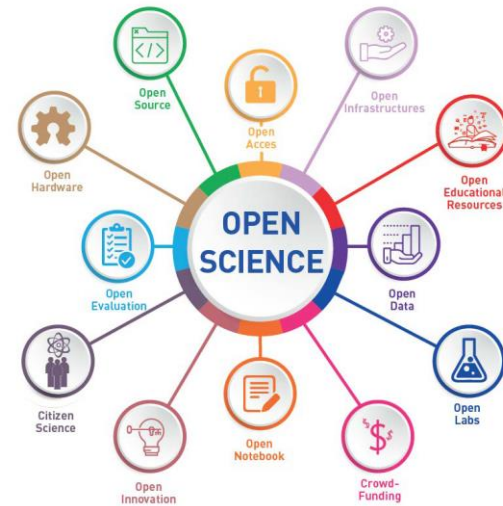


Open Science as a vision for Austria ?!

A regional perspective on a global Vision



Stefan Hanslik

Federal Ministry of Education Science and Research, Austria

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Another OS-Definition: Open Science is changing the way we approach Science...

Open Science involves efforts that endeavor **to make the scientific process** and research outputs **more widely accessible to all**. This might include scientific papers, data, software applications and, potentially, scientific infrastructure. Open Science is being promoted not only by funding agencies, but also by communities of researchers and there are many international “movements” that advocate Open Science practices. Open Science means a rather broad approach including open access on publications, open data, open educational resources, open methods, the implementation of new academic reward systems and so on.

There is no formal definition of Open Science. - <https://nsf.gov/pubs/2020/nsf20068/nsf20068.jsp>. Another frequently cited definition can be found at <https://www.fosteropenscience.eu/node/1420>.

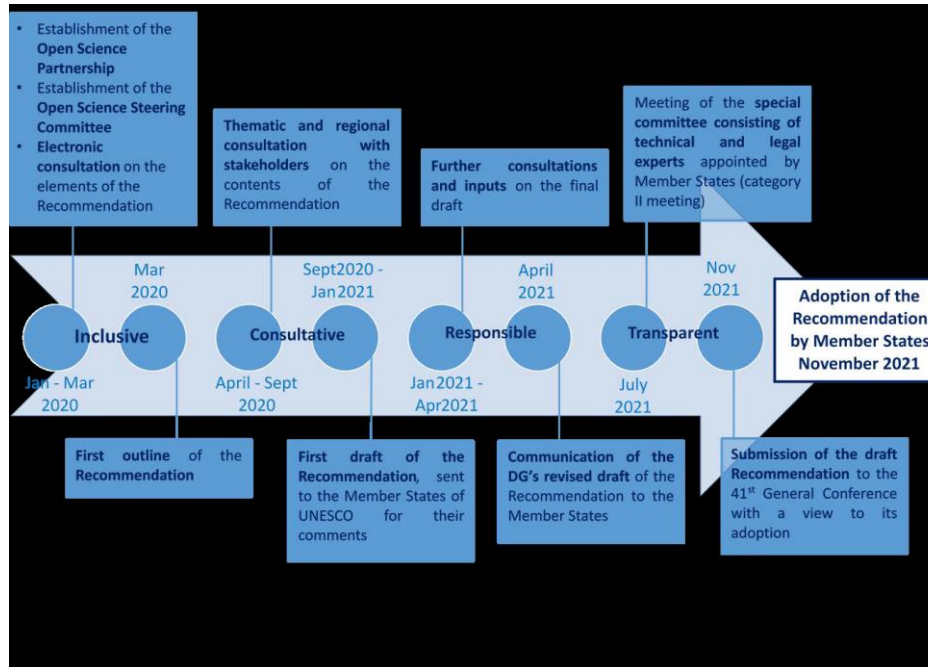
At its 40th session in November 2019, the **UNESCO** General Conference decided to prepare a **draft recommendation on Open Science**.

This was a major decision, the relevance of which has been confirmed by the current pandemic: as this period has shown, **we need scientific cooperation** for the good of all humanity, today more than ever.



