

AUTUMN EDITION (2022)

GRRIP NEWSLETTER

REFLECTIONS ON A CONTINUOUS JOURNEY



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



GRANT AGREEMENT ID: 820283

FOREWORD

Prof. Malcolm Fisk

The umbrella term 'Responsible Research and Innovation (RRI)' and its tenets are well known among organisations funded by the European Commission to support its implementation. But the 'RRI' label, as pointed out by Jeremy Gault in this Newsletter, is not known more widely.

Therefore, when engaging with different stakeholders, the five marine and maritime research organisations (the GRRIP case study partners), have pointed to the importance of the tenets (often referred to as the 'pillars' of RRI) rather than imply any need to subscribe to a wholesale 'package'.



This made good sense in view of the nature of some of the challenges and opportunities they encountered - aspects which were not foreseen when each of those partners selected implementation priorities for inclusion in their action plans.

In this newsletter, you will get a glimpse of how the tenets and broader aspects of RRI were embedded by the partners (MaREI, Swansea University, PLOCAN, IUML, WavEC) and their experiences so far. As noted by Eric Jensen in this Newsletter, the 'journey' of these organisations has been iterative and has evolved - this being especially so for the three case study partners that were hosted by universities.

He talks, in that context, of the 'realities' that could be instrumental in slowing or supporting desired policy and practice changes. Conversely the partners sometimes benefited from initiatives existing at the universities (notably for staff training) that fitted, or could be steered towards concordance, with some of the RRI tenets that were 'in focus'.

In an insightful interview, Jeremy Gault mentions that he has started embedding the RRI concept in new funding proposals, and how gradually staff at MaREI centre have started to give additional focus on those aspects of their research that relate to its impact. He describes, with such research in mind, how there is a need to embed the research in the local community - with this and interactions with other case study sites having brought about some notable successes through engagement with a wider public. It is notable that it was such 'grassroots' implementation of the action plan for his organisation that was a particular 'highlight' for Gault. Getting to the grassroots, sharing our views, and finding new understandings between us, is surely an objective that we can all endorse.

Professor Malcolm Fisk works within the Centre for Computing and Social Responsibility at De Montfort University in Leicester, United Kingdom. His career embraces roughly equal periods in municipal government, academia and the commercial sector - with his knowledge of the latter combining in his work as leader and/or partner in multiple European Commission funded projects. His is widely published and a regular, often keynote, speaker at international events.



INTERVIEW

Jeremy Gault, MaREI Research Coordinator – Coastal and Marine Systems, and Beaufort Operations Manager

What motivated MaREI to be part of the GRRIP project?

The GRRIP project is about operationalising the tenets of RRI and obviously gender equality, public engagement, science education, ethics, and open access are relevant to all organisations.

As a university, we would have been involved across all five aspects for decades, even if strictly speaking they wouldn't have been referred to under the banner of RRI. Some of them we have definitely been involved in longer than others.

Obviously science education is a core value of the university. Open access by comparison has been more prevalent in the last few years. In terms of public engagement, we've always been involved in that as a Centre - since early days we have focused on coastal management, and one of the key aspects in coastal management is involving the public. So the Quadruple Helix (QH) approach of GRRIP was of significant interest to MaREI.

We are soft funded, so we do look at what's happening in terms of evolutions within the context of the European Commission, not just in the GRRIP project, but also the integration of RRI within other project areas.

UCC is a green campus, and has now considerable focus on the SDGs and mapping research against it which are linked back to RRI. The university would see itself as being at the forefront of that. In addition to this, we've been involved in a number of other projects that have involved the tenets of RRI.

With GRRIP I think we saw the benefit at research groups' level in understanding RRI better, especially with regards to future applications for European funding. The gender queries are probably the ones that have the most relevancy along with open access. Those are the ones that the funding agencies tend to focus on, although it very much depends on the call.

But then on different sets of funding we would look at public engagement, but we would probably call that impact. That's what it tends to be phrased in the European research spectrum. From our perspective, we viewed the constituents of RRI in terms of MaREI as a baseline. And we looked at where we could improve on those. So hopefully through GRRIP we've improved at the research group level, but probably at the institutional level as well.

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

So with regard to specific actions, first of all, socializing that GRRIP existed and publicising RRI as a concept within the institution.



