An Roinn Tithíochta,
Pleanála agus Rialtais Áitiúil
Department of Housing,
Planning and Local Government

Investigative Foreshore Licence Application (Offshore Renewable Energy)

Please indicate project category as appropriate:

Wave:

[ ]

Tidal:

[ ]

Wind:

[X]

Other:

Please specify:

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Applicant Name and Address:

Full Name of Applicant (not Agent):

[redacted]

Company/Organisation:

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Address:

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Applicant's Legal Advisor:

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Part 1: Proposal Details (Attach additional documents as required)

1.1	**Provide background information on the project including reason and objectives of the site investigations, the site selection process and any proposals for future works at the site.** **Company Information** Ilen Array Ltd. is a special purpose vehicle established by Ivernia Energy for the purpose of developing an offshore wind farm, Ilen Array Offshore Wind Farm (OWF), in the Atlantic Ocean off the coasts of county Kerry and Clare. **Project Information** Ilen Array Ltd. is proposing to develop an offshore wind farm at a site off the Kerry and Clare coasts, see accompanying Foreshore Licence Maps: - FS007244-01- Ilen Foreshore License Map_Simple - FS007244-02- Ilen Foreshore License Map_SI Locations The proposed site will be developed using fixed and floating foundation wind turbine technologies. As well as generating electricity from offshore wind, this project will also consider options to produce hydrogen from offshore wind energy by the process of electrolysis. This is what is known as a power-to-x solution. Greater detail on these proposals will be provided as the project progresses through development phases. Offshore wind is one of the key technologies to bring forward the production of green hydrogen and meet Ireland and Europe's commitment of reaching net-zero carbon emissions by 2050. Ilen Array Ltd. is seeking to undertake a variety of marine surveys at the proposed site in order to inform the specific location, design and layout of the proposed offshore wind farm and export cable route to shore. The surveys will include geophysical, geotechnical, environmental and metocean campaigns and are detailed in this foreshore licence application form and supporting documents. Specifically, the objective of the proposed foreshore licence application works is to determine detailed site conditions including seafloor geology, metocean conditions and environmental characteristics. The survey results will also provide information to inform the planning and design of a wind farm, including wind, waves, seabed characteristics and marine life. The site investigation surveys in the proposed Foreshore Licence Application Area will support the development of the proposed Ilen Array Offshore Wind Farm. The delivery of the Ilen Array Offshore Wind Farm is in line with the Irish Government's Programme for Government, Climate Action Plan, draft National Marine Planning Framework and Offshore Renewable Energy Development Plan (OREDP). The proposed Ilen Array Offshore Wind Farm aims to take advantage of the offshore wind resource opportunity and is consistent with the policy context of the OREDP. In particular the proposal is consistent with the OREDP's vision, policies, and principles especially in relation to sustainable development, mitigation of climate change and delivery of Ireland's climate and renewable electricity targets. Subject to the award of a foreshore licence as well as favourable weather conditions Ilen Array Ltd. propose a survey works schedule that will be phased over 5 years and ideally commencing in early 2023 (or as soon as a Foreshore Licence is obtained).

	Site Selection Process A constraint mapping and screening exercise was undertaken within the Irish Exclusive Economic Zone (EEZ) to identify an area suitable for offshore wind farm development. As part of the site selection process all areas of the Irish EEZ were assessed for suitable offshore wind development areas. This involved a review of the following data groupings; maritime boundaries, bathymetry, resource potential, access to grid, offshore developments, environmental, physical, and social constraints. This work concluded that it would be suitable to develop an offshore wind farm off Ireland's west coast at the identified site. Therefore, the proposed survey area was selected off the coasts of county Kerry and Clare. The identified site area has suitable resource, bathymetry, is less constrained than other areas and initial indications point towards appropriate ground conditions are present. The total proposed survey area is approximately 629.80 km² (62,980 ha). All marine surveys will be confined to the proposed survey area within the foreshore 12 nautical mile (nm) limit. The full description of planned surveys is contained within the Schedule of Works accompanying this application. **Proposals for future works at the site** Ilen Array Ltd. will endeavour to develop an offshore wind project at the proposed site. The company views the reform of marine consenting legislation in Ireland as positive and combined with the ambitious target of at least 5GW of offshore wind by 2030 included in the 2020 Programme of Government, as an indication that Ireland is ready for offshore win. This is going to take significant efforts and Ilen Array Ltd. is eager to contribute this and be part of Ireland achieving this 2030 renewable energy targets. If the proposed survey work, together with desktop studies and stakeholder engagement, indicates the feasibility of bringing the proposed project to the next step, that step will be progressed in accordance with the National Marine Planning Framework, the relevant consenting regime and new legislation (i.e. the Maritime Area Planning Bill). The accompanying Foreshore Licence Application Map(s) shows the proposed survey area inside the 12nm limit which is the subject of this Foreshore Licence Application. Included in the Schedule of Works is Figure 1-1 which shows a larger area to the west of the 12nm limit. As a foreshore licence application for this larger area is not possible, the developer will apply for this area under the Maritime Area Planning Act 2021 (MAP) and once the Maritime Area Regulatory Authority (MARA) has bene established. Ilen Array Ltd. will then be able to explore variables relating to the seabed, marine biology and metocean conditions etc. in the area outside 12nm (OWF area outside 12nm).
1.2	**Possible MW output of final development:** A minimum of 1.5 GW.
1.3	**Type of surveys proposed (e.g. geophysical, geotechnical, archaeological or benthic**.) - Geophysical survey (including archaeology and UXO) - Benthic Survey Programme on the basis of geophysical data - Preliminary geotechnical surveys - Wind resource monitoring - Metocean surveys - Nearshore and intertidal surveys - Environmental surveys including bird and marine mammal surveys

