

Open infrastructures in conflict zones: a case study of DOAJ and Ukrainian journals

This case study explores the role of the Directory of Open Access Journals (DOAJ) in increasing the visibility and accessibility of Ukrainian academic journals. Ukrainian journals face numerous challenges due to economic constraints and the ongoing war. The article presents how open infrastructures play an important role in supporting journals during conflict, invasion or major disruption, using DOAJ as a case study. It analyzes what has worked and what could have been improved in DOAJ's approach, including its collaborative efforts with the Supporting Ukrainian Editorial Staff (SUES) project, the Open Ukrainian Citation Index (OUCI) and Research4Life as initiatives to increase the visibility, transparency and impact of all digitized Ukrainian academic journals, despite the ongoing war with Russia. Recommendations are presented to increase the quality and visibility of Ukrainian journals and to guide open infrastructures in supporting journals from conflict areas.

Keywords

conflict areas; Directory of Open Access Journals; open infrastructures; scholarly communication; open access; Ukraine



OLENA ZIMBA

Associate Professor,
Consultant
Rheumatologist
Department of
Rheumatology
Immunology and
Internal Medicine
University Hospital
in Kraków
Poland



KATRINE SUNDSBØ

Community Manager
Directory of Open
Access Journals
(DOAJ)
Denmark



NATALIA
KALIUZHNA

Research Associate
Leibniz Information
Centre of Science and
Technology
Germany



IEMIMA PLOSCARIU

Managing Editor
Directory of Open
Access Journals
(DOAJ)
Spain

Challenges faced by Ukrainian academic journals amidst the war

The ongoing war in Ukraine has posed significant challenges for Ukrainian editors and journals, disrupting the academic publishing landscape at multiple levels. From the early hours of 24 February 2022, editors of scientific journals located in regions bordering the Russian Federation and Belarus faced the urgent task of safeguarding essential publishing materials. This included creating hard copies of journal archives, reviewer databases, publishing agreements and other key content related to the publication process.¹ The threat of losing decades-long archives of scientific literature has not disappeared since then – it has spread across the entire country.

2 The state of digital preservation of scientific journals worldwide remains fragile.²

For countries affected by armed conflicts, preservation is of paramount importance. Historical instances reveal how cultural memory has been systematically destroyed through the deliberate targeting of libraries and archives during periods of military aggression.³ In the digital age, these actions have evolved, with the erasure of digital records emerging as a powerful tool for perpetrators to manipulate historical narratives and shape public perception to align with their agendas.⁴ Scholars have emphasized that the ongoing Russian war against Ukraine, while partially driven by the pursuit of economic resources, is fundamentally motivated by efforts to appropriate Ukraine's cultural identity and historical heritage as part of a broader ambition to restore a 'lost empire'.⁵ Thus, preserving Ukrainian contributions to science and ensuring the continued existence of national journals is crucial for safeguarding the nation's cultural and intellectual heritage in the face of ongoing aggression.

'The threat of losing decades-long archives of scientific literature has not disappeared ... it has spread across the entire country'

Ukrainian law requires scientific publishers to deposit electronic copies of each issue in the national depository, overseen by the Vernadsky National Library. The potential loss of the library's servers would result in the loss of 1,433,700 unique articles, which are currently hosted by the depository. Only a few Ukrainian publishers make use of robust international dark archives. Based on the DOAJ data, only 14.8% (68) of all indexed Ukrainian journals use professional storage systems monitored through the Keepers Registry (e.g. CLOCKSS, Public Knowledge Project Preservation Network, Portico, etc.).

To mitigate the risk of data loss due to physical damage to infrastructure on the one hand, and to secure digital archives from hacking and cyber-attacks on the other, publishers sought possibilities for relocating their servers abroad. Such a decision seemed right and hopeful. However, as Christina Dinh Nguyen highlighted in her 2024 article for *Insights*, threats to digital content during conflicts are not restricted by national borders.⁶ In this article, Nguyen also cited the 2023 cyber-attack on the British Library by the hacking group Rhysida, illustrating that even well-resourced institutions can become targets in modern warfare. It is worth mentioning that cyber-attacks against Ukraine have been in place since Russia's illegal annexation of Crimea and eastern regions in 2014, intensifying before the full-scale invasion in 2022.⁷ During this time, the public, energy, media, financial, business and non-profit sectors in Ukraine have suffered severely.⁸

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Another disruption is caused by rolling Russian attacks on Ukraine's energy infrastructure, leading to widespread power outages across cities. A report by the Kyiv School of Economics estimates damages and losses to the energy sector since the invasion to exceed \$16 billion, with a significant share affecting electricity generation facilities.⁹ Such a situation plunges cities into prolonged blackouts, severely undermining civilian life and work conditions. Ongoing power cuts posed significant organizational challenges for journal publishers, hindering their ability to plan in advance and meet important deadlines. To maintain communication with authors, reviewers and international collaborators, until the national power grid was fully restored, publishers invested in power generators and satellite internet constellations, ensuring that their connections remained intact even amid ongoing disruptions.¹⁰ However, most Ukrainian journals are published by local academic institutions, learned associations and local publishing houses, many of which are inadequately equipped with digital tools, platforms and reliable electricity facilities to cope with such challenges. Given the non-profit scholarly publishing landscape in Ukraine, where journals often operate with minimal financial resources and rely on public institutions, grants or volunteer efforts, not every publisher can afford autonomous power stations.

A 2023 survey on the impact of the war on Ukrainian science journal editors, which involved 160 respondents (response rate of 13.2%), revealed significant structural and organizational disruptions, financial instability and psychological stress.¹¹ Editors and staff, who either relocated within the country or sought shelter abroad, faced the challenge of navigating a new reality. They had to juggle multiple responsibilities, including searching for housing, enrolling their children in new schools, undergoing registration procedures in host countries and setting up makeshift workstations, all while trying to maintain the operations of their journals. Despite these challenges, most editors continued working voluntarily, adapting to remote work, fewer submissions and altered publication schedules. Additionally, financial constraints have intensified, limiting the ability of journals to cover publication costs and sustain operations. The psychological toll of the conflict has also affected productivity and focus, further hindering the editorial processes. Despite these obstacles, Ukrainian editors remain resilient, striving to uphold the quality and integrity of their publications. Overall, the survey emphasizes the need for international support, particularly in the form of mentoring and financial assistance, to help maintain the quality of academic publishing in Ukraine during the ongoing crisis.

