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# **/Responsible-Industry**

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EU Policy recommendations for Responsible  
Research and Innovation in Health and Ageing

THE RESPONSIBLE-INDUSTRY PROJECT CONSORTIUM

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# INTRODUCTION

**T**he EU has set itself a target to invest 3% of the EU's GDP (public and private combined) in R&D/innovation by 2020. As a whole, the EU was spending 2.03% of GDP in 2014; it is not on course to achieve its 2020 target. Just how much of Europe's current combined R&D spend is respectful of principles of responsible research and innovation (RRI) is currently unknown. However, the EU is in a strong position to advance RRI through a number of levers such as: science funding, regulation of health care products in the single market and ongoing engagement and dialogue with industry. Health and ageing are recognised as major societal challenges for the EU and together they constitute a large section of public spending. Included in this, is funding for innovations that are necessary to cope with demographic ageing. In the public sector, the ageing trend in the EU is projected to require age-related expenditure to rise by 1.4 percentage points of GDP by 2060 compared to 2013<sup>1</sup>. The size of the global digital health market was estimated to be \$60.8 billion (USD) in 2013 and expected

<sup>1</sup> <http://www.strategyand.pwc.com/global/home/what-we-think/innovation1000/rd-intensity-vs-spend-2015>

**"IT IS ONLY WITH SCIENCE THAT WE CAN OVERCOME OUR BIGGEST CHALLENGES SUCH AS ... OUR AGEING POPULATION"**

Carlos Moedas, at the 10<sup>th</sup> anniversary of the European Research Council, 21 March 2017

to increase to \$233.3 billion (USD) in 2020<sup>2</sup>. RRI could find ready acceptance in this large market because the products and services will be directly used by older people and their carers. For maximum uptake of RRI, we need to advance the adoption of RRI in the private, as well as the public sectors. To this end we have gathered evidence from industry representatives about their experiences and opinions of RRI through the following activities: a Delphi study of 165 respondents (including 35 industry executives); four in-depth cases of applying RRI; 30 interviews with industry executives; and stakeholder consultation with five industry executives over three meetings<sup>3</sup>. **The findings from these activities are organised into three messages: raise awareness; engage industry; optimize regulation and promote voluntary codes.**

<sup>2</sup> <https://www2.deloitte.com/uk/en/pages/life-sciences-and-healthcare/articles/2016-global-health-care-sector-outlook.html>

<sup>3</sup> References to these studies are available in the Responsible Industry website, deliverables section

# RAISING AWARENESS

Policy-makers should continue to raise awareness of RRI in industry as an umbrella concept and with special attention to its less known principles. This should be consistent through all the European Commission's points of dialogue with industry, giving due attention to the differing levels of knowledge of RRI among large corporates and SMEs

## EVIDENCE:

- Awareness of RRI principles is higher among tech companies working in the health and ageing sector because they make products and services that are of direct relevance to patients and older persons
- There is a strong overlap of RRI with other concepts such as sustainable development and corporate citizenship, which can lead to duplication of regulatory guidance and voluntary codes
- Most executives are more familiar with the principles of RRI than the umbrella concept itself. SME executives are generally less aware than their peers in large corporates
- Industry executives are most sensitized to user involvement and ethics (especially around personal data): they pay less attention to open access, gender inclusivity, and science education or foresight

"IT WOULD BE ALMOST STUPID TO DO SOMETHING WITHOUT HAVING ALL STAKEHOLDERS INVOLVED ... WE WOULD PROBABLY BE OUT OF BUSINESS IF WE DIDN'T DELIVER WHAT WORKS OR WHAT SOLVES REAL NEED".

Responsible Industry interviewee working in industry

## EU POLICY RECOMMENDATIONS

DG RTD should step up its efforts to raise awareness of RRI **inside** the EU Commission, ensuring that its principles are integrated into the EU e-health action plan (DG CONNECT); Commission Strategy on Corporate Social Responsibility (DG GROW); European Innovation Partnership on Active & Healthy Ageing (DG CONNECT and SANCO) - and their successors. Likewise in the cross-industry social dialogue and in the sectoral social dialogues on healthcare and telecommunications, the Commission should raise the RRI principles for joint consideration by trade unions and employers.



In the European Fund for Strategic Investments (EFSI 2.0), the Commission should seek to promote RRI in the SME projects that it funds. DG RTD should work with the European Investment Bank and Commission services to build their knowledge of and capacity to promote RRI.

In future iterations of the EU's public procurement directive and in its guidance to public authorities on buying social, the Commission should integrate RRI principles. Public authorities would be encouraged to assess tenders that comprise provision of technology solutions against the principles of RRI - notably in the health and ageing area. Good practices on RRI-compliant procurement from local authorities and regions could be highlighted in various ways, e.g. at conferences or through awards.

