

## D8.1: Plan on Monitoring Processes and Indicators

### Document Information

<b>Title</b>	<b>Plan on Monitoring Processes and Indicators</b>	
<b>Distribution</b>	Public	
<b>Document Reference</b>	GRRIP T8.2: Monitoring methods and implementation GRRIP T6.4: Risk management plan	
<b>Deliverable Leader</b>	Xiaoyue Tan	EUR
	Hub Zwart	EUR
<b>Contributing Authors</b>	Xiaoyue Tan	EUR
	Hub Zwart	EUR
	Caitriona Mordan	DCU
	Carolina João da Silva	WavEC
	Elmina Homapour	DMU
	Indrani Mahapatra	UCC
	Kate Sahan	Previously worked at EUR
	Malcolm Fisk	DMU
	Ruth M. Callaway	SU
	Silvia Martín	PLOCAN
<b>Acknowledgement:</b> We acknowledge Patrizia Grifoni (CNR) and Fernando Ferri (CNR) for their contributions on the intervention list, and Colm G. Kearns (DCU) for his inputs into this document.		

### Revision History

Rev	Date	Description
01	14/01/2020	Draft by Kate Sahan, Hub Zwart
02	11/09/2020	Draft modified by Hub Zwart, Xiaoyue Tan
03	17/12/2020	Draft section for monitoring methodology provided by WP6
04	04/02/2021	Draft revised by Xiaoyue Tan and Hub Zwart
05	05/04/2021	Draft revised by Xiaoyue Tan based on the comments from WP6 and WP7
06	13/04/2021	Draft revised by Xiaoyue Tan based on the comments from project coordinator
07	04/05/2021	Draft revised by Xiaoyue Tan based on the comments from partner sites



08	25/05/2021	Draft revised by Xiaoyue Tan based on the comments from Malcolm Fisk from DMU
09	30/09/2021	Revisions made by Xiaoyue Tan
10	05/10/2021	Finalised by Xiaoyue Tan, Indrani Mahapatra, and Jeremy Gault

## Legal Disclaimer

The views expressed, and responsibility for the content of this publication, lie solely with the authors. The European Commission is not liable for any use that may be made of the information contained herein. This work may rely on data from sources external to the GRRIP project Consortium. Members of the Consortium do not accept liability for loss or damage suffered by any third party as a result of errors or inaccuracies in such data. The information in this document is provided “as is” and no guarantee or warranty is given that the information is fit for any particular purpose. The user thereof uses the information at its sole risk and neither the European Commission nor any member of the GRRIP Consortium is liable for any use that may be made of the information.



## Acronyms

AP	Action Plan
M&M	Marine and Maritime
QH	Quadruple Helix
RPO	Research Performing Organization
RFO	Research Funding Organization
STI	Science, Technology and Innovation
WP	Work Package
RSSR	Recommendation on Science and Scientific Researchers



## Table of contents

<b>1 Introduction</b> .....	<b>5</b>
1.1 <i>GRRIP monitoring and evaluation</i> .....	5
<b>2 GRRIP institutional and cultural interventions</b> .....	<b>7</b>
<b>3 GRRIP monitoring methodology</b> .....	<b>8</b>
3.1 <i>GRRIP indicators for monitoring</i> .....	8
3.2 <i>An example action plan for monitoring intervention implementation progress</i> .....	9
3.3 <i>GRRIP monitoring tools</i> .....	13
3.4 <i>GRRIP monitoring process</i> .....	15
3.4.1 <i>RRI operational base within the RPOs and RFO for GRRIP monitoring</i> .....	15
3.4.2 <i>Complete Action Plan Frameworks for monitoring use</i> .....	15
3.4.3 <i>Online project management</i> .....	16
3.4.4 <i>Quarterly meetings with partners</i> .....	16
3.4.5 <i>Reflect and refine tools and processes</i> .....	17
3.5. <i>Plans for ensuring sustainability of Action Plans</i> .....	18
3.6 <i>Plans for ensuring financial sustainability of GRRIP platform</i> .....	18
<b>4 Conclusions</b> .....	<b>20</b>
<b>Appendix A List of Institutional and Cultural Interventions for GRRIP</b> .....	<b>21</b>
<b>Appendix B List of GRRIP Indicators Proposed for Monitoring</b> .....	<b>25</b>



## 1 Introduction

The major aim of the GRRIP project is to embed sustainable RRI practices in four research performing organizations (RPO) and one dual-function RPO and research funding organization (RFO) (total five RPO&RFO) in the marine and maritime sectors to enable institutional and cultural changes in these sectors. The project centres on the six RRI dimensions: ethics, gender equality, open access, science education, public engagement, and governance in which self-tailored RRI Action Plans (APs) is to be co-developed and selected interventions implemented. Quadruple Helix (QH) stakeholders will be engaged, where appropriate, throughout the AP development and implementation process within each RPO&RFO. In order to facilitate AP interventions through an ongoing learning process, it is necessary to establish indicators and carry out impartial monitoring, reflection and evaluation.