1.4 Survey methodologies and equipment to be used for each survey type proposed:

The table below summarises the survey methods to be undertaken at the proposed investigation area. For further details please see the accompanying Schedule of Works document.

Survey	Methods	Purpose
Hydrographical and Geophysical	Multibeam Echosounder (MBES)	MBES is a system for collecting detailed topographical data of the seabed. Typical equipment includes the Kongsberg EM3002D multi-beam system with mounting system including AML SV Smart Probe, Kongsberg EM 2040 or similar. For these surveys the equipment will operate at a typical central frequency of 200 - 400kHz (700kHz optional) with sound pressure levels in the range of 200-228dB re1µPa @1m.
	Side Scan Sonar (SSS)	SSS surveys are used to determine sediment characteristics and seabed features. The EdgeTech 4200 may be taken as an indicate example of an SSS device and for these surveys will have a potential operating frequency range of approximately 230/540kHz in the offshore area and 540/850kHz in the shallower nearshore area with sound pressure levels of 228dB re1µPa @1m.
	Magnetometer	A magnetometer is used to identify magnetic anomalies and hazard mapping for metal obstructions, shipwrecks and unexploded ordnance on the surface and in the shallow sub-surface. The Geometrics G-882 can be taken as an indicative equipment example, it is a passive device (i.e. it does not emit any sound waves into the marine environment).
	Sub-bottom Profiling (SBP)	SBP is used to develop an image of the subsurface, identifying different strata encountered in the shallow sediments. The Innomar SES-2000 Medium or Medium 100 are indicative examples of parametric system with primary and secondary frequency ranges of 85-115kHz and 2-22kHz, respectively, and sound pressure levels of up to 247 dB (typically operated at <200dB) re1µPa @ 1m, which would be used in both nearshore and offshore areas. The Applied Acoustics AA301 is an indicative example of a boomer, with sound pressure levels in the range of 208-215dB re1µPa @ 1m which would be used in the nearshore shallower area. The applied Acoustics Duraspark 400 is an indicative example of a sparker system used in sub-bottom profiling, with sound pressures in the range of 204-216dB re1µPa @1m.
Geotechnical	Boreholes	Up to 40 no. boreholes will be required for the Preliminary Campaign. Boreholes may be up to 80m deep within the OWF area however within the Offshore Export Cable Corridor (OECC) area they will likely be around 20 m deep. All drilling equipment used will follow the relevant ISO and API technical specifications for drilling equipment.
	Cone Penetration Tests (CPT)	CPTs are a method used for testing the soils strength parameters. CPTs can be performed as either Seabed CPTs or as Down Borehole CPTs. Up to 247 no. CPTs will be required for the Preliminary Campaign. The spacing interval will be determined by the variability and level of understanding of the shallow geology. The final number and location of SI points will be informed by the geophysical survey results.

