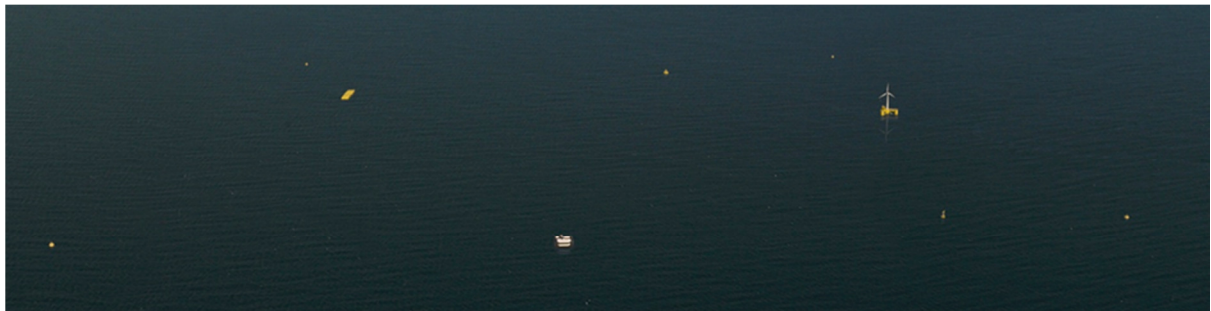


**Galway Bay**  
**Marine and Renewable Energy Test Site**  
**Foreshore Lease Application FS006566**  
**Response to Public Submissions**  
**November 2016**



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## **Introduction**

The Marine Institute is applying for a Foreshore Lease for a Marine and Renewable Energy Test Site. It is located at the existing test site offshore of Spiddal, Co. Galway and will provide developers and researchers with a leased area in which to test and demonstrate their prototype ocean energy converters and related technologies.

The application provides for an upgrade of infrastructure to improve the service offered to end-users. The following list details the proposed long term deployments at the site:

- Upgraded cardinal marks to allow for safer navigation;
- A databuoy to provide wave measurements;
- Buoys for testing marine technologies and scientific sensors;
- A 'SeaStation' which will provide power to, and dissipate power from, ocean energy devices as well as provide data communications to shore;
- An acoustic array for monitoring underwater sound;
- Interlocking modular gravity base(s);
- A variety of scientific sensors and instruments;
- Cables which will connect the instruments, sensors, and ocean energy devices;

The proposed upgrade of the site will enable periodic deployments of up to three individual devices, of the following types, for test and evaluation purposes for a maximum period of 18 months:

- Surface ocean energy converters;
- Sub-surface ocean energy converters;
- Seabed ocean energy converters;
- Prototype floating wind turbines;
- Novel marine technologies and scientific sensors.

It is proposed that the upgraded test site will operate for up to 35 years, with devices on site intermittently throughout the year. The test site has been structured into three berths, designed to only allow a maximum of 3 prototype ocean energy converters to be deployed and tested at any one time. The fourth berth will be for the Cabled Observatory and related projects.

## **Prescribed Bodies Consultation**

Written submissions on the proposed development were invited from a range of statutory bodies including; Environmental Protection Agency, Bord Iascaigh Mhara, Commission for Energy Regulation, Irish Coast Guard, Marine Survey Office, Department of Defence, Health and Safety Authority, Sustainable Energy Authority of Ireland, Commissioners of Irish Lights, Inland Fisheries Ireland, Sea Fisheries Protection Authority, Department of Agriculture, Food and Marine (DAFM), Department of Arts, Heritage and the Gaeltacht (Underwater Archaeology Unit), Galway County Council, Geological Survey of Ireland, Met Éireann, Heritage Council, Department of Arts, Heritage and the Gaeltacht (National Parks and Wildlife Service) and Birdwatch Ireland

## FS006566: Marine Institute response to public submissions

### Public Consultation

The Department of Housing, Planning, Community and Local Government (HPCLG) places a high priority on public participation during the assessment of foreshore applications.

Prior to the submission of the Marine Institute's foreshore lease application FS006566 during the pre-application phase, and throughout the project development stage, Marine Institute representatives held meetings with key stakeholders at local and national level and with representatives in the Spiddal area.

Prior to the submission of foreshore lease application FS006566 during the pre-application phase, public information leaflets were distributed throughout Spiddal in October and November 2015 seeking the public's views on the proposal.

Three public information meetings were held on the planned foreshore lease application;

- 19<sup>th</sup> January 2016 in Tigh Giblin, An Spideal
- 14<sup>th</sup> June 2016 in Park Lodge Hotel, An Spideal
- 21<sup>st</sup> July 2016 in Connemara Coast Hotel, An Furbogh.

Prior to, and during, the statutory public consultation period advertisements were taken in the national, regional and local press in May, June and August 2016.

The statutory public consultation period commenced on the 19<sup>th</sup> May 2016, to close on 17<sup>th</sup> June. The public consultation period was extended initially until the 1<sup>st</sup> July 2016, then to 2<sup>nd</sup> August 2016, and ultimately extended until the 9<sup>th</sup> September 2016.

A full copy of the application, and the relevant maps, plans, reports and drawings, were made available for public inspection at the following locations:

- Salthill Garda Station, Salthill, Galway City
- Spiddal Public Library, An Spideal, Co. na Gallaimhe
- Spiddal Tourist Office, An Spideal, Co. na Gallaimhe

A full copy of the application, and the relevant maps, plans, reports and drawings, were made available online<sup>1</sup>.

The Marine Institute also produced a Frequently Asked Questions leaflet<sup>2</sup> and distributed to a variety of business premises from Furbo to Inverin during the week 20-24th June 2016 after the second public information meeting, answering many of the issues raised.

The Marine Institute also held a number of meetings with members of the public and many elected public representatives in the weeks leading up to the public consultation period's deadline for submissions

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<sup>1</sup> <http://www.housing.gov.ie/planning/foreshore/applications/marine-institute-spiddal>

Last accessed 16:51 on 4th November 2016

<sup>2</sup> [http://www.marine.ie/Home/sites/default/files/MIFiles/Docs\\_Comms/Galway%20Bay%20Test%20Site%20FAQ%20ENG.pdf](http://www.marine.ie/Home/sites/default/files/MIFiles/Docs_Comms/Galway%20Bay%20Test%20Site%20FAQ%20ENG.pdf)

Last accessed 17:06 4<sup>th</sup> November 2016

## **FS006566: Marine Institute response to public submissions**

The statutory public consultation phase closed on the deadline for submissions date of 9<sup>th</sup> September 2016. The Marine Institute received 557 submissions on the foreshore lease application from the Department of Housing, Planning, Community and Local Government on 28<sup>th</sup> September 2016.

The Marine Institute reviewed each individual submission and the various topics on which the submission was made were identified and noted. The within each of the 18 identified topics, different specific issues were raised and these were again noted and referenced to each submission number.

The accompanying submissions matrix identifies each of the 18 topics, the 102 different issues associated with the 18 topics, and the submission number that raised the issue.

The remainder of this document contains the Marine Institute's response to each of the individual 102 identified issues raised in submissions received during the public consultation period.

## 1. Accuracy of Information issues

### **Issue 1: Incorrect information: SACs missing**

Submission Nos: 117, 122, 124, 262, 273, 274, 289, 311, 316, 317, 319, 320

**Response:** The Environmental Report clearly identifies all the environmentally designated areas in the vicinity of the proposed Galway Bay Marine and Renewable Energy Test Site in Figure 3-2 on page 47. The Appropriate Assessment Stage 1 Screening reporting undertaken by AquaFact International Services on behalf of the Marine Institute also clearly identifies the SACs in the vicinity of the test site, along with their qualifying interests.

### **Issue 2: Incorrect information: dwellings**

Submission Nos: 112, 114, 117, 124, 255, 264, 269, 273, 274, 277, 280, 287, 289, 307, 311, 312, 315

**Response:** The application form states that the distance from nearest habitation is 1.50km with reference to the dwelling identified on drawing number 01: *Site Location Distances* accompanying the application. The actual distance to nearest habitation is 1.485km to an adjacent property not shown on the map. The map is not required to, nor does it purport to, show all dwellings in the vicinity of the test site.

### **Issue 3: Application is incomplete**

Submission Nos: 54, 57, 103, 117, 122, 124, 133, 262, 264, 273, 274, 289, 302, 313, 324

**Response:** The Marine Institute's foreshore lease application, accompanying Environmental Report, and supporting appendices are complete and meet the requirements for a foreshore lease application.

### **Issue 4: Vague information on economic benefits**

Submission Nos: 124, 196, 211, 212, 227, 228, 235, 236, 238, 239, 246, 247, 248, 249, 251, 252, 257, 265, 270, 271, 279, 281

**Response:** Section 5.3 of the Environmental Report addresses employment and socio-economic benefits. It is stated in that section that during the operational phase of the site:

*"There will be an increase in visits to the area which will promote economic activity in the local hotel and catering industries"*

and that;

*"Workboats and marine contractors will be needed to assist the installation, monitoring and maintenance of the test devices and smaller sensors that will be deployed on the site".*

It is also stated that:

*"Local employment opportunities should be identified and local businesses should be encouraged to avail of any opportunities that arise in the project. The Marine Institute will work with Udaras na Gaeltachta to maximise long term benefits for the region."*

## FS006566: Marine Institute response to public submissions

In terms of potential for job and wealth creation, the Economic Study for Ocean Energy Development in Ireland published by the SEAI and Invest Northern Ireland in 2010 states that:

*“There is currently sound quantitative evidence that by 2030 a fully developed island of Ireland OE sector providing a home market and feeding a global market for RE could produce a total Net Present Value (NPV) of around €9 billion and many thousands of jobs to Irish and Northern Irish economies. It is possible that an island of Ireland wave energy industry meeting the 500MW 2020 target could produce at least 1,431 additional FTE jobs and an NPV of €0.25bn, increasing to 17,000-52,000 FTE jobs and an NPV of between €4-10bn by 2030. This is dependent upon achieving sufficient technology learning rates – most likely encouraged and maintained initially through a form of capital and/or operational subsidy. Similarly a tidal industry providing 200MW of capacity by 2020 may deliver around 600 FTE jobs and an NPV of €111m, increasing to 8,500-17,000 FTE jobs and an NPV of between €1.5-2.75bn by 2030.”*

The scale of economic benefits ultimately achieved is conditional on early involvement in the sector and the putting in place of appropriate policy supports for the sector.

### **Issue 5: There was no details for all devices and infrastructure that will be located on the test site.**

*Submission Nos: 14, 40, 55, 98, 101, 103, 107, 121, 196, 205, 208, 211, 212, 227, 228, 235, 236, 237, 238, 239, 246, 247, 248, 249, 251, 252, 255, 257, 263, 270, 271, 278, 279, 281, 292, 311, 472*

**Response:** Details of both long term and short term infrastructure, and all the devices that could potentially be located on the test site are described in Chapter 4 of the Environmental Report accompanying the foreshore lease application.

### **Issue 6: The title of the application is very misleading**

*Submission Nos: 131, 132, 196, 205, 211, 212, 227, 228, 235, 236, 238, 239, 246, 247, 248, 249, 251, 252, 255, 257, 265, 270, 271, 273, 274, 287, 279, 281, 289, 291, 311*

**Response:** Although the title of the application form “Application for Foreshore Lease to Construct and Offshore Electricity Generating Station” may cause some confusion, item 22 on the application form: “Nature of proposed generating station (i.e. wind powered, wave powered, etc.)” it is clearly described as:

*“testing of prototype wind, wave and tidal devices”*

The nature of the development as described on the Department of Housing, Planning, Community and Local Government website<sup>3</sup> is “Application for the testing of prototype wind, wave and tidal energy devices at Galway Bay Marine and Renewable Energy Test Site Spiddal, Co. Galway”.

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<sup>3</sup> <http://www.housing.gov.ie/planning/foreshore/applications/marine-institute-spiddal>  
Last accessed 15:15 on 3<sup>rd</sup> November 2016



## **FS006566: Marine Institute response to public submissions**

The title of the environmental report in support of the above application is “Galway Bay Marine and Renewable Energy Test Site Foreshore Lease Application: Environmental Report”

### **Issue 7: Full nature and extent of the proposed project is not clearly identified**

*Submission Nos: 112, 114, 124, 143, 185, 186, 187, 188, 289, 307, 311, 312, 315, 316, 317, 319, 320, 328, 329, 330, 334, 552*

**Response:** Chapter 4 of the Environmental Report clearly describes the full nature and extent of the proposed project including, inter alia, the test site location, the project components, manner of installation, nature of deployment of test and demonstration devices, the overall project timescale, and approach to decommissioning.