### 1.1 GRRIP monitoring and evaluation

Monitoring and evaluation are two interdependent but different concepts. Monitoring concerns regular systematic collection and analysis of information to track the progress of intervention implementations against pre-set targets, objectives, and milestones. Monitoring provides information on where a project is at any given time (or over time) relative to respective targets and outcomes. With data on specific performance indicators, monitoring provides records of activities and results, and signals problems that may hamper the effectiveness and efficiency of the interventions. However, monitoring only presents what has been delivered, so it is not sufficient to answer some complicated questions, such as why a particular problem arose, or why a particular outcome occurred or failed to occur.



According to the GRRIP project plan, APs were to be designed and implemented for each RPO&RFO informed by the Audit (detailed in the D5.2 report). The interventions in the APs were to be planned for institutional and cultural changes covering policies, processes and practices. Monitoring will provide data to, and be complemented by evaluations, which will answer complex questions concerning RRI interventions.

The Action Plans are formed from selecting a suite of interventions for each case study site, which consists of the most relevant interventions based on the RRI Baseline Level (see deliverable D5.2) and commitments in the proposal. The GRRIP Institutional and Cultural Interventions are grouped under 6 goals for actions. The interventions derive from the research phase of GRRIP (WP3, WP4) as well as recommendations from other RRI projects and literature. The selection of the most relevant interventions per site is based on recommendations given in D5.2 (the results of audit surveys and interviews). The list of interventions (total interventions: 72, as can be seen in Appendix A) aims to provide guidance on selecting evidence-based practices to enable the sites to practically embed RRI into the institutional structure and fabric. A specific list of meaningful indicators best able to measure and understand the extent of implementation of selected RRI interventions both during and post project completion will be created and adjusted by joint efforts of GRRIP WP leaders and partner sites.

This document details the monitoring plan and methodology and provides guidance for the monitoring implementation during and post the GRRIP project. It has been informed by the APs (developed by each GRRIP partner site for the interventions selected with support from WP6 and WP7) to address the gaps indicated by the RRI Baseline established in D5.2.



## 2 GRRIP institutional and cultural interventions

Six intervention goals for relevant institutional and cultural changes have been established from the research phase of GRRIP as well as recommendations from other RRI projects and literature. It provides a frame of reference as GRRIP enters the practical stages of the project.

The institutional and cultural interventions are grouped under six goals:

- To build institutional leadership and support
- To embed RRI in the institutional governance framework
- To develop institutional knowledge, skills and awareness of RRI
- To establish structures to facilitate sustainable engagement with societal stakeholders
- To embed RRI in the STI (Science, Technology and Innovation) systems/funding proposals
- To embed ongoing reflection and analysis into the implementation process

The interventions cover all 6 keys of RRI in an integrated manner. 72 specific interventions (as can be seen in Appendix A) were established under these six goals covering policies, practices, processes and activities. These relate to the embedding of dimensions of RRI in the governance and daily practices of the institutions as well as to ways of systematically and meaningfully engaging and collaborating with stakeholders.

Meanwhile, the list of GRRIP institutional and cultural interventions combined with the Action Plan Framework provides a flexible, clear and structured approach to enable the GRRIP RFOs/RFOs to introduce and monitor the impact of step-changes in localised structures and culture towards embedding RRI during and beyond the lifespan of the project.



### 3 GRRIP monitoring methodology

#### 3.1 GRRIP indicators for monitoring

An indicator is a unit or variable, in which or by which a measurement is made. Indicators are needed for tracking the progress of project implementation. They primarily relate to inputs and activities and are needed for measuring results of the project, including outputs, outcomes and impacts.

Good indicators should be logical and practical. As required by the GRRIP proposal and learning from institutional change experience on gender equality<sup>1</sup>, GRRIP proposed to follow the well-known SMART and SPICED criteria (as can be seen in Table 1) in co-developing the indicators with the RPO&RFOs. The co-developed indicators should fit their customized APs. Care will be taken that the selected indicators will not be too many, too complex, too expensive or too difficult to measure. The list of potential indicators for monitoring can be found in Appendix B. This set of indicators outlines the progress and evidence required for each of the interventions outlined and suggested to the RPOs/ RFO. This list of indicators will be customized for each RPO&RFO and will be open to adjustment during the next phases of project based on the reflection and evaluation of RRI implementation at the interim and end of the project lifecycle.

**Table 1** SMART and SPICED Criteria for Indicators

<i>Indicators used for gathering performance information should be..... SMART</i>	
<b>S</b>	<b>Specific:</b> Reflect what the project intends to change and are able to assess performance
<b>M</b>	<b>Measurable:</b> Must be precisely defined; measurement and interpretation is unambiguous; Provide objective data; Be comparable across projects allowing changes to be compared

<sup>1</sup> Espinosa Fajardo, Julia & Bustelo, María & Velasco, Maria. (2016). Evaluating Gender Structural Change. Guidelines for Evaluating Gender Equality Action Plans.





