

Open Access Journals in Serbia

Policies and Practices

A study prepared in the context of the project
Revisiting Open Access Journal Policies and Practices in Serbia,
funded through the EIFL Open Access Programme

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Contents

| | |
|---|----|
| Acknowledgments..... | 1 |
| Executive Summary..... | 2 |
| 1. Introduction | 11 |
| 1.1. Background | 11 |
| 1.2. Project <i>Revisiting open access journal policies and practices in Serbia</i> | 14 |
| 2. Methodology..... | 16 |
| 2.1. Respondents | 16 |
| 2.2. Journal publishers | 18 |
| 3. General journal details..... | 21 |
| 3.1. Publication frequency and the number of papers a year..... | 21 |
| 3.2. Content types..... | 24 |
| 3.3. Languages | 24 |
| 3.4. DOI | 26 |
| 4. Editorial Board | 28 |
| 5. Author guidelines..... | 32 |
| 6. Publication ethics..... | 34 |
| 6.1. Dealing with unethical behaviour | 35 |
| 6.1.1. <i>Misconduct</i> | 35 |
| 6.1.2. <i>Retraction</i> | 36 |
| 6.1.3. <i>Corrections</i> | 42 |
| 7. Open Access policy and practice | 43 |
| 7.1. Open Access statement..... | 43 |
| 7.2. The online availability of journal content..... | 43 |
| 7.3. Online publishing | 46 |
| 7.4. Submission Charges and Article Processing Charges..... | 49 |
| 7.4.1. <i>Submission charges</i> | 49 |
| 7.4.2. <i>Article processing charges</i> | 51 |
| 8. Copyright, user rights and self-archiving..... | 53 |
| 8.1. Copyright..... | 53 |
| 8.2. User rights | 56 |

| | |
|---|------------|
| 8.3. Rights retained by authors and the self-archiving policy | 57 |
| 9. Editorial process | 59 |
| 9.1. The length of the editorial process | 59 |
| 9.2. Submissions..... | 61 |
| 9.2.1. <i>Technical quality of submissions</i> | 64 |
| 9.2.2. <i>Response to reviewers</i> | 66 |
| 9.2.3. <i>References</i> | 66 |
| 9.3. Peer review | 68 |
| 9.4. Similarity checking and plagiarism detection | 78 |
| 9.5. Editorial documentation | 81 |
| 10. Publication process | 85 |
| 10.1. Copyediting | 85 |
| 10.2. Translation | 87 |
| 10.3. Desktop publishing and printing | 89 |
| 10.3.1. <i>Desktop publishing</i> | 89 |
| 10.3.2. <i>Printing</i> | 91 |
| 10.4. Journal websites..... | 97 |
| 10.4.1. <i>Domain and hosting</i> | 98 |
| 10.4.2. <i>Landing pages for articles and metadata</i> | 102 |
| 10.4.3. <i>Machine-readable metadata</i> | 105 |
| 10.4.4. <i>Website platform</i> | 105 |
| 10.4.5. <i>Responsive design</i> | 107 |
| 10.4.6. <i>Search</i> | 108 |
| 10.4.7. <i>Social buttons</i> | 108 |
| 10.4.8. <i>Website maintenance</i> | 108 |
| 10.4.9. <i>Website costs</i> | 109 |
| 10.4.10. <i>Web analytics and altmetrics</i> | 110 |
| 10.4.11. <i>Social networking websites</i> | 111 |
| 11. Indexing and abstracting | 112 |
| 11.1. Web of Science and Scopus..... | 112 |
| 11.2. Directory of Open Access Journals (DOAJ) | 117 |
| 11.3. Other databases | 118 |
| 12. Conclusions and recommendations | 119 |
| 12.1. Journal websites and electronic publishing..... | 119 |
| 12.2. The implementation of copyright policies and licenses | 121 |
| 12.3. Ensuring a continuous inflow of manuscripts | 122 |
| 12.4. Funding | 123 |
| 13. References | 127 |
| 14. List of tables | 132 |
| 15. List of figures..... | 133 |

| | |
|--|-----|
| Appendix 1: Questionnaire | 135 |
| Appendix 2: Editorial Policy (template)..... | 153 |
| Appendix 3: License agreements (templates) | 164 |
| Authors transfer copyright to the publisher | 164 |
| Authors retain copyright and grant to the publisher the non-exclusive right to publish the manuscript | 166 |
| Authors retain copyright and publishing rights without restriction..... | 168 |
| Appendix 4: Author statement (template)..... | 170 |

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Executive Summary

Background

The present study is a result of the ten-month project *Revisiting open access journal policies and practices in Serbia* (“Revisiting Open Access Journal Policies and Practices in Serbia” 2016), supported by EIFL. The purpose of the project was to:

- offer a solution to the problem of undefined editorial policies, identified during the reapplication process in Directory of Open Access Journals (DOAJ), by devising a policy template ([Appendix 2: Editorial Policy](#)),
- to raise the awareness of Open Access (especially its technical aspects and electronic publishing), and
- help improve editorial and publishing procedures through education.

There are about 400 Serbian journals that have an online version and the vast majority of them are available online free of charge to authors and readers. Keeping in mind the growing number of OA mandates at the international level, Serbian Open Access (OA) journals could become increasingly attractive for international authors if they managed to improve their visibility and online outlook. However, the most of them are merely traditional print journals that also have an online version. Journals that are published only electronically are rare in Serbia.

The study presents the results of the survey (111 Questions in 13 sections; see [Appendix 1: Questionnaire](#)), conducted between 30 May and 11 July 2016 among Serbian journals that had a freely available online version. It also draws attention to the actions undertaken with the aim of resolving some of the identified problems and puts forward recommendations for future action. The template devised by the project team to help journals define their editorial policies in accordance with the recommendations of DOAJ and Scopus is given in the appendix (see [Appendix 2: Editorial Policy](#)). The policy template is accompanied with a set of supporting documents (templates for license agreements and the author statement), also provided in the appendix (see [Appendix 3: License agreements](#)) and [Appendix 4: Author statement](#)).

Survey

The purpose of the survey was to identify problems related to editorial and publishing practices. The analyzed sample included 236 journals (112 in physical sciences and engineering and 124 in social sciences and humanities) that provided valid responses and was highly relevant in the local context, as it covered 89.09% of the active *doiSerbia*¹ journals; 54.80% of all journals indexed in the Serbian

¹ A journal repository created in 2005 with the idea of increasing the visibility of Serbian Open Access journals by assigning DOIs to individual articles of selected journals. The repository is hosted on the server of the National Library of Serbia.