### **Issue 8: Misleading information**

*Submission Nos: 10, 54, 90, 126, 194, 206, 255, 262, 267, 289, 300, 307, 308, 310, 312, 315, 316, 317, 319, 320, 330*

**Response:** The Marine Institute’s foreshore lease application, accompanying Environmental Report, and supporting appendices do not contain any misleading information.

## 2. Appropriate Assessment issues

### **Issue 9: The impacts have not been Appropriately Assessed**

Submission Nos: 144, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 189, 190, 191, 192, 198, 199, 200, 201, 204, 213, 214, 215, 216, 217, 224, 225, 226, 255, 293, 301, 304, 306, 311, 347, 349, 350, 351, 352, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 415, 416, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 466, 467, 468, 469, 470, 471, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514

**Response:** The first stage in the Appropriate Assessment process is Screening. Screening addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3) of the Habitats Directive (92/42/EEC):

- i. whether a plan or project is directly connected to or necessary for the management of the site, and
- ii. whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a Natura 2000 site in view of its conservation objectives.

If the effects are deemed to be significant, potentially significant, or uncertain, or if the screening process becomes overly complicated, then the process must proceed to Stage 2 Appropriate Assessment (preparation of a Natura Impact Statement).

The Screening assessment undertaken by AquaFact International Services on behalf of the Marine Institute has shown that there is no potential for significant effects from the proposed test site and that Stage 2 Appropriate Assessment is not required. Appropriate Assessment Stage 1 Screening report is included in Appendix 6 of the Environmental Report.

The Appropriate Assessment screening when completed by the Department of Housing, Planning, Community and Local Government (HPCLG) will be published on the Department website when a determination of the application has been made.

### **Issue 10: NIS may be necessary due to mitigation measures in Natura Screening Document.**

Submission Nos: 7

**Response:** The impacts from the proposed test site will not have any significant effects on the nearby Natura 2000 sites, their qualifying interests/special conservation interests, or conservation objectives. The Screening Assessment has concluded that Stage 2 Appropriate Assessment is not required. The Appropriate Assessment Stage 1 Screening report did not identify any mitigation or monitoring measures as being required.

Mitigation measures were only included in the specific Marine Mammal Risk Assessment in Appendix 6, Section 4 as requested by the Development Applications Unit of the (then) Department of Arts Heritage and Gaeltacht which stipulated the marine mammal assessment should provide information on;

1. Marine Mammal Baseline Description
2. Assessment of Likely Significance to marine mammals
3. Mitigation and Monitoring for marine mammals.

## FS006566: Marine Institute response to public submissions

### 3.1. Proposed mitigation and monitoring should be clearly described

The Marine Mammal Risk Assessment does not fall within the Appropriate Assessment process.

#### **Issue 11: Is the Minister satisfied that the 'project' has been appropriately assessed?**

*Submission Nos: 87, 208, 262, 331, 332, 325, 326, 300*

**Response:** The Appropriate Assessment screening when completed by the Department of Housing, Planning, Community and Local Government (HPCLG) will be published on the Department website when a determination of the application has been made.

#### **Issue 12: Proper procedure has not been observed in reaching this decision and this matter will not survive a judicial review process if proper consultation is not carried out.**

*Submission Nos: 88*

**Response:** The Appropriate Assessment was prepared in accordance with the current guidance:

- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DEHLG 2009, Revised February 2010);
- Marine Natura Impact Statements in Irish Special Areas of Conservation – A Working Document. April 2012 (DAHG, 2012)
- EU Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC (EC, 2007);
- Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (EC, 2002); and
- Managing Natura 2000 Sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC, 2000).

During the preparation of Appropriate Assessment Stage 1 Screening report, consultation was carried out with the National Parks and Wildlife Service (NPWS) of the Department of Arts, Heritage and the Gaeltacht (DAHG) to identify the scoping opinion of the NPWS in relation to the proposal and to the ecological constraints and sensitivities of the habitats and species in the area. The Appropriate Assessment Stage 1 Screening report, consultation letter and response are included in Appendix 6 of the Environmental Report.

### 3. Conflict of Interest issues

**Issue 13: Question Minister Coveney's impartiality**

*Submission Nos: 84, 85, 107, 117, 226, 267, 289, 292, 300, 307, 308, 310, 311, 312, 314, 315, 316, 317, 319, 320, 330*

**Response:** This is a matter for the licensing authority to address.

**Issue 14: MLVC conflict of interest**

*Submission Nos: 263, 292, 322, 330*

**Response:** The Marine Licence Vetting Committee (MLVC) is a non-statutory body comprised of technical, scientific and engineering specialists from various government departments (and with a remit to include additional expertise as required), independently reviews the application and any submissions and makes a recommendation to the Minister of Housing, Planning, Community and Local Government. As this foreshore lease application FS006566 is being made by the Marine Institute, the Marine Institute members of the MLVC will not be involved in the assessment of the application

**Issue 15: The lack of transparency is of concern.**

*Submission Nos: 80, 122, 226, 262, 287, 305, 330*

**Response:** The law requires that all applicants for a foreshore lease apply to the Marine Planning and Foreshore Section of the Department of Housing, Planning, Community and Local Government. There is a clear separation of functions between the Marine Institute and the consenting authority and the Institute does not believe there to be a conflict.

## 4. Correspondences

### **Issue 16: Email correspondence.**

*Submission Nos: 45, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 537, 538, 542, 547, 552, 554*

A number of submissions received were general email correspondences between members of the public and the Foreshore Licencing Unit requesting information and clarification on the leasing process, requests for extensions to public consultation periods.

These email correspondences were reviewed and the following issues were identified within; Accuracy of Information, Appropriate Assessment, Environmental Impact Assessment, Galway Development Plan, Grid Connection, Public Consultation, Visual Impact, Wildlife.

The issues raised in the above email correspondences are addressed in the relevant sections of this document.

## 5. Environmental Impact Assessment issues

### **Issue 17: Environmental Report is largely based on assumption without researching the facts.**

Submission Nos: 1, 104, 252, 252, 265, 278, 285, 472

**Response:** The Environmental Report has a specific section listing all published scientific literature consulted. Eighty four separate sources of information have been referenced citing specific local, national and international research undertaken on the environmental effects in the respective areas considered in the Environmental Report.

### **Issue 18: The project has been split into three smaller projects to avoid the need for an EIS.**

Submission Nos: 61, 85, 107, 112, 114, 117, 124, 143, 144, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 189, 190, 191, 192, 196, 198, 199, 200, 201, 204, 207, 211, 212, 213, 214, 215, 216, 217, 224, 225, 226, 227, 252, 255, 262, 263, 267, 270, 271, 279, 281, 282, 283, 284, 289, 291, 292, 293, 303, 304, 306, 307, 308, 310, 311, 312, 315, 316, 317, 319, 320, 325, 330, 347, 349, 350, 351, 352, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 415, 416, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 466, 467, 468, 469, 470, 471, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514

**Response:** The project has not been split into three smaller projects to avoid the need for an EIS. Foreshore lease application FS006611 submitted in 2016 was for a one year interim lease for the test site to ensure the continued operation of the test site whilst this present foreshore lease application FS006566 (also submitted in 2016) was being assessed by the Department of Housing, Planning, Community and Local Government (HPCLG).

Foreshore licence FS005751 and related Galway Co. Co. planning application 13/947 submitted in 2013 was for the Galway Bay Cable Project, the installation and operation of a telecommunications cable from the secondary school in Spiddal to the Galway Bay observatory, a scientific research station, co-located at the test site.

### **Issue 19: The proposed development has been inadequately screened.**

Submission Nos: 144, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 160, 161, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 189, 190, 191, 192, 193, 198, 199, 200, 201, 204, 211, 212, 213, 214, 215, 216, 217, 224, 225, 262, 272, 275, 276, 287, 287, 289, 289, 289, 291, 292, 307, 311, 312, 315, 316, 317, 319, 320, 330, 330, 330, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 420, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 466, 467, 468, 469, 470, 471, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514

**Response:** The Marine Institute submitted an EIA screening report detailing findings from a desktop analysis of the receiving environment that may be affected by the proposed development, and documented the procedures and outcome of the process undertaken as part of the screening. The consenting authority assessed the screening report and came to the conclusion that an EIA would not be required for the development.

The Environmental Impact Assessment screening report when completed by the Department of Housing, Planning, Community and Local Government (HPCLG) will be

## **FS006566: Marine Institute response to public submissions**

published on the Department website when a determination of the application has been made.

### **Issue 20: Cumulative impacts not included in EIS screening**

*Submission Nos: 144, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 189, 190, 191, 192, 198, 199, 200, 201, 204, 213, 214, 215, 216, 217, 224, 225, 262, 347, 349, 350, 351, 352, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 415, 416, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 466, 467, 468, 469, 470, 471, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514*

**Response:** Cumulative impacts have been included in the EIS screening report in Section 4.1.5

### **Issue 21: Cumulative effects of this development have not been assessed**

*Submission Nos: 1, 82, 83, 85, 98, 117, 122, 124, 128, 196, 205, 211, 212, 227, 228, 235, 236, 238, 239, 246, 247, 248, 249, 250, 251, 252, 257, 262, 265, 270, 271, 279, 281, 289, 291, 302, 307, 311, 311, 312, 315, 316, 317, 319, 320, 325, 330*

**Response:** Indirect, Cumulative Impacts and Interactions between impacts of this development have been assessed in Section 15 of the Environmental Report.

### **Issue 22: Environmental Assessment and screening was carried out by applicant and not competent authority.**

*Submission Nos: 10, 101, 194, 552*

**Response:** The Marine Institute submitted an EIA screening report detailing findings from a desktop analysis of the receiving environment that may be affected by the proposed development, and documented the procedures and outcome of the process undertaken as part of the screening. This screening report established the likely effects of the proposed development on the environment. The consenting authority assessed the screening report and came to the conclusion that an EIA would not be required for the development. The applicant can screen a project themselves or can consult with the competent authority to remove any uncertainty.

### **Issue 23: The application breaches Environmental and EU law.**

*Submission Nos: 83, 84, 87, 124, 255, 552, 552*

**Response:** The Department of Housing, Planning, Community and Local Government (HPCLG), as the competent authority, will determine compliance of the application with environmental and EU law.

### **Issue 24: Environmental assessment took place under the wrong legislation.**

*Submission Nos: 10, 114, 194, 278, 552*

**Response:** The Department of Housing, Planning, Community and Local Government (HPCLG), as the competent authority, will determine compliance of the application.

## **FS006566: Marine Institute response to public submissions**

### **Issue 25: Failure to comply with European case law re. appropriate tiering relationships between Strategic Environmental Assessment (SEA) for plans and programmes and Environmental Impact Assessment (EIA) for projects.**

*Submission Nos: 10, 194, 302, 311*

**Response:** The Department of Housing, Planning, Community and Local Government (HPCLG), as the competent authority, will determine compliance of the application.

### **Issue 26: An EIA/EIS is required.**

*Submission Nos: 50, 66, 67, 68, 70, 79, 81, 87, 89, 98, 102, 108, 111, 112, 113, 114, 115, 117, 118, 120, 121, 122, 123, 124, 137, 144, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 189, 190, 191, 192, 197, 198, 199, 200, 201, 203, 204, 207, 209, 211, 212, 213, 214, 215, 216, 217, 222, 223, 224, 225, 226, 226, 229, 233, 244, 245, 250, 252, 255, 258, 259, 260, 261, 268, 269, 272, 275, 275, 276, 277, 278, 280, 286, 287, 292, 293, 296, 298, 300, 301, 303, 303, 304, 306, 308, 309, 310, 311, 314, 324, 330, 330, 347, 349, 350, 351, 352, 353, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 415, 416, 417, 418, 419, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 536*

**Response:** The Marine Institute submitted an EIA screening report detailing findings from a desktop analysis of the receiving environment that may be affected by the proposed development, and documented the procedures and outcome of the process undertaken as part of the screening. The consenting authority assessed the screening report and came to the conclusion that an EIA would not be required for the development.

The Environmental Impact Assessment screening and Appropriate Assessment screening when completed by the Department of Housing, Planning, Community and Local Government (HPCLG) will be published on the Department website when a determination of the application has been made.