Jeremy Gault

We presented to the researchers in MaREI, as well as management and the directors of the institution, to highlight our involvement in the project, and to reaffirm that RRI as a concept was out there. We also held interviews with staff members. We had questionnaires with the top-up / top-down format, and looked at some barriers and challenges of RRI implementation with staff members. We do have open access as a metric so we were able to look at publications, for example.

And from that, we were able to determine probably around half our publications were open access in the last seven or eight years. We've looked at projects which were both quadruple helix and triple helix – in truth it was skewed more in terms of numbers towards triple helix, mainly through Interreg, because it works on triple helix, although it now extends to quadruple helix as well.

At the start we had what was called an expert couplet, which is ourselves and the local authorities coming together to jointly engage with the local community. So that was a triple helix approach. It's a slightly different, in that you have the couplet, and then you engage with a third party rather than all three parties being equal partners if you like.

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

Our providence, integrated coastal zone management, one of its key principles is to engage society while also taking long term views, we had these triple helixes in Integrated Coastal Zone Management (ICZM), and from other research themes, we have people who engage with industry routinely.

We have worked with virtually every university in Ireland, as well as universities across Europe, and also civil society organizations. So we had a background and expertise in that. We have in-house capacity in that we have people who are communication experts in research who lead the dissemination and exploitation work packages in major projects.

And then we also have a full time Education and Public Engagement (EPE) manager who works exclusively on public engagement as part of the MaREI Centre. And that transcends across the universities because every Science Foundation Ireland (SFI) funded centre in Ireland has one of these EPE managers which allows us to push open doors.



Dingle Peninsula 2030 Climate Hack for Schools activity

There's an EPE strategy at MaREI. There's an EPE advisory board and under the SFI there are KPIs in relation to science education and public engagement. However, some people do find it more difficult to engage than others, and it is subject specific.

Given the insights of RRI, it can potentially help them see that there is a part of their job that could be interesting to people, especially as people become more tech aware, for example. And then we always have people in general, who might be interested in societal engagement as a concept and see the benefits of public engagement. Some people won't see it as being a significant component of their work. But the framework for funding has changed. If you look at the way that all funding is done now, there's equal weighting for impact as there is to the science and the running of the project.

So in Horizon Europe, it's three sections, five marks. One is for science. The other two are not science. But getting scientists to work on the other two is much harder to do. And yet scientists, by definition, should want to talk about their science. They should realize there is a need to talk to different people about their work. Before scientists talked to scientists. Occasionally they talked to governments. They didn't necessarily see the benefit of speaking to society because they didn't really make the link between society voting for the politicians that give them money to do their research. I think it's Einstein who said if you can't explain your science to somebody who knows nothing, then you know nothing about your science. You should be able to break it down.

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

Some of the most obvious barriers are institutional, or rather pan-institutional. In reality, the way that universities advance researchers' careers isn't based on things like societal engagement. It's nice to have, but it's not going to get you your interview.

Then there's the need for resources, whether that's time or funding. MaREI is soft funded, so people are employed to produce the deliverables in the projects. And if the project hasn't been written to include societal engagement then they don't necessarily do it. Even if they want to do it, they may not have the time or resources. Most projects have a public engagement component now. So, what you need is the people to put their hand up and be involved and get allocated resources to it. The difficulty in any project is getting the resource allocation for public engagement to the correct level. It tends to be a bolt-on.

And then bookending that is the dissemination and communication. This is back to the paradox that project management and the engagement and dissemination, they have equal weights, yet, if you look at the effort that goes into developing a proposal, more effort is on the meat (the science) than on the bread.



Delegates from the Ireland-Wales Forum at MaREI

That's changing slowly. People here tend to work the other way around and look at the impact, and this is where RRI fits in. What impact will that have? Using the metrics that RRI provides you can say, well, how are we performing against that? And sometimes, because of the research program, there isn't the pressure to actually engage society – is it necessary?

We do have projects obviously in various spectrums, like aquaculture for example, where you really do need to engage with the public. And you also have to remember, you have a national framework. Traditionally in Ireland, the public would have been very sceptical regarding structural development. And there are good reasons for that. So we need to be better at explaining infrastructure and development and public engagement by scientists is part of that. Wanting to have renewable energy is fine for example, but then you need to explain to people why and what the impact will be to them.

How did MaREI benefit from the societal engagement workshop?

In terms of the benefits of having a quadruple helix framework, I was genuinely surprised at the interest shown. People were really interested and asked very insightful questions or provided interesting comments. The feedback we got back from the events was very positive – they were eager to participate in the next upcoming events.