Citation Index (*SCIndeks*); 91.30% of the Serbian journals indexed in the Science Citation Index, Social Sciences Citation Index and Arts and Humanities Citation Index; 61.76% of journals from Serbia indexed in Scopus (73.68% of the active ones) and 82.72% of Serbian journals indexed in DOAJ, at the time when the data were collected. The majority of the journals covered by the survey were published by public universities and scholarly and professional associations.

The preliminary results of the survey were instrumental in designing the workshops conducted towards the end of the project.

The presented results do not reflect the current situation but the state-of-the-art at the time when the data were collected and this is largely due to the actions undertaken during the project. The greatest differences between the presented results and the current situation may be observed in the following areas: publication ethics, retraction policy, peer review information, OA policy, copyright, licensing, self-archiving policy.

Survey results

General journal details

The vast majority (95.76%) of the analyzed journals published 1–4 issues a year. Journals in social sciences and humanities prevailed among periodicals published annually (77.27% of the journals that publish one issue a year), while physical science and engineering journals were dominant among the journals published four times a year (59.42%) and those with 6–12 issues a year (100%).

Almost 60% of journals published between 11 and 30 research papers (citable articles) a year and nearly one-half of them published 6–10 citable articles per issue. Most journals (65.25%) did not publish only research papers but also book reviews, news, reports, comments, etc.

Almost 45% of journals published full-text papers only in English, whereas 41.95% contained citable articles in various languages (English, Serbian, German, French, Russian, Hungarian, Italian, Greek, etc.). The journals that published research papers only in Serbian accounted for less than 10%.

At the time of the survey, 54.24% of journals assigned DOIs to their articles, whereas 45.78% did not use DOIs.

Editorial board and author guidelines

Although 76.69% of the analyzed journals had a list of editorial board members on their websites, they did not follow a uniform standard when providing details about their editorial boards: e.g. 36.02% of journals did not provide affiliation information. When present, affiliation information was often incomplete.

The majority of journals (85.17%) published author guidelines on their websites.

Publication ethics

At the time when the data were collected:

- most journals (72.03%) did not have a policy on publication ethics and responsibilities and it was even impossible to find elements of publication ethics in other documents or policies;

- 83.9% of journals did not have a defined policy for dealing with misconduct; only 8.90% had fully defined misconduct-related policies;
- 89.41% of journals did not have an explicitly defined retraction policy; only 9.32% had a defined retraction policy.

The situation was later mitigated by defining editorial policies, relying on the policy template devised during the project.

Open access policy and practice

More than half of journals (58.65%) did not have an OA statement at the time of the survey.² In about 40% of journals it was possible to find at least a phrase indicating that a journal was Open Access or a sentence saying that it was 'indexed in the Directory of Open Access Journals'.

Access to the full content of journal volumes was enabled in 94.92% of journals through independent websites, publishing institutions' websites, *doiSerbia*, *SCIndeks*, De Gruyter Open or other platforms. Seventy-five percent of journals were available online starting with volumes published in 2000 and later. Nearly one-third of journals were available in full text from Vol. 1.

Most journals (91.95%) said that they regularly uploaded content to their websites (or *doiSerbia* and *SCIndeks*) and less than 5% reported delays in making content available online. However, nearly 40% of the analyzed journals made the electronic version available online only after printing and only 13.56% published individual papers ahead of print (usually after acceptance). This indicated that electronic publishing was not optimally adopted among Serbian journals. The importance assigned to the print version was still great despite its limited impact and poor cost-effectiveness. The conclusion was confirmed by the survey data related to the structure of publishing costs.

Serbian journals rarely charged submission charges and article processing charges (APCs). According to the responses, nearly 90% of journals did not charge submission charges but in most journals (78.39%) this was not explicitly stated. More than 85% of journals did not charge APCs, but in most cases (75%), this information was impossible to find on the journals' websites.

It may be expected that most OA journals in Serbia will remain APC-free for at least several years or more because the majority of them rely on local authors, whose payment potential is low.

Copyright, user rights and self-archiving

At the time when the data were collected, in nearly one-half (46.61%) of the analyzed journals rights were not defined. The responses related to copyright issues were highly unreliable. Copyright transfer to the publisher was required by 24.15% of journals. Only rarely (5.51%), authors retained either some rights or full copyright and this was explicitly stated either in the journal policy or in the author guidelines.

User rights were not defined or all rights were reserved in about 70% of the analyzed journals. Only 19.07% used Creative Commons licenses and had the license information on their websites. About 6% of journals marked each paper with the appropriate license.

² It was considered that a journal had an OA statement if it was possible to find at least a phrase such as 'This is an Open Access journal' or 'The content of this journal is freely available' anywhere on the website.

More than three-quarters of the analyzed journals (77.12%) did not have an explicitly defined self-archiving policy. The responses suggested that journals would more readily allow authors to share and deposit the final, published version (publisher's PDF) than post-prints or pre-prints. At the time of the survey, it was possible to find only five self-archiving policies of Serbian journals in SHERPA/RoMEO.

The rights-related issues were addressed in the further course of the project, namely during the process of aligning editorial policies with the template devised by the project team. Nevertheless, the poor copyright awareness of the Serbian research community, including journal editors, remains one of the most important challenges to overcome.

Editorial process

In 67.37% of the analyzed journals peer review was normally completed within three months and it rarely lasted longer than six months (96.19% of journals managed to complete the review process within six months).

Judging by the responses, the review procedure and preparations for publication took almost equal time on average, and the latter could last a little bit longer. In 73.30% of the journals, it took more than one month to publish an accepted manuscript. In almost 30% of the journals where peer review was conducted quickly (up to one month) preparations for publication took 3–12 months. The majority of journals where the period between acceptance and publication was short (up to two weeks) used the OnlineFirst / Ahead of Print option.

The delays in the publication phase were not always justified and very often they were a result of the traditional publishing mindset, primarily focused on the print version of the journal.

Submissions

Although journals combined various methods of recruiting and receiving submissions, email was the prevailing channel for manuscript submission. In 30.51% of journals, submissions were received only by email. Less than 15% of journals used web-based submission forms (most commonly Open Journal Systems or CEON/CEES Aseestant) as the only submission channel. Some journals that used web-based submission forms still accepted email submissions. Submissions were also received based on calls for papers and individual authors were sometimes invited to contribute papers.

The results of the survey showed that some editorial procedures were not optimized, as journals tended to tolerate untidy submissions and missed deadlines. More than a half of the analyzed journals (52.97%) assigned reviewers even to the manuscripts that did not conform to their style guidelines. If such manuscript received positive reviews, corrections were sometimes made by the journal's editorial and technical staff. Nearly 10% of the respondents invested effort and time to format and correct manuscripts before sending them to reviewers, though some of these manuscripts were eventually rejected. In 51.69% of journals members of the editorial staff regularly checked and corrected references.