### **Issue 27: Inadequate information regarding the environmental effects.**

*Submission Nos: 1, 115, 122, 143, 255, 296, 300, 307, 312, 315, 317, 319, 320, 333*

**Response:** The Environmental Report has a specific section listing all published scientific literature consulted. Eighty four separate sources of information have been referenced citing local, national and international research undertaken on the environmental effects in the respective areas considered in the Environmental Report.

### **Issue 28: Environmental Assessment inadequate to cover the whole area affected by development.**

*Submission Nos: 61, 65, 82, 84, 85, 85, 87, 289, 307*

**Response:** The Department of Housing, Planning, Community and Local Government (HPCLG), as the competent authority, will determine the adequacy of the environmental assessment undertaken.

### **Issue 29: Environmental impacts of past and current operations at the site not assessed.**

*Submission Nos: 101, 103*



## FS006566: Marine Institute response to public submissions

**Response:** The Environmental Report was prepared to provide an analysis of the likely effects (good and bad), of the proposed development on the environment, including flora, fauna, water, landscape and cultural heritage. The baseline environmental conditions are described in each of the respective chapters in the Environmental Report and present results from various studies conducted over the past ten years operation of the test site showing that the past and current operations at the test site have had a negligible impact.

### **Issue 30: Environmental impacts of future unknown technologies cannot be assessed.**

*Submission Nos: 87, 101, 112, 115, 117, 143, 268, 277, 289, 303, 307, 312, 315, 316, 317, 318, 319, 320, 330*

**Response:** The environmental impacts of future unknown technologies have been assessed. The manner in which they have been assessed is detailed in Section 2.6 of the Environmental Report:

*"... the different environmental impacts were assessed for the worst case scenarios, when applicable, based on current device technologies, in order to establish impact thresholds for the different environmental receptors and provide an envelope of potential environmental impacts.*

*The worst case scenario assessment for each environmental receptor assumed that all permanent infrastructure was deployed at the site, all recurring short term infrastructure was deployed at the site, and that the three device testing berths were occupied by those devices which would be expected to have greatest impact on the receptor under consideration. The various components contributing to the worst case scenarios for each receptor are detailed in Chapter 4.7: Worst Case Scenarios for Impact Assessment*

*Appropriate methodologies have been used to assess the effects relating to each of the environmental topics that have been investigated as part of the report. These methodologies are based on recognised good practice and guidelines specific to each subject area, details of which are provided within each individual technical section."*

### **Issue 31: No information provided on consultations with external bodies e.g. Independent Environmental NGO.**

*Submission Nos: 198, 199, 200, 201, 204, 213, 214, 215, 216, 217, 224, 225, 280, 347, 349, 350, 351, 352, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 415, 416, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 466, 467, 468, 469, 470, 471, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514*

**Response:** The external bodies consulted on the Marine Institute's Foreshore Lease Application FS006566 along with their observations and the Marine Institute's responses to those observations are all available on the Department of Housing, Planning, Community and Local Government's website<sup>4</sup>

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<sup>4</sup> <http://www.housing.gov.ie/planning/foreshore/applications/marine-institute-spiddal>  
Last accessed 17:06 on 3<sup>rd</sup> November 2016

**Issue 32: Light pollution has not been adequately addressed in the screening report.**

*Submission Nos: 196, 205, 211, 212, 227, 228, 235, 236, 238, 239, 246, 247, 248, 249, 251, 257, 270, 271, 279, 281, 291*

**Response:** Light pollution from the test site will be negligible. The four cardinal marks and their navigation lights have been in existence since the site was first established in 2006. The only additional source of light at the test site would be an aviation light on any floating wind turbine which might be deployed. Section 13.9 of the Environmental Report states:

*“It is planned that the only marking lights denoting the presence of the test site will be those of the statutorily sanctioned cardinal marks. No devices deployed on site will carry marking lights, other than any floating wind turbine which must comply with aviation lighting as specified by Irish Aviation Authority.”*

**Issue 33: The SEA Directive should be applied to this development.**

*Submission Nos: 262, 287, 311, 325*

**Response:** The Galway Bay Marine and Renewable Energy Test Site is a development, therefore the SEA Directive does not apply. Strategic Environmental Assessment (SEA) is the process by which environmental considerations are required to be fully integrated into the preparation of plans and programmes and prior to their final adoption. Environmental Impact Assessment (EIA) is the process by which the anticipated effects on the environment of a proposed development or project are measured and this process has been applied correctly to this development.

**Issue 34: SAC's have not been considered.**

*Submission Nos: 1, 64, 65, 83, 84, 87, 107, 112, 114, 117, 121, 124, 131, 132, 133, 143, 185, 186, 187, 188, 262, 312, 315, 316, 317, 319, 320, 321*

**Response:** The Appropriate Assessment Stage 1 Screening reporting undertaken by AquaFact International Services on behalf of the Marine Institute and included as Appendix 6 of the Environmental Report includes the identification of relevant SAC, compilation of information on their qualifying interests and conservation objectives; assessment of the likely effects – direct, indirect, cumulative – undertaken on the basis of available information (desk study, field survey and/or primary research) in accordance with Marine NIS Guidelines<sup>5</sup>

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<sup>5</sup> DAHG. 2012. Marine Natura Impact Statements in Irish Special Areas of Conservation – A Working Document. April 2012. Prepared by the National Parks and Wildlife Service of the DAHG.

## 6. Galway Development Plan issue

### **Issue 35: The site is contrary to development allowed in the Galway County Development Plan**

Submission Nos: 8, 16, 21, 50, 58, 59, 62, 64, 65, 79, 87, 108, 112, 114, 117, 121, 122, 124, 137, 143, 185, 186, 187, 188, 206, 289, 307, 311, 312, 315, 316, 317, 319, 320, 328, 329, 552

**Response:** Section 2.5.6 of the Environmental Report discussed the Galway Development Plan under policies relevant to the development of marine renewable energy and the test site where it was stated that:

*“The Draft Galway County Development Plan 2015–2020 encourages marine renewable energy. It contains a specific reference to wave, tidal and offshore wind and recognises that natural resources are a vital element of the county’s resource base and that they have not been developed to their full potential.*

*The development of renewable resources is specifically addressed as part of the its overall strategy for transport and infrastructure developments, where it aims to optimise the development of appropriate renewable energy sources that make use of the natural resources of the area concerned in an environmentally acceptable and sustainable manner.*

*The plan also recognises the importance of the ‘SmartBay Project’ (which includes marine observation, advanced technology sensor and data management systems, communication projects and R&D) and offers significant opportunities for large multinationals and Irish-based SME’s”.*

Specifically, there are a number of policies outlines in the County Development Plan<sup>6</sup> which support the development of sustainable renewable energy resources, including:

#### **Policy ER 2 – Development of Renewable Energy**

The Council shall support proposals for renewable energy developments at appropriate scales (including, ocean energy/wave and tidal technologies and ancillary facilities including associated grid connection) at appropriate locations within the County having regard to residential amenities, biodiversity and landscape sensitivities, where such proposals are in compliance with the County Development Plan 2015 - 2021 and the principles of proper planning and sustainable development. Where possible the Council will develop its own micro generation projects to facilitate its own energy requirements.

#### **Objective ER 1 – Electricity and Renewable Energy Infrastructure**

Support the development and expansion of infrastructure for the generation, storage, transmission and distribution of electricity, renewable energy and other renewable energy proposals in suitable locations in County Galway.

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<http://www.galway.ie/en/services/planning/developmentplansandpolicy/galwaycountydevelopmentplan2015-2021/#>

Last accessed 11<sup>th</sup> November 2016 at 17:35

## **FS006566: Marine Institute response to public submissions**

### Objective ER 4 – Renewable Energy

a) Support and facilitate the sustainable development and use of appropriate renewable energy resources and associated infrastructure within the County, including;

- Wind Energy;
- Wave/Tidal Energy;
- Hydro-Power;
- Solar Energy;
- Bio-Energy;
- Geo-Thermal;
- Combined Heat Power (CHP);
- Heat Energy Distribution (such as District Heating/Cooling Systems); and
- Other renewable energy sources, as appropriate and in line with national guidelines for sustainable development.

b) The Council shall commence a County Renewable Energy Strategy within the lifetime of the plan as resources permit. This document will also take micro generation options into account and will recognise that renewable energy projects are not just limited to large scale infrastructural projects.

## 7. Grid Connection issues

**Issue 36: Is the site grid connected?? The Minister says it is, but the Marine Institute say it is not.**

*Submission Nos: 50, 54, 57, 87, 112, 114, 117, 122, 262, 273, 274, 289, 307, 311, 312, 315, 316, 317, 319, 320, 325*

**Response:** The Galway Bay Subsea Observatory is located within the test site and electrical power is supplied to it via the subsea cable to power the scientific instruments on the Observatory. There will be no capacity to export power to the grid from any wave, tidal or floating wind energy device that might be deployed at the test site should the foreshore lease application be granted.

**Issue 37: The cable project also said it would be grid-connected application before this**

*Submission Nos: 122, 289, 307, 312, 314, 315, 316, 317, 319, 320*

**Response:** As part of the background planning for the Galway Bay Cable Project, outline development plans and reports for the project were produced. The reports included an assessment of the possible alternatives for the installation of cable(s) and considered various cable types and designs, and on-shore landing locations. A total of six options were presented, three for each of the two landing locations identified, including the possibility of establishing the facility as a power export, grid connected location for WEC developers.

In addition to the possible provision of a grid connected test facility, the development plans and reports proposed to provide a power supply and data transmission facility (optic fibre cable) for the Marine Institute SmartBay Project involving a submarine cable, incorporating fibre optic and electricity supply, running from a location near the wave test site to the same landing location as the test site cable.

Ultimately, none of the grid connection options were proven to be feasible and Galway Bay Cable Project foreshore licence application FS005751 was submitted only for the power supply and data transmission facility (fibre optic cable) for the Marine Institute SmartBay Project.

**Issue 38: There is allowance for a power generating structure which can be connected to the national grid**

*Submission Nos: 263, 292*

**Response:** The power generating structure referred to is the SeaStation Platform, and is a floating platform proposed to be deployed at the test site. The SeaStation would not be a power producing platform connected to the national grid. As there will be no capacity to export power to the national grid from any wave, tidal or floating wind energy device that might be deployed at the test site, the SeaStation Platform is designed to a) store any electricity generated by test devices and use it to power environmental sensors and other monitoring equipment, and b) dissipate any excess power generated by test devices.

## 8. Health Concern issue

### **Issue 39: No assessment of impact of light & noise on public health and safety**

Submission Nos: 37, 57, 90, 115, 196, 205, 207, 211, 212, 227, 228, 235, 236, 237, 238, 239, 246, 247, 248, 249, 251, 257, 265, 270, 271, 277, 279, 281, 286, 287, 289, 300, 303, 324, 328, 329

**Response:** The impact of lighting on the test site was not assessed in the Environmental Report as there will be no additional lighting required on the test site above what has been in place for the past 10 years, other than for an aviation light on any floating wind turbine that may be deployed at the site.

Section 13.9 of the Environmental Report states:

*“It is planned that the only marking lights denoting the presence of the test site will be those of the statutorily sanctioned cardinal marks. No devices deployed on site will carry marking lights, other than any floating wind turbine which must comply with aviation lighting as specified by Irish Aviation Authority.”*

As the operational noise anticipated at the test site is no greater than ambient noise typically experienced in a coastal environment, no noise assessment was undertaken.

The foreshore lease application form states in items 33 -36 that;

*“Maximum noise levels from the operation of full scale commercial wind farms are typically ~100dB(A). It is estimated that operational noise at the test site will be ~50dB(A)*

*Ambient background noise levels in a coastal marine environment of 30-50dB(A) would be expected to prevail at the test site.*

*Ambient background noise levels in a coastal marine environment of 30-50dB(A) would be expected to prevail at the point of nearest habitation*

*The nearest habitation is located very close to the coastline and approximately 1.5km from the boundary of the test site. It is estimated that maximum noise levels expected at this location will be within the range of ambient background noise in a coastal marine environment of between 30-50dB(A).”*

## 9. Lease issues

### **Issue 40: 35yr lease is too long**

Submission Nos: 1, 4, 4, 8, 9, 70, 80, 89, 102, 104, 105, 106, 107, 109, 111, 115, 117, 124, 137, 159, 203, 207, 209, 218, 219, 229, 231, 233, 244, 245, 250, 258, 259, 266, 268, 269, 272, 275, 276, 277, 280, 285, 286, 290, 293, 294, 300, 301, 303, 304, 306, 328, 329, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 420, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514

**Response:** While the term of the any lease that may issue is a matter for the Minister to determine, the application for a 35 year lease for the quarter scale test site was made to ensure the operational lifespan of all the national ocean energy testing facilities are consistent. The test site is an integral component of Ireland's Ocean Energy Strategy and is being developed in accordance with the national Offshore Renewable Energy Development Plan<sup>7</sup> (OREDP); Lir National Ocean Test Facility building was officially opened in in Cork last year and provides small to medium scale laboratory testing of ocean and maritime systems. The Atlantic Marine Energy Test Site (AMETS) in Belmullet was granted a 35 year foreshore lease in 2015 to facilitate testing of full scale wave energy converters in an open ocean environment. The provision of the test site is required to meet one of the key initiatives set out in the Offshore Renewable Energy Development Plan and Harnessing Our Ocean Wealth. It will help underpin the Government's stated objective of producing 50GW from ocean energy by 2050, 35 years from 2015.