<b>A</b>	<b>Attainable:</b> Achievable by the project and sensitive to change; Feasible time and money to collect data using chosen indicators; Available at a reasonable cost
<b>R</b>	<b>Relevant</b> to the project in question
<b>T</b>	<b>Time bound:</b> Describes when a certain change is expected
<b>Indicators used when collecting subjective information should be.....SPICED</b>	
<b>S</b>	<b>Subjective:</b> Contributors have a special position or experience that gives them unique insights which may yield a high return on the evaluator’s time. What may be seen by others as ‘anecdotal’ becomes critical data because of the source’s value.
<b>P</b>	<b>Participatory:</b> Indicators should be developed together with those best placed to assess them. This means involving the ultimate beneficiaries, but it can also mean involving local staff and other stakeholders.
<b>I</b>	<b>Interpretable and communicable:</b> Locally defined indicators may be meaningless to other stakeholders, so they often need to be explained.
<b>C</b>	<b>Cross-checked and compared:</b> The validity of assessment needs to be cross-checked, by comparing different indicators and progress, and by using different informants, methods, and researchers.
<b>E</b>	<b>Empowering:</b> The process of setting and assessing indicators should be empowering in itself and allow groups and individuals to reflect critically on their changing situation.
<b>D</b>	<b>Diverse and disaggregated:</b> There should be a deliberate effort to seek out different indicators from a range of groups, especially men and women. This information needs to be recorded in such a way that these differences can be assessed over time.

### 3.2 An example action plan for monitoring intervention implementation progress

As can be seen in Appendix B, most of the GRRIP indicators proposed for monitoring are about actions and outputs. Since GRRIP interventions are closely related to achievements at overall goal level (RRI institutional and cultural change), the intended changes in the different GRRIP monitoring indicators will indicate if the desired impact is taking place.

An example of how a specific GRRIP indicator is monitored with milestones, targets and associated thresholds (if any) to track progress towards a specific GRRIP intervention goal during implementation is shown in Table 2.



Table 2 Action plan for monitoring the progress of implementing interventions (an example)

<b>Intervention code and title</b>	<b>6.1. Identify and appoint RRI Champions across the institution to support RRI Implementation</b>
<b>Goal: Build Institutional Leadership and Support</b> <b>RRI Key: Governance</b>	
<b>Problem and response:</b> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>Problem or context: e.g. Demonstrating what RRI is and how it is implemented is cited as a frequent challenge. It is hard to drive change alone and try to find some allies in the organization, who understand the value of engagement, and are happy to speak up for it. Hence, there is a need to increase the circle of influence, by appointing RRI champions.</p> </div> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>Response and goal: e.g., The goal of this intervention is to increase the network of RRI change-agents or allies across the institution in catalysing, supporting and promoting RRI implementation. To foster a culture of RRI and pave way for institutional change, developing systems and procedures to identify and appoint RRI champions, or RRI change-agents within the institution. These allies (RRI champions) can be from across the institutional functions and include people from various levels. For instance, professional services staff, academics, researcher development staff, partner organisations, early career researchers etc.</p> </div>	
<b>Stakeholder management (QH):</b> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>Ownership: Members of the working group or relevant research institutes/faculties.</p> </div> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>Who is involved: Individuals appointed as RRI champions internally or could be externally among the stakeholders.</p> </div> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>Coordination mechanisms: Working group set up regular quarterly or semi-annually meetings and strategic communications with RRI champions and relevant stakeholders.</p> </div>	



**Details of the implementation:**

**Preparation (optional):**

Working group to meet, discuss and co-create the description of RRI-champions scheme.

**Implementation:**

To engage with senior management and gain their agreement/buy-in to advertise the role of RRI champions.

Shortlisting and prepare a cross-sectional list of individuals who can act as RRI Champions across the RRI pillars.

Discuss the role with RRI champions and identify opportunities/platforms that RRI champions can advocate and raise awareness of RRI efforts within the institution to support the implementation of RRI.

**Follow up (optional):**

Working group set up regular meetings and communication with RRI champions. This can be through surveys and monitoring to capture the extent of their engagement and outcomes related to institutional changes.

**Indicators:**

Indicator Description	Milestones	Targets
list of individuals who can act as RRI Champions to support RRI implementation.	Milestone 1: 1/5/2021	Target: Working group to meet, discuss and co-create the description of RRI champions' scheme.
	Milestone 2: 1/9/2021	Target: To engage with senior management and gain their agreement/buy-in to advertise the role of RRI champions.
	Milestone 3: 1/10/2021	Target: Shortlisting and prepare a cross-sectional list of individuals who can act as RRI Champions across the RRI pillars.
'Champions' are approached to discuss how they can engage and support the implementation of an RRI dimension	Milestone 4: 1/11/2021	Target: Discuss the role with RRI champions and identify opportunities/platforms that RRI champions can advocate and raise awareness of RRI efforts within the institution to support the implementation of RRI.
	Milestone 5: 1/5/2022 Ongoing post monitoring	Target: Working group set up regular meetings and communication with RRI champions. This can be through surveys and monitoring to capture the extent of their engagement and outcomes related to institutional changes.



**Barriers, risk and mitigation strategy:**

The RRI champions might change, due to change in their contract duration, workload, environmental barriers such as Covid-19, personal circumstances, a shift in priorities for their intuitions to deal with the short-term fall out from Covid-19. To have a continuous feedback loop with the RRI Champions to anticipate the risk.

**Sustainability plan:**

Setting up regular meetings, and communications with RRI champions.  
Details of how the Champion scheme is set up and how it will operate and the insights to the impact of the efforts to date.