Having a subcommittee of the QH also helped us greatly to get a flavour of what to expect. We can't solve everything and I think we were fairly realistic when talking to people a what we could and couldn't do. And if we can get an idea of what they want, that's another way of feeding back across the science policy gap to say, 'we've spoken to people in our region and what they really want is this'. And to do that, we would need some sort of dedicated funding call from the government to look at that, for example.

To be fair, there are some dedicated calls coming out from the SFI about societal engagement, and we've built upon some of pilot studies we've done in Dingle for example, which have in turn evolved into fully realised structures.

But perpetuating those is always going to be difficult. An idea is that when we open up the MaREI building fully, we can get more people around, so they can experience first-hand what it is we actually do.

Editors' Note: Since this interview Jeremy has left his role at MaREI and is now a Project Manager at the Simply Blue Group.



Did any future collaborations or research ideas or meetings emerge as a result of MaREI involvement from the project?

Luckily we had the UNIC City Lab project's partnership. Finding out what they did and running the QH engagement workshop jointly with them was really good, because they have a different understanding to the way we would run things. I think the way that they produce materials afterwards, it's slightly different.

We would be very matter of fact, bullet-pointed. Whereas their approach is more of a qualitative analysis of what people said and the way they said it, which is interesting. We're used to co-creating and co-designing. We've interacted with other projects before, but it's the first time probably we've engaged in a truly joint initiative between projects.

There is this kind of difficulty with what happens to RRI next. The tenets of RRI are always going to be there, whatever the umbrella is called doesn't really matter to me. For example, in all the new proposals that I've written or been involved with, they have benefited from GRRIP. So even if it's nothing to do with RRI, I've put in elements into that proposal, which I think or hope strengthen that proposal. I wouldn't be looking for RRI in the next project. I'd be looking for RRI in the next series of projects and looking for ways to mainstream the pillars internally. For me, that's better than having specific RRI projects.

What are your personal highlights of GRRIP project?

Well, after a number of years, maybe it's a very small victory, we now have a gender-neutral identifier in our forms, which we didn't have previously. I'd mentioned the quadruple helix - I think re-establishing that is essential for a research centre. You've got to have a context to do so, and GRRIP gave that context. We are really good in a European context for going out and meeting people. We're not however as good at embedding ourselves in our local community.

At the University level we present to each other all the time. But as a Centre, we very rarely open up and say, 'this is our research come and have a look at what we do'. I think people would be more understanding when it comes to the government putting money into something, if they knew what it actually did. For that reason the QH engagement is essential for me.

Something else beneficial which came later in the project - just talking to the other four case study sites and actually hearing first-hand accounts of what other people were doing, getting the reassurance that similar difficulties arise across sites, that these issues are not unique to you, sharing solutions through our experiences and mutual learning was really helpful. I don't think that was actually envisaged as a thing that would happen, it just evolved naturally. And getting to know the people involved in those specific sites was quite interesting because then you get a flavor of both the uniformity in Europe, but also the disconformity. We're different countries and even within those countries there are significant regional differences. So an appreciation of the grassroots implementation was something of a highlight for me.



The National Ocean Test Facility at MaREI, Beaufort building

PARTNER PROFILE

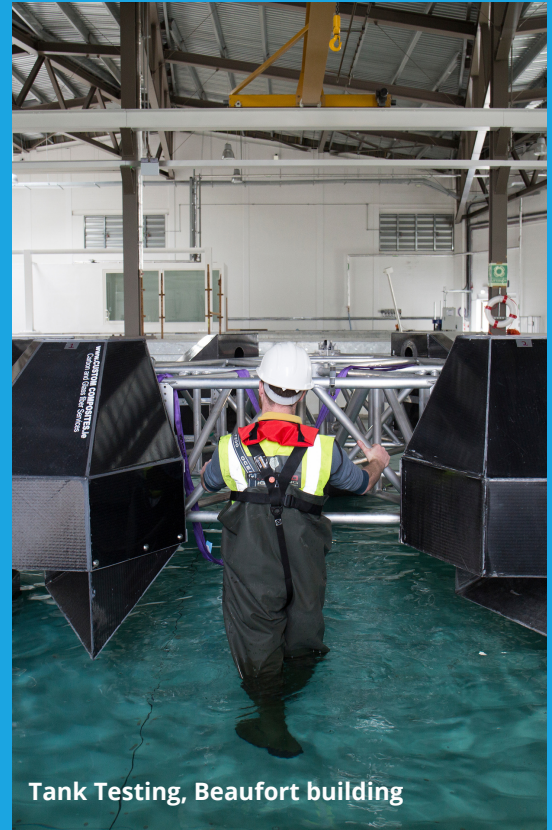
MaREI is the Science Foundation Ireland's (SFI) Research Centre for energy, climate and marine, coordinated by the Environmental Research Institute (ERI) at University College Cork. MaREI has over 250 researchers across 13 partner institutes in Ireland working with over 75 industry partners focussing on the energy transition, climate action, and the blue economy. MaREI delivers impactful research by collaborating with industry, informing policy, and empowering society.