### **Issue 41: Long lease will open flood gates to increase development abuse and neglect**

Submission Nos: 14, 86, 144, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 189, 190, 191, 192, 198, 199, 200, 201, 204, 213, 214, 215, 216, 217, 224, 225, 226, 297

**Response:** This concern could be dealt with by way of a specific condition in any lease that may issue. Such a condition could limit the testing of technologies to those described in Chapter 4 of the Environmental Report accompanying the foreshore lease application.

### **Issue 42: Other leases granted appear to be shorter**

Submission Nos: 98

**Response:** As set out in Section 2(1) of the Foreshore Act, 1933 (as amended) the maximum term of a foreshore lease is 99 years. It is our understanding, however, that a term of 35 years is considered to be more appropriate and has been applied in the case of other foreshore developments e.g. SEAI for the Atlantic Marine Energy Test Site (AMETS) at Bellmullet (Ref FS005726), Monkstown Bay Marina Company Ltd for an extension to an existing marina development at Monkstown in Cork Harbour (Ref FS005826), Irish Water Outfall from Carrigtwohill Waste Water Treatment Plant (Ref FS006120).

### **Issue 43: Length of lease makes it difficult to assess environmental damage**

Submission Nos: 103

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<sup>7</sup> <http://www.dccae.gov.ie/energy/en-ie/Renewable-Energy/Pages/OREDP-Landing-Page.aspx>  
Last accessed 10<sup>th</sup> November 2016 at 15:55

## **FS006566: Marine Institute response to public submissions**

**Response:** Environmental monitoring will be amongst the lease conditions stipulated by the Statutory Authority. The Marine Institute will develop an Environmental Monitoring Plan (EMP) as a safeguard to the protection of the marine environment. The EMP would describe in detail the proposed installation methodologies, potential impacts and associated mitigation and control measures. The EMP would also elaborate on measures proposed to monitor impacts, to respond to impacts and remediate or mitigate any impacts encountered. Close consultation with the relevant statutory and non-statutory bodies will ensure an appropriate EMP is put in place.

### **Issue 44: What safeguards are in place to restrict alterations of usage during the 35 year lease.**

*Submission Nos: 1, 1, 8, 107, 115, 121, 237, 255, 263, 292, 297, 297, 298*

**Response:** Similar to Issue 41 above this concern could be dealt with by way of a specific condition in any lease that may issue. Such a condition could limit the use of the site to the test and demonstration of prototype ocean energy converters and associated marine technologies, details of which are described in Chapter 4 of the Environmental Report accompanying the foreshore lease application.



## 10. Location issues

### **Issue 45: Too close to shore**

Submission Nos: 66, 70, 73, 74, 75, 76, 77, 89, 94, 96, 97, 99, 100, 102, 107, 111, 128, 255, 263, 289, 292, 302, 322, 330

**Response:** The Galway Bay Marine and Renewable Energy Test Site is proposed to be located at the existing  $\frac{1}{4}$  scale wave energy test site located on the north side of Galway Bay since 2006. The test-site is located 2.4 km southeast of the village of Spiddal and 1.2km from the nearest point to shore.

### **Issue 46: No wind farms allowed within 5km of shore**

Submission Nos: 69, 87, 105, 112, 113, 114, 115, 117, 124, 289, 307, 312, 315, 316, 317, 319, 320

**Response:** It is stated in “Offshore Generating Stations - Notes for intending developers”<sup>8</sup> that offshore generating stations will not, as a general rule, be allowed within 5km of shore but applicants may make a case for such if they consider that the proposed construction will not interfere unduly with the visual amenity of the area in question (both landscape and seascape).

The above document is intended to refer to applications for foreshore licences and leases in respect of commercial generating stations only. Where an applicant intends to test a new technology on a demonstration or pilot basis, or to carry out other tests which may be relevant to the development of new technology, separate arrangements may apply subject to the Minister being satisfied that it is clearly a demonstration project as is the case for the proposed Galway Bay Marine and Renewable Energy Test Site.

### **Issue 47: Alternate sites considered?**

Submission Nos: 1, 9, 95, 255, 263, 267, 285, 292, 300, 302, 303, 307, 308, 310, 311, 312, 314, 315, 316, 317, 319, 320, 321, 330, 472

**Response:** The issue of considering alternate site locations for the proposed test site was addressed in Section 3.2.2 of the Environmental report where it is stated that:

*“The principal elements on which the Galway Bay site was selected in 2006 are set out below:*

- *The site should be located in a bay demonstrating  $\frac{1}{4}$  of the wave resource experience in the open ocean to the west of Ireland and within the 12nm limit;*
- *Appropriate logistical support should be available locally;*
- *Minimal impact on the environment and stakeholders;*
- *A non-rocky seabed to facilitate cabling and anchoring.*

*No alternative locations were considered for the Galway Bay Marine and Renewable Energy Test Site. The reasons for this are:*

- *The test site has been operating successfully at this site for 10 years, with negligible impact on the environment.*

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<sup>8</sup> <http://www.sei.ie/uploadedfiles/RenewableEnergy/policydocument.pdf>  
Last accessed 11<sup>th</sup> November 2016 at 16:55hrs

## FS006566: Marine Institute response to public submissions

- *Galway Bay and SmartBay are recognised (nationally and internationally) as a world leading marine test facility for the development of innovative products and services for the global maritime sector.*
- *Research by UCC shows that the wave resource at the test site, represents a ¼ of that found in open Atlantic conditions; ideal for testing WEC prototypes at TRL 4-6.*
- *The availability of a long term time series dataset from the site is crucial for wave energy research. This dataset also provides for temporal assessment of environmental quality and impacts of climate change. It is important for this to be maintained.*
- *The availability of a range of experienced support and marine services nearby.”*

Section 3.3 of the Environmental Report concludes that:

*“While EPA Guidelines recommend considering alternatives for the choice of the development, the fact remains that the Galway Bay ¼ scale wave energy test site has been established at the present location for the past ten years, is an accepted part of the maritime landscape in Galway Bay, and has had negligible impact on the marine environment since its inception. Therefore, no alternate locations have been considered.”*

### **Issue 48: General - unsuitable location**

*Submission Nos: 1, 8, 38, 50, 52, 54, 57, 58, 59, 61, 62, 63, 64, 65, 68, 70, 72, 73, 82, 84, 89, 108, 110, 130, 143, 159, 185, 186, 187, 188, 255, 263, 272, 275, 276, 277, 334*

**Response:** This is similar to issue 47 above and has been addressed in that context.

### **Issue 49: Part of Burren GeoPark / UNESCO site**

*Submission Nos: 16, 21, 115, 117, 122, 124, 289*

**Response:** The Burren UNESCO GeoPark is located 8km away from the proposed development at its nearest point and components of the proposed development are likely to be barely discernible and be very unlikely to give rise to any impacts at such distances

### **Issue 50: The site is unsuitable for testing wave energy as it is wave limited**

*Submission Nos: 86, 330, 159*

**Response:** The proposed Galway Bay Marine and Renewable Energy Test Site would be located at the existing ¼ scale ocean energy test site on the north side of Galway Bay. The principal elements on which the Galway Bay site was selected originally in 2006 was that it should be located in a bay demonstrating ¼ of the wave resource experience in the open ocean to the west of Ireland and research by UCC (included as Appendix 11 of the Environmental Report) demonstrated that the wave resource at the test site represented a ¼ of that found in open Atlantic conditions;

Proving ocean energy converter technology in a benign environment like Galway Bay is critical to the future development of the industry as a whole. It will give confidence to investors to proceed to full scale commercial development, in support activities at the full scale Atlantic Marine Energy Test Site in Belmullet, Co Mayo.

**Issue 51: Not key to meeting Government initiatives**

*Submission Nos: 122, 124*

**Response:** In February 2014, the Department of Communications, Energy and Natural Resources (DCENR) published the Offshore Renewable Energy Development Plan (OREDPA). The purpose of the OREDPA is to provide a framework for the sustainable development of offshore renewable energy in Ireland. The OREDPA acknowledges that realising the potential of offshore renewable energy can only be achieved if offshore renewable energy developments do not adversely impact Ireland's rich marine environment.

The OREDPA is grounded in the principle that all development of offshore wind and ocean energy in Irish waters will be fully in line with Ireland's EU and international environmental obligations and best practice. The OREDPA identifies the opportunity for Ireland of realising the potential of our offshore energy resources for increasing indigenous production of renewable electricity, thereby contributing to reductions in our greenhouse gas emissions, improving the security of our energy supply and creating jobs in the green economy.

The OREDPA describes ten policy and enabling actions as key to the development of the offshore renewable energy sector, and support of the Galway Bay test site is explicitly included.

The implementation of the OREDPA, led by DCENR, will be mechanism through which government action across the environmental, energy policy and economic development dimensions will be coordinated to support the offshore renewable energy sector to reach commercial viability.

**Issue 52: Issues relating to exclusion zone around site, and fishing impact.**

*Submission Nos: 12, 50, 54, 57, 84, 99, 100, 116, 117, 141, 208, 208, 263, 273, 274, 282, 283, 284, 285, 307, 308, 310, 312, 315, 316, 317, 319, 320, 353*

**Response:** There will be no exclusion zone outside the area of the test site.

Section 13.9 of the Environmental Report, addressing navigational issues, states that:

*"To minimise risks to vessels navigating in the area and the devices to be deployed at the test site, it would appear appropriate that the test site area be re-designated as an Area to be Avoided (ATBA) on all navigation charts. An Area to be Avoided (ATBA) is a routing measure comprising an area within defined limits in which either navigation is particularly hazardous or it is exceptionally important to avoid casualties and which should be avoided by all ships or certain classes of ships."*

The impacts on fishing activity were assessed in Section 12.3.4 of the Environmental Report which concluded that:

*"The project is unlikely to have any significant negative impacts on commercial fishing and aquaculture as the vessel exclusion zone does not impede access to a significant part of the fishery and may even result in gains to fishing income due to*

## **FS006566: Marine Institute response to public submissions**

*the nursery that it creates. During the installation and during device deployment and recovery operations, the impacts on the fishing industry in the area will be of short duration and of low significance overall. Impacts can be reduced through careful planning of all activities associated with the test site in line with the accredited HSEQ Management Plan, and through continuing engagement with key stakeholders in Spiddal.*

## 11. Noise issues

### **Issue 53: No noise assessments done**

Submission Nos: 107, 117, 121, 123, 124, 129, 143, 207, 255, 285, 289, 307, 311, 312, 315, 316, 317, 319, 320, 321

**Response:** As the operational noise anticipated at the test site is no greater than ambient noise typically experienced in a coastal environment, no noise assessment was undertaken. The foreshore lease application form states in items 33 -36 that;

*“Maximum noise levels from the operation of full scale commercial wind farms are typically ~100dB(A). It is estimated that operational noise at the test site will be ~50dB(A)*

*Ambient background noise levels in a coastal marine environment of 30-50dB(A) would be expected to prevail at the test site.*

*Ambient background noise levels in a coastal marine environment of 30-50dB(A) would be expected to prevail at the point of nearest habitation*

*The nearest habitation is located very close to the coastline and approximately 1.5km from the boundary of the test site. It is estimated that maximum noise levels expected at this location will be within the range of ambient background noise in a coastal marine environment of between 30-50dB(A).”*

### **Issue 54: Concern about noise pollution**

Submission Nos: 2, 5, 14, 72, 91, 197, 209, 222, 229, 231, 232, 244, 245, 250, 255, 259, 266, 268, 269, 277, 280, 286, 290, 300, 303, 327, 328, 329, 417, 418, 419, 421

**Response:** This is similar to issue 53 above and has been addressed in that context.

### **Issue 55: What impacts on marine mammals**

Submission Nos: 1, 107, 203, 226

**Response:** The risk to, and the impacts on, marine mammals that could be posed by the project have been examined in Section 6.3 of the Environmental Report. This information is supported by the specific Marine Mammal Risk Assessment in Appendix 6, Section 4 as requested by the Development Applications Unit of the (then) Department of Arts, Heritage and Gaeltacht.