'Ukrainian editors remain resilient, striving to uphold the quality and integrity of their publications'

Findings from another survey of over 2,500 Ukrainian scientists highlighted the severe and multifaceted impact of the war on Ukrainian science.¹² About 18.5% of Ukrainian scientists have fled the country since the start of the war in 2022. Those who stayed face numerous challenges, including reduced research time due to power outages and state budget cuts as funds are redirected to the defence sector. They often encounter difficulties in collecting experimental samples and grapple with existential concerns about the future of their work and life. Around 40% of these scientists report conducting less research than before the war, and 23.5% no longer have access to essential research inputs. The war may create a 'lost generation' of PhD students and young Ukrainian researchers due to the unavailability of local mentors and disrupted academic activities.

'The war may create a 'lost generation' of PhD students and young Ukrainian researchers'

The situation with Ukrainian scientific journals illegally appropriated by Russia on occupied territories remains unresolved.¹³ These journals often retain Ukrainian ISSN numbers, as they were registered before 2014, while positioning themselves as affiliated with Russia and continuing their publishing activities. DOAJ has worked with the Ministry of Education and Science of Ukraine to identify and remove journals where the country of publication does not match UNESCO boundaries.

To ensure that Ukrainian scientific communication remains vibrant and visible on a global scale, a number of international publishers have waived article processing charges (APCs) for authors affiliated with Ukrainian institutions.¹⁴ However, many researchers have been unable to benefit from these initiatives due to language barriers and differing methodological traditions in research paper composition. Furthermore, the Russian war against Ukraine has exposed another issue that affects not only local publishers in the conflict zone but also scientific publishing more broadly. This issue is related to the ethical considerations in referencing territories that have been illegally annexed or claimed, as well as citing fossils and cultural artifacts from these regions. In the current geopolitical situation, publishers and editors should not hide behind neutrality disclaimers but must ensure that the research they publish complies with international law and upholds ethical standards.¹⁵

DOAJ's key initiatives for enhancing the visibility and accessibility of Ukrainian academic journals

DOAJ plays a crucial role in enhancing the visibility and accessibility of Ukrainian academic journals that adhere to open access publishing standards. DOAJ is an independent, non-profit organization managed by Infrastructure Services for

4 Open Access C.I.C. (IS4OA), based in Denmark. According to their website, DOAJ's mission is to 'increase the visibility, accessibility, reputation, usage and impact of quality, peer-reviewed, open access scholarly research journals globally, regardless of discipline, geography or language'. With the help of over 100 team members, volunteers and ambassadors, it works to build an equitable and diverse scholarly ecosystem where trusted research can be accessed globally without barriers.

DOAJ has been instrumental in supporting improved publishing practices among Ukrainian academic journals during the ongoing conflict.

The remainder of the article will analyze how this was accomplished through such actions as: fast-tracking the review of Ukrainian publisher applications, working with Ukrainian academics as DOAJ volunteers, organizing webinars through the Supporting Ukrainian Editorial Staff (SUES) project and adapting its publisher course into Ukrainian.

Collaborating with the Open Ukrainian Citation Index (OUCI) and promoting diamond open access as a sustainable model, DOAJ has strengthened the resilience and global reach of Ukrainian scholarly publishing. The DOAJ's strict indexing criteria and guidance stimulate Ukrainian editors and publishers to meet global standards for publishing quality and ethical open-access content.

'DOAJ has been instrumental in supporting improved publishing practices among Ukrainian academic journals during the ongoing conflict'

As of 7 October 2024, the DOAJ hosts 20,959 journals from 135 countries.¹⁶ Ukraine has 458 DOAJ-indexed journals, ranking the country in twelfth place globally and seventh in Europe. Journals indexed in DOAJ constitute 24.5% of Ukraine's national scientific journals (1688), which are included in the List of Professional Publications of Ukraine – an official registry of credible journals curated and maintained by the Ministry of Education and Science of Ukraine.¹⁷ Publications in these journals are required for academic advancement, including obtaining PhD degrees, professorships, securing state funding, passing accreditations and so on. To be included in the List of Professional Publications of Ukraine, journals must meet specific criteria. For decades, Ukrainian authors seeking academic promotion have been primarily interested in publishing with local journals listed in the List of Professional Publications of Ukraine, formerly overseen by the Higher Attestation Commission of Ukraine – a national government agency historically responsible for awarding advanced academic degrees. Currently, this responsibility falls under the Ministry of Education and Science of Ukraine, which outlines specific criteria for inclusion in the list. These criteria include requirements for editorial board composition, peer review processes and compliance with national academic standards. While focused on local publishing norms, these criteria differ significantly from the indexing standards of international bibliographic databases such as Scopus or Web of Science. As a result, this system has allowed the proliferation and survival of journals that meet local requirements for Doctor of Philosophy (PhD) and Doctor of Sciences (DSc) qualifications, often without enhancing their global visibility or citation potential. The discrepancy between local and international standards has limited the incentive for Ukrainian journals to align with global publishing norms.¹⁸

The diverse array of DOAJ-indexed Ukrainian journals includes 84 in Science, 77 in Social Sciences, 61 in Technology, 60 in Medicine, 32 in Philosophy, Psychology and Religion, and 26 in Language and Literature. The year 2019 saw the highest influx, with 88 journals joining the database, while the subsequent years 2021, 2022, 2023 and 2024 added 34, 41, 34 and 26 journals, respectively (Figure 1). It is important to note that in 2014, DOAJ introduced new criteria, which meant that 99% of indexed journals had to reapply.¹⁹ The reapplication project started in 2015 and concluded in 2017, when over 40% of journals were removed from the database due to failure to resubmit an application or not meeting new criteria.²⁰ In 2014, 57 journals from Ukraine were indexed in DOAJ.²¹