MaREI's research capabilities cover a wide range of cross-cutting topics in marine renewable energy technologies, materials and structures, observation and operations, coastal and marine systems, bioenergy, energy policy and modelling, and energy management.

MaREI researchers work with collaborators in more than 36 countries and research results is translated into policy insights – this has underpinned energy, marine and climate policies of the Irish Government over the past eight years, in addition to informing EU policy. Through engaged research and dialogue with stakeholders and communities, MaREI also supports the human and societal dimensions of climate action and marine conservation.

MaREI is committed to advancing research which includes stakeholder engagement and involvement across the research life cycle. The approaches include participatory and deliberative processes, action research, and co-production of research where work is done alongside practitioners and community partners.

For example, in the recent SEAI Sustainable Energy Award 2022 event, the Corca Dhuibhne Sustainable Energy Community, who collaborate with MaREI researchers, the local community (including schools, transport, farming and tourism sectors) to foster a sustainable low-carbon transition took home the award of Inspirational Energy Community. Conducting research with the wider community is recognised by University College Cork. UCC bestowed MaREI researchers "Engaged Research Award 2021" for the Corca Dhuibhne 2030 Project. This project has also been recognised by the United Nations as a UN Living Lab.



Tank Testing, Beaufort building



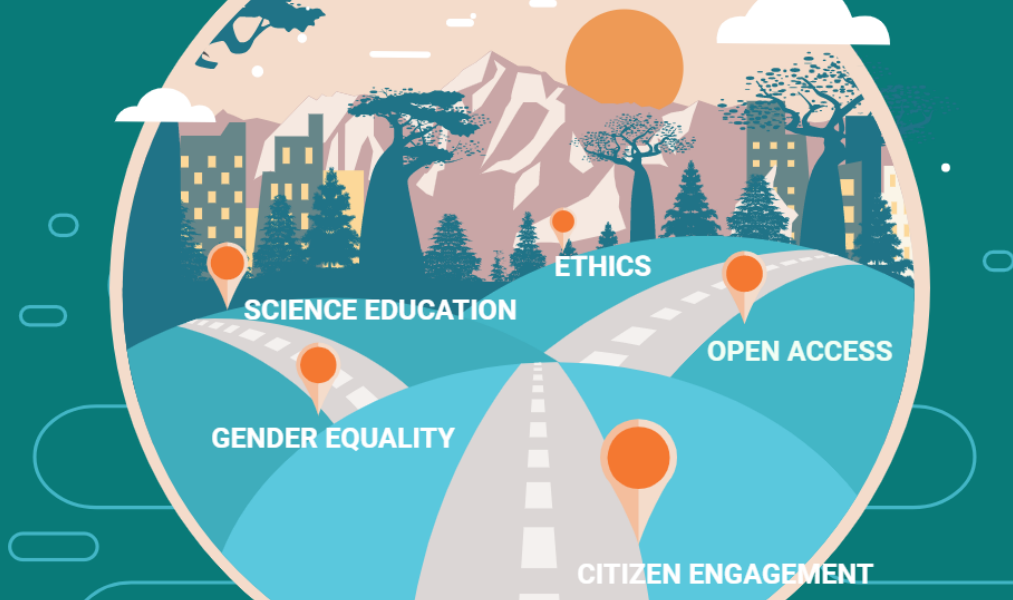
Members of the Dingle Hub team receiving a Climate Action Award for the Corca Dhuibhne 2030 initiative



MaREI Beaufort building, Ringaskiddy, Co Cork

About MaREI

- **Location:** Beaufort Building, Environmental Research Institute, University College Cork, Ringaskiddy, Co. Cork
- **Website:** <https://www.marei.ie/>