**Trial plan (delete if the intervention will not be trialled):**

The trial starts at 1/04/2021. Members of the working group or relevant research institutes/faculties. And individuals appointed as RRI champions internally or externally among the stakeholders will be involved.



### 3.3 GRRIP monitoring tools

A multi-method monitoring approach (both quantitative and qualitative) is being adopted and a variety of data collection tools (surveys, semi-structured interviews, etc.) and project management tools (e.g., indicator dashboard) are being administered over the implementation phase to monitor the progress of RRI culture change experienced in each institution. The indicator dashboards for GRRIP monitoring will be mainly relied on to record the information gathered. The online GRRIP Monitoring System will be formed by placing the interventions sheets, indicator dashboard on Teams. A column to capture monitoring progress against target dates has been incorporated. The five RPO&RFO sites are required to populate these columns with progress updates at pre-defined intervals over the lifespan of the project.

It is possible that partner sites will establish their own monitoring systems. In this case, they will be able to share the screenshots of their system or put inputs into the Excel file (the dashboard) to facilitate both monitoring (WP7) and evaluation (WP8). Other tools will be utilised in the monitoring process (depending on the nature of the interventions) including, where relevant, focus groups, surveys, and interviews. Once the Action Plans are finalised these tools will be placed on Teams and become “living documents”. Because of COVID-19, many or all such activities (depending on the progress of the pandemic and the measures necessary to safeguard project and RPO&RFO staff) GRRIP events and consultations will continue to use online tools, such as Teams and Zoom.



Table 3 GRRIP monitoring tools for data collection and project management

Tool/ Instrument	Descriptions	Relevant materials
Indicator Dashboards for RPO&RFO sites (WP7) <b>(Primary tool)</b>	Using the Action Plans and the Intervention Sheets, indicator dashboards have been created for each RPO&RFO. The APs and indicator dashboard underpin the monitoring process (WP7). Table 4 below gives the headings for the columns incorporated in the dashboards.	Quarterly work updates; Indicator dashboard with milestones
Observation of workshops by WP8	Observation will be used for data collection during important GRRIP events, such as meetings with stakeholders, mutual learning workshops, GRRIP SC meetings, intervention monitoring meetings etc.	Observation notes for important matters
Sample surveys Designed by WP8 (Optional tool)	Quality of involvement survey for monitoring QH <sup>2</sup> engagement for selected QH stakeholders is planned to be used. This will enable collection of mainly qualitative information that will add meaning to the more quantitative information that derives from much of the monitoring process.	Survey questions; Report of survey findings
Interviews/ focus groups conducted as part of WPs7 and 8 (Optional tool)	Based on the insights from survey findings, and/or observations of GRRIP events, WPs7 and 8 may organize focus group discussions to collect largely qualitative data. Structured discussions are envisaged among small groups of stakeholders (up to 8 participants) for around 30 minutes to one hour via Zoom or Teams.	Focus group discussion guidelines and questions; Report of focus groups.
Individual interviews (Optional tool)	Based on the insights from survey findings, and/or observations of GRRIP events, WPs7 and 8 may organize semi-structured individual interviews for around 30 minutes to one hour via Zoom or Teams. These will allow in-depth exploration of ideas that emerge from survey findings or observations.	Interview guidelines and interview questions; Report of interviews

<sup>2</sup> Engagement of stakeholders is envisioned through the quadruple helix approach (QH) by involving four major actors: science, policy, industry, and society. More information on QH can be found in relevant articles, such as Schütz, F., Heidingsfelder, M. L., & Schraudner, M. (2019). Co-shaping the future in quadruple helix innovation systems: uncovering public preferences toward participatory research and innovation. *She Ji: The Journal of Design, Economics, and Innovation*, 5(2), 128-146.



### 3.4 GRRIP monitoring process

Each of the five GRRIP RPO&RFO sites will support monitoring and evaluation with WPs5, 6, 7 and 8. This approach aims to optimise the time and engagement of the RPOs and RFO in creating Action Plans and support the continuous collection for the interventions.

#### 3.4.1 RRI operational base within the RPOs and RFO for GRRIP monitoring

As described in Task 6.10 (GRRIP proposal), the RRI operational base within the RPOs and RFO has been established. This is where the primary responsibility for RRI monitoring lies. The monitoring will be quantitative and qualitative and will be done on a quarterly basis and will be shared with WP8 where it will feed into the Reflection and Evaluation function (T8.3).

Monitoring activities require resources for data collection, data analysis and data management. GRRIP WP leaders from WP7 and WP8 will work together with RPO&RFO leads (i.e., RPOs' or RFO's principal investigators) for these activities and align with the resources indicated in the GRRIP project agreement.

#### 3.4.2 Complete Action Plan Frameworks for monitoring use

The complete GRRIP Action Plan frameworks provide a flexible, clear and structured approach to enable the RFOs/RFO to introduce and monitor the impact of step-changes in localised structures and culture towards embedding RRI during and beyond the lifespan of the project. The selected interventions for each site (i.e. RPOs & RFO) are described in the Action Plan framework consisting of:

- Intervention Sheets (section 2.1);
- Intervention Overview;
- Indicator Dashboard; and



- Action plan GANTT Chart.

