The future that we want!
Voices, facts, and wishes from the RRI community at the Go4 conference Shaping New Horizons - Responsible Research and Innovation in Europe and across the World

On 14-15 January 2016 the Go4 - GREAT, Res-AGorA, ProGReSS, and Responsibility - four EU-funded projects launched in February 2013 (FP7, SiS work programme 2011), held a final joint conference in Brussels. More than 200 people attended this event, co-hosted by the European Economic and Social Committee, and moderated by the science writer and broadcaster Vivienne Parry. The four projects presented their findings, conceptual developments, concrete messages and policy recommendations on how to facilitate the uptake of RRI across Europe and beyond.

As Ralf Lindner summarized for the Go4, given the impressive conceptual and empirical knowledge in the field of responsible research and innovation which has been generated by the growing community of academics, strategic decision-makers and research and innovation practitioners over the recent past, it is now the time for governments and funding institutions to encourage vigorously, enable and fund experimentation with different approaches and instruments in a diversity of settings.

This special issue of the ProGReSS project eNewsletter is a collection of the highlights of the conference, and participants’ impressions, reflections or wishes for the future of RRI. We take this opportunity to thank again all the attendees who joined us from all over the world and made possible a fruitful, engaging, and lively debate.

THANK YOU ALL FOR JOINING US!

Our audience!

Audience of the “Benefits of Inclusive Innovation” Session

A moment of our RRI Open Space session

Vivienne Parry

The “Voices from around the World” Panel

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Wishes for the future of RRI

We hope that RRI will bridge science and technology with society, allowing us to preserve our humanity and shape our future without submitting ourselves reflexively to the invisible hand of the market and to align innovation with our needs in a responsible and inclusive way.

Our wish for the future of RRI is that it will go beyond addressing the risks of new technologies in high income settings and join global policy efforts that link research and innovation to the creation of a fairer and more inclusive society... a society that succeeds in addressing humanity's challenges.

RRI and the collective efforts to specify and realise the concept contribute to re-opening the fundamental debate about the purpose, direction and future societal benefits of research and innovation.

We anticipate that the deployment of practical tools to implement RRI will enhance its common understanding. This will hopefully increase the outreach of RRI beyond the established circle of stakeholders towards a more versatile and global audience.

For the European Economic and Social Committee as the voice of civil society, the concept of Responsible Research and Innovation is of the utmost importance – it shouldn't be targeted towards institutions but towards citizens. EU citizens need to understand the reasons and the goals of the different research projects in each specific field. Citizens should be seen as active actors in the research process, not only as mere observers, (Go4 Conference Press Release).

Gonçalo LOBO XAVIER, European Economic and Social Committee (EESC)

Innovation is essential to the 21st century. Not just for growth and jobs. But for communities and for the planet. Innovation can be scary when it comes as fast as it does today. As a sophisticated society, as lay individuals and as user communities, we need to engage with science, scientists and innovators at all stages of the innovation process. To keep European innovation on the right track and at the ambitious scale that the planet needs, we need responsible innovators, committed scientists, and an engaged society.

Robert MADELIN, European Political Strategy Centre (EPSC), EC

RRI in action is about transforming the society and the System behaviour. It is about engaging citizens for an inclusive society driven by universal values.

Giuseppe BORSALINO, DG Research & Innovation, EC

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RRI builds on many existing and established activities from technology assessment to corporate social responsibility, from research ethics to science and technology studies. In the future RRI needs to explicitly reflect on how these various activities can be aligned to ensure that research and innovation promote the public good.

BERND CARSTEN STAHL, De Montfort University, UK

I am sure that RRI will play an important role in rethinking the responsible development of Europe and in promoting equitable opportunities for women in the scientific field.

ADRIANA SCHIOPOIU BURLEA, University of Craiova, Romania

I hope for stakeholder commitment and public private partnerships to invest in, manage and drive innovations towards sustainable socially desirable ends.

RENE VON SCHOMBERG, DG Research and Innovation, EC

I hope that more case studies will be completed, not only in science research but also in small and medium sized industries. I would like the case studies to be ethnographic, and use participant observation, because I think there is a lot to learn about decision-making processes in relation to RRI. This kind of information would undoubtedly be useful in policy-making, as well as advancing thought on the subject, as it would move from superficially deciding what a model might look like and into looking at the nuts and bolts of different systems.

