113dB (Beck *et al*. (2013), McKeown (2014)), this is considerably below the 226dB in the proposed surveys (at 0.3 – 5kHz, *i.e.* within the peak audible range of sea birds). As such this statement has no validity and has not provided complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works. As all the findings of no LSE on bird colonies and SPAs in relation to noise in the NIS revolve around this statement, it can only be concluded that in the NIS presented that a LSE remains for all bird colonies and SPAs in the vicinity of the license area. This statement holds true for both over and underwater noise. A more in-depth assessment of transmission loss would be required in order to provided complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works.
- NIS statements such as "*A restriction to works within 1 km of South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA between the months of September March inclusive will eliminate the effect of noise or visual disturbance and prevent a pathway occurring that may result in a potential adverse effect to the wintering bird assemblages at this SPA*" (p21-22) lack complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works.
- Sampling within the boundary of SACs, the NIS provides statements, such as:

  "*The footprint of the jack up and associated samples will however be negligible and not affect the overall sediment budget for the area which will be one of general accretion, and considering the very small and localised footprint of such activities (expected to be c. 2 no. within the SAC), it will have no effect on the quality, condition, or extent of habitats present.*"

  "In the intertidal a tracked vehicle may also be required to access the shore for construction of trial pits. Trial pits shall be machine dug using an excavator (either from a boat or from land depending on access) up to 5 metres depth. All material will be reinstated following completion of the tests at each trial pit. Following reinstatement,

the community structure and function will return and no adverse effects on the integrity of the SAC will result."

These statements provide no quantification of this disturbance and, as such, fail to provide complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works.

- Within the *Supporting Information: Screening for Appropriate Assessment* (p.13), the applicant states in relation to hearing damage thresholds for marine mammals:

  "*Although these thresholds have since been updated (by Southall et al. (2019) and NOAA (2018)), it is the Southall et al. (2007) thresholds, upon which the 2014 DAHG (now DHLGH) guidance (on managing the risk to marine mammals from man-made sound sources in Irish waters) is based, which have been used to undertake this assessment*."

  The NPWS (2014) guidelines "*Guidance to manage the risk to marine mammals from man-made sound sources in Irish waters*" is, as stated, a guidance document and in this case an outdated one. Regardless of the guidelines followed, it is on the onus of the Notice Party to carry out an Appropriate Assessment in compliance with the Habitats Directive and ensure that where a *likely significant effect* exists due to the proposed operations, that mitigation measures are put in place to eliminate that *likely significant effect.*

  If, after the application of mitigation measures a *likely significant effect* remains, as in this case, then the competent authority must reject the application. Therefore, it on the onus of the applicant to use the most up-to-date and accurate available at the time of the assessment. Table 3.3 provides outdated data in relation to auditory thresholds. The most up-to-date figures would estimate PTS for the Harbour porpoise at 202dB re 1µPa @1m (Southall *et al*., 2019).

- Within the *Supporting Information: Screening for Appropriate Assessment* (p.14, footnote), the applicant assumes a potential impact range (TTS) for harbour porpoise of 5 km, based off Thompson *et al*. (2013) but no quantitative assessment is provided as to the reason for halving this distance. As such this assessment does not provide complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works.
- The proposed survey is carrying out surveys within the *Rockabill to Dalkey Island SAC*, which has a qualifying interest of Harbour porpoises, using noise creating equipment (UHRS – Boomer/Sparker: 0.3–5kHz @ 226 dB, SBP – Pinger/Chirp: 500Hz to 16 kHz @225 dB) within the audible range of these species (100Hz-180kHz), which will exceed the PTS threshold of these porpoises (202dB, Southall *et al*., 2019) and they have screened them out (Supporting Information: Screening for Appropriate, p. 47). This decision to screen out the LSE of noise on harbour porpoises seems to be based on the statement:

  "*the presence of the survey vessel is likely to lead to small-scale temporary displacement of animals resulting in them being a sufficient distance from the survey equipment so as not to be susceptible to the onset of either PTS or TTS*"

  Either this is considered a mitigation measure in which it is incorrectly being assessed at stage 1 Appropriate Assessment or it is an incorrect finding and should be screened in. The probability of porpoises being present within the survey area at the time of onset of audible emission remains high and a LSE remains.

- Supporting Information: Screening for Appropriate, p. 47 states that:

"*Using information on animal density (Table 4.2), and the equation πr2 (where r = 5 km as per Thompson et al., 2013) to calculate the area of the zone of potential effect, it has been estimated that there is potential for disturbance of a very small number of individuals of some species (less than 1% of their reference populations). Furthermore, any effects are likely to be temporary and reversible (animals are likely to return to affected sites within a few hours as documented by Thompson et al., 2013) with suitable alternative local habitat being available in the meantime.*"

Taking a worst case scenario (*Rockabill to Dalkey Island SAC*), the density of harbour porpoises within that SAC is 1.87/km2 (O'Brien & Berrow, 2016), therefore the LSE **on the SAC** of TTS effects should be taken in relation to this density, therefore, given the area of considered effect (5km radius, 78.5km2) along with the area of the SAC (273km2), one would expect an impact on ~28% of the *Rockabill to Dalkey Island SAC* qualifying interest, *i.e.* the Harbour Porpoise. This certainly constitutes a LSE and as such contravenes the Habitats Directive.

- Within the *Supporting Information: Screening for Appropriate Assessment* (p.48), the applicant screens out the LSE on collision for marine mammals by the statement:
  "Vessel strikes are a known cause of mortality and physical injury (with potential for subsequent infection) in marine mammals, particularly large whales. The species under consideration are considered to be more agile than the large whales and have been shown to avoid ships"

  As the onset of TTS is likely for a considerable population of the *Rockabill to Dalkey Island SAC*'s QI (Harbour Porpoise, referred to previously), this is likely to cause a significant level of deterioration of the Harbour Porpoise navigation potential, essentially temporarily deafening them, as these species use auditory signals to navigate and feed. As the busy shipping lane of Dublin Port lies within the *Rockabill to Dalkey Island SAC,* this inhibition of the Harbour Porpoise's ability to navigate will inevitably result an increased collision risk and it is incorrect to screen it out at this point in the Appropriate Assessment

- Whelk is abundant in the license area, which is evidenced by the it being the primary commercial fishing activity. Whelk spawn here and are an important source of nutrition for local seabird colonies. Though it is accepted that many areas of the proposed license area the sediment is course (not all areas) and sediment will not remain suspended for long, the proposed activities will result in significant depth of local smothering of whelk and other benthic communities. No assessment or quantification of this aspect of the plan has been presented in the appropriate assessment. A development of the proposed size, combined with the cumulative impacts of previous and current developments, would result in a prolonged recovery period for the whelk, as there is no planktonic dispersal stage. No assessment of the indirect effects of this smothering on Annex I habitats within SACs or birds from local SPAs has been carried out by the developer.

- The AA does not adequately assess or quantify the effect of the proposed development on the Annex IV family of Phocidae (Grey seals) at Lambay Island SAC, using figures and seal populations relevant to the SAC.
- The AA does not adequately assess or quantify the effect of the proposed development on Risso's dolphin or leatherback turtle, which have been recorded in the area (Arklow Bank Dumping at Sea EPA License). These European cetacean species are listed on Annex IV of the EU Habitats Directive (92/43) as species requiring strict protection.

