



UNIVERZITA KARLOVA

Open Access at Charles University: Opportunities and Challenges

Radka Římanová, Lucie Panchártek-Suchá,
Jan Konvalinka et al.



Czech National Open Access Strategy

Full name: The Czech Republic National Strategy of Open Access to Scientific Information for 2017-2020

Approved by the Government of the Czech Republic in June 2017

Requires open access... → The strategy is very general, without specific requirements and goals, mostly describing the current (2016/17) state

The **Action Plan for the Implementation of the National Strategy** was legally adopted by the Government on April 29, 2019 (planned date: December 31, 2017)

How will the Action Plan affect Charles University?

- Main impacts:
 - Starting 1 July 2020, CU will have to make all research articles and proceeding papers open access.
 - CU will have to start to systematically monitor all paid article processing charges (OA publishing fees, or APCs).
 - CU authors will have to have ORCID identifiers (which should be part of metadata records sent to the national CRIS system – IS VaVal).
- Although the AP does not cover open data, CU should be prepared for the next stage → it is to be expected that the future national research policy will contain an open data policy.

Current state of open access at Charles University

Open Access at CU

- Charles University signed the [Berlin Declaration on Open Access to Knowledge in Sciences and Humanities](#) in 2013 and so has confirmed its participation in the open movement.
- In 2017 the *Declaration of Charles University Academic Senate and university management on open access policy at CU* was published and further steps will follow.

Implementation of the CU Declaration

Planned steps (according to the Declaration)	Current state (to November 2019)
Central Library will provide methodical guidance and information on open access (OA).	Fulfilled; see Central Library website
Special OA librarian position will be created in all faculty libraries.	Partially fulfilled; see Central Library website
University CRIS system will allow users to add full texts of publications to the metadata record.	In progress since 2018
CU Institutional Repository will be prepared in accordance with OpenAIRE guidelines.	In progress since 2018
Legal analysis of employee works - qualified counseling for academics	Fulfilled; 17/2018 , 46/2018 a 47/2018
All projects supported by CU funding bodies (e.g. GAUK etc.) should promote OA as preferred publishing model.	-
Optimal environment for further development of OA publishing will be set up for Karolinum Press and other faculty publishers.	Partially fulfilled; Karolinum Press and FA Press

... and how open is CU now?

OA publishing is mainly an individual / voluntary activity or a requirement from external funders.

Green OA

- Voluntary and often outside the CU infrastructure
- In subject specific repositories, general purpose repositories like Zenodo

Gold OA

- Voluntary or mandatory but thanks to policies defined outside CU by funding bodies – H2020 (EC), Czech Health Research Council, ...

How open is CU according to WoS*?

In Web of Science, there are 12,941 records ("Article" and "Proceedings Paper") under "Charles University Prague" for 2016-18, of which **4,937** have been identified by WoS as **open access** (i.e., 38%):