JONATHAN HANKINS, Fondazione Giannino Bassetti, Italy

I hope that RRI will be a flagship for productive, multi-method, multi-disciplinary collaborations, developing and applying innovative ideas for shaping our common future in a responsible way.

ARMIN GRUNWALD, KIT ITAS, Germany
The Progress project has provided an excellent forum for sharing ideas about approaches to RRI from across five continents and many different perspectives, from academia to industry. I hope the rich array of outputs help lay firm foundations for future work in this area.

Paul WOODGATE, Wellcome Trust

In the future, I hope the phrase Responsible Innovation doesn’t exist at all. The issues it describes, processes, and advocates will be just part of the way we do research, policy and innovation and won’t need a special name. All of us will think in a much more thoughtful and holistic way about the impact of what we do, taking responsibility for our own actions and joining with others to work on solutions where a more collaborative approach is needed or the deep complexities of prioritising impacts is out of our control.

Hilary SUTCLIFFE, MATTER, UK

My hope is that RRI will provide a new language for a discussion of the value, opportunities and uncertainties of science and innovation. I would like to see scientists and citizens, as part of broader culture, joining conversations about what science can and cannot do about the problems we face, what needs to change and what are the problems with science as it currently stands.

Jack STILGOE, University College London, UK

Many thanks to Hilary and Jack for sending us their wishes even though they could not attend the conference!!

NEWS

- **Lund Revisited**: Next steps in tackling societal challenges.
- **Patient involvement could improve medicines R&D, industry personnel suggest**.
- **Business and industry towards a responsible innovation; ICT in ageing**.
- **Exploring responsible innovation: Dutch public perceptions of the future of medical neuroimaging technology**.
- **What do trends in economic inequality imply for innovation and entrepreneurship?**
- **What values are important to scientists?**
- **Indigenous Peoples’ Innovation: Intellectual Property Pathways to Development**.

The Press Release [http://goo.gl/4mkYt4](http://goo.gl/4mkYt4)
Recognising Responsible Research and Innovation in the world, Scientix [http://goo.gl/1ySwlv](http://goo.gl/1ySwlv)
The ProGReSS video selection [https://goo.gl/3Lhpdn](https://goo.gl/3Lhpdn)
RRI Tools reporting on the conference [http://blog.rii-tools.eu/-/rri-from-the-go4-pit-1](http://blog.rii-tools.eu/-/rri-from-the-go4-pit-1)
FOTRRIS reporting on the conference [http://goo.gl/6wg8ly](http://goo.gl/6wg8ly)

Don’t miss the Go4 at the ESOF 2016 RRI session! On July 23-27 in Manchester, [http://www.esof.eu/home.html](http://www.esof.eu/home.html)

More on the Go4 outputs, initiatives and recent news can be accessed at the following websites,

- Great [http://www.great-project.eu](http://www.great-project.eu)
- ProGress [http://www.progressproject.eu](http://www.progressproject.eu)

www.progressproject.eu
Quo Vadis RRI?

Excerpt from Prof. R. OWEN’s Keynote Presentation,
RRI Shaping New Horizons, 14 January 2016, EESC

Which problems is Responsible Research and Innovation (RRI) trying to address?
The first is the problem of unexpected surprises, and the illusion of control. Technovisionary science and innovation, in particular the disruptive type, are always associated with uncertainties, ignorance, ambiguities and the potential for unexpected surprises. The future of those yet to live will be populated by the visions and innovations of those living in the present. But of course the future is unpredictable. This presents us with a dilemma of control in which we trade off potential opportunity losses against the potential for harm, lock-in and path dependency.

Some of us who have been working on RRI have identified a set of key competencies which can help us address this, provided they are integrated and embedded into the science and innovation system. These are important foundations for RRI. They call for competencies of anticipation, of reflexivity, inclusive deliberation, openness and responsiveness at different levels, from individuals to institutions. Easy words to say, harder, but not impossible to develop policies for, and difficult to put into practice.

But of course the problem of unexpected surprises is not the only, and perhaps not even the most important problem RRI attempts to address. What about the purposes of innovation? Now we are moving the question away from ‘how do we proceed under conditions of ignorance and uncertainty?’ to, crucially, ‘what kind of future do we want science and innovation to bring into the world?’