- The AA does not adequately assess or quantify the effect of the proposed development on Tope shark (*Galeorhinus galeus*), which is of particular importance as the proposed development area is a known Tope shark nursery area (Ellis et al. (2012). Their long-life span and low birth rate make them particularly susceptible to species decline. Threats to the tope shark include habitat degradation in nursery areas, which makes the proposed license particularly precarious to them. Tope shark is listed under the IUCN Red List status as "vulnerable" and is protected under the Northern Ireland Priority Species List. The tope shark's range is large and are known to migrate to Strangford and Carlingford Loughs.
- The AA does not adequately assess or quantify the effect of the proposed development on how seabed vibrations affect bottom dwelling fish or the hearing capabilities of sharks, rays and skates and invertebrates. Disturbance to the seabed equates to habitat loss for the angel shark (*Squatina squatina*) is a bottom-dwelling shark that spends most of the day buried in the sand. The angel shark has been declared extinct in the North Sea and locally extinct over part of its former range in the Irish Sea. Threats to the angel shark include being killed as bycatch and habitat degradation. The angel shark's long life span and low birth rate make it particularly susceptible to species decline. The angel shark is protected by the Northern Ireland Priority Species List, is listed on the Irish Red Data Book as critically endangered. The angel shark is also recognized by the IUCN and OSPAR in Ireland.
- The AA does not adequately assess or quantify the effect of the proposed development on the undulate ray (*Raja undulata*), which is a member of the skate and ray family. The flat, bottom dwelling fish is found throughout the Irish Sea. The undulate ray is listed on the IUCN Red List as endangered, recognised by the IUCN in Ireland, listed as UK Priority Species and protected under the Northern Ireland Priority Species List. The undulate ray is particularly sensitive to habitat degradation from human activity.
- The application area is a nursery ground for spotted ray, thornback ray and the AA does not adequately assess or quantify the effect of the proposed development.
- The AA does not adequately assess or quantify the effect of the proposed development on the Sandeel. Sandeel are an **exceptionally important source of nutrition** for local seabird colonies. Though it is accepted that many areas of the proposed license area the sediment is course (not all areas) and sediment will not remain suspended for long, the proposed activities will result in significant depth of local smothering of sandeel and other benthic communities. No assessment or quantification of this aspect of the plan has been presented in the appropriate assessment. A development of the proposed size, combined with the cumulative impacts of previous and current developments, would result in a prolonged recovery period for the sandeel, as the license area is a known spawning ground for sandeel (Ellis et al. 2012). Sandeels live on the seabed in this area and the proposed development represents a real threat to the sandeel and their predators. Sandeels are keystone species and sandeel abundance have been shown to have direct effect on some seabird population and the **breeding success of kittiwakes (red listed), terns (amber), fulmars (amber listed) and shags (amber listed)**. Sandeels are part of many food webs for other fish species and seabirds. No assessment of the indirect effects of this smothering on Annex I habitats within SACs or birds from local SPAs has been carried out by the developer. Sandeel are listed on the IUCN red list as a threatened species, it is on the UK BAP priority species list and the Northern Ireland priority species list.
- The AA does not adequately assess or quantify the effect of the proposed development on the European eel (*Anguilla Anguilla*). It is expected that the proposed activities will result in significant depth of local smothering of European eel and other benthic communities. No assessment or quantification of this aspect of the plan has been presented in the

appropriate assessment. A development of the proposed size, combined with the cumulative impacts of previous and current developments, would result in a prolonged recovery period for the European eel, as the license area is a known spawning ground for European eels. European eels live and spawn on the seabed in this area and the proposed development represents a real threat to the European eels and their predators. European eels feed off molluscs and crustaceans which will be in decline as the seabed will have been disturbed. European eel is critically endangered and the numbers of juvenile eels reaching the coast have declined in recent years due to barriers to migration and habitat loss. This proposed development will add to the habitat loss and migration barriers of this endangered species and prevent them from reproducing. They are sensitive to sound and vibration. They also have swim bladders and underwater sound pollution significantly affects the behaviour of juvenile eels in as they become disorientated and fall subject to prey, thus reducing the number of their population. European eels are listed on the Irish Red Data Book listed as critically endangered and recognised by the IUCN and OSPAR in Ireland.

- The AA does not adequately assess or quantify the effect of the proposed development on the Basking Sharks (Cetorhinus maximus). Sightings data collected by the Marine Conservation Society (Bloomfield and Solandt, 2008) suggests that the waters in the vicinity of Kish Bank is an area of regular sightings and activity for Basking Sharks. Basking Sharks are endangered and recognised by the IUCN and OSPAR in Ireland. Their slow growth and reproductive rates make them particularly vulnerable to population decline and threats include collision with boats and habitat disturbance.
- The AA does not adequately assess or quantify the effect of the proposed development on Herring (clupeiformes) are listed in the Habitats Directive Annex II. In Kish sprat were the most abundant fish in terms of numbers caught followed by herring and poor cod. Annex II Herring are hearing specialist species of highly sensitive with mechanisms that couple the swim bladder in inner ear. Seabed removal and suspended sediment would lead to loss of habitat preventing the development of juveniles. Noise vibration can affect juveniles, particularly noise sensitive species such as herring and noise generalists such as cod and cause physiological stress. The current application area is a nursery and a spawning ground for cod. The proposed development would have a negative impact on the development of juveniles of cod.
- Nursery grounds are sites where juveniles occur at higher densities, have reduced rates of predation and have faster growth rates than in other habitats. Seabed disturbance is anticipated to have a potential impact on the nursery grounds where seabed removal and the suspended sediment plume can potentially lead to a loss of habitat, preventing the development of juveniles. Noise and vibration caused by seabed disturbance can also potentially affect juveniles within the localised area, particularly noise sensitive species such as cod (vulnerable), potentially causing physiological stress.
- The applicant's "*Supporting Information: Screening for Appropriate Assessment*" states (p.16):

  "*Not all of the Annex II diadromous fish QIs are suspectable to underwater noise. Fish species are either hearing specialists where intricate connections from the swim bladder to the inner ear allow the perception of underwater noise; or hearing generalists where there is no connection with the swim bladder and therefore little or no perception of underwater noise. It is considered that only hearing specialist species are sensitive to underwater noise, and that no route to impact exists for hearing generalists*."
- **<u>This is clearly false and incorrect</u>** for cod which are hearing generalists where the proposed development is the cod (*Gadus morhua*) is a member of the gadoid fish family. The cod is

protected under the Northern Ireland Priority Species List because it meets the following criteria:
    - IUCN Red List status is “vulnerable;”
    - Listed as a UK priority species;
    - Declining population.
    - The cod is also recognized by OSPAR in Ireland.
- The AA does not adequately assess or quantify the effect of the proposed development Spawning grounds which are recorded within the vicinity of the application area for the key commercial species; spawning grounds are located for the following species: i. Cod; ii. Sandeel; iii. Whiting; iv. Plaice; v. Sole; vi. Ling; and vii. Mackerel.
- The AA does not adequately assess or quantify the effect of the proposed development nursery grounds which are located withing the application area for species such as cod, anglerfish, tope shark, spotted ray and whiting.
- The AA does not adequately assess or quantify the effect of the proposed development on Annex IV Animals and plant species of community interest in need of strict protection (from Habitat Directive) Sturgeons Annex IV of Habitat Directive (sturgeons are bony fish) and the last sturgeon was identified in the application area and the marlin mapped it in the application area also (here).
- AA does not adequately assess or quantify the effect of the proposed development as a spawning ground for plaice sole; ling; mackerel all which are will be affected.
- A number of migratory fish are also known to utilise the rivers and the coastal waters of the east coast of Ireland and hence have the potential to migrate through the general area of the application. These species include Atlantic salmon (*Salmo salar*), trout (*Salmo trutta*), European eel (*Anguilla anguilla*), sea lamprey (*Petromyzon marinus*), European sturgeon (*Acipenser sturio*), twaite shad (*Alosa fallax*) and allis shad (*Alosa alosa*). AA does not adequately assess or quantify the effect of the proposed development on the Atlantic salmon (*Salmon salar*), which is a member of the Salmonidae family. Threats to the Atlantic salmon are habitat degradation and the creation of barriers to migration which will most likely result from this proposed development. The Atlantic salmon is protected under the Northern Ireland Priority Species List because it meets the following criteria:
    - Declining population;
    - Listed in Annexes II and V of the Habitats Directive
- The potential effects of the proposed disturbance to the seabed are likely to interact with spawning grounds to generate a significant impact due to suspended sediment and seabed disturbance. Therefore, the potential effects of the proposed seabed disturbance are likely to interact with nursery grounds to generate a significant impact.
- AA does not adequately assess or quantify the effect of the proposed development potential impacts associated with fisheries relate to habitat removal caused by seabed disturbance and the associated release of the suspended sediment plume, potentially leading to displacement of fish in the vicinity of the sediment plume area. Noise and vibration caused by seabed levelling is also anticipated to impact upon fish species in the localised area, particularly noise specialists such as cod and herring, which are relatively sensitive to sound.
- AA does not adequately assess or quantify the effect of the proposed development the food chain.
- Benthic flora and fauna are anticipated to be directly impacted by seabed disturbance. Habitat removal will result in the loss of benthic communities within the application area including the removal of both infauna and epifauna. Potential impacts on benthic

communities will also have secondary impacts on species which prey upon benthic invertebrates further up the food chain such as eels.