If authors failed to provide a timely response to reviewers, most journals would send a reminder and extend the deadline (84.74%), with or without warning the authors that the manuscript would be rejected if the new deadline was missed.

Peer review

In nearly 40% of journals, no information about the peer review process could be found either on the website or in the print version. Many journals (61.44%) did not inform potential authors and the readership about the average length of the review procedure.

The information regarding the type of peer review was missing in more than one-half of the analyzed journals. According to the responses, 66.95% of them used a double-blind procedure. More than 60% of journals from this group belonged to social sciences and humanities. Single-blind peer review was used by 26.69% of journals and the majority of them were focused on physical sciences and engineering.

Submitted manuscripts were usually reviewed by at least two reviewers (73.73% of the analyzed journals). In nearly 20% of journals, each paper was reviewed by a single reviewer or was evaluated by the editor or an editorial board member.

In case the reviewers disagreed, more than one-half of journals (52.54%) assigned additional reviewers. In some cases (15.25%), decisions to publish or reject a manuscript were made by the editor or the editorial board. Most journals (84.75%) had never faced appeals or complaints regarding peer review.

According to the responses, reviews were delivered on time (though delays could occur) in 73.73% of the analyzed journals. Nearly one-fifth (18.22%) of the respondents said that reviews were always delivered in a timely manner. Only 6.78% of the respondents reported delays. When reviewers were late, most journals sent a reminder and extended the deadline, but while one group of journals (47.03%) assigned new reviewers if the new deadline was missed, the other (41.53%) kept on waiting even after the new deadline.

It was still possible to find journals where invited (13.98%) and conference papers (9.32%) were not subject to peer review. In both cases, this fact was not clearly indicated in the editorial policy and/or author guidelines and the papers that had not been subject to peer review were not clearly marked.

Similarity checking and plagiarism detection

Journal publishers in Serbia reported plagiarism detection as a major problem primarily due to limited funds and the inability to afford reliable commercial similarity tracking software. According to the survey data, 62.71% of journals did not use any plagiarism detection tools.

Editorial documentation

As far as the editorial documentation (correspondence, archiving all versions of accepted manuscripts, as well as the rejected ones) was concerned, the survey data suggested that 58.05% of journals consistently applied good practices. In all other cases, answers revealed that not everything was done in accordance with standards. Judging by the responses, 12.29% of the analyzed journals had extremely messy, scattered and incomplete documentation. In most journals, the practices related to maintaining the editorial documentation relied on the local traditional know-how typical of print journals, though translated into an electronic environment. About 20–25% of journals used an online journals management system but not all of them consistently applied good practices.

Publication process

Copyediting

The survey data revealed diversified practices: more than 40% of journals relied on professional copyeditors, while nearly 30% depended on volunteer work and the volunteers were most commonly editorial staff members. Nearly 40% of the analyzed journals did not have any costs associated with copyediting, because editing was done by volunteers, or authors were required to cover the costs. The costs of copyediting usually did not account for more than 20% of the journal's budget.

Translation

In nearly 90% of the analyzed journals, there was no need to translate full-text papers into foreign languages (authors were required to submit them in the desired or required language). Although most respondents (68.64%) required that abstracts be submitted in English (or another language), in 26.27% of the analyzed journals, abstracts were translated either by a professional translator or an editorial staff member. About 40% of journals had no costs associated with translation. Translation costs rarely accounted for more than 20% of the journal's budget.

Desktop publishing and printing

Desktop publishing was yet another area where journals considerably relied on volunteer work: in 25.85% of the analyzed journals computer layout was done by volunteers. About 10% of journals were supported by publishing units or individual employees within their publishing institutions, due to which the cost of desktop publishing did not necessarily burden the journals' budget. Nearly 60% of journals had expenses associated with desktop publishing. The most commonly used desktop publishing software tools were MS Word (37.29%), and Adobe InDesign (23.73%). Judging by the survey data, many respondents were not familiar with the technical details related to the printing process.

The print-runs of Serbian scholarly journals were not high: in nearly one-half of the analyzed journals, they ranged between 101 and 300 copies and they were never higher than 1000 copies. Though small, these print runs accounted for a significant share of the budget. In 46.61% of journals, printing costs made more than 50% of the journal's budget. While most journals had already reduced the print-run and planned to reduce it further, nearly 70% of them did not plan to abandon the print version and switch to electronic publishing only. These data additionally confirm the prevailing focus on the print version as the 'truly legitimate' version of the journal and the lack of understanding of the benefits of electronic publishing.

Journal websites

Most journals in Serbia had technically poor websites (no article-level metadata, not OAI-PMH compliant, no independent website) and it was apparent that this segment of publishing and dissemination of research outputs was largely underestimated and even neglected. The content of Serbian journals was often scattered on multiple (duplicate) websites that were not properly maintained, and was sometimes also available through various journal repositories or publishing platforms (*doiSerbia*, *SCIndeks*, *De Gruyter*). Three-quarters of the analyzed journals could not

implement DOIs if they relied only on their websites (or the publishing institution's website) because they did not have landing pages for individual papers (only the PDFs of complete volumes or individual papers were uploaded). The survey data highlighted the role of (journal repositories) *doiSerbia* and *SCIndeks*, in mitigating this situation. Both platforms provided landing pages for articles and harvestable metadata (through OAI-PMH).

According to responses, website maintenance largely relied on volunteer work. In 65.25% of the analyzed journals website expenses did not exceed 20% of the journal budget.

Indexing and abstracting

At the time when the data were collected, 23 journals published in Serbia were indexed in SCI, SSCI and AHCI and 68 journals were indexed in Scopus (including discontinued journals). Before launching the re-application process in March 2014, DOAJ had indexed more than 100 journals from Serbia. In April 2017, only 73 journals were indexed in this database. According to the responses, 66.53% of the respondents had never applied for indexing in the Web of Science, had never applied for indexing in Scopus, 65.25% were not indexed in DOAJ, whereas 71.19% had never applied for indexing in any other database. The survey failed to investigate the reasons for the lack of interest for indexing in international databases. Relying on frequent complaints made by journal editors, the project team erroneously expected that a significant number of Serbian journals had applied for indexing but had been rejected. Accordingly, the survey was focused on identifying the reasons for rejection and not the reasons for not applying.

As the consultations and workshops within the project sought to explain the acceptance criteria in the most relevant databases, it is expected that an increasing number of Serbian journals will apply and qualify for indexing in the future.

