Governance of Responsible Innovation
GREAT – 321480

MASIS reporting: Reflexive approach to MASIS V1			
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1. Executive Summary

Within the Res-AGorA project, which aims to create a socio-normative governance framework for Responsible Research and Innovation (RRI), the sub-project Monitoring Responsible Research and Innovation (MoRRI) will develop a web application for monitoring and visualizing data and information on RRI. MoRRI provides an overview of current European developments in and experiences with RRI. It monitors recent activities in RRI in European countries, including: Austria, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, the Netherlands, Poland, Spain, and the UK. MoRRI provides statistical data, country reports and key documents on RRI in these selected European countries and gives users the opportunity to create custom-made reports on RRI activities in Europe. MoRRI will be updated regularly to provide up-to-date information.

Res-AGorA and GREAT have signed Memorandum of Understanding between the two project consortia (Appendix). According to the memorandum the GREAT Consortium has adopted a reflexive approach to MoRRI.

This report is part of GREAT's WP 5, Gap Analysis and Proposition of Framework. The report describes the work done in task 5.4 (MASIS bridge) during the period M2 (March 2012) – M24 (January 2014).

2. Introduction

GREAT aims at developing an empirically based and theoretically sound model of the role of Responsible Research and Innovation (RRI) governance. One of the issues in building up an effective, usable and useful governance system at the level of the EU is to understand the RRI dimensions and their implementation and interpretation in different countries, cultures and organisations.

Within the Res-AGorA project (http://res-agora.eu/), which aims to create a socio-normative governance framework for Responsible Research and Innovation (RRI), the sub-project Monitoring Responsible Research and Innovation (MoRRI) will develop a web application for monitoring and visualizing data and information on RRI. MoRRI (https://morri.res-agora.eu/) provides an overview of current European developments in and experiences with RRI. It monitors recent activities in RRI in European countries, including: Austria, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, the Netherlands, Poland, Spain, and the UK. MoRRI provides statistical data, country reports and key documents on RRI in these selected European countries and gives users the opportunity to create custom-made reports on RRI activities in Europe. MoRRI will be updated regularly to provide up-to-date information. On part of GREAT VTT has participated in the development of the MoRRI (Monitoring of RRI) approach together with Res-Agora partners in WP 5 (Monitoring of RRI trends and developments). The projects GREAT and Res-AGorA have fine-tuned the collaboration to be done in MoRRI (virtual and physical meetings) described in the Memorandum of Understanding between the GREAT Consortium and the Res-AGorA Consortium.

3. 1st round of reporting under MoRRI initiative

The first steps for GREAT and VTT within Task 5.4 was to get familiarwith MASIS work which precedes the MoRRI and to start the 1st round of reporting as a national contact point for the MoRRI. Kick-off meeting for MoRRI activity and National Correspondents Workshop on 3rd and 4th of December 2013 in Berghotel Tulbingerkogel Mauerbach, Vienna was arranged for national contact points. This workshop was organized within the Res-AGorA Project and in the context of GREAT's WP5, the goal of which is to monitor responsible research and innovation (RRI) in selected countries of the European Union and one non-member state of the EU. The objectives of the workshop within this context were:

- to form a team of national correspondents (NC) to carry out the tasks of WP5 of Res- AGorA;
- to introduce the NC to the Res-AGorA project in general and
- include the NC in the Monitoring of RRI (MoRRI) in particular;
- to discuss with the NC the concept of RRI and to get additional input to the Res-AGorA project;
- to clarify the roles and responsibilities in WP5 and to fine-tune the monitoring exercise.

Participants of the workshop included representatives of the Res-AGorA consortium (FhG-ISI, UT, UNIPD, DBT, IHS, UNIMAN, UPEMLV, AU) as well as NC from the Czech Republic, Finland (VTT), Greece, Hungary, Iceland, Ireland, Lithuania, Poland, and Spain, which were selected for this purpose following an open call for tender. The emphasis of the workshop was to encourage an exchange between participants about the concepts of, and experiences with, RRI in different European countries.