- Sandeels are keystone species found on codling sand bank and sandeel abundance have been shown to have direct effect on some seabird population and the breeding success of kittiwakes (red listed), terns (amber), fulmars (amber listed) and shags (amber listed). Sandeels are part of many food webs for other fish species and seabird
- AA does not adequately assess or quantify the effect of the proposed development on the Annex IV atheriniformes Ray finned fish atherina presbyter sand smelt (bony fish) listed in the Habitat Directive and goby fish listed in Annex II of habitats directive.
- A does not adequately assess or quantify the effect of the proposed development the emission of methane gas as a result of working or being in the vicinity of the application area due to the known kish bank reserves in the application area.
- The Habitats Directive and OSPAR are intended to protect species that are at risk of Extinction; they protect the habitat in which they exist. The application area is the habitat of threatened, endangered and critically endangered species and the AA does not adequately assess this. This proposed development should be prevented under the Wildlife (Ireland) Acts, 1976 & 2000 as "wilful interferences with the breeding place of a protected species." In order to fulfil Ireland's obligations under the Habitats Directive, OSPAR, and its own laws, the proposed development should be declined as it's AA does not adequately assess or quantify the effect of the proposed development.
- The AA does not adequately assess or quantify the effect of the proposed development on the Allis shad (Alosa alosa) is a member of the herring family. The fish lives in coastal waters and estuaries for most of its life but migrates into rivers to spawn. Threats to the Allis shad include the construction in their migratory paths, habitat degradation and water pollution, all of which will result from this proposed development. The Allis shad is listed under the Northern Ireland Priority List because it meets the following criteria:
    - Listed as a UK priority species;
    - Irish Red Data Book classified as vulnerable
    - The Allis shad is also recognized by the Habitats Directive and OSPAR.
    - The twaite shad (scientific name: Alosa fallax) is a member of the herring family,
    - similar in appearance to the Allis shad. Spending most of its life in coastal waters, the
    - fish migrates upstream in the spring to spawn. Like the Allis shad, threats to the twaite
    - shad include disruption to the seabed and other migratory route obstructions, habitat degradation,
    - pollution all of which will result from the proposed development.

    The twaite shad is also recognized by the Habitats Directive and IUCN in Ireland. The twaite shad is protected under the Northern Ireland Priority Species List
    - because it meets the following criteria:
    - Listed as a UK priority species
    - Irish Red Data Book classified as vulnerable

2. <u>Insufficient Evidence or Mitigation Measures:</u>

There is insufficient evidence that the proposed works, individually, or in combination with other plans or projects, is unlikely to have a significant effect on any European Site/s subject to specific mitigation measures.

- AA screening information in relation to matters including the bird species studied, the impact of underwater noise on bird species, a lack of clarity in relation to the proximity criteria and zone of influence used in screening sites and a failure to present evidence to support conclusions in relation to in combination effects.
- Likely significant effects in combination with other plans or projects were not assessed, including combined effects of past investigations in the area.
- Granting of benthic grabs/trawls, without preceding drop down camera, ROV or SCUBA dives of the site is poor international practice and may result in the damage to sensitive habitats
- The license application states, regarding *Codling Fault Zone SAC* that:

  "*In order to ensure no adverse effects on the conservation objective of the SAC, mitigation will be put in place to ensure that no extractive survey methods (or placement of anchors or jack up legs) cause damage to these qualifying interests. This will be achieved by using geophysical survey data to identify the locations of potential Annex I habitat. Any areas of potential reef will be avoided through micrositing of equipment or survey location*."

  The exact methods used and features which the development company considers to be inclusive of an Annex I habitat in this regard and clear go/no-go features should be outlined. Without this, the mitigation measures do not contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works.

- "*FS007134 Risk Assessment for Annex IV Species*" (p. 18) states that:

  "*It is considered that standard mitigation measures, as detailed in the 2014 Department of Arts, Heritage and Gaeltacht (DAHG) Guidance and outlined below such as pre-start monitoring and ramp-up ("soft-start"), will prevent individual animals from having the potential to be exposed to the risks outlined in Section 5*."

  The mitigation measures outlined in the outdated 2014 Department of Arts, Heritage and Gaeltacht (DAHG) Guidance are adequate to avoid LSE on marine mammals.

- "*FS007134 Risk Assessment for Annex IV Species*" section "7*.1 Mitigation Measures for Geophysical Equipment*" states that '*soft start-up*' and other mitigation measures will only be implemented "*where the equipment has the capacity*", therefore, a worst-case scenario should be adapted and, given that assessments in previous sections of this document rely on these mitigation measures to determine no LSE, this indicates that a LSE remains.
- "*FS007134 Risk Assessment for Annex IV Species*" (p. 18) states that:

  "*If there is a break in sound output from the SPB (or other audible source with source level above the threshold for auditory injury) for a period greater than 30 minutes (e.g. due to equipment failure, shut-down, survey line/station change) then all pre-survey monitoring measures and ramp-up (where this is possible) will recommence prior to re-starting*"

  However, no quantifiable justification for the 30 minute duration is presented and therefore the mitigation measure does not contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works.
- "*FS007134 Risk Assessment for Annex IV Species*" (p. 18) states that

  "*Where the duration of a survey line or station change is greater than 40 minutes, the activity will, on completion of the line/station being surveyed, either cease (i.e.,*

shut down) or undergo a reduction in energy output to a lower state where the peak sound pressure level from any operating source is 165 - 170 dB re 1 µPa @ 1 m or lower"…." Where the duration of a survey line or station change is greater than 40 minutes, the activity will, on completion of the line/station being surveyed, either cease (i.e., shut down) or undergo a reduction in energy output to a lower state where the peak sound pressure level from any operating source is 165 - 170 dB re 1 µPa @ 1 m or lower."

However, no quantifiable justification for the 40 minute duration is presented and therefore the mitigation measure does not contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works.

- *Natura Impact Statement*, Table 2.1 indicates that Geophysical surveys "may also incorporate visual surveys (*e.g*. drop-down video, ROV, *etc*.)" however, no inclusion of visual surveys are mentioned in under Geotechnical surveys. Visual surveys should precede Geotechnical surveys and relevant Environmental/Ecological surveys in every case, or at minimum where reef structures exist in the vicinity of the geotechnical survey. If this is not consistently the case, then a LSE on reef structures remains.
- In relation to mitigation measures in place to avoid disturbance of *Mytilus edulis* beds, it is stated (*Natura Impact Statement,* p.24) that:

  "*All work undertaken in the intertidal by tracked vehicles will avoid the area of Mytilus edulis (plus a suitable buffer to ensure their structural integrity), the boundary of which will be delineated through a survey of the area prior to such work commencing*"

  This mitigation measure is not sufficiently defined to eliminate a LSE on the *Mytilus edulis* reef. Therefore, a conclusion of no LSE could not be accurately determined within this NIS as stated.
- In relation to mitigation measures in place to avoid disturbance of *Ammophila arenaria*, it is stated (*Natura Impact Statement,* p.26) that:

  "*Access tracks will avoid areas of Shifting dunes along the shoreline with Ammophila arenaria (white dunes) wherever possible*"

  This mitigation measure is not sufficiently defined to eliminate a LSE on the *Ammophila arenaria*. Therefore, a conclusion of no LSE could not be accurately determined within this NIS as stated.
- In relation to mitigation measures in place to avoid disturbance of *Fixed coastal dunes with herbaceous vegetation (grey dunes)*, it is stated (*Natura Impact Statement,* p.27) that:

  "*Access tracks will avoid areas of Fixed coastal dunes with herbaceous vegetation (grey dunes) wherever possible*"

  This mitigation measure is not sufficiently defined to eliminate a LSE on the *Fixed coastal dunes with herbaceous vegetation (grey dunes)*. Therefore, a conclusion of no LSE could not be accurately determined within this NIS as stated.
- In relation to mitigation measures in place to avoid disturbance of *Humid dune*, it is stated (*Natura Impact Statement,* p.28) that:

  "*Access tracks will avoid areas of humid dune slacks wherever possible*"

  This mitigation measure is not sufficiently defined to eliminate a LSE on the *Humid dune*. Therefore, a conclusion of no LSE could not be accurately determined within this NIS as stated.
- In relation to mitigation measures in place to avoid disturbance of *Petalophyllum ralfsii (Petalwort)*, it is stated (*Natura Impact Statement,* p.29) that:

"*Access tracks will avoid areas of Petalophyllum ralfsii (Petalwort) <u>wherever possible</u>;*"

This mitigation measure is not sufficiently defined to eliminate a LSE on the *Petalophyllum ralfsii (Petalwort)*. Therefore, a conclusion of no LSE could not be accurately determined within this NIS as stated.

