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GRRIP NEWSLETTER

BRINGING ABOUT CHANGE

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S
HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME.



GRANT AGREEMENT ID: 820283

FOREWORD

**Dr Eric A. Jensen, Senior Research Fellow and
Director of Policy Research Unit (ICORSA)**



RRI is aimed at better aligning research and innovation work with the needs and positive values of society. Bolstering RRI involves deep introspection and re-assessment of policies and practices employed by each of the five marine and maritime organisations involved in the project. RRI touches many aspects of research performing organisations' core work, including recruitment and hiring procedures and, internal and external communication and administration. RRI implementation also affects the way that research is conducted and by whom, including issues such as workforce diversity, gender equality, inclusion of ethnic minorities and alignment with societal needs and ethics. GRRIP builds its approach on learnings and legacy from previous EU-funded projects such as NUCLEUS (New Understanding of Communication, Learning and Engagement in Universities and Scientific Institutions) and JERRI (Joining Efforts for Responsible Research and Innovation). These projects also worked to embed RRI with research organisations.

The GRRIP project's objective is to achieve institutional and cultural change. Early in the project, an evaluation was conducted to see where how embedded RRI was already in the five participating marine and maritime research institutions across Europe. Based on the results from this evaluation, interventions were planned in these organisations, coupled with subsequent evaluation and monitoring. This represents an evidence-based approach to embedding RRI, rooted in collaboration between the marine and maritime research institutions and other GRRIP partners with specialisms in RRI, science communication and evaluation.

This issue presents perspectives on GRRIP's process of embedding RRI as follows:

- Professor Malcolm Fisk (De Montfort University) presents observations gleaned from the GRRIP monitoring process. In particular, he highlights lessons learned so far about key challenges and enabling factors for RRI implementation. He identifies key enablers of RRI implementation, such as the commitment to RRI principles expressed by research organizations' staff who are involved in the GRRIP project. He also points to the underpinning role of national and EU policies, small organization size, and in the case of universities, established ethics procedures as key 'enablers'.
- Professor Franck Schoefs from IUML, one of GRRIP's marine and maritime research organisations, reflects on the experiences of the introspective and organisational change process from embedding RRI in IUML's policies and practices. He identifies specific aspects of the RRI implementation that have been particularly challenging and rewarding, as well as the prioritisation decisions that his organization has made as GRRIP has unfolded. Franck also points to the value that IUML has found from internalising RRI principles and making them a part of the organisation's DNA.

Dr. Eric A. Jensen has a global reputation in social research and impact evaluation of public and stakeholder engagement with science. Jensen is currently Senior Research Fellow at ICORSA (International Consortium of Research Staff Associations - icorsa.org), which is contributing RRI, evaluation, and public engagement expertise to the GRRIP project. His expertise spans themes relating to evidence-based science communication (see sciencecomm.science), public engagement, research impact, and responsible research and innovation policies and practices. His PhD is in Sociology from the University of Cambridge.





INTERVIEW

Franck Schoefs - Director of Institut Universitaire Mer Littoral (IUML)

What motivated IUML to be part of the GRRIP project?

IUML's main interest in RRI was driven by the potential to participate in a project that seeks to understand the expectations of the wider society, in particular the European community and how it reflects these expectations. IUML as an organisation aspires to understand and aims to be aligned with these expectations in a proactive manner and not on sporadic external demands. We began a process of evaluation and change within our organisation five years ago by examining our existing relationship with the public with a view to improving our citizen engagement. And what we learned was that we needed to bring about change in IUML's governance structure. After an initial trial we quickly realised that we didn't know how best to improve our existing practices. Soon after this trial, the GRRIP Project started and our participation in the project forced us to think about our existing practices and the implementation of the RRI actions within the context of a defined framework. This defined framework for implementation was the driving motivational factor for IUML to be involved with the GRRIP Project.

Can you provide some details of actions related to RRI implementation within IUML?