Following the completion of the Intervention Sheets and the Intervention Overviews, RPOs/RFO will complete the indicator dashboard as seen in the example below, drawing where necessary from their own monitoring systems. This process includes outlining how the RPOs/RFO will demonstrate progress in relation to the interventions and when it is expected that progress can be demonstrated. The final section in the Action Plan framework involves capturing the key milestones over the project cycle (and beyond) for the implementation of the interventions.

*Table 4 Sample indicator dashboard: Column headings in order*

1	RRI Key	8	Actual
2	Intervention Code	9	Responsible Person
3	Intervention Name	10	Ownership
4	Milestone	11	Risk Identified
5	Date	12	Risk Impact
6	Baseline	13	Required Actions
7	Target (Thresholds)	14	Monitoring Date

### 3.4.3 Online project management

In order to support the project team and representatives from the RPOs & RFO to work efficiently and effectively over the course of the implementation period, the Actions Plans, including the indicator dashboard will be integrated on the MS Teams platform. These documents will be updated regularly by the site leads.

### 3.4.4 Quarterly meetings with partners

The online dashboard will anchor scheduled quarterly progress meetings with the RPOs & RFO leads as part of the monitoring process (WP7). Prior to each meeting, site leads will populate their progress column and this will be discussed, in relation to the milestones set out in the indicator





dashboard. The indicator dashboard column headings, as presented in Table 4, addresses the answers to the following questions:

- What evidence needs to be collected?
- When and how should evidence be collected?
- Who (responsible person) will collect the evidence and from whom (ownership)?
- Is there any issues or risk identified that need to be solved?
- What would be the impact of the identified risk on the target and milestone?
- What issues/concerns are raised?

#### 3.4.5 Reflect and refine tools and processes

The information emerging from this ongoing systematic collection of data and information on each selected intervention will be shared on a quarterly basis with WP8 where it will feed into the Reflection and Evaluation function (Task 8.3). It is suggested that WP7 lead with support from site leads write up memos after each quarterly implementation update meeting for GRRIP monitoring. Progresses, barriers, challenges, uncertainties, risks, etc., concerning GRRIP interventions will be recorded and reflected in the memos. Every three months, the WP8 lead (in discussion with WP7) will check the overall progress made by each site for their selected interventions, raise queries for clarification where appropriate, and rate each in terms of quality (poor, acceptable, outstanding) and sustainability (poor, acceptable, outstanding). Descriptions of rating criteria can be found in D8.2: Evaluation Plan. Suggested changes to the interventions and indicators, AP frameworks and the monitoring process itself will be considered and refinements to the processes made.

### 3.5. Plans for ensuring sustainability of Action Plans

As is the case with most funded research projects, GRRIP will face sustainability challenges post-project. The 5 RPOs&RFO, however, believe in the five dimensions of RRI and are committed to bringing about institutional changes related to RRI. The RRI-related interventions were identified as:

- TIER 1 (interventions completed within a year);
- TIER 2 (medium term: interventions within 1 and 3 years); and
- TIER 3 (long term: 3 to 5 years).

Some TIER 2 and all TIER 3 interventions are post end date of GRRIP project. Plans for all interventions (including those beyond the project duration) are provided in D6.1 as part of the individual Action Plans. In some instances, the 5 RPOs&RFO have proposed linking the RRI Action Plan developed under GRRIP to their existing commitments within their institutions. Furthermore, as described in D8.2, each Action Plans outlined in D6.1 will be rated in terms of sustainability as part of the evaluation activities of WP8. It is envisaged that, post project, the 5 RPOs&RFO sites will be sharing their experiences via the GRRIP platform or direct networking.

### 3.6 Plans for ensuring financial sustainability of GRRIP platform

Numerous H2020 funded projects face the same challenges related to sustainability of the project website, and the risk of losing the knowledge materials created as part of the project. These concerns have been shared by various EU project beneficiaries with representatives of DG Research and Innovation and satisfactory solutions remain to be devised. Most project websites quickly become dormant unless resources are spent on it to maintain them. The marketisation of





higher education and the associated imperatives do make funding of such project websites from institutional budgets, without a convincing business case, a challenge.

GRRIP is aware of such issues, hence, it is envisaged that the Dissemination, Communication, and Exploitation Plan and Data Management Plan will ensure that the risk of losing knowledge material is minimised. The preliminary thoughts are that establishing a marine and maritime GRRIP platform in LinkedIn can help in sustaining the community beyond project duration. This marine and maritime RRI LinkedIn group will comprise of GRRIP partners and interested representatives from the QH. This group will be open to other professionals, who are working on RRI themes or are interested in learning more about RRI, to join. The LinkedIn group will be moderated by the shared D&C officer, who is responsible for MUSICA project at UCC (which runs till December 2024). In time it is hoped that the LinkedIn group will become self-sustaining as it is expected that the RRI related conversation started via this platform for organisations in the marine and maritime sector would have gathered more widespread interest. The newsletters and institutional website of each case study sites could carry details of RRI related postings in LinkedIn to increase awareness levels of the RPOs' staff members. The advisory board that will be constituted for GRRIP, will be asked for advice regarding strategies for sustaining the marine RRI community platform/network. The QH members of the 5 case study sites are being approached to get an idea about how to engage with them and what platform for discussion they find best.

