

Grant Agreement Number: 824671

SUPER MoRRI – Scientific understanding and provision of an enhanced and robust monitoring system for RRI

D7.3 – Policy report on the state of SwafS RRI projects

Author(s): Ingeborg Meijer, Anestis Amanatidis

Submission Date: 24.01.2022

Version: 1.0

Type: Report

Dissemination Level: Public

Project website: www.supermorri.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824671. The opinions expressed in this document reflect only the authors' view and in no way reflect the European Commission's opinions. The European Commission is not responsible for any use that may be made of the information it contains.





Table of Contents

Executive Summary	4
1 Introduction	5
1.1 Scope and objectives of the deliverable	6
1.2 Structure of this deliverable	6
1.3 Changes to this deliverable.....	7
2 Background	8
2.1 Point of Departure	8
2.1.1 Planning the outreach.....	9
2.1.2 Feedback incorporation.....	11
2.2 Final, feedback questionnaire.....	12
2.2.1 Projects with a running time of less than one year	13
2.2.2 Projects with a running time of more than one year.....	13
2.3 Results.....	14
3 Multistabilities of Responsibility in SwafS	16
3.1 Defining multistabilities.....	17
3.2 Project topology.....	17
3.3 Science with and for Society: facilitating practices of responsibility	18
3.4 Science with and for Society: democratising research and innovation.....	20
3.5 Science with and for Society: mobilising actors around RRI conceptualisations	21
3.6 Discussion.....	23
3.7 Reflecting on monitoring and evaluating (M&E) in SwafS projects	24
4 Conclusion	26
5 References	28
6 Appendix	29
6.1 Email for engaging participants with the questionnaire	29



EXECUTIVE SUMMARY

In the light of SUPER MoRRI staying receptive to ongoing discussions within the *Science with and for Society* ecosystem about the strategies and issues to put the thinking of responsibility in research and innovation into practice, the research for this report was designed around following key questions: *How is 'responsibility' operationalised, and how is it made measurable across the projects within the Science with and for Society programme?* By inquiring into 29 projects within SwafS, based on previous experiences from a series of collective reflection that comprises both the entire ecosystem of SwafS and a sub-group specialised on monitoring and evaluation practices in territorial RRI projects (SwafS-14), this research identified three strategies through which projects funded under SwafS operationalise RRI in their respective contexts, namely (1) facilitating practices of responsibility, (2) the democratisation of research and innovation and finally (3) the mobilisation of actors around RRI conceptualisations. Finally, we put these findings into a perspective of monitoring and evaluation with a focus on the multiplicity of RRI in SwafS.



1 INTRODUCTION

Despite the diverse set of themes, focus and areas of application that consortia funded under the Horizon 2020 Science with and for Society (SwafS) programme operate within, there is a common denominator that aligns the apparently most juxtaposed projects. That is, all of the consortia are asked to reflect on MoRRI indicators to make measurable and evaluate specific impacts that their effort may elicit. The MoRRI indicators, developed in SUPER MoRRI's predecessor (the MoRRI project), are connected to the policy of Responsible Research and Innovation (RRI) and thus not only provide the vocabulary necessary, but also a format in which these impacts are understood under the banner of bringing Society closer to Science and vice versa. Simultaneously, there is a complexity to the employment of a policy such as RRI and its presumed indicators. Although it provides a sense of stability and presumed intercomparability and standardisation, it cannot be taken as a given, as project-internal understandings and conceptions of any of RRI's assets and practices differ drastically from one another, and do not necessarily reflect the national-level executed MoRRI indicators, as various exchanges among various formats in projects funded under SwafS show. Claiming an ability to simply measure and compare projects is in that regard a very difficult task showing a need to develop sensitivities to the different ways RRI is operationalised in different contexts, thereby confirming the need for credible contextualization as was introduced in SUPER MoRRI's strategic plan¹.

The expectations for SUPER MoRRI to develop a monitoring and evaluation framework that can be applied by all SwafS-funded projects with a focus on RRI raised the need to engage with these SwafS-projects on a regular basis during the lifetime of the project. This was the start of what is now called the RRI or SwafS-ecosystem, initiated and hosted by SUPER MoRRI². Representatives of projects funded under several consecutive SwafS-calls (see Table 3) get together in bimonthly calls to discuss a wide range of topics related to RRI, including monitoring, evaluation, stakeholders, citizen science, equality, diversity and inclusion, self assessment, and engagement to mention a few. The alternating months the SwafS-ecosystem gets together on the topic of territorial RRI and how to monitor and evaluate territorial aspects in addition to RRI. This is what is called the SwafS14 M&E-group.

The ongoing (bi-)monthly meetings within the SwafS ecosystem (see 2.1) have yielded a wealth of knowledge that highlights the need for diversity in different contexts, after many projects involved in SwafS shared intimate accounts of their efforts to put RRI to practice and measure it in their respective projects. As such, this deliverable tries to pay due respect to the variety of RRI that can be found in SwafS, giving a stage to the wide range of activities, conceptualisations and ideas of the partners in these projects, and their efforts to reconcile this diversity with the MoRRI indicators. As such, the SwafS-projects aim to contribute to SUPER MoRRI's developing monitoring and evaluation framework, and hence the interactions are essentially bi-directional.

¹ Deliverable D1.2 is available at: <https://super-morri.eu/download/153/findings-and-deliverables/5179/d-1-2-strategic-development-plan-2020-24.pdf>

² For an overview see: <https://super-morri.eu/rri-ecosystem/>



Simultaneously, the emerging focus on institutions as the place where ‘science in here’ meets ‘society out there’ from both Horizon Europe and SUPER MoRRI’s focus on research-performing and research-funding organisations differs in previous conceptions of MoRRI’s focus on a national country-clustering level, surfacing two key questions that this deliverable aims at addressing: *How is ‘responsibility’ operationalised, and how is it made measurable across the projects within the Science with and for Society programme?*

1.1 Scope and objectives of the deliverable

Overall, the purpose of this document is to present how different H2020 SwafS-funded projects work towards desirable, measurable impacts within the Science with and for Society programme and how ‘responsibility’ is operationalised. With desirable we mean that monitoring and evaluation is conducted for the benefit of users in these projects; and to demonstrate responsibility in the context of their own practices. The idea of ‘credible contextualisation’ according to which any indicator SUPER MoRRI develops should first pass through a co-creation phase with potential users, and second, be accompanied by guidance on the degree of interpretive ‘stickiness’ of the indicator. By stickiness we mean the capacity of the indicator to support interpretations or generalisations beyond the immediate context of the indicator development.

In practice, the task to identify how SwafS projects work towards operationalisation of responsibility and implementation of MoRRI encompasses:

- a) Co-creating a questionnaire serving as the basis of engaging with the SwafS ecosystem
- b) Collecting data from two members per consortium in the entirety of SwafS
- c) Analysing the data from the questionnaire
- d) Conducting desk research on already-existing reports and websites of consortia
- e) Engage and collate insights from SwafS 14 M&E subgroup on responsibility (workshop)
- f) Summarise, conclude and recommend a ‘State of RRI’ within SwafS, as well as
- g) Lessons learned for the Monitoring and Evaluation framework

1.2 Structure of this deliverable

This document is divided into three key parts that reflect the logic with which this task was approached. The first part (Chapter 2) elaborates on and declares the assumptions with which this task was designed and reflects on methodological decisions that have been made on the way.

The second part collates the (a) the outcomes of the co-creation session during a SwafS ecosystem meeting on the topic, (b) analysis of the questionnaire results, and the (c) desk research.

The last part is based on the previously conducted analysis and consists of conclusions (d) that point towards (e) a ‘State of RRI’ within the Science with and for Society (SwafS) programme and the ways in which responsibility is manifested in the consortia funded under SwafS.