The first round of monitoring was started in January 2014. Tasks for the national correspondents in round 1 of data collection were the following:

Task 1.1:

Please select 10 important documents from the last 10 years, which exemplify national policies on RRI in your country. These could include (but are not limited to) national research or innovation strategies, laws and their supporting documentation, communications / declarations / resolutions and other means for soft regulation, contracts between state and universities, white papers etc.

Task 1.2:

For each of the selected 10 documents, please provide a one paragraph abstract in English containing the central information of the document.

Task 1.3:

Please provide a brief analysis (maximum 2 pages) based on the compiled documents about RRI policies in your country addressing the following questions:

- What characterizes national policies towards RRI in your country?
- What are the most prominent dimensions of RRI that materialise in these documents? Which are the aspects of RRI addressed?
- What major mechanisms exist to support national goals related to RRI?

The first round of reporting was completed in the beginning of March 2014.

Preliminary results[1] of the monitoring exercise of the first round have shown that RRI is not a very well-known concept in Europe and that its meaning is highly opalescent. In different national contexts, the meaning of RRI was found to overlap with a number of pre-existing and well established concepts and ideas such as research integrity, research ethics, bioethics, national independence and autonomy, safety, standardization and sustainability, among others. Dominant narratives that frame RRI were also found to differ across countries. Economic growth is a dominant narrative in some countries, for example, whereas in other countries, there may be more emphasis on different societal needs. RRI plays a role in various technical areas such as energy supply, security, transport, ICT, neuro-/human enhancement, genetically modified organisms, etc. These also vary across countries due to differences in national instruments, policies and strategies. Across countries there are a multitude of instruments in place to promote RRI, e.g., corporate social responsibility, ethics committees, hard and soft law, ombudsmen, (participatory) technology assessment, public procurement, research funding schemes, tax

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[1] 1)   Please visit: http://www.morri.res-agora.eu/masis for more detailed description of process and results

regulation, training/education, etc. However, the impact of these instruments has to be verified. Challenges of RRI include that RRI might run the danger of being used as a legitimizing concept only, which might also contribute to the closing down of critical public discussion.

4. 2nd round of reporting under MoRRI initiative

In the 2nd round of MoRRI focus will be on two themes that emerged from the 1st round:

- 'responsibility in *funding* research and innovation' and
- 'responsibility in *performing* research and innovation'

MoRRI will focus on a selection of the key actors/agents who were also identified in the 1st round of data collection. Four specific RRI governance actors/agents have been identified and these will be investigated further in the 2nd round:

Actor/agent 1: Responsible funding of research and innovation at public research funding agencies; research into this area is conducted through using a combination of desk research and interviews.

Actor/agent 2: Responsible funding of research and innovation at private research foundations; research into this area is conducted through using a combination of desk research and interviews.

Actor/agent 3: Responsibility in performing research and innovation at universities; research into this area is conducted through desk research.

Actor/agent 4: Responsibility in performing research and innovation at private companies; research into this area is conducted primarily through interviews.

For each actor/agent there are a number of research questions that the national correspondents will address in their studies and answer in their national report.

In order to ensure a fairly homogeneous format for the national reports, correspondents are allowed to provide a fixed frame for the number of words that should be used to answer each individual question. Also guidance is inserted under each of the 4 actors/agents that are selected for the study. National correspondents need to analyze and interpret the raw data they collect in their country. Raw data should be referenced and explicated, to the extent it is necessary, to understand (and becoming able to validate) the interpretation. Raw data in terms of original documents should be uploaded in the database.

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5. Discussion and next steps

The 1st round of MoRRI provided an initial understanding of
- the dimensions of RRI that materialize in national policies,
- the actors who are involved in the governance of RRI,
- the techno-scientific domains that RRI governance addresses,
- and the variety in policy mechanisms that are applied at the national level.