The likelihood, consequence and impact magnitude of the identified risks to marine mammals were as follows:

<b>Risk</b>	<b>Likelihood</b>	<b>Consequence</b>	<b>Impact</b>
Installation Noise:	Possible;	Negligible;	Low
Operational Noise:	Possible;	Negligible;	Low
Collision Risk:	Unlikely;	Minor;	Low
Barrier to Movement:	Remote;	Negligible;	Low
Electro-Magnetic Fields:	Unlikely;	Negligible;	Low
Disturbance to Seabed:	Highly Likely;	Negligible;	Low
Loss of Habitat & Species:	Highly Likely;	Negligible;	Low
Addition of New Structures:	Highly Likely;	Negligible;	Low

## 12. Other issues

### **Issue 56: Marine archaeology has not been assessed.**

*Submission Nos: 262, 263, 287, 288, 292*

**Response:** Section 10 of the Environmental Report, and Appendix 7: Marine Archaeology contains full details of the marine archaeological assessment undertaken.

### **Issue 57: Suggestions of aquaculture development and other uses of site.**

*Submission Nos: 37, 107, 159, 218, 226, 295, 311, 325*

**Response:** The Marine Institute is applying for a Foreshore Lease for a Marine and Renewable Energy Test Site. It is located at the existing wave energy test site and will provide developers and researchers with an area in which to test and demonstrate their prototype ocean energy converters and related technologies.

The application provides for an upgrade of infrastructure to improve the service offered to end-users. The following list details the proposed long term deployments at the site:

- Upgraded cardinal marks to allow for safer navigation;
- A databuoy to provide wave measurements;
- Buoys for testing marine technologies and scientific sensors;
- A 'SeaStation' which will provide power to, and dissipate power from, ocean energy devices as well as provide data communications to shore;
- An acoustic array for monitoring underwater sound;
- Interlocking modular gravity base(s);
- A variety of scientific sensors and instruments;
- Cables which will connect the instruments, sensors, and ocean energy devices.

The proposed upgrade of the site will enable periodic deployments of up to three individual devices of the following types for test and evaluation purposes for a maximum period of 18 months:

- Surface ocean energy converters;
- Sub-surface ocean energy converters;
- Seabed ocean energy converters;
- Prototype floating wind turbines;
- Novel marine technologies and scientific sensors.

It is not intended or proposed that any aquaculture developments can take place at the test site.

### **Issue 58: Danger to pleasure craft and fishing vessels.**

*Submission Nos: 90, 139, 255, 263, 292*

**Response:** Section 13 of the Marine Institute's Environmental Report assessed the risk and impact of the site on marine safety and in Section 13.5 determined that:

## FS006566: Marine Institute response to public submissions

*“the Galway Bay Marine and Renewable Energy Test Site development is a ‘low risk, small scale development ... a development in an area where the potential risks are low, and/or a small scale development’ for the following reasons:*

- the location of the test site on the northern shore of Galway Bay outside commercial shipping routes;*
- the existence of the test site for the past ten years;*
- knowledge of the site location within the local fishing community;*
- the cardinal marking scheme demarcating safe passage routes around the test site;*
- the inclusion of the test site on all Admiralty Charts for navigation purposes”*

On assessment of the existing environment, no significant impact on navigation was identified. A number of mitigation measures have been proposed in Section 13.8 of the Marine Safety Statement to minimise risks to vessels navigating in the area and the devices to be deployed at the test site.

### **Issue 59: No ability to prevent devices from being deployed.**

*Submission Nos: 80, 207, 255*

**Response:** The deployment of wave energy converters, tidal turbines, floating devices and other innovation projects would take place in accordance with the strict conditions described in the Galway Bay Test and Demonstration Site Manual included in Appendix 2 of the Environmental Report, and any other specific conditions that the Minister may deem necessary in any lease that may issue.

The document explains the procedures to be followed by any company or researcher wishing to use Galway Bay Marine and Renewable Energy Test Site to test their ocean energy conversion prototypes or devices. It also states the “Conditions for Use” of the facility.

It provides the legal, marine safety, environmental and operation conditions the users must satisfy prior to a device being granted access to the test site. Should a user fail to satisfy any of the conditions then no access would be granted to the site.

### **Issue 60: Legislation is outdated.**

*Submission Nos: 8, 263, 292, 322*

**Response:** The Foreshore Act 1933 has been amended on a number of occasions as follows:

- Foreshore Act 1933 (No. 12 of 1933)
- European Community (Environmental Impact Assessment) Regulations 1989 (S.I. No. 349 of 1989);
- European Community (Environmental Impact Assessment) (Amendment) Regulations 1999 (S.I. No. 93 of 1999);
- Foreshore (Amendment) Act, 1992 (No. 17 of 1992);
- Fisheries (Amendment) Act 1997 (No. 23 of 1997) (Section 67);
- Fisheries and Foreshore (Amendment) Act 1998 (No. 54 of 1998) (Section 5);
- European Communities (Environmental Impact Assessment) (Amendment) Regulations 1998 (S.I. No. 351 of 1998);

## **FS006566: Marine Institute response to public submissions**

- Fisheries (Amendment) Act, 2003 (Part 5);
- Maritime Safety Act 2005 (No. 11 of 2005) (Part 6);
- Foreshore and Dumping at Sea (Amendment) Act 2009 (No. 39 of 2009);
- European Communities (Foreshore) Regulations 2009 (S.I. No. 404 of 2009);
- European Communities (Public Participation) Regulations 2010 (S.I. No. 352 of 2010);
- Foreshore (Amendment) Act 2011 (No. 11 of 2011);
- European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011);
- European Union (Environmental Impact Assessment) (Foreshore) Regulations 2012 (S.I. No. 433 of 2012).
- European Union (Access to Review of Decisions for Certain Bodies or Organisations Promoting Environmental Protection) Regulations 2014 (S. I. No. 352 of 2014)

### **Issue 61: Who is responsible for damage caused by collision with devices?**

*Submission Nos: 1,302*

**Response:** To minimise risks to vessels navigating in the area and the devices to be deployed at the test site, the test site area will be re-designated as an Area to be Avoided (ATBA) on all navigation charts. An Area to be Avoided (ATBA) is a routing measure comprising an area within defined limits in which either navigation is particularly hazardous or it is exceptionally important to avoid casualties and which should be avoided by all ships or certain classes of ships. Where collision occurs with floating structures in a clearly demarcated and licensed area then responsibility is that of the vessel.

### **Issue 62: What happens if the devices break free of their moorings?**

*Submission Nos: 1, 255, 263, 292, 302*

**Response:** In accordance with statutory maritime regulations an Emergency Response Plan in accordance with the Offshore Renewable Energy Installations (OREI) guidelines is being developed. The plans and procedures to be taken in the case of an emergency or serious imminent danger are being prepared and will be updated as required.

Separate device-specific risk assessments for the devices will be prepared by device developers before devices are installed. The device-specific risk assessments will conform to the guidelines of the HSEQ Management System.

### **Issue 63: No National policy.**

*Submission Nos: 255, 305, 322*

**Response:** In February 2014, the Department of Communications, Energy and Natural Resources (DCENR) published the Offshore Renewable Energy Development Plan<sup>9</sup> (OREDPP). The purpose of the OREDPP is to provide a framework for the sustainable development of offshore renewable energy in Ireland. The OREDPP acknowledges that realising the potential of offshore renewable energy can only be achieved if offshore

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<sup>9</sup> <http://www.dccae.gov.ie/energy/en-ie/Renewable-Energy/Pages/OREDPP-Landing-Page.aspx>  
Last accessed 10<sup>th</sup> November 2016 at 15:53



## **FS006566: Marine Institute response to public submissions**

renewable energy developments do not adversely impact Ireland's rich marine environment.

The OREDP is grounded in the principle that all development of offshore wind and ocean energy in Irish waters will be fully in line with Ireland's EU and international environmental obligations and best practice. The OREDP identifies the opportunity for Ireland of realising the potential of our offshore energy resources for increasing indigenous production of renewable electricity, thereby contributing to reductions in our greenhouse gas emissions, improving the security of our energy supply and creating jobs in the green economy.

The OREDP describes ten policy and enabling actions as key to the development of the offshore renewable energy sector, and support of the Galway Bay test site is explicitly included.

The implementation of the OREDP, led by DCENR, will be mechanism through which government action across the environmental, energy policy and economic development dimensions will be coordinated to support the offshore renewable energy sector to reach commercial viability.

### **Issue 64: Subsea cabled observatory already installed.**

*Submission Nos: 330*

**Response:** The Galway Bay Subsea Cabled Observatory was installed in 2015 under foreshore licence FS005751.

It has been referenced in the Environmental Report in Section 4.3.2 "Long Term Infrastructure" so as to accurately describe all infrastructure currently located, or proposed to be located, within the boundary of the test site.

### **Issue 65: Who is the competent authority?**

*Submission Nos: 330*

**Response:** The Marine Planning and Foreshore Section of the Department of Housing, Planning, Community and Local Government (HPCLG) are the competent authority

### **Issue 66: Project should be subject to specialised planning application.**

*Submission Nos: 287, 330*

**Response:** The Foreshore Act 1933, as amended, requires that a lease or licence must be obtained from the Minister for the Environment, Community and Local Government for the carrying out of works or placing structures or material on, or for the occupation of or removal of material from, State-owned foreshore, which represents the greater part of the foreshore. Construction of permanent structures on privately owned foreshore also required the prior permission of the Minister under the Foreshore Act. (All the foreshore of Ireland is presumed State-owned unless valid alternative title is provided).

### **Issue 67: Provisions of the Foreshore Act 1933 have not been complied with by government and its agents**

## **FS006566: Marine Institute response to public submissions**

*Submission Nos: 146*

**Response:** The Marine Planning and Foreshore Section of the Department of Housing, Planning, Community and Local Government (HPCLG) are the competent authority under the Foreshore Act 1933 and determine compliance with the Act.

### **Issue 68: Call for a public hearing.**

*Submission Nos: 210*

**Response:** The Department of Housing, Planning, Community and Local Government (HPCLG) places a high priority on public participation during the assessment of foreshore applications:

- At pre-application stage, when the developer initially discusses the project with HPCLG (Marine Planning and Foreshore Section), the developer is encouraged to engage in pre-application consultations with stakeholders.
- In accordance with the Aarhus Convention Implementation Guide, Irish legislation pertaining to Environmental Impact Assessment, Access to Information on the Environment and public participation procedures requires notices of applications to be published in a newspaper that is circulated in the relevant area and/or published on-line.
- HPCLG updates the website in the event further information is requested and received.
- Where a decision is taken to grant or refuse an application, HPCLG makes available to the applicant and the public the main reasons and considerations on which the decision is based, the main reasons and consideration for the attachment of any conditions and the fact that a person can question the validity of any such determination by means of judicial review. This information is published on the HPCLG website.
- Once a decision has issued, a person can apply to the High Court and seek a judicial review of the validity of the decision. Order 84 of the Rules of the Superior Courts (S.I. No. 15 of 1986) sets down the procedures governing judicial review.