		Vibrocore / Gravity Corer	Vibrocore (VC) and Gravity Corer (GC) are two methods of collecting un-consolidated seabed samples. Up to 273 no. sample locations for either vibrocore or gravity sampling with a target depth of 6m BSF will be required for the Preliminary Campaign.
	Metocean	Floating LiDAR	Up to 2 floating LiDAR buoys will be deployed to measure the wind resource within the OWF Area. Deployment of this buoy will include anchor points on the seafloor. LiDAR may be deployed for a period of between 12 to 24 months.
		Acoustic Doppler Current Profiler (ADCP)	Up to 5 ADCPs may be used to examine wave and current conditions in the Foreshore Licence Application Area. This equipment is installed on the seabed and anchored with a suitable mooring structure. It is generally a short-term deployment used to gather seasonal data (e.g. winter storm data) however may be deployed for longer.
		Wave Buoy	Up to 2 wave rider buoys may be deployed to measure wave heights and direction to feed into the detailed design of the project within the OWF area. They will be moored to the seabed by a suitably sized mooring structure.
	Ecology	Bird Survey	Identify bird species distribution and behaviour within the Foreshore Licence Application Area using non-intrusive aerial surveys. This does not require a licence under the Foreshore Act 1933, as amended and is included for information only.
		Fisheries Survey	Identify fish species distribution within the Foreshore Licence Application Area. Exact details of monitoring required will be determined through engagement with the relevant authorities such as SFPA, the Marine Institute and through local knowledge where appropriate.
		Benthic Ecology (subtidal benthic survey, intertidal habitat walkover survey)	This survey is designed to identify the expected benthic communities and habitats within the Foreshore Licence Application Area. This may consist of an intertidal walkover survey with a biotope mapping exercise of the intertidal part of the OECC and its proposed landfalls with identification of the existing habitats. Where appropriate, core/quadrat sampling and hard substrate quadrat sampling will be carried out. In the intertidal area features of conservation importance such as reefs will be identified by means of visual inspection and mapped. Where the Annex I Habitat reef is a qualifying interest for an SAC, MNCR Phase II surveys will be used to survey pre-selected sites within the SAC. MNCR Phase I surveys will be used for all other intertidal reef. Subtidal sample locations may be subject to drop down video in advance of sampling. In the subtidal area features of conservation importance such as reefs will be identified by means of visual inspection. There will be up to 273 no. subtidal locations within the Foreshore Licence Application Area and typically up to 4 samples will be taken at each location.
		Marine Mammal Survey	Identify marine mammal species distribution within the Foreshore Licence Application Area. This does not require a licence under the Foreshore Act 1933, as amended and is included for information only. The marine mammal observational studies will be run concurrently with the at site bird surveys.

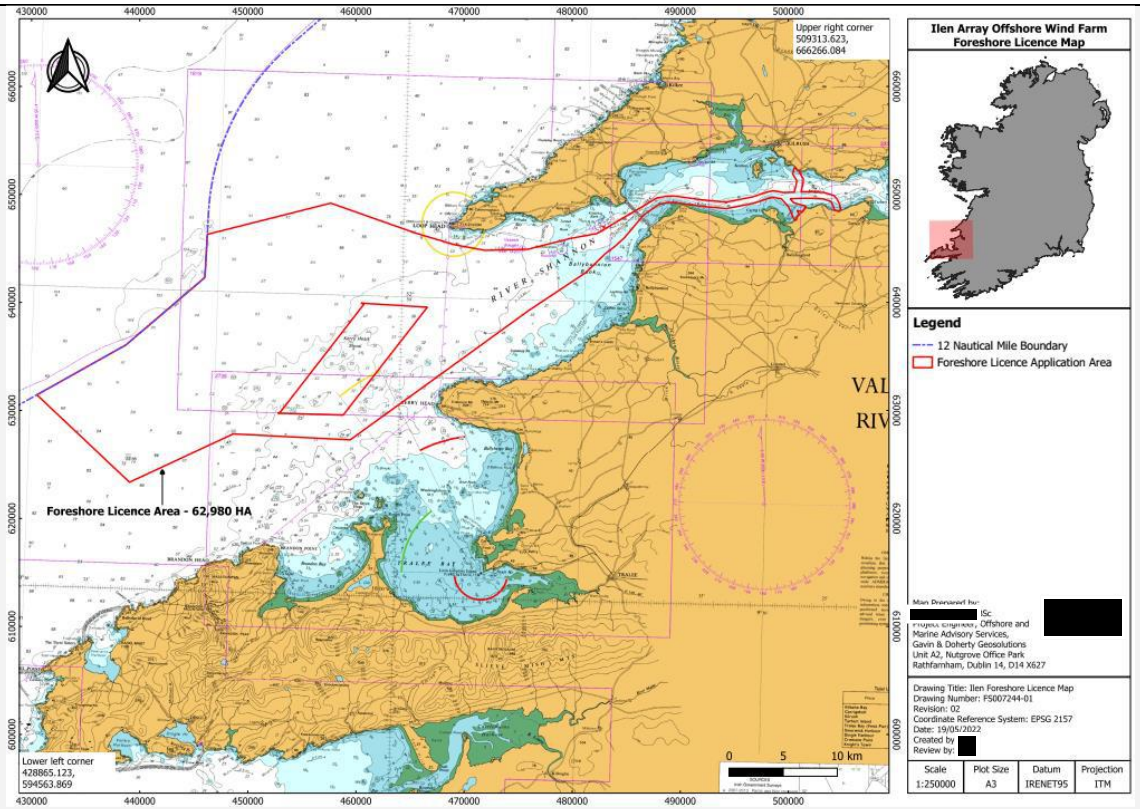
		Marine Mammal Acoustic Monitoring	Marine mammal acoustic monitoring using CPODs deployed on the seabed. SoundTrap hydrophones may be deployed alongside the CPODs for periods throughout the monitoring campaign. Either 2 permanent sites will be selected, or the 2 sites will be relocated every 3 months during battery change. The CPOD locations are subject to archaeological survey results.
	Archaeology	Underwater Archaeology	Identification and assessment of metallic and other targets recorded during the marine geophysical surveys.