There was significant variation across these categories and heterogeneity across countries. The inventory of RRI policy documents and the national reports capturing and summarizing the contents of those documents offer a platform for the 2nd and 3rd round of MoRRI. While the 1st round gave us a broad overview of the RRI landscape, the upcoming rounds will try to zoom in on particularly important and interesting spots on the map, thus arriving at a more fine-grained resolution.

The Res-AGorA project is interested in exploring de facto governance of RRI across different governance situations, with a specific focus on actors at the meso-level. Empirical analyses of de facto governance will, in turn, inform the development of a governance framework for RRI. MoRRI contributes to this research agenda by providing data and analyses on de facto RRI governance situations across 16 countries.

VTT will continue performing as national correspondent for the round 3 and analyse the results of the first and the second round of reporting and process (reflexive approach) with the WP 5 partners of the GREAT project.

Appendix

D R A F T
(version 2, October, 2012)

<u>Memorandum of Understanding</u>
<u>between the project consortia of</u>

Res-AGorA (Proposal No. 321427)

&

GREAT (Proposal No. 321480)

Within the Funding Scheme:
Collaborative project (Small or medium-scale focused research project)

Call:
FP7-SCIENCE-IN-SOCIETY-2012-1

Topic SiS.2012.1.1.1-1:
Governance frameworks for Responsible Research and Innovation (RRI)

The project consortia express their interest to coordinate their research activities and collaborate in a number of defined areas with regard to the foreseen monitoring of RRI activities (adjusted and refined continuation of MASIS) in a selected number of countries.

The core of the country-by-country monitoring will be conducted and managed by Res-AGorA (WP leader: Technopolis) in the following way:

Overview:
1. Development and operationalisation of an analytical framework for monitoring of RRI activities
2. Initial scanning of EU27 (+selected non-EU countries) to identify promising countries for monitoring of RRI activities
3. Continuous monitoring of RRI activities in selected countries (results documented in annual reports and final report)
4. Updating and maintaining the former MASIS website.

Details:
The monitoring of RRI activities and developments seeks to continue, albeit with differences, the MASIS monitoring of science and society activities website, a service which was developed under a previous procurement procedure. The deliverables of the monitoring can be considered as stand alone thematic, annual country reports.

Before starting the "real' work, the monitoring task will need to address several aspects of the actual monitoring: what should be monitored, and in which way should it be presented and who is the user group? This concerns thus conceptual aspects as well as diffusion aspects. A website such as MASIS, ERAWATCH or METRIS offer county specific information useful for a country monitoring. The systems are however not conceptually designed to provide cross-country intelligence. It is thus of strategic importance to decide early on the functions of the monitoring and the addresses. A system that simply accumulates information and presents it, but leaves it up to the viewer to search for content is different from a system that provides analyses or enables analyses. The former is often linked to text – online or in form of reports as it is currently on the MASIS website. The latter would require a different collection methodology, which leads to coded information. An example may help understanding the differences: a monitoring may ask to provide an overview of the fields, where ethical reviews are required by law. In a report/text style, the fields would be included in writing, possibly the experts would also provide the relevant legal provisions. For analysing this information across countries, a user may need to open x-number of reports, search for the relevant chapter, export and then possibly assign information, e.g. the fields relevant by country plus the relevant legal provisions, into a table format in order to obtain a systematic synthesis. While the FP call text asks for annual reports – which can and will be produced – we would like to go beyond the simple presentation of country specific reports and enrich the website with a dashboard-style feature that enables the user to chose from a set of indicators (i.e., specific information about particular items) and compare this for x number of countries (see e.g., http://www.ideas2evidence.com/showcase.html).
This requires however the co-development of the structure suitable for reporting as well as colleting and coding the information in a repository that will serve as the data basis for the dashboard. This extra visualisation and the development for the "data" repository will offer

numerous options for the diffusion of the monitoring results and a wider use of the monitoring content.