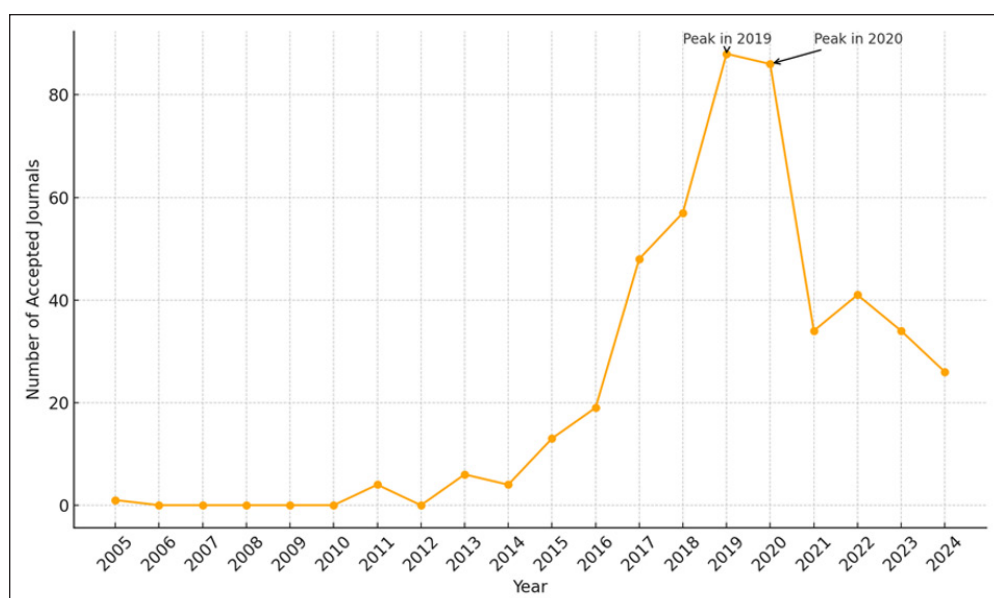


Figure 1. Graph showing the number of DOAJ-accepted journals published in Ukraine from 2005 to 2024. The plot clearly illustrates the fluctuations in the number of accepted journals over the years, with notable peaks in 2019 and 2020

The list of the top publishers includes V. N. Karazin Kharkiv National University (26), KNUKIM Publishing Centre/ Kyiv National University of Culture and Arts (16), Igor Sikorsky Kyiv Polytechnic Institute (13), Taras Shevchenko National University of Kyiv (13), LLC ‘CPC’ Business Perspectives” (11), National University of Kyiv-Mohyla Academy (9), National University of Life and Environmental Sciences of Ukraine (8), Oles Honchar Dnipro National University (8), and Zaslavsky O.Yu. (7). The majority of these publishers are government-affiliated universities.

DOAJ as the key source for mapping Ukrainian diamond journals

In the ongoing effort to make open access publishing more equitable and inclusive for both authors and readers, as well as to ensure that research outputs remain in the hands of those who produced it, the diamond business model brings a lot of hope. Increasing focus on diamond open access has sparked a surge of initiatives and projects aimed at evaluating the role of diamond journals in scholarly communication, turning the spotlight on the DOAJ as one of the few trusted sources that provide data on APCs, which is crucial for identifying diamond journals.

While some countries are just beginning to experiment with the diamond model,²² for others it has served as a foundational basis for the national publishing system for decades, even before the term ‘diamond open access’ was formally introduced.²³ Prominent examples can be found in Latin American countries, where publishing activities are predominantly managed by collaborative, non-commercial academic networks and open infrastructures.²⁴ Among European Union countries, Croatia and France stand out for having mature diamond publishing platforms.²⁵ Similarly, in Ukraine, diamond publishing is not a new development, as many scientific journals are published by universities and research institutions, which in some cases subsidize the costs without relying on author fees. A recent examination of open access adoption in Ukraine found that 60.9% of all open access publications produced by authors affiliated with Ukrainian universities and research institutions between 2012 and 2021 were published in national journals.²⁶ This study focused on article data rather than journals, leaving the prevalence of diamond open access unaddressed. The existing Ukrainian national bibliometric indexes lack the necessary metadata to identify diamond journals. Furthermore, in the current circumstances, developing the necessary features or investing resources in the creation of a national diamond open access journal list is challenging. This is where DOAJ can step in to help, offering a valuable resource for shedding light on the Ukrainian diamond open access landscape.

‘In the ongoing effort to make open access publishing more equitable and inclusive ... the diamond business model brings a lot of hope’

The distribution of Ukrainian diamond open access journals in the DOAJ reflects variation across different academic disciplines. In Figure 2, Humanities leads the chart, comprising 28.5% of the total, with 73 journals. This is closely followed by Social Science, which represents 21.1% of the journals, totalling 54. Natural Sciences accounts for 19.5%, with 50 journals, while Medical and Health Sciences makes up 13.7% with 35 journals. Engineering and Technology contributes 12.9%, equating to 33 journals. Finally, Agricultural Sciences represents the smallest share, comprising 4.3% of the total, with 11 journals.

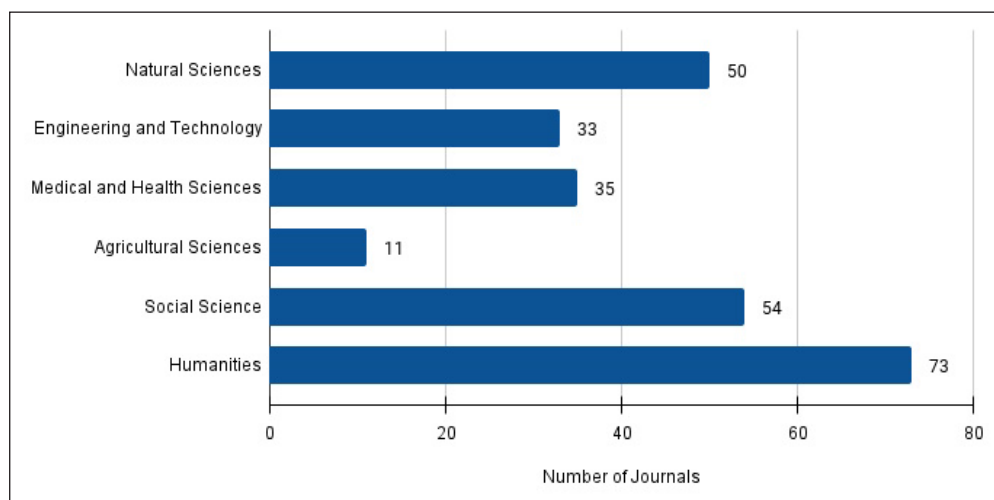


Figure 2. Ukrainian diamond open access journals by research areas

Figure 3 indicates that the majority of journals, 84% (215), are published by research institutions, including universities and scientific institutions of the National Academy of Sciences of Ukraine. Government agencies are second in terms of the number of diamond open access journals published, with 5.5% (14). Learned societies accounted for 3.9% (10), while commercial publishers published only 1.6% (4). This further confirms that the distribution of research findings and discoveries within Ukraine is primarily driven by academic bodies, underscoring the importance of institutional support in maintaining open access to scientific outputs.²⁷