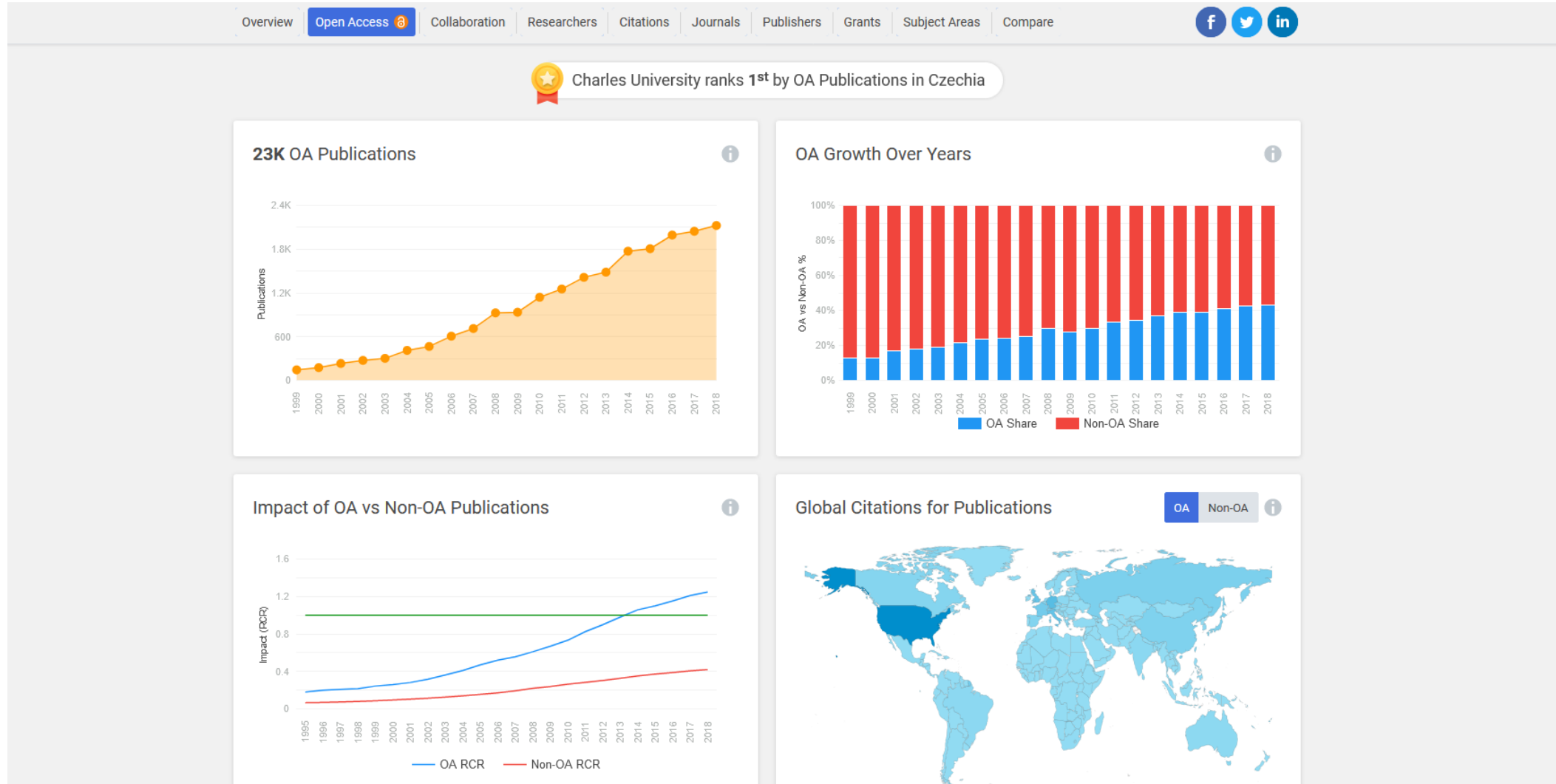
- Green OA = 48 % („Green Accepted“ + „Green Published“ WoS categories)
- Gold OA = 40 % („DOAJ Gold“ + „Other Gold“ WoS categories)
- Bronze OA = 12 % („Bronze“ WoS category)

The most open fields according to data for 2016-18 from WoS are:

- Physics Particles Fields (766)
- Astronomy Astrophysics (474)
- Multidisciplinary Sciences (421)
- Physics Nuclear (260)
- Biochemistry Molecular Biology (191)

* Data valid as of November 1, 2019

Another view on the openness at the CU: open access increases the citation rate



According to the [Open Access - Global Trends and Rankings](#) application, 26 % of CU publications are OA.

What needs to be done?

Challenges of Open Access at Charles University

Changes needed at institutional level

Technical infrastructure:

- Creating a stable CU Institutional Repository for publications
- Connecting the CU Institutional Repository to international (and national?) infrastructures – e.g. OpenAIRE, future (?) national OA content aggregator, etc.

Political steps

- Directive on the CU level requiring authors to comply with the OA principles.
- Introducing **OA conditions into internal grants and competitions.**

Supporting steps

- Introducing the position of a **university OA coordinator**
- Creation of a stable network of **open access faculty coordinators**
- Preparation of supporting legislative and methodological materials/instructions.

+ all changes and activities should also cover **research data** (at least in the pilot version)

Green or Gold?