### 13. Pollution issues

#### **Issue 69: General pollution concerns**

Submission Nos: 44, 98, 121, 197, 222, 223, 255, 269, 277, 280, 296, 303, 308, 328, 329, 417, 418, 419, 421

**Response:** The consideration of potential impacts of the development of the Galway Bay Marine and Renewable Energy Test Site were undertaken in Section 6 (Flora and Fauna) and Section 7 (Water) of the Environmental Report. The assessment of those identified impacts was undertaken respectively in Section 6.6 and Section 7.3 of the Environmental Report. It was concluded that given the scale of the site and the intermittent nature of deployments the impacts on all receptors are of low concern:

*“Accidental events or spillages from marine vessels and equipment e.g. fuel/oil leaks, cleaning fluids, paint, specialised chemicals, litter etc. have the potential to occur. In addition, fuel spillages could occur when the diesel tank on the SeaStation needs refuelling. The fuel stored on the SeaStation will be in a secure container and leakages from this will be unlikely.*

*All vessels employed to carry out any work onsite will have all required certification to ensure sea worthiness. In addition they will employ best practice measures to minimise any possible impacts on the marine environment and in case of an accidental event the ship’s Oil Pollution Plan will be implemented and on board oil pollution control measures will be implemented to minimise any impacts on the environment. The quantities of oil/fuel involved in accidental spillages are likely to be very small and the impact on water quality would be minor. The likelihood of a spillage would be unlikely.”*

Section 7.5 concluded that:

*“Overall, any impact on water quality from the project will be short-term and of low significance, and the development does not present any significant risks to water quality”*

#### **Issue 70: Extent of possible pollution effects**

Submission Nos: 117, 119, 121, 122, 124, 289, 307, 312, 315, 316, 317, 319, 320

**Response:** This is similar to Issue 69nd has been addressed in that context.

#### **Issue 71: Contaminants & anti-fouling**

Submission Nos: 101, 103

**Response:** The consideration of potential impacts of the development of the Galway Bay Marine and Renewable Energy Test Site were undertaken in Section 6.5 of the Environmental Report. The assessment of those identified impacts was undertaken in Section 6.6 of the Environmental Report as it was determined that:

## **FS006566: Marine Institute response to public submissions**

*“There is the potential for contamination from the use of anti-fouling compounds and the erosion of sacrificial anodes. As the quantities and toxicities associated with these are generally expected to be extremely small and therefore the potential effect will be of negligible significance. There are no sensitive habitats in the vicinity of where these compounds may be used and as a result any impacts will be negligible.”*

## 14. Precautionary Principle issue

### **Issue 72: Call for the Precautionary Principle to be invoked**

Submission Nos: 15, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 41, 47, 48, 49, 50, 51, 54, 55, 60, 70, 71, 72, 73, 83, 85, 89, 92, 93, 102, 111, 112, 114, 115, 117, 121, 122, 124, 127, 137, 143, 262, 289, 307, 308, 310, 311, 312, 314, 315, 316, 317, 319, 320, 330

**Response:** The OSPAR Precautionary Principle<sup>10</sup> states:

*“By virtue of the precautionary principle, preventive measures are to be taken when there are reasonable grounds for concern that human activities may bring about hazards to human health, harm living resources and marine ecosystems, damage amenities or interfere with other legitimate uses of the sea, even when there is no conclusive evidence of a causal relationship. A lack of full scientific evidence must not postpone action to protect the marine environment. The principle anticipates that delaying action would in the longer term prove more costly to society and nature and would compromise the needs of future generations.”*

Advice issued by the International Council for the Exploration of the Sea (ICES) to OSPAR in 2010 on the environmental interactions of wave and tidal energy devices<sup>11</sup> in summary stated that:

*“Renewable energy developments (wave, tidal stream and barrage / fence) are likely to become important features of the OSPAR area. The likely ecological impacts of barrages / fences are large and reasonably well understood, but the impacts of wave, and particularly tidal stream device, are much less predictable and have the potential to be significant for some groups of organisms. It is important that the result of thorough monitoring of early deployments of wave and tidal stream devices are published and used to guide the management of subsequent developments.”*

Accordingly, the Marine Institute will develop an Environmental Monitoring Plan (EMP) as an additional safeguard to the protection of the marine environment. The EMP would describe in detail the proposed installation methodologies, potential impacts and associated mitigation and control measures. The EMP would also elaborate on measures proposed to monitor impacts, to respond to impacts and remediate or mitigate any impacts encountered.

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<sup>10</sup> <http://www.ospar.org/about/principles/precautionary-principle>  
Last accessed 17:32 on 4<sup>th</sup> November 2016

<sup>11</sup> ICES 2010 Environmental interactions of wave and tidal energy generation devices. Special Request Advice June 2010, Section 1.5.5.7 ICES Advice Book 1, 184 -194

## 15. Public Consultation issues

### **Issue 73: Insufficient consultation with local members of the public.**

*Submission Nos: 2, 8, 9, 14, 37, 39, 50, 55, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 68, 70, 79, 80, 81, 82, 84, 89, 90, 91, 96, 104, 106, 108, 109, 115, 117, 112, 119, 123, 129, 130, 133, 145, 196, 205, 211, 212, 227, 228, 235, 236, 238, 239, 246, 247, 248, 249, 250, 251, 252, 257, 262, 265, 270, 271, 272, 275, 276, 279, 281, 282, 283, 284, 289, 291, 292, 301, 304, 307, 308, 310, 311, 312, 315, 316, 317, 319, 320, 324, 326, 330, 331, 332, 354*

**Response:** The Department of Housing, Planning, Community and Local Government (HPCLG) places a high priority on public participation during the assessment of foreshore applications:

- At pre-application stage, when the developer initially discusses the project with HPCLG (Marine Planning and Foreshore Section), the developer is encouraged to engage in pre-application consultations with stakeholders.

Prior to the submission of foreshore lease application FS006566 during the pre-application phase, and throughout the project development stage, meetings were held with key stakeholders at local and national level and with representatives in the Spiddal area. A list of consultations undertaken is provided in Section 2.7.1 of the Environmental Report.

Prior to, and during, the statutory public consultation period advertisements were taken in the national regional and local press in May, June and August 2016 including;

- Irish Times, 19<sup>th</sup> May 2016
- Connacht Tribune, 19<sup>th</sup> May 2016
- The Irish Skipper, 28<sup>th</sup> May 2016 (monthly publication)
- The Marine Times, 31<sup>st</sup> May 2016 (monthly publication)
- Irish Times, 17<sup>th</sup> June & 1<sup>st</sup> July 2016
- Galway Advertiser, 23<sup>rd</sup> June & 30<sup>th</sup> June 2016
- Connacht Tribune, 24<sup>th</sup> June & 1<sup>st</sup> July 2016
- The Marine Times, 1<sup>st</sup> July 2016 (monthly publication)
- Galway Independent, 3<sup>rd</sup> August 2016
- Irish Times, 4<sup>th</sup> August 2016
- Galway Advertiser, 4<sup>th</sup> August 2016
- Connacht Tribune, 5<sup>th</sup> August 2016

There were press releases from the Marine Institute and local radio interviews on the process over April – August period. Three public information meetings were held on the planned foreshore lease application;

- 19<sup>th</sup> January 2016 in Tigh Giblin, An Spideal
- 14<sup>th</sup> June 2016 in Park Lodge Hotel, An Spideal
- 21<sup>st</sup> July 2016 in Connemara Coast Hotel, An Furbogh.

The Marine Institute also held a number of meetings with members of the public and many elected public representatives in the weeks leading up to the public consultation period's deadline for submissions

### **Issue 74: Stakeholder consultation not sufficient.**

## FS006566: Marine Institute response to public submissions

Submission Nos: 42, 46, 46, 73, 102, 108, 115, 141, 143, 159, 196, 205, 206, 211, 212, 227, 228, 235, 236, 238, 239, 246, 247, 248, 249, 251, 255, 257, 262, 267, 270, 271, 279, 281, 289, 291, 307, 308, 310, 311, 312, 315, 316, 317, 318, 319, 320, 536

**Response:** This is similar to Issue 73 and has been addressed in that context.

### **Issue 75: No public representatives available during consultation period.**

Submission Nos: 144, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 189, 190, 191, 192, 198, 199, 200, 201, 204, 213, 214, 215, 216, 217, 224, 225, 262, 272, 275, 347, 349, 350, 351, 352, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 415, 416, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 466, 467, 468, 469, 470, 471, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514

**Response:** The Marine Institute complied with all requirements and obligations relating to public consultation as imposed by the Department of Housing, Planning, Community and Local Government in submission of foreshore lease application FS006566.

### **Issue 76: Lack of information during consultation process.**

Submission Nos: 2, 10, 50, 58, 59, 61, 89, 98, 101, 103, 105, 106, 111, 115, 117, 122, 124, 137, 145, 194, 197, 222, 223, 226, 262, 273, 274, 278, 298, 307, 312, 315, 316, 317, 319, 320, 321, 330, 417, 418, 419, 421

**Response:** A full copy of the application, and the relevant maps, plans, reports and drawings, were made available for public inspection at the following locations:

- Salthill Garda Station, Salthill, Galway City  
(24 hours)
- Spiddal Public Library, An Spideal, Co. na Gallaimhe  
(Tuesdays, Thursdays and Fridays from 10.30 to 13.00 hours and 13.30 to 17.00 hours, Wednesdays from 14.00 to 17.00 hours and 17.30 to 19.30 hours, Saturdays from 11.00 to 15.00 hours, Closed on Mondays, Sundays and public/bank holidays)
- Spiddal Tourist Office, An Spideal, Co. na Gallaimhe  
(08.30 to 16.30 hours Monday – Friday)

A full copy of the application, and the relevant maps, plans, reports and drawings, were made available online<sup>12</sup>.

Prior to the submission of foreshore lease application FS006566 during the pre-application phase, public information leaflets were distributed throughout Spiddal in October and November 2015 seeking the public's views on the proposal.

The Marine Institute also produced a Frequently Asked Questions leaflet<sup>13</sup> and distributed to a variety of business premises from Furbo to Inverin during the week 20-24th June 2016 after the second public information meeting answering many of the issues raised.

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<sup>12</sup> <http://www.housing.gov.ie/planning/foreshore/applications/marine-institute-spiddal>

Last accessed 16:51 on 4th November 2016

<sup>13</sup> [http://www.marine.ie/Home/sites/default/files/MIFiles/Docs\\_Comms/Galway%20Bay%20Test%20Site%20FAQ%20ENG.pdf](http://www.marine.ie/Home/sites/default/files/MIFiles/Docs_Comms/Galway%20Bay%20Test%20Site%20FAQ%20ENG.pdf)

Last accessed 17:06 4<sup>th</sup> November 2016

**Issue 77: Consultation process flawed or not adhered to.**

Submission Nos: 70, 71, 72, 73, 111, 121, 206, 219, 255, 262, 263, 267, 285, 287, 292, 302, 330

**Response:** This is similar to Issues 73 and 76 and has been addressed in that context.

**Issue 78: Public not included in decision making process in contravention of Aarhus convention**

Submission Nos: 10, 14, 143, 144, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 160, 161, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 189, 190, 191, 192, 193, 194, 198, 199, 200, 201, 204, 213, 214, 215, 216, 217, 224, 225, 255, 267, 293, 300, 301, 304, 306, 307, 310, 311, 312, 314, 315, 316, 317, 319, 320, 324, 325, 328, 330, 347, 349, 350, 351, 352, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 415, 416, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 466, 467, 468, 469, 470, 471, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 552

**Response:** European Directive 2003/35/EC (known as the Public Participation Directive or PPD) transposes the second and third pillar of the provisions of the UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (also known as the Aarhus Convention) into European Community law.

The Department of Housing, Planning, Community and Local Government (HPCLG) places a high priority on public participation during the assessment of foreshore applications and lists on their website<sup>14</sup> the specific measures required:

- At pre-application stage, when the developer initially discusses the project with HPCLG (Marine Planning and Foreshore Section), the developer is encouraged to engage in pre-application consultations with stakeholders.
- In accordance with the Aarhus Convention Implementation Guide, Irish legislation pertaining to Environmental Impact Assessment, Access to Information on the Environment and public participation procedures requires notices of applications to be published in a newspaper that is circulated in the relevant area and/or published on-line. The Foreshore Act 1933 (as amended) provides that an applicant, who has submitted an environmental impact statement (EIS), must publish a notice in a newspaper circulating in the district in which is situated the foreshore to which the application relates
- HPCLG updates the website in the event further information is requested and received.
- Where a decision is taken to grant or refuse an application, HPCLG makes available to the applicant and the public the main reasons and considerations on which the decision is based, the main reasons and consideration for the attachment of any conditions and the fact that a person can question the validity of any such determination by means of judicial review. This information is published on the HPCLG website.
- Once a decision has issued, a person can apply to the High Court and seek a judicial review of the validity of the decision. Order 84 of the Rules of the Superior Courts (S.I. No. 15 of 1986) sets down the procedures governing judicial review.

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<sup>14</sup> <http://www.housing.gov.ie/planning/foreshore/public-participation-foreshore-consent-process>  
Last accessed 16:25 on 4<sup>th</sup> November 2016



## **FS006566: Marine Institute response to public submissions**

The Marine Institute have complied with all the requirements and obligations imposed by the Department of Housing, Planning, Community and Local Government in submitting foreshore lease application FS006566.

