

Welcome from the General Manager

Welcome to the latest edition of the SmartBay newsletter. It has been a busy 6 months since our last edition with numerous projects on the go including; the deployment of Sea Power’s experimental wave energy device, the award of nine National Infrastructure Access Programme (NIAP) projects and the successful audit for our ISO 9001, 14001 and 18001 accreditations after our restructuring.

It is fantastic to see Sea Power deploy their device at the SmartBay test site after the tremendous effort that has been put into the design, quality control and manufacture process over the past 18 months. The sea trials are progressing well and we look forward to the successful completion of the initial phase of the project in March, 2017.

A huge thanks to Niamh Flavin who managed our recent HSEQ audit which has resulted in the successful accreditation of our activities under the ISO 18001, 14001 and 9001 standards. Other significant projects and initiatives include: the FORESEA project (the INTERREG funded programme) which awarded 10 support packages in the first call and currently has a second call open, our work with the IDA and Marine Institute to promote Ireland’s marine and maritime “ecosystem” to companies in the UK and US and the recent award of the National Infrastructure Access Programme (NIAP) projects. More detail about the specifics of these projects will be provided in the next edition of the Newsletter in 2017. Finally, I would like to take the opportunity to wish You and Yours a Merry Christmas and a Happy and Healthy New Year.

John Breslin
General Manager



Sea Power device under tow to the SmartBay test site

Projects

MARINA

The MARINA project kick off meeting took place in June and is progressing well. The focus of this H2020 funded project is to provide a best practice roadmap for the implementation of Responsible Research and Innovation (RRI). This will be achieved by focusing on “hot topic” issues in the marine and using RRI to develop solutions to stimulate involvement with relevant stakeholders. SmartBay Ireland, in conjunction with UCC will be hosting a local workshop in January by invite focusing on the future development of wave energy in Ireland.

BlueTech San Diego

John Breslin attended the Maritime Alliance 8th San Diego BlueTech Week 2016, which focused on “Case Studies of Collaboration”. This week-long event included: the 2nd Annual BlueTech Cluster; a Big-Data, Maritime Cyber and OceanGIS conference and the BlueTech and Blue Economy Summit, which featured a new pitch fest for small and medium size companies.

The Summit included panel sessions, featured new technology showcases, keynote addresses from high level officials and key industry leaders and a tech expo and networking opportunities for industry stakeholders, investors, and government officials from around the world.

John Breslin participated and presented during a “Gathering Big Data” panel session on Tuesday, November 10th and Dr



JERICO-NEXT

Zunibal, a Spanish company, have been successful in their application under the first Trans National Access call as part of the H2020 Jerico-NEXT project. Zunibal will have at least two months of free access to the SmartBay test site, during which time the company will test and validate its met ocean buoy. The wave measurement capability of the system will be assessed and improved, with the goal of validating a low-cost wave buoy.

COLUMBUS

The COLUMBUS project aims to capitalise on the European Commission’s significant investment in marine and maritime research by ensuring accessibility and uptake of research Knowledge Outputs by end users. SmartBay Ireland will be hosting a workshop as part of the knowledge transfer process in 2017.

Edel O’Connor of the Marine Institute delivered the keynote address on Ireland’s national ocean economy strategy at the Blue Tech and Blue Economy Summit.

The Marine Institute and Irish Maritime Energy Resource Cluster (IMERC) were presented with the International Maritime Partner award by The Maritime Alliance.

The Maritime Alliance (TMA) is the non-profit industry association and cluster organizer for the San Diego maritime technology community. The Marine Institute and IMERC were selected for this international award for their work in developing Ireland’s marine technology cluster.



Above: International Maritime Partner Award

Sea Power Update

SeaPower has received grant support from the Sustainable Energy Authority of Ireland (SEAI), to progress to device scale testing in open sea conditions for the first time. SeaPowers' experimental device was successfully deployed at the SmartBay test site on November 2nd. This deployment follows a rigorous programme spanning almost 8 years which involved small scale laboratory and lake tests and continuous development. Prior to deployment an independent third party verification of the design, construction and deployment of the device was undertaken by Wood Group Kenny in Galway.

