Overview - Horizon 2020 Science with and for Society - Responsible Research and Innovation related resources and initiatives in Flanders and beyond

Introduction

In Horizon 2020, the Science with and for Society (Swafs) programme has the aim to contribute to the promotion of Responsible Research and Innovation (RRI): "societal actors work together during the whole research and innovation process in order to better align both the process and its outcomes, with the values, needs and expectations of European society." Under this concept a number of subjects are defined, which served as inspiration to structure this overview of resources.

In Flanders many initiatives in these various Swafs and RRI areas take place, in collaboration with scientists based at Flemish (research) institutions or with citizens living in Flanders, and they are often publicly available - in English and/or Dutch. This document takes stock of the resources, research and practices over the last years. On top of the Flemish initiatives, also Horizon 2020 proposal and project requirements and European initiatives are included in the overview. It is by no means (yet) an exhaustive overview and therefore it will be continuously updated with future developments.

Under Horizon Europe, the successor programme to H2020, the Science with and for Society programme as such no longer exists, but as under Horizon 2020, the different subjects that fall under this umbrella are being continued as cross-cutting issues, and are thus being promoted throughout Horizon Europe. Furthermore, a majority of the topics are being continued under the Horizon Europe "Strengthening the ERA" subprogramme part.

If you have any suggestions for this overview please feel free to send them to Margot Beereboom, Horizon 2020 Swafs / Horizon Europe Strengthening the ERA NCP Flanders: ncp fwo@fwo.be

In this overview a division is made into seven subjects. Under each subject, for each initiative, a link is provided, as well as a one-sentence explanation and the operational level which is indicated between brackets.

Citizen Science

- <u>ledereen wetenschapper</u> *collection of citizen science projects* (Flanders)
- <u>Curieuze Neuzen</u> projects on air quality executed in Antwerp (2016) and Flanders (2018) and on heat and drought (2021) (Flanders)
- <u>Scivil citizen science</u> *knowledge centre on citizen science* (Flanders)

¹ "Responsible Research and Innovation, Europe's ability to respond to societal challenges", European Commission, DG R&I, 2012. More information on Horizon 2020 Responsible Research and Innovation: https://ec.europa.eu/programmes/horizon2020/en/h2020-section/responsible-research-innovation

- Burgers betrekken bij het wetenschaps- en innovatiebeleid report from Flemish advisory council for innovation & enterprise (Vario) on citizen involvement in science and innovation policy (2020) (Flanders)
- <u>WeCount</u> a research project in which citizens observe urban transport, coordinated by Transport & Mobility Leuven NV and funded through Horizon 2020 (European)
- <u>EU Citizens science</u> online platform on citizen science projects, resources, training and organisations (worldwide)

Gender equality

- <u>Wetenschap=M+V+X</u> campaign on gender equality in research and resources on implicit bias (Flanders)
- <u>Gelijke Kansen en Diversiteit 2014–2018</u> a report on equal opportunities in Flemish universities published by Vlaamse interuniversitaire Raad (Vlir) (Flanders)
- <u>Charter Gender in academia 2019</u> a charter that offers Flemish universities concrete measures for their own policies, published by Vlir and Jonge Academie (JA) (Flanders)
- <u>Vlaamse overheid Team Gelijke Kansen</u> equal opportunities team of the Flemish government (Flanders)
- <u>Guidance on Gender equality in Horizon 2020</u> *gender requirements in Horizon 2020 applications for funding* (European)
- <u>EIGE</u> European Institute for Gender Equality (European)
- Women in European Academies from patronae scientiarum to path-breakers a book from All European Academies (ALLEA) published in 2020 (European)
- <u>Soapbox Science Brussels</u> 20 minute interviews with women scientists on the science they do (worldwide)

Open Access

- Open Access FWO policy open access requirements in FWO funded research (Flanders)
- <u>Open Access</u> online platform that provides an overview of open access resources for researchers (Belgium)
- <u>Open Research Europe</u> publishing platform for publications on research funded by Horizon 2020 funding (European)
- <u>Open access in Horizon 2020 open access requirements in Horizon 2020 applications</u> for funding (European)

Open Science

- <u>Flemish Open Science Board (FOSB)</u> a Flemish open science policy plan and board was launched in 2020 to create a shared vision on the future of OS and the EOSC (Flanders)
- Research Data Management en de Vlaamse universiteiten a white paper on research data management in Flemish universities, published in 2018 by Vlir (Flanders)