1.3 Changes to this deliverable

This deliverable has undergone changes that differ from the original description of work insofar they concentrate on an organisational rather than a national, country-clustering level. Specifically, these changes that were agreed on are based upon four key developments:

1. The critical reflection in WP1 has shifted the attention from macro (national policy) to meso (organizational) level.
2. The data collection is predominantly taking place through the Country Correspondent Network which will result in a qualitative dataset at the organizational level of Research Funders (RFO) and Research Performing Organisation (RPO).
3. The H2020 RRI-Practice project has delivered a range of policy reports at the country level. And the RRING-project has analysed the RRI-related policies (Unesco, OSF).
4. Horizon Europe's focus on open and responsible research and innovation prioritises institutional settings over the national level and deconceptualizes RRI.

To respond to these changes, the deliverable was adjusted as described in the *introduction* (see 1.) and the *scope and objectives of this deliverable* (see 1.1). In accordance to these changes, an amendment to the Grant Agreement was made.



2 BACKGROUND

2.1 Point of Departure

The developments that elicited the change of this deliverable are also resonating in ongoing discussions within the territorial RRI projects under SwafS-14, where a monitoring and evaluation subgroup meets in bimonthly meetings to exchange over experiences with their respective regions and share insights and difficulties as to approaching monitoring and evaluation in projects with a territorial dimension. Taken as an opportunity to enrich the outcomes of this task, this SwafS14 group, which is comprised of eight projects, was used for collective reflection and focused conversations into the issues of measuring impacts under the banner of RRI. Two prominent themes that were highlighted included:

Translational issues with local actors in participatory approaches: Especially prevalent through the territorial (regional; or: engaging with local stakeholders) nature of the SwafS-14 group, translational issues have been very prominent on the agenda. Especially challenging is the finding of a *common language* to mobilise around and being engaged in a *joint process* of e.g. responsible research and innovation. The meaning of RRI in all its diversity (conditions, keys) and its vocabulary that is used by RRI-experienced project partners, relating to the themes that the territorial actors are focusing on, do not provide for a shared understanding, let alone a sufficient basis for collaborating with each other.

Rigidity of indicators: Whilst quantitative measures radiate a sense of certainty through standardisation, many aspects of RRI cannot be easily captured in numbers (although indeed MoRRI indicators provide a good basis), calling for sensitivity ‘beyond metrics’. One danger in that regard that was a recurring topic in these discussions was to take for granted and not look beyond e.g. certain models, such as the five RRI keys (European Commission, 2014). In affect, peripheral, although potentially important developments or aspects might not be accounted for. Thus, in order to adequately ‘operationalise’, a concept such as RRI needs to cover more.

From a perspective of the overall task that 7.3 comprises of, the identification of these themes through the joint meetings within SwafS14 M&E group made us receptive in the design of the approach itself. These inputs steered the thinking that influenced the decisions taken considering data collection and the formulation of the questions.

Understood from this deliverable’s focus on measuring impacts under the banner of responsible research and innovation, these themes naturally pointed at a set of questions that seems rather fundamental in this debate, but often overlooked, as they question the so-established position of terms such as ‘RRI’, ‘indicators’ or ‘impacts’. That is, this set of questions withdraws from preconceptions and impositions about the ‘right’ way of ‘doing’ RRI, and instead supports thinking about engaging in responsible practices within research and innovation, creating the



space to define ‘desirable outcomes’ of ‘responsible practices’ for one’s own empirical context and understanding. Paired with the requirements of the SwafS programme on its projects to reflect on aspects of impact, indicators, transformative change etc. as specified in the *Science with and for Society Work Programme 2018-2020*³, these fundamental questions gain importance, as they indicate a potential gap between the actors’ understandings and project requirements that needs attention.

2.1.1 Planning the outreach

Based on these first inputs and ideas of ‘weighting’ the research question within the frame of possibilities (given the Description of Work), a first draft questionnaire was created. Specifically, five questions were developed and distributed across the different projects. The questions however were not designed to “give an answer”, or measure “performances of RRI-implementation”. Rather, they served to understand the ways in which these projects reflect notions of RRI in their own words and logics.

The questions therefore tried to illuminate three key themes: (1) how the projects conceive of RRI, (2) how the projects made ‘their’ RRI actionable / translated RRI into practice and (3) how their notions of RRI are carried beyond the boundaries of the ‘project’.

To frame the thinking with which the the formulation of the questions was approached, principles were formulated that serve as reference points against which the formulations can be inspected:

- (1) Questions need to be both specific (relatable) and open (answerable),
- (2) They do not serve the purpose of creating comparative grounds between projects, but aim at illuminating the projects in their very own contexts,
- (3) They should not be formulated in ways that implies formality (to detach the questions from programme aims),
- (4) They should not superimpose any conceptions of RRI, but inquire about ontological differences, and finally,
- (5) They should be directed towards the “opinion of the project” (consensus).

Based on these organising principles, the following questions with the following logic (order) were formulated:

Rationale	Question
Project-internal	What does (or did) the project understand as ‘responsible’?
Project-external	How does (or did) this project bring ‘responsibility’ to life?
Translation	What difficulties does (or did) this project encounter as to ‘thinking’ in RRI?
Actual impacts	What changes does (or did) this project invoke in its environment?

³ https://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-swfs_en.pdf



Operationalisation	There are certain RRI criteria (MoRRI indicators, RRI keys etc.). How do (or did) these shape your project? Did they?
--------------------	---

Table 1: Pre-feedback questions and rationales

Next to the formulation of these questions, key pillars of the strategy of engaging the SwafS ecosystem with these questions were developed that included the format, timing and other requirements that would need to be ensured throughout the engagement. These included:

Who to engage?

Even though it might be very interesting to send these questions to every single participant in these projects, we are tied to time constraints. This is why we discussed to send the questions to two participants of each consortium that operates under the Science with and for Society programme: one receiver is the consortium leader and the other is any researcher who plays an active role in the project. This will allow us to gather impressions that feed into understanding the ways that RRI is inscribed in these projects and how they carry this inscription towards the outside. In the email to the survey participants it was pointed out that in case a receiver of the questionnaire does not see him or herself fit to answering these questions, he or she should simply forward the request to someone within the consortium he or she thinks better fits the task.

How to engage?

While trying to keep it simple and informal (which is the spirit in which we would like to deliver it to spark honest and meaningful answers), a simple email should suffice in approaching the participants, to which they can simply reply with their answers or choose any other format of their liking (e.g. sending back a .pdf document). Another detail that, in retrospect, was crucial was that the emails were not sent in bulk. Through a personalisation in the subject-line ('Questions about responsibility in [project name]') and the mentioning of (a) the recipients name in the beginning of the email and (b) the other person who received the email within the same consortium in a suffix at the end of the email, it presumably decreased the threshold to engage, which can be seen in both the (relatively) high numbers of respondents and the thoroughness of the responses.

The contact details were retrieved from already-existing contact lists (through the SwafS ecosystem meeting or the SwafS 14 M&E group for instance), as well as from an online search through consortia websites and their contact forms.

When to engage?

In order to prime (some) receivers and build momentum around the questionnaire, the reflective nature of the SwafS-Ecosystem meeting on May, 19th 2021 was used as an introduction and feedback session on the questions developed. These bimonthly meetings consist of a considerable number of invitees from a wide range of SwafS projects with an average participation of around 25 and have the purpose of sharing insights and experiences with each other on the common quest to bring society closer to science and vice versa. After the feedback was collected and incorporated into the questionnaire, the questionnaire was sent out on the 15th of June 2021 to 8 SwafS-14 projects as a test with a deadline on the 25th of June 2021, and to the entirety of SwafS by 6th of July 2021 with a deadline on the 30th of July 2021, giving the participants enough time to



respond thoroughly and make up their minds and / or account for possible holiday returns. Below a graphic describing the plan of engagement.