1.5	**Describe the nature and scale of any structure to be erected on the foreshore for testing the suitability of the site. Is the structure proposed to be temporary or permanent?** There will be no structures erected for the geophysical survey campaign. This application is for survey activities only. No permanent structure shall be erected as part of these works. As described in the Schedule of Works document, a Floating LiDAR Buoy (Seawatch or similar) will be deployed accompanied by a mooring system, ADCPs will be deployed on the seafloor as part of the survey works and CPODs may be deployed for marine mammal monitoring. Some of these instruments to be deployed will be accompanied by marker buoys. All activities represent only temporary deployments associated with data collection and site characterisation investigations.
1.6	**Provide information on proposed mooring, marking and lighting arrangements for any proposed deployment of instrument arrays.** All equipment deployed under the licence shall be moored, marked and lit as required under navigational safety requirements and in consultation with the Commissioners of Irish Lights.
1.7	**Has the applicant held or does the applicant hold any previous Foreshore Licences, Leases or applications over the area sought or over any other area? (Give details including Department's file reference number(s)).** No previous foreshore leases or licences have been or are held by the applicant.
1.8	**Indicative timing of the investigation works: (i) Start date (ii) Duration (iii) Any other information relevant to timing.** Ilen Array Ltd. intends to adopt a phased survey approach in order to minimise the risk associated with poor weather conditions. The intention is to begin geophysical survey activities in 2023 with a staged series of investigations over the subsequent five years as the project reaches the detailed design stage. Geophysical surveys will inform the geotechnical campaign. The Geotechnical campaign will be carried out on a phased basis and will likely have an initial, interim and completion phase as the detailed project design progresses.
1.9	**Describe any likely interactions with activities of the public or other foreshore users during the investigative works (e.g. fishing, aquaculture, sailing, and surfing). Describe any measures proposed to minimise inconvenience to other users.**

	No negative impact or minimal impact is expected from the planned survey work with other foreshore users (fishing, sailing, surfing, etc). Ilen Array Ltd. will issue a marine notice to notify the public and other foreshore users in the area about the works schedule.
1.10	**Describe any consultations undertaken to date with other foreshore users.** At the time of submission of the application to the Foreshore Unit consultation had yet to be initiated with other foreshore users in relation to the scope of works proposed under the Foreshore Licence application. Ilen Array Ltd. intends to begin a programme of stakeholder engagement over the coming weeks, initially with fisheries organisations and local fisheries before expanding the consultation to other relevant parties. Ilen Array Ltd. intends to ensure that all relevant bodies and the public are kept fully informed prior to and during the proposed survey works.
1.11	**Describe any consultations undertaken to date with other consent authorities e.g. planning authority, Commission for Energy Regulation etc.** An online pre-application meeting was held with officers of the Foreshore Unit of the Department of Housing, Local Government and Heritage (DHLGH) on 25th September 2020 and again on the 4th of November 2021. The application has been submitted in line with guidelines issued by the Foreshore Unit of DHLGH.
1.12	**Describe briefly any consultations undertaken with relevant authorities (e.g. county council, port/harbour authority etc) or State Agencies e.g. National Parks & Wildlife Service (NPWS), National Monuments Service (NMS) of Department of Arts, Heritage and the Gaeltacht:** The stakeholder engagement process has begun with several meetings having taken place already, these include: - National Parks & Wildlife Service (NPWS) – 10.05.2021 - Commissioners of Irish Lights – 21.05.2021 - EirGrid – 16.06.2021 - Irish Coast Guard – 23.06.2021 - Irish Whale and Dolphin Group – 25.05.2021 - Marine Survey Office – 08.07.2021 - Irish Whale and Dolphin Group – 07.12.2021 - Shannon Foynes Port Company – 02.12.2021
1.13	**Describe briefly any support received or under application with the Sustainable Energy Authority of Ireland (SEAI) or other State Agency:** No support for this project is under application with or has been received from the Sustainable Energy Authority of Ireland or other state bodies.

Part 2: Proposed Site. (Attach additional documents as required)

2.1	**Delineate the proposed site in red on a latest edition map at a scale of 1:10 000 or larger scale if more appropriate and available, indicating:** Please see below the Foreshore Licence Map.



2.2 Geographic coordinates of the area under application, where the area can also be identified on the Ordnance Survey map, specify Ordnance Survey coordinates also.