*“In the context of pressing planetary and socio-economic challenges, sustainable and innovative solutions require an **efficient, transparent and vibrant scientific community** not only stemming from scientists, but from the whole of **society**”*

Roadmap towards the Recommendation on Open Science



Austria supports the initiative to elaborate a recommendation on open science that aims at realizing Article 27 of the Universal Declaration of Human Rights, namely to share in scientific advancement and its benefits, which is not the case today. Knowledge, science and technology are important tools to advance the SDGs.

Austria fully agrees with UNESCO that Open Science is a major instrument to make accessible common achievements to overcome present and future challenges of scientists and researchers.

Local actions related to Open Science

A platform of collaboration has been founded including universities, research institutions and universities for applied science (the Open Science Network Austria - **OANA**). OANA developed and published (October 2020) recommendations for open science in Austria.

Within the development of this recommendation a public consultation was performed. Together with two other responsible Austrian ministries the the Austrian Ministry of Education, Science and Research will elaborate a **national policy on Open Science and the European Open Science Cloud**. The ministry and Austrian stakeholders are also directly involved in developing national contributions and European commitments to the process of the European Open Science Cloud (EOSC).

EOSC as one of the policy intentions to foster Open Science (OS) in Europe.

Within the frame of Austria's Presidency of the Council of the European Union in 2018, the European Science Cloud was launched by acclamation of the Vienna Declaration on the EOSC as a European milestone in the developments connected to Open Science. The Vienna Declaration on the EOSC still represents a principal commitment of Austria to the concept of Open Science.

Moreover, the Austrian Social Science Data Archive joined the Consortium of European Social Science Data Archives. Within the current performance agreement (between the ministry and the universities) period 2019-2021, we have anchored open science as part of the digitization strategies that Austrian public universities are in the process of developing. Furthermore, a node is currently being set up in the frame of the project FAIR Data Austria at the Vienna University of Technology to implement the FAIR principles at domestic level: FAIR digital objects should be findable, accessible, interoperable and re-usable. The National Node RDA Austria is actively reinforcing this initiative.

(To view the Austrian involvement in EOSC, see also: https://www.aco.net/developing_eosc.html?L=1)

The open science movement is gaining speed all over Europe. We will have to take care that that the societal impact is given and that most of the population will be able to take part in these developments.

On one hand there is still a generation gap in using open science methods, on the other hand one needs to aim at decreasing divides due to technological developments.

Additionally, Open Science might run the risk of continuing a trend of commodification of science. The detrimental effects of “platform capitalism” and the development of single dominant monopolies must be prevented.

Indeed, it is up to the member states of the EU and their governments to assume their responsibility, also in the field of Open Science. This entails especially to act responsibly regarding legal issues like, for example, intellectual property rights, copy right, data privacy and data protection, further all ethical issues related with the enhanced use of data and digital objects.

With regards to legal issues let me recall the broad commitment for Open Science in the European Commission R&I Framework Programme [Horizon Europe](#).

One of the operational objectives includes **“fostering open science and ensuring visibility to the public and open access to scientific publications and research data, including appropriate exceptions.”**

Another important addition is the “new” **EU’s Directive on Open Data and the Re-use of Public Sector Information (PSI Directive)** [which](#) puts a greater focus on enhancing the way that publicly funded research data should be made available, accessed and shared. The new directive came into force in July 2019.

European Commission, 2019, EU Budget for the Future:Horizon Europe. EU Funding for Research and Innovation 2021-2027, https://ec.europa.eu/commission/sites/beta-political/files/budget-may2018-research-innovation_en.pdf

Directive (EU) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data and the re-use of public sector information , https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2019.172.01.0056.01.ENG

Sarita Albagli, *Open Science as an instrument for the democratization of knowledge*;
<https://dx.doi.org/10.1590/1981-7746-sol00093>

Budroni, P.: About open science and autonomy of science. *Data Intelligence* 3(1), 2021. doi: 10.1162/dint_a_00077

Burgelman, J-C.: Politics and Open Science: How the European Open Science Cloud became reality (the untold story). *Data Intelligence* 3(1), 5-19 (2021). doi: 10.1162/dint_a_00069

Thank you for your attention!

stefan.hanslik@bmbwf.gv.at

Federal Ministry of Education Science and
Research, Austria

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