It is accepted that RRI itself, as a term, might lose prominence in few years (as happened with ELSA, CTA, design for sustainability etc.), hence the branding of the platform will be flexible



and able to incorporate newer concepts as they arise (based on the policy push from the EC) and it is hoped these new concepts could help to perpetuate discussion.

## 4 Conclusions

Any project that strives for successful interventions requires a robust, continuous and effective monitoring system. With GRRIP monitoring, answers to the following questions<sup>3</sup> will be sought:

- Are the pre-identified outputs being produced as planned and being produced efficiently?
- What are the issues, uncertainties, risks and challenges that are foreseen or being faced that need to be taken into account to ensure the achievement of results?
- What decisions need to be made concerning changes to the already planned work in subsequent stages?

GRRIP monitoring will provide opportunities at regular predetermined points to validate the logic of intervention design, activities and their implementation; and to make adjustments as needed. The information from monitoring will be used to encourage improvements or reinforce the Action Plans. It will also contribute to mid-term and final evaluations of the GRRIP interventions at each RPO/RFO. Details on how the monitoring data feed into evaluation can be found in D8.2: Evaluation Plan.

---

<sup>3</sup> Source: HANDBOOK ON PLANNING, MONITORING AND EVALUATING FOR DEVELOPMENT RESULTS by United Nations Development Programme (2009)



## Appendix A List of Institutional and Cultural Interventions for GRRIP

Goals	GRRIP LIST OF INSTITUTIONAL AND CULTURAL INTERVENTIONS		Associated RRI Pillar
	No.		
<b>GOAL 1: Build Institutional Leadership and Support</b>	1	Complete GRRIP Self-Assessment Tool to determine RRI Baseline Level	Governance
	2	Identify and ensure representation on the GRRIP Working Group from key institutional functions and departments as well as top, middle management and researchers for implementing RRI (HR, Finance, etc.)	Governance
	3	Set-up regular progress meeting with the Working Group	Governance
	4	Ensure the RRI Working Group is balanced and have access and authority to deliver the Action Plan	Gender
	5	Get pledges/formal commitment from institutional leadership outlining commitment to the implementation of all RRI dimensions (Ethics, Public Engagement, Gender, Open Access, Science Education) in policies, structures, processes in the institution	Governance
	6	Design flexible and tailored action plans with short, medium and long-term (post-project) objectives/initiatives.	Governance
	7	Identify and appoint RRI Champions across the institution to support RRI Implementation	Governance
	8	Assess the local culture of the institution and national STI context	Governance
	9	Set-up a reporting structure with senior leadership to share progress at pre-defined intervals, demonstrating the usefulness to management to enable RRI to take root within the organisation	Governance
	10	Develop an Institutional RRI Policy/Strategy outlining the rationale for embedding RRI as an integrated approach into the institution & communicating the vision and the key objectives of the unit and is worded to suit the culture of the institution and the national STI context	Governance
	11	Set-up a RRI unit with a staff member or members explicitly responsible to embed Gender Equality, Public Engagement, Open Access, Science Education	Governance
	12	Formalise Institutes commitment to Institutional and policy-makers' commitment to the UNESCO 2017 Recommendation on Science and Scientific Researchers (RSSR)	Governance
<b>Goal 2: Embed RRI in the Institutional Governance Framework (policies, practices &amp; structures)</b>	13	Develop an organisational Open Access Policy and protocols	Open Access
	14	Set-up a tracking mechanism to establish number of publications in hybrid journals or fully Open Access journals	Open Access
	15	Establish an Institutional Repository (IR) with necessary resources and support to pursue optimal communication and promotion on RRI Dimensions	Open Access
	16	Set up an Open Access Fund for the Institution	Open Access
	17	Create a social media campaign aimed at increasing outreach/take-up of Open Access Literature/Open Access Data	Open Access
	18	Establish a research ethics committee/research integrity office	Ethics
	19	Include stakeholders and researchers in the development of institutional ethics committee and guidelines	Ethics



	20	Develop processes for managing Ethics and Research Integrity	Ethics
	21	Develop written policies for Public Engagement	Public Engagement
	22	Develop processes for managing Public Engagement	Public Engagement
	23	Develop written policies for gender equality	Gender
	24	Develop a Gender Equality Plan	Gender
	25	Set-up gender balance recruitment committee protocols ensuring researcher positions equal or higher than 40% of female participation	Gender
	26	Develop mechanism to track the bibliometric data of female researchers in the institution	Gender
	27	Introduce structures and policies to embed gender balance in institutional R&I decision making	Gender
	28	Develop mechanism to track the share of female patents in M&M for institution	Gender Science Education
	29	Develop policies/strategy to promote science education	Education
	Goal 3: Develop Institutional knowledge, skills and Awareness of RRI	30	Carry-out institutional assessments on researcher well-being (fair retribution, career stability/prospects, public recognition, social security, mobility support and equal access and participation in international community)
31		Create incentive mechanisms for researchers/staff working on RRI proposals, projects and multi-disciplinary collaboration	All
32		Run a training support series, which includes Ethics & Research Integrity Training	Ethics
33		Run a training support series, which includes Public Engagement Training	Public Engagement
34		Run a training support series, which includes Open Access Training & Research Data Sharing	Open Access
35		Run a training support series, which includes Gender Equality Awareness	Gender, Diversity & Inclusion
36		Run a training support series which includes Diversity & Inclusion Awareness Training	Gender, Diversity & Inclusion
37		Run a training support series, which includes Science Education	Science Education
38		Collect, track and analyse information on trainings completed on RRI dimensions	All
39		Embed RRI training on Participatory Research in educational structures, e.g., in PhD schools or summer school	All
40		Develop tools/focus group/deliberative sessions to understand the challenges staff face in engaging with RRI dimensions	Public Engagement, /Science Education
41	Create a communications campaign raising awareness about the project, RRI and the relevance of institutionalising it, e.g., Websites, RRI information kiosk, bulletins, and will be working in cooperation with WP2	Public Engagement	