This forces us to explore the values that underpin innovation and how these are arrived at, who benefits and who loses – questions of distributive and intergenerational justice.

Ultimately RRI should be about being responsible. In doing so we have to explore what the word responsibility means. In his wonderful essay on future-oriented moral responsibility* Henry Richardson introduces two helpful dimensions of responsibility that I argue should be pillars for RRI, and in which my colleagues and I grounded the processual dimensions of RRI that I have already discussed**. He presents these through a metaphor that I will loosely paraphrase.

Many of us in the room are parents – I myself have two children. When we go out for an evening and entrust our children to the services of a babysitter we do not ask them to strictly enforce our particular standards of table manners, or the exact time that the children are put to bed. Our primary concern is that our children are safe: that strangers are not admitted, that the children do not leave the house, and that they are prevented from playing with matches or knives, drinking whisky or climbing on to the roof.

Richardson describes the babysitter’s duties as being oriented around a set of specific concerns – here our children’s safety and wellbeing – things we care about. It is this dimension of responsibility as care that sits behind the question ‘what sort of future do we want science and innovation to bring into the world?’; what do we care about, and on what values should these be based?

The second element of future-oriented responsibility that Richardson introduces is what he describes as an ‘undertaking to cope with surprises’. He is reminding us again that the future is usually unpredictable, and that unpredictable things happen. Given this, we expect the babysitter to ‘look out for the children in myriad unforeseeable circumstances’ and, importantly, ‘bend or revise pre-existing rules’. So our rule of ‘do not let the children leave the house’ should be broken in the event of a fire breaking out. Ultimately, uncertainty and unpredictability mean that to be responsible is to be vigilant, adaptive, flexible and responsive. In the context of science and innovation this requires not only the capacity to adapt and respond as new information and circumstances arise, but also to listen and respond to different perspectives and voices in an inclusive way.

If we tend to blackbox the word ‘responsible’, the same can be said for the word ‘innovation’. Notwithstanding appeals to social innovation, inclusive innovation, even Gandhian innovation, the sad truth is that the buzzword innovation is intimately, overwhelmingly tied to a
political economy based on markets, competitive destruction, the creation of value, consumption and never ending growth. Is RRI an enabling part of this all conquering system, one that is ultimately unsustainable: ecologically and socially?

Not necessarily. In fact there are other world views in which science and innovation are implicated. From ideas of Buen Vivir in South America, to the Peoples Science Movements in India, to the rise of the degrowth movement. The Progress project has helpfully shed light on at least a few of these. But these are in truth minority voices, voices in the shadows of hegemony. Ultimately this tragedy has to end. Where do we need RRI to go next?

Well, we need to not only move from risk to innovation governance, but we need to fundamentally reframe innovation. We need to encourage and take seriously world views that offer different normative frames. We can’t afford to close down the discourse in this respect. We need to change the cognitive frame for innovation, including within our education programmes, for example in our Business Schools. 

Can RRI reframe innovation, and in doing so reframe our political economy? In a world with a fragile future in which societal change must come if we are to survive and flourish, I believe this is one of RRI’s greatest challenges, and one of RRI’s greatest opportunities.

Notes


The Importance of Ethics Governance in RRI

Dorian KARATZAS, Head of the Ethics Sector, DG Research and Innovation

The increasing globalization of economic activities, including research, development and innovation, brings significant opportunities for the scientific community and industry. These opportunities include broader access to human and non-human resources. At the same time, the risk of exporting non-ethical practices to third countries (“ethics dumping”) is ever present, and responsible researchers and innovators must be made aware of the potential to avoid such double standards.

Ethics is an important part of Responsible Research and Innovation (RRI), and one might even argue that it is its first building block. It is also the building block that most requires going global. EU funded research should respect high standards of research ethics and integrity independent of the location of the research and even if there are weaker local standards. To achieve this, the efforts of the ethics research community must go beyond blind compliance processes, and endeavour to augment ethics reflexivity and ethics governance. Ethics reflexivity is especially important when dealing with ethical issues in research and innovation around the world.