Conclusions and recommendations

Based on the survey data and the information obtained during the process of aligning journal policies, it is possible to identify four major challenges that need to be addressed in order to ensure the sustainability of Serbian OA journals:

- journal websites and electronic publishing;
- policies in general, but specifically copyright and licensing;
- ensuring a continuous inflow of manuscripts, and
- funding, i.e. business models to guarantee the sustainability of journals.

Journal websites and electronic publishing

The survey data revealed that a significant number of Serbian OA journals were not fully aware of their OA status and the benefits of online publishing, including e-workflow. This is the most vividly illustrated by the:

- fact that many journals did not have independent websites or had websites of a poor quality;
- large disproportion between the costs of printing and website maintenance;
- conservative and inefficient editorial and publishing practices typical of print journals; and
- the lack of interest for indexing in international databases.

The main reason why many journal websites in Serbia did not meet the basic technical requirements lies in the fact that most publishers were not familiar with the principles of electronic publishing. The emphasis was still heavily laid on the print version. Unfortunately, this approach was fostered by the criteria for allocating subsidies for scholarly journals in Serbia by the ministry responsible for science, which did not recognize the costs of establishing and maintaining journal websites as eligible. As such, they were a limiting factor to the development of Serbian OA journals.

In order to facilitate the development of Serbian scholarly journals, it is necessary to adjust rules and regulations that apply to scholarly publishing. Namely, it is necessary to define the minimum standard technical requirements that journal websites have to meet in order to receive funding and to redefine the criteria for allocating subsidies for scholarly journals so as to accommodate the costs of electronic publishing.

The implementation of copyright policies and licenses

In the process of aligning journal policies with the template devised by the project team, it was observed that a significant number of editors/publishers who fully understood and adopted policies related to Open Access, ethical standards and peer review failed to understand the concepts related to copyright and licensing, despite detailed instructions. It is necessary to provide continued education about these issues, as they remain a major challenge for the future.

Ensuring a continuous inflow of manuscripts

As the national system for the evaluation of scientific outputs relies on the impact factor and citation counts, the majority of local scientists tend to publish their research in international journals with an impact factor. Submissions that reach local journals not indexed by the Web of Science or Scopus are often second-class. Due to the fear that the inflow of manuscripts may decrease, editors sometimes tolerate untidy submissions and even some forms of misconduct. In order to make an essential change, it is necessary to stop this practice and undertake long-term actions aimed at improving the journal's outlook. Journals should seek to attract new, international authors.

Funding

Most journals in Serbia rely on public funding and are not likely to introduce APCs primarily because they are afraid that introducing author fees would discourage local authors, whose paying potential is low, to publish with them. Cutting public subsidies would seriously threaten their sustainability. This problem could partly be solved by redefining the criteria for allocating subsidies for scholarly journals towards fostering electronic publishing and good OA practices. Publicly funded journals should be required to be open effectively, which namely means that:

- their electronic versions must be made available online without delay, after proper peer review;
- they should meet certain technical requirements (at least landing pages for articles, preferably Dublin Core metadata in XML and OAI-PMH); and
- their OA and copyright policies must be explicitly defined so as to facilitate the exchange of scientific information.

This would ensure a more cost-effective utilization of public funds and a greater visibility of local journals.

Project results

The project *Revisiting open access journal policies and practices in Serbia* addressed the problem of missing or incomplete journal policies rather successfully by devising easily applicable and adjustable templates for journal policies and the accompanying documents (author statements and license agreements). The policy template ([Appendix 2: Editorial Policy](#)), available in Serbian and English, covers:

- the responsibilities of the main participants in the publishing process (editors, reviewers and authors);
- a description of the peer review procedure;
- procedures for dealing with plagiarism and other forms of misconduct;
- a retraction policy;
- an OA statement; and
- copyright and licensing.

About 100 journals from Serbia have defined their policies so far and the process is expected to continue. The template fully covers the policy-related requirements set by DOAJ and Scopus, which is confirmed by the fact that all *doiSerbia* journals whose policies rely on it have successfully passed the (re)evaluation procedure in DOAJ, and one journal has been accepted for indexing in Scopus.

The problem of technically poor websites was mitigated by upgrading the *doiSerbia* platform. Two pages were added to journal profiles: one for the editorial policy and another for author guidelines. A list of editorial board members was already a part of the journal profile, while *Aims and Scope* were given at the beginning of the editorial policy. The purpose of the upgrade was to enable those journals which did not have landing pages for articles, XML metadata and those that were not OAI-PMH compliant to use the *doiSerbia* journal profiles as their websites.

A knowledge-base website was created within the web domain of the National Library of Serbia (<http://repositorijum.nb.rs/kutakzaurednike.aspx?upustvo=13>), where all materials created during the project were uploaded. Along with guidelines for journal publishers written specifically for this website, it offers the templates for the editorial policy and accompanying documents, presentations used at the four workshops held during the project and the video recordings of the workshops.

1. Introduction

It is estimated that there are about 400 journals in Serbia that are free to read online. Although they can be roughly classified as Open Access (OA) journals, it is apparent that the awareness of their OA status is insufficiently developed, as well as that the most of them are limited to a local context and fail to make efficient use of modern information and communication technologies, freely available knowledge bases and open-source software. The present study seeks to identify both the strong and the weak aspects of OA journal publishing in Serbia based on a survey conducted among more than 200 journals. In order to understand the specific features of OA publishing in Serbia, before opening the discussion, it is necessary to outline the context in which these journals have developed.

1.1. Background

The context in which the concept of Open Access³ has been developing in Western Europe and the USA is considerably different from that in Serbia, the Balkans and, presumably, the most of the former Eastern Bloc. In the West, the OA movement has been a reaction to high subscription rates, paywalls and publishers' monopolies. It has implied a shift from subscriptions to article processing charges (APCs) paid by authors of their institutions (Working Group on Expanding Access to Published Research Findings 2012; Suber 2012, 134–47), while in Serbia the free availability of the electronic versions of journals has never been a matter of dispute. In order to discuss the development of OA in Serbia it is crucial to understand that it has nothing to do with the shift from subscriptions to APCs. It is rather a shift from (subscription-based or free) print scholarly journals to scholarly journals freely available online in an electronic format. In Serbia, they have been free to read since they first appeared and scholarly journals that require a subscription to read the electronic version are rare. On the other hand, there are not many online-only journals. Most journals have a print version (distributed under subscription or free of charge) and a free-to-read electronic version. Therefore, the transition to OA in Serbia is essentially a transition to electronic publishing and the major challenges and obstacles in this process are not 'ideological' but rather technological.