The road to responsible research and innovation: Experiences from the GRRIP project

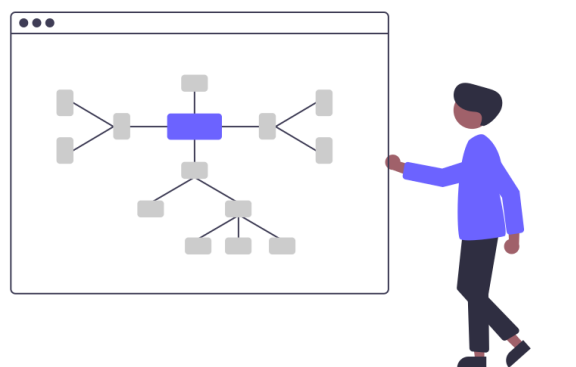
Eric Jensen

GRRIP has provided the impetus for initiating, accelerating, catalysing and galvanising organisational transformations towards more responsible research and innovation (RRI). This has been undertaken in research performing organisations (RPOs) across Europe, one of which is also a research funding organisation (RFO).

Two of the GRRIP case study partners are marine research-oriented departments or centres within large universities: MaREI in University College Cork (Ireland) and the Biosciences Department at Swansea University (UK). The other implementing partners are the marine research organisations WavEC (Portugal) and PLOCAN (Spain) and the research federation IUML (France). While there are a range of perspectives globally on how to make research and innovation more 'responsible', the European Union's strategy has prioritised improvements in gender equality, ethics, public engagement, science education, and open access. Years into GRRIP's effort to bolster policies and practices in these areas, it is time to reflect on what has been achieved so far for the case studies involved.

GRRIP case study partners' experiences highlight the iterative and evolving nature of RRI implementation. These experiences within marine and maritime research and innovation organisations show that the journey to greater embedding of RRI involves a mix of planning, social, emotional, and material support as well as detailed administrative work. This can include peers giving informal advice, positive encouragement and sharing the benefit of their experiences. Organisational change in this way, therefore, takes many forms, with twists and turns being a normal part of the journey.

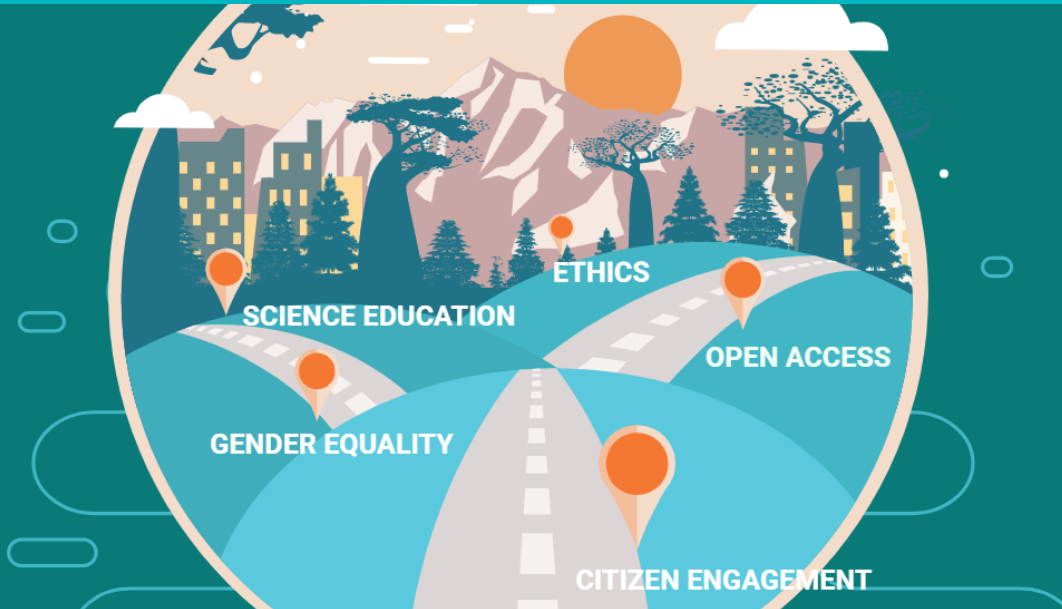
Case study partners encountered plenty of challenges during the GRRIP project. The first of these was in the evaluation, monitoring and self-reflection regarding changes required to deliver on their RRI action plans. As reported by one 'it was difficult to turn the camera back on ourselves'. Another challenge was that when viewed retrospectively the original action plans were not always sufficiently aligned to the realities faced by the partners seeking to implement them. One advised that others taking on this challenge should 'make sure (they) have a clear understanding of how (their) organisation works' when devising such an action plan. They advised others 'be realistic about the challenges involved in culture change ... you need to be focused and gradualist.' Not to do this means that worthy and ambitious plans can run foul of practical constraints in the norms, rules, and structures of the organisation.



