

NUCLEUS Conference 2016
Lyon (FR) 12-14 October 2016

'Responsible Research and Innovation (RRI): European Challenges and Ambitions'



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European Commission
DG RTD B7.002
**'Mainstreaming RRI in
Horizon 2020 and ERA'**

Summary

- I. RRI: Where are we?*
- II. RRI: What is going on?*
- III. RRI: Where are we going?*



European
Commission

Science and Society



WHY?



RRI: A simple strategy

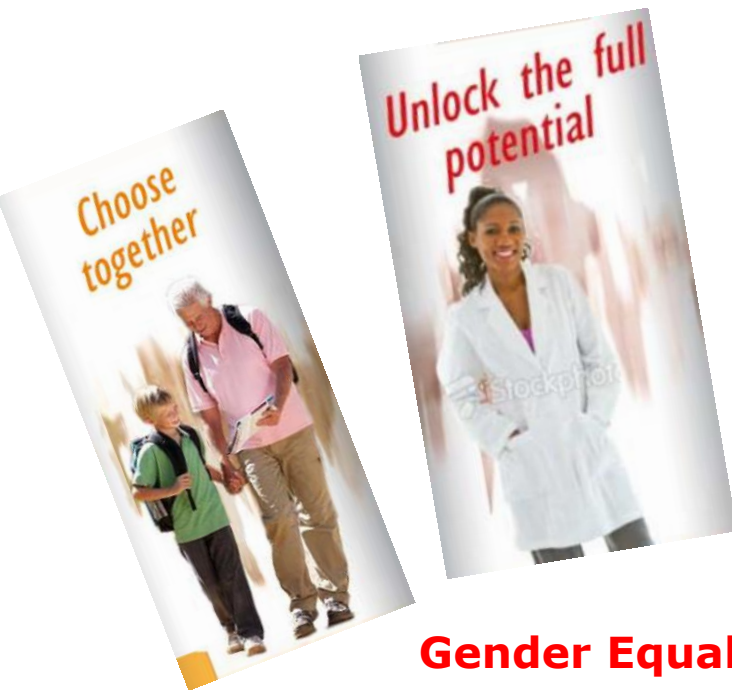
Science and society:

An Ecosystem

A systemic approach to Science and Society:

Responsible Research and Innovation

RRI across Horizon 2020



Gender Equality



**Science
Education**



Ethics



**Open
Access**

**Engagement
(including Citizen
Science)**

In a few words...

RRI is:

- Aiming to make the **interplay between science and society** more harmonious and more efficient;
- Inviting all stakeholders to **open up** to and work with each other;
- Engaging in particular all citizens, women as well as men, in science, technology, research and innovation in order to ensure that societal **values, concerns and needs** are taken care of.

SWAFS and RRI in the European Commission

Organizational Chart:

SWAFS: Units DG RTD.B7 + REA.B5	(23p+10p)
RRI: Sector DG RTD.B7.002	(8p)
Gender: Sector DG RTD.B7.001	(8p)
Ethics: Sector DG RTD.01.001	(7p)
Open Access DG RTD.A6	(2p)

SWAFS and RRI in HORIZON 2020

Three main priorities

(Part I) Excellent science, EUR 24441 million

(Part II) Industrial leadership, EUR 17015 million

(Part III) Societal challenges, EUR 29679 million

Part V: Science with and for Society EUR 462,2 million

RRI in Horizon 2020 governance rules

Framework programme decision

- Article 14 'Cross-cutting issues' (including RRI)
- Article 16 'Gender equality'
- Article 18 'Open access'
- Article 19 'Ethical principles'

RRI in Horizon 2020 governance rules

Framework programme decision

Broad lines of the specific objectives and activities
Science and society

"The relationship between science and society as well as the promotion of responsible research and innovation, science education and culture shall be deepened and public confidence in science reinforced by activities of Horizon 2020 favouring the informed engagement of citizens and civil society in research and innovation."

RRI in Horizon 2020 WP 2016-2017

Clear improvement vs WP 2014-2015

- 16 lines out of 22 (vs 6 out of 22) are addressing explicitly RRI
- Representing roughly half of the overall M€ 14,100 budget
- RRI presentation is coherent across Horizon 2020
- Short narratives have been developed, linking society, RRI and Horizon 2020 activities

RRI in Horizon 2020 WP 2016-2017

Example of narrative: 14. Secure societies – Protecting freedom and security of Europe and its citizens

Meaning of Responsible Research and Innovation

The calls under 'Secure societies – Protecting freedom and security of Europe and its citizens' are **in line with the Horizon 2020 Responsible Research and Innovation (RRI) cross-cutting issue**, **engaging society** on sensitive security issues, integrating the **gender** and **ethical dimensions**, ensuring the **access** to security research outcomes whenever possible and encouraging formal and informal **science education** relating to security. **Activities will be multi-actor and underpinned by public engagement.**

RRI in Horizon 2020 WP 2016-2017

Example of topic: DS.08-2017 Cybersecurity PPP: Privacy, data protection, Digital identities

.../...

For all strands, proposals should **identify and address the societal and ethical dimensions** of the strand they choose to cover taking into consideration the possibly divergent perspectives of pertinent stakeholders.

Proposals have to **address the specific needs of the end-user**, private and public security end users alike. Proposals are encouraged to **include public security end-users and/or private end users**.

