Report template
Italian National Workshop
Padova, Feb 24, 2017

Executive summary (maximum half a page)

The participants to the workshop appeared interested in the concept of RRI and open to its implementation. While only those who took part to relevant EU projects and activities were aware of Responsible Research and Innovation, all the participants linked RRI or its keys to their previous experiences in order to make sense of this concept, for instance with open access and ethics.

The panel included not only research performing and research funding organizations, but also technology transfer bodies and NGOs. This broad composition of the panel allowed to explore RRI in the wider innovation ecosystem.

When the research community is considered, the participants identified decisions on funding, publications, and (peer) evaluation as key decisions to encourage a behaviour consistent with RRI and its keys. When the innovation ecosystem is considered, social actors are deemed as often incapable to formulate their needs in clear and effective ways, in particular SMEs. Regulators and public policy makers are considered, in this case, as key actors to mainstream RRI among dispersed economic actors.

Introduction

Date and location of workshop
The workshop was held on February 24, at the FISPPA Department of the University of Padova.

Participant list
(with affiliations / Comments on participation based on national structures (e.g. why this NGO, policy, other group participation; what is missing, etc.)

Nicoletta	**ARIANI**	University of Padova	Represents the EU Projects Office of the University. The Office provides supports and training for all the University structures/researchers for H2020.
Marcella	**BONCHIO**	University of Padova	Deputy Rector for Research. She is responsible for the overall research development strategy of the University.
Massimo	**CHIOCCA**	Center for innovation and economic development, Romagna Chamber of Commerce	Coordinates CSR/RRI activities of the Romagna Chamber of Commerce. Co-author of a certification standard on Responsible Innovation.
Valeria	**DELLE CAVE**	Italian Institute of Technology	Coordinates the communication and engagement activities of the IIT, the government-funded excellence centre for RTD.
Francesca	**GAMBAROTTO**	Galileo Science and Technology Park/ University of Padova	Coordinates the activities of the technology transfer organization of the Padova Region. The Park hosts startups and works primarily with SMEs in the Veneto Region and nationally.
Leopoldo	**LARICCHIA ROBBIO**	Telethon Foundation	Heads the Fundraising, Engagement and Results Communication division. Telethon is the single largest private donor for genetic research in Italy.

Christian	**MICHELETTI**	European Center for the Sustainable Impact of Nanotechnology (ECSIN) / EcamRicert srl	Risk assessment scientist and regulation expert. ECSIN is the nanotoxicology laboratory of a company working delivering testing services. Works nationally with SMEs on knowledge and technology transfer.
Iolanda	**OLIVATO**	European Center for the Sustainable Impact of Nanotechnology (ECSIN) / EcamRicert srl	Technology transfer officer. ECSIN is the nanotoxicology laboratory of a company working delivering testing services. Works nationally with SMEs on knowledge and technology transfer.
Giampietro	**PELLIZZER**	Doctors for Africa – CUAMM	Medical doctor and clinical researcher. Coordinates the research activities of CUAMM, the largest Italian NGOs working on public health in Africa.
Valentina	**POLICARPI**	Italian Institute of Technology	Works on the education projects and fundraising of the IIT, the government-funded excellence centre for RTD.
Angela	**SIMONE**	Giannino Bassetti Foundation for Responsible Innovation	Science communicator. Deputy coordinator of the H2020 Project Smart Map on RRI at Fondazione Bassetti. Fondazione Bassetti is part of the VIRI Institute.
Isabella	**SUSA**	Turin University of Technology	Communication Manager, Research Area of the Turin University of Technology. Member of a national working group on RRI of the Conference of University Directors.

The group of stakeholders includes the main societal actors involved in the research and innovation process. Though the Chambers of Commerce are representatives of the public administration, public funders and regulators are under-represented. Moreover, though organizations such as the Italian Institute of Technology have branches all over the country, the stakeholders we gathered are mostly from the northern regions of Italy.

Understanding of responsibility and RRI

How is responsibility in research and innovation framed by the participants? Is there broad consensus on what is responsibility in science and innovation or did the participants' views differ considerably? How did this differ between different actors? What do people understand by RRI?

The participants tended to frame RRI in the terms of their previous experience. For Universities, the idea of "third mission" was introduced to frame RRI in the context of Higher Education institutional mandate. The distinction of RRI keys encouraged this line of thinking, as the participants' previous and current activities could be boxed in one "RRI key" or another. As an example, Open Access was frequently mentioned. Ethics, and ethics-assessment procedures, were equally presented as established examples of RRI in medical research. The idea that research should be "useful to society" was offered as the general umbrella under which the discussion of RRI could be framed. "Mission-oriented" R&D groups and initiatives were a translation of the orientation of science and innovation towards society that RRI encourages. Public Research Organizations and Higher Education institutions were considered to have a special obligation to show the social impact of their research, as far as their research is funded by taxpayer money.

