

Open Access and Open Science in Europe and Switzerland: things are moving

Swiss Librarians for Evidence Based Medicine Meet and Greet for Swiss Biomedical Librarians Bern

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Abstract

Open Access, the free access to scientific research results, has been a topic for various stakeholders for more than ten years. Yet most scientific publications are still not freely accessible and the traditional licence-based publishing systems continues to prevail. But recently, science politicians of various countries and the European Union have picked up the topic of Open Access, placed it into the context of Open Science, and now call for fundamental changes in the way resarch results should be incentivized, evaluated, distributed, published and reused. The Amsterdam Call for Action on Open Science, led by the Dutch EU Council Presidency, is a hallmark of this new political drive, which has the potential to deeply change the scholarly publishing system. Meanwhile in Switzerland, swissuniversities, the rector's assembly of all Swiss Higher Education Institutions, has taken the lead in elaborating a Swiss national Open Access strategy, following a request by the Swiss State Secretariat for Education, Research and Innovation. An important element of this strategy will be to bring together key stakeholders in Switzerland and to follow the European trends. This talk will summarize these recent proceedings in Europe and Switzerland and show which road Open Access is likely to follow in the coming years.



Contents

- Open Access (OA) in general: why, improvements, risks, roads to
- Open Access in Europe
- Offsetting agreements
- National Open Access strategy in Switzerland
- KUB / CBU position on Open Access



Added value of Open Access / Open Science

Visibility

Media

wider dissemination of research undertaken in Austria

higher quality of information services

Public

transparent spending of tax money

Publisher

market entrance for providers from Austria

Developing Countries

self-help based on current scientific knowledge

Reproducibility

simplifying the verification of research results

Knowledge Networks

new potentials via data and text mining

Interdisciplinarity

enhances exchange between disciplines



Open Innovation

access to cutting-edge research encourages innovation

Democratisation

access independent of income

Knowledge Transfer

diffusion of knowledge into all societal areas

Education

teaching and learning according to the scientific state of the art

Citizen Science

participation of citizens in the research process

Politics

making better decisions based on current scientific knowledge

Health

up-to-date information for doctors and patients

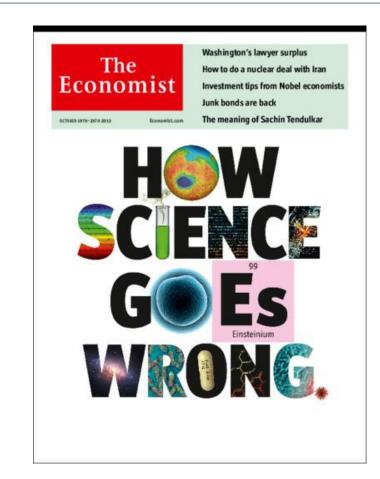
Research Efficiency

avoiding duplication and double funding



Why Open Access?

- Academic science is funded by public resources and results should thus be a public good (always respecting competition fears of researchers, intellectual property, data protection and other sensitive research results)
- Better transparency and re-using of data will enhance efficiency of science and prevent irreproducibility – problems for which science has recently been critized heavily
- Economic driver:
 - Very basic principle of economics:
 Information → Innovation → Growth
 - Concrete example: knowledge-intensive small and medium-size enterprises (SME; KMU) are likely to profit from free access and re-use of scientific results → important for Switzerland as the "land of SMEs/KMUs"



Such a cover of The Economist (2013) is very bad news for science



Present subscription-based situation

- Access only against payment
- Private ownership of publicly funded knowledge
- Re-use is limited, arbitrary, complex
- Innovations in science communication are hindered
- Text & Data Mining (increasingly basis for new findings) often restricted
- Publicly funded knowledge does not reach all and cannot multiply optimally
- Oligopoly of a few big publishers
- Monoculture regarding business models, optimizing profits instead of communication
- High increases in licence prices
- Big Deals displace smaller publishers
- Double payments (Double Dipping) in hybrid journals (subscription journals in which single articles can be made OA against an article processing charge (APC)): on the rise, hybrid APCs are paid by researchers in Switzerland, not SNF