RRI in Horizon 2020 WP 2018-2020

Margins for progress toward WP 2018-2020

- **Narratives** could be more elaborated and
- should appear in **all parts** of the Horizon 2020 WP,
- evidencing the **RRI challenges**, the strengths and weaknesses of each area and
- relating directly to **topics** as necessary

Summary

I. RRI: Where are we?

II. RRI: What is going on?

I. SiS/SWAFS activities (184/53) projects

II. European Commission: 3 Os, WP18-20

III. Member States (e.g. Italian Senate)

IV. International (e.g. OECD)

III. RRI: Where are we going?

SiS/SWAFS ongoing work

I. FP7-Science in Society

- I. SiS Portfolio (184): e.g. RRI TOOLS (Training the trainers...)**
- II. SiS and FP7 Ex-post evaluation (published May 2016)**

II. Horizon 2020-Science with and for Society

- I. Portfolio (53): e.g. FoTRRIS, **NUCLEUS**, CIMULACT, DITOs**
- II. AG's strategic report; OPOC; Scoping paper**
- III. Gap analysis (e.g. Precaution, science communication)**
- IV. Interim Evaluation (to be published early 2017?)**

FP7 Ex-Post Evaluation: Response to the Report of the High Level Expert Group

Recommendations:

"(d): Bring science closer to the citizens

The Commission agrees with the HLEG that the engagement of the general public with the Programme and more generally the active participation of citizens in science is important. In its implementation, Horizon 2020 engages citizens and other relevant stakeholders through the development of responsible research and innovation agendas and by providing greater support to public outreach activities."

Brussels, 19.1.2016, COM(2016) 5 final

3 O's strategy

Open Innovation

Open Science

Open to the World



<https://ec.europa.eu/digital-single-market/en/news/open-innovation-open-science-open-world-vision-europe>

3 O's strategy

Open Innovation

"An invention becomes an innovation only if users become a part of the value creation process. Notions such as '**user innovation**', as coined by Eric von Hippel, emphasize the role of citizens and users in the innovation processes as '**distributed**' sources of knowledge. **This kind of public engagement is one of the aims of the Responsible Research and Innovation programme in Horizon 2020.**"

<https://ec.europa.eu/digital-single-market/en/news/open-innovation-open-science-open-world-vision-europe> p. 13

3 O's strategy

Open Science

"Citizen Science can contribute to the Commission's goal of Responsible Research and Innovation, as it reinforces public engagement and can re-direct research agendas towards issues of concern to citizens."

<https://ec.europa.eu/digital-single-market/en/news/open-innovation-open-science-open-world-vision-europe> p. 54

Time Table for the Elaboration of the Work Programme 2018-2020

2016

Advisory groups	(30/05/16)
Stakeholder consultation	(04/07/16)
Consultation Member States	(Q2/Q3)
Strategic Programming Document	(Q3)
Start of drafting of WPs	(Q4)

Time Table for the Elaboration of the Work Programme 2018-2020

2017

Consultation PC configurations	(Q1-Q3)
Adoption of the WP 2018-20	(Q4)

Member States (e.g. Italian Senate)

"The time has also come to **standardise the responsible research and innovation (RRI) approach** through public action, not only in terms of sufficient resources, but also concerning the link between funding and results."

p. 5

Resolution of the 7th standing committee (Education, heritage, scientific research, entertainment and sport), Doc. XXIV, No 61, Italian Senate, 29/06/2016

Member States (e.g. Italian Senate)

"5. An effective monitoring, reporting and assessment system is an essential requirement for ensuring the inclusion of RRI in the SWAFS programme and the other H2020 actions."

p. 6

Resolution of the 7th standing committee (Education, heritage, scientific research, entertainment and sport), Doc. XXIV, No 61, Italian Senate, 29/06/2016

Member States (e.g. Italian Senate)

"4. GUIDELINES FOR THE GOVERNMENT
After having analysed the SWAFS programme and taking into account its long-term value for the future rather than its financial benefits, the 7th Standing Committee feels that it should set out some **general guidelines for the Government as regards the overall implementation of Horizon 2020 within Italy. .../...**"

p. 6

Resolution of the 7th standing committee (Education, heritage, scientific research, entertainment and sport), Doc. XXIV, No 61, Italian Senate, 29/06/2016

Member States (e.g. Italian Senate)

".../... The foundation must be laid both to increase the involvement of citizens in science topics and to transform that involvement into active participation in European calls [] in order to take advantage of all the opportunities offered by the EU."

p. 6

Resolution of the 7th standing committee (Education, heritage, scientific research, entertainment and sport), Doc. XXIV, No 61, Italian Senate, 29/06/2016

Open to the world (e.g. OECD)

“Neurotechnology and Society: Strengthening Responsible Innovation in Brain Science”

15-16 September 2016


Washington D.C., United States



<https://www.innovationpolicyplatform.org/project-emerging-technologies-and-brain-oecd-bnct>

Open to the world (e.g. OECD)

Blue Sky Forum agenda



OECD
BLUE SKY III

INFORMING SCIENCE AND INNOVATION POLICIES:
TOWARDS THE NEXT GENERATION OF DATA AND INDICATORS
Ghent, 19-21 September 2016

[Registration](#) | [Venue and dates](#)

The OECD Blue Sky 2016 Forum will run from 9:00 on **Monday 19 September**, preceded by a welcome dinner on Sunday 18 September, through 13:30 on **Wednesday 21 September**, followed by a farewell lunch.

<https://www.oecd.org/sti/blue-sky-2016-agenda.htm>

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III. RRI: Where are we going?

Probable Timetable for the Elaboration of FP9

2017

Horizon 2020 Interim Evaluation (Q4)

2018

Stakeholder Consultations (Q1)

Adoption of EC Proposal for FP9 (Q4)

2019-2020

Negotiation Council-EP (Q1/Q3)

2020

Adoption of FP9 decisions (Q4)

Our ambition

RRI approach fully mainstreamed:

- In R&I stakeholders organisations
- At local and regional levels,
- In Member States and EU policies,
- At international level.

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**Thank you for your
attention!**

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