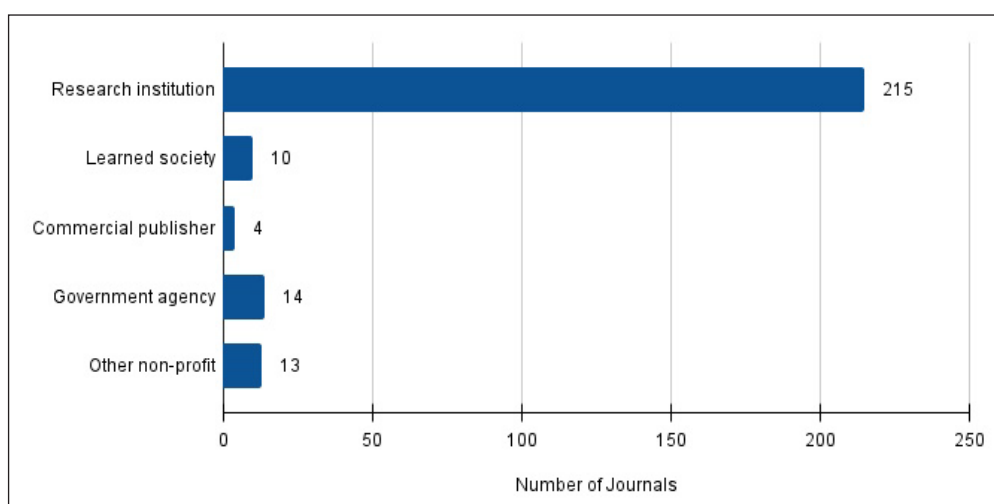


Figure 3. Ukrainian diamond open access journals by publishing entity

In this context, it is important to highlight that, until recently, there was no state financial support for sustaining scientific journal publishing in Ukraine.²⁸ Additionally, academic institutions in the country operate on limited budgets and the core national funding body, the National Research Foundation of Ukraine, does not provide direct support for journals, unlike similar funding bodies in other European countries.²⁹ Broader economic challenges could impact the ability of journals to waive APCs without compromising quality and

7 sustainability.³⁰ The ongoing war has further strained resources, disrupted operations and limited financial support for publishing, making it even more challenging for Ukrainian journals to operate without APCs.

The conversation around diamond open access has been a primary focus in scholarly communications in the last years, with initiatives like DIAMAS and the Action Plan for Diamond Open Access paving the way for global initiatives and conversations around the sustainability of diamond open access.³¹ DOAJ is a part of the DIAMAS consortium and is at its core committed to equity and diversity whilst advocating for robust quality control and responsible publishing practices. In a DOAJ blog post³² Judith Barnsby, Head of Editorial, and Cenyu Shen, Deputy Head of Editorial (Quality), emphasized the importance of supporting diamond open access journals that do not charge APCs, recognizing the sustainability challenges faced by journals that do not charge any fees. There are 13,547 (65%) of the 20,959 journals in DOAJ without fees. It must be recognized that APC data in DOAJ is self-reported by the journal editors who submit applications for indexing and reflects the actual information at the time of submission. DOAJ does not have the capacity to track changes in APCs for journals after their inclusion, but encourages publishers and journal editors to notify DOAJ with an update request when or if their APC changes. For larger publishers, this can also be updated annually through automatic processes. The practice of publishers waiving APCs as a marketing strategy for newly launched journals to attract authors, only to introduce APCs later, highlights the need for a more nuanced approach in identifying diamond open access journals.³³ This practice is more common among commercial publishers. In the case of Ukraine, the number of commercial publishers was small (4), allowing us to manually verify their websites to ensure they did not charge APCs. However, for large-scale studies, this approach would present challenges.

'The ongoing war has further strained resources ... making it even more challenging for Ukrainian journals to operate without APCs'

OUCI: enhancing open access and transparency in Ukraine

Along with DOAJ, another open infrastructure that has supported open access publishing in Ukraine is OUCI, a state-supported open infrastructure. OUCI represents a significant advancement in monitoring the open access academic publishing landscape of Ukraine,³⁴ specifically through its integration with Unpaywall. As a search engine and citation database, OUCI aggregates data from all publishers utilizing Crossref's 'Cited-by' service and supports the Initiative for Open Citations. The OUCI also uses DOAJ data, and is a good example of how open infrastructures can interoperate to support a whole community of scholars affected by war.

Its primary goals are to streamline the search for scientific publications, enhance the completeness and quality of metadata in Ukrainian scholarly works, and facilitate bibliometric studies across various disciplines, particularly in the social sciences and humanities. By ensuring that every citation ideally includes a DOI, the OUCI promotes transparency and accuracy in scholarly communication. This initiative underscores Ukraine's commitment to accessible academic publishing and enhancing global visibility while also supporting national efforts to accelerate the transition to open research information, thus echoing the principles outlined in the 2024 Barcelona Declaration on Open Research Information.³⁵

The SUES project: enhancing Ukrainian scholarly communication

The SUES project is an initiative by European institutions to support Ukrainian scholarly communication.³⁶ Formed in March 2022, the SUES project addresses urgent requests for support from Ukrainian scientific publishing colleagues facing significant challenges due to the destruction of infrastructure and interruption of public subsidies. One of the key partners of the SUES project is DOAJ, along with several other collaborators. The project aims to aid scholarly journals and academic publishers in their daily activities, enhance international visibility, improve infrastructure and build stronger future relationships.