	42	Implement thematic cafes and reflection workshops to support the implementation of RRI	Public
	43	Prepare institutional leaders and researchers to utilise participatory research methods	Engagement
	44	Disseminate case studies examples of how RRI is integrated, practiced in other M&M settings successfully	Science
	45	Create a social media campaign aimed at increasing outreach/take-up of Open Access Literature/Open Access Data	Education Science Education Open Access
<b>Goal 4: Establish Structures to Facilitate Sustainable Engagement with Societal Stakeholders</b>	46	Track the number of research and innovation collaborations that demonstrate stakeholder inclusion	Governance
	47	Dedicate a physical space and/or virtual space where stakeholders and researchers can share interests/ask questions	Public Engagement
	48	Provide GRRIP stakeholders with relevant information/tools on goals so they can actively contribute to institutionalising RRI	Public Engagement
	49	Create opportunities for citizens to engage in meetings/debates about issues related to M&M	Public Engagement
	50	Create a platform for sharing RRI best practice approaches across stakeholder networks	Public Engagement
	51	Include pre-defined stakeholder engagement cycles in Action Plan	Governance Public
	52	Leverage existing collaborations and extend strategic stakeholder networks with different societal actors	Engagement Governance/S
	53	Create a dedicated section for training and education of all the external stakeholders and have a sub-section for each stakeholder	science Education
	54	Create Intellectual property rights/agreements to protect researchers/stakeholder collaboration	Governance Public
	55	Join membership of the European Citizen Science Association (ECSA)	Engagement
	56	Connect GRRIP Working Group and Stakeholder Group with national science communication infrastructure/actors	Governance
57	Run institutional initiatives/brokerage opportunities to support and facilitate staff understand & establish collaborations and engagements with stakeholders	Public Engagement	
<b>Goal 5: Embed RRI in the STI Systems/Funding Proposals</b>	58	Include “societal impact” as a criterion of research programmes	Governance
	59	Incorporate longer project timelines for projects which have a RRI element	Governance
	60	Examine RRI Dimensions in current M&M funding programs	Governance
	61	Identify gaps in funding grant policies where RRI is absent and could be embedded funding grants	Governance
	62	Engage in a benchmarking and engagement process, learning from funders who have incorporated RRI into the research funding calls	Governance
	63	Develop processes and methodologies on how to best embed RRI dimensions into research funding calls	Governance Public
	64	Embed Public Engagement activities in the funding structure for research funding calls	Engagement



	65	Engage with national RFOs to encourage inclusion of public engagement/RRI dimensions in funding structures	Governance/P ublic Engagement
	66	Engage national RFOs to encourage public engagement elements as evaluative criteria in research proposal evaluations	Governance/P ublic Engagement
	67	Engage with representatives from the STI system to discuss the adoption of The UNESCO Recommendation on Science and Scientific Researchers	Governance Governance/G ender
	68	Lobby national RFOs for inclusion of gender content in research	
<i>Goal 6: Embed ongoing Reflection and Analysis into the RRI Implementation Process</i>	69	Set up a system to monitor and track how RRI practices have shaped the institutional structures and culture from a holistic perspective	Governance Science Education
	70	Engage in a series of mutual learning activities with other GRRIP sites	All
	71	Benchmark progress against 'good practice' institutions	All
	72	Create synergies with other RRI projects to expand network and share mutual learning.	All





## Appendix B List of GRRIP Indicators Proposed for Monitoring<sup>4</sup>

Goals	No.	Proposed Indicators
<b>GOAL 1: Build Institutional Leadership and Support</b>	1	Established RRI maturity level in the Audit report
	2	Number of working group members who are from key institutional functions
	3	Number of progress meetings with the working group for a certain period
	4	Percentage of female members in the Working Group
	5	Written documentation in evidence via Action Plan, signed charter and/or letter of support
	6	Completed GRRIP Action Plan
	7	A cross-sectional list of individuals acting as RRI Champions (and allies) and active in endorsing the project and its values
	8	Research report on local culture of the institution and national STI (Science, Technology and Innovation) context
	9	Overviews in place for planned meetings for sharing updates on GRRIP with institutional leadership
	10	Complete strategy document in place demonstrating how GRRIP principles and Action Plan align and support institutional and national objectives
	11	An official and recognised RRI unit (or core group/network) is in place with a remit for influencing, supporting RRI across the institution
	12	Signed declaration/commitment to RSSR (Recommendation on Science and Scientific Researchers) priority areas
<b>GOAL 2: Embed RRI in the Institutional Governance Framework (policies, practices &amp; structures)</b>	13	The organisation has evidence of clearly labelled written policies and protocols for promoting open access
	14	Description of the tracking mechanism developed for open access by partners
	15	Description of the institutional repository in use or developed to facilitate open access
	16	The amount of financial resource dedicated for supporting open access is clear
	17	Number of campaigns (emails, social media, webinars, etc.) aimed at promoting open access
	18	Description of research ethics committee/ research integrity office in place
	19	There are established and committed members of each institution's Ethics Committee