### **Issue 79: None of the information was initially available in the Irish language**

*Submission Nos: 43, 129, 133, 137, 143, 302, 307, 311, 312, 315, 316, 317, 319, 320*

**Response:** The Marine Institute submitted foreshore lease application FS006566 to the Marine Planning and Foreshore Section containing the following bi-lingual documents: Foreshore Lease Application Form and accompanying Environmental Report. The detailed technical appendices were submitted in their original English form only.

The information made available during the public consultation period from 19<sup>th</sup> May 2016 to 9<sup>th</sup> September 2016 included all the above documentation.

The Marine Planning and Foreshore Section is responsible for the update of the Department website with the details and supporting documentation with respect to foreshore applications.

### **Issue 80: Not available on line as gaeilge until June the 30th.**

*Submission Nos: 54, 57, 117, 122, 324*

**Response:** This issue is similar to Issue 79 and has been addressed in that context.

### **Issue 81: The locations where information was available is not normally accessed by interested parties**

*Submission Nos: 122, 143, 307, 312, 315, 316, 317, 319, 320, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 348, 412, 413, 414, 420*

**Response:** A copy of the application, and the relevant maps, plans, reports and drawings, were made available for public inspection at the following locations:

- Salthill Garda Station, Salthill, Galway City  
(24 hours)
- Spiddal Public Library, An Spideal, Co. na Gallaimhe  
(Tuesdays, Thursdays and Fridays from 10.30 to 13.00 hours and 13.30 to 17.00 hours, Wednesdays from 14.00 to 17.00 hours and 17.30 to 19.30 hours, Saturdays from 11.00 to 15.00 hours, Closed on Mondays, Sundays and public/bank holidays)
- Spiddal Tourist Office, An Spideal, Co. na Gallaimhe  
(08.30 to 16.30 hours Monday – Friday)

A copy of the application, and the relevant maps, plans, reports and drawings, were also made available online<sup>15</sup> for download.

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<sup>15</sup> <http://www.housing.gov.ie/planning/foreshore/applications/marine-institute-spiddal>  
Last accessed 16:51 on 4th November 2016

## 16. Tourism issues

### **Issue 82: Tourism - General objection**

Submission Nos: 1, 13, 16, 21, 37, 54, 66, 70, 72, 80, 84, 85, 89, 91, 94, 95, 97, 99, 100, 102, 112, 114, 121, 122, 127, 132, 134, 143, 145, 162, 185, 186, 187, 188, 197, 202, 203, 220, 222, 223, 234, 244, 255, 255, 256, 263, 267, 268, 282, 283, 284, 285, 286, 290, 296, 300, 302, 305, 307, 309, 312, 315, 316, 317, 318, 319, 320, 323, 324, 327, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 348, 353, 412, 413, 414, 417, 418, 419, 420, 421, 465

**Response:** The impact on tourism was addressed in Section 12.4 of the Environmental Report and it was determined that

*“During the operational phase, one of the issues associated with the Galway Bay Marine and Renewable Energy Test Site is that the array of different structures might appear slightly anomalous to visitors who are unaware of the sites’ purpose. The overall impact is judged to be slight and this only applies to a worst case scenario where three above-surface devices are briefly in place at the same time.*

*“Due to its uniqueness however, the test site may result in an increase in visits to the area. It could provide a first-hand opportunity to view marine renewable resources in operation in a near-shore environment.”*

In section 12.4.3 of the Environmental Report, by way of mitigation, the Marine Institute has committed:

*“to provide an interpretive installation on the shoreline (most likely at Spiddal), which provides information about the various marine renewable technologies and the purpose of the site for testing such devices. It is believed that there will be genuine interest in the Galway Bay Marine and Renewable Energy Test Site and any visual ambiguity is likely to be removed for those armed with information about the site.”*

Failte Ireland commissioned an independent report by AOS Planning (Public Consultation Submission No. 297) on the Marine Institute’s foreshore lease application FS006566, for the purpose of assessing the significance of any impacts on the tourism amenity of the local and wider areas. The conclusions from that report state:

*“In this instance it is considered that, although the proposed development will change the nature and character of the receiving environment – namely in relation to changed views of Galway Bay, these impacts are not significantly different from the existing activities which take place in this working bay. It is also considered that the majority of visitors to the area will view the development intermittently while travelling along the R336 coast road. In this context it is considered that there is unlikely to be a significant negative impact on tourism in the area arising from the current proposal”*

### **Issue 83: Impacts not assessed**

Submission Nos: 57, 98, 144, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 160, 161, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 189, 190, 191, 192, 193, 198, 199, 200, 201, 204, 213, 214, 215, 216, 217, 224, 225, 234, 256, 258, 272, 275, 276, 293, 301, 304, 306, 324, 330, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 420, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463,

## FS006566: Marine Institute response to public submissions

464, 466, 467, 468, 469, 470, 471, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514

**Response:** This is similar to Issue 82 and has been addressed in that context.

### **Issue 84: Exclusion from consultation**

Submission Nos: 115, 117, 122, 207, 287, 289, 308, 310

**Response:** The competent authority determined the external bodies to who the Marine Institute's application FS006566 was distributed for comment. Failte Ireland did make a submission on the Marine Institute's application FS006566 during the public consultation phase (Public Consultation Submission No. 297).

### **Issue 85: Wild Atlantic Way**

Submission Nos: 1, 14, 16, 21, 50, 70, 73, 74, 75, 76, 77, 87, 91, 94, 101, 102, 105, 108, 117, 122, 124, 131, 133, 136, 139, 143, 159, 206, 207, 226, 232, 256, 258, 259, 267, 268, 270, 271, 285, 285, 297, 300, 303, 307, 310, 312, 315, 316, 317, 319, 320, 465

**Response:** The Marine Institute commissioned specialised independent consultants Macro Works Ltd. to undertake a Seascape and Visual Impact Assessment. The report is included as Appendix 8 of the Environmental Report and the accompanying photomontages included as Appendix 9. Section 1.2.1.4 of the Seascape and Visual Impact Assessment report describes the public amenities and facilities:

*"The northern coast of Galway Bay is a popular tourist area hosting numerous hotels, B&Bs, restaurants and pubs. There is also a craft village in Spiddal. The R336 coast road forms part of the recently inaugurated and highly popular 'Wild Atlantic Way' tourist driving route and also provides access to the Aran Islands via a Ferry service at Rossaveel and an aerodrome at Inverin."*

Viewshed Reference Points (VRP's) are the locations used to study the visual impacts of the proposal in detail and are intended to reflect a range of different receptor types, distances and angles. Three of the five Viewshed Reference Points detailed in Section 1.2.2.3 of the Seascape and Visual Impact Assessment report, are representative of views that would be typically experienced along the Wild Atlantic Way. The visual impact of the test site infrastructure from each of the VRPs is assessed in Section 1.3.2.4 of the Landscape and Visual Impact Assessment report and the impacts were adjudged to range from low to low-negligible.

In addition, Failte Ireland commissioned an independent report by AOS Planning (Public Consultation Submission No. 297) on the Marine Institute's foreshore lease application FS006566, for the purpose of assessing the significance of any impacts on the tourism amenity of the local and wider areas. The conclusions from that report state:

*"In this instance it is considered that, although the proposed development will change the nature and character of the receiving environment – namely in relation to changed views of Galway Bay, these impacts are not significantly different from the existing activities which take place in this working bay. It is also considered that the majority of visitors to the area will view the development intermittently while travelling along the R336 coast road. In this context it is considered that there is unlikely to be a significant negative impact on tourism in the area arising from the current proposal"*

## FS006566: Marine Institute response to public submissions

### **Issue 86: Burren / UNESCO site**

Submission Nos: 46, 70, 73, 89, 102, 108, 111, 124, 206, 289, 307, 312, 315, 316, 317, 319, 320

**Response:** The Marine Institute commissioned specialised independent consultants Macro Works Ltd. to undertake a Seascape and Visual Impact Assessment. The report is included as Appendix 8 of the Environmental Report and the accompanying photomontages included as Appendix 9. Section 1.3.3 of the Seascape and Visual Impact Assessment report explains the rationale and the extent of the study area selected:

*“The proposed marine energy test facility is 1.3km offshore and most of the components will not rise more than a few metres above the waterline. Whilst some of the components of the proposed development may be discernable from distances up to 10km in optimal viewing conditions, they are likely to be barely discernable. Thus, they would be very unlikely to give rise to any significant visual impacts at such distances. For this reason, a more focussed 5km radius study area has been applied in this instance.”*

The Burren UNESCO GeoPark is located 8km away from the proposed development at its nearest point and components of the proposed development are likely to be barely discernible and be very unlikely to give rise to any significant visual impacts at such distances

### **Issue 87: Galway 2020**

Submission Nos: 43, 258, 259, 293, 301, 304

**Response:** The Galway2020 bid for the European City of Culture was not specifically included in the impacts on tourism, as addressed in Section 12.4 of the Environmental Report. The impacts of the proposed development on general tourism were assessed to be slight, with a potential for positive impacts:

*“During the operational phase, one of the issues associated with the Galway Bay Marine and Renewable Energy Test Site is that the array of different structures might appear slightly anomalous to visitors who are unaware of the sites’ purpose. The overall impact is judged to be slight and this only applies to a worst case scenario where three above-surface devices are briefly in place at the same time.*

*“Due to its uniqueness however, the test site may result in an increase in visits to the area. It could provide a first-hand opportunity to view marine renewable resources in operation in a near-shore environment.”*

In section 12.4.3 of the Environmental Report, by way of mitigation, the Marine Institute has committed:

*“to provide an interpretive installation on the shoreline (most likely at Spiddal), which provides information about the various marine renewable technologies and the purpose of the site for testing such devices. It is believed that there will be genuine interest in the Galway Bay Marine and Renewable Energy Test Site and any visual ambiguity is likely to be removed for those armed with information about the site.”*

## **FS006566: Marine Institute response to public submissions**

The Marine Institute is also collaborating with Galway2020 on several projects<sup>16</sup>;

- An Artist in Every Place, co-curated with UZ Arts (Scotland) of the InSitu Network, the projects are across urban and rural locations involving an environmental community group, workplace choirs, and traditional boat builders in partnership with the Marine Institute of Ireland.
- Ariel Sparks, where Louise Manifold will be in residence on the Marine Institute's Galway based Celtic Explorer Research vessel, and on a 20 day research expedition will develop the framework and brief for eight Irish and European artists to create a six part series of experimental oceanic/coastal radio broadcasts,
- The Sea Gate District Museum/Historic Centre Hub Expansion proposal, in partnership with Galway City Council, Fáilte Ireland, National Museum of Ireland, Dept. of Arts Heritage and the Gaeltacht, & NUI Galway.

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<sup>16</sup> "Making Waves" Galway Application for European Capital of Culture 2020

## 17. Visual Impact issues

### **Issue 88: Adverse effect on seascape**

Submission Nos: 1, 13, 126, 132, 133, 134, 137, 230, 250, 252, 253, 255, 259, 263, 282, 283, 284, 290, 292, 297, 302, 305, 353, 354, 472

**Response:** The effect on the seascape has been specifically considered in Section 1.3.1.3 of the Seascape and Visual Impact Assessment report included as Appendix 8 of the Environmental Report where it is stated that:

*“Along a rugged section of coastline there is potential that the view of a geometric array of offshore structures could generate a sense of developing and taming of the naturalistic seascape. However, in this instance the section of coastline in question is not synonymous with the wild Atlantic and has been influenced by cultural activities for hundreds of years. The existing test facility site is contained within a large bay that accommodates the daily activities of a relatively high coastal population who are already familiar with similar activities taking place at the site. For this reason, it is not considered that the proposed structures will conflict with the seascape values associated with the northern portion of Galway Bay.”*

### **Issue 89: Impact views of Galway Bay / Clare coast**

Submission Nos: 6, 8, 78, 79, 121, 123, 143, 196, 197, 205, 211, 212, 227, 228, 234, 235, 236, 238, 239, 246, 247, 248, 249, 251, 255, 257, 265, 267, 268, 270, 271, 279, 281, 286, 291, 299, 300, 303, 313, 327, 417, 418, 419, 421, 472

**Response:** Viewshed Reference Points (VRP's) are the locations used to study the visual impacts of the proposal in detail and the selected viewpoints are intended to reflect a range of different receptor types, distances and angles. Given that the proposed development does not represent significant bulk, visual impacts will result almost entirely from visual 'intrusion' rather than visual 'obstruction' (the blocking of a view).

For all VRPs considered, the magnitude of the visual impacts ranged from low to low-negligible. The visual impact of the test site infrastructure from each of the VRPs is detailed and assessed in Section 1.3.2.4 of the Seascape and Visual Impact Assessment report.