We are focused on embedding the five RRI principles in our governance structure. To do this, we needed to convince the Management Board, made of the Directors of the 22 Research Units, about our proposition. In seeking to change our governance and approach to RRI implementation we first identified RRI champions to assist in convincing the Management Board to in restructure our governance framework

Secondly, and most challenging, was the formulation of a Stakeholder Committee, to advise on IUML's RRI implementation strategies. For this, we had to identify who would best represent the wider needs in terms of RRI and its implementation. It was particularly challenging due to the fact that we didn't focus our earlier communications and dissemination on society. Instead, it was more centred around actions that would arise from specific opportunities. So GRRIP was important in that it acted as a foundation to facilitate the creation of a viable stakeholder committee, which to date has 11 members, drawing from society, industry, policymakers and academia. This activity of identifying and forming the Committee was very useful to guarantee that actions can be launched. GRRIP helped us to be aware of the resources we have within the organisation and provided us the instruments to monitor the effects of the actions and identify potential risks and mitigations.

At the beginning of the Stakeholder Committee and Management Board meetings we ask questions, present some ideas we have in mind, and at the end we agree on clear set of actions we need to preform before the next meeting.

We discussed and identified which pillars required targeted actions -- we decided to focus on Civic Engagement first, Gender Equality and Open Science second, followed finally by Science Education and Ethics which were deemed to be topics of less importance to IUML due in part to previously existing rules within the organisation around Marine life and Green Energy, topics which already include contingencies around ethics.

We had a large project, COSELMAR 2012-2017, where some staff were involved, in which science education and public engagement were points of discussion. They weren't the central topics of the project, but it forced us to consider ways to develop and better share our research results with the wider society.



Franck Schoefs

As part of this project, a web series was developed with short videos with a view to providing the citizen with an opportunity to understand the results of the research and how they originated.

We decided that the researchers in this project, would be perfect as RRI champions, because they are able to discuss RRI keys and they have previous experience in dealing first-hand with these concepts. We were also able to draw on other individuals who previously organised or participated in seminars at Nantes, seminars which focused on engagement and discussion with the citizen (for instance the National Exhibition of the sea: Mer XXL, 2019, +10000 visitors).

We also looked to Directors of Chairs drawn from industry, with whom IUML enjoy a strong connection. We had to consider, of course, the nature of the industry and whether RRI concepts could align with its objectives. And, we approached those to be RRI champions whose work intersected between citizens and industry.

Finally, we approached senior management and directors from IUML given their project management experiences in bringing these different interests together, which was vitally important given their knowledge of overseeing projects like this and setting out achievable goals.

What supporting factors exist in IUML to engage with wider societal stakeholders?

IUML's primary responsibility is to promote interdisciplinary research – and the main objective is to do research and innovation to tackle societal issues. And by its nature this type of interdisciplinary research involves analysing several issues or topics simultaneously with a view to understanding whether the innovation is effective, if it will be acceptable at a wider societal level.



So whether we're working on marine renewable energies, aquaculture or algal toxicology we need to consider the wider picture and not just single subjects in isolation: for instance, cost of marine renewable in a global economy, spatial planning, public perception of innovations, health and ecology. So this ingrained interdisciplinary approach is probably the main supporting factor from the IUML perspective. Because, when we want to speak within a strand of a specific discipline, whether that's maritime law, maritime economy or maritime technology, the focus tends to be granular, and, as a result, people from the wider society can have difficulties in understanding how these topics or issues can contribute to the overall wellbeing of society. The interdisciplinary approach removes these barriers because it necessitates presenting these issues in a wider context.

What are the biggest barriers to wider stakeholder engagement for IUML?