- In relation to assessment of effects on *[1140] Mudflats and sandflats not covered by seawater at low tide* and particularly in relation to *Zostera* habitats within *South Dublin Bay SAC*, the NIS provided states (p.29-30):

  "*Offshore borehole sampling from a jack up barge may be required. This activity does have a greater footprint than the remote sampling described above, however is also <u>only likely to be viable</u> in the more offshore regions of the SAC due to water depths and so will avoid the more sensitive habitats such as the Zostera community located towards the upper shore."*

  This statement does not constitute a mitigation measure and a clear statement of depth/area in which borehole sampling from a jack up barge will be carried out should be outlined and a specific statement outlining whether or not such investigations will occur within the area where *Zostera* habitats have been observed. Without this a conclusion of no LSE could not be accurately determined within this NIS as stated.

- In relation to mitigation measures in place to avoid disturbance of [1180] Submarine structures made by leaking gases, it is stated (*Natura Impact Statement,* p.32) that:

  "In order to ensure no adverse effects on the conservation objective of the SAC, mitigation will be put in place to ensure that no extractive survey methods (or placement of anchors or jack up legs) cause damage to these QIs. This will be achieved by using geophysical survey data to identify the locations of potential Annex I habitat. Any areas of potential reef will be avoided through micrositing of equipment or survey location."

  This mitigation measure is not sufficiently defined to eliminate a LSE on the [1180] Submarine structures made by leaking gases. Therefore, a conclusion of no LSE could not be accurately determined within this NIS as stated. Which exact geophysical survey data will be reviewed in this respect? Will this include drop-down video/ROV surveys? How likely is the proposed geophysical survey data to proved a false negative with regard to the presence of [1180] Submarine structures made by leaking gases? What features specifically do the potential licensees consider to be indicative of a [1180] Submarine structures made by leaking gases feature? This mitigation measure does not provide complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works.
- According to the Natura 2000 statement, "the Conservation Objectives to maintain the favourable conservation condition of Harbour Porpoise (*Phocoena phocoena*) [1351] within the *Rockabill to Dalkey Island SAC*, are defined by the following list of attributes and targets:
  - Species range within the site **<u>should not be restricted by artificial barriers</u>** to site use; and
  - Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site."

  Both of these site targets would be contravened as a result of the granting of this license application.

3. Unregulated Development Environment:

Granting of this license would contravene article 6(3) of the Habitats Directive by granting a consent to a project which leaves the developer free to determine subsequently certain parameters without first having made certain that the development consent granted establishes conditions that are strict enough to guarantee that those parameters will not adversely affect the integrity of the site.

- The development consent, if granted, should establish conditions that are strict enough to guarantee that those parameters will not adversely affect the integrity of the site. This is not evident from this application
- Choice of benthic grab methods is not clear and is of utmost importance in attaining correct data for the next stage of the appropriate assessment of the proposed wind park. Biological trawls are considerably more beneficial in some instances and a clear indication of what will and will not be discovered by these methods should be outlined.

4. Cumulative Impact:

The current license application appropriate assessment fails to take into account properly or at all the cumulation of the impact of the project with the impact of other existing and/or approved projects contrary to article 4(3) and Annex III. Granting of this license would be a breach of article 4(4) by failing to ensure that the project was properly described in terms of cumulation of impacts.

- The cumulative impact of the granting of multiple licenses in the area for surveys such as these will have a cumulative impact which has not been appropriately assessed. As such, granting of this license would constitute a breach of the habitats directive.
- No cumulative assessment has been made of the very real possibility that two developers could be conducting similar site survey work including boreholes and cone penetration tests in the same area at the same time.
- In combination effects the applicant only considers synchronous events and synchronous licenses/leases and do not give any consideration to prolonged repetitive surveying, dredging and noise in the area, impacted by past licenses/surveys, such as their own previous surveys as recently as 2019. In fact, it is not made clear in the application why repeated benthic grabs/trawls is required and may cause significant impact to benthic communities.
- The NIS admits that "*it is concluded that there may be a small ex-situ in-combination displacement impact to this SCI as a consequence of proposed works*" (p.20) however fails to quantify this effect. Additionally, no *temporal in-combination effects* have been considered in relation to past and proposed future projects. As such, the NIS has failed to provide complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works.
- Though the proposed surveys, considered in combination with various works around Dublin port, undertaken by *Dublin Port Company*, (*e.g. Natura Impact Statement,* p. 25, 31) are considered to have the potential to lead to in combination effects on *North Dublin Bay SAC*, there is considered to be no LSE as a result of each project being "*small in spatial scale, and short in temporal scale*". This does not constitute an appropriate assessment and fails to provide complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works.
- The in-combination effects are inadequately addressed and do not include recent license applications such as FS007188, as is required under Article 6(3) of the Habitats Directive.

Conclusion

Based on the extensive scientific analyses presented here it must be concluded that the current Foreshore Licence application does not provide information that would justify granting this licence and the application should be refused.

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Submission 15

I wish to lodge my objection/observation in relation to the application FS007134 made by ESB Wind Development Limited for a Licence to carry out site investigations relating to a possible wind farm on a site named "Sea Stacks Offshore Wind", situated off the coasts of Dublin and Wicklow.

My observations/Objections are as follow:

The cumulative impact of repeated geotechnical and geophysical site investigations

There have already been significant site investigations carried out in this area and there is currently another licence application by another developer being processed. The cumulative impact of repeated geotechnical and geophysical site investigations on our fragile marine environment along this small stretch of coastline must be considered. All cause disturbance to marine life and habitats. In the absence of designated marine protected areas we can not permit repeated disturbance and damage.

Public Consultation

To date no meaningful effort has been made by Government to inform the public in a balanced way of both the pros and cons associated with such large scale near shore marine windfarms. It would appear from what has been happening so far that there is an alliance between the Government and developers and a biased drive to facilitate developers to progress their near shore windfarm businesses. Political will has been promoting and supporting offshore windfarm development but has failed to inform the public, based on unbiased scientific evidence, of the environmental impact that may accrue from such large scale near shore investigations and development. Rather than depend on developers to do it, our Government must take responsibility for facilitating public consultation and open meaningful public debate. During the Pandemic public consultation is more challenging and extra efforts are required to target audiences in a user friendly way. No special efforts seem to have been made by Government over the last 2 years to engage with citizens by producing accessible, unbiased information about proposed projects and the alternatives. As a citizen I consider myself disenfranchised by the lack of unbiased public information and consultation relating to proposals for such massive permanent alteration to our precious marine environment and coastal landscape.

Consideration of alternatives

In the rush to meet climate targets it seems that all alternatives regarding site selection and turbine type have not been given due consideration. Although great progress has been made with the development of floating turbines, for example off the Scottish Coast, they seem to have been dismissed as a possibility for the Irish East Coast. It is said repeatedly that the technology is not yet sufficiently advanced and that the Irish Sea is too deep but there is also much information available that suggests they can be used effectively in similarly adverse conditions elsewhere. There have

been recent reports of Scottish Projects. It is crucial that all alternatives are given full unbiased consideration before we progress any particular projects.

Failure to designate Marine Protected Areas

In the interests of preserving the biodiversity of our fragile marine environment absolutely no disturbance to our coastal waters by developers should be permitted before we designate Marine Protected Areas. It is shameful that as an island nation we have designated a mere 2% of our marine environment for protection. Without the designation of MPAs there can be no safe site selection and applications for site investigations are premature.