- Research data management FWO policy research data management requirements in FWO funded research (Flanders)
- <u>European Open Science Cloud (EOSC)</u> a project to create a cloud which aims to offer European researchers an environment for "data storage, management, analysis and re-use across disciplines" and brings together data-infrastructures (European)
- <u>DIOSI</u> a Horizon 2020 Swafs research project which has the objective to develop and Implement hands-on training on Open Science and Open Innovation for Early Career Researchers, coordinated by Universiteit Antwerpen (European)
- <u>DG Research and Innovation strategy on Open Science</u> an information and news platform on the strategy for Open Science run by a European Commission directorate general (European)
- Horizon 2020: Guidelines on Data Management in Horizon 2020 guidance on data management for Horizon 2020 proposals and throughout the project life cycle (European)

Research ethics

- <u>Guidance Horizon 2020: How to Complete Your Ethics Self-Assessment</u> *ethics requirements in Horizon 2020 applications for funding* (European)
- <u>Gegevensbeschermingsautoriteit</u> *independent authority in the field of privacy* (Belgium)
- Research ethics FWO policy research ethics requirements in FWO funded research (Flanders)
- European Code of Conduct for Research Integrity a framework for the European research community published in 2017 by All European Academies (ALLEA)
 (European)

Science Communication

- <u>Ik heb een vraag</u> online library with Q&As from the general public answered by scientists
- <u>Vlaamse Wetenschapsagenda</u> online library with Q&As from the general public answered by scientists (Flanders)
- <u>Grijze Cellen</u> evening lectures for the wider public (Flanders)
- <u>Universiteit van Vlaanderen</u> short online lectures for the wider public (Flanders)
- <u>Science Figured Out</u> *3 minute videos where scientists explain their research* (Flanders)
- <u>Vlaamse PhD cup</u> competition in which PhD students receive communication training to present the results of their doctorate to a wider public (Flanders)
- <u>Sound of Science</u> 2-day science festival for the wider public (Flanders)
- Science communication FWO policy science communication requirements in FWO funded research (Flanders)
- <u>Ghent University Museum (GUM)</u> science museum and botanical garden open to the public (Flanders)

- <u>KULeuven Academic heritage</u> scientific collections and heritage accessible for the general public through activities, exhibitions and other projects (Flanders)
- <u>UHasselt Organ museum</u> Hasselt University Faculty of Medicine and Life Sciences museum (Flanders)
- Universiteit Antwerpen heritage and archive scientific collections and heritage of University of Antwerp (Flanders)

Science education

- <u>Brightlab</u> stimulating STEM education by providing teachers with content, didactics and didactic teaching resources (Flanders)
- <u>Technopolis</u> STEM activity centre for the public (Flanders)
- <u>Dag van de Wetenschap</u> research institutions opening their doors for a day to the wider public (Flanders)
- <u>Wooow Wetenschapsfestival Gent</u> one-day science festival as part of Dag van de Wetenschap by Ghent higher education institutions (Flanders)
- STEM-academie overview of STEM activities for 0-26 year olds (Flanders)
- <u>STEM academie recognition</u> Flanders Innovation & Entrepreneurship (Vlaio) recognized STEM academies (Flanders)
- <u>STEM platform an advisory body and steering committee to/of the Flemish government on STEM action plan and matters</u> (Flanders)
- <u>iSTEM</u> a project to consolidate and structure knowledge related to STEM didactics in order to support schools in the implementation of STEM didactics, supported by the Vlaamse Universiteiten en Hogescholen Raad (Vluhr) (Flanders)
- <u>Kinderuniversiteit</u> student activities for 5-12 year olds by Association Ghent *University* (Flanders)
- <u>EnRRICH</u> a Horizon 2020 Swafs coordination and support action with the objective to enhance Responsible Research and Innovation through curricula in higher education, coordinated by Vrije Universiteit Brussel (European)
- Fotrris a research project with the objective to foster a transition towards
 Responsible Research and Innovation systems, coordinated by Vito and funded by
 Horizon 2020 Swafs (European)
- <u>EU Contest for Young Scientists (EUCYS)</u> a competition for young scientists between 14-20 years funded by Horizon 2020 Swafs (European)
- <u>Scientix</u> community for STEM science education in Europe funded by Horizon 2020 Swafs (European)