Comhshaol, Pobal agus Rialtas Áitiúil
Environment, Community and Local Government

For Office Use

Ref. No._____

Application date:_____

Date of receipt. _____

Date Validated:_____

APPLICATION FOR A LEASE/LICENCE/CONSENT UNDER THE FORESHORE ACT 1933 (AS AMENDED)

- **Applications for Offshore renewable energy (ORE) projects should use an ORE specific form.**
- **Please complete the form electronically. Type details in the boxes provided, space will expand as you type.**
- **The enclosures checklist should also be completed**
- **Tá an leagan Gaeilge den fhoirm seo ar fáil ar iarratas.**

Applicant Details:

Contact Name: Diane Hodnett
Company/Organisation: America Europe Connect Ltd.
Address: 26 Fitzwilliam St. Upper, Dublin 2
Phone No: 01 6624 399
E-mail address: diane@seafibre.com

Nominated Contact/Agent (Where different from above):

Name: Chris Willey
Company: TE Subcom
Address: Suite 100S, 412 Mt. Kemble Avenue, Morristown, New Jersey
Phone No: 0044 1245 505 209, Mobile: 0044 7718 910 643
E-mail address: cwilley@subcom.com

Applicant's Legal Advisor:

Name: Alice Whitaker
Address: Phillip Lee Solicitors, 7/8 Wilton Terrace, Dublin 2
Phone No: 01 237 3700
E-mail address: awhittaker@philiplee.ie

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

1.1	**Description of proposed works/activity.** America Europe Connect Main Lay - Installation of subsea fibre optic cable at Ross Beach, Killala Bay, Co. Mayo. A Planning Report incorporating a description of the works, a Marine Archaeology Report, a Natura Impact Statement and Ecological Impact Assessment, and a Marine and Intertidal Ecological Impact Assessment is attached.
1.2	**Describe the nature and scale of any structure to be erected on the foreshore. Is the structure proposed to be temporary or permanent?** No structure to be erected. The works relate to the installation of a submarine cable.
1.3	**Indicative timing of the works/activity: (i) Start date (ii) Duration (iii) Any other information relevant to timing.** (i) Start Date – August 2015 (ii) Duration – 2 weeks
1.4	**Primary usage for proposed development (please tick)**

Use	
Industrial	
Commercial	√
Within Fishery Harbour Centre	
Sea Fisheries	
Local Authority	
Community/Co Op scheme	
Other(specify)	

1.5	**Do the proposed works provide for public use, commercial use, restricted use or strictly private use? Provide Details** Commercial Use – Installation of a Trans-Atlantic fibre optic cable.
1.6	**Might the proposed works restrict public use/enjoyment of the foreshore? Provide details.** No restriction of public use / enjoyment of the foreshore.

1.7	**Has the applicant held or does the applicant hold any previous Foreshore Licences, Leases or applications over the area sought or over any other area including pending applications? (Give details including Department's file reference number(s)).** A predecessor to the current applicant, Emerald Networks Ltd., received a Foreshore Licence for Site Investigations at the site on 8th May 2014 (Ref: FS 6280). These works have been completed.
1.8	**Status of planning permission application: Pending/granted/not required.** **Consent Authority:** **Reference Number:** **(Please provide copies of consents granted)** No Planning Permission required.
1.9	**Are any other consents required for this proposal? Please detail.** **Consent type** **Consent Authority:** **Reference Number:** **Status of application:** **(Please provide copies of consents granted)** No other consents required.
1.10	**Employment Implications (If any)** 40 persons employed during installation period.
1.11	**Capital cost of proposed works (€ - Euro** €3,000,000
1.12	**Do the proposed works involve the draw down of European Union or State funding?** **If "Yes" give details, including any time restrictions, etc. applying** No draw down of EU or State funding.

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

2.1	**County:** Mayo
2.2	**Location name and nearest townland name:** Ross Beach, Ross, Killala
2.3	**Geographic co-ordinates of the area under application in degrees minutes and seconds WGS84 for offshore developments and where the area can also be identified on the Ordnance Survey map and /or is connected to the seashore/mainland , specify Ordnance Survey map no and Irish National Grid co-ordinates** Key Points to WGS84 54° 13′ 59.52″ N, 9° 11′ 47.22″ W 54° 31′ 37.44″ N, 9° 15′ 58.5″ W Key Points to Irish National Grid (OS Map 6696/6697) 122028.77E, 332246.88N 118064.83E, 365035.72N
2.4	**Please indicate the size of the Foreshore area (Ha²) or (M2) or (KM2)** 2.6ha
2.5	**If offshore please indicate distance from shore (Km):** Not Applicable
2.6	**Is any of the foreshore in the proposed site in private ownership? If yes please provide documentary evidence of same (e.g. folio)** No
2.7	**Any other site details considered relevant:** See Planning Report

Part 3. Maps and Drawings, Please refer to Guidance on map and drawing requirements.

3.1	**Site location map attached? Please include reference no(s).** Please see Drawing 1251-206: Mainlay - Landfall
3.2	**Foreshore Lease/Licence map attached? Please include reference no(s).** Please see Drawing 1251-206: Mainlay - Landfall
3.3	**Drawings of structures to be used and or layout (if required) attached? Please detail and include reference no(s).** Not applicable. The works relate to the installation of a submarine cable.
3.4	**Admiralty Chart attached?** Please see Drawing 1251-204: Mainlay – Offshore Route & Drawing 1251-205: Mainlay – Inshore Route
3.5	**Other maps/drawings attached ?– please detail and include reference numbers**

Part 4: Pre- application consultations

4.1	**Describe briefly any consultations undertaken with the following bodies.** • **National Parks & Wildlife Service (NPWS)** • **National Monuments Service (NMS) of Department of Arts, Heritage and the Gaeltacht** • **Inland Fisheries Ireland** • **Sea Fisheries Protection Authority** • **Marine Institute** • **Marine Survey Office** **Please also provide copies of correspondence.** Correspondence was undertaken with NPWS and Inland Fisheries Ireland in the course of preparing the Natura Impact Statement & Ecological Impact Assessment and the Marine and Intertidal Ecological Impact Assessment. Copies of the correspondence are included with this application.

4.2	**Describe briefly any consultations undertaken with other relevant authorities (e.g. Local Authority, port/harbour authority etc) or State Agencies.** Consultations were held with Mayo County Council on the use of the car park at Ross Beach to locate the Beach Manhole in relation to the cable landfall.
4.3	**Describe any consultations undertaken to date with other foreshore users.** Consultations were undertaken with local fishermen in relation to the line of the cable route.
4.4	**Describe any likely interactions with activities of the public or other foreshore users during the construction and operational phases of the works/activities (e.g. fishing, aquaculture, sailing, and surfing swimming, walking). Describe any measures proposed to minimise inconvenience to other users.** Fishing vessels will be required to keep clear of the Cable Lay vessel.
4.5	**Have adjacent land owners, whose properties may be affected by these works been consulted? Please provide details/permissions as appropriate.** The works are all on public land and Mayo County Council have been consulted and are in agreement with the proposals.