Serbian scholarly journals are mostly published by universities, research institutes, cultural institutions, scholarly and professional associations and they are free for authors and readers. Their publishing is financially supported by the publishing institutions, as well as through membership fees, occasional donations and public funds allocated based on annual calls for funding. Many of them sell

³ According to the Budapest Open Access Initiative (BOAI), Open Access means "free availability [peer-reviewed journal literature] on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself" ('Read the Budapest Open Access Initiative' 2002).

subscriptions to the print version, while the electronic version is freely available. As it will be seen below, under [7.4.2. Article processing charges](#), most of them are not eager to introduce any charges for authors. In other words, the vast majority of Serbian Open Access journals fit in the concept of ‘Platinum Open Access’⁴ APC-free Open Access or ‘subsidized Open Access’ (Solomon 2008, 19).

The beginning of OA journal publishing in Serbia dates back to the late 1990s, when the publishers of scholarly journals began to upload journal volumes on their websites. It was at that time that a shift to desktop publishing was made, the files that contained the final layout of journal issues were available, and it was natural to upload them to institutional websites. This was done in a random manner and the practice was not well received by all. The resistance against the online availability of journals was not due to a potential loss of profit, since Serbian scholarly journals were non-profit oriented. The opposition seems to have been irrational – rooted in the inability to accept a new medium and the refusal to recognize the legitimacy of electronic publications.⁵ Two decades later, the same refusal is present when the issue of abandoning printing is raised (see [10.3. Desktop publishing and printing](#)).

The disputed legitimacy of electronic sources may be one of the reasons why subscription-based efforts for the distribution of scholarly journals have never yielded results in Serbia. It is even right to say that the establishment of subscription-based scholarly online journals has never been seriously considered as an option. It was estimated that few readers would decide to buy a subscription to the electronic version. Furthermore, scholarly journals in Serbia have always been published by non-for-profit organizations subsidized by public funds, and not by publishing companies. Back in the late 1990s and early 2000s, these small publishers could not afford the simplest websites, let alone the infrastructure necessary for selling electronic subscriptions. Open Access was their natural fate.

Random uploading was followed by the first attempts to collect digital copies in an organized manner and establish a journal repository. It is interesting that the earliest efforts in this direction were focused on social sciences and humanities. In 2000–2001, the portal *Komunikacija – Communication* (<http://www.komunikacija.org.rs>) was launched by the eponymous non-governmental organization founded by a group of professors of the Faculty of Philosophy in Belgrade and researchers affiliated with several research institutes. The project was supported by the Open Society Foundation (“Electronic Editions of Leading Yugoslav Journals in Social Sciences and Humanities,” n.d.). *Communication* is an online database, a full-text repository, which rests on an open-source platform and contains digital copies of journals in humanities and social sciences. Though it is still available on the internet, it is not properly maintained, nor has it been upgraded to meet the current standards. *Communication* offers tables of contents with links to the PDFs of individual papers. Some papers are also supplied with abstracts and the database is searchable.⁶ The design and fate of this repository highlight several issues that need to be considered when establishing journal websites, online publishing platforms or journal repositories. In order to be sustainable, any platform must be interoperable and upgradable, and it must be maintained. It does not suffice to upload/deposit content and make it retrievable in a closed database that is not optimized for search engines and aggregators. A fully operational platform should also enable the dissemination of its content by

⁴ For the dispute concerning the term, see Haschak 2007; Harnad 2007; Beall 2012.

⁵ The same opposition was globally present at that time, cf. Rowland 1997; Richard D. Llewellyn 2002.

⁶ It is possible to search by authors, keywords and UDC.

offering structured metadata to global harvesters (Suber 2012). The publishers of Serbian scholarly journals are still insufficiently aware of these requirements. Journal websites usually fail to meet them; they are developed without a clear plan for the future, due to which it is impossible to build upon previous work. Nevertheless, despite its technical and conceptual drawbacks, *Communication* reveals an early readiness to make current publications freely available.

SocioFakt Open Access (2004) was the first online journal repository that was developed with the relevant technical standards in mind. This pilot project was developed by upgrading *SocioFakt Online*, the national citation index for social sciences (Šipka 2006). *SocioFakt Open Access* also offered full text, metadata compliant with the Dublin Core standard (“About SocioFakt” 2006) and was equipped with the OAI-PMH protocol, due to which it could operate as a data provider in the global OAI-PMH framework⁷ – i.e. it was harvestable by aggregators. Along with fully searchable article-level metadata, it was also possible to search the full text of deposited papers. *SCIndeks* (developed in 2006–2007) followed the same concept and conformed to the same standards, but it included journals from all areas of science (Šipka 2006). As a combination of a citation index, a full-text repository and a publishing platform (Šipka and Kosanović 2008; Stanić and Sotirović 2009), it is comparable to SciELO.⁸ The decision to stop the public funding of the project (CEON 2015) led to a major setback in the development of OA journals in Serbia. Before the funding was cut, *SCIndeks* had indexed 475 journals and nearly 40% of papers had been available as full text (“Časopisi” 2015). After the change, some journals ceased to be available online and the visibility of those with poor websites (see [10.4. Journal websites](#)) was dramatically diminished.

The crucial shift towards the implementation of persistent identifiers for journal papers was made with *doiSerbia* (2005) (“*doiSerbia*” 2011; Kosanović 2012). *DoiSerbia* is basically a journal repository that enables DOI assignment by providing landing pages for articles (see [3.4. DOI](#)). It also operates as an OAI-PMH data provider. As opposed to *SCIndeks*, it is not searchable, and this is its major drawback.

Journal websites are the weakest point in the Open Access infrastructure in Serbia. Although Open Journal Systems is a robust open-source publishing platform, there are approximately 50 journals in Serbia that use OJS. The majority of them are published by the University of Niš and the University of Novi Sad (Faculty of Philosophy), where multiple journals are hosted on a federated platform and the publishing system is operated and maintained by the publishing institution.⁹ A significant part of other websites do not meet even the most basic technical requirements for electronic journals. The lack of funds does not seem to be a plausible explanation. The problem is rather associated with the above-mentioned disputed legitimacy of electronic publications. Most journal publishers in Serbia do not identify their journals as electronic journals. The consequences of this inability to understand the nature of the new medium and the requirements and standards inherent to it have been wide-ranging. Due to this, we still have too many archives of PDF s instead of fully operational electronic journals (see [10.4. Journal websites](#)).