### **Issue 90: Photos are misleading**

Submission Nos: 9, 50, 98, 107, 117, 124, 137, 143, 196, 205, 211, 212, 227, 228, 235, 236, 238, 239, 246, 247, 248, 249, 251, 252, 257, 263, 265, 270, 271, 278, 279, 281, 289, 291, 307, 312, 315, 316, 317, 319, 320, 321, 330

**Response:** The photomontages accompanying the Seascape and Visual Impact Assessment report are included as Appendix 9 and were produced by specialised independent consultants and were captured and presented in accordance with the Scottish Natural Heritage Visualisation Guideline 2014. All long term infrastructure that would be visible on site, and the three most visually intrusive devices as described in the application, are included in all five photomontages presented to the public.

### **Issue 91: Out of character for the landscape**

Submission Nos: 16, 16, 21, 54, 55, 56, 60, 86, 91, 96, 97, 99, 100, 111, 118, 135, 137, 140, 185, 186, 187, 188, 203, 209, 220, 229, 231, 254, 264, 266, 268, 311, 324

## **FS006566: Marine Institute response to public submissions**

**Response:** The conclusions in Section 1.5.1 of the Seascape and Visual Impact Assessment report included as Appendix 8 of the Environmental Report refer to the nature and character of the seascape/landscape:

*“... this is a settled section of coastline hosting an array of coastal industries and relatively dense yet dispersed population. This coastline therefore has an anthropogenic character and the continuing use of the marine energy test facility is not considered to significantly conflict with the seascape values associated with the northern portion of Galway Bay. The overall significance of seascape impact is judged to be slight and this only applies to a worst case scenario where all of the structures are briefly in place at the same time.”*

### **Issue 92: Clearly visible from R336 / Sli Conamara**

*Submission Nos: 59, 108, 121*

**Response:** The proposed test site infrastructure will be visible from the R336 and Sli Conamara.

Three of the five Viewshed Reference Points detailed in Section 1.2.2.3 of the Seascape and Visual Impact Assessment report, included as Appendix 8 of the Environmental Report and the accompanying photomontages included as Appendix 9, are representative of views that would be typically experienced from the R336.

All five Viewshed Reference Points detailed in Section 1.2.2.3 of the Seascape and Visual Impact Assessment report, included as Appendix 8 of the Environmental Report and the accompanying photomontages included as Appendix 9, are representative of views that would be typically experienced from the 'Sli Conamara' as they are all located along the northern coastline of Galway Bay.

Viewshed Reference Points (VRP's) are the locations used to study the visual impacts of the proposal in detail and are intended to reflect a range of different receptor types. The visual impact of the test site infrastructure from each of the VRPs is assessed in Section 1.3.2.4 of the Landscape and Visual Impact Assessment report.

The conclusions in Section 1.5.1 of the report state that:

*“... this is a living and working section of coastline that hosts an array of structures and land uses and it is not considered that the marine energy test facility conflicts with the character and values associated with the coastal vistas in this area.”*

### **Issue 93: It is in a "Protected View Area".**

*Submission Nos: 70, 102, 111, 112, 113, 114, 273, 274*

**Response:** Viewshed Reference Point VP5: Promenade along R336 coast road at Furbogh is representative of the Protected View Area No. 74: “View of North Clare Coast” as referenced in the Galway County Development Plan. The selected Viewshed Reference Points (VRP's) detailed in in Section 1.2.2.3 of the Seascape and Visual Impact Assessment report, included as Appendix 8 of the Environmental Report and the accompanying

## **FS006566: Marine Institute response to public submissions**

photomontages included as Appendix 9, are the locations used to study the visual impacts of the proposal in detail and are intended to reflect a range of different receptor types.

The visual impact of the test site infrastructure from the above view point is assessed in Section 1.3.2.4 of the Landscape and Visual Impact as:

*“The proposed structures of the marine energy test facility will be barely discernable from here towards the mouth of Galway Bay (southwest) due to the viewing distance and the lack of contrast against the sky. In clear viewing conditions the floating wind turbine will be the structure most likely to be noticed. In the context of the dynamic and complex coastal setting in the foreground, the proposed marine energy test facility is considered to have a minimal visual presence. For the same reason it is not likely to noticeably detract from the visual amenity experienced at this location. On the basis of the reasons outlined above, the magnitude of visual impact is judged to be negligible.”*

### **Issue 94: Eyesore / blot on scenery / ugly**

*Submission Nos: 38, 91, 104, 121, 127, 138, 139, 142, 162, 222, 223, 232, 234, 240, 241, 242, 243, 244, 245, 277, 285, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 348, 412, 413, 414, 420*

**Response:** The specialised independent Landscape and Visual Impact Assessment consultants do acknowledge in Section 1.5.2 of the Seascape and Visual Impact Assessment report, included as Appendix 8 of the Environmental Report), that:

*“In terms of aesthetics, it is considered that the cluster of variant structures may appear slightly anomalous”*

The conclusions in Section 1.5.1 of the report also state that:

*“The proposed structures may also contribute a minor degree of visual clutter to the seaward view, particularly in low angle views from the shore where the three dimensional layout of the structures is less apparent. Nonetheless, this is a living and working section of coastline that hosts an array of structures and land uses and it is not considered that the marine energy test facility conflicts with the character and values associated with the coastal vistas in this area.”*

### **Issue 95: Difficult for the local community to truly understand the (visual) impact of the test site**

*Submission Nos: 9, 143, 196, 205, 211, 212, 227, 228, 235, 236, 238, 239, 246, 247, 248, 249, 251, 257, 265, 270, 271, 279, 281, 287, 291, 330*

**Response:** The Marine Institute commissioned specialised independent consultants Macro Works Ltd. to undertake a seascape and visual impact assessment. The report is included as Appendix 8 of the Environmental Report and the accompanying photomontages included as Appendix 9.

### **Issue 96: Visual impact on tourism**

*Submission Nos: 95, 101, 103, 226, 297, 300, 309*

**Response:** The impact on tourism was addressed in Section 12.4 of the Environmental Report and it was determined that



## FS006566: Marine Institute response to public submissions

*“During the operational phase, one of the issues associated with the Galway Bay Marine and Renewable Energy Test Site is that the array of different structures might appear slightly anomalous to visitors who are unaware of the sites’ purpose. The overall impact is judged to be slight and this only applies to a worst case scenario where three above-surface devices are briefly in place at the same time.*

*Due to its uniqueness however, the test site may result in an increase in visits to the area. It could provide a first-hand opportunity to view marine renewable resources in operation in a near-shore environment.”*

In section 12.4.3 of the Environmental Report, by way of mitigation, the Marine Institute has committed:

*“to provide an interpretive installation on the shoreline (most likely at Spiddal), which provides information about the various marine renewable technologies and the purpose of the site for testing such devices. It is believed that there will be genuine interest in the Galway Bay Marine and Renewable Energy Test Site and any visual ambiguity is likely to be removed for those armed with information about the site.”*

Failte Ireland commissioned an independent report by AOS Planning (Public Consultation Submission No. 297) on the Marine Institute’s foreshore lease application FS006566, for the purpose of assessing the significance of any impacts on the tourism amenity of the local and wider areas. The conclusions from that report state:

*“In this instance it is considered that, although the proposed development will change the nature and character of the receiving environment – namely in relation to changed views of Galway Bay, these impacts are not significantly different from the existing activities which take place in this working bay. It is also considered that the majority of visitors to the area will view the development intermittently while travelling along the R336 coast road. In this context it is considered that there is unlikely to be a significant negative impact on tourism in the area arising from the current proposal”*

### **Issue 97: Objectiveness of Assessment**

*Submission Nos: 2, 86, 280, 285, 287, 311, 311, 322, 322, 322, 328, 329*

**Response:** The Seascape and Visual Impact Assessment report included as Appendix 8 of the Environmental Report was conducted by specialised independent consultants Macro Works Ltd., whose relevant experience includes over 90 wind farms, electricity transmission infrastructure, telecommunications masts and a wide range of industrial and commercial developments, and is based on:

- Landscape Institute and the Institute of Environmental Management and Assessment publication entitled Guidelines for Landscape and Visual Impact Assessment (GLVIA-2013).
- Natural England publication ‘An approach to Seascape Character Assessment’ (2012)
- Environmental Protection Agency (EPA) publication ‘Guidelines on the Information to be contained in Environmental Impact Statements (2002) and the accompanying

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Advice Notes on Current Practice in the Preparation of Environmental Impact Statements (2003)

## 18. Wildlife issues

### **Issue 98: The proposed project poses a risk and may cause harm to marine mammals.**

*Submission Nos: 1, 3, 60, 65, 66, 68, 79, 98, 112, 114, 122, 137, 206, 226, 289, 300, 302, 307, 311, 312, 315, 316, 317, 319, 320*

**Response:** The risk to, and the impacts on, marine mammals that could be posed by the project have been examined in Section 6.3 of the Environmental Report. This information is supported by the specific Marine Mammal Risk Assessment in Appendix 6, Section 4 as requested by the Development Applications Unit of the (then) Department of Arts, Heritage and Gaeltacht.

The likelihood, consequence and impact magnitude of the identified risks to marine mammals were as follows:

<b>Risk</b>	<b>Likelihood</b>	<b>Consequence</b>	<b>Impact</b>
Installation Noise:	Possible;	Negligible;	Low
Operational Noise:	Possible;	Negligible;	Low
Collision Risk:	Unlikely;	Minor;	Low
Barrier to Movement:	Remote;	Negligible;	Low
Electro-Magnetic Fields:	Unlikely;	Negligible;	Low
Disturbance to Seabed:	Highly Likely;	Negligible;	Low
Loss of Habitat & Species:	Highly Likely;	Negligible;	Low
Addition of New Structures:	Highly Likely;	Negligible;	Low

### **Issue 99: The proposed project poses a risk and may cause harm to birds**

*Submission Nos: 1, 3A, 13, 66, 68, 112, 114, 117, 136, 300, 307, 309, 311, 312, 315, 316, 318, 319, 320, 330*

**Response:** The risk to, and the impacts on, birds that could be posed by the project have been examined in Section 6.4 of the Environmental Report. This information is supported by the Appropriate Assessment Stage 1 Screening Report in Appendix 6, Section 3 as required under Article 6(3) of the EU Habitats Directive.

The likelihood, consequence and impact magnitude of the identified risks to birds were as follows:

<b>Risk</b>	<b>Likelihood</b>	<b>Consequence</b>	<b>Impact</b>
Loss of Habitat & Species:	Highly Likely;	Negligible;	Low
Addition of New Structures:	Highly Likely;	Negligible;	Low
Collision Risk:	Unlikely;	Minor;	Low
Barrier to Movement:	Remote;	Negligible;	Low

The findings of the Appropriate Assessment Stage 1 Screening Report found that the project will not pose any risk to the populations of any of the bird species assessed in the Appropriate Assessment.

### **Issue 100: The proposed project poses a risk and may cause harm to the general wildlife**

*Submission Nos: 1, 61, 70, 74, 75, 76, 77, 81, 83, 84, 85, 85, 87, 94, 115, 126, 130, 197, 203, 221, 222, 232, 250, 255, 263, 269, 292, 292, 303, 327, 330, 330, 417, 418, 419, 421*

**Response:** This is similar to Issue 111 and 112 and has been addressed in that context.

### **Issue 101: The test site has already had a negative impact on marine mammals and birds**

## **FS006566: Marine Institute response to public submissions**

*Submission Nos: 79, 101, 103, 121, 206*

**Response:** The Environmental Report was prepared to provide an analysis of the likely effects (good and bad), of the proposed development on the environment, including flora, fauna, water, landscape and cultural heritage. The baseline environmental conditions are described in each of the respective chapters in the Environmental Report and present results from various studies conducted over the past ten years operation of the test site showing that the past and current operations at the test site have had a negligible impact on marine mammals and birds.

### **Issue 102: The proposed project poses a risk and may cause harm to fish and fish stocks**

*Submission Nos: 3A, 4, 80, 98, 107, 126, 136, 159, 208, 226, 300*

**Response:** The impacts on fish stocks that could be posed by the project have been assessed in Section 12.3 of the Environmental Report and it was found that the test area, with its effective exclusion on fishing activity, may result in the development of nursery areas which could enhance fish and shellfish stock. Mooring systems may also create artificial reef structures which could also lead to enhanced fish and shellfish stock in the area. Such nursery areas may lead to increased catch in future, enhancing fishermen's income on a sustainable basis.