Part 5: Environmental Considerations
(your consultations with National Parks and Wildlife Service and National Monuments Service may inform your answers. Attach additional reports as required and mark under the R column)

www.epa.ie/downloads/advice/ea/guidelines/

www.environ.ie/en/DevelopmentHousing/PlanningDevelopment/EnvironmentalAssessment/

http://www.npws.ie/protectedsites/appropriateassessment/

http://webgis.npws.ie/npwsviewer/

	Environmental legislative requirements	Yes	No	R
5.1	**Is an Environmental Impact Statement required for this proposal?**		√	
5.2	**Is a Natura Impact Statement required for this proposal?**	√		√
5.3	**Is the area within or adjacent to a NHA, pNHA, SAC, SPA, or National Park? Specify site names and code(s).** See Natura Impact Statement & Ecological Impact Assessment and the Marine and Intertidal Ecological Impact Assessment attached.	√		
5.4	**Describe any other projects or plans for the area, anticipated or developed, that in combination with this proposal, may have a significant effect on a Natura 2000 site: Please list with planning reference numbers (where available).**		√	

	Environmental Considerations	Yes	No	R
5.5	**Will the proposal have any potential environmental impacts? If yes, please describe** See Natura Impact Statement & Ecological Impact Assessment and the Marine and Intertidal Ecological Impact Assessment attached.	√		√

5.6	**Are you proposing any measures to mitigate the potential environmental impacts? If yes, please describe** See Natura Impact Statement & Ecological Impact Assessment and the Marine and Intertidal Ecological Impact Assessment attached.	√		√
5.7	**Are there public health/safety implications arising from the proposed works? (e.g. effluent disposal, removal of derelict or dangerous structures etc.) If yes, please describe**		√	
5.8	**Will the works involve the storage and/or disposal of waste? If "Yes" please give details of the type of waste and the proposed method of storage and/or disposal (including location)**		√	
5.9	**Other Environmental Considerations? If yes, please specify.** See Natura Impact Statement & Ecological Impact Assessment and the Marine and Intertidal Ecological Impact Assessment attached.	√		√

	Built Heritage Considerations	**Yes**	**No**	**R**
5.10	**Does the area contain an archaeological site or feature? If yes, please specify.**		√	
5.11	**Does the area contain or adjoin a listed archaeological site or monument? If yes, please specify.**		√	
5.12	**Will the proposal have any potential impacts on the archaeological integrity of the site? If yes please describe**		√	
5.13	**Are you proposing any measures to mitigate potential archaeological impacts? If yes, please describe?**		√	

Part 6: Navigational Safety Considerations. (Your consultations with relevant stakeholders may inform your answers. Attach additional documents as required and mark under the R column)

	Navigational Safety Considerations.	Yes	No	R
6.1	**Are there public navigational safety implications arising from the proposed works?**		√	
6.2	**What marine activity is there in the area?** Fishing Adjacent bathing and beach activities	√		
6.3	**How will the marine activity be affected by the proposed works?** Not at all		√	
6.4	**What mitigating measures will be put in place?** None required		√	
6.5	**How will the proposed works affect Marine Navigation in the future?** Not at all		√	

Part 7: Fishing/Aquaculture considerations (your consultations with IFI, SFPA, DAFM may inform your answers. Attach additional documents as required and mark under the R column)

	Fishing/Aquaculture considerations	Yes	No	R
7.1	**Is the proposal located in proximity to any of the following:** • **aquaculture operation** • **designated Shellfish Growing Waters** • **fish spawning ground** • **other sensitive fisheries location** **Please Illustrate on appropriate chart including distance in Km.** See Natura Impact Statement & Ecological Impact Assessment and the Marine and Intertidal Ecological Impact Assessment attached.	√		√
7.2	**Are there other potential impacts of the proposal on fishing/aquaculture in the area? If yes, please describe.**		√	
7.3	**Are there any measures proposed to mitigate potential impacts on fisheries or aquaculture? If yes, please describe.** See Natura Impact Statement & Ecological Impact Assessment and the Marine and Intertidal Ecological Impact Assessment attached.	√		

Part 8 – Additional information

8.1	**Please detail any additional relevant information.** See Planning Report attached.

Declaration and Consent:

The details provided here are correct to the best of my knowledge.

I understand that no works will be commenced, by me or my agents on the proposed site, without the prior written consent of the Minister.

I agree that on completion of the works, all environmental data that is not commercially-sensitive shall be provided within a reasonable timeframe to the Marine Institute; the format and timeframe to be agreed with the Marine Institute. I understand that the Marine Institute may make this information available to individuals and organisations in line with its data access policy.

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

Signed for and on behalf of the applicant:

Dick Lochett

Name of above Signatory (block letters):

DIANE HOLMES

Position Held:

DIRECTOR

Date 16/2/2015

Return completed applications to:

Foreshore Unit
Marine Planning and Foreshore
Department of the Environment, Community and Local Government
Newtown Road
Wexford

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

Enclosures Checklist

One hard copy of every document is required unless otherwise stated. Electronic versions of documentation must also be provided in searchable PDF format (no single file to be greater than 30mb) so that the Department can make them available on its website.

Item No.	Description	No. of copies Required	
1	**Application Form.** With original signature	4	
2	**Mapping (see guidelines document)** (i) Site Location map (ii)Foreshore Lease/licence map	4 4	
3	**British Admiralty Chart** (largest available scale)	1	
4	**Drawings** of the structures to be used and/or layout	4	
5	**Pre-application correspondence with stakeholders.**	1	
6	**Other statutory permissions:** (i) Planning permission (ii) Effluent Discharge Licence (iii) Other consent (Please specify)	1 1 1	
7	**Company documentation (1):** Certified copy of the Company's Memorandum and Articles of Association	1	
8	**Company documentation (2)** Certificate of Incorporation of a Limited Liability, or Company/Rule Book/Constitution for a Club or Co-Operative Society as appropriate	1	
9	**Environmental Impact Statement (EIS).** (i) Hard copy (ii) CDs	5 50	
10	**Natura Impact Statement (NIS)**	5	
11	**Property-related owner permissions/wayleaves** (i) Folio – (or other evidence of private ownership) (ii) Wayleave/consent from other property owners (iii) Other (Please specify)	2 1 1	
12	**Other – Please specify**	1	

Correspondence with Inland Fisheries Ireland

From: Bryan Deegan (Altemar Environmental Consultants) [mailto:bryan@altemar.ie]
Sent: 08 September 2014 12:41
To: aisling.donegan@fisheriesireland.ie
Cc: John Conneely; michael.lennon@fisheriesireland.ie; Bryan Deegan (Altemar Environmental Consultants)
Subject: Trans-Atlantic Fibre optic Cable landing at Killala

Dear Aisling,
Following on from our phone conversation, please find attached information on the proposed landing of a trans-Atlantic fibre optic cable at Ross beach in Killala Bay.