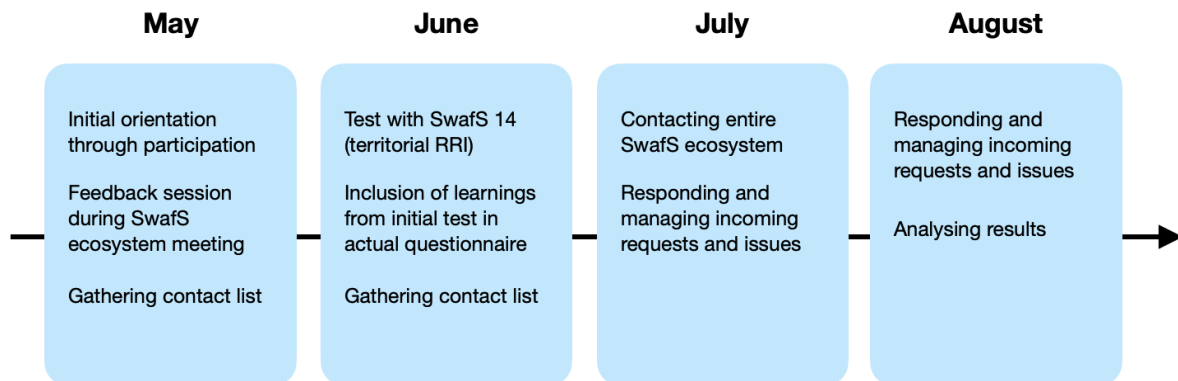


Illustration 1: Plan of engagement

2.1.2 Feedback incorporation

In retrospect, presenting and allowing for ‘democratised editing’ of the questions during May’s SwafS ecosystem meeting was a very positive experience, as certain formulations were unclear to many of the participants. What follows is a breakdown of the questions and the key points that were made for each.

General points:

- Translating is part of many different activities – is there a way to specify, or encapsulate these in the way the questions are asked?
- There have been different efforts to asking similar questions. In that sense, could I use previous surveys / interviews / questions / work and depart from there?
- As a way for asking ‘beyond the project’: asking about the (sustainable) changes beyond the research-project’s lifetime?
- Asking the respondents that if there is no answer / find it hard to answer, they should pose the questions that they are facing in order to understand the struggle.
- What is the driver of the change process in the projects? Incorporate this in one of the questions.
- Maybe I should include the thinking behind the questions to make it clearer. (Within the project; outside the project.)
- Add: If you don’t have an answer, please criticise the question for me.

Question 1: What does the project understand as ‘responsible’?

- Several ways, several lenses. On what level? Which phase of the project?



- Theory-practice: the understanding of responsibility may change in practice.
- Maybe focus on the transformation that the word responsibility undergoes in the course of the projects.

Question 2: How does (or did) this project bring ‘responsibility’ to life?

- Include governance settings and actors here. It can be perceived on an organisational level, system level etc.
- Easy to loose discussions on transformative change
- ‘Bringing to life’ relating to execution, the second phase (‘activity’)

Question 3: What difficulties does (or did) this project encounter as to ‘thinking’ in RRI?

- Reformulating towards asking about the ‘difficulties about triggering reflections about RRI’ an the themes that it is mobilising
- Thinking about translational aspects across actors are part of thinking in RRI
- Positive: this questions seems to be straightforward

Question 4: What changes does (or did) this project invoke in its environment?

- ‘Invoke’ is a complicated word. Make it more easy to understand / specific
- Suggestions: impact; set in motion
- Distinguish between impacts that are achieved versus prospective impacts
- Distinguish between levels: project or not
- Identify a gap between the conceptions of researchers and / or stakeholders
- Find a word that goes beyond what the project does – set in motion?

Question 5: There are certain RRI criteria (MoRRI indicators, RRI keys etc.). How do (or did) these shape your project? Did they?

- Include Stilgoe et al.’s (2013) four dimensions
- Be explicit about not using ‘project’ language
- Does this question refer to the project, or the pilot-level?

2.2 Final, feedback questionnaire

After the feedback session on May 19, 2021, the following questions were formulated trying to, as much as possible, incorporate the constructive criticism that the session elicited without moving away from what this exercise wants to explore. Additionally, two questionnaires were



developed that aimed at projects existing for more than one year and younger projects to reduce confusion:

2.2.1 *Projects with a running time of less than one year*

Rationale	Question
Project-internal	'Responsibility' is a central theme in projects funded under SwafS. What are the project's understandings of 'responsibility' and how did it change across the project lifetime?
Project-external	Through which (planned) activities, actions or practices does the project bring 'responsibility' to life?
Translation	Translating responsibility to practice has sometimes proven difficult. What difficulties does this project encounter as to mobilising actors around RRI?
Actual impacts	What (prospective) changes did the project set in motion in its environment?
Operationalisation	There are certain RRI conceptualisations (MoRRI indicators, RRI keys, RRI dimensions etc.). How do these influence your project as to 'doing' responsibility? Were they helpful?

Table 2: Logic of questions for project running for less than a year

2.2.2 *Projects with a running time of more than one year*

Rationale	Question
Project-internal	'Responsibility' is a central theme in projects funded under SwafS. What are the project's understandings of 'responsibility' so far?
Project-external	Through which (planned) activities, actions or practices does the project aim at bringing 'responsibility' to life?
Translation	Translating responsibility to practice has sometimes proven difficult. What difficulties does (or did) the project encounter as to mobilising actors around RRI?
Actual impacts	What (prospective) changes does the project aim at setting in motion?
Operationalisation	There are certain RRI conceptualisations (MoRRI indicators, RRI keys, RRI dimensions etc.). How do these influence your project as to 'doing' responsibility? Do they?

Table 3: Logic of questions for project running for more than a year

Finally, a template-email was designed that was used to approach the participants (see appendix 6.1).



2.3 Results

Based on the strategy explained so far, the different consortia within the Science with and for Society programme were contacted. The SUPER MoRRI project itself was not included, being the organiser of this inquiry. In the end, a total of 49 consortia were contacted, including projects that already finished, such as NewHoRRIZon (SwafS-9) or SISCODE (SwafS-13). A detailed table with all the consortia that were contacted is listed below:

SwafS Call	Call theme	Consortia
SwafS-5-2017	New constellations of changing organisations and actors	Multi-Act, RiConfigure
SwafS-5-2018-2020	Grounding RRI in research-performing and research-funding organisations	Co-Change, Ethna System, Grace , GRRIP, RESBIOS
SwafS-9-2016	Moving from constraints to openings, from red lines to new frames in Horizon2020	NewHoRRIZon
SwafS-13-2017	Integrating society in science and innovation – an approach to co-creation	Siscode
SwafS-14-2017	A linked-up global world of RRI	RRING
SwafS-14-2018-2019-2020	Supporting the development of territorial responsible research and innovation	CHERRIES, DigiTeRRI, RIPEET, RRI-LEADERS, RRI2SCALE, SeeRRI, TeRRIFICA, TeRRitoria, TetRRIS, TRANSFORM, WBC-RRI.NET
SwafS-15-2018-2019	Exploring and supporting citizen science	ACTION, Cities-Health , CoAct, CROWDS4SDG , CSI-COP, Envirocitizen, EU-Citizen.Science, MICS, REINFORCE, WeCount
SwafS-19-2018-2019-2020	Taking stock and re-examining the role of science communication	NEWSERA
SwafS-20-2018-2019	Building the SwafS knowledge base	On-MERRIT, C4S, ALLINTERACT , B2-InF, FEDORA
SwafS-22-2018	Mobilising research excellence in Europe's outermost regions	FORWARD
SwafS-23-2020	Grounding RRI in society with a focus on citizen science	INCENTIVE, JoinUs4Health, TIME4CS
SwafS-27-2020	Hands-on citizen science and frugal innovation	COESO, FRANCIS , STEP CHANGE, YOUCOUNT
SwafS-31-2020	Bottom-up approach to build the SwafS knowledge base	RRIstart, SEEDS, Critical Making , PandeVITA, MOSAIC

Table 4: Consortia engaged

Each programme call had a different rate of engagement. While SwafS-14-2018-2019-2020 had a turnover of respondents of 10 out of 11 projects, other calls, such as SwafS-5-2018-2020, did not



have such a strong rate of engagement with only one out of five projects participating. The graph below shows the rate of engagement by call.