A crowdfunding campaign raised over €73,000 to support around 45 Ukrainian journals, exceeding the initial goal of €16,500.³⁷ In addition to financial support, SUES offers a series of webinars tailored to the needs of Ukrainian editors and publishers based on their survey feedback. As part of this initiative, DOAJ volunteer associate editors, Nataliia Kaliuzhna and Iryna Kuchma, arranged two webinars, 'Indexing journals in the Directory of Open Access Journals (DOAJ)' and 'Copyright and Licensing', at the SUES summer school in 2022. These webinars addressed key issues, such as DOAJ indexing, copyrights and licensing, and best practices in journal publishing. Each session included a presentation and discussion, with recordings available on the SUES website. The webinars covered topics like open access compliance, Creative Commons licensing and essential publishing practices. SUES aims to provide mentoring, support for DOAJ/DOAB inclusion and scholarships to assist with day-to-day operations, fostering new forms of exchange between publishers and journals.

'A crowdfunding campaign raised over €73,000 to support around 45 Ukrainian journals, exceeding the initial goal of €16,500'

Going a step further, DOAJ in partnership with Research4Life and the Academy of Science of South Africa (ASSAf), adapted their virtual publisher course into Ukrainian to help local editors enhance their publishing practices and improve the visibility, accessibility and recognition of Ukrainian research. The course prepares journals for applying to be indexed in DOAJ, outlining key considerations and criteria as well as giving practical examples of policies and good publishing practice. The publisher course had four modules and took place from September to October 2024, with over 400 registered participants. This initiative became possible after Ukraine joined the Research4Life Country Connectors programme in 2023. Furthermore, Research4Life is considering the possibility of enriching the journal portfolio available through their portal with Ukrainian journals indexed by DOAJ.³⁸

Another significant development in Ukraine was the implementation of the Ukrainian Open Science Plan in 2022, adopted in October of the same year.³⁹ One of its goals is to increase the number of DOAJ-indexed journals. Additionally, DOAJ has played an important role in Ukrainian scholarly communications by serving as a discovery and selection tool for the EPP UA (Electronic Preservation Project for Ukrainian OA journals), conducted by TIB (Technische Informationsbibliothek) – Leibniz Information Centre for Science and Technology University Library.⁴⁰

DOAJ seeks to help publishers in other countries where conflict exists or where various forms of support are needed. In 2024, DOAJ reviewed its Ambassador Programme, which is an outreach programme to support journal editors and local communities in under-represented countries with good practice in publishing and DOAJ indexation. The review has meant that the focus of the programme will be re-established to low- and middle-income countries (LMICs). DOAJ will be recruiting an ambassador for Ukraine in 2025, highlighting the need for support to this region due to the ongoing war, and due to the number of open access journals in the region.

'DOAJ has a team of Ukrainian volunteer associate editors who help with assessing the applications DOAJ receives from Ukraine'

The role of the DOAJ Ukrainian team in enhancing open access for Ukrainian journals

DOAJ has a team of Ukrainian volunteer associate editors who help with assessing the applications DOAJ receives from Ukraine. Volunteers have processed numerous applications submitted by Ukrainian publishers, especially since the outbreak of hostilities. The associate editors use their experience to help publishers and journal editors meet DOAJ minimum criteria for inclusion. After receiving a list of over 60 interested journals and publishers from the SUES project, the team evaluated whether each journal met DOAJ's basic criteria for indexation. When a journal failed to meet the basic criteria or other elements of best practice in open access publishing, the team member worked with the publisher to help them improve their policies. Ultimately, it falls to the publisher whether they are willing to implement the changes requested. This way of fast-tracking Ukrainian applications has remained a policy of DOAJ

since 2022. It means that Ukrainian applications are prioritized in the Slavic editorial group, which strives to complete reviews of Ukrainian journal applications as soon as possible. Other editorial groups outside the Slavic editorial group at DOAJ continue to focus on helping journals in their specific geographic region.

This policy of fast-tracking Ukrainian applications and DOAJ's added investment in Ukrainian journals has resulted in over 90 journals being indexed in the directory since hostilities began. Notably, applications from Ukrainian publishers have improved significantly since then, especially regarding the transparency of their editorial policies. The team observed that their communication with publishers and editors also vastly improved, as both sides earnestly sought to improve the quality of Ukrainian journals.

DOAJ's best practices for enhancing Ukrainian academic journals

DOAJ's guide to applying is an essential starting point for journals with an interest in applying for indexation and for improving the quality of their journals. Ukrainian journals applying to DOAJ are no different than the norm, in terms of what causes a journal to be rejected: problems with open access policies, licensing, copyright, editorial practices and peer review processes. In some cases, there are small differences distinguishing an accepted journal from a rejected journal. Journal editors might often not be fully aware of best practices, how to implement certain criteria, or how to properly describe to the community that best practice is indeed being followed. Another obstacle for Ukrainian journals, particularly those at early stages of publishing, is endogeneity, which implies that more than 25% of articles in the latest two issues are authored by either editorial team members or reviewers of the same journal. Another common issue with Ukrainian journals, although significantly less so in the last two years, is the requirement for PhD or Masters students to submit a supervisor's review along with their manuscript. This may be a sign of poor peer review or the absence of it altogether. Table 1 outlines key advice for common criteria categories found in the DOAJ application form.

'Ukrainian journals applying to DOAJ are no different than the norm, in terms of what causes a journal to be rejected'

Key considerations before DOAJ application

Open access policy

- Ø Ensure the journal displays an open access (OA) statement that aligns with the Budapest, Berlin and Bethesda Declarations.
- Ø Licensing and copyright terms should be clearly stated, and should not conflict with the definition of OA.
- Ø There should be no references to 'All rights reserved', as this contradicts open access policies and restrictions on fair use conflicting with OA principles.

Licensing and copyright

- Ø Licensing terms should be clearly stated or consistent across different sections of the journal's website and application form.
- Ø There should be no user restrictions conflicting with OA licensing terms, such as the CC BY licence.
- Ø There should be no reuse restrictions, such as embargo periods, conflicting with OA policies and the Creative Commons (CC) licensing.
- Ø Clear copyright holder information should be available and clear.

Peer review

- Ø The peer review process must be stated. If a non-traditional peer review method is used this needs to be explained in further detail.
- Ø It is highly recommended that the peer review timeline is visible, for example by using 'Submitted', 'Accepted' and 'Published' dates on individual articles.

Endogeneity

- Ø The journal should have diverse authorship, with articles authored by editorial board members not exceeding 25% in either of the latest two issues or in the last calendar year for journals with continuous publishing.

(Contd.)