Two years ago, before we undertook this process of learning, we didn't really foresee barriers because we simply saw it as a case of devising and implementing actions based on the research and recommendations. However, the experience we have gained since then has helped us identify two main barriers – political changes after each election and changing of research priorities. Secondly, people change within organisations. There's always flux and so while an issue might be deemed important within a department at any given time, a change in personnel can easily shift these focuses elsewhere. So a constant effort is required in order to maintain these interests and ensure stakeholder buy-in, because we cannot simply start from scratch with regards to RRI, as RRI is fundamentally a long-term process. And that in itself is time consuming, the need to establish new relationships and dialogue to maintain progress.

How did IUML benefit from the societal engagement workshop?

The benefit is clear – without societal engagement workshops it's impossible for us to know and to be sure that our ideas and the accrued knowledge that we want to share with the wider society is of real-world use. These workshops provide an invaluable space where we can share our research and engage in a meaningful way. One particularly useful method is public engagement science and research. Theoretically, for example, we envisioned citizen scientists being used within the House of the Sea (a venue) – where they undertake research and analysis of the sea and littoral areas within our region. In the regional stakeholder engagement forum, we realised that from a practical standpoint however, every city in the littoral region would want to have its own House of the Sea, and this raises difficulties in terms of fulfilling commitments. So, instead, we developed a process aligned with the region's requirements that allowed sites to be selected on merit, based on the region's ability to support. Thus, without the wider stakeholder engagement, the idea would have remained purely theoretical.

Did any future collaborations or research ideas or meetings emerge from the project

One such topic involves ships with sails – we had a workshop with citizens in October 2021 ([De la caravelle au voilier-cargo: L'éolien au cœur de nouvelles découvertes](#)) where we discussed this topic. It was a very interesting discussion around what kind of ship should or could be developed and what is needed to support such innovation. There emerged an opposition between two ideas – the first was to have small ships that are able to go from port to port in the French Littoral area just to increase local trade. The other idea was about large ships, basically intercontinental commercial vessels for transporting international products. We then discussed strategic developments, such as where to invest the money to make necessary improvements. The other points were based around legal and regulatory requirements and needs. The need to adapt existing ships as opposed to building new ones was put forward due to the goals around decarbonisation.



Students surveyed members of the public in Malta to gather ideas on Port of the Future, November 2021



Students gathered views of the public in Malta on climate change issues in littoral areas, November 2021



Here we encountered issues around regulation on the ships themselves, as we could not simply put a mast and sail on a ship without considering the mechanical functioning.

This interaction led us to launch a group where people representing the economic and trade interests, those with a background in legal and regulatory affairs, and members of the shipping and sailing sector came together to produce a project where we can deal with these issues simultaneously treating each aspect with equal importance. IUML's involvement with GRRIP was particularly useful in this regard as it heavily informed our approach to structuring the citizen interaction, forming the working group, and putting the processes in place to gather and report feedback received..

What motivated you to be involved in the project?

We knew we needed to change our practices - it's not an easy task to undertake, and without a project like GRRIP guiding us, undertaking institutional change of this scale, any change might have been a 10-year plan rather than a three-year plan. I believe that given the scale of the societal issues we face today around marine and maritime science, implementing the required and positive changes institutionally in a quick and effective manner is invaluable.

GRRIP could be described as an accelerator of sorts for implementing the changes which we wanted to bring out by giving the opportunity to share our experiences between the 5 case study sites, to learn from the experiences of others and to formulate and implement a best-practice approach. That clearly reduces the risks of launching inefficient actions and helps to duplicate and scale up best practices and adapt to the local culture. Participation in GRRIP also pushes IUML to accept and value a high degree of accountability because we as an institute have to be able to explain and stand over our actions, and report progress regularly. RRI is not simply a set of indicators we have to follow and tick boxes against. It's a long-term process.

What are your personal highlight of GRRIP project.

My involvement with GRRIP has completely changed the way I approach these topics now. In the past we were following external demands. For example, at the start of a big race event at La Rochelle, which happens every four years we are routinely invited to speak about science to the wider society at this event. We would be provided with a stand and it would be the same topic and fixed format all years. So there was no internal motivation.