This and other challenges took on a different form depending on the size of the organisation. For example, case study partners that were operating as research centres or departments within large university systems encountered both benefits and limitations from this position. On the positive side, such centres and departments could tap into larger university-led initiatives and training provision that helped to facilitate RRI implementation.

On the negative side, the flow of information through university's complex (sometimes fragmented) structures could make seemingly simple tasks such as understanding who in the unit had participated in relevant training, difficult to navigate. One case study site lead noted that, for them, at the outset of the project there was 'no systematic picture of the training use and quality, and therefore what gaps' for RRI-related training provision needed to be addressed. The importance of identifying early "quick-wins - with high impacts and low cost" was highlighted by another site lead. This is because such an approach can help to build motivation or momentum to advance RRI action plans within an organisation.

It follows that smaller research organisations found it easier to implement changes and track progress. For example, they could introduce new training programmes without needing to negotiate with a centralized university training system. However, smaller organisations also have less people and resources for implementing the diverse range of actions needed to fulfil the various RRI dimensions.



The road to responsible research and innovation: Experiences from the GRRIP project

Eric Jensen

This issue of less staff, in some cases, meant a particular challenge for action plan implementation was faced when there were gaps in RRI-related expertise within the organisation. To stick with the same example, while a new RRI training programme could be introduced without protracted negotiations or bureaucratic hurdles, there may not be the relevant internal expertise to deliver training that covers the intricacies and nuances inherent in gender equality, ethics, and other RRI dimensions.

As the RRI implementation journey in GRRIP developed and such challenges emerged, case study partners were able to learn from and gain inspiration from each other. This suggests that a key benefit to undertaking such a change initiative lies in working together with other RPOs rather than 'going solo'. The GRRIP project has enabled such a collaborative approach.

Without direct funding, research organisations typically collaborate through voluntary professional networks that help to sustain a community of practice around a specific topic. In the case of RRI, networks such as RRING, Living Knowledge and the RRI Ambassadors Global Network (a LinkedIn group) have already been established and could be tapped into or extended to add a focus on organisational change for interested organisations and individuals.

Another point highlighted by the experiences of RRI action plan implementation is the importance of the wider national and international policy context for RRI. For example, decisions about which aspects of RRI to focus on were influenced by national government regulations and European funding priorities. One partner prioritised gender equality out of the range of RRI principles, because it was mandatory to have a gender equality plan to receive European Commission funding and to comply with national legislation.

Finally, while availability of resources is critical to RRI change processes, fostering internal transformations has tended to take more effort. In some cases, internal structures, norms and established practices may seem immovable, at least within the space of a couple years of often small-scale, unit-level interventions that were within the GRRIP project. Changes in research and innovation systems take time. Overall, this will be a marathon for the case study partners. GRRIP is helping with just one part of the journey to ensure that their research and innovation makes a difference for the marine and maritime research sector and with lessons learnt that can benefit people and communities in Europe and beyond. As these research organisations continue their journeys, they will bring with them the relationships and know-how they have developed during the project.

About the author

Prof. Eric A. Jensen has a global reputation in social research and impact evaluation. Jensen is currently Senior Research Fellow at ICORSA (International Consortium of Research Staff Associations), contributing RRI, evaluation and public engagement expertise to the GRRIP and MUSICA projects.

Jensen is a senior consultant for UNESCO, designing the monitoring framework for the Recommendation on Science and Scientific Researchers. He is an Associate Professor of Sociology at the University of Warwick (Career Break) and a Civic Science Fellow at the University of Illinois at Urbana-Champaign.

His expertise spans themes relating to evidence-based science communication (see sciencecomm.science), public engagement, research impact, open science and responsible research and innovation policies and practices. His PhD is in sociology from the University of Cambridge. His recent books include *Science Communication: An Introduction* (World Scientific) and *Doing Real Research: A Practical Guide to Social Research* (SAGE).



