SwafS-30-2020: Responsible Open Science: an Ethics and Integrity Perspective

SwafS-30-2020: Responsible Open Science: an ethics and integrity perspective

Specific Challenge:

Open Science (OS) aims to promote transparency and reproducibility of results and increase and widen the diffusion of knowledge.

At the same time, in order to maximize the benefits of OS, there are several ethical, legal and social challenges that need to be addressed.

Such challenges include:

• Possible development of new forms of malpractice

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- Risk of diluting research results of high quality (emergence of fake science)

- Risk of new bias in the assessment of the quality of the research output and impact notably via the alternative metrics

- Issues related to content-mining, the privacy of data subjects, potential conflicts with intellectual property and data protection rights

- The emergence of questionable dissemination/publication practices like the proliferation of predatory journals

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Scope:

The action should **examine and map the ethical, legal and social implications and RI issues** related to OS, and support the integration of research ethics and integrity as structural component of OS.

Issues to be addressed include the need to **develop appropriate infrastructure and tools for handling sensitive personal data**. In this context, the action should explore, among others, the relevance of Blockchain.

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The action should also explore ethical issues related to **the implications of OS on reproducibility, on the evaluation of science and scientific reputation, on scholarly communication and on the involvement of citizens** in the scientific process.

The work should be based on **a bottom-up approach**, gauging the attitudes of all relevant stakeholders (e.g. researchers, research funders, publishers and citizens) through the organisation of workshops and consultations.

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Ultimately, the work undertaken should result in:

A. Detailed strategic/policy assessment that will enable the EC to support the work of relevant stakeholders in promoting responsible OS.

B. Operational guidelines to support the work of researchers.

C. If needed, a proposal for a short document complementing the European Code of Conduct on RI.

D. Traditional and online training material on responsible OS for students, young and experienced researchers.

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Expected Impact:

The action will provide a **comprehensive overview of the ethics and research integrity issues** and opportunities related to Open Science and how they can be **effectively handled at EU level**.

Furthermore, the action will promote a model **balancing the need for openness with relevant ethical, legal, social and research integrity considerations**.