Task 1: Identification of relevant aspects to be monitored – developing a common template (month 3-4)

Here, the conceptual developments from Res-AGorA's WP2 (Analytical Concept) and complemented by the input from GREAT will be 'transformed' into a meaningful report structure. Given that RRI is more focused than the current SiS coverage of MASIS, the work on the structure will bear the MASIS legacy in mind for the development of the new structure of the monitoring.

Guidelines will equally be developed to explain what should be covered. The structure and the guidelines will be tested for one or two countries, ideally for countries covered by a partner.

Deliverable: Common template structure of RRI at national level

Task 2 Scanning of countries (month 5-6)

MASIS currently monitors 38 countries, the envisioned RRI monitoring will not maintain the 38 countries. Which countries will be monitored initially will be based on the size of a research and innovation system or advances in RRI. In order to obtain initial country specific information, an initial scanning will be organised. This scanning will cover the EU27 plus a small number of other countries such as RU, US, JP, AU, and CN.

The scanning can include a list of main organisations, 5-10 regulated fields, the legal framework (laws and by-laws), leading experts etc. This information will then be stored and analysed and linked to some key R&D figures such as GBAORD by NABS, R&D intensity and HRST. This should provide the basis for the set of countries to be monitored. This initial information will also be provided to the other relevant WP leaders for their further use in the extranet. Given the overall budget planned for the monitoring and the collection and coding of information, about 20 countries will be covered.

Deliverable: Basic overview of RRI in EU27+ countries

Task 3 The Monitoring system (month 7-36)

Once the countries are set, country experts will be chosen. Countries covered by the Res-AGorA partners are covered within the consortia. All other countries will be sub-contracted. The identification of other competent experts per country will follow the FP7 participation rules (i.e. restricted call for tender per country coverage) that will be organised by Technopolis. There are two main reasons for the sub-contracting: 1. Language and 2. Expertise. In order to organise a monitoring, i.e. collecting information according to a specified template and updating on a regular basis, the normal FP project structure is not ideal given the monitoring is not research per se, but it is a means to analyse and further develop studies. As thus, we do not see another option but to use individual country experts who will provide the service to the project and beyond. The country experts will provide three annual reports. The reports will be quality checked and commented by senior researchers from within the consortium (Partner 2 and 6 in particular) and the country experts need to take the commenting into account before they will be accepted.

Technopolis will provide its extensive knowledge in setting up a monitoring system and management it in terms of sub-contracts, coordination, information provision, quality control and all other relations with the set of individual sub-contractors and the other consortia partners. Technopolis will equally manage the (now) MASIS website and provide

for ideas of its revamp. It will oversee the technical amendments possibly needed (to be provided by a specialised IT sub-contractor) and develop the Dashboard. Technopolis will manage the website and keep it up to date. A monitoring in terms of use (Google Analytics) will be envisaged.

In terms of length of the annual reports which are planned as deliverables, 20-30 pages should be the maximum length. Given that it is unlikely that the RRI landscape within a country changes radically from year to year, annual reports with a differing structure may be more interesting and telling, and attracting more publicity rather than reports that include 95% of the same information over time. This however would be an aspect to be discussed and agreed with the Commission services.

Separately, a repository will be developed and maintained which will serve as the background for the dashboard application. Information collected for the purpose of screening will be made available to all partners for the totality of the project via the extranet.

 The GREAT Consortium will make a reflexive approach to MASIS in two steps: first to apply the analytical grid and model on MASIS report and work (testing and presenting the results of the application with underlying limits' gap) and proposing hypothesis to overcome them in close interaction with Res-AGorA and secondly to apply the analytical grid and model of the GREAT project and results on the findings of the Res-AGorA project in its MASIS monitoring (with the aim to try to overcome the limits of the guidelines and so on).

Joint meetings:
In order to facilitate coordination between the two consortia with regard to the monitoring activities, a joint meeting in month 3 or 4 of the projects is foreseen. The main purpose of that meeting will be the development and refinement of the common monitoring template based on the conceptual understanding of RRI at the early stage of the projects.

Karlsruhe, October 2012   Namur, October 2012

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Coordinator Res-AGorA   Coordinator GREAT