We have previously carried out an Appropriate Assessment for site investigations (http://www.environ.ie/en/Foreshore/ApplicationsandDeterminations/EmeraldNetworksLtd/ApplicationDetails/FileDownLoad,35941,en.pdf) and are now preparing an Appropriate Assessment for the main lay of the cable.

Please find attached the Application for foreshore licence for the main lay of the cable. It details the methods to be used for main lay. Please note that the main lay, using a ship/plough will commence at approx. 10m BCD.

It is proposed that the main lay would take place next April to avoid impacting the overwintering birds.

Kindest Regards

Bryan

Bryan Deegan (MCIEEM)
Managing Director
Altemar Ltd.
Marine and Environmental Consultants
Tel. +353 (0)1-2010713/ +353 (0)86-8366641
email: **bryan@altemar.ie**
LinkedIn
www.altemar.ie

ALTEMAR
Marine & Environmental Consultancy

From: Aisling Donegan [mailto:Aisling.Donegan@fisheriesireland.ie]
Sent: 25 September 2014 12:04
To: bryan@altemar.ie
Subject: Letter

Hi Bryan,

Copy of letter sent last week attached.

19 September 2014

Mr. Bryan Deegan
Managing Director
Altemar Ltd.
Marine and Environmental Consultants
Greystones
Co. Wicklow

RE: **Foreshore Licence Application for laying of Trans-Atlantic fibre optic cable at Ross beach, Killala Bay, Co. Mayo**

Dear Mr. Deegan,

Regarding the above proposed development, Killala Bay is an important migratory route for salmon and eel to the River Moy which is a nationally important salmon fishery. The Moy estuary is also popular for sea trout angling. Ross beach provides flat fish angling and Killala Bay supports a number of charter boats for sea angling. Killala Bay has been allocated "high ecological status" in the Western River Basin Management Plan and this status must be protected. The proposed works are also within the Killala Bay/Moy Estuary SAC. IFI request that the following comments are taken into consideration:

- It is proposed to carry out the pipe laying in April 2015. This is during the annual Atlantic salmon smolt run from the River Moy to sea. This is also the time of year when glass eels will be migrating into fresh waters. Procedures must be put in place to ensure no damage or disturbance to these vulnerable fish results from the above operation. IFI request a copy of these procedures prior to works commencing.

- IFI requests one weeks' notice prior to works commencing on this site. Please contact Fisheries Environmental Officer, Aisling Donegan on 087-1264446.

Yours sincerely

_____
John Conneely
Director

Cable-kb 0914

Kind Regards

Aisling Donegan
Fisheries Environmental Officer

Iascach Intíre Éireann
Inland Fisheries Ireland

Tel +353 (0)96 22788

Mob +353 (0) 87 126 4446
Fax +353 (0)96 70543
Email aisling.donegan@fisheriesireland.ie
Web www.fisheriesireland.ie

From: Bryan Deegan (Altemar Environmental Consultants) [mailto:bryan@altemar.ie]
Sent: 09 January 2015 14:54
To: 'ciara.oleary@fisheriesireland.ie'
Subject: Killala Fibre Optic Cable

Hi Ciara,
Thanks for the quick few minutes yesterday. Here is the information on the fibre optic cable landing. http://www.environ.ie/en/Foreshore/ApplicationsandDeterminations/EmeraldNetworksLtd/ApplicationDetails/FileDownLoad,35941,en.pdf This is the initial AA screening for site investigations.

Also attached is IFI's response from the consultation process.

Having consulted with the engineers, it now looks like it will be August/September 2015 when the main lay will be taking place. I will get back to Aisling and mention this to her.

In relation to the eels, you mentioned that from April they will transforming to elvers. Would a August/September main lay, impact on them and are there any particular mitigation measures that we should carry out?

Thank you for the help.

Bryan

Bryan Deegan (MCIEEM)
Managing Director
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email: **bryan@altemar.ie**
LinkedIn
www.altemar.ie

ALTEMAR
Marine & Environmental Consultancy

From: Ciara OLeary [mailto:Ciara.OLeary@fisheriesireland.ie]
Sent: 03 February 2015 12:45
To: Bryan Deegan (Altemar Environmental Consultants)
Subject: RE: IFI Data Request Form

Thanks Bryan for sending in the form
I have a couple of questions in relation to the laying of the cables in relation to eels.

- How long do you think the work will take within the Killala bay estuary? You have 2 months allocated will it take that long or could it go longer than that? The August/September period

is the start of the silver eel run but it's still early in the season and October/November for the last few years as been the months with the peak migration (in our study sites anyhow). Once the work is taking place in the sea it shouldn't impact the eels.

- Will the work take place 24hrs a day 7 days a week or is there specific times when work will be carried out? ie during the day? The eels migrate at night in the River, in the Estuary they can move during the day (I have tagged eels moving during the day).
- Is there any weather conditions that would postpone work ie storms etc. The stormy conditions (lot of wind and flood conditions in river) is when the eels would migrate so if you don't work under those conditions anyhow it won't impact the eels migrating out.

Regards
Ciara

From: Bryan Deegan (Altemar Environmental Consultants) [mailto:bryan@altemar.ie]
Sent: 03 February 2015 12:25
To: Sandra Doyle
Cc: Ciara OLeary; tjm@mdmeng.ie
Subject: IFI Data Request Form

Dear Sandra,
Please find attached the completed data request form. Specifically, it is to request information/consultation in relation to the development of mitigation measures for European eels and Atlantic salmon, which are necessary in the preparation of an Appropriate Assessment & EcIA for the landing of a trans-Atlantic cable fibre-optic cable at Ross Strand, Killala Bay.