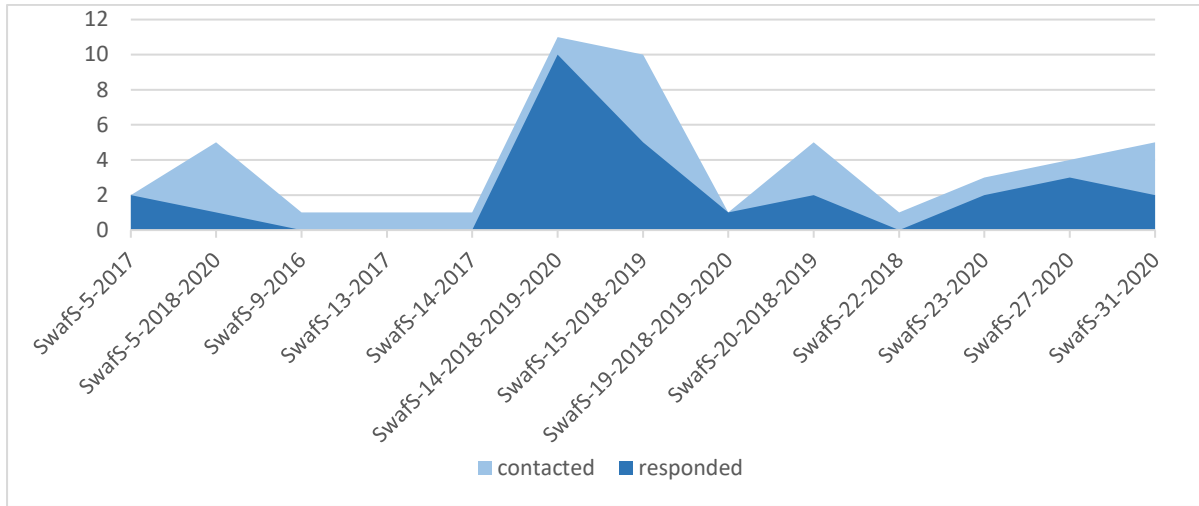


Illustration 2: Consortia contacted and consortia responded by SwafS-call

A total of 29 consortia out of 49 participated in this questionnaire (marked in bold and italics in Table 4). As elaborated earlier in the strategy, two participants per project were contacted, knowing of each other's reception of the email. However, not always did both members of each consortium respond, as either:

- (1) only one member per consortium responded
- (2) multiple members per consortium responded, as it was circulated internally
- (3) the members, together, formulated one answer to the questionnaire
- (4) or nobody responded (albeit reminder-emails).

In total, 29 projects participated with a total of 36 respondents out of 110 inquiries (including forwarding emails and other diverging communication).

To note, this questionnaire had interesting effects within certain consortia. For instance, within ACTION (SwafS-15), the questionnaire sparked an internal exercise of introspective reflection on their practices of responsibility and how they, collectively, define it.

Another interesting observation is that some members who received the email did not feel comfortable giving answers to these questions. In a number of instances, the members were not part of research performing organisations.

What was extremely interesting was the commitment and investment the participants showed in the answering of the questions. On average, the questions were answered with a word count of 100 words (Q1: 118, Q2: 110; Q3: 115; Q4: 68; Q5: 92), spanning between two ('No problems' in the question about the difficulties) to 651 words. The nature of the answers was extremely reflective, which the strategy in the formulation of the questions set out for. The figure below presents a visual overview of the word counts by question.

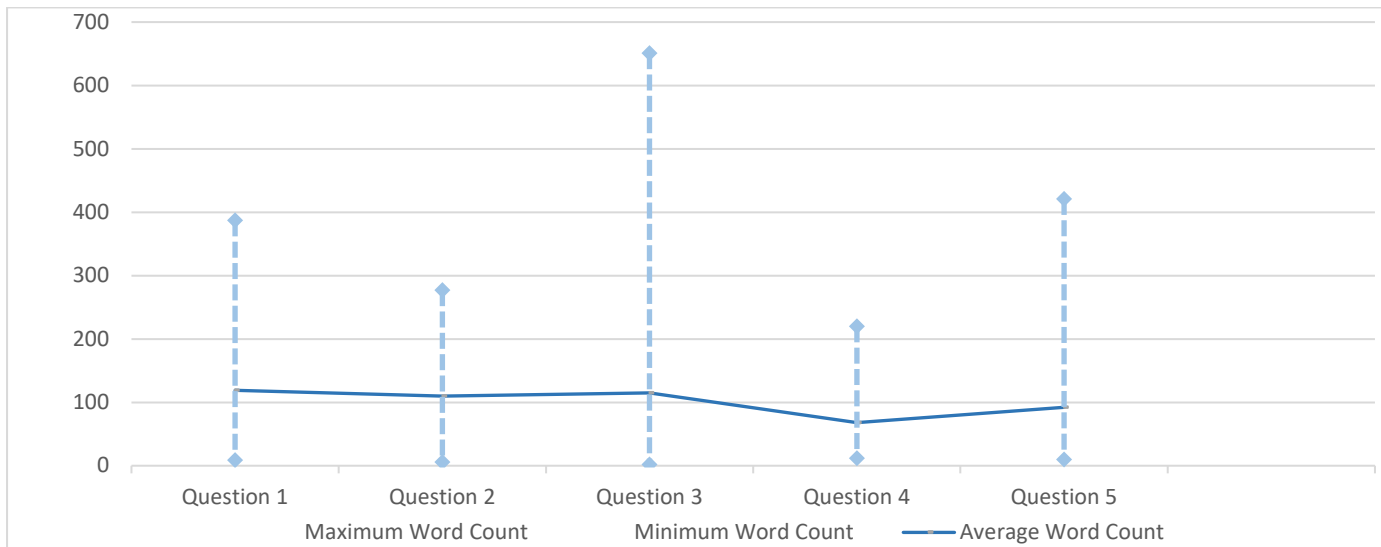


Illustration 3: Minimum, maximum and average word count by question

Finally, the communication with the projects also has sparked a few different outcomes, where projects felt more comfortable reflecting on the questions in the form of a blog post, or the invitation of some participants into the bimonthly SwafS Ecosystem meeting, binding the projects closer together and furthering the space for reflection about these issues.

3 MULTISTABILITIES OF RESPONSIBILITY IN SWAFS

One of the objectives of this task was to identify, if any, ‘indicators in the wild’ through understanding how different SwafS projects ‘do’ responsibility. The results from the questionnaire carved out three main understandings that sometimes, but not always, align with one or more of the three dominant conceptualisations of RRI that were described in the Strategic Plan of SUPER MoRRI in early 2020 (Deliverable 1.2).

First of all, these include the European Commission’s very own ‘six keys of RRI’, namely public engagement, ethics, gender equality, governance, open science and science education, which are reinforced and practiced in a collective process of diverse societal actors (researchers, citizens, policymakers, business etc.) that “work together during the whole research and innovation process in order to better align both the process and its outcomes with the values, needs and expectations of society”⁴.

The second key conceptualisation stems from von Schomberg (2013), describing a transparent, interactive process by which societal actors and innovators become mutually responsive to each other with a view to the (ethical) acceptability, sustainability and societal desirability of the innovation process and its marketable products” (von Schomberg 2013: 63), where global deficits drive the need for collective responsibility and stewardship (von Schomberg 2019).