I'm able to say with confidence now that RRI has become an internal motivation. It's not only sitting with the external demands of the European society. It's an internal motivation, and is supported with robust tools and methods. It has completely changed the way we as researchers are working, because we know how to set an expectation, how to approach an action, while keeping the RRI framework in mind - which is a best practice of conducting research and innovation.

Public engagement to explore possible combinations of offshore renewable energy systems, January 2022





IUML
INSTITUT UNIVERSITAIRE
MER & LITTORAL
FR CNRS 3473

PARTNER PROFILE

The Sea and Littoral Reserch institute (in French, Institut Universitaire Mer et Littoral) is an interdisciplinary research federation (FED Label by Ministry of Research in 2004 and FR labelled by by Ministry of Research and National Center for Scientific Research in 2012) with more than 850 researchers in twenty-two laboratories and research units. These researchers belong to eight institutions spread across France:

- University of Nantes
- CNRS
- Ifremer
- Centrale Nantes
- University of Le Mans
- French Maritime Academy (ESNM)
- French Academy for Marine Affairs (ENSAM)
- Université Bretagne Sud



IUML is one of the top three maritime research and teaching clusters in France and has been doing interdisciplinary research for 50 years (It started fist in the 70's with two laboratories then was structured in 1992 with four laboratories and was known as Sea Substances and Organisms Institut). The institute works in close collaboration with its territory, the Pays de la Loire and Nantes Metropole. The Institute has worked with and is recognised by Grand Port Maritime Nantes Saint-Nazaire, Chantiers de l'Atlantique, Bénéteau, Naval Group, Préfecture Maritime, as well as many SMEs and start-ups.

IUML is a member and administrator of Pôle Mer Bretagne Atlantique (French maritime cluster for innovation in industry, PMBA), the French Maritime Cluster (CMF), the French network of Maritime Universities (RUM), and the European Marine Board. The institute focusses on four research topics :

- Marine Bioprocesses and Resources
- Structures at sea, Ship of the future, Renewable marine energies
- Biodiversity, Health and Coastal Environment
- Blue Growth, and Governance of the Maritime Space

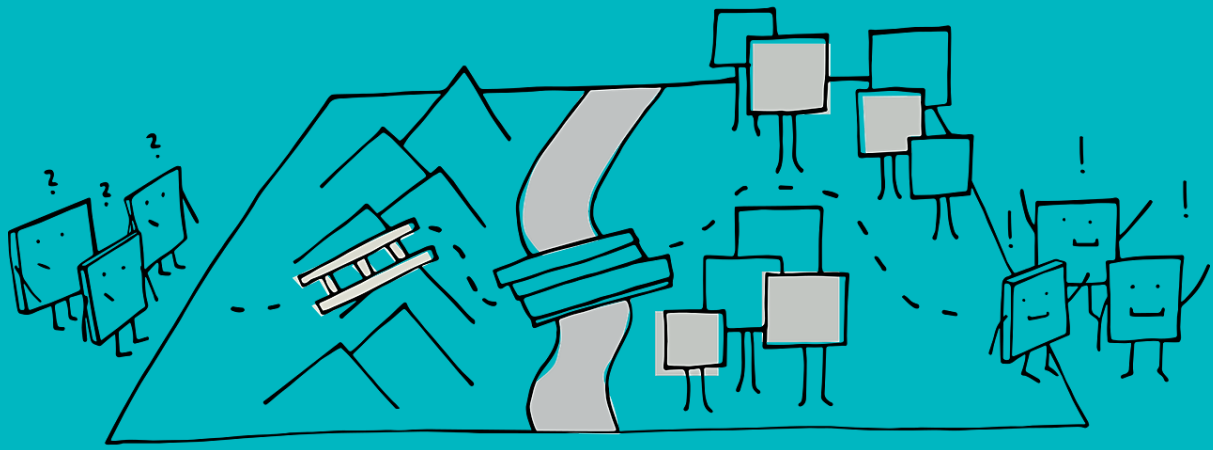
The Institute accesses to large platforms for maritime and marine innovation recognized in France and in Europe: the Microalgae R&D facility, Algosolis, for cutting edge research and innovation in marine bioprocesses; SEMREV and UN@SEA, two offshore tests sites for Marine Renewable Energies; a Platform for Simulating ships behaviour in marine environment; GeM-U-Tec, test facilities for assessing strength of materials and behaviour of sensors used in various structures in sea. The institute is linked with Technocampus Ocean which hosts industry and academia working on marine and maritime innovation.