Thank you

Bryan

Bryan Deegan (MCIEEM)
Managing Director
Altemar Ltd.
Marine and Environmental Consultants
Tel. +353 (0)1-2010713/ +353 (0)86-8366641
email: **bryan@altemar.ie**
Linked in
www.altemar.ie

ALTEMAR
Marine & Environmental Consultancy

From: Cathal Gallagher [mailto:Cathal.Gallagher@fisheriesireland.ie]
Sent: 11 February 2015 16:48
To: Bryan Deegan (Altemar) (bryan@altemar.ie)
Cc: Paddy Gargan; Ciara OLeary; Aisling Donegan
Subject: killala Bay

Hi Bryan,

Please find attached the advice requested for proposed Cable laying in Killala Bay. Should you require additional information please revert to me directly.
Kind regards,
Cathal

Iascach Intíre Éireann
Inland Fisheries Ireland

OBSERVATION/ADVICE NOTE

Iascach Intíre Éireann
Inland Fisheries Ireland
3044 Lake Drive
Citwest Business Campus
Citywest, Dublin 24
Phone: (01) 884 2600
Fax No: (01) 836 0060

FROM: Bryan Deegan
DATE IN:
SUBJECT: Mitigating effects for eels in Killala Bay
DATE OUT: 11/2/2015
ANSWERED BY: Dr. Ciara O'Leary. Ms Aisling Donegan & Dr Gargan

Dear Bryan

Regarding the above proposed development, Killala Bay is an important migratory route for salmon and eel to the River Moy which is a nationally important salmon fishery. The Moy estuary is also popular for sea trout angling. Ross beach provides flat fish angling and Killala Bay supports a number of charter boats for sea angling. Killala Bay has been allocated "high ecological status" in the Western River Basin Management Plan and this status must be protected. The proposed works are also within the Killala Bay/Moy Estuary SAC.

We examined the plan for the cable laying in Killala Bay. Regarding eels, the time line of August /September should not impact on the inshore migration of glass eel or upstream migration of elvers. However one thing to be aware of is the silver eel run which will take place from August to December/January. This is where the eels migrate en masse out of the freshwater and coastal areas and undertake their long migration route to the Sargasso Sea.

The following is a list of concerns in relation to laying the cables and mitigating effects that will reduce the risk to the eels.

1. The silver eels will normally migrate during the new moon phase of the moon as these are the darkest nights and during flood conditions. In your reply to our question on 'what conditions would work be postponed?, you have said that the cable laying requires calm conditions therefore this work should not impact on the migration of

silver eels out of the estuary as the conditions required by the eels to migrate are not suitable for laying cables.

2. The eels migrate at night in the rivers and once they move into estuaries it's possible that under certain conditions they migrate during the day. The effects of noise from cable laying works and its effects on the migration behaviour of eels is not well known. As the work is scheduled to take one 24 hour period there is sufficient time within the migration period (August – January) for eels to have the potential to delay migration during that 24 hour scheduled period and recommence migration once the work has ceased.

Overall the work scheduled for Killala bay is scheduled for August/September and should take approximately 3 days to complete. As this is early in the silver eel season the risk to the silver eel migration is minimal but we would suggest being conscious of the timing of the migration especially when the work is taking place from 5- 10 kms in to the shore line (this corresponds to the area around the middle of the estuary where the cable laying meet the pathway of eels migrating out from the Moy). Once the eels are in the coastal waters the laying of fibre optic cable shouldn't impact the silver eels migrating out.

In general, procedures must be put in place to ensure no damage or disturbance to vulnerable fish stocks, particularly salmon and eels, results from the proposed operation. IFI request a copy of these procedures prior to works commencing. IFI requests one weeks' notice prior to works commencing on this site. Please contact Fisheries Environmental Officer, Aisling Donegan on 087-1264446.

Dr. Cathal Gallagher
Head of Research and Development

Iascach Intíre Éireann
Inland Fisheries Ireland

Tel +353 (0)1 8842681
Mob +353 (0) 87 9500126
Fax: +353 (0)1 8360060
Email cathal.gallagher@fisheriesireland.ie
Web www.fisheriesireland.ie

Inland Fisheries Ireland HQ, 3044 Lake Drive, Citywest Business Campus, Dublin 24.

Correspondence with National Parks & Wildlife Service

From: Bryan Deegan (Altemar Environmental Consultants) [mailto:bryan@altemar.ie]
Sent: 16 January 2014 00:37
To: Jochen Roller - (DAHG)
Subject: Appropriate Assessment of a trans-Atlantic Fibre Optic Cable landing at Killala

Hi Jochen,
Please find attached a shapefile and a permission request for data for an AA. It has terrestrial and marine elements. Could you please use the shapefile for the extent limit?

Thank you for the help.

Bryan

Bryan Deegan
Managing Director
Altemar Ltd.
Marine and Environmental Consultants
Tel. 01-2010713/ 086-8366641
email: **bryan@altemar.ie**
Linked in
www.altemar.ie

From: Jochen Roller - (DAHG) [mailto:Jochen.Roller@ahg.gov.ie]
Sent: 27 January 2014 12:20
To: Bryan Deegan (Altemar Environmental Consultants)
Subject: RE: Appropriate Assessment of a trans-Atlantic Fibre Optic Cable landing at Killala

Hi Bryan,

Please find requested data attached. Please note that the shapefile is a polygon file in Irish Grid with the size of the squares corresponding to the precision of records in our species database. We don't hold any species records for the area of interest beyond Irish Grid limits.

Just to reiterate, as per the data policy, our datasets are not complete or perfect in terms of quality, so it is important to note that the absence of information in the NPWS dataset for an area, does not necessarily imply a low biodiversity value for that area. These data should not be seen as a replacement for field surveys.

Please note that the NPWS species dataset is incomplete, particularly for fish, bats and birds, so please don't be surprised if species listed on the site synopsis do not appear in the dataset. Can I also remind you that locations for sensitive species should not be made publicly available.

The list of what qualifies as a rare or threatened species is available at http://www.npws.ie/mapsanddata/requestdata/ . It covers species listed one or more of the following documents: EU Directives (Birds & Habitats), Wildlife Act, 1976 & Wildlife (Amendment) Act, 2000, Flora (Protection) Order 1999 or Published National Red Lists. This list is regularly updated, as new legislation is added, or red lists are published, so it is worth checking back to the version available on the NPWS website regularly.

Inland Fisheries Ireland, BirdWatch Ireland, Bat Conservation Ireland and the National Biodiversity Data Centre may have additional records of use.

Best regards
Jochen

Jochen Roller
National Parks & Wildlife Service
7 Ely Place, Dublin 2, Ireland
Jochen.Roller@ahg.gov.ie
Tel: +353-1-8883073

From: Denis Strong - (DAHG) [mailto:Denis.Strong@ahg.gov.ie]
Sent: 22 September 2014 15:41
To: Bryan Deegan (Altemar Environmental Consultants)
Cc: Susan Callaghan - (DAHG)
Subject: RE: Trans-Atlantic Fibre optic Cable landing at Killala

Bryan,
Just to follow up, I've consulted with my colleague here, Sue Callaghan, DCO who will be dealing with this application from this office and liaison with Eamonn kelly's side.