Key considerations before DOAJ application

Administrative and technical

- Ø The ISSN(s) must be correct and fully registered.
- Ø Institutional affiliations for editorial board members should be clear, and editorial board membership must correspond to the volume and topics of published articles.
- Ø Journals' editorial board members should correspond to the geographic scope. For example, journals claiming to be international must have an international editorial board.

Content and website

- Ø Journals must have published enough research content to meet DOAJ's minimum requirements of five articles in the most recent issue.
- Ø Journals should not display non-standard indexes and questionable metrics.
- Ø Information on the journal's website should be consistent. If information is available in several languages, the information must be the same in all languages.

Table 1. Key considerations before DOAJ application

DOAJ editors regularly encourage Ukrainian editors to upgrade their instructions and ethics statements and adjust to the requirements for DOAJ indexing and re-evaluation. The best way to increase the coverage and visibility of Ukrainian journals is for editors to strictly adhere to the revised principles of transparency and best practice in scholarly publishing and regularly consult the DOAJ indexing criteria.⁴¹ Envisaging more applications from Ukraine and building on previous evaluations, some pointers for successful indexing can be highlighted:

1. Consulting all aspects of the revised inclusion criteria.
2. Specifying professional and geographic priorities of the journal's aims and scope.
3. Updating and upgrading instructions for authors, with more emphasis on research reporting standards and referencing.
4. Proactively employing open access, visibility and dissemination tools on the journal website and at the article level (e.g. ORCID, social media accounts).
5. Avoiding displays of impact indicators other than those issued by globally recognized databases such as Scopus and Web of Science.
6. Consulting and enforcing updated position statements, declarations and guidance of global editorial associations.
7. Improving editorial credentials by attending training courses of recognized authorities in indexing and publishing.

'DOAJ editors regularly encourage Ukrainian editors to upgrade their instructions and ethics statements'

Successful indexing requires clearly formulated and enforced author instructions and publication ethics statements, which should include peer review details, authorship criteria, conflict of interest notes and retraction guidelines, among many other essential points. Uncertain aims and scope, and too broad coverage of subject categories are among other main issues encountered by DOAJ evaluators of Ukrainian journals. Unclear or conflicting licensing and copyright issues are also among the common issues. DOAJ has helped editors from Ukraine overcome these problems in the journals accepted for indexation in DOAJ through quick communication with journal contacts during the fast-track reviewing policy.

Avoiding poor publishing practices and connections with non-standard impact-issuing agencies is now increasingly prioritized, paving the way for greater visibility of Ukrainian journals on the DOAJ platform and thus globally. It is important that Ukrainian editors and publishers maintain an active interest in DOAJ indexation during the crisis. One of the biggest challenges for Ukrainian journals that affect eligibility for DOAJ indexation is a severe shortage of local manuscript submissions due to the ongoing war. The situation may worsen. At the time of writing, the internationalization and diversification of author pools and switching to English as the main language of publication is a temporary way forward for Ukrainian journals to be able to continue to operate. The main issue now for editors is to upgrade the editorial policies of Ukrainian journals, publish valuable content with implications for both local and global readership and circumvent substandard publishing practices.

Conclusion

The analysis presented in this case study highlights the important role of open infrastructures and DOAJ in sustaining scientific communication and publishing activities of Ukrainian academic journals during challenging times. DOAJ's initiatives have primarily focused on boosting the visibility of these journals and improving their publishing standards. In particular, fast-tracking efforts by the DOAJ Slavic group to review applications from Ukrainian journals help maintain their visibility, ensuring they remain discoverable by a global audience. This, in turn, ensures that the voices of Ukrainian authors are not silenced, allowing their research and perspectives to contribute to the global academic dialogue. The ambassador programme is another way by which DOAJ engages and supports Ukrainian scholarly publishers. These actions are, or can be, applied to journals in other regions experiencing conflict. Another important reason for indexing is that bibliographic visibility is crucial for enabling participatory openness, which, beyond simply supporting a nation during conflicts, is a vital condition for advancing global open access.⁴² By addressing the key criteria from DOAJ's guide to applying, such as those related to licensing, peer review and referencing, Ukrainian journals can improve their chances of successful inclusion in DOAJ, thereby enhancing their global visibility and credibility.

Efforts to improve publishing standards were implemented through initiatives such as the SUES project and the publisher course, which provided Ukrainian editors with essential resources and training to strengthen their journal publications and adapt to international standards. The SUES project has also been instrumental in providing much-needed financial and technical support to Ukrainian publishers.

Despite these effective and valuable efforts, many of the challenges faced by Ukrainian publishers remain unaddressed. Specifically, the preservation of scientific journals remains a significant issue. While an initiative led by the Leibniz Information Centre for Science and Technology University Library aims to create a long-term archive for Ukrainian journals in the sciences, technology and engineering, it does not include journals from the arts and humanities. Furthermore, the reliance on volunteers for this initiative has resulted in a prolonged timeline for implementation. Similarly, the disruptions caused by blackouts do not have an easy solution and continue to hamper the work of Ukrainian publishers. Continued support from international organizations and collaboration with global bibliographic databases will be essential in achieving these goals and fostering a sustainable open access publishing environment in Ukraine.

'Continued support from international organizations ... will be essential in achieving these goals and fostering a sustainable open access publishing environment in Ukraine'

Abbreviations and Acronyms

A list of the abbreviations and acronyms used in this and other *Insights* articles can be accessed here – click on the URL below and then select the 'full list of industry A&As' link: <http://www.uksg.org/publications#aa>.

Competing interests

The authors have declared no competing interests.