Two possible open access roads

Green OA model would mean for CU

- **Prerequisite:** The need to build a stable and functional infrastructure
- **Impact:** Increase time-related/technical difficulties to report results (in addition to metadata, it would be necessary to store full texts as well as to attach license agreements)
- **Benefit:** Securing (often delayed) OA within CU infrastructure
- **Benefit:** Ensuring long-term archiving (and thus access) to your own publication production
- **Benefit/opportunity:** The possibility to extend the infrastructure to other types of outputs (e.g. research data) and link them with publications

Gold OA model would mean for CU

- **Prerequisite:** The need to negotiate sound and sustainable conditions
- **Impact:** Increase (at least during the transitional period) of information costs (access → publication)
- **Benefit:** Ensuring immediate OA, but with publishers (as a result, a stable institutional infrastructure for green OA is needed – long-term archivation)

Funding of OA publishing

- From our perspective, one of the main challenges in the field of OA is the **lack of funds** for a full transformation to gold open access.
- According to a [study from Max Planck Digital Library](#), there are enough resources in the current publishing system to transfer from the subscription-based model to gold open access.

However...

It is very difficult to estimate
exactly how much
the Gold OA would cost us.

One of possible estimations...

- According to CU CRIS, CU authors produced 20 044 journal articles in 2016-18, 8 222 as corresponding authors → the average annual number is **2 741**.
- Charles University paid approx. 19 mil. CZK for 489 OA articles in 2016-18 → the average cost of 1 APC could then be **39 000 CZK**.
- So,... hypothetical annual costs on OA publishing at CU could be:
 $2\,741 * 39\,000 \text{ CZK} = \mathbf{106 \text{ mil CZK}}$
 - But CU currently pays **58 mil CZK** per year for journal subscriptions (from and out of CzechELib) + approx. annual cost on APCs.
- This shows that **CU lacks approx 47 mil CZK (=1,9 mil EUR*)** for the transformation to gold open access.

* Rate to October 31, 2019: 1 EUR = 25,510 CZK

Points to keep in mind

We cannot calculate accurate costs estimation because...

- APCs are not universal, prices differ title to title and are changing all the time
- Not all corresponding authors are also paying authors
- Not all open access journals charge APCs (e.g. platinum OA journals, journals allowing the green OA model)
- Real (future) prices could be decreased by offset deals, membership discounts etc.

Changes needed at national level

Clear OA as well as ORD policy with mandatory goals and terms (in National Research, Development and Innovation Policy for 2021+?)

Offset deals (APCs + fair conditions for green open access)

OA and ORD in **terms and conditions of national funding bodies** → OA and ORD should be required; potential costs on OA/ORD publishing (e.g. APCs) must be eligible

- In the future, to address financing OA publishing of **postgrant publications** (e.g. special fund like [EC/OpenAIRE FP7 Post-Grant Open Access Pilot](#)).

Why are some researchers reluctant?

The Dangers and Concerns (real or conceived)

- Financial concerns (there are no free lunches – someone will have to pay for it, and it will be us anyway)
- Bureaucratic way of transforming the publishing models (directives and deadlines might lead to closing certain important publishing avenues)
- Nationwide vs European vs global action (we need American publishers on board as well)
- Danger of introducing wrong motivations for authors and publishers (publishing poor research for profit, predatory publishing)
- Access for less developed countries (institutes) for publishing their papers
- “Facebookisation” of science publishing (free content might lead to the floods of rubbish, as it happened with newspapers and magazines); hierarchy of data sources (prestige, reliability, authority) has to be retained

Why are some researchers reluctant?

The Dangers and Concerns (real or conceived)

- Financial concerns (there are no free lunches – someone will have to pay for it, and it will be us anyway)
- Bureaucratic way of transforming the publishing models (directives and deadlines might lead to closing certain important publishing avenues)
- Nationwide vs European vs global action (we need American publishers on board as well)
- Danger of introducing wrong motivations for authors and publishers (publishing poor research for profit, predatory publishing)
- Access for less developed countries (institutes) for publishing their papers
- “Facebookisation” of science publishing (free content might lead to the floods of rubbish, as it happened with newspapers and magazines); hierarchy of data sources (prestige, reliability, authority) has to be retained
- **Profit is not a dirty word, free market is great and communism does not work**

We believe in change

- Increasing the visibility of CU scientific results (publications and data)
- Equal access to scientific information for CU students and staff
- Enhancement of the internal infrastructure by functionality of the repository
- Possibility to monitor alternative metrics for our research publication
- Keeping up with international scholarly communication standards

Summary

To take advantage of the opportunities, CU (and all other research institutions) needs to provide the academic community with the maximum possible support in:

- Technical Infrastructure
- Politics&methodology
- Financial aspects

Open access initiative **needs political support at the national, European and even global level.**

Thank you for your attention
(and keep fingers crossed)