The Sea Power device was manufactured by Foynes Engineering Ltd. in Limerick and was towed from Foynes by sea to SmartBay. The device was deployed by Atlantic Towage and Marine Ltd. with assistance from the Marine Institute's Ocean Energy team. The installation of the moorings, load testing and connection of the device was performed successfully and without incident.

The device will be deployed at the SmartBay test site until March 2017 during which time its performance will be validated against a wide range of wave heights and wave periods from a range of directions.



Ocean Energy Europe

The Ocean Energy Europe Conference for 2016 took place in Brussels in October this year. SmartBay Ireland exhibited as part of the Irish stand and also attended the FORESEA stand. The event consisted of talks on technical aspects, finance and policy in the Ocean Energy industry drawing leading industry developers and high level politicians and representatives.

The conference included a presentation of the FORESEA 1st call support packages in which SmartBay Ireland played a leading role. Also presented at the conference was the OEE roadmap highlighting recommendations to policy makers for the progression of Ocean Energy in Europe.



Ireland OEE stand with representatives from SEAI and the MI

Research at SmartBay

By Jann Zwahlen (NUIG)

A camera, located at 20m depth off the coast of Spiddal on the SmartBay observatory provides a unique opportunity in Ireland to observe the day-to-day activities of fish living on our doorstep. We know from trawling which species live down there, but how they live and their real-time activities and abundances is largely unknown.

For example, the two most abundant fish species observed so far have been Whiting, which is commercially quite important, and Pouting. These, along with occasional Pollack, have been visible almost permanently over the period that I have been examining the footage. Except when they suddenly disappear. This happened yesterday as a seal appeared and hung around the camera for 4-5 minutes. The disappearance of the fish was so unusual and so abrupt that it was clear that something was very much 'afoot'.

For my final year project, which is a pilot study for this subsea camera, I will count the number of fish at particular times of the day. I will simultaneously note some of the many environmental variables which are also available on the observatory. This will hopefully give new insights in the fish dynamics throughout the autumn.



Group of whiting in front of the camera

These data will be used to support more specific studies and at other times of year.

In the meantime, I will continue analysing the small "window" into Galway Bay and hope for more exciting observations.

Funding Programmes

NIAP Update

Nine out of the twelve applications received in 2016 were selected for funding by an external independent panel of evaluators. The successful applicants are currently in the process of finalizing the grant agreements so projects can start in 2017. Preparatory works to support projects requiring use of the SmartBay observatory in Galway Bay are already underway to ensure all hardware is in place by the time the observatory is redeployed in January 2017 after its first recovery for servicing in December.

MARINET 2

The MARINET 2 project received approval from the EC in late August and the grant and consortium agreement procedures are in train. The kick-off meeting has been scheduled for February 2nd 2017.

Promotion of Irish Marine and Maritime Opportunities

In Q3 and Q4 SmartBay Ireland, the Marine Institute and the IDA identified a global pipeline of marine and maritime companies. The purpose of this work is to promote Ireland's world-class test facilities, together with our research, enterprise and innovation capabilities and supports, to companies in the UK and US.

Meetings were held with UK and US companies to promote Ireland's marine and maritime "ecosystem". Several projects have been identified for SmartBay which will help these companies to develop a footprint in Ireland and gain a better understanding of Ireland's capabilities and the connected nature of this "ecosystem".

SmartBay test site foreshore lease application

The Marine Institute applied for a new lease in April this year and an extensive public consultation process on the proposed development closed in September. A review of the public submissions was undertaken and the Marine Institute's responses have been forwarded to the Foreshore Licencing Unit. We await the decision of the Department of Housing, Planning, Community and Local Government.

FORESEA

The FORESEA project recently announced its 2nd call for support packages. This call is open through to the 28th February 2017 and is aimed at developers of low carbon enabling technologies for testing of their technologies in real sea environments. For further information, please contact Eoin Nicholson.



Above: Members of the FORESEA team from OEE, EMEC, SEM-REV, TTC and SmartBay

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