



Science with and for Society Work Programme 2018-2020

Orientations and indicators

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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**)
- Introduction of **two-stage calls** for some topics to reduce over-subscription (**SwafS-01-2018-2019 & 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



Opening: 05 Dec 2017

Closing: 10 Apr 2018

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

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S03: 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)

S04: Citizen Science

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

S05: 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



European
Commission



SUSTAINABLE DEVELOPMENT GOALS

1 NO POVERTY



2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



4 QUALITY EDUCATION



5 GENDER EQUALITY



6 CLEAN WATER AND SANITATION



7 AFFORDABLE AND CLEAN ENERGY



8 DECENT WORK AND ECONOMIC GROWTH



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



10 REDUCED INEQUALITIES



11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



14 LIFE BELOW WATER



15 LIFE ON LAND



16 PEACE, JUSTICE AND STRONG INSTITUTIONS



17 PARTNERSHIPS FOR THE GOALS



SUSTAINABLE DEVELOPMENT GOALS

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:

http://www.technopolis-group.com/wp-content/uploads/2016/12/2171_D3.2.pdf

'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

30s Strategy: <https://ec.europa.eu/digital-single-market/en/news/open-innovation-open-science-open-world-vision-europe>

High Level Group on maximising impact of EU Research and Innovation Programmes -

http://ec.europa.eu/research/evaluations/index_en.cfm?pg=hlg

Future scenarios for research & innovation policies in Europe (BOHEMIA Study) - <https://bookshop.europa.eu/en/new-horizons-pbKI0417245/>

SWAFS: <http://ec.europa.eu/research/swafs/index.cfm?pg=home>

Consultation on SWAFS WP2018-2020 Work Programme (also on RRI): https://ec.europa.eu/research/consultations/swafs-wp2018-2020/consultation_en.htm

EESC Information Report on H2020 interim evaluation (SWAFS/RRI): <http://www.eesc.europa.eu/?i=portal.en.int-opinions.40454>

MoRRI: <https://morri.netlify.com/>