Is the term RRI used at all? How?

Though all the participants received one of the presentations on RRI developed in the RRI Tools project, the use and knowledge of the term RRI is mostly limited to the organizations that have participated to EU

projects either on this subject or on science-society relations in general. In other words, most participants were unfamiliar with the notion.

What was identified as significant barriers, drivers and best practices to the further development of responsibility in research and innovation, to RRI (and potentially to the keys)?

The workshop was particularly rich in assessing the institutional mechanisms and conditions that favour/impede the implementation of RRI and in proposing strategies and instruments for developing and diffusing RRI. The moderator suggested to frame this assessment in terms of the organizational practices participants were directly involved in or were aware of.

As examples of good practices, we can mention:

- the creation of goal/application-oriented multidisciplinary R&D groups, including experts from communication/public engagement (setting term limits for these groups was seen as an instrument to discourage institutional and disciplinary "entrenchment", thus fostering openness and collaboration);
- the promotion of co-design involving users and professional intermediaries (e.g. disabled people on exoskeletons, clinicians on nanoparticles for drug delivery);
- the codification of the responsible governance of innovation through (new) voluntary standards for innovative firms and research organizations;
- the establishment of multi-stakeholder fora to foster collaboration and knowledge exchange between actors (e.g. research clusters for discussing nanotechnology safety; 'hackathons' to create sustainable products in the agrofood sector).

Among the problems (or barriers) discussed in the workshop, we emphasize a few that are related to the characteristics of societal actors on the one hand, and to the features of research and innovation activities on the other hand. The following examples are illustrative of these types of barriers:

- specific target groups cannot articulate their needs in clear and effective ways (e.g. SMEs);
- expertise other than scientific one is needed to "decode" these needs and engage targets;
- some types of research (and researchers) are less close to applications and, therefore, they feel shielded from and are less familiar with public exposure. This limited exposure make these researchers less responsive to social views and concerns.
- In many cases, impacts manifest themselves only in the medium/long term and as a result of the interaction of innovation in the broader societal context. This peculiar characteristic of innovation does not allow a clear definition of responsibilities from the outset, as well as their definite allocation.

When the institutional framework of research and higher education is considered, evaluation mechanisms are seen to neglect researchers efforts in public engagement and communication. This situation discourages research to invest a significant portion of their time in these activities, which are, generally, underfunded.

Decisions on funding, publications, and (peer) evaluation have been identified as the sites where incentives can be more effective to encourage a behaviour consistent with RRI and its keys. These "transmission mechanisms" comprise:

- the inclusion of RRI-related criteria in the call/tender specifications;
- the adoption of publication policies that strongly encourage or mandate the explicit engagement with RRI or the compliance with policies related to RRI keys (e.g. research integrity and ethics);
- the creation of multidisciplinary teams so that RRI-related criteria are fully considered in evaluations;
- the set up of mechanisms that preemptively foster commitment and adherence (e.g. reserve to funders the right to ask a second research group to replicate experiments when integrity infringements are suspected).

Training of researchers have been mentioned from two points of view:

- as a mechanism to balance institutional incentives and the moral commitment of researchers;
- as a tool for providing researchers the soft skills they need to communicate to and engage with the public and with stakeholders.

Training on these topics is seen generally as insufficient or totally lacking.

At what level (state, institutional level, individual researchers) did the participants tend to address responsibility in research and innovation?

Most of the discussion focused on the organizational level. However, a remarkable shift occurred when the possibility to foster RRI in SMEs was discussed. On this subject, the role of regulators/policy makers was emphasized, as (small and medium-sized) firms are seen both reluctant to engage in activities that are not seen tightly related to their ordinary business operations, and lacking the necessary resources to support an effort towards this direction.

Reflections on the workshop process

How easy was it to recruit people? How easy was the conversation; was there a degree of conflict to the discussions? To what extent did the facilitator have to steer the discussion with specific questions (in contrast to an easy flow of discussion)?

The recruitment process relied partly on the established collaboration networks of the CIGA Centre. The reliance on existing networks speeded up the recruitment process. Despite the heterogeneity of the panel, the exploratory nature of the discussion and the goal of the workshop (getting an overview of opinions, experience and knowledge about RRI) effectively registered diversity but did not raise any apparent conflict between the participants. Participants felt encouraged to report their opinions and the conduction left the discussion develop almost spontaneously.

Did the participants seem interested in the project's results?

The goals of the project and RRI were generally well received by the workshop participants. However, skepticism was voiced about the possibility to export RRI into the broader economic system, especially in the Italian environment, where most of the firms are SMEs. In terms of the workshop's impact, the University of Padova has asked the organizers a first draft of a training programme on RRI for the University staff, in order to initiate a discussion on RRI at the university level.