Sue advises that you should now put this application through our Development Application Unit, DAU and formally request a scoping meeting with the NPWS, regional and scientific sides.
By doing so, this will ensue that you are facilitated with a face to face meeting where all the relevant issues are threshed out and covered before you go on to the formal licence application.

Hope this is helpful and apologies for the delay in coming back to you on this

Denis

Denis Strong,
Deputy Regional Manager,
National Parks & Wildlife Service,
Dept. Arts, Heritage & the Gaeltacht
Ballycroy National Park,
Lagduff More,
Ballycroy,
Westport, Co. Mayo.

Tel: 076 100 2519 Fax: 076 100 2527 Mobile: 087 26 46 465

An Roinn
Ealaíon, Oidhreachta agus Gaeltachta
Department of
Arts, Heritage and the Gaeltacht

From: Bryan Deegan (Altemar Environmental Consultants) [mailto:bryan@altemar.ie]
Sent: 10 September 2014 12:25
To: Eamonn Kelly - (DAHG)
Cc: tjm@mdmeng.ie
Subject: Trans-Atlantic Fibre optic Cable landing at Killala- Offshore habitats

Dear Eamonn,
Following on from our phone conversation earlier, please find attached information on the trans-Atlantic fibre optic cable which will land at Ross beach in Killala Bay. Please find attached the Application for foreshore licence for the main lay of the cable. It details the methods to be used and route for main lay.

We have previously carried out an Appropriate Assessment for site investigations (http://www.environ.ie/en/Foreshore/ApplicationsandDeterminations/EmeraldNetworksLtd/ApplicationDetails/FileDownLoad,35941,en.pdf) and are now preparing an Appropriate Assessment for the main lay of the cable which will cross the Irish EEZ.

It is proposed that the main lay would take place next April to avoid impacting the overwintering birds. As I mentioned earlier, we are looking into the route and the potential of disturbance for biogenic (Lophelia) reefs offshore and have spoken to Denis Strong (NPWS) about the more local conservation issues in Killala and Inland Fisheries Ireland about the Moy SAC salmon/lamprey.

As discussed, could you please send on shapefiles of the newly protected Geogenic reefs within the Irish EEZ?

Thanks Eamonn

Bryan

Bryan Deegan (MCIEEM)
Managing Director
Altemar Ltd.
Marine and Environmental Consultants
Tel. +353 (0)1-2010713/ +353 (0)86-8366641
email: **bryan@altemar.ie**
LinkedIn
www.altemar.ie

ALTEMAR
Marine & Environmental Consultancy

From: Eamonn Kelly - (DAHG) [mailto:Eamonn.Kelly@ahg.gov.ie]
Sent: 10 September 2014 15:02
To: bryan@altemar.ie
Subject: FW: Trans-Atlantic Fibre optic Cable landing at Killala- Offshore habitats

Bryan,

See attached as requested.

Kind regards,

Eamonn

From: Michelle Molumby - (ESRI - DAHG)
Sent: 10 September 2014 15:00
To: Eamonn Kelly - (DAHG); Gareth John - (DAHG)
Cc: Brian Carroll - (DAHG)
Subject: RE: Trans-Atlantic Fibre optic Cable landing at Killala- Offshore habitats

Hi Eamonn,

Please find attached, as requested, a folder containing the following two shapefiles:

Six_Offshore_SACs_WGS84_Polygons.shp
Six_Offshore_SACs_WGS84_Vertices.shp

The co-ordinate system of both is WGS84.

Regards,
Michelle (GIS Unit)

From: Eamonn Kelly - (DAHG)
Sent: 10 September 2014 14:31
To: Gareth John - (DAHG); Michelle Molumby - (ESRI - DAHG)
Subject: FW: Trans-Atlantic Fibre optic Cable landing at Killala- Offshore habitats

Michelle,

As discussed and further to the message below, is it possible to get a shapefile(s) of the six offshore reef SACs please?

Kind regards,

Eamonn

From: Julie Fossitt - (DAHG) [mailto:Julie.Fossitt@ahg.gov.ie]
Sent: 22 October 2014 13:13
To: bryan@altemar.ie
Cc: Denis Strong - (DAHG); David Lyons - (DAHG); Noel Kirby - (DAHG)
Subject: Follow up from meeting today

Bryan

Further to our meeting today about the proposed America-Europe Connect Ltd/TE Subcom trans-Atlantic fibre-optic cable landing in Killala Bay, Co. Mayo, please find attached, as promised, the pages on mitigation in appropriate assessment from the new draft Commission guidance on Article 6 of the Habitats Directive. In addition, I have set out below some extracts from planning legislation relating to restrictions on exemptions.

On my understanding, exempted development is no longer exempted development if there are restrictions on exemptions under Article 9(1)(a) of the Planning and Development Regulations, 2001-2012. Among other things, there are restrictions on exemptions if a development would:

(vii) consist of or comprise the excavation, alteration or demolition (other than peat extraction) of places, caves, sites, features or other objects of archaeological, geological, historical, scientific or ecological interest, the preservation, conservation or protection of which is an objective of a development plan or local area plan for the area in which the development is proposed or, pending the variation of a development plan or local area plan, or the making of a new development plan or local area plan, in the draft variation of the development plan or the local area plan or the draft development plan or draft local area plan,

(viiB) comprise development in relation to which a planning authority or An Bord Pleanála is the competent authority in relation to appropriate assessment and the development would require an appropriate assessment because it would be likely to have a significant effect on the integrity of a European site,

(viiC) consist of or comprise development which would be likely to have an adverse impact on an area designated as a natural heritage area by order made under section 18 of the Wildlife (Amendment) Act 2000.

I have also checked the GIS here and see that the route of the cable along roads to the Asahi site will be adjacent to (or will cross) parts of the SAC and/or SPA at six separate locations. While I hadn't checked in advance, this was not evident at the meeting today. Any potential impacts on the European sites in these locations will need to be included in the NIS.

More observations may issue when your pre-planning/scoping request comes through from the Development Applications Unit in due course.

Regards,
Julie

Dr Julie Fossitt
Divisional Ecologist, Ecological Assessment Unit
National Parks and Wildlife Service
Department of Arts, Heritage and the Gaeltacht
2nd Floor, Custom House, Druid Lane, Flood Street, Galway
Direct line: 091 539284
Fax: 091 539289

An Roinn
Ealaíon, Oidhreachta agus Gaeltachta
Department of
Arts, Heritage and the Gaeltacht

From: Manager Dau [mailto:Manager.Dau@ahg.gov.ie]
Sent: 29 October 2014 10:18
To: bryan@altemar.ie
Subject: FW: Trans-Atlantic Cable- Killala meeting

Bryan

I have routed this to the National Parks and Wildlife Service on our internal record management system. No doubt you will be talking with NPWS directly at the meeting referred to in your emails. The reference number is G Pre00408/2014.