It is noteworthy that journal repositories, and not online publishing platforms, have played the key role in the development of Serbian OA journals. In a fragmented publishing landscape, marked by the lack of

⁷ On OAI PMH: Breeding 2002.

⁸ On SciELO: Packer 2001; Marcondes and Sayao 2003.

⁹ University of Niš: <http://facta.junis.ni.ac.rs/> (15 journals); Faculty of philosophy in Novi Sad: <http://epub.ff.uns.ac.rs/> (11 journals)

coordination¹⁰ and poor awareness of the benefits of online publishing, *doiSerbia* and *SCIIndeks* have served as optimized (and for some journals the only) OA channels.

Although their commitment to the free availability of journal content is firm and indisputable, most Serbian scholarly publishers are not fully aware of their Open Access status, they do not declare themselves as OA publishers and see no need or feel no responsibility towards adopting the relevant standards and innovations in the area. In other words, Serbian OA publishers are marked by a strong OA feeling and poor OA awareness. When asked about their primary concerns, they usually mention a better ranking in the national evaluation system or the inclusion in the Web of Science and Scopus. Along with better authors and papers, such a shift would secure subsidies from public funds and ensure their sustainability. Therefore, those who seek international recognition are usually ready to adopt new standards if this is required by the Web of Science and Scopus. It is only when they realize that Open Access could serve as a vehicle on their way towards better journal ranking that they agree to improve their practices. The nature of this motivation (better status rather than permanent improvement) is the source of some inconsistent practices that will be discussed later in the text.

Undefined journal policies, including the Open Access policy, are another major problem. In the world of print journals in Serbia, such documents do not exist. Journals usually have guidelines for authors, which may contain some ethical considerations or information regarding peer-review. Publishing institutions sometimes have rulebooks that govern their publishing activities and they may contain elements of journal policies, responsibilities or copyright issues. The latter documents are not always publicly available. In a limited local context, such documents have not been considered necessary. The only journal-related guidelines at the national level are provided by the Act on Editing Scholarly journals (“Akt o uređivanju naučnih časopisa” 2009). Although it implicitly gives a hint on some elements of journal policies, the document primarily deals with practices. It also briefly mentions electronic journals (see [10.4. Journal websites](#)) but it does not set any standards that apply to them.

1.2. Project *Revisiting open access journal policies and practices in Serbia*

The reapplication process in Directory of Open Access Journals (DOAJ) (‘Update on Reapplications and New Applications’ 2016) revealed the full scope of the problem of undefined policies and insufficient transparency. Before the reapplication process, DOAJ indexed more than 100 journals from Serbia. Forty-four *doiSerbia* journals had originally been submitted to DOAJ by the National Library of Serbia and their reapplications were managed by the National Library. It turned out that most journals did not meet the new criteria defined by DOAJ: they did not have an OA policy, copyright issues and user rights were not defined, and the most of them did not use Creative Commons licenses. The situation was slightly better regarding publication ethics, as those journals that had applied for indexing in Scopus had to adopt and make public a policy on publication ethics and they were familiar with the concept and purpose of journal policies. As it was necessary to react promptly, a whole series of *ad hoc* solutions were applied to deal with the reapplications, but eventually these circumstances led to the launching of the ten-month project *Revisiting open access*

¹⁰ For example, many faculties within the University of Belgrade publish multiple journals but journals published by the same faculty, and even the same department, only exceptionally share the same online platform.

journal policies and practices in Serbia (“Revisiting Open Access Journal Policies and Practices in Serbia” 2016), supported by EIFL. The purpose of the project has been to solve the policy problems by offering a policy template, as well as to identify other major problems, primarily those associated with editorial and publication practices.

An extensive survey was conducted as part of the project. It covered a wide range of issues, from OA policies, ethical considerations and copyright issues, to the practices associated with various stages of the editorial and publication processes. Special attention was paid to journal websites. The preliminary results of the survey were instrumental in designing the workshops conducted towards the end of the project. The data to be presented in the following sections reveal distinct clusters of problems. Some of them have been mitigated already during the project (policy-related issues). However, major problems (transition to electronic publishing, improving the quality of journal websites) cannot be solved merely by educating journal editors. In order to foster the development of OA journals and electronic publishing, it is necessary that funding authorities define standard requirements that would apply to all scholarly journals in Serbia that rely on public funding (see [12. *Conclusions and recommendations*](#)).

2. Methodology

The data on the policies and practices of Serbian Open Access journals were collected using a survey questionnaire. It contained 111 questions divided into 13 sections (see [Appendix 1: Questionnaire](#)). The survey was created using Survey Monkey, a cloud-based survey tool. The data were collected between 30 May and 11 July 2016. During that period, two Skype sessions were held in order to provide additional guidance to the respondents and explain the questions identified as unclear or complicated.¹¹ After the sessions, the respondents who wished to correct or amend something were allowed to submit another response.¹² The survey was not anonymous but journal titles and contact details collected through the survey were anonymized to protect the identity of the participants, and to create an environment where the respondents would share information more freely. The fact that the survey was not anonymous was of great help during data processing, as it was possible to identify and correct a great deal of unreliable responses. Had it been anonymous, the collected data would have been practically useless. The survey data presented in the study are sometimes accompanied with observations collected during consultations and informal conversations with editors and editorial staff members, Skype sessions and workshops. There were many opportunities to discuss the topics covered in the questionnaire and the responses. We found this information useful in directing project activities and, therefore, we will include it in this study, though it may not be fully objective.

After the survey had been closed, data were exported to MS Excel. There were 282 responses but not all of them were valid. Incomplete¹³ and duplicate responses were removed, as well as the responses received from 12 journals that failed to meet the minimum Open Access standards (see [7. Open Access policy and practice](#)). The remaining 236 responses were processed and analyzed. Before data processing, the responses were checked and, if necessary, corrected. The checks were performed by comparing the responses and the information available on journal websites, as well as by contacting the respondents and asking them to provide additional information.

2.1. Respondents

According to the list of Serbian journals published electronically¹⁴ available at KoBSON's website, there are 382 journals that have an electronic version. The list includes journals that have ceased publishing, but does not include those available in full text only through *SCIndeks* and *doiSerbia*. It

¹¹ The unclear or complicated questions were identified both by the respondents and by the project team, based on incorrect or meaningless responses.

¹² During data processing their previous responses were not taken into consideration.

¹³ Mostly due to interrupted sessions.

¹⁴ http://kobson.nb.rs/nauka_u_srbiji/elektronski_casopisi_iz_srbije.95.html?service=26&offset=0

may be estimated that there are about 400 Serbian journals that have an electronic version and the vast majority of them are freely available. All of them were invited to submit their responses. However, the primary target group were the 55 journals¹⁵ included in *doiSerbia*.