Point No.	WGS84 / UTM zone 29N EPSG:32629		WGS84 Geographic EPSG:4326		IRENET95 / Irish Transverse Mercator EPSG:2157	
	X	Y	Longitude	Latitude	X	Y
1	398534.58	5807493.87	-10.49165	52.40826	430483.70	631448.17
2	414091.21	5822564.04	-10.26690	52.54637	446254.36	646307.90
3	425459.39	5825607.96	-10.09997	52.57541	457668.32	649195.12
4	433364.32	5822938.96	-9.98281	52.55244	465538.58	646415.71
5	437007.75	5821912.04	-9.92888	52.54364	469168.83	645337.98
6	439764.57	5821439.89	-9.88815	52.53971	471919.88	644827.48
7	443721.20	5821592.09	-9.82984	52.54150	475879.72	644924.88
8	447721.76	5822663.12	-9.77103	52.55153	479896.21	645940.74
9	450116.63	5823140.76	-9.73578	52.55605	482298.34	646385.30
10	455608.70	5826509.53	-9.65523	52.58681	487838.55	649678.79
11	456554.17	5826689.24	-9.64130	52.58850	488786.75	649845.43
12	457124.41	5826705.72	-9.63289	52.58869	489357.36	649854.01
13	458178.68	5826599.20	-9.61731	52.58782	490410.42	649732.83
14	458677.05	5826530.84	-9.60995	52.58724	490907.97	649657.55
15	459629.24	5826406.45	-9.59588	52.58619	491858.66	649519.93

16	460522.32	5826328.55	-9.58269	52.58556	492750.89	649429.62
17	462022.84	5826215.27	-9.56053	52.58465	494250.21	649295.50
18	464468.59	5826731.20	-9.52449	52.58945	496703.70	649777.63
19	465633.43	5827151.09	-9.50734	52.59330	497874.64	650181.47
20	466334.68	5827329.03	-9.49700	52.59494	498578.53	650349.72
21	467271.16	5827172.52	-9.48316	52.59360	499513.06	650180.19
22	468309.21	5827222.63	-9.46784	52.59411	500552.04	650215.91
23	468408.10	5827660.49	-9.46643	52.59805	500657.03	650652.50
24	468501.11	5828124.56	-9.46510	52.60223	500756.50	651115.39
25	468511.33	5828306.40	-9.46496	52.60386	500769.24	651297.14
26	468122.04	5828911.49	-9.47077	52.60928	500388.26	651907.77
27	468249.92	5829418.79	-9.46893	52.61385	500523.20	652413.40
28	468346.50	5829532.06	-9.46752	52.61487	500621.37	652525.37
29	468820.01	5829225.14	-9.46049	52.61214	501090.74	652211.80
30	468767.21	5829017.19	-9.46125	52.61027	501035.05	652004.53
31	469121.07	5828467.16	-9.45598	52.60534	501381.36	651449.47
32	469097.55	5828048.42	-9.45628	52.60158	501352.02	651030.96
33	468994.80	5827535.75	-9.45775	52.59696	501242.13	650519.60
34	468932.23	5827257.46	-9.45865	52.59446	501175.69	650242.11
35	469171.05	5827270.78	-9.45513	52.59459	501414.75	650252.12
36	469930.60	5827270.08	-9.44391	52.59463	502174.47	650240.88
37	471044.24	5827225.35	-9.42747	52.59428	503287.74	650180.70
38	471951.63	5826971.67	-9.41405	52.59205	504191.81	649914.38
39	472295.81	5826594.12	-9.40894	52.58867	504530.84	649531.96
40	472539.83	5826069.39	-9.40530	52.58397	504767.64	649003.73
41	472627.26	5825637.82	-9.40397	52.58009	504849.10	648570.85
42	472019.01	5825619.52	-9.41294	52.57990	504240.47	648560.98
43	471966.09	5825880.79	-9.41375	52.58225	504191.15	648823.05
44	471790.70	5826257.93	-9.41637	52.58563	504020.95	649202.71
45	471624.36	5826440.40	-9.41884	52.58726	503857.11	649387.53
46	470950.20	5826628.87	-9.42881	52.58892	503185.40	649585.39
47	469918.28	5826670.32	-9.44404	52.58923	502153.83	649641.16
48	469187.46	5826670.99	-9.45483	52.58920	501422.85	649651.97
49	469112.37	5826666.81	-9.45594	52.58916	501347.68	649648.82
50	468816.93	5826646.67	-9.46030	52.58896	501051.89	649632.78
51	467918.77	5826603.25	-9.47355	52.58852	500152.92	649601.81
52	468254.46	5826235.81	-9.46856	52.58523	500483.59	649229.63
53	469343.78	5825953.57	-9.45245	52.58276	501569.26	648932.21
54	469418.69	5825833.25	-9.45134	52.58168	501642.51	648810.82
55	469067.93	5825405.47	-9.45647	52.57782	501285.73	648387.81