Regards

Michael Murphy,
Development Applications Unit
Dept. Of Arts, Heritage & the Gaeltacht
Newtown Road,
Wexford

t: (053) 911 7516

From: Manager Dau [mailto:Manager.Dau@ahg.gov.ie]
Sent: 11 November 2014 15:40
To: Bryan Deegan (Altemar Environmental Consultants)
Subject: RE: Trans-Atlantic Cable- G Pre00408/2014

Bryan

I refer to your email of 20 October, 2014 in relation to the proposed Trans-Atlantic fibre optic cable, including the landfall at Ross village, Killala, Co. Mayo, and to the draft Natura Impact Statement (NIS) provided. Reference is also made to a meeting of 20 October, 2014 with staff of the National Parks and Wildlife Service. Attached are the Nature Conservation observations and the Marine Science and Biodiversity recommendations of the National Parks & Wildlife Service of the Department of Arts, Heritage and the Gaeltacht.

Regards

Michael

National Parks and Wildlife Service
Our Ref: G Pre00408/2014
11 November 2014
Bryan Deegan (MCIEEM)
Managing Director
Altemar Ltd.
Marine and Environmental Consultants
Via Email: bryan@altemar.ie
Re: Proposed Trans-Atlantic Cable- Killala, Co Mayo
A Chara,
I refer to your email of 20 October, 2014 in relation to the proposed Trans-Atlantic fibre optic cable, including the landfall at Ross village, Killala, Co. Mayo, and to the draft Natura Impact Statement (NIS) provided. Reference is also made to a meeting of 20

October, 2014 with staff of the National Parks and Wildlife Service. Outlined below are the Nature Conservation observations and the Marine Science and Biodiversity recommendations of the National Parks & Wildlife Service of the Department of Arts, Heritage and the Gaeltacht.

Nature Conservation Observations

Project outline and regulation

As set out in the draft NIS and at the meeting, the project involves the laying of a subsea cable from beyond the 12 mile limit, through Killala Bay, to the landfall at the public car park at Ross village. The cable will then extend as far as the Asahi site, south of Killala. The project involves offshore and onshore elements that will be regulated by two separate authorities, and will require a foreshore licence and planning permission. It is the responsibility of the competent authorities involved to carry out screening for appropriate assessment, and an appropriate assessment, if required, under Regulation 42 of the European Communities (Birds and Natural Habitats) Regulations, 2011, and/or Part XAB, Sections 177U and 177V of the Planning and Development Act, 2000, as amended, when an application is made.

The advice of the Department is that the likely significant effects of all parts of the project, on its own and in combination with other plans and projects, should be assessed in the NIS. Unless advised otherwise by the competent authorities involved, the NIS should be submitted with any applications required. In addition, the Department advises against project splitting, and advises of the restrictions on exemptions that apply under planning legislation in the case of a project that requires an appropriate assessment.

All lands required for project construction, including temporary works areas, parking, compounds, and storage and disposal sites, etc., should form part of the applications for consent. This is particularly important within or close to European sites, as no works or development may occur outside the limits of what has been permitted. Any additional obligations that arise at pre- or post-consent stages, including in respect of ground testing, archaeological testing, or relocation of services etc., should be noted in this regard.

European sites

The cable will be laid within the European sites, Killala Bay/Moy Estuary cSAC (site code 000458) and Killala Bay/Moy Estuary SPA (site code 004036) as far as the landfall. These sites have site specific conservation objectives. If it follows the public road, the cable will pass close to the boundary of these sites at a number of locations, and will traverse one or more sites at river crossings. River Moy cSAC (site code 002298) is located about 14km to the south-east, and has generic conservation objectives.

The NPWS website (npws.ie) should be consulted as a key source of data, information and publications about these European sites and their qualifying interests (SACs), special conservation interests (SPA), and conservation objectives, whether generic or site specific. In the case of site specific conservation objectives, accompanying backing documents, and habitat and species datasets, should be consulted and used in the assessments. However, the limitations of the available data should be noted as set out in the relevant conservation objective documentation. In the case of generic conservation objectives, their full scope should be borne in mind in assessments; conservation condition of a habitat or species is linked to conservation status as defined in Articles 1(e) and 1(i) of the Habitats Directive.

NIS

An NIS, which is defined in law, should cover the impacts of all parts of a project, whether permanent or temporary, and all lands required at all relevant stages. It should also cover all potential effects of the project in combination with other plans and projects. The tests, terminology and stages of the relevant legislation (outlined above) should be followed, including in respect of the NIS which is currently in preparation. Relevant case law of the Court of Justice of the European Union (CJEU) should also be noted.

The NIS should present the necessary scientific information and analysis of likely significant effects of the project on the conservation objectives of the relevant European sites. Where mitigation is required or specified, this should be set out in detail for all project phases and elements as part of the application for consent. This should include sufficient details of any method statements, or environmental management or operating plans, required. No significant details of mitigation may be deferred to be developed or agreed at the post consent stage, as this may mean that the extent of the project and its likely significant effects are not known at the application stage and when undertaking the appropriate assessment. The final analysis in the NIS should be of the residual effects, and whether there will be adverse effects on the integrity of a European site, having assessed the effectiveness of the mitigation.

In a previous communication, the Department indicated that the action of some of the operations associated with cable-laying and burying may be considered analogous to dredging. For the purpose of conserving and preventing disturbance of marine mammals, it was indicated that the provisions of "*Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters*" (available to download from: http://www.npws.ie/marine/bestpracticeguidelines/) should be applied to ensure noise introduced into the marine environment has minimum effect.

The NIS must be taken into account when carrying out the appropriate assessment. The appropriate assessment must include a determination under Article 6(3) of the Habitats Directive as to whether the project would adversely affect the integrity of a European site. Case law of the Court of Justice of the European Union has established that the assessment carried out under Article 6(3) cannot have lacunae and must contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects on a European site in the case of a project (Case C-258/11, Sweetman and others).

Other assessments

It was confirmed that an EIS is not required for the project. As onshore or offshore ecological effects may arise that are outside the scope of an NIS, the Department advised that these should be addressed in an ecological impact assessment that complements the NIS. This should generally correspond to the flora/fauna chapter of an EIS.