The Nantes University currently houses IUML, which created in 2015 the first online programme UN-eSEA in France in marine and littoral science, offers nine Master's degree courses in Maritime law, marine spatial planning, etc. NU also offers short term courses and training courses for industry in partnership with the WEAMEC marine energy cluster.



About IUML

- **Location:** Saint-Nazaire, Nantes, Le Mans and Lorient, France
- **Website:** <http://www.iuml.fr>



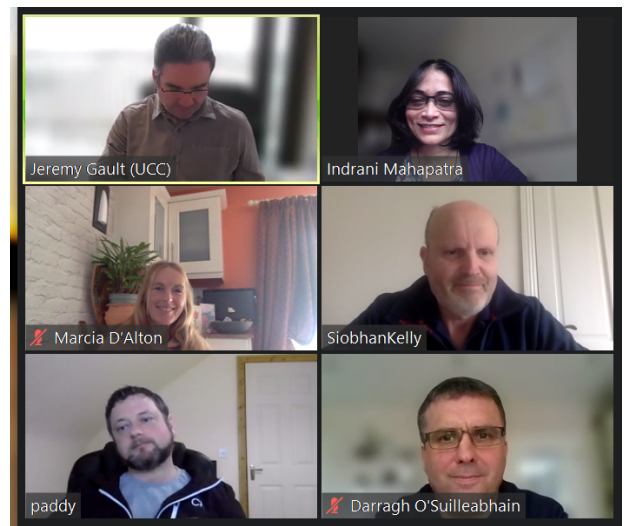
THE RRI IMPLEMENTATION JOURNEY: BARRIERS AND ENABLERS

Malcolm Fisk (DMU)

The five marine and maritime (M&M) research organisations (or 'sites') in the GRRIP project are implementing various measures related to the five pillars (or keys) of gender equality, ethics, public engagement, open access, and science education that constitute responsible research and innovation (RRI). During implementation of these RRI keys, barriers have been faced and enablers have been identified.

These five research organisations work with the private, public, and civil society sectors. Their willingness to join the GRRIP consortium was a reflection of their interest in the RRI pillars and a shared desire to conduct their research work in sustainable and ethically defensible ways. Such ambitions are reflected in the vision and mission statements of these five organisations which clearly indicate their interest to conduct research in the areas of environmental, social, and economic aspects of the M&M sector. These areas are important to a wide range of stakeholders – including their employees and trainees; and the communities that could be impacted by their research work. For example, the majority of the sites have successfully conducted Quadruple Helix (involving local communities, policymakers and government, business representatives, and academics) engagement activities despite the pandemic. This demonstrates public interest in their research and has helped to introduce, and raise awareness of, RRI to a wider audience. As societal and environmental concerns appear to be more prevalent across society the QH are potentially predisposed to becoming more engaged with the research conducted by the organisations. However, gaining active engagement from the QH for the five RRI dimensions is more difficult and will need further consideration.