Improvements and risks by Open Access

- Access only against payment is free for all
- No private ownership of publicly funded knowledge
- Re-use is limited, arbitrary, comples permitted and easy
- Innovations in science communication are hindered promoted
- Text & Data Mining (increasingly basis for new findings) often restrictive is permitted
- Publicly funded knowledge does not reach all and can cannot multiply optimally
- Oligopoly of a few big publishers Diversified publication market?
- Monoculturer Diversity regarding business models?
- High increases in licence prices Cost development unclear
- Big Deals displace smaller publishers Alternatives unclear
- Double payments (Double Dipping) in hybrid journals can be minimized by offsetting agreements, e.g. offsetting APCs from licence price or Big Deals including OA

Further reasons for Open Access: diversity

- Open Access has the potential to create a diversified publishing market with different business models (e.g. crowd funding: Open Library of Humanities, Knowledge Unlatched)
- Thus the dominance of big publishers could be reduced and a more functional market could be formed
- This requires careful consideration of implementation measures in order not to unnecessarily promote big publishers
- A variety of roads to Open Access should be supported:
 - Green Road (depositing/second publication in repositories)
 - Gold Road (first publication with OA)
 - Offsetting agreements including prize transparency
 - Alternative business models (e.g. Open Journal Systems, Bern Open Publishing BOP, Hauptbibliothek Open Publishing Environment HOPE, Heidelberg University Press...)

Open Access strategies and activities: increasingly, Gold OA is the goal

Goal: 100% (green and gold) OA in 2022

Governmental goal of 50% (100 %) gold OA within 5 years (10 years)

<u>VSNU & Springer Big Deal:</u> OA publishing and access subscription (also with Wiley)

- - Government & RCUK action
 - Support of gold and green OA
 - Goal: 100% gold OA
 - JISC APC <u>pilot offsetting</u> APC costs with subscription fees
 - HEFCE: OA obligatory for the next Research Excellence Framework
 - Wellcome Trust Open Access Policy incl. strict sanctions



Research Council: five-year gold OA funding scheme



Goal: 100% OA in 2015 (green and gold)



European Commission; Dutch presidency

- Open Science <u>strategy</u>, <u>policy platform</u>, <u>agenda</u> and <u>conference</u>; incl. OA and new rewards/incentive models
- Recommendation to the member states: 60% OA by 2016
- Call on publishers for <u>new business models</u>

FP7 & Horizon 2020

Mandatory OA policy, green and gold OA

Science Europe

- Strong OA position statements
- Principles for OA publishing services in 2015

LERU

 Roadmap (green and gold) and <u>statement</u> (anti double dipping) on OA

EUA

Roadmap on OA, expert group for Big Deals



- German universities to establish OA publication budgets since 2010
- Development of <u>infrastructure for OA publications</u>
- <u>DeepGreen</u> (development of green OA workflows)
- OA2020 journal flipping initiative by MPDL (supported by many scientific organizations)
- OANA: network supported by 50 organisations. <u>Recommendations</u> for national OA strategy
- Goal = 100% gold OA until 2025
- FWF & Austrian library consortium piloting offsetting model with <u>IOP</u> and <u>T&F</u>
- FWF: worldwide first OA book programme
- FWF: highest OA expenditure of a funding agency



- Government: 12 month embargo OA policy for all public funding agencies with a budget > \$ 100 Mio.
- Law mandating NIH to provide free access
- Strong OA Ivy League supporters, e.g. Harvard
- Most advanced OA policies by some charities like <u>Gates</u>, <u>Ford</u> and others