The following important ecological receptors should be taken into account in the assessment:

- Sites with nature conservation designations, including proposed NHAs, the reasons for their designation, and their conservation objectives, where available;
- Annex IV (Habitats Directive) species of fauna and flora, and their breeding sites and resting places, which are strictly protected under the European Communities (Birds and Natural Habitats) Regulations, 2011;
- Other species of fauna and flora which are protected under the Wildlife Acts, 1976-2000;
- '*Protected species and natural habitats*', as defined in the Environmental Liability Directive (2004/35/EC) and European Communities (Environmental Liability) Regulations, 2008, including:
  - Birds Directive - Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur);
  - Habitats Directive - Annex I habitats, Annex II species and their habitats, and Annex IV species and their breeding sites and resting places (wherever they occur);
- Other habitats of ecological value in a national to local context;
- Stepping stones and ecological corridors covered by Article 10 of the Habitats Directive.

Available information on sites, habitats and species should be reviewed. In addition, the following may be required to assess the likely effects on sites, habitats, and species of flora and fauna:

- Habitat survey of the receiving environment, following the Heritage Council methodology (Atkins 2010). Any Annex I (Habitats Directive) habitats should be identified as such and should be clearly mapped, described and evaluated, including in terms of the vegetation communities, flora and fauna they support;
- A habitat map of the site and surrounds with the footprint of the development and all works areas overlain, to enable impacts on habitats to be quantified and qualified;
- Botanical survey of the receiving environment to be undertaken at the appropriate time of year to properly characterise and evaluate the habitats present, and identify any rare or protected species;
- Faunal surveys of the receiving environment to be undertaken at appropriate times of the year to identify any rare or protected species that use the site and surrounding areas, including but not limited to the following:
  - Bird surveys to determine bird usage of the site and surrounds;
  - Mammal surveys;
  - Aquatic species surveys.

The receiving environment should be defined to include all areas that will be impacted directly and indirectly by the proposed development, whether on a permanent or temporary basis.
The likely effects on sites, habitats and species should be assessed in the light of all aspects of project development at site preparation, construction and operation stages, and should take into account direct, indirect and cumulative impacts, as appropriate. Impacts should be qualified and quantified, where possible. Information on local geology, hydrology and soils may also be required.
Full details of mitigation measures to avoid, reduce or offset negative effects should be provided. Only minor details of project execution and mitigation may be deferred to the post-consent stage and to method statements or other management plans. If there is uncertainty as to the likely effects at consent stage, this is likely to indicate deficiencies in the assessment.

Marine Science and Biodiversity observations

This submission is noted as a scoping communication and it is anticipated that a formal application to the Department of the Environment, Community and Local Government will follow subsequently. This Department will reserve final comment until the document has been finalised.
In previous communication with the proponents the supporting documentation has been discussed. It was indicated that the action of some of the operations associated with cable laying and burying may be considered analogous to dredging. For the reason of the conservation of marine mammals it was indicated that the provisions of "Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters" (available to download from: http://www.npws.ie/marine/bestpracticeguidelines/) should be applied to ensure noise introduced into the marine environment have minimum effect.
Issues were also raised in relation to the potential for in-combination effects and possible project-splitting. The proponents should communicate with the Planning Department of Mayo County Council to seek clarification on the issues raised.
Kindly forward any further queries/information to manager.dau@ahg.gov.ie; if this is not possible, correspondence may alternatively be sent to the following address:

The Manager,
Development Applications Unit,
Department of Arts, Heritage and the Gaeltacht,
Newtown Road,
Wexford.
In addition, please acknowledge receipt of these observations by return.

Is mise le meas,
Michael Murphy,
Development Applications Unit
Tel: (053) 911 7516

Company's Memorandum and Articles of Association

FP
5/9/23

COMPANIES ACTS, 1963 to 2013

COMPANY LIMITED BY SHARES

MEMORANDUM OF ASSOCIATION

OF

AMERICA EUROPE CONNECT LIMITED

6096288

1. The name of the Company is America Europe Connect Limited.

2. The objects for which the Company is established are:-

(a) To undertake and carry on in Ireland or elsewhere services for instance

(i) To carry on the development of telecommunications infrastructure and networks together with the sale or lease of duct, fibre or capacity on the network and to carry on throughout the world all or any of the following business of buyers, sellers, importers, exporters, manufacturers, designers, lessor, licensors, renters, hirers, installers, maintainers, repairers and agents for and dealers in telecommunications equipment of all kinds.

(ii) To acquire any such shares, stock, debentures, debenture stock, bonds, notes, obligations or securities by original subscription, contract, tender, purchase, exchange, underwriting, participation in syndicates or otherwise and whether or not fully paid up and to subscribe for the same subject to such terms and conditions (if any) as may be thought fit.

(iii) To exercise and enforce all rights and powers conferred by or incident to the ownership of any such shares, stock obligations or other securities including without prejudice to the generality of the foregoing all such powers of veto or control as may be conferred by virtue of the holding by the company of such special proportion of the issued or nominal amount thereof and to provide managerial and other executive, supervisory and consultant services for or in relation to any company in which the company is interested upon such terms as may be thought fit.

(b) To undertake and carry on in Ireland or elsewhere, any other business (whether manufacturing or otherwise) which may seem to the Company capable of being

conveniently carried on in connection with the above, or calculated directly or indirectly to enhance the value of any of the Company's property and rights for the time being.

(c) To purchase or otherwise acquire and undertake all or any part of the undertaking assets, business, property, privileges, contracts, rights, obligations and liabilities of any company, corporation, society partnership or person carrying on any business which the Company is authorised or empowered to carry on or possessed of property suitable for the objects of the Company or of any company or corporation in which the Company holds shares, bonds, debentures or other securities or obligations, and to pay for the same in cash or in shares or securities or obligations of the Company or partly in cash and partly in shares or securities or obligations or any other consideration, and to carry on the business of any such company, corporation, society, partnership or person whose assets are so acquired.

(d) To amalgamate with any other company.

(e) To apply for, purchase or otherwise acquire any patents brevets d'invention, licences, concessions and the like, conferring any exclusive or non-exclusive or limited rights to use or any secret or other information as to any invention which may seem capable of being used for any of the purposes of the Company or the acquisition of which may seem calculated directly or indirectly to benefit the Company and to use, exercise, develop or grant licences in respect of or otherwise turn to account the property, rights or information so acquired.

(f) To enter into partnerships (including, for the avoidance of doubt limited partnerships) or into any arrangements for sharing profits, union of interests, co-operation, joint venture, reciprocal concession or otherwise with any person or company carrying on or engaged in or about to carry on or engage in any business or transaction which this Company is authorised to carry on or engage in or any business or transaction capable of being conducted so as directly or indirectly to benefit the Company.

(g) To take or otherwise acquire and to hold shares and securities in any company other than the Company and to sell, hold, re-issue with or without guarantee or otherwise deal with the same.