The invitation was sent to approximately 500 journals the digital copies of which were deposited in the Digital Repository of the National Library of Serbia.¹⁶ The interest was greater than expected but it did not come from the target group. With few exceptions, the journals from the primary target group turned out to be the least interested in the survey. It was only after several reminders that 49 of them responded. On the other hand, the journals which were not so well established at the national and international levels, but sought to make improvements, and particularly those that had got a new editor immediately before the project was launched were the most interested, not only in the survey but also in other project activities.

If we strictly applied the criteria of Open Access publishing and particularly those applied by DOAJ (DOAJ, n.d.), many of our respondents would not be considered Open Access journals. As it will be shown, the majority of them lacked an explicit Open Access policy at the time when the survey was conducted. A significant number of journals made their content available online with delays, not because of embargo periods but due to technical problems. Several journals that did not have a website but planned to make their content freely available online asked to be included in the survey. One journal recently switched to a subscription-based model (all of its content published until then remains freely available) and another offers free access only to selected content. Keeping in mind the educational character of the project, all of them were allowed to fill in the questionnaire, but not all of their responses were included in the analysis. The purpose of the survey was to help the project team identify major problems that need to be resolved. Accordingly, the idea was to cover a full range of experiences and collect as much information as possible.

As data processing took considerable time, it was possible to track the progress made by those respondents who had requested to be included in the survey though their content had not been (freely) available online. If they had made progress until the end of the project, their responses were included in the body of analyzed data. Following the survey, one of the journals was approved for indexing by *SCIndeks*.¹⁷ Two journals established websites and one of them was in the process of preparing content to be uploaded. The content of one journal was available as full text through Academia.edu. Another journal had an old website where earlier volumes were available as full text and was – at the time of the study – in the process of establishing a new website. Their responses were included as part of the data collection and analyzed since these journals were making continuous efforts to enable free access to their content. The journal that converted to a subscription-based model was also included, as its previous OA practices were relevant for the study.¹⁸

Some responses were not included in the body of analyzed data as no progress towards OA was made in the months following the survey. For example, three journals failed to establish websites or

¹⁵ The total number of journals included in *doiSerbia* is 66. Some of them are discontinued, some have arranged for DOI assignment with other publishers and one has switched to a subscription-based model.

¹⁶ In reality, this is not a fully structured public repository but merely a record of printed and electronic issues delivered to the National Library of Serbia. Not all of the invited journals were published regularly. Some of them were print-only journals.

¹⁷ Before that, a few volumes were available on the publisher's website and new volumes were uploaded only after an embargo period.

¹⁸ Also, it is possible that it will switch back to OA.

upload journal content to the websites of the publishing institutions until the end of the project. Though they had said they would like to make their content available online, it was impossible to see any sign of progress in this direction. Four active journals uploaded only a few volumes to the websites of their publishers. As the most recent volumes had been uploaded five, ten, or even more years ago and it was apparent that the websites were not maintained, their responses were not taken into consideration. The responses from another four journals were excluded from the data collection: Journal A was a subscription-based print journal offering only tables of contents on the website; Journal B provided free access only to selected content, while the remaining papers were available through subscription; Journal C did not have a website but used Academia.edu, where only tables of contents were available;¹⁹ and Journal D offered only abstracts (as PDFs) on the publisher's website. Their responses were not taken into consideration as no progress towards OA had been made in the months following the survey. One of the journals used to be available through *SCIndeks* at the time when the responses were collected, but by the time the survey was closed, it was impossible to find it there or anywhere else. As we were unable to check the responses, we did not take them into consideration.

The analyzed sample is highly relevant in the local context. Out of 236 respondents whose answers were taken into consideration, 49 were *doiSerbia* journals and 115 were indexed in *SCIndeks* (88 available in full text through *SCIndeks*) at the time when the data were collected.²⁰ In other words, 89.09% of the active *doiSerbia* journals and 54.8% of the *SCIndeks* journals²¹ were covered by the survey. In order to be included in these repositories the journals had to meet certain quality criteria. Out of 23 journals indexed in the Science Citation Index, Social Sciences Citation Index and Arts and Humanities Citation Index, 21 (91.30%) responded. Forty-two respondents were indexed in Scopus, accounting for 61.76% of all journals from Serbia indexed in that database and 73.68% of the active ones. Sixty-eight respondents were indexed in DOAJ; they accounted for 82.72% of all Serbian journals indexed in this database at that time. Journals in social sciences and humanities slightly prevailed (52.54%, 124 journals) in the sample. However, it should be borne in mind that the division was rather rough and the group of journals identified as belonging to social sciences included a number of multidisciplinary journals.

2.2. Journal publishers

The greatest part of the journals covered by the survey were published by public universities and scholarly and professional associations, including some of the oldest scholarly societies in Serbia. Public universities, including their faculties and departments, as well as research institutes under their auspices, were the sole publishers of 38.98% of the analyzed journals. They also appeared as co-publishers of 10 journals (4.24%). In other words, 102 (43.22%) journals covered by the survey were published or co-published by public universities. This number includes the eleven journals (4.66%) published or co-published by research institutes under the auspices of public universities. Various associations were the sole publishers of 61 (25.85%) and co-publishers of 10 journals. In other words, 71 journals (30.08%) covered by the survey were published or co-published by scholarly societies,

¹⁹ Some years ago, it was announced that the publisher would establish a website but nothing has happened so far.

²⁰ After the survey had been closed, new journals were included in *SCIndeks*, while some were discontinued. Eighteen journals were indexed both in *doiSerbia* and *SCIndeks*; 13 were present in full text in both repositories.

²¹ At the time when the data were collected.

professional associations and non-governmental organizations. Other publishers include research institutes (including the institutes founded by the Serbian Academy of Sciences and arts and not including those that are part of universities), private universities and cultural institutions, as well as the Serbian Academy of Sciences and Arts and Matica srpska, as National scholarly and cultural institutions with a special status.

Unfortunately, very few journals published by the Serbian Academy of Sciences and Arts (SASA) and Matica srpska were covered by the survey. Except for the scanned volumes randomly uploaded to the website of the Serbian Academy of Sciences and Arts, most journals published by this institution were not available online.²² Two journals co-published by the SASA and research institutes responded to the survey. Out of 12 journals published by Matica srpska and uploaded on the website of this institution,²³ three responded to the survey.

The ‘other’ category included four journals published by two ministries, two by medical organizations, one by the Serbian Orthodox Church, one by a police academy, one by a research institute under the auspices of the Ministry of Defence, as well as two journals co-published by medical organizations and professional associations.