Legacy Projects

It is absolutely unacceptable that projects that submitted applications under outdated legislation, before we had the kind of environmental awareness we have now, are given special status of any kind. All proposed projects should start from scratch under the new legislation and be subject to full scrutiny in accordance with up to date best international standards for windfarm development and site selection. There should be no preferential standing based on an outdated application process in the absence of the designation of Marine Protected Areas based on best independent scientific evidence.

Site selection

It is absolutely unacceptable that developers have been permitted to select sites without adequate environmental constraints. Based on best independent expertise, sites should be selected by Government and developers should only be offered opportunities to propose projects within suitable designated zones. We rely on our elected representatives to safeguard our long term interests by setting boundaries and controlling development. Such blatant allegiance to, and preferential positioning for, legacy projects demonstrates clearly that this is not happening.

Monitoring of Compliance

Given the enormity of what is at stake it is crucial that provision is made for completely independent expert monitoring of any disturbance to our marine environment caused by investigations should a licence be granted.

Highest Standards for Environmental Impact Assessments

It is crucial that the Government engages independent expertise of the highest calibre to ensure that Environmental Impact Assessments are broad enough and conducted in accordance with current highest international standards.

Killiney Bay Community Council

REQUEST FOR A COST BENEFIT ANALYSIS RE. THE INSTALLATION OF TURBINES WITHIN THE KILLINEY BAY AREA

Costings are an essential condition for a public appraisal and evaluation of the profit and loss balances deriving from the installation of multiple wind turbines within and near to the Pristine Killiney Bay area. We request a valuation of the natural capital inherent in our local bio-geography. We request the measurement of the capital value of our Killiney Bay maritime environment, via a system of accounting based on data evidence of present and future financial value gain or loss. Economic metrics make it possible to integrate ecosystems into economic price ratios compatible with market finance. Consistent with this measurement of eco-value, we request an appraisal of 'ghost death' from damage to the sea floor and dependent sea stock. We seek the inclusion of national capital accounting impact assessment as follows:

1. Factor the monetary value of, offset by the damage to, the benthic ecosystem proximate to the Dublin Bay Biosphere and proximate SAC. In particular, cost the value of the Kish and Bray sandbanks as spawning grounds for fish and molluscs, and feeding grounds for sea birds. Focus on the proximity of this area to the Special Area of Conservation, Rockabill to Dalkey.

2. Define predicted costs due to coastal erosion on Killiney Beach and Cliffs. Note 1.

3. Examine the installation of wind turbines adjacent to Dublin Bay Biosphere and Dalkey to Rockabill SAC in terms of injury to porpoises.

Note 1: COASTAL EROSION CONSIDERATIONS :

Under future greenhouse-induced climate scenarios (Houghton et al., 2001), adjustment in both the rate of sea-level rise and wind-wave energy are envisaged (Watson et al., 2001) although a present it is not possible to say with certainty the degree of change or the threshold tolerances of these banks. Anthropogenic interference in littoral processes could also affect this balance although current management philosophy prohibits significant removal of the bank sediment or southerly sediment supply areas ([redacted] personal communication). Future uses of the banks for offshore wind farms are currently under evaluation although there are no current plans to license large scale offshore aggregate extraction ([redacted], personal communication). Offshore aggregate extraction is subject to ongoing policy development although it is unlikely, at this stage, that extraction could occur with the 20m isobath due to coastal erosion considerations ([redacted], personal communication).

Seabed mapping and seafloor processes in the Kish, Burford, Bray and Fraser Banks area, South-Western Irish Sea, Irish Geography, January, 2001.

Source: Andrew James Wheeler, University College, Galway

Gerry D. Sutton, University College, Cork

Submission 17

Note: I permit any representations or points made in this submission to be relied on, referenced or used in support of Coastal Concern's submission on the same application (ESB Wind Development Limited FS007134) or in the future.

I object to the granting of the foreshore licence application FS007134 by ESB Wind Development Limited.

These are some of the grounds for objection which I wish you to take into consideration, primarily,

Oversights: In conjunction with two other developers as part of a consortium, an ESB offshore wind subsidiary (Hibernian Wind?) commissioned a 2002 baseline study on bird habitats in relation to a site area immediately adjacent to and surrounded by the current ESB Wind Development Limited proposed survey investigation area. This 2002 bird study found significant concentrations of protected bird species using the proposed site area and around for foraging, breeding, listed the presence of migratory bird species and mapped concentrations of flight patterns of protected species in and around the area to the North, North-West and North East of the 2002 proposed site area which is by and large the subject site area of the current site investigation foreshore Licence Application (FLA) FS007134.

It is striking that the current developer did not take the findings of this thorough 2002 baseline bird study (including expert flight mapping) into consideration in their assessment of the suitability of the selection of FS007134's proposed site and that it was not taken into account in their site selection process, or in their current NIS, in the Screening for Appropriate Assessment, or in Annex IV species reports, or geotechnical and geophysical reports given that ESB Wind Development as it stands now would surely have been aware of the important findings on avifauna habitats and species in and around this area before ESB then wind energy subsidiary pulled out of consortium to develop the proposed project area in 2005[1].

What concerns me is that an objective assessment at site selection stage, or at the site investigation submission stage where, if all applicable habitats and birds directives criteria were knowledgeably applied, should clearly have ruled out the proposed site area in relation to both cetaceans (as protected species as are their habitats and their status as component species of adjacent SACs) and avifauna (as protected species as are their habitats and their status as component species of adjacent SPAs) and sandbanks habitat and species, reef building polychaetes habitats, and migratory fish and critical fish spawning grounds.

In relation to critical fish spawning grounds in the proposed FLA site area I would like to draw attention to concerns expressed by three EU approved marine organisations in relation to the impartiality of assessment surveys submitted as part of offshore investigative and infrastructural project applications generally in Europe, and draw attention to a letter[2] addressed to the Directorate-General for Maritime Affairs and Fisheries from the North Western Waters Advisory Council, the Pelagic Advisory Council and the North Sea Advisory Council which addresses the impact of marine wind energy developments on commercial fish stocks. In this letter these organisations express the following concerns as to:

"marine habitat alterations and other key interactions ... the NWW, North Sea and Pelagic AC members are specifically concerned over these potential impacts given the importance of e.g. spawning grounds/burrows for the health of the stocks under their remit. **The NWW, North Sea and Pelagic ACs are equally concerned over the quality, thoroughness and independence of impact studies carried out prior to offshore projects in their remit area. To date, most impact studies are being commissioned and/or funded by the energy sector, raising the question of impartiality**"[3]

I find that another shortcoming of ESB Wind Development Limited Site Investigations FLA supporting documents is that, in the insufficient time granted for the public to read these reports I also found an overreliance on documents which I found sometimes had insufficient scientific parameters on the issue in question or in relation to providing justifications as to whether likely significant effects (LSEs) will or will not come about. For example in assessing the effects of benthic profiling, drilling, seismic, acoustic or intrusive survey methods and the effects of sound disturbance on marine mammals etc, a study titled 'A Ship Traffic Disturbance Vulnerability Index for Northwest European Seabirds as a Tool for Marine Spatial Planning' by K Fliessbach et al is referenced more than once. This study refers only to noise made by **shipping vessels** and while no doubt it is a good study, because of its terms of reference (shipping vessels), it cannot provides relevant scientific criteria for the assessing or eventual dismissing of LSEs that may (and in my opinion will) arise from extensive noise, vibrations and habitat deterioration that arise not from shipping vessels but from drilling to 70 metres, vibrocoring and many other intrusive sonar and acoustic survey methods as proposed in the ESB Wind Development Limited FLA such as, "Accompanying Report" "Risk Assessments Report" or "Schedule of Works".