References

1. Liudmyla Ostapenko, "Scholarly Publishing in Ukraine since February 24, 2022," *Septentrio Conference Series*, no. 1 (10 November 2022), DOI: <https://doi.org/10.7557/5.6771> (accessed 15 April 2025).
2. Martin Paul Eve, "Digital Scholarly Journals Are Poorly Preserved: A Study of 7 Million Articles," *Journal of Librarianship and Scholarly Communication* 12, no. 1 (24 January 2024), DOI: <https://doi.org/10.31274/jlsc.16288> (accessed 15 April 2025).
3. Lynn H. Nicholas, *The Rape of Europe: The Fate of Europe's Treasures in the Third Reich and the Second World War* (Vintage Books USA, 1995).
4. Christina Dinh Nguyen, "Digital Cultural Heritage in the Crossfire of Conflict: Cyber Threats and Cybersecurity Perspectives," *Insights* 37, no. 1 (7 May 2024), DOI: <https://doi.org/10.1629/uksg.647> (accessed 15 April 2025).
5. Olena Mishalova, Olha Hordiichuk, and Oleh Sokolovskiy, "Russia's War in Ukraine as a 'War for Identity' and Appropriation of Cultural Tradition," *Ethics in Progress* 15, Issue 1 (2024): 73–94, DOI: <https://doi.org/10.14746/eip.2024.1.4> (accessed 15 April 2025).
6. Nguyen, "Digital Cultural Heritage in the Crossfire of Conflict."
7. "Illegal annexation of Crimea by Russian Federation," European Union External Action Service, 18 March 2016, https://www.eeas.europa.eu/node/3547_en (accessed 15 April 2025).

8. Jakub Przetacznik and Simona Tarpova, "Russia's War on Ukraine: Timeline of Cyber-Attacks," Think Tank | European Parliament, June 2022, [https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI\(2022\)733549](https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2022)733549) (accessed 15 April 2025).
9. Igor Piddubnyi and Dmytro Goriunov, "Damages and Losses to Ukraine's Energy Sector Due to Russia's Full-Scale Invasion Exceeded \$56 Billion – KSE Institute Estimate as of May 2024," KSE Kyiv School of Economics, 10 June 2024, <https://kse.ua/about-the-school/news/damages-and-losses-to-ukraine-s-energy-sector-due-to-russia-s-full-scale-invasion-exceeded-56-billion-kse-institute-estimate-as-of-may-2024/> (accessed 15 April 2025).
10. Serhiy Kozmenko and Liudmyla Ostapenko, "The War Year 2022 Is a Year of Trials for the Journal and the Publishing House," *Problems and Perspectives in Management* 20, no. 4 (30 December 2022): 653–56, DOI: [https://doi.org/10.21511/ppm.20\(4\).2022.49](https://doi.org/10.21511/ppm.20(4).2022.49) (accessed 15 April 2025).
11. Maryna Zhenchenko, Irena Izarova, and Yulia Baklazhenko, "Impact of war on editors of science journals from Ukraine: Results of a survey," *European Science Editing* 49, (2023), DOI: <https://doi.org/10.3897/ese.2023.e97925> (accessed 15 April 2025).
12. Ga  tan de Rassenfosse, Tetiana Murovana, and Wolf-Hendrik Uhlbach, "The effects of war on Ukrainian research," *Humanit Soc Sci Commun* 10, 856 (2023), DOI: <https://doi.org/10.1057/s41599-023-02346-x> (accessed 15 April 2025).
13. Alla Sadovnyk, "Russian propaganda, Ukrainian ISSN: how scientific journals from the occupied territories get into foreign libraries," *Suspilne News*, 4 November 2024, <https://suspilne.media/872353-russian-propaganda-ukrainian-issn-scientific-journals-occupied-territories-foreign-libraries/> (accessed 15 April 2025).
14. "Ukraine Academic Support," Elsevier, <https://www.elsevier.com/hubs/ukraine-academic-support> (accessed 15 April 2025); "Waivers and discounts," Wiley, <https://authorservices.wiley.com/author-resources/Journal-Authors/open-access/article-publication-charges/waivers-and-discounts.html> (accessed 15 April 2025); "APC waivers and discounts," Springer Nature, <https://www.springernature.com/gp/open-science/policies/journal-policies/apc-waiver-countries> (accessed 15 April 2025).
15. Jaime A. Teixeira da Silva, "Clearer Academic Guidelines to Assist Authors and Editors Are Needed to Navigate Geopolitically Sensitive Conflicts," *Journal of Scholarly Publishing* 55, no. 1 (January 2024): 120–38, DOI: <https://doi.org/10.3138/jsp-2023-0022> (accessed 16 April); Paul Stewens, "Are Academic Publishers Ignoring the Theft of Ukrainian Fossils?," *Undark Magazine*, 25 April 2024, <https://undark.org/2024/04/25/opinion-academic-publishers-ukrainian-fossils-theft/> (accessed 16 April 2025).
16. "Home," DOAJ, <https://doaj.org/> (accessed 16 April 2025).
17. "Home," Ministry of Education and Science of Ukraine, Scientific and professional publications, 26 June 2024, <https://mon.gov.ua/nauka/nauka-2/atestatsiya-kadriv-vishchoi-kvalifikatsii/naukovi-fakhovi-vidannya> (accessed 16 April 2025).
18. On the Approval of the Procedure for Forming the List of Scientific Professional Publications of Ukraine," Ministry of Education and Science of Ukraine, 15 January 2018, <https://zakon.rada.gov.ua/laws/show/z0148-18#Text> (accessed 16 April 2025).
19. "Reapplications: are your journals ready? Are you ready?," *DOAJ Blog*, 15 December 2014, <https://blog.doaj.org/2014/12/15/reapplications-are-your-journals-ready-are-you-ready/> (accessed 16 April 2025).
20. "The Reapplications project is officially complete," *DOAJ Blog*, 13 December 2017, <https://blog.doaj.org/2017/12/13/the-reapplications-project-is-officially-complete/> (accessed 16 April 2025).
21. "DOAJ Metadata," accessed via Wayback Machine, 2 July 2014, <https://web.archive.org/web/20140703025130/https://doaj.org/faq#metadata> (accessed 16 April 2025).
22. Jane Mahony, "Towards an All-Ireland Diamond Open Access Publishing Platform: The PublishOA.ie Project – 2022–2024," *Publications* 12, no. 3 (September 2024): 19, DOI: <https://doi.org/10.3390/publications12030019> (accessed 16 April 2025).
23. Christian Fuchs and Marisol Sandoval, "The Diamond Model of Open Access Publishing: Why Policy Makers, Scholars, Universities, Libraries, Labour Unions and the Publishing World Need to Take Non-Commercial, Non-Profit Open Access Serious," *tripleC: Communication, Capitalism & Critique. Open Access Journal for a Global Sustainable Information Society* 11, no. 2 (9 September 2013): 428–43, DOI: <https://doi.org/10.31269/triplec.v11i2.502> (accessed 16 April 2025).
24. H. Shmagun et al., "Is 'Diamond' Open Access an Appropriate Publishing Model for Asian Countries? A Case Study from Latin America," 2021, <https://www.semanticscholar.org/paper/Is-%E2%80%98Diamond%E2%80%99-Open-Access-an-Appropriate-Publishing-Shmagun-Shim/2114c397947f7e7443a25b5cb87645a25d1bc5d6> (accessed 16 April 2025).
25. Zehra Ta  kin et al., "D5.2 National Overviews on Sustaining Institutional Publishing in Europe," DIAMAS – European Commission, 4 June 2024, <https://zenodo.org/records/13683953> (accessed 16 April 2025).
26. Zehra Ta  kin et al., "D5.2 National Overviews on Sustaining Institutional Publishing in Europe," DIAMAS – European Commission, 4 June 2024, <https://zenodo.org/records/13683953> (accessed 16 April 2025).
27. Nataliia Kaliuzhna and Christian Hauschke, "Open Access in Ukraine: Characteristics and Evolution from 2012 to 2021," *Quantitative Science Studies* (18 September 2024): 1–20, DOI: https://doi.org/10.1162/qss_a_00324 (accessed 16 April 2025).
28. "MON Proposes Public Discussion of the Draft Resolution to the Cabinet of Ministers of Ukraine, On the Approval of the Procedure for Providing State Support to Scientific Professional Publications of Ukraine Indexed by International Scientometric Databases," Ministry of Education and Science of Ukraine, <https://mon.gov.ua/news/do-proiekt-postanovy-kmu-pro-zatverdzhennia-poriadku-na-dannia-derzhavnoi-pidtrymky-naukovym-fakhovym-vydanniam-ukrainy-iaki-indeksiuiatsia-mizhnarodnymy-naukometrychnymy-bazamy-danykh> (accessed 16 April 2025).
29. Mikael Laakso and Anna-Maija Multas, "European Scholarly Journals from Small- and Mid-Size Publishers: Mapping Journals and Public Funding Mechanisms," *Science and Public Policy* 50, no. 3 (1 June 2023): 445–56, DOI: <https://doi.org/10.1093/scipol/scac081> (accessed 16 April 2025).