<sup>4</sup> The Number of the indicators shown in the second column of the table of Appendix B corresponds to the serial number of the interventions shown in the second column of the table of Appendix A. Note. Based on the specific context of the five partner sites, the interventions and their corresponding indicators will be adjusted to be more specific.



	20	Description of processes for managing ethics and research integrity are in place
	21	There are written policies for public engagement
	22	Targets on public engagement
	23	Written policies for promoting gender equality are in place
	24	Gender equality plan
	25	Gender balance recruitment committee protocols are established
	26	Description of bibliometric indicators are in place to measure women's contribution to relevant scientific publications
	27	Documentation is in place detailing the percentages of women on relevant advisory boards, committees, etc.
	28	The system used to track the number of patents developed by female contributions.
	29	Written policies/strategy to promote science education
	30	Description of initiatives in place to assess or address researcher well-being
31	Description of incentive mechanisms in place for researchers to engage in RRI related activities	
<b>GOAL 3: Develop Institutional knowledge, skills and Awareness of RRI</b>	32-37	Number of training initiatives, courses, and other related activities for specific RRI related topics
	38	Mechanisms to track RRI-related trainings are in place
	39	List of RRI-related trainings or courses for researchers
	40	Research report is made on challenges staff face in engaging with RRI dimensions
	41	Records of communications related to RRI with stakeholders are in place
	42	Records of workshops or meetings conducted to discuss/reflect on current RRI status of organisation and plan
	43	Percentage or number of staff who have completed training/CPD on utilising participatory research method (in a fixed time frame)
	44	Records of communications/email/Blog posts through department/ institution highlighting RRI good practices in Marine and Maritime sector
45	Number of social media campaigns aiming at promoting open access literature	
<b>GOAL 4: Establish Structures to Facilitate Sustainable Engagement with Societal Stakeholders</b>	46	Number of stakeholders, their sectors, and the nature and frequency of their engagement
	47	Description of a space for researchers and stakeholders to interact, generate and share ideas
	48	Number of GRRIP Stakeholder workshops issuing stakeholders with information on RRI and how the issues are being addressed
	49	Number of events where M&M challenges with citizens are discussed
	50	Description of social media platform/GRRIP platform to profile examples of what the case study sites are doing to engage stakeholders; Number of active users on the QH platform; number of discussion topics and discussion threads
	51	Final AP that includes agreed timeframe for conducting stakeholder workshops to review progress
	52	Schedule of updating the list of stakeholders that ensure representation from all helices
	53	Informational resource for external stakeholders, e.g., webpage with customised materials on RRI
	54	Written agreements for protecting intellectual property rights during research/stakeholder collaboration
	55	Evidence of membership of ECSA to access knowledge on conducting citizen science at high standards



	56	Description of national structures and bodies/groups that the institution can align with and collaborate with to deliver initiatives on public engagement and/or other RRI dimensions
	57	Event details such as agenda/dates/gender balance; numbers of participants; sectoral breakdown of stakeholders; and completed feedback forms for promoting RRI among staff
<i>GOAL 5: Embed RRI in the STI Systems/Funding Proposals</i>	58	Documentation outlining the methodological approach for inclusion of grand challenges/missions/societal impact in research programmes and co-creative approaches used to determine chosen selection
	59	Documentation highlighting proposal/confirmation request to include longer timelines for projects that demonstrate stakeholder engagement
	60	Report detailing incorporation of RRI pillars into current M&M funding programmes
	61	Report detailing the gaps and opportunities to embed RRI over short, medium, and long-term
	62	Report detailing correspondence/interviews/desk-based research conducted to investigate how other funding agencies have embedded RRI into funding calls
	63	Presentation/report/ Action Plan detailing the processes/actions undertaken over the short/medium and long-term to encourage and embed RRI into future funding calls
	64	Document/report/call text highlighting that Public Engagement with M&M is an integral part of a selected funding call
	65	Description of the engagement events with national RFOs. Confirmation of meeting date/content/presentation/outcomes
	66	Description of the engagement events with national RFOs with confirmation of meeting date/content/presentation/outcomes
	67	Description of the engagement events with national STI representatives including content highlighting the UNESCO Recommendation on Science and Scientific Researchers (RSSR)
	68	Description of calls of action to funders to support inclusion of gender dimensions in research
<i>GOAL 6: Embed ongoing Reflection and Analysis into the RRI Implementation Process</i>	69	Description of tools/monitoring plan for each intervention selected from overall list of GRRIP interventions with scheduled data collection periods
	70	Records of the mutual learning workshops, attendance records of the feedback/reflection on learnings from these
	71	Number of staff participating / attending in conferences/ /meetings involving RRI
	72	Review of reports on past/current RRI projects