(h) To enter into any arrangements with any Governments or authorities, supreme, municipal, local or otherwise, that may seem conducive to the Company's objects or any of them and to obtain from any such Government or authority any rights, privileges and concessions which the Company may think it desirable to obtain and to carry out, exercise and comply with any such arrangements, rights, privileges and concessions.

(i) To establish and support or aid in the establishment and support of associations, institutions, funds, trusts and conveniences calculated to benefit directors and ex-directors, employees or ex-employees of the Company or the dependants or connections of such persons, and to grant pensions and allowances and to do any acts or things or make any arrangements or provisions enabling employees of the Company or other persons aforesaid to become shareholders in the Company or otherwise to participate in the profits of the Company upon such terms and in such manner as the Company thinks fit, and to make payments towards insurance and to subscribe or guarantee money for charitable or benevolent objects or for any exhibition or for any public, general or useful object, or any other object whatsoever which the Company may think advisable.

(j) To promote any company or companies for the purpose of acquiring all or any of the property and liabilities of the Company or for any other purpose which may seem directly or indirectly calculated to benefit the Company.

(k) Generally to purchase, take on lease, exchange, hire or otherwise acquire any real and personal property and any rights or privileges which the Company may think necessary or convenient for the purposes of its business.

(l) To develop and turn to account any land acquired by the Company or in which it

farming, cultivating, letting on building leases or building agreement and by advancing money to and entering into contracts and arrangements of all kinds with builders, tenants and others.

(m) To construct, maintain and alter any buildings or works necessary or convenient for any of the purposes of the Company or for the benefit of its employees.

(n) To construct, improve, maintain, develop, work, manage, carry out or control any roads, ways, tramways, railways, branches or sidings, bridges, reservoirs, watercourses, wharves, factories, warehouses, electric works, shops, stores and other works and conveniences which may seem calculated directly or indirectly to advance the Company's interests and to contribute to, subsidise or otherwise assist, or take part in the construction, improvement, maintenance, working, management, carrying out or control thereof.

(o) To invest and to deal with the moneys of the Company not immediately required in such manner as may from time to time be determined.

(p) To lend and advance money or give credit to any persons, firms or companies and in particular to customers of and others having dealings with the Company upon such terms as may seem expedient, and to guarantee, support or secure whether by personal covenant or by mortgaging or charging all or any part of the undertaking, property and assets (present and future) and uncalled capital of the Company or by both such methods, the performance of the obligations of and the repayment or payment of the principal amounts of and premiums, interest and dividends on any securities of any person, firm or company, and in particular (without prejudice to the generality of the foregoing) to give (with or without consideration) security for any debts, obligations or liabilities of any company which is for the time being the holding company or a subsidiary (both as defined by Section 155 Companies Act, 1963) of the Company or another

(q) To borrow or raise money either without security or secured in such manner as the Company shall think fit and in particular by the issue of debentures or debenture stock, perpetual or otherwise, by mortgage or other security charged upon all or any of the Company's property both present and future, including its uncalled capital and to purchase, redeem or pay off any such securities.

(r) To remunerate any person or company for services rendered or to be rendered in placing or assisting to place or guaranteeing the placing of any of the shares of the Company's capital or any debentures, debenture stock or other securities of the Company, or in or about the formation or promotion of the Company or the conduct of its business.

(s) To draw, make, accept, endorse, discount, execute and issue promissory notes, bills of exchange, bills of lading, warrants, debentures and other negotiable or transferable instruments.

(t) To undertake and execute any trusts the undertaking whereof may seem desirable and either gratuitously or otherwise.

(u) To sell or dispose of the undertaking of the Company or any part thereof for such consideration as the Company may think fit, and in particular for shares, debentures or securities of any other company having objects altogether or in part similar to those of the Company.

(v) To adopt such means of making known the products or services of the Company as may seem expedient and in particular by advertising in the Press, by circulars, by purchase and exhibition of works of art or interests, by publication of books and periodicals and by granting prizes, rewards and donations.

(w) To obtain any Act of the Oireachtas or Provisional Order for enabling the Company to carry any of its objects into effect or for effecting any modification of the Company's constitution or for any other purpose which may seem expedient and to oppose any proceedings or applications which may seem calculated directly or indirectly to prejudice the Company's interests.

(x) To procure the Company to be registered or recognised in any country or place.

(y) To sell, improve, manage, develop, exchange, lease, mortgage, enfranchise, dispose of, turn to account, or otherwise deal with all or any of the property and rights of the Company, provided always that no surplus arising upon any such sale shall be available for distribution through the profit and loss account.

(z) To promote freedom of contract, and to resist, insure against, counteract and discourage interference therewith, to join any lawful Federation, Union or Association, or to do any lawful act or thing with a view to preventing or resisting directly or indirectly any interruption of or interference with the trade or business of the Company or any other trade or business or providing or safeguarding against the same, or resisting or opposing any strike, movement or organisation which may be thought detrimental to the interests of the Company or its employees and to subscribe to any association or fund for any such purpose.

(aa) To do all or any of the above things in any part of the world, and as principals, agents, contractors, trustees or otherwise, and by or through trustees, agents or otherwise and either alone or in conjunction with others.

(bb) To distribute any of the property of the Company in specie among the members.

(cc) To do all such other things as the Company may think incidental or conducive to the attainment of the above objects or any of them.

Provided that:

(i) the word "company" in this Clause, except where used in reference to this Company, shall be deemed to include any partnership or other body of persons, whether incorporated or not incorporated and whether domiciled in Ireland or elsewhere and the intention is that the objects specified in each paragraph of this Clause shall except where otherwise expressed in such paragraph be in no way limited or restricted by

reference to, or inference from, the terms of any of other paragraph; and

(ii) the provisions of this Clause shall be subject to the Company obtaining, where necessary for the purpose of carrying any of its objects into effect, such licence, permit or authority as may be required by law.

3. The liability of the members is limited.

4. The share capital of the Company is €1,000,000 divided into 1,000,000 shares of €1 each.

We, the several persons whose names and addresses are subscribed, wish to be formed into a company in pursuance of this Memorandum of Association and we agree to take the number of shares in the capital of the Company set opposite our respective names:

Names, addresses and descriptions of subscriber	Number of shares taken by each subscriber
Aqua Ventures International FZE P.O. Box 50073 Fujairah United Arab Emirates Company	One Hundred (100)
TOTAL SHARES TAKEN:	One Hundred (100)

Signed on behalf of Aqua Ventures International FZE

Jacob Logothetis

P.O.Box. 50073 Fujairah - U.A.E. AQUA VENTURES INTERNATIONAL FZE

Dated this 8 day of July 2014

Witness to the above signatures

[illegible]
17 The Red Mill
[illegible]
Dublin 7