30. "The World Bank in Ukraine," World Bank, 29 October 2024,
<https://www.worldbank.org/en/country/ukraine/overview#:~:text=Poverty%20in%20Ukraine%20has%20increased,2024%20and%202%25%20in%202025> (accessed 16 April 2025).
31. Home," DIAMAS,
<https://diamasproject.eu/> (accessed 16 April 2025); "Action Plan for Diamond Open Access," Science Europe,
<https://www.scienceeurope.org/our-resources/action-plan-for-diamond-open-access/> (accessed 16 April 2025).
32. "Meet the DOAJ team: Head of Editorial and Deputy Head of Editorial (Quality)," *DOAJ Blog*, 26 June 2024,
<https://blog.doaj.org/2024/06/26/meet-the-doaj-team-head-of-editorial-and-deputy-head-of-editorial-quality/> (accessed 16 April 2025).
33. Marc-André Simard et al., "We Need to Rethink the Way We Identify Diamond Open Access Journals in Quantitative Science Studies," *Quantitative Science Studies* (17 September 2024): 1–6, DOI:
https://doi.org/10.1162/qss_c_00331 (accessed 16 April 2025).
34. "Open Ukrainian Citation Index (OUCI)," OUCI,
<https://ouci.dnrb.gov.ua/en/> (accessed 16 April 2025).
35. "Barcelona Declaration on Open Research Information,"
<https://barcelona-declaration.org/resources/> (accessed 16 April 2025).
36. Louise Stoddard, "Supporting Ukrainian Editorial Staff – UKSG eNews Editorial 518," UKSG,
<https://www.uksg.org/newsletter/uksg-enews-518/supporting-ukrainian-editorial-staff-uksg-enews-editorial-518> (accessed 16 April 2025).
37. "SUES – Supporting Ukrainian Editorial Staff," OPERAS,
<https://operas-eu.org/projects/past-projects/sues/> (accessed 16 April 2025).
38. Ina Smith et al., "Promoting open access: Advancing DOAJ inclusion and scholarly publishing best practices," ASSAF, 31 October 2024,
<https://www.assaf.org.za/2024/10/31/promoting-open-access-advancing-doaj-inclusion-and-scholarly-publishing-best-practices/> (accessed 16 April 2025).
39. "Ukraine National Open Science Action Plan," October 8 2022,
<https://mon.gov.ua/static-objects/mon/sites/1/nauka/2023/01/26/National-Open-Science-Plan-Ukraine.pdf> (accessed 16 April 2025).
40. Sabina Auhunas et al., "Electronic Preservation Project for Ukrainian Open Access Journals (EPP UA) to Safeguard Research Content during the War," *11nd International Conference "Open Science and Innovation in Ukraine 2023,"* (2024) 1: 7, DOI:
<https://doi.org/10.2174/9789815256956124010006> (accessed 16 April 2025).
41. "Transparency and best practice," DOAJ,
<https://doaj.org/apply/transparency/> (accessed 16 April 2025); "Guide to applying," DOAJ,
<https://doaj.org/apply/guide/> (accessed 16 April 2025).
42. Stephen Pinfield, *Achieving Global Open Access: The Need for Scientific, Epistemic and Participatory Openness* (London: Routledge, 2024), DOI:
<https://doi.org/10.4324/9781032679259> (accessed 16 April 2025).

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Corresponding author:

Olena Zimba

Associate Professor

Consultant Rheumatologist

Department of Rheumatology

Immunology and Internal Medicine

University Hospital in Kraków

Kraków

Poland;

National Institute of Geriatrics

Rheumatology and Rehabilitation

Warsaw

Poland;

Department of Internal Medicine N2

Danylo Halytsky

Lviv National Medical University

Lviv

Ukraine

E-mail: zimbaolena@gmail.com

ORCID ID: <https://orcid.org/0000-0002-4188-8486>

Co-authors:

Katrine Sundsbø

ORCID ID: <https://orcid.org/0000-0002-9222-0929>

Nataliia Kaliuzhna

ORCID ID: <https://orcid.org/0000-0003-3154-8194>

Iemima Ploscariu

ORCID ID: <https://orcid.org/0000-0002-2398-6090>

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