A detailed structure of the journals publishers involved in the survey is shown in Figure 1 and Table 1.

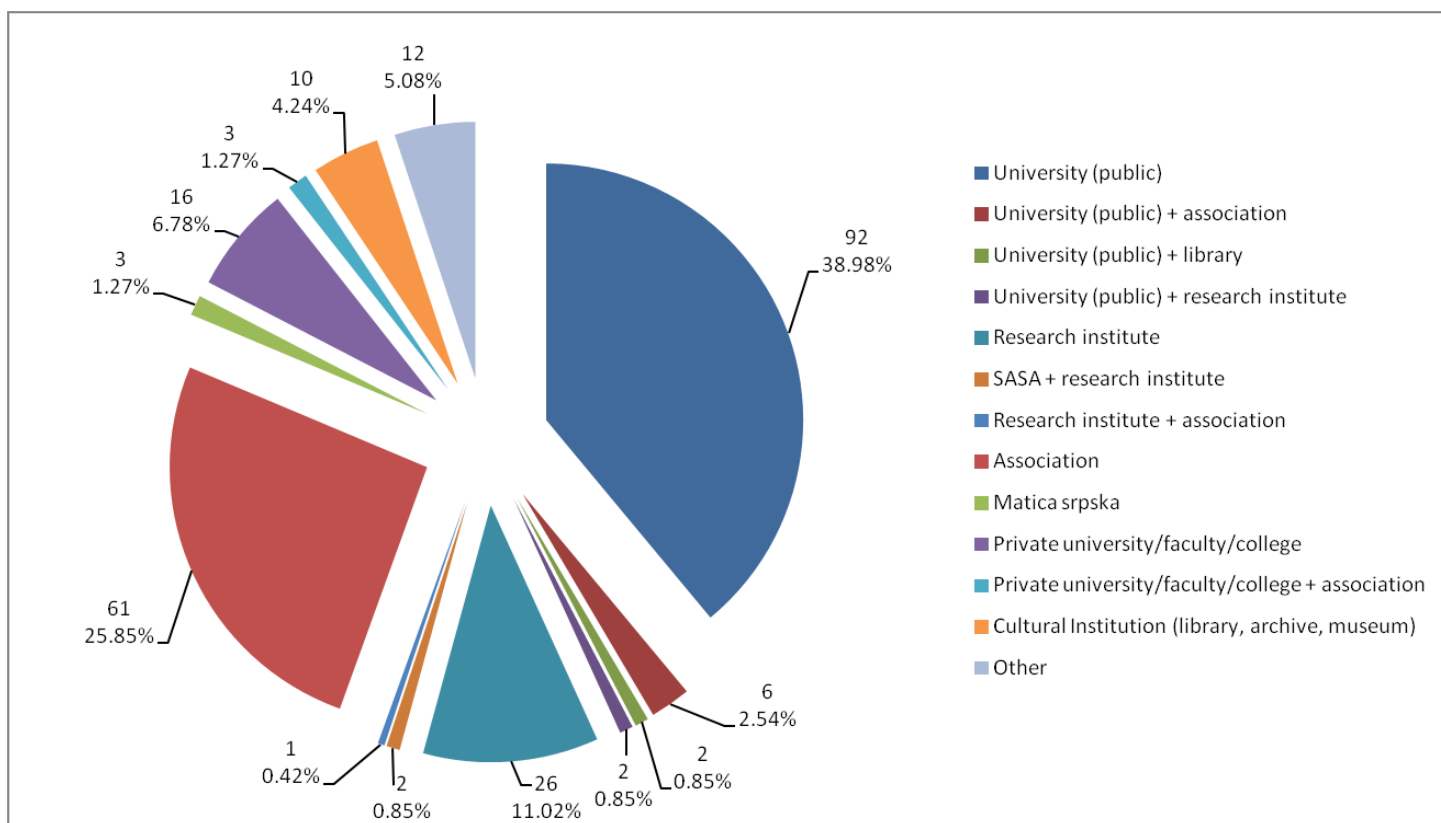


Figure 1 The structure of journal publishers

²² Some of them were not published regularly. One journal published by the SASA had been available through *doiSerbia* but it was discontinued.

²³ Two journals published by Matica srpska were part of *doiSerbia*.

Table 1 Journal publishers

| PUBLISHER | No. of journals | % in the sample |
|---|-----------------|-----------------|
| University of Belgrade | 26 | 11.02% |
| University of Novi Sad | 28 | 11.86% |
| University of Kragujevac | 5 | 2.12% |
| University of Niš | 20 | 8.47% |
| University of Novi Pazar | 1 | 0.42% |
| University of Priština (displaced) | 2 | 0.85% |
| Research institute | 19 | 8.05% |
| Research institute (University of Belgrade) | 9 | 3.81% |
| Research institute (University of Novi Sad) | 1 | 0.42% |
| Research institute (SASA) | 7 | 2.97% |
| Matica srpska | 3 | 1.27% |
| Private university / faculty / college | 16 | 6.78% |
| Association | 61 | 25.85% |
| Cultural Institution | 2 | 0.85% |
| Library | 1 | 0.42% |
| Museum | 6 | 2.54% |
| Archive | 1 | 0.42% |
| Medical organization | 3 | 1.27% |
| Ministry | 4 | 1.69% |
| Military institute | 1 | 0.42% |
| Church | 1 | 0.42% |
| University of Belgrade + research institute | 1 | 0.42% |
| University of Belgrade + association | 4 | 1.69% |
| University of Belgrade + library | 1 | 0.42% |
| University of Novi Sad + library | 1 | 0.42% |
| University of Kragujevac + research institute | 1 | 0.42% |
| University of Kragujevac + association | 1 | 0.42% |
| SASA + research institute (SASA) | 1 | 0.42% |
| SASA + research institute | 1 | 0.42% |
| Research institute (University of Belgrade) + association | 1 | 0.42% |
| Research institute (SASA) + association | 1 | 0.42% |
| Private university/faculty/college + association | 3 | 1.27% |
| Medical organization + association | 2 | 0.85% |
| Police academy | 1 | 0.42% |
| Total | 236 | 100.00% |

3. General journal details

3.1. Publication frequency and the number of papers a year

The vast majority of journals covered by the survey published 1–4 issues a year (95.76% of the respondents, 226 journals).²⁴ As expected, journals dealing with social sciences and humanities prevailed among periodicals published annually (77.27% of the journals that published one issue a year) and two times a year (54.88%). Physical science and engineering journals prevailed among the journals published four times a year (59.42%) and those with 6–12 issues a year (100%).