56	468594.07	5825528.22	-9.46348	52.57889	500813.47	648517.16
57	468770.18	5825142.13	-9.46084	52.57543	500984.26	648128.54
58	468476.10	5824611.17	-9.46513	52.57064	500682.76	647601.53
59	468304.62	5824717.65	-9.46767	52.57159	500512.71	647710.42
60	467781.77	5825863.99	-9.47550	52.58186	500005.64	648864.27
61	467120.96	5826589.53	-9.48532	52.58835	499354.74	649599.15
62	466360.08	5826716.70	-9.49657	52.58944	498595.44	649736.89
63	465809.30	5826576.94	-9.50468	52.58815	498042.59	649604.74
64	464632.97	5826152.91	-9.52200	52.58426	496860.10	649196.92
65	464006.77	5826020.81	-9.53123	52.58304	496231.92	649073.48
66	462062.97	5825610.77	-9.55987	52.57922	494281.96	648690.29
67	460473.69	5825730.75	-9.58333	52.58018	492693.95	648832.34
68	459564.30	5825810.07	-9.59676	52.58083	491785.44	648924.29
69	458597.45	5825936.37	-9.61105	52.58189	490820.11	649064.04
70	458107.76	5826003.53	-9.61828	52.58246	490331.22	649138.01
71	457884.36	5826026.11	-9.62158	52.58264	490108.08	649163.68
72	457102.84	5826105.07	-9.63313	52.58329	489327.45	649253.51
73	456619.24	5826091.09	-9.64026	52.58313	488843.54	649246.23
74	455849.02	5825944.70	-9.65161	52.58175	488071.10	649110.48
75	454422.48	5824933.32	-9.67252	52.57254	486630.17	648118.63
76	454214.12	5824680.38	-9.67556	52.57025	486418.24	647868.51
77	452658.88	5822792.41	-9.69824	52.55314	484836.43	646001.61
78	451853.24	5822031.97	-9.71001	52.54624	484020.04	645252.14
79	450931.74	5821307.90	-9.72349	52.53965	483088.25	644540.66
80	449412.77	5819786.10	-9.74565	52.52583	481547.80	643039.52
81	449161.56	5819534.43	-9.74932	52.52354	481293.04	642791.26
82	443943.29	5815957.73	-9.82562	52.49088	476023.80	639285.90
83	427560.29	5803727.38	-10.06422	52.37901	459466.77	627278.81
84	416745.38	5804129.56	-10.22317	52.38109	448654.05	627830.73
85	407210.11	5799527.98	-10.36195	52.33820	439052.01	623359.52
86	420845.61	5806108.30	-10.16341	52.39948	452782.96	629753.36
87	426878.49	5806010.24	-10.07473	52.39944	458816.35	629571.79
88	434527.87	5816107.33	-9.96430	52.49117	466607.80	639565.97
89	428630.64	5816383.06	-10.05120	52.49291	460712.65	639923.48
90	428381.31	5816397.44	-10.05488	52.49301	460463.44	639941.32
91	428642.91	5816284.55	-10.05100	52.49203	460723.56	639824.77
92	421069.14	5806216.17	-10.16015	52.40049	453008.06	629858.17

2.3 Delineate proposed site on relevant Admiralty Chart.

	Please see the Foreshore Licence Maps accompanying this application: - FS007244-01- Ilen Foreshore License Map_Simple - FS007244-02- Ilen Foreshore License Map_SI Locations
2.4	**Relevant Local Authority:** Kerry County Council and Clare County Council.
2.5	**Location name and nearest townland name:** The application area includes a proposed cable corridor next to Moneypoint Power Station and in the vicinity of Ralaphane, Glencullare North and Kilnaughtin. Further offshore the proposed investigation extends approximately 22.4km from shore. The following townlands are each over 13km west of the proposed investigation area (listed below North – South): 1. Kilconly South 2. Ballybunnion 3. Kilmore 4. Glenderry 5. Maulin 6. Ballyheige 7. Barrow 8. Fenit 9. Fermoyle 10. Ballycurrane 11. Feohanagh 12. Clogher 13. Kilbaha 14. Shannafreaghoge 15. Loop Head
2.6	Distance from nearest other developments, including any offshore renewable energy developments on the foreshore:

Site name	Distance to Ilen Array FLA (km)
FS007081 DesignPro Cahiracon Quay Tidal Energy Testing	21.19
FS007083 Eirgrid Cross Shannon 400 kV Electricity Cable	0.11
FS007041 Kerry Coco Maintenance Dredging and Disposal at Sea, Fenit Harbour, Co Kerry	17.82
FS006885 NUIG Waverider Buoy– Brandon Bay	10.88
FS006474 Kerry County Council - Tralee Bay Dredging	17.82
FS006975 Shannon Foynes Port Company Maintenance Dredging	18.99
FS006837 Shannon Foynes Port Company Jetty Construction	20.58
FS006594 Shannon Foynes Port Company Site Investigations	20.27
FS006578 Aughinish Alumina Ltd Maintenance Dredging	24.24
FS007375 Mainstream Renewable Power Offshore Wind Farm (OWF) Site Investigations	Overlap