Research ethics within an RRI governance structure will benefit from a wider audience, a wider discussion and a wider application of ethics principles. It will thus promote and spread an ethics and research integrity culture among the EU scientific community, which - in addition to the necessary compliance activities, will benefit from better research, better outcomes and higher impact.

One could claim that Research Ethics and Research Integrity can provide the connective tissue between the three priorities identified by Commissioner Moedas: Open Science, Open Innovation and Open to the World. Ethics will contribute the necessary framework to discuss unavoidable trade-offs, the non-economic costs, the issue of accountability and importantly, the socially relevant context.

My wish for the future of RRI is that ethics governance can draw on the strengths of different world regions in a common goal (no “ethics dumping”) and thereby lead global discussions of RRI by example.
The RRI Open Space

Open Space Technology is a relatively new problem-solving methodology that seeks to harness the creative forces of regulated self-organisation and “chaos” to elicit new approaches to complex questions. The conference program offered two brief Open Space sessions. The first one on 14 January addressed the question “How can RRI enter the real world?” and the second one on 15 January addressed the question “How can RRI have global impact?” The organizers assumed that participants from the four different RRI projects and many external speakers and guests would benefit from addressing overarching questions whilst being free from the strictures of their individual projects.

Each of the Open Spaces was well attended, and in the customary manner a range of different ideas or topics were soon proposed forming mini ‘agendas’ which were then adopted and debated by the participants. The “law of two feet” encouraged individuals to gravitate towards the topics that promised the most compelling discussions, and the role of facilitators was merely to encourage active engagement without adherence to previous debates or judgement on the outcomes.

A range of energetic solutions emerged when the groups reported back after an hour of Open Space discussions. Whilst the reported outcomes would have surely benefited from a longer period of discussion, it was clear that the Open Space process had produced a fresh body of thinking, and that a number of ideas emerged that could benefit from further elaboration. For instance, “bring the Real World into research, by starting with the Real World” attracted example suggestions, emphasizing the linkage between real societal needs and early research collaboration. Other topics such as dissemination of, and the need for role-models and ambassadors for RRI were given fresh impetus, showing that the next phase of taking RRI further into the world would benefit from deeper creative processes.

The thematic questions for the two day RRI Open Space sessions were respectively, “How can RRI enter the real world?” and “How can RRI have global impact?”. The only ‘law’ for a successful Open Space is the Law of Two Feet!
Global Inclusive RRI

The Go4 joint conference in Brussels represented a unique opportunity to raise awareness once more about some of the ProGReSS project’s key themes and challenging ideas: the necessary engagement of all social groups in the innovation process, with special emphasis on the vulnerable, the poor, and the marginalised people; the importance of engaging with actors from around the world whilst looking for good practice for inclusive innovation in different political and economic contexts and; the conditions that make a responsible and societally desirable yet profitable approach in Industry innovation feasible.

These were the themes around which ProGReSS organised two of the conference sessions: the “Benefits of inclusive RRI”, and the “Voices from around the World” sessions.

We would like to thank all our invited speakers and partners for joining us in Brussels.

There is more work to do to achieve global inclusive innovation! We hope we can contribute to bringing it about in future ventures.

How do you say “Good morning!” in the San language? The Go4 audience practicing with Reverend Mario Mahongo, a moment of our “Voices from around the World” session.

The COMENSUS project at UCLan during our “Benefits of Inclusive RRI” session. Left to right: Lisa Davies, Jacqueline Vella, and Dr Michael McKewon.

Our partners from South Africa during our “Benefits of Inclusive RRI” session. Left to right: Hennie Swart (SASI), Prof. David Kaplan (UCT), Reverend Mario Mahongo (SASI).

Prof. Bernd Carsten Stahl (de Montford University) and the chair of the “Benefits of Inclusive RRI” session, Dr Francesca I. Cavallaro (UCLan).

The “Voices from around the World” Panel. Left to right: Prof. Fatima Castillo (UP Manila, Philippines), Hennie Swart (SASI, South Africa), Prof. Sachin Chaturvedi (RIS, India), Dr. Hain Bing (IWE Cass, China), Prof. David Kaplan (UCT, South Africa), Dr Rohaya Mohd Nor (Unimas, Malaysia), Prof. John Weckert (CSU, Australia), Prof. Michael Davis (IIIT, US), Prof. Doris Schroeder (UCLan, UK and ProGReSS co-ordinator). Front row, Robert Terry (WHO).
Associated Projects

ProGReSS is associated with the Group of Six (Go6) RRI projects dealing with Responsible Research and Innovation (RRI) Governance launched under the FP7 Science in Society programme, and with the RRI-ICT Forum project funded by the European Union through its Horizon 2020 (H2020) programme for Research and Innovation. Together, we make up a critical mass of researchers taking forward RRI Governance in Europe, and beyond.