In relation to protected bird species as mentioned above, this general area as site for any wind farm associated activities was already found in 2002, by a developer funded baseline report - to carry the risk of significant impact on protected bird species. The number and categories of protected bird species now red or amber listed using this area has since notably increased. The report concluded:

The other potential impact highlighted in the preliminary report was the possible displacement of foraging seabirds from the Kish Bank ... This was identified as a potentially significant impact for rather more species of national importance. As stated in that report, shallower sea areas such as the Kish Bank are relatively scarce in this region, the Kish itself constitutes quite a large proportion of the available resource. ***Therefore any effective loss of habitat would be more likely to result in significant ecological consequences, such as reduced breeding success and increased mortality.*** *Alternative feeding areas with similar characteristics may well be limited. Similarly for birds outside the breeding season, loss of feeding resources could be significant.* ***Again, if a disturbance effect occurs, its ecological consequence would be dependent on the availability of alternative feeding areas. If such alternative areas were not available and then birds were unable to reach adequate body condition before migration, this could result, for example, in increased mortality rates*** *... given the importance of the area,* ***a precautionary approach would need to be taken****. This is particularly the case when the* ***conservation status of the populations*** *using the Kish Bank is considered.* ***The Bank itself has sufficient conservation value to qualify for SPA status, solely on the grounds of the roseate tern numbers that use it. This is not, however, the only SPA issue, as many of the seabird populations using the Kish are very likely to be from designated SPAs nearby.*** *This includes all of the following:*

> ***Rockabill Island - breeding roseate and common tern****.*
>
> *Skerries Islands - breeding shag and cormorant*

Lambay Island - breeding Manx shearwater, shag, guillemot, razorbill, fulmar, cormorant, kittiwake.

Ireland's Eye - breeding gannet, cormorant, kittiwake, guillemot and razorbill.

North Bull Island Dollymount - breeding common tern, passage roseate and

a. *other terns.*

Howth Head - breeding kittiwake and razorbill.

Sandymount Strand / Tolka Estuary - breeding common tern, passage roseate and other terns.

Wicklow Head - breeding kittiwake, razorbill, guillemot, fulmar and shag.

If birds feeding on the Kish and breeding/on passage at any of these other SPAs were affected, it is possible that the overall SPA populations of these species could be reduced.

*... it can be concluded at this stage that as far as the most sensitive bird issue on the site is concerned**, roseate tern**, it would **be inappropriate to construct a wind farm within its main area of use (i.e. in the northern half of the Bank). It would not be possible to be sure that significant impacts would not occur, and hence the only current solution would be to locate the wind farm outside the area used by this species.***

*In terms of the nationally important species, there are potentially significant issues with regard to the impacts on the Kish populations themselves **and also in terms of possible impacts on neighbouring SPAs for a range of species, particularly including Manx shearwater, shag, kittiwakes, common terns, guillemots and razorbills.***

Given these baseline findings which both the current applicant developer and the Foreshore Application Unit would have access to in relation to assessing this area and understanding adverse impacts on protected species in the area, I feel that the current applicant developer throughout their supporting documentation for FS007134, has gone out of their way to overlook or downplay **the cumulative effects** of proposed OFW projects affecting this area (such as Dublin Array's proposed extensive site investigations and where turbine height of the proposed OWF is estimated to be up to 310m height x 61) which will have,at site investigation stage, cumulatively or separately, likely significant effects or significant adverse impacts on protected species or habitats.

It is also of concern that the applicant developer does not put forward and makes no reference to alternative sites for site investigations or OWF project, potentially further creating a pressure towards a confirmation bias in relation to avoiding the effects of the precautionary principle and the requirements of the habitats and birds directives on findings of likely significant effects or cumulative effects of OWF projects in this area on species and habitats. For clarity, cumulative effects are "in Article 3(3) ... caused by the projects or plans that are currently under consideration together with the effects of any existing or proposed projects or plans. When impacts are assessed in combination in this way, **it can be established whether or not there may be, overall, an impact which may have significant effects on a Natura 2000 site or which may adversely affect the integrity of a site**... **It should also be remembered that cumulative impacts could result where impacted areas interact."**[4]

I would also like to note to the deciding authorities that the carrying out of screening for appropriate assessments and Natura Impact Statements, including at any proposed geotechnical and geophysical site investigations has a necessary requirement of objectivity:

Approach to decision-making The diversity of habitats, species, projects and plans that exist within the European Union and the variations between national regulations require the approach to the Article 6 assessments to be robust and yet flexible... ***the decisions made through the application of the methodology should attempt to be as transparent and objective as possible*** *and at the same time should reflect the value judgments inherent in any environmental assessment.* ***Implicit in the habitats directive is the application of the precautionary principle, which requires that the conservation objectives of Natura 2000 should prevail where there is uncertainty****. The Commission's COM(2000) 1 final 'Communication from the Commission on the precautionary principle' (European Commission, 2000a) states that the use of the precautionary principle presupposes identification of potentially negative effects resulting from a phenomenon, product or procedure; a scientific evaluation of the risks which****, because of the insufficiency of the data, their inconclusive or imprecise nature****, makes it impossible to determine with sufficient certainty the risk in question (European Commission, 2000a, p. 14****). This means that the emphasis for assessment should be on objectively demonstrating, with supporting evidence, that: there will be no significant effects on a Natura 2000 site (Stage One: Screening****); or*** ***there will be no adverse effects on the integrity of a Natura 2000 site*** *(Stage Two: Appropriate assessment****); or there is an absence of alternatives to the project or plan that is likely to have adverse effects****.* [5]

There is also an obligation at Screening and NIS stage on the applicant to acknowledge uncertainties and any gaps in information. While it appears to me that there are uncertainties and gaps in the information submitted as part of the application's supporting documentation for FS007134 , this is not properly acknowledged or flagged by the applicant or by the organisation who has compiled the information submitted on behalf of the applicant.

I am also concerned that relevant historic judgments (e.g. JUDGMENT OF 11. 1. 2007 — CASE C-183/05) and recent findings in an as yet unpublished report on the NPWS as to the its lack of capacity to effectively assess, monitor and have oversight of species and habitats to the standards required in relation to 'strict protection' and in relation to marine areas is palpable in relation to below par scientific data gaps and ommissions in the supporting FLA documents . I am curious to know, given that the applicant developer says that consultations with NPWS were undertaken (although the written advice given by NPWS on the current submission is not made available) why it is that the supporting documentation contains uncertainties and gaps that call into effect the precautionary principle and if this has been noted or flagged to the applicant developer or to the Foreshore Application Unit, or if it will be flagged to the Marine Licence Vetting Committee if it progresses to that stage, by the body tasked with assessing and monitoring such proposal and project? I am concerned that (as reported in the media), a recent draft review report on the NPWS found that because of under-resourcing and other problems, the NPWS does not have the required capacity to fulfil its statutory role in Marine nearshore and offshore projects under the EU Habitats and Birds Directives for which it is responsible. I feel that this lack of capacity is reflected in the ESB Sea Stacks Investigation FLA supporting documentation and fear the long term consequences for protected species and habitats in this area (at site investigation stage and beyond) in relation to this proposal and in relation to other projects in 'the pipeline' in this same area.

Please note that I object to the developer in the Risk Assessment for Annex IV Species report, on page 5, incorrectly transposing a particularly relevant provision, writing; "The Habitats Directive has been transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 - 2021 .... These Regulations provide for the protection of cetacean and marine turtle fauna and as such it is an offence to: Deliberately capture or kill any specimen of these species in the wild; etc. (or) "**Damage or destroy** a breeding site or resting place of such an animal;" The correct wording of this provision should be "**deterioration** or destruction of breeding sites or resting places." Deterioration – a far lower level of adverse impact effects rather than 'damage' which is a more drastic term, as substituted in the Risk Assessment for Annex IV Species report, unintentionally or otherwise removes a much higher level of strict protection from direct or indirect effects applicable to the species and habitats in and adjacent and likely to be effected by the proposed site investigation measures. It infers that there is more latitude up to the point of 'damage' rather than 'deterioration' regarding the requirements of the strict protection habitats and speices.

Given that ESB (or its then subsidiary Gort Wind) were in charge of what resulted in an environmental fiasco regarding the onshore Derrybrien Wind Farm's lack of proper environmental assessments in granting permissions (Case C-215/06 Commission v. Ireland Judgment of the European Court of Justice, 3 July 2008) and consequent huge fines and penalties imposed on the Irish state by the ECJ[6], I am concerned about whether application documents for the Sea Stacks actually withstand or come up to proper scrutiny. Keeping in mind also that offshore wind projects and proposals – as pointed out in various EU and national guidance documents – are even more difficult to effectively vet, assess monitor or 'police' in relation to biodiversity and habitat deterioration, than onshore ones.