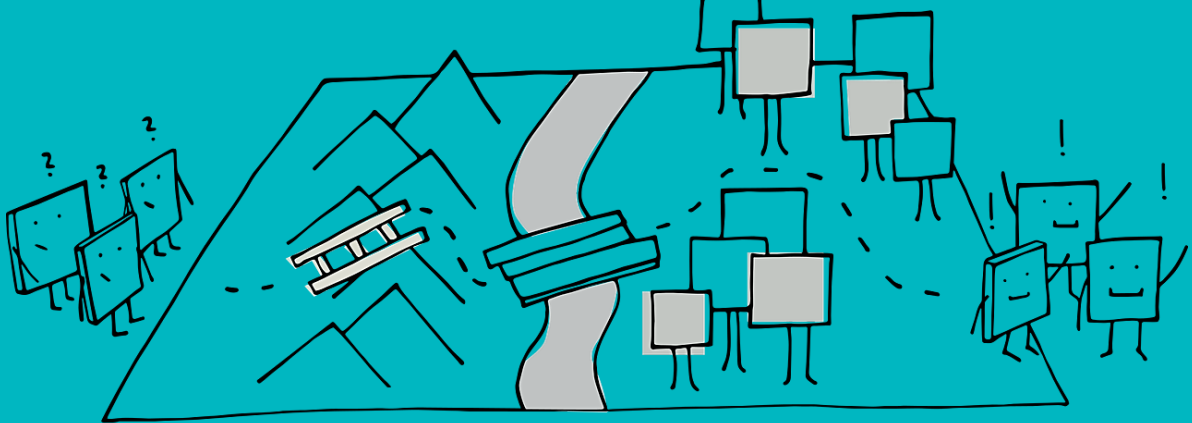
QH meeting (MaREI, UCC), April 2022



The ambitions and the specific governance structures of the sites have influenced their approach to implementing the suite of measures related to the five RRI 'keys'. As part of their preparations, they determined the existing baselines and used these to inform the development their own RRI Action Plans. This process helped them to identify what would be required to bring about stronger or improved alignment with agreed RRI related ideals - of governance more generally; and, more specifically, of gender equality, public engagement, science education, the openness of their research processes and outputs, and ethical aspects of research. These five sites chose interventions from a master list of 72 suggested RRI-related interventions and developed actions plans with targets to aid in monitoring and evaluation. While the five sites have made good progress to meet their targets (at March 2022) for between 18 and 30 interventions (number varies between sites), a number of enablers and barriers have been identified and lessons being learnt and shared within the wider consortium.

An important point is about the challenges faced. Responsibility for shaping the Action Plans and driving forward with the interventions has rested on a core set of people within each of the five organisations and has required significantly more resources than were originally planned for the project. Raising awareness of the RRI agenda amongst senior management and a broader range of research-oriented staff was a priority. There is no doubt that the (RRI responsible) staff have largely succeeded, at least in their initial endeavours – and an enabling context has, therefore, been established - despite some RRI initiatives being potentially seen as 'add-ons' (with expertise, time, and resource implications) to the normal operation of the sites. This means that each site has been able to point to multiple interventions having been made and changes in policy and practice having taken place.

Particular barriers to change at some of the sites are, however, significant because of decisions having to be made by a 'host' body such as is the case for the three sites that are largely subject to governance frameworks of universities (IUML within Nantes Université, MaREI in University College Cork and the Department of Biosciences in Swansea University).



THE RRI IMPLEMENTATION JOURNEY: BARRIERS AND ENABLERS

Malcolm Fisk (DMU)



Engaging citizens to identify research priorities, IUML

More exciting, and heralding the prospect of future successes, are some enablers. The first and foremost of these is in the personalities, commitment, and endeavours of the 'core' RRI staff members in each of the organisations. The second important enabler is the organisational size where smaller (<60 employees) organisations have been able to make rapid progress in implementing some of the RRI interventions. Specifically with regard to the RRI keys, enablers have been identified through supportive national legislation (especially with regard to gender equality); Europe-wide policies and national funding programmes (e.g., of the UK) on open access (with gold preferred more than the green open access) for the publishing of research outputs; and, as noted for three sites, existing ethical frameworks within host universities. In all such cases the sites have adjusted and re-thought, as necessary, the opportunities and challenges both for their marine and maritime context and for the new areas of research and innovation that can apply.