2.7	**Distance from shore:**

	The proposed site boundary runs along the highwater mark as shown in the Foreshore Licence Maps accompanying this application.
2.8	**Distance from nearest aquaculture operation:** There is partial overlap of the Offshore Export Cable Corridor (OECC) element of the Foreshore Licence Application Area with an aquaculture licenced site (Site T06/233) for the bottom cultivation of Mussels (*Mytilus edulis*), on the foreshore at Ballylongford Bay, Shannon Estuary, Co. Kerry. There is also a small overlapping area of the OECC with a further aquaculture site identified as T08/004BO on the opposite side of the Estuary, Co Clare, and while this is correctly identified as a fishery order area, it should be noted that this is not a licenced aquaculture site and is not governed by DAFM aquaculture licencing legislation (Fisheries Act 1997)
2.9	**Distance from any other sensitive location e.g. fish spawning ground, designated Shellfish Growing Waters.** The closest Designated Harmful Algal Blooms (HABs) Inshore Shellfish Production Area within the Shannon Estuary. The areas within the Shannon Estuary are for the production of a number of bivalve mollusc species and occupy a total extent of 325.8 km^2. There is an overlap of approximately 14.5 km^2 between the OECC and the HABs Inshore Shellfish Production Areas within the Shannon Estuary. The table below shows the species for which nursery and spawning areas are known to occur within the application area.
2.10	**Any other site details considered relevant:** As part of the preparation for this application an examination was undertaken of various sources to identify both infrastructure and historical wrecks in the survey area. Further information is available in the Non-Statutory Environmental Report (NSER) submitted with this application. Specifically, the location of subsea cables is shown in Figure 4-18. Shipwreck data available through both the National Monuments Service (NMS) Database and the INFOMAR project is shown in Figure 4-19.

Species	Nursery Area	Spawning Area
Cod	✓	X
Haddock	X	X
Whiting	X	X
Mackerel	✓	X
Horse Mackerel	✓	X
Herring	X	✓
Blue Whiting	X	X
Hake	✓	X
Megrim	X	X
White Belly Angler Monk	✓	X
Black Belly Angler Monk	✓	X

	There are no INFOMAR surveyed shipwrecks within the bounds of the proposed site. The NMS Database identifies three shipwrecks within the proposed survey site. However, many of the wrecks from the NMS Database are unconfirmed, and unlike the INFOMAR database NMS have not been subject to recent surveying.

Part 3: Nature Conservation Considerations (Attach additional documents as required)

3.1 **Distance from nearest Natura 2000 sites (i.e. Special Protection Area (SPA) or Special Area of Conservation (SAC):**

The Foreshore Licence Application Area overlaps with several SACs and SPAs as outlined in the following section of this application form, Section 3.2.

3.2 **Name and location of Natura 2000 sites in or around the project area:**

The Table below summarises all Natura 2000 Sites in or around the project area.

Site name (Code)	Distance from site (km)
Lower River Shannon SAC (002165)	0.00
River Shannon and River Fergus Estuaries SPA (004077)	0.00
Kerry Head Shoal SAC (002263)	0.04
Loop Head SPA (004119)	0.80
Kerry Head SPA (004189)	1.13
Magharee Islands SAC (002261)	4.28
Magharee Islands SPA (004125)	4.44
Tralee Bay and Maghaarees Peninsula, West to Cloghane SAC (002070)	6.78
Tralee Bay Complex SPA (004188)	7.61
Kilkee Reefs SAC (002264)	8.47
Dingle Peninsula SPA (004153)	8.68
Illaunonearaun SPA (004114)	8.68
Mount Brandon SAC (000375)	9.80
Akeragh, Banna and Barrow Harbour SAC (000332)	11.56
Carrowmore Dunes SAC (002250)	14.13
Mid-Clare Coast SPA (004182)	14.22
Blasket Islands SPA (004008)	25.26

3.3 **Describe potential impacts of the site investigations on Natura 2000 sites.**