RESPONSIBILITY: http://responsibility-rrri.eu/?lang=en
GREAT: http://www.great-project.eu/
Responsible-Industry: http://www.responsible-industry.eu/
RRI-ICT Forum: http://rri-ict.eu/

Delivering European renewal relies heavily on the advancement of Responsible Research and Innovation (RRI) - that is, research and innovation which:

- is ethically acceptable,
- is sustainable by avoiding significant adverse effects, and
- drives towards the common good, i.e. societal desirability.

Especially the third aspect - societal desirability - is an underexplored aspect of RRI and it is the aim of the project to develop a strategy for fostering the convergence of regional innovation systems at the global level. The project aims to advocate a European normative model for RRI globally, using constitutional values as a driver to inform societal desirability.

ProGReSS concentrates on the underexplored and least converging part of RRI, namely achieving societal desirability. The project will link existing international networks of RRI from all continents with European partners and societal actors to achieve the following objectives:

1. Link existing international networks of RRI with relevant societal actors on a global scale to focus innovation on societal desirability.
2. Complete a major fact-finding mission comparing science funding strategies and innovation policies in Europe, the US, China, Japan, India, Australia, and South Africa.
3. Advocate a European normative model for RRI globally, using constitutional values as a driver to inform societal desirability.
4. Develop a strategy for fostering the convergence of regional innovation systems at the global level.

### Project summary

#### WORK PACKAGES

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<th>WORK PACKAGES</th>
<th>KEY OBJECTIVES</th>
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<tr>
<td>WP1: Management</td>
<td>To ensure the smooth and effective running of the project in order to achieve the main objectives.</td>
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<td>WP2: Innovation Systems</td>
<td>To ensure that the network’s deliberations and outputs are informed by and compatible with cutting edge research on innovation systems.</td>
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<tr>
<td>WP3: Innovation for Society</td>
<td>Complete a major fact-finding mission comparing science funding strategies and innovation policies in Europe, the US, China, Japan, India, Australia and South Africa.</td>
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<td>WP4: Outreach</td>
<td>To ensure that industry and end-user views are taken into account in the convergence roadmap.</td>
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<td>WP5: Case Studies</td>
<td>To provide input to deliberations from three case studies with practical relevance for the notion of and the need for responsible research and innovation (RRI).</td>
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<td>WP6: Dissemination</td>
<td>To communicate widely the findings and outcomes of the project while allowing stakeholders and policy makers to inject their perspective into the project.</td>
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<tr>
<td>WP7: Convergence roadmap</td>
<td>Develop a strategy for fostering the convergence of regional innovation systems at the global level.</td>
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ProGReSS consortium

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| ![UK Flag] | Centre for Professional Ethics  
University of Central Lancashire, (Uclan)  
[http://www.uclan.ac.uk/](http://www.uclan.ac.uk/) |
| ![Spain Flag] | Tecnalia Research & Innovation (TRI)  
| ![Germany Flag] | Science & Technology Studies  
Europäische Akademie (EA)  
| ![China Flag] | Institute of World Economics & Politics (IWE)  
Chinese Academy of Social Sciences (CASS)  
| ![US Flag] | Center for the Study of Ethics  
in the Professions(CSEP)  
Illinois Institute of Technology (IIT)  
[http://ethics.iit.edu/](http://ethics.iit.edu/) |
| ![Australia Flag] | Centre for Applied Philosophy and Public Ethics (CAPPE)  
Charles Sturt University (CSU)  
| ![South Africa Flag] | Environmental Evaluation Unit (EEU)  
University of Cape Town (UCT)  
| ![South Africa Flag] | South African San Institute (SASI)  
| ![India Flag] | Research and Information System  
for Developing Countries (RIS)  
[http://www.ris.org.in/](http://www.ris.org.in/) |

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