Science with and for Society Work Programme 2018-2020

Orientations and indicators

Assoc. Prof. Eilish McLoughlin
Dublin City University
A heightened policy interest in engaging society

Commissioner Moedas (2015) has identified three strategic priorities, **(3Os strategy)**:

**Open innovation, Open science, Open to the world**

"many more actors will take part [in the research process] in different ways and the traditional methods of organising and rewarding research will also see many changes".

One important dimension of open science is **citizen science**, which is envisioned as "linked with outreach activities, science education or various forms of public engagement with science as a way to promote RRI."
Science with and for Society (SWAFS)

Objectives:
1) Build effective co-operation between science and society,
2) Foster the recruitment of new talent for science,
3) Pair scientific excellence with social awareness and responsibility

KPI: Number of institutional change actions promoted by the programme towards Responsible Research and Innovation (RRI)

Budget: EUR 432.7m over 7 years
SWAFS Rationale and Union added value

- Rapid advances in contemporary scientific research and innovation have led to a rise of important ethical, legal and social issues that affect the relationship between science and society.

- Improving the cooperation between science and society to enable a widening of the social and political support to science and to technology in all Member States is an increasingly crucial issue which the current economic crisis has greatly exacerbated.

- Public investment in science requires a vast social and political constituency sharing the values of science, educated and engaged in its processes and able to recognise its contributions to knowledge, to society and to economic progress.
SWAFS Broad Line of Activities

- make scientific and technological careers attractive to young students, and foster sustainable interaction between schools, research institutions, industry and civil society organisations;

- promote gender equality in particular by supporting structural changes in the organisation of research institutions and in the content and design of research activities;

- integrate society in science and innovation issues, policies and activities in order to integrate citizens' interests and values and to increase the quality, relevance, social acceptability and sustainability of research and innovation outcomes in various fields of activity from social innovation to areas such as biotechnology and nanotechnology;
SWAFS Broad line of Activities

- encourage citizens to engage in science through **formal and informal science education**, and promote the diffusion of science-based activities, namely in science centres and through other appropriate channels;

- develop the **accessibility** and the **use of the results** of publicly-funded research;

- develop the **governance** for the advancement of responsible research and innovation by all stakeholders (researchers, public authorities, industry and civil society organisations), which is sensitive to society needs and demands, and promote an **ethics framework** for research and innovation;

- improve knowledge on **science communication** in order to improve the quality and effectiveness of interactions between scientists, general media and the public.
WP18-20 Policy innovations

- **Citizen science** is a new strategic orientation
- First topic on **science communication, Science4Refugees**
- Heightened emphasis on **climate change, sustainability and biodiversity**
- Greater focus on **sustainable institutional changes**
- Smaller **number of topics**, greater number of funded actions (~71).
- **SMART impacts** to be detailed for all topics
- Completely **bottom-up RIA topic** (*SWAFS-20-2018-2019*)
5 Strategic orientations WP18-20

1. Accelerating and catalysing processes of institutional change

2. Stepping up support to gender equality in research & innovation policy

3. Building the territorial dimension of SwafS partnerships

4. Exploring and supporting citizen science

5. Building the knowledge base for SwafS
SO1: Institutional Change

**SwafS-01-2018-2019:** Open schooling and collaboration on science education

**SwafS-02-2018:** Innovative methods for teaching ethics and research integrity

**SwafS-03-2018:** Developing research integrity standard operating procedures

**SwafS-04-2018:** Encouraging the re-use of research data generated by publically funded research projects

**SwafS-05-2018-2019:** Grounding RRI practices in research and innovation funding and performing organisations

**SwafS-06-2018:** Science4Refugees

SO2: Gender Equality

**SwafS-09-2018-2019:** Supporting research organisations to implement gender equality plans

**SwafS-10-2018:** Analysing gender gaps and biases in the allocation of grants

**SwafS-13-2018:** Gender Equality Academy and dissemination of gender knowledge across Europe
Opening: 05 Dec 2017  
Closing: 10 Apr 2018

**SO3: territorial dimension of SwafS partnerships**

**SwafS-14-2018-2019**: Supporting the development of territorial Responsible Research and Innovation

**SwafS-22-2018**: Mobilising Research Excellence in EU Outermost Regions (OR)

**SO4: Citizen Science**

**SwafS-15-2018-2019**: Exploring and supporting citizen science

**SO5: knowledge base for Swafs**

**SwafS-18-2018**: Taking stock of the application of the precautionary principle in R&I

**SwafS-19-2018-2019**: Taking stock and re-examining the role of science communication

**SwafS-20-2018-2019**: Building the SwafS knowledge base

**SwafS-21-2018**: Advancing the Monitoring of the Evolution and Benefits of Responsible Research and Innovation
Specific contributions to cross-cutting issues

SwafS WP18-20 integrates **Horizon 2020 cross-cutting issues**:
- Responsible research and innovation (RRI) including gender,
- Enhancing the attractiveness of the research profession.

Moreover, all proposals **should explicitly aim** to achieve positive impacts in one or more of the following cross-cutting issues:
- Climate change, sustainable development, and biodiversity,
- Cooperation with third countries.
- Support Sustainable Development Goals (www.un.org/)

**KPI**: Instances where citizens, Civil Society Organisations (CSOs) and other societal actors contribute to the co-creation of scientific agendas and scientific contents
SwafS partnerships

SwafS will encourage partnerships between: universities, formal, non-formal and informal science education providers (including primary and secondary schools), science museums and centres, governments and public authorities (including regional and local administrations), businesses (including industry and the service sector), enterprises (e.g. start-ups, SMEs, larger corporations) and CSOs operating at local, national and European levels.
Expected Impacts

SMART - Specific, Measurable, Achievable, Realistic, Time-bound

SWAFS Key Performance Indicator (KPI) is related to the number of institutional change actions promoted by the programme across any/all RRI dimensions:

- **Gender** (e.g. implementation of Gender Equality Plans)
- **Science education** (e.g. introduction of new curricula, new teaching methods, new means of systematically fostering informal learning in non-educational settings)
- **Open access/open data** (e.g. introduction of new rules or practices concerning open access and/or open data)
- **Public engagement** (e.g. new means of systematically engaging citizens/Civil Society Organisations in research and innovation activities such as through agenda setting, foresight and public outreach)
- **Ethics** (e.g. implementation of new rules concerning treatment of research ethics, codes of conduct, ethical reviews).
Monitoring the evolution and benefits of responsible research and innovation - MoRRI

36 MoRRI Indicators for RRI:

- Gender Equality (GE) - 10
- Science Literacy and Science Education (SLSE) - 4
- Public Engagement (PE) - 10
- Ethics (E) - 3
- Open Access (OA) - 6
- Governance (GOV) - 3

Url:
'LAB – FAB – APP' Lamy Report

'Investing in the European future we want'

Recommendation n°5

'Adopt a mission-oriented, impact-focused approach to address global challenges'

"The Group calls on the European Commission to launch a wide stakeholder debate among citizens, scientists and innovators on potential future R&I missions for Europe."

Published 03 July 2017
'LAB – FAB – APP' Lamy Report

'Investing in the European future we want'

Recommendation n°8

'Mobilise and involve citizens'

Action:
Stimulate co-design and co-creation through citizen involvement.
Further information

SWAFS:  http://ec.europa.eu/research/swafs/index.cfm?pg=home
MoRRI:  https://morri.netlify.com/