Information in support of a Screening for Appropriate Assessment is provided in support of this application (refer Supporting Information for Screening for Appropriate Assessment [SISAA] document that forms part of the Application Documentation). That report found that in the absence of mitigation measures significant effects on Annex I Habitats of the Lower River Shannon SAC and on several mobile marine species that are qualifying interests for Special Areas of Conservation within the zone of influence of the site investigation activities could not be excluded at the screening stage and a Natura Impact Statement (NIS) is provided in support of a Stage 2 Appropriate Assessment to be undertaken by the Competent Authority for those Annex I Habitats, Annex II Species and their

	associated SACs. The NIS concluded that with the implementation of appropriate mitigation measures the proposed works will not have a significant impact on any Natura 2000 site or its qualifying interests either alone or in combination with other plans or projects. For further information please see the accompanying "Supporting Information for Screening of Appropriate Assessment (SISAA)" report and "Natura Impact Statement (NIS)".
3.4	**Describe any measures proposed to mitigate possible impacts on Natura 2000 sites and other key marine receptors.** Compliance with DAHG (2014) (Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters) best practise guidelines will ensure that the proposed surveys will have no significant impact on marine mammals or fish species sensitive to noise. In addition to the fact that survey vessels will be slow moving and therefore any risk due to collision is unlikely. Specific mitigation measures are included for the protection of species susceptible to the sudden introduction of underwater noise. The soft start procedure will be used for all surveys to mitigate against any possible impact to these species. To protect benthic habitats at Lower River Shannon SAC, for subtidal surveys an ROV or camera will be used in advance of grab sampling to identify areas of protected habitat. If protected habitat is identified the area will not be subject to physical sampling and camera or video will be used as an alternative. Siting of boreholes will be subject to prior inspection of the area by ROV or camera and alternative borehole sites will be found in the event that protected habitat is detected. With respect to intertidal surveys: surveys will be undertaken within daylight hours and sensitive species within the survey area will be identified, recorded and avoided during sampling. No other mitigation measures are considered necessary for any of the Natura 2000 sites considered under the Appropriate Assessment Screening Report (Please see SISAA and NIS documents).
3.5	**Describe any other projects or plans for the area, anticipated or developed, that in combination with this proposal, may have a significant effect on a Natura 2000 site:** Plans from other projects were examined. Potential in-combination effects were identified between this application and the following project: • FS007375 Mainstream Renewable Power Offshore Wind Farm (OWF) Site Investigations Possible in-combination effects were identified and assessed and where it was found that there was a possibility of in-combination effects relevant mitigation measures were incorporated. Having examined the possible likely effects of this project it is concluded that due to the: 1. Implementation of effective communication between Ilen Array Ltd. / Ilen Array Offshore Wind Farm and those projects listed above; 2. Likely timing and phased nature of proposed activities; 3. Temporary nature of proposed activities;

	4. Very localised and imperceptible effects of proposed activities; and 5. Implementation of the DAHG (2014) best practice guidelines; adverse in-combination effects of the proposed activities with the project identified on the conservation objectives of the Natura 2000 sites assessed in this report is considered not likely.

Part 4: Navigational Safety Considerations.

4.1	**Distance from shipping lanes at nearest point. Illustrate on the appropriate marine charts accompanying the application.** Please see the Non-Statutory Environmental Report which shows marine traffic for the area in accordance with the Automatic Identification System (AIS) monitored by the Irish Coast Guard. Vessel traffic does pass through the OWF area however the higher density is located in the OECC area of the Foreshore Licence Application Area.
4.2	**If a safety zone for passage of shipping (including fishing and leisure boats) is sought, supply details and give reasons.** No specific safety zone will be sought. A marine notice will be issued in advance of works which will ask that other users of the foreshore maintain a safe distance from survey vessels in line with accepted maritime safety.
4.3	**If any temporal /spatial restrictions are sought on the use of any type of fishing gear or leisure activity within the area, provide details and justification for such restrictions and indicate location(s) on appropriate marine charts.** No specific restrictions will be sought. As in Section 4.2 a notice to mariners will be issued in advance of any survey works.

Declaration and Consent:

The details provided in this application and supporting documentation are correct to the best of my knowledge.

I understand that no works shall be commenced by me or my agents on the proposed site without the prior written consent of the Minister. The granting or refusal of any foreshore investigation licence will not give rise on the part of the applicant to any expectation whatsoever for right or entitlement to a grant of any future foreshore consent in respect of all or any part of the area of Foreshore to which any consent in relation to this application is granted.

By submitting this application form, I agree that the details provided (with personal contact details in the case of an application from an individual redacted) are to be published on the website of the Department of Housing, Planning and Local Government and shared with all appropriate prescribed bodies (as part of the Prescribed Bodies Consultation process) in furtherance of consideration for a Foreshore Consent under the Foreshore Act 1933, as amended.

I give consent to the Minister and his servants to copy this application and to make (a redacted where appropriate) copy available for inspection and copying by the public. This consent relates to this application, to any further information or submission provided by me or on my behalf and to the publication of the licence document.

Signed for and on behalf of the applicant:

[redacted]

Name of Signatory (block letters):

[redacted]

Position Held:

Director

Date:

24/05/2022

Return completed applications to:

Marine Planning and Development Section
Department of Housing, Planning and Local Government
Newtown Road
Wexford
Y35 AP90

Enquiries to: Foreshore@housing.gov.ie (Other contact details to be included in Guidance materials)
Email a copy of application documents: Foreshore@housing.gov.ie