"Open Science should provide support, not impose sanctions"

Open Letter from some participants of the 3rd Open Science Retreat (14/15 June 2022, https://openscienceretreat.zbw.eu/) organised by ZBW – Leibniz Information Centre for Economics.

The relevance of the Open Science paradigm has significantly increased over the last decade.¹ The worldwide developments of recent years and months have, however, shown that different crises do put different expectations on openness as well as can act either as enablers or as limiters on openness. With this, we are experiencing the "shifting goalposts" of openness, and an ambiguous situation has emerged: while there was a new push worldwide for open practices during the COVID pandemic on the one hand, restrictions were being placed on scientific cooperation with Russia and Belarus, while simultaneously supporting the science system in Ukraine. These two contrasting examples highlight the political and societal expectations of Open Science and thus, the role of (and pressure on) the scientists supporting, promoting and practising Open Science. This paradigm of Open Science is not merely a way of "just doing science right",² but rather a belief or even a behaviour that must be consistent with the commitment of researchers, while also being promoted and followed through in national, European or international policy.

How do such developments influence the Open Science movement in general? How is Open Science related to and affected by the current crises, be they humanitarian, geopolitical, environmental or all of the above? What are the positions and reactions of Open Science advocates and activists? These questions were addressed in the course of the Open Science Retreat³ on "Impact of Global Crises on the Open Science Movement" in June 2022.

¹ See for instance the <u>Open Science Monitor</u> of the European Commission, the recent publication on <u>Research assessment and implementation of Open Science</u> by the Competitiveness Council of the European Union, the existence of international law on Open Science (<u>OECD Recommendation on Access to Research Data from Public Funding</u>, 2021), and the <u>UNESCO Recommendation on Open Science</u>.

² Melanie Imming, & Jon Tennant. (2018). Sticker open science: just science done right (ENG). Zenodo. https://doi.org/10.5281/zenodo.1285575

³ https://openscienceretreat.zbw.eu/

Following the Open Science Retreat, some participants (named below) wrote this open letter. The purpose of the letter is to emphasise the fundamental value of Open Science principles and openness in the light of different crises but also to highlight challenges regarding national, European or international policies, which might contradict the Open Science principles and make following these even harder.

The bottom line is that "Open Science should provide support, not impose sanctions".

The following statements are intended to stimulate a hitherto little-held discourse on the role of Open Science in this situation. They should also act as a starting point for the development of strategies and courses of action to provide a way forward in line with the Open Science paradigm.

- The Open Science paradigm is often associated with the expression "as open as possible, as closed as necessary". Although "closed" may be seen to be contrary to the Open Science principles, the Open Science community needs to define the criteria if and when closed has to be an option, particularly in light of the (global) crises.
- When applying sanctions or restrictions it is essential to distinguish between institutional collaborations, individual collaborations, and research knowledge:
 The continuation of institutional collaboration is justifiably restrictable and can therefore be stopped based on countries. The individual co-operations between researchers should not be impacted upon and should be left to the individual considerations of the researchers as far as possible in the framework of related agreements. However, access to research knowledge should not be restricted, for the following reasons:
 - The open principles including Open Access, Open Data, Open Source etc. should equally apply to everyone, and not be turned into instruments of exclusion,
 - it is almost technically impossible to implement comprehensive access restrictions, and
 - such restrictions will even in the best case scenarios not accurately affect the intended group(s) targeted by corresponding sanctions in general.
- Open Science can be a positive enabler in any crisis situation and, in this case, can act as a safeguard by ensuring the scientific knowledge of Ukraine is kept both accessible and secure. One of the current solutions is to primarily store

(research) data outside of the Ukraine. While these efforts are laudable, we have to acknowledge that many questions remain unresolved. These include, among others, legal questions regarding ownership of the safeguarded data and responsibility of the long and short term safekeeping of these data.

It should always be kept in mind that Open Science implies a supportive and empowering mission. Open Science must not be perverted into a sanctioning or punishing instrument. On that basis, our appeal for following the Open Science paradigm in the current situation requires the following actions:

- Workflow Management: Coordinate and align support activities in order to ensure the effective and accurate use of resources needed.
- Content Management: Provide information and assistance to supporting stakeholders, enabling them to make informed and timely decisions on current questions.
- Stakeholder Engagement: Communicate directly with affected researchers/scientists and listen to their needs with a focus on support, as opposed to sanctions.

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