PROJECT UPDATES & NEWS

GRRIP ANNOUNCE FINAL CONFERENCE DETAILS

Title: Grounding Responsible Research and Innovations Practices (GRRIP) in marine and maritime research organisations: Explorations and Determinations

Dates: 1-2 December 2022

Location: PLOCAN, Taliarte, s/n, 35214 Telde, Gran Canaria (Las Palmas), Spain (hybrid event)

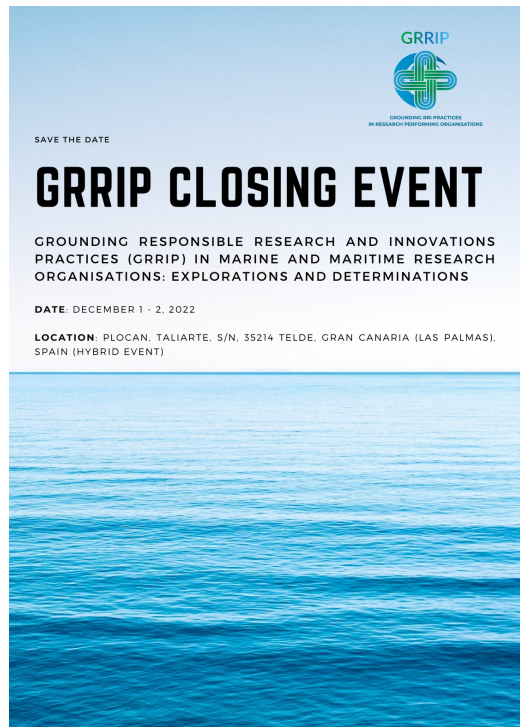
The GRRIP project is excited to announce preliminary details for its closing event. The project, which is set to conclude in December 2022, has overseen the creation of some 18 to 30 interventions, and associated action plans for four research performing organisations (RPO) and one dual-function RPO and research funding organisation (RFO) in the marine and maritime sector.

This has been achieved with the help of seven RRI expert partners of the consortium, with a strong focus on engaging representatives of the Quadruple Helix (higher educational institutes, private sector, government, and civil society).

The conference aims to:

- Share the journey of RRI institutionalisation: assessing RRI baseline, identifying interventions, and implementing them.
- Exchange experiences of the challenges and opportunities in the RRI implementation activities.
- Present the monitoring and evaluation results.
- Provide a space to exchange ideas and practices with other Swafs projects and Quadruple Helix members.
- Launch the Marine and Maritime RRI community.

The full program will be circulated soon via the GRRIP website, GRRIP social media channels and to the projects newsletter subscribers.



GO SEE THE SEA

IUML organised a public engagement event on 27 August 2022, at the behest of the President of Loire-Atlantique department.

The “Go See the Sea” event is organised every year, and moves from one town to another along the 133 km Loire-Atlantique coast. The goal is to raise public awareness about the oceans (marine pollution, renewable energies, safety at sea, etc.).

In 2022, the event was in the French commune, Le Pouliguen. IUML designed the event based on Jules Verne’s stories where it presented how marine species adapt and form colonies in submerged part of wind turbines. They showed samples collected at various depths (2 to 20 meters depth) of wind energy infrastructure, e.g., mussels, corals, and worm tubes to the public.

The topic of marine renewable energies is highly controversial in France, however, those attending IUML’s stand were found to be highly engaged, they asked questions and showed interest to understand the impacts of MRE structures. A PhD student, Antoine Dubois, whose thesis focuses on the subject of the public’s perception of marine renewable energies, distributed a questionnaire to assess the perception.

WAVEC ANNUAL SEMINAR 2022



WavEC is organizing its annual seminar this year on November 10th, in Lisbon, Portugal. This is an event that WavEC organizes every year since 2012 with an Embassy, where technology developers, project developers, research institutions, academia, consultancy providers, insurance companies, law firms and policymakers come together to discuss the development of offshore renewable energy in Europe.

WavEC is organizing their Annual Seminar in collaboration with the Embassy of Spain in Portugal and will be discussing the prospects of offshore wind development in the Iberian coast, supply chain and innovative projects. This years seminar is an in-person event. Entry is free but spaces are limited. If you wish to attend then early registration is recommended. You can find the links for the registration and programme below.

- REGISTRATION:
<http://wavecseminar2022.tacongresspco.com/>
- PROGRAMME:
<https://www.wavec.org/en/events/wavec-seminar-2022>



Attendees at the Go See the Sea event