"...enablers have been identified through supportive national legislation (especially with regard to gender equality); Europe-wide policies and national funding programmes (e.g. of the UK) on open access..."

There are, of course, further challenges ahead. But the preconditions for future change for the organisations, following a good start, are now in place. Crucially, the lessons learnt will be shared by the GRRIP project for the benefit of the marine and maritime sector, and the wider RRI community, and should prove invaluable to others intending to implement RRI in their organisation.

About the author

After working in local government and the electronics industry, Malcolm returned to academia in 2010 and is now Professor of Ageing and Digital Health at De Montfort University - where he draws on his expertise on ageing, health and responsible innovation.

Notable, is his recent leadership of two European Commission funded projects (PROGRESSIVE and TeleSCoPE) that focused on service quality standards. Currently he leads work for De Montfort University within projects that focus on responsible innovation. He is also Visiting Professor at Univerzita Hradec Králové (Czech Republic).

Malcolm is widely published and carries a strong reputation in the field of digital health. He is a qualified housing manager, an expert for NICE (the UK National Institute for Health and Care Excellence) and ANEC (the European Consumer Voice on Standardisation).



PROJECT UPDATES & NEWS

TIME4CS EVENT

Time4CS is a Horizon 2020 research and innovation programme, coordinated by the Agency for the Promotion of European Research. Time4CS organised their first citizen science helix event on February 8, 2022, "The Role of Citizens in EU Missions Implementation" in which the GRRIP Project took part in.

Dr Ruth Callaway (Senior Research Scientist, Swansea University) was on the panel discussions on "Citizen Science Activities in the EU Mission" designed around the five missions of Horizon Europe, during which she shared her thoughts on citizen science opportunities in Mission Ocean. Dr Gordon Dalton (Senior Research Fellow, PLOCAN), GRRIP's Project Coordinator, also took part in the dedicated pitch session (designed to search for partners for the upcoming Mission Calls) where he presented his expertise and discussed potential contributions.

SWANSEA UNIVERSITY CONTRIBUTE TO BBC PROGRAMME

Ruth Callaway (Senior Research Scientist, Marine Biology at Swansea University) featured as an interviewee on a recent episode of BBC's Great Coastal Railway Journeys television programme.

Ruth joined host Michael Portillo in the Mumbles to discuss new research into sea walls, providing insight into the ground-breaking design work on a new generation of sea defences, which takes into account both engineering properties and biodiversity. Researchers are monitoring a range of patterned hexagonal tiles to see which ones coastal creatures and seaweeds prefer. Skip to 11 minutes to watch Ruth's contribution (you will need to be based in the UK to access the iPlayer).



IUML'S PARTICIPATION IN OCEAN BtoB WORKSHOP

IUML presented the GRRIP project during the plenary session of the Ocean BtoB event on February 22, 2022. The event was supported by Pôle Mer Bretagne Atlantique, an accredited Economic development cluster in the maritime area. During the session IUML distributed a survey to explore priority research topics in marine renewable energies.

WHITE NIGHT FOR RESEARCHERS

In the "White Night for Researchers" event, held in Nantes on January 27, 2022, IUML organized a citizen engagement event, with close to 50 people attending the session on planning aspects of offshore wind energy platforms.

The participant(s) were asked to place a magnet on a map of the region where they thought the next offshore energy system could be and people from four disciplines - engineering, law, economy and spatial planning - discussed with the participant(s) if it was possible. The engagement session explored what other economic activities (e.g., algae cultures) could be integrated with these platforms.



IUML'S PARTICIPATION IN BLUE DAY WORKSHOP

IUML presented the GRRIP project during the plenary session of the Blue Day workshop devoted to Virtual and Augmented reality on March 10, 2022.