Other points and objections:

- Several bird species in the AA screening document and elsewhere are misclassified or even omitted (despite being on record in this area and in relevant SPAs in relation to the level of protection required), in particular in relation to underwater acoustic noise surveying, and the diving-foraging features of some bird species at screening and the effects of intrusive and acoustic investigative works are misinforming: See Table 2 for examples.

- The developer does not give any estimate of time or hours in relation to intrusive elements of their proposed site survey. Given that these site investigations comprise significant use of intrusive acoustic scanning, drilling and dredging survey methods adjacent to protected species and their range of habitats, (including but not exclusive to local SPAs and SAC sites) over the space of 5 years, and overlapping cumulatively with other projects, this is a critical omission which I believe should lead to this application being rejected.

- In the ESB Wind Development Limited Site Investigations at Sea Stacks Offshore Wind off Dublin and Wicklow application there are gaps and omissions in relation to: impacts on fish species and fish spawning grounds (also as to sand eels and polychaetes), gaps and omissions in relation to the avoidance of or protection of pathways between protected sites and protected species

range. There are gaps and omissions in relation to the barrier effects of this FLA alone or together with other FLAs in the area and are gaps and omissions regarding fragmentation of foraging habitats and in relation to breeding and resting place of protected species. There are also gaps and omissions in the application in relation to the range, distribution of, and the deterioration of breeding and resting grounds of species requiring strict protection (cetaceans, in particular the harbour porpoise, a QI for Rockabill to Dalkey Island SAC) and gaps and omissions relating to the assessment of biogenic, geogenic reefs and 1180 MDAC habitats. See below Table 1. for scope of errors, omissions and gaps that I found to be present in the supporting documentation on birds in, Annex IV or NIS and AA screening documents. Because of these gaps and omissions I believe that the granting of this FLA would in breach of the requirements of Article 12 and other provisions of the Birds and Habitats Directives and guidance (see table 2.below) especially provisions relating to the "deterioration or destruction of breeding sites or resting places," for example in view of the seismic and acoustic surveying measures.

- The developer holds out that the site investigations, in particular intrusive investigations such as sonar and acoustic scanning of the seabed etc, the drilling (vibrocoring, sampling, borehole drilling etc, tracked vehicles, jack up barges) are of low impact and short duration, which I feel is misleading. From this position the developer also holds out that the intrusive site investigation measures are detached from the construction and operation stages of the offshore wind farm. I do not find this to be credible because the extent of intrusive investigations (even without an estimate of duration of hours or even days of such intrusive investigations – another important omission) are an integral part of the preparation for construction, turbine foundation preparation and construction and operational phase of the proposed offshore wind farm.

TABLE 1.

Articles 6.1 and 6.2 of the habitats directive require Member States to:
Take positive conservation measures that are necessary to maintain or restore habitat types and species for which the site has been designated (Article 6.1); **Take measures to avoid any deterioration of habitat types or any significant disturbance of the species present** (Article 6.2). ... At a minimum, the sites' conservation objective will be to maintain the species and habitats for which it was designated in the same condition. This means ensuring that they will not deteriorate below that level.

The aim of Articles 12 to 16 of the Habitats Directive is to establish and implement a strict protection regime for animal species listed in Annex IV (a) of the Habitats Directive within the whole territory of the Member States.

Articles 12 and 13 provide for measures which should establish a system of strict protection for the flora and fauna listed in Annex IV of the Directive.

Species Protection under Habitats Directive - System of strict protections (Articles 12-16 of the Habitats Directive)

1. Member States shall take the requisite measures to establish a system of strict protection for the animal species listed in Annex IV in their natural range, prohibiting:

(a) all forms of deliberate capture or killing of specimens of these species in the wild;

(b) **deliberate disturbance of these species, particularly during the period of breeding, rearing, hibernation and migration**;

(c) deliberate destruction or taking of eggs from the wild;

(d) deterioration or destruction of breeding sites or resting places.

However, the overall objectives of the Habitats and Birds Directives go beyond simply preventing further deterioration. They aim to ensure that EU protected species and habitat types reach a favourable conservation state across their natural range in

the EU. Thus more ambitious conservation objectives may be required to restore and improve the conservation condition of the EU protected species and habitat types present on that site (under Article 6.1).

The overall objective of the two directives is to ensure that the species and habitat types they protect are maintained and restored to a favourable conservation status15 throughout their natural range within the EU. **This target is defined in positive terms, oriented towards a favourable situation, which needs to be reached and maintained. It is therefore more than just avoiding deterioration.**

Table 2

Kittiwakes are screened out for underwater as 'non-diving'
but https://scottishwildlifetrust.org.uk/species/kittiwake/

"Behaviour In winter, kittiwakes live far out to sea but start to re-occupy nesting sites as early as February around Scotland's coasts. Kittiwakes are the only gulls that dive and swim underwater. They can dive or dip just below the surface to catch prey of marine invertebrates, sand-eels, plankton, and fish."

TERNS (ALL) are in my opinion misclassified as "primarily surface feeding" whereas in :

https://data.jncc.gov.uk/data/926cdbbd-c384-42a9-b9e5-81abd778bbd0/JNCC-Report-500-Annex8-Eglington-Perrow2014.pdf the following is found:

3.4.3 Roseate Tern ... Foraging behaviour The main capture method is plunge diving (Dunnet et al. 1990) using a characteristic angled dive using its wings to increase speed as it descends ('powerdiving') from relatively low height (typically 3-6 m and up to 12 m – Cabot & Nisbet 2013). Full immersion is achieved and it may remain submerged for 1-2 seconds suggesting it may reach depths of >0.75 cm and perhapsup to 1.2m (Dunn 1972 op cit BWPi 2006, Cabot & Nisbet 2013). It may also snatch fish and other prey from the water surface and may quarter back and forth as it searches for prey. There are few studies on diet composition of roseate terns in Europe although the limited evidence suggests that the diet of adults and chicks is predominately sandeels (Ammodytes marinus and A. tobianus) herring and sprat (Langham 1968 op cit BWPi 2006, Dunn 1972 op cit BWPi 2006, Mundy 1997, Newton & Crowe 2000). Sandeels seem to be more important in North America (Richards & Schew 1989 op cit Lascelles et al. 2013, Rock et al. 2007b, Safina et al. 2009). Roseate terns occasionally catch small prey like crustaceans, or other surface prey (BWPi 2006).

Herring gulls seem to be screened out from underwater effects but they do in fact dive when foraging at sea: https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/herring-gull "Being so opportunistic, they have a great diversity of foraging tactics from plunge diving for small fish in the surface waters of the sea"

Fulmars are also screened out as non-diving when in fact they are ocean divers:

https://oceanwide-expeditions.com/to-do/wildlife/fulmar-1 How do Fulmars feed? Fulmars are pelagic (meaning they live entirely at sea) outside of their breeding months. When they're hunting (as opposed to scavenging) they are ocean divers, plunging several metres under the water to nab prey, or plucking them out from just under the surface.

Red throated divers appear to be screened out from underwater effects as non-diving but according to " https://birdwatchireland.ie/birds/red-throated-diver/

Identification: Red-throated Divers are the smallest of the divers found in Ireland. Compared to other species of divers the Red-throated Diver has a flat chest, a thin neck, a light bill, a small head and a pale appearance. Usually birds swim low on the water but may float higher at times. They often jump up to dive and can stay underwater for over a minute. Red-throated Divers are more gregarious than other divers and small, scattered flocks on the sea during the winter are common.

I can't find any inclusion anywhere in ESB Wind Development Limited application docs of two QI protected bird species known to forage in the area - Gannets and Manx Shearwaters. both Gannets and Manx Shearwater are recorded as present in and around the site and gannets are a CSI on Lambay or Irelands eye. They have been observed foraging in and around the proposed site area. "There appears to be a huge shoal of sprat or sand eels off the Dublin coast from Lambay Island, south to Killiney Bay ... it stretches to about five miles east of the Kish Lighthouse. There are currently 1000's of sea birds exploiting it, among them are Gannets, Manx Shearwaters and Kittiwakes." https://iwdg.ie/fin-and-minke-whales-off-dublin-and-rissos-dolphins-off-wicklow-whats-happening/

Both Gannets and Shearwaters are divers to my knowledge: "**Gannets** are specialist plunge **divers** that perform short and shallow V-shaped **dives** and long and deep U-shaped **dives** in pursuit of pelagic fish" https://maps.biodiversityireland.ie/Species/10817 Gannets (Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List)

Shearwater Manx https://birdwatchireland.ie/birds/manx-shearwater/ "Diet taken from the sea by diving. Small fish, plankton, molluscs and crustaceans."