The Commission should strive for consistent thought leadership and communication on responsible innovation beyond individual terms of office or budget periods. RRI should be carried forward with high visibility into the Open Science approach and concretely into the next Multi-Annual Financial Framework including the 9th research framework programme - so building on awareness of RRI among stakeholders and research knowledge from Horizon 2020. Rebuilding the research agenda with another similar porte-manteau concept would mean a loss of momentum.

# ENGAGING INDUSTRY

Policy-makers and public funders should champion RRI on the basis of its commercial value as well as its social value - and engage continuously with executives in different roles to change their thinking and work towards adoption into culture and strategy

## EVIDENCE:

### Obstacles

- Perceived **need for additional resources** arising from RRI compliance activities and corresponding impact on profit to shareholders and delayed time-to-market of new products and services
- **Complexity of securing adoption of RRI** into company strategy and business processes: lack of clarity within companies about who should take the lead so there is a need for senior management “buy-in”
- **Insufficient education and training** among industry executives, scientists, engineers and designers in ethics of research and innovation

“THE IT BUSINESS IS CHANGING SO FAST ... SO WE ALWAYS FEAR [BEING] BEHIND IN DEVELOPMENT. TIME TO MARKET IS CRUCIAL, COMPETITION IS FIERCE”.

Responsible Industry interviewee in senior management role in large company

### Drivers

- If all products are similar, then evidence of attention to societal or environmental concerns would provide a **competitive edge** amongst consumers or public sector buyers
- The need to work with companies’ marketing, CSR and R&D divisions as well as senior management to get RRI onto the agenda internally - so that **the whole company takes ownership**
- Proponents of RRI need to talk about it from the **social value or human benefit standpoint**: some companies and executives are more receptive to this reasoning than others

## EU POLICY RECOMMENDATIONS

The Commission should work to mainstream RRI principles in EU funding calls for the European Research Council and Horizon 2020 work programmes 2018-20. It is important that this is not just in the “Science with and for Society” area (where they are already embedded) but in all other societal





challenges. The findings of Responsible Industry demonstrate that this is vital for societal **challenge 1** “health, demographic change and wellbeing”.

The Commission should initiate a pilot award for products or services that are respectful of RRI principles in their development for private companies of different sizes and under different societal challenges Also, possibly under each of the European Innovation Partnerships, e.g. Active and Healthy Ageing.

“IN THE AREA OF ELDERLY CARE, TECHNOLOGY DEVELOPMENT SHOULD ... BE CARRIED OUT NOT ONLY FOR PROFIT [BUT] TO FULFIL GENUINE NEEDS OF PEOPLE”

Responsible Industry interviewee working in a technology SME

# OPTIMIZING REGULATION AND PROMOTING VOLUNTARY CODES



Policy-makers should work with both specific regulatory change and the promotion of voluntary codes of conduct to advance RRI

## EVIDENCE:

- Voluntary codes of conduct that are owned by industry associations were considered to be the most appropriate tool to advance RRI adoption among SMEs; these voluntary codes would need distinct value-added compared to existing codes. Alternatively, RRI principles could be included in existing codes.
- Larger companies are more likely to respond to specific regulatory change rather than soft promotion of RRI as an umbrella term. This could perhaps mean identifying gaps where regulation does not take specific RRI principles into consideration.

**“WE DO NOT NEED TOOLS OR MORE BUREAUCRACY, WE NEED A CHANGE OF THINKING”.** Industry executive participating in Delphi survey.

## EU POLICY RECOMMENDATIONS

In the EU’s possible future initiative on the European Data Economy and in future EU data protection regulation, the EU should give due consideration to the following:

**reasons and scopes of the data gathering; the liability in data management; and the full awareness of persons providing their data.** It should bring existing EU directives on medical devices up to date to include e-health and mobile-health devices - again seeking to include RRI guidance in those directives. It should promote the use of standards and interoperability in the design of ICT products to combine different components in the realization of complex systems and services. After DG RTD has worked to raise awareness of RRI with its colleagues in DG CONNECT, DG SANCO and DG GROW, those DGs should, in turn, raise awareness of RRI in industry to advance voluntary codes of conduct and consult on future regulatory change.

We are recommending that the EU mainstream RRI into all EU policy and funding, engage in continuous dialogue with industry on RRI, update regulation for the digital age and promote voluntary codes. By taking these steps, the EU will increase its capacity to respond to societal challenges and develop a competitive edge in R&D investment globally.

For more information please check the Responsible Industry website:  
[www.responsible-industry.eu](http://www.responsible-industry.eu)