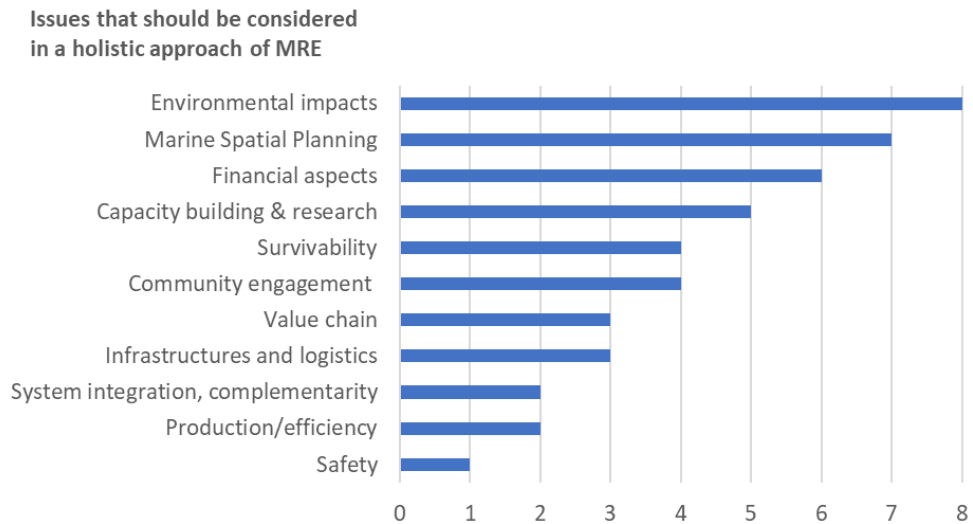
The event was supported by Pôle Mer Bretagne Atlantique. During the event IUML distributed a survey to explore priority research topics in Marine Cybersecurity.



PROJECT UPDATES & NEWS

Stakeholder Views on MRE Development

WavEC conducted a survey to understand the issues that should be considered in large scale marine renewable energy (MRE) development, which actors needed to be involved and how to involve them and the relevance and impacts of various issues identified. The survey was sent to industry representatives, policymakers and government, academia, and civil society.



Consideration of environmental impacts, marine spatial planning, and financial aspects were the top three issues selected by the survey respondents.

The survey respondents were predominantly from industry and academia (40% each from both stakeholder categories).

Responses from representatives of government and civil society composed the remaining 20%.

Of the total respondents who completed the survey, 80% identified themselves as male and 20% female.

STAKEHOLDER ENGAGEMENT EVENT: OFFSHORE WIND SUPPLY CHAIN IN PORTUGAL

Offshore Wind Supply Chain in Portugal is a stakeholder engagement event organized by the European Funded TWIND project, that aims to facilitate knowledge exchange to support offshore wind growth. As part of the project the consortium prepared a stakeholder's matrix to identify key actors in the supply chain and open opportunities to companies interested in offshore wind in Portugal.

A stakeholder engagement side event (hybrid) took place at WindEurope 2022, in Bilbao, on April 6, from 11am to 12:30 pm (CEST).

This event presented the main objectives, activities, and results of the project, with a focus on the stakeholder matrix. It also gathered stakeholders that will present their experience, interests, and future challenges in offshore wind.



WavEC COLLABORATIONS



WavEC as a FreShER project partner was part of the webinar organised on April 20, 2022 aimed at floating solar energy technology developers, supply chain, authorities and certifiers, scientific community, public sector, media and general public. The goal of the FreShER project is to demonstrate and validate an innovative mooring solution in a full-scale floating photovoltaic plant which is 50% more cost efficient compared to standard solutions.

The project is deployed in Alqueva dam (Portugal), an hybrid solution combining hydro and solar power. The methodology followed is expected to be of great value for certification bodies and the development of standards for the sector in the near future.

FreShER project is funded by the European Maritime and Fisheries Fund (European Union), and has the participation of Seaflex, EDP – Gestão da Produção de Energia SA, ISIGENERE, Research Institutes of Sweden, EDP – Center for New Energy Technologies and WavEC Offshore Renewables.