Conclusion: I ask that all relevant authorities take into account the points and objections set out above in their decision making on this application. I also wish to point out that I feel that insufficient time and support was given to the public in notification, accessibility and /or sufficient time to research or properly draw up objections to the terms or supporting documentation of this FLA. I feel that it is wrong that this FLA is held out by the developer as not being in any way part of the

construction and operation aspect of this large scale OWF. I feel that this FLA proposes intrusive and damaging survey methods per se but also constitutes construction site preparation. I feel that this FLA should be rejected as it constitutes an integral part of the whole extremely ill-sited development project including consequent construction / operation. I find that this FLA is simply the first step of potentially serious impacts (on biodiversity, marine mammals and coastal and marine habitats, fish spawning ground and migratory fish and bird habitats especially foraging and breeding) arising from the offshore large scale proposed development to which this application is integral.

Given the points I raise in the conclusion of my opinion , please can the relevant authorities and relevant advisory services take careful note of the following requirements in relation to any reasons for decisions and in relation to ESB Wind Development Limited Site Investigations at Sea Stacks Offshore Wind off Dublin and Wicklow foreshore licence, ref: FS007134:

Like all EU environmental legislation, the Habitats Directive is based on the precautionary principle8 , i.e. that absence of scientific evidence on the significant negative effect of an action cannot be used as justification for approval of this action. ***When applied to Article 6(3) procedure, the precautionary principle implies that the absence of a negative effect on Natura 2000 sites has to be demonstrated before a plan or project can be authorised*** *... It is the responsibility of the* ***competent authorities****, in the light of the conclusions of the appropriate assessment on the implications of a plan or project for the Natura 2000 site concerned, to decide whether or not to approve the plan or project.* ***Approval can be given only after they are certain that the proposed plan or project will not adversely affect the integrity of the Natura 2000 site. That is the case where no reasonable scientific doubt remains as to the absence of such effects12 . The focus is therefore on demonstrating the absence of adverse effects rather than their presence, reflecting the precautionary principle13 . The appropriate assessment must therefore be sufficiently detailed and substantiated to demonstrate the absence of adverse effects, in light of the best existing scientific knowledge in the field14 . The same level of certainty is required if the decision is made during the screening stage; also at this stage there should no reasonable doubt as to the absence of likely significant effects.*** [7]

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[1] https://www.irishtimes.com/business/esb-pulls-out-of-kish-wind-farm-project-off-east-coast-1.424265?mode=sample&auth-failed=1&pw-origin=https%3A%2F%2Fwww.irishtimes.com%2Fbusiness%2Fesb-pulls-out-of-kish-wind-farm-project-off-east-coast-1.424265

[3] https://www.nwwac.org/_fileupload/Opinions%20and%20Advice/Year%2016/NWWAC-PELAC-NSAC%20submission%20for%20ICES%20NR%20request%20Wind_November_2020_EN.pdf

[4]

https://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura_2000_assess_en.pdf

[5]

https://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura_2000_assess_en.pdf

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[6]

https://deliverypdf.ssrn.com/delivery.php?ID=647007085116110029120071106113093065023042O

680770350541211020310760690750690831111130210200361200130430471241141160280010820850080860870080790821201030870820011200010320010781200000270091210201130921210150041190730230960740650030011050130030840961130 86&EXT=pdf&INDEX=TRUE

[7] https://ec.europa.eu/environment/nature/natura2000/management/pdf/methodological-guidance_2021-10/EN.pdf

National Inshore Fishermen's Association CLG (NIFA) secretary and the National Inshore Fishermen's Organisation CLG (NIFO) secretary

With reference to planning application reference number FS007134, by ESB Wind Development Limited (ESB), Gateway, East Wall Road, Dublin 3. D03 A995 for a Licence to carry out site investigations relating to a possible wind farm on a site named "Sea Stacks Offshore Wind", situated off the coasts of Dublin and Wicklow, The National Inshore Fishermen's Association (NIFA) and the National Inshore Fishermen's Organisation (NIFO) wish to make the following joint submission.

Members inform of little or no pre application consultation, many inform that they learned about the application and consultation on social media and as Organisations we only discovered detail of it having searched through the various consultations on the Gov .ie website. This coupled with the timing of the consultation, over the Christmas period, a time where inshore fishers typically take some time off, has made it difficult to put a considered response together or gauge the potential impact this project will have on members. Members that have raised, what we feel are valid concerns regarding this application. This submission is based on the same, the main points being as follows

Importance of area to Inshore Fishing Activity

The area in question is important in general to Inshore Commercial fishing, Primarily static gear fishing using pots targeting whelk, particular in the offshore sector of the site. For some of our members the area in question accounts for the vast majority of their economic activity . Their activity there is well established and traditional .

Members concerned operate small vessels, typically between seven and twelve meters in length, given the size of these vessels and the nature of fishing activity in the broader general area, operating elsewhere, to where the traditionally have done, is not realistically a viable option for them, even on short term basis.

Likely short term disruption of activity and economic impact caused by the same

While we appreciate this application is for site investigation works, our members are concerned that these works will disrupt their fishing operations and this disruption will have a negative economic impact on them. The extent of that disturbance is still unknown and will likely vary between members. Given the density of fishing activity, both in this specific and adjacent areas and the nature of the survey work, disruption is highly likely, and may involve static gear operators having to move gear, to avoid damage or loss to it, in advance of the survey. Previous experience with similar applications has proved this to be the case.

Our position is than any disruption should be kept to an absolute minimum. Given that avoiding this disruption completely is highly unlikely and given the principles of "avoid, minimise or mitigate" detailed in the National Marine Planning Framework (NMPF), we ask that consent to proceed be withheld until a Fisheries Management and Mitigation Strategy (FMMS) agreed with our relevant members. This FMMS needs to be designed to keep displacement of activity to an absolute minimum , but where displacement occurs and in turn has a negative impact on members working outside of the area, the FMMS and agreement needs to take these members into account also.

Medium to long term economic impact.

Again acknowledging that the application is for site investigation works, members have concerns that these works will have a negative effect that will be longer lasting than the juration of works. These concerns are based on previous experience for similar site investigation works off the East Coast. The above mentioned FMMS needs to take these concerns into account also.

In particular they are concerned about the effects of using a sub bottom acoustic profiler, in water as shallow as this will have on the Whelk population. In general the opinion of the Fishing industry is that offshore seismic survey work has a negative effect on catch rates for some time after a survey has been carried out in an area. While we acknowledge the intensity of the proposed acoustic work is far lower than that used for offshore oil and gas exploration, members are concerned that the fact that the water is much shallower in this area will mitigate against this. For most members concerned, Whelk is the most important fishery to them. Any negative effect on the Whelk population in the short, medium or long term, could be economically detrimental to them.

Again acknowledging that this application is only for site investigation work members are concerned with the unknown long term effects such developments may have particularly given the amount of interest in ORE development in the general area and the cumulative effects these potential developments will have combined.

Finally to conclude, we would like to thank DHLGH for the opportunity to make this submission and we trust our concerns will be given the consideration they deserve.

6.0 Summary

6.1 Ocean Winds wish to acknowledge the FLA SS FS007134 Application for Site Investigation Work. Ocean Winds and ESB share a common interest in the strategic development of offshore wind nationally, and the east coast and at this specific location.

6.2 OW Ireland submitted the Réalt na Mara Offshore FS007330 for the now named Réalt na Mara Offshore Wind Farm with the Department of Housing, Local Government and Heritage, in March 2021.

6.3 The FLA SS FS007134 Application area overlaps with the Réalt na Mara Offshore FS007330 Application Area and with the activities proposed under these applications, (subject to the grant of licences in the future). We are open and willing to engage with DHLGH, DECC, ESB and other relevant Licence / Leaseholders and others as may be relevant.

6.4 Ocean Winds Ireland is open to discussion and engagement as applicable, we would appreciate being informed about the process going forward.