⁴ <https://ec.europa.eu/programmes/horizon2020/en/h2020-section/responsible-research-innovation>



The last conceptualisation that is widely used are the four dimensions of responsible innovation as operationalised by Jack Stilgoe, Richard Owen and Phil Macnaghten in 2013, namely anticipation, reflection, inclusion and responsiveness. They define it as a “taking care of the future through collective stewardship of science and innovation in the present” (Stilgoe et al. 2013: 1530). Despite their differences, there are overlaps that, within SUPER MoRRI, are collated as the ‘I3’ model (Integration, Implementation Impact⁵), offering an overview of the key conceptualisations that were considered in the analysis of the responses yielded.

	Responsible Research and Innovation		
	<i>Integration</i>	<i>Implementation</i>	<i>Impact</i>
European Commission	Diverse societal actors	Public engagement in the whole research and innovation process	Increased alignment between R&I and society
Von Schomberg	Societal actors and innovators	Mutual responsiveness	Better marketable products Liberal-democratic values
Stilgoe, Owen & Mcnaghten	Collective stewardship	Anticipation, reflection, inclusion, responsiveness	

Table 5: Conceptual summary of ‘Responsible Research and Innovation’

3.1 Defining multistabilities

In this document, we call the ways in which RRI (or responsible practices) occurs ‘*multistabilities*’. Inspired from works in Philosophy of Technology (see Rosenberger, 2017), this work highlights a certain temporality and fluidity of the concept, paying respect to the multiple understandings and ways of ‘doing RRI’ that the respondents of the questionnaire have described so thoroughly. This compound word thus emphasises through its prefix ‘multi’ that there is more than one RRI that occurs in these projects at any time. The word ‘stability’ indicates that it is a delicate, temporal process in which actors are engaged and hold stable through their involvement, creating a common RRI for the consortium’s work that may be inspired and based on (very) stabilised operationalisations of responsibility, e.g. the 6 RRI keys from the European Commission, but nonetheless differ in their empirical context.

3.2 Project topology

One very common delineation in the consortia surveyed is the classification of an ‘inside’ and ‘outside’ of the consortium. Whilst one would assume that this differentiation would relate to

⁵ <https://super-morri.eu/download/153/findings-and-deliverables/5179/d-1-2-strategic-development-plan-2020-24.pdf>



actors being either formally engaged in a consortium or not, the line is not quite clear-cut. Especially in SwafS-14, a programme that focuses on ‘territorial RRI’, ‘inside’ and ‘outside’ sometimes relates to either a ‘research level’ involvement or being part of ‘the regions’, despite the actors’ formal engagement in the project. It is important to keep in mind that the consortia that responded mostly consist of different actors from different actor groups (e.g. quadruple helix), that can however engage ‘outside’ actors (not formally engaged with the consortium), e.g. with citizens, that, again, consist of different societal groups. This dynamic plays out in different ways depending on the project and can influence how consortia understand themselves.

The key purpose of this research is to understand how these projects bring responsibility to life in their lifetime. Although the projects (mostly) based their work on one of the three understandings of RRI, they often developed an own way to putting the thinking into practice. The following section will describe the three different multistabilities of RRI that the questionnaire identified by working through different examples, following a logic of (1) operationalisation and (2) difficulties. Interestingly, characteristics of the stabilities can be highlighted in the different notions of *with*, and *for* of the programme name *Science with and for Society*, which the italic letters in the headings of the stabilities indicate.

3.3 Science with and *for* Society: facilitating practices of responsibility

Operationalisation of responsibility

Characterised by a strong directionality of the research and innovation efforts towards the groups that the projects try to mobilise, this ‘stability’ revolves around focusing on the issues and desires of a specific community or network of actors, empowering them in negotiating, establishing and transforming issues into what *for them* is responsible. The role of the consortium here is supportive, where resources (knowledge, network, funding etc.) are offered in driving these transformations.

"It is about designing a process where all quadruple helix stakeholders can share the co-responsibility of designing regional strategy and implementing regional activities." (SeeRRI)

Much more than simply involving stakeholders in the process of research and innovation, it is the stakeholders that are taking a central stage in the structuring and navigation of the process. By transferring agency from the researchers to the (quadruple helix) stakeholders *whom the research concerns*, the projects assume a strong value-dimension that is directed towards the stakeholders who it tries to mobilise and engage. The notion of responsibility here emerges implicitly from the projects’ stakeholders, as they are allowed to define what is desirable and valuable *for them* though their decisions and actions concerning the research and innovation process, whilst researchers and ‘project level’ partners act as supporting actors for them.

"We were convinced that this [involving all stakeholders] would lead automatically to responsibility, because within the development one could respond to all concerns, questions and issues raised by the participants representing the four helixes." (RIconfigure)

Sheer involvement, that is, the formal participation of the projects, was not enough when governing responsibility in such an implicit way. Rather, specific sets of questions needed to be addressed that the project eventually faced:



“During the project we discovered that involvement as such is not enough, why would society be involved and who from society?” (RIconfigure)

The necessary questions are directed towards the actors who have a stake in the context in which the project plays out. Identifying these stakes allows for identification of (more) stakeholders – those whom the transformations, the knowledge produced or mobilisation of actors concern. Giving the stakeholders' agency within the project simultaneously allows for creating common definitions about what is socially desirable for them and thus what is responsible in the very context in which the project plays out. And opposed to following pre-set dimensions of responsibility (e.g. 6 keys of RRI; see third stability), what is responsible becomes very specific to the context at hand:

“In our case, for sure a strong focus on data protection. We work with private citizens in a citizen science setting, so protecting data from the participating citizens and be rigid and precise on participants' consent is a constant focus point. Secondly, we use technology that could be able to collect private information (i.e. camera-based sensor). One element in terms of responsibility is to design and use the technology GDPR-compliant, by design.” (WeCount)

Difficulties and issues

This agency transfer to stakeholders challenges the projects insofar as they have to face specific challenges that this strategy comes with. Whilst often taken for granted as a basic group of actors, engaging 'society' raises one of the most central questions already: who is 'society' and who represents it? Most prominently in 'territorial RRI' projects which work with different regions of Europe, the word 'region' becomes a liminal word that is sometimes taken for granted: which actors from a specific region does the project involve and in what ways do these actors represent the region itself? How do these influence the regional agendas and strategies, political, social or other contexts and what is their stake that the project can address? All these questions are part of the problem of identifying 'society'.

Furthermore, involving stakeholders so deeply also means that a thorough understanding of the research and/or innovation must be ensured. Understanding the assumptions inscribed in the project, the potential transformations the project can produce and what it really is that is being discussed are preconditions to engaging in a common process. These problems of expertise spring from the fact that nonscientific actors are being invited and engaged in an academic process that some actors do not have the experience or understanding for. This makes it important for the projects to create the (formal) space for stakeholders to contribute with *“their worries and insights” (RIConfigure)*.

Another issue that the projects encountered in the engagement of external stakeholders was of very practical nature: managing expectations as to the time that is required for them, especially in a process that first needs learning, to be involved. That applies especially when there is no direct reimbursement of the energy and time that these actors contribute (e.g. monetary or otherwise). RIPEET, a project that tries to establish responsible practices in the energy sector of three different regions in Europe, tackles this difficulty by activating already-existing networks of actors and explicitly giving them the feeling that the project gives them the opportunity to shape the direction their region is taking.



Finally, a key issue that exists across all multi-stakeholder approaches described by the projects is that of translation. Involving a range of actors from different fields and ‘content’ cultures makes it difficult to communicate effectively, as the language that certain groups use might differ from that of another, although they are, in the end, concerned with the same thing. The strategy to tackle this issue identified by DigiTeRRI is, however, rather simple: *“Here, a lot of talking is necessary” (DigiTeRRI).*

3.4 Science *with* and for Society: democratising research and innovation

Operationalisation of responsibility

The second stabilisation of responsibility surfaces in the attempt to *fully* democratise the research and innovation process by involving diverse sets of actors into not only the research and innovation project, but also its design. Characteristically among the projects that resonated with this stabilisation, responsibility is ensured through two key mechanisms: (1) the creation of common views across all actors and (2) holding each actor equally accountable for decisions and actions taken throughout the R&I process and its outcomes. In effect, these two mechanisms ensure that each actor not only fully engages in, but also has the prerequisite knowledge and understanding necessary to contribute to the development of the project.

In order to be able to reach such level of collective participation, there is the necessity to first discuss one’s differences in the creation of a common ground, a basis on which the project can be built.

“During the process, all partners converged to a common view, language and approach and this was not to be taken for granted at the beginning of the project.” (Multi-Act)

This involves not only inviting actors to a collective research process, but also the collective design of this process in the first place. This ensures that the assumptions that the research design carries (e.g. formulation of research questions or conceptualising a methodology) implicitly represent each actor’s concerns, understandings of the matter at hand.

“Our project’s main actions towards responsibility are directed to ensure that citizens participate in all phases of research, including the choice of the research question and the design of the study, with capacity to make decisions and influence choices. This is done with the idea to balance scientists’ and citizens’ views, aims and preferences, expecting that the results of the final project will be more useful for the society as a whole.” (CitieS-Health)

This common process of defining the project strategy as such both aligns expectations and fosters understanding of the activities to come. They create a foundation for collective deliberation where participation extends beyond formally engaging in a project. It demands active involvement in decisions that shape the process, making every actor accountable for the decisions taken throughout the process.

Difficulties and issues

The doctrine of democratising entirely the research and innovation process also entails difficulties that needed to be addressed by the projects employing this stabilisation. Although



there are many overlaps with the previous stability, the weight of some aspects is different here. Adding to the difficulty of identifying the right actors for a certain project, the consortia here faced an added difficulty of addressing the differences between the actors as well. The key thinking was it is not enough to only let different groups partake in the research and innovation process (with a specific focus on vulnerable groups), but the actors gathered have to develop a feeling of belonging to and engaging with a wider cause. This process of creating a team, rather than a collection of diverse actors, was rather challenging for many projects and needed managerial sensitivity by the more formally involved partners (e.g. the consortium leader).

A second difficulty that was mentioned rather often is the underestimation of time it takes to fully engage actors in such a collaborative process. Especially visible in projects that explicitly gravitate around citizen science, it plays out in the consortium balancing the expectations of the actors against the time that is available (and within limits) that needs to be invested, especially by stakeholders that are not receiving funding from the project. Sometimes, this leads to the simplification of certain steps in order to lower the threshold of engagement and makes the engagement less time-consuming. Another issue especially visible within projects that revolve around citizen science is that of democratisation of the entirety of the process, as some decisions still rely on the scientists' views: *"Many of the multiple decisions taken along the project still rely a lot on scientists as we couldn't find an agile way to involve citizens in all decisions"* (CitieS-Health). This is an especially demanding difficulty, as the organising principle of this stability of responsibility is democratisation.

3.5 Science *with and for* Society: mobilising actors around RRI conceptualisations

Operationalisation of responsibility

The third stabilisation described by the projects concerns the implementation of already-existing principles or thinking of what is responsible. As opposed to the previous two stabilities, which require a proactive involvement to first declare *what* responsibility means in any given context, this stability provides certain normative anchor points or methodologies that, when followed, are thought to produce responsible outcomes. These pre-formulated anchor points surface in e.g. the previously described '6 RRI Keys', or methodologies such as Stilgoe et al.'s dimensions (2013). Here, the strategy the projects follow is one of implementing these already-operationalised models into a specific context. The form this act of implementation takes can be understood as a 'formalisation' of RRI, where usually the different principles (in the example of the European Commission's six keys) are being bureaucratised in specific contexts or the RRI dimensions Stilgoe et al. (2013) applied to the research process: in gender equality committees or the creation of an ethics manager position to ensure this perspective.

"The project is based on the design and implementation of grounding actions, i.e., clearly defined institutional changes. They include, for example, the development of a Gender Equality Plan, the creation of committees exploring ethical issues in research, the establishment of online mechanisms allowing citizens to contribute to the research activity, establishing protocols or guidelines to institutionally embedding public engagement in the research process, introducing RRI-oriented criteria in the calls for project proposals" (GRACE)



"[...] we develop working groups for mutual learning - so my understanding in this project is that the research systems are to be improved through mutual learning related to ethics and gender, open science and open access, science education and public engagement." (WBC-RRI.NET)

The primary task for the consortia therefore involves the mobilisation of actors around an operationalisation of responsibility (e.g. RRI Keys, RRI dimensions etc.) through the resources that the projects comes with, thereby bringing RRI closer to European research and innovation.

Difficulties and issues

Although the previous two stabilities show some similarities as to the difficulties (especially surrounding participatory governance), this stability deviates into different difficulties that are of operational nature. One of the biggest challenges the projects face here is that RRI is simply not known to the stakeholders that they are working with from one empirical context to another.

"[...] it is already clear that the RRI approach is almost unknown to everyone in the energy transition community." (RIPEET)

"RRI was not well known and the arrangement of multistakeholder initiatives of dialogue and reflection were not yet implemented before the CHERRIES project and so the creations of enabling conditions for triggering the process required the adoption of different strategies and also time." (CHERRIES)

This creates the need for any project involved to first create the conditions that are necessary for RRI implementation. Given that there often is such a low degree of RRI-literacy, projects do have to account for educating their actors and stakeholders about RRI as such, which gives rise to the second difficulty.

"We found that RRI discourses based on and articulated in 'formal' terminology remain rare at regional level. Notwithstanding this, it is evident that there are substantial shares of "de facto RRI" activities that local stakeholders maintain but would so far never have considered referring to by that name." (TetRRIS)

Thus, it is confirmed that RRI is rather vague and hard to comprehend, which is exactly why such operationalisations (like the six RRI keys) are used as they make the concept much more tangible and thus easier for the projects to mobilise actors around. Although this might sound more straightforward, it is not, as the researchers from CHERRIES described:

"The understanding and translation of the RRI concept into the regional activities and practices must be one of the most difficult points to address. Some partners cannot easily relate to the established keys and dimensions promoted by RRI. For instance, the keys concerning Ethics or Open Science seem to be difficult to apply in the project context or we haven't been able to acknowledge them properly." (CHERRIES)

Additionally, local dynamics can also burden the implementation process. Region- or context-specific characteristics can force the projects to develop alternative strategies for different contexts to create the conditions necessary for RRI. That can be local governmental structures that do not allow for streamlining RRI initiatives as described in the methodologies or the planning of the projects.



Finally, it needs to be stressed that this does not apply to the six RRI keys by the European Commission only. Any of the more popular RRI operationalisations (see Table 5) can be the subject around which mobilisation happens. The problem is that following a thinking of implementation can make it difficult account for the context in which it is ought to be implemented, as local dynamics and other specificities are, at least conceptually, unaccounted for in the definition of responsibility. This leads to translational issues within consortia that render the projects' work difficult.

3.6 Discussion

In order to contextualise the three different stabilities, this section aims at highlighting certain aspects in both the way the respondents have engaged in this task and the way multistabilities are embedded in the consortia.

As described earlier (see 2.3), a sample of two participants per consortium was chosen to participate in the questionnaire. Further, the strategy of engagement purposefully did not specify *how* the questionnaire should be answered in order to accommodate the different understandings and preferences of the respondents. This led some respondents to group up and formulate one answer per consortium, depicting the consensus among different actors or other respondents to formulate their opinion based on their experiences from within the consortium. Hence, the quotes from the last section *do not necessarily reflect the consensus of the projects*. This prompts the questions of *how stabilities emerge within consortia, and what does this mean for this report's task?*

To understand these questions, one must first reflect on the process of how stabilities stabilize in the first place. In short, to stabilize means to engage in a careful oscillation of different understandings of RRI against each other until one version prevails and is accepted by the group. To better understand this process, we can refer to a long history of scholars trying to understand the creation of (scientific) facts and their ways of describing this process with the help of actor-network-theory developed by Bruno Latour in the late 1980s (see Latour 1987). In short, Latour argues that for anything to emerge, it needs to become embedded in a network of human and material relations. A central assumption in actor-network theory is thus that things are what they are because they are brought to be (stabilised) by actors relating to other actors (Latour 1987; Gad & Jensen 2010). To exemplify this thinking, the six keys of RRI by the European Commission exist only because they are embedded in an actor-network (of these six keys of RRI), spanning actors such as the DG RTD, organisations in consortia that are conducting research with or about them, the policy-documents and websites delineating and discussing them, the graphics visualising them et cetera. It is through this webbing of (human and non-human) actors in a network that the six keys of RRI stabilise under what is called 'RRI'.

Projecting the question of how stabilities stabilise onto actor-network theoretical thinking, it becomes apparent that different actors can assemble with different conceptions of RRI at the beginning of projects. Their formal affiliation and commitments towards a common goal then forces them to carefully carve out what, for them, RRI is. As such, the actors (both consciously or not) engage in a process of stabilisation through conversing, the crafting of conceptual models and operationalisations of their understanding of RRI until, eventually, they subscribe to one version (one actor-network) of RRI. For this task, this means that the answers the respondents



gave (either ‘joint answers’ or ‘individual opinion’) signify specific actor-networks of RRI within consortia, rendering the answers equally valid, given that these conceptions exist. Another aspect that becomes apparent when understood through this perspective (and resonates with the answers from the consortia) is that it generally can be said that there is one corresponding stability per consortium, because the actors eventually subscribe to the prevailing actor-network (one stability of RRI) within the consortia examined. Differences emerge across different consortia that became apparent through e.g. this inquiry into a broader range of projects.

The second aspect that deserves to be highlighted is that two of the three stabilities the actors described in the questionnaire revolve around participatory methods for ensuring responsible outcomes with the spearheading question about the ends that these methods want to achieve in their conception of responsibility. That is, stability one and two (facilitating practices of responsibility and democratisation of research and innovation, respectively). Whilst the key difference between the two operationalisations is rather clear, being that the former focuses and aligns around the point-of-view of the group that it is trying to address whilst the latter invites into joint processes through democratisation and agency-transfer across researchers and practitioners alike, the goals these approaches are working towards are, however, identical in many ways. Although expressed in different ways (sensitising local actors for climate change issues, increasing societal actors involved in R&I systems, raising awareness, create interventions, gathering of a diverse pool of stakeholders), all of these statements aim at *mobilising actors around a theme that, for different reasons and different actors, deserve attention*. As such, these projects all aim at challenging a status quo that actors believe can and should be improved. This, of course, underlines the normative ground a concept such as RRI comes with: it is brought to life in order to create changes that aim at improving society in ways that can be understood as societally desirable. And this is the key difference between the first two stabilities, which aim at participation mostly, and the third stability (mobilising actors around RRI conceptualisations). Whilst the first two try to *facilitate* the definition of a desired change, followed by the mobilisation of actors around this theme, the last stability of RRI already comes with pre-formulated problematisations that are being ‘problematised into a specific context’. The question then becomes whether these problematisations resonate with the communities the projects are trying to engage or not, and what consequences this has in either case.

3.7 Reflecting on monitoring and evaluating (M&E) in SwafS projects

This task was designed as not only a description of the different stabilities that occur in projects of RRI within SwafS. As described in the introduction of this report, the underlying thinking was to connect these findings with monitoring and evaluation, potentially identifying new indicators that can be incorporated to better identify RRI impacts.

The biggest lesson to draw from this questionnaire is that RRI is very diverse in SwafS. It comes in different conceptualisations and operationalisations. It concerns different things in different contexts. Employing RRI within a group of actors is not a straightforward exercise, but needs careful negotiation until it stabilises to an extent that actors can work with it in order to catalyse socially desirable changes in the contexts it is employed for. This poses a key challenge for monitoring and evaluation based on an a-priory set of indicators indicating certain effects, as the



diversity of RRI likely outweighs any set of indicators developed with any new project that is concerned with RRI, arguing that each project, in its unfolding, creates specific versions of RRI that can hardly be fully covered by any pre-existing set of indicators. To inform this argument, the next paragraphs aims at highlighting some of the changes that the projects have catalysed in their contexts, focusing on question four of the questionnaire: *what (prospective) changes did the project set in motion in its environment?* Doing so allows us to understand the catalysing effects the projects have had.

Especially when operating under a stability of ‘mobilisation of actors around certain RRI conceptualisations’, *institutionalisation* of e.g. the RRI keys is a rather prominent effect of the research projects. Creation of boards or committees, but also the contribution to institutional priorities or processes is part of this narrative.

Many actions have been already institutionalised and they will be continued or replicated in the next years. The list is quite long, including new committees established, new training courses introduced, new guidelines approved by the concerned internal boards, the allocation of a budget line devoted to RRI or an RRI key, the establishment of a person in charge of coordinating RRI activities in the organisation. (Actor in GRACE)

Another impact of the projects has features of facilitation, where the engagement of different actors has sparked ideas being followed-up on independent from any preconceptualisation, highlighting an interventionist notion to e.g. define regional priorities. Furthermore, the involvement of the project prospectively influences the governance of R&I in energy in the territories active (Actors from RIPEET).

An especially interesting example comes from TeRRIFICA⁶, a project gravitating around climate change adaptation and mitigation activities in regional settings. With specific focus on policymakers and regional authorities, the project eventually sparked different results in different regions it was active in: In Poznan, the project data collected supported climate change mitigation discussions on local policy level. In France, the project connected to already-existing networks and further helped grow the issue, whilst in Germany it led to sensitising actors around climate change issues on the smallest levels (e.g. balcony greening). And in Minsk, it provided hands-on experience for sustainable development education, showing the multiplicity of interventions one single project can have in different contexts, although departing from the same RRI vantage point.

Furthermore, WeCount⁷, a project focused on democratising traffic data collection to be fed as policy-messages into local decision-making processes, have e.g. ensured that data protection is a given on the platform the project collects the data for, making data protection an act of responsibility in itself.

Whilst these institutional, privacy-driven, policy-directed, citizen-empowering or awareness-raising changes depart from the ‘same’ thinking, it is evident that there is complexity that M&E has to manage. Ultimately, the diversity that has been described in this report itself is indicating a question. That is, whether monitoring and evaluation can account for the diversity of actual

⁶ <https://terrifica.eu/about-terrifica/>

⁷ <https://we-count.net>



action and what this takes, closely followed by what the purpose of M&E is in this context. In view of this task's purpose of reflecting upon the results for identifying 'indicators in the wild', it seems like the analysis and introduction of multistabilities, as well as the glimpse into the transformations that were catalysed by the projects, point away from 'fixed' indicators that inquire into a specific picture of RRI. Taking these lessons seriously, indicators must be solid enough to bridge interpretations of RRI across analysts and evaluators, and flexible enough for contexts to emerge in the indicators used in any M&E framework. These are conditions that apply when the key purpose of M&E adheres to a principle of 'depicting the right thing'. Conversely, monitoring and evaluation was also raised as a knowledge-generating process emphasising the commitments of collectives where M&E can be understood as an active involvement amidst the context in question rather than a detached attempt at accurately describing a project. This highlights the collective's 'productive interactions', where audiences are not seen as passive actor groups producing knowledge and actions and eventually impacts, but also "co-producers of the criteria by which such impact is evaluated" (de Rijcke et al. 2019; Spaapen & van Drooge 2011), potentially relieving the 'problem of diversity' that this report has highlighted.

4 CONCLUSION

Research funded under the European Commission happens, more than ever, under a broad consensus that the research conducted should be responsible. RRI was established as an attempt to generate and take up knowledge in socially desirable ways, working against a linearity of research and innovation that left the consequences of research and innovation open to after the R&I processes had concluded. By involving stakeholders in the process and thus granting 'society' a voice in the makings of science and innovation (Owen et al. 2012), both the processes and the outcomes of research are expected to reach higher levels of responsibility.

For researchers, RRI has provided a set of guiding principles to processes of research and innovation (see Owen et al.'s process dimensions of RRI) and has contributed to, in reference to why RRI exists in the first place, making European research and innovation more responsible. In this report we have described the ways in which strategies towards responsibility materialises in projects funded under SwafS. Irrespective of which stability of responsibility projects employ for themselves and how they further these strategies to attain socially desirable - or responsible - outcomes for their projects, the values inscribed in these projects point towards identical goals, which is what matters. Whether through a policy device such as RRI or other participatory practices that go under different names (e.g., co-creation, citizen science (as a discipline)), the goal is to give society a voice in scientific processes that, for the longest time, had been undisclosed from societal actors. In that sense the RRI paradigm aligns closely to the Unesco's equality, diversity and inclusion (EDI) focus that they support through the Recommendation for Science and scientific researchers⁸.

⁸ https://en.unesco.org/themes/ethics-science-and-technology/recommendation_science



The projects funded under SwafS base their operationalisation of responsibility on either the six keys of RRI from the European Commission (2014) or Owen et al.'s process dimensions (2012). The former is employed as means to an end of the research (Stability 3: institutionalisation of RRI), while the latter provides an introspective tool under which to assess research processes and determine whether or not projects resonate with the values of RRI as such, where the end goal is not set from the beginning, but context-dependent (Stability 1: facilitating practices of responsibility & Stability 2: democratisation of R&I). Whilst this 'alignment' of certain conceptualisations to certain multistabilities of responsibility is nothing to be worried about per se, as they help in operationalising the stabilities in different ways, it is challenging for monitoring and evaluation. Whilst standardisation of impacts (e.g. through MoRRI indicators) allows for comparability and measuring, the diversity of impacts that the projects under SwafS produce exceeds any formulation of indicators. While SDGs, MoRRI indicators and RRI Keys are often used by the projects to form an initial understanding of the desired impacts and creating a basis for expectation management, most of the projects that were inquired into further the range of available indicators by formulating own indicators.

“As for the MoRRI indicators and the SDGs, a further contextualisation and “customisation” of indicators for the overall evaluation of the regional experimentations will be part of the work in the next months (co-production of indicators and metrics of territorial RRI between M&E team and regional partners.” (CHERRIES)

„We have presented for them the RRI indicators, MoRRI indicators, and SDGs but have allowed the organization to set their own success criteria which fit their organizations and their context.“ (GRACE)

Indeed, democratising not only the research process, but also the evaluation of research and thus allowing for e.g. the different regions to set for themselves what socially desirable is seems to be one way of ensuring that monitoring and evaluation embraces and pays respect to the multiplicity of manifestations of responsibility.

The experiences shared through this questionnaire by many of the SwafS projects, the lessons learnt from the SwafS-ecosystem meetings and the sub-group on territorial RRI also underlines what has been captured in the strategic plan of SuperMoRRI as *responsible quantification* and *credible contextualisation*⁹, both of which are instruments for ensuring a contextualisation of indicators through involvement of its users, ensuring that responsibility, as defined implicitly through the indicators, resonates with the users' desired outcomes and ensures that RRI cannot be decontextualised to capture its meaning, actions and impacts in practice.

⁹ <https://super-morri.eu/download/153/findings-and-deliverables/5179/d-1-2-strategic-development-plan-2020-24.pdf>



5 REFERENCES

- de Rijcke, S., Holtrop, T., Kaltenbrunner, W., Zuijderwijk, J., Beaulieu, A., Franssen, T., van Leeuwen, T., Mongeon, P., Tatum, C., Valkenburg, G., Wouters, P. (2019) *Evaluative Inquiry: Engaging Research Evaluation Analytically and Strategically*. *fteval Journal for Research and Technology Policy Evaluation* (48). pp. 176-182. ISSN 1726-6629
- European Commission. (2014). *Responsible research and innovation: Europe's ability to respond to societal challenges*. Publications Office. <https://data.europa.eu/doi/10.2777/95935>
- Gad, C., & Jensen, C. B. (2010). *On the Consequences of Post-ANT*. *Science, Technology, & Human Values*, 35(1), 55-80. <https://doi.org/10.1177/0162243908329567>
- Latour, B. (1987). *Science in action: How to follow scientists and engineers through society* (11. print). Harvard University Press.
- Owen, R., Macnaghten, P., & Stilgoe, J. (2012). *Responsible research and innovation: From science in society to science for society, with society*. *Science and Public Policy*, 39(6), 751-760. <https://doi.org/10.1093/scipol/scs093>
- Rosenberger, r. (2017) *Callous Objects: Designs Against the Homeless*. University of Minnesota Press.
- Spaapen, J. and Van Drooge, L. (2011). *Introducing Productive Interactions in Social Impact Assessment*. *Research Evaluation*, 20 (3), 211-18.
- Stilgoe, J., Owen, R., & Macnaghten, P. (2013). *Developing a framework for responsible innovation*. *Research Policy*, 42(9), 1568-1580. <https://doi.org/10.1016/j.respol.2013.05.008>
- Von Schomberg, R. (2013). *A Vision of Responsible Research and Innovation*. 51-74.
- Von Schomberg (2019). *International Handbook of Responsible Innovation*. Cheltenham, Edward Elgar: 83-100.



6 APPENDIX

6.1 Email for engaging participants with the questionnaire

Dear [name]

Part of the monitoring and evaluation focus of the Super_MoRRI project is trying to be responsive to the different ways in which RRI occurs, is being used and supported, or manifests. As part of [SwafS Programme], [Project Name] is not only formally requested to reflect on different RRI indicators, but also needs to put the thinking of ‘responsibility’ into practice.

This is why we are asking you to reflect up on and answer the five questions below. This can be in any format you like; in this email in the form of a reply, in a separate document or any other format of your choice. **The only request is to answer until the [date].**

If you feel like you are not the right person to answer, please feel free to forward this email to somebody who you think is better suited within your consortium. Also, in case you cannot find an answer to a question because of the way it is formulated, please criticise it for us to understand your concerns, or ask us for support. Thanks already!

- (1) ‘Responsibility’ is a central theme in projects funded under SwafS. What are the project’s understandings of ‘responsibility’ and how did it change across the project lifetime?
- (2) Through which (planned) activities, actions or practices does (or did) the project bring ‘responsibility’ to life?
- (3) Translating responsibility to practice has sometimes proven difficult. What difficulties does (or did) this project encounter as to mobilising actors around RRI?
- (4) What (prospective) changes did the project set in motion in its environment?
- (5) There are certain RRI conceptualisations (MoRRI indicators, RRI keys, RRI dimensions etc.). How do (or did) these influence your project as to ‘doing’ responsibility? Were they helpful?

The answers will be anonymised and only be used for analysis in the framework of Super_MoRRI with special attention to work package 7, task 3 – that is, to identify ‘indicators in the wild’ in the attempt to describe a ‘State of RRI’, beyond the traditional way of the MoRRI indicators, and focusing on your credible contexts.

Many thanks and all the best,

Anestis Amanatidis

On behalf of the Super_MoRRI team

Note: In your consortium, [name] also received this email (two participants per consortium).



SUPER MoRRI

Scientific Understanding and Provision of an Enhanced and Robust Monitoring system for RRI

Horizon 2020, Science with and for Society Work Programme 2018-2020,

Topic: SwafS-21-2018

Grant Agreement Number: 824671



UNIVERSITY OF BERGEN



Universiteit
Leiden
The Netherlands



AARHUS UNIVERSITY