Examples of offsetting agreements

- Institute of Physics (IOP); Taylor & Francis: pilot agreements with FWF (national science fund) and KEMÖ (library consortium) in Austria:
 - If authors choose to go for OA, APCs for hybrid OA are paid by FWF and deducted from KEMÖ licensing prize the following year
 - First judgement by KEMÖ: this saves money but does not boost OA*
- Springer; Wiley: pilot Big Deals including OA with VSNU (university association of the Netherlands):
 - Access to large journal subscription bundles
 - All works in those journals where the corresponding author is from a participating Dutch university are automatically Open Access (no upper limit/cap, with CC-BY licence)
 - Confidential information: the sum of previously paid subscription plus hybrid Gold APC costs is the prize for the current Big Deals
 - Example: a Dutch university previously paid annually for Springer subscription and published 500 articles in these journals. 50 of these articles were OA with APCs paid by the researchers, using university or funder money. In the current Big Deal, the overall paid sum is the same but all 500 articles and more if researchers publish more are Open Access. This translates into at least 90% offsetting of APCs.
 - First judgement by KEMÖ of similar Springer deal in Austria: this boosts OA (and keeps Springer prominently in the market)*

*presented by Snejzana Cirkovic, KEMÖ, at the Symposium of the Consortium of Swiss Academic Libraries (CSAL) on "Academic licensing and publishing today", University of Bern, Sept. 7, 2016



Open Access in Europe

Large political will in the EU to implement Open Access and Open Science in one broad approach:

- Amsterdam Call for Action on Open Science (EU council presidency of Netherlands)
- Open Science Policy Platform (EU Commission)
- European Open Science Agenda (EU Commission)
- Competitive Council Conclusions about Open Science (Science ministers of EU) (<u>EU-communication</u>, <u>Science</u>
 article): Political consensus: all scholarly publications should be OA until 2020
- <u>LERU strongly supports</u> these activities
- European University Association (EUA): Roadmap to OA



OA in the EU: contents using the Amsterdam Call for Action as an example

Two European goals until 2020:

- Full Open Access for all scientific publications
- A fundamentally new approach towards optimal reuse of research data



Necessary policies for these goals:

- New assessment, reward and evaluation systems
- Alignment of policies and exchange of best practices

Implementation using 12 concrete Action Items:

- Several contain OA, new business models and negotations with publishers
- Several contain new incentives and evaluation models for Open Science



Start-up with an amazing world-wide network of scientists

Head of Advisory Board: Thomas Südhof, Stanford U., Nobel prize laureate

We should thus support **ScienceMatters**

Founder: Lawrence Rajendran, Professor for Systems and Cell Biology of Neurodegeneration, UZH





National Open Access strategy in Switzerland

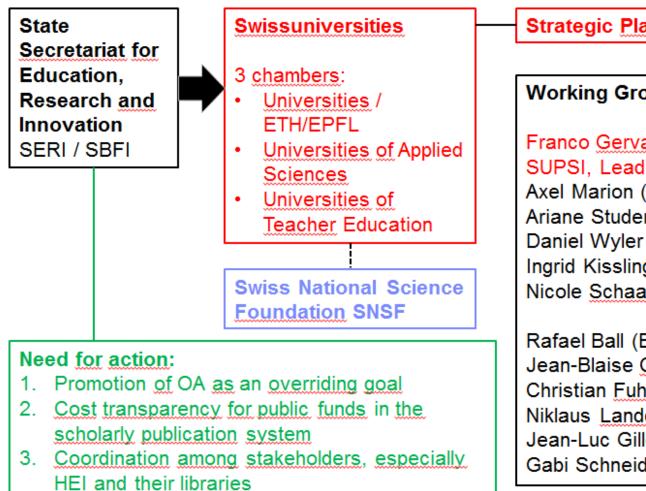
- Objectives and set-up
- Strategy document structure and content
- Draft schedule for stakeholder dialogue & strategy adoption

Next 5 slides are adapted from:

Gabi Schneider, Deputy program manager SUC P-2, «Working towards an Open Access strategy for Switzerland», presented at Consortium CSAL annual symposium «Academic licensing and publishing today» Bern, Sept. 7, 2016



An Open Access Strategy for Switzerland: objectives and set-up (Dec 2015 →)



Objectives for OA to research publications

Strategic Planning Delegation

Working Group Open Access:

Franco Gervasoni (SWU / SUPSI, Lead)

Axel Marion (SWU)

Ariane Studer (SWU)

Daniel Wyler (SWU / EUA)

Ingrid Kissling-Näf (SNSF)

Nicole Schaad (SERI)

Rafael Ball (ETHZ)

Jean-Blaise Claivaz (UniGE)

Christian Fuhrer (OA UniZH)

Niklaus Landolt (KUB-CBU)

Jean-Luc Gilles (UTE / SUC P-2)

Gabi Schneider (SUC P-2)

https://www.swissuniversities.ch/de/themen/hochschulpolitik/open-access/



Strategy: draft document structure (overview)

- 0 Preamble
- 1 Why Open Access to publications?
- 2 Current situation
- 3 Principles guiding OA strategy
- 4 Objectives
- 5 Action items

→ to be followed by an action plan after strategy adoption



Strategy: draft document structure and content (1)

#	Chapter	Content
0	Preamble	
1	Why OA to publications?	 Exploit technology in the context of Open Science (,time to market' → enhance collaboration, visibility, attention,) Increase diversity of publication market Point out flaws and consequences of research evaluation and reputation mechanisms in place → For a nation whose prosperity is based on knowledge, OA is an important economic driver
2	Current situation	 OA is emerging as a standard for high-level research and high on research policy agendas (examples) Varieties of OA publishing (definitions) European countries adopt national policies and strategies



Strategy: draft document structure and content (2)

#	Chapter	Content
3	Principles guiding OA strategy	 Unified approach: common objectives and political support Awareness and commitment of research communities Cost transparency and cost neutrality Ascertain control and diversity of scholarly publication process Revise quality assessment system
4	Objectives	 Take European objectives as a benchmark: 80% of scholarly publications OA by 2020 100% of scholarly publications OA by 2024
5	Action items	 Adopt and align OA policies Negotiate with publishers (back-up Consortium) Coordinate and pool resources / infrastructures Promote / support new publication models Communicate and raise awareness



Strategy: adoption procedure (DRAFT!)

- 31.08. Strategy document draft adopted by working group
- 07.09. swissuniversities Board OK
- 08.09. → 1st opinions: SNSF, KUB-CBU, SSIC, ... (main stakeholders)
- 13.09. SNSF Research Council
- 16.09. swissuniversities Research Delegation
- 21.10. swissuniversities Strategic Planning Delegation

November → Review by swissuniversities members (rectors)

- 14.12. swissuniversities Board
- 31.01. swissuniversities Plenary Assembly





Swiss Conference of Higher Education Institutions (SCHEI)



Action plan for implementation

KUB / CBU position on Open Access

- Organisation and stakeholder level:
 - Emphasize role of libraries and Consortium as important national partners in Open Access, especially in negotiations with publishers
 - Get support from swissuniversities, SNF and SERI for a stronger position in negotiations
 - Strengthen competences of the Consortium in the area of Open Access. This requires additional resources. A
 grant proposal has been submitted to SUC P-2 program
- Contents and objectives:
 - Support and negotiate Green Road Open Access (goal: clauses in current licences for short and unified embargo periods)
 - As a matter of principle, Gold Open Access is supported
 - Avoid double dipping by all means (Offsetting agreements)
 - Support alternative Gold OA models and initiatives
- Detailed paper with recommendations for implementation in progress, to be discussed at KUB / CBU meeting of Sept. 21
- KUB / CBU will be asked by swissuniversities for comments on the national OA strategy document



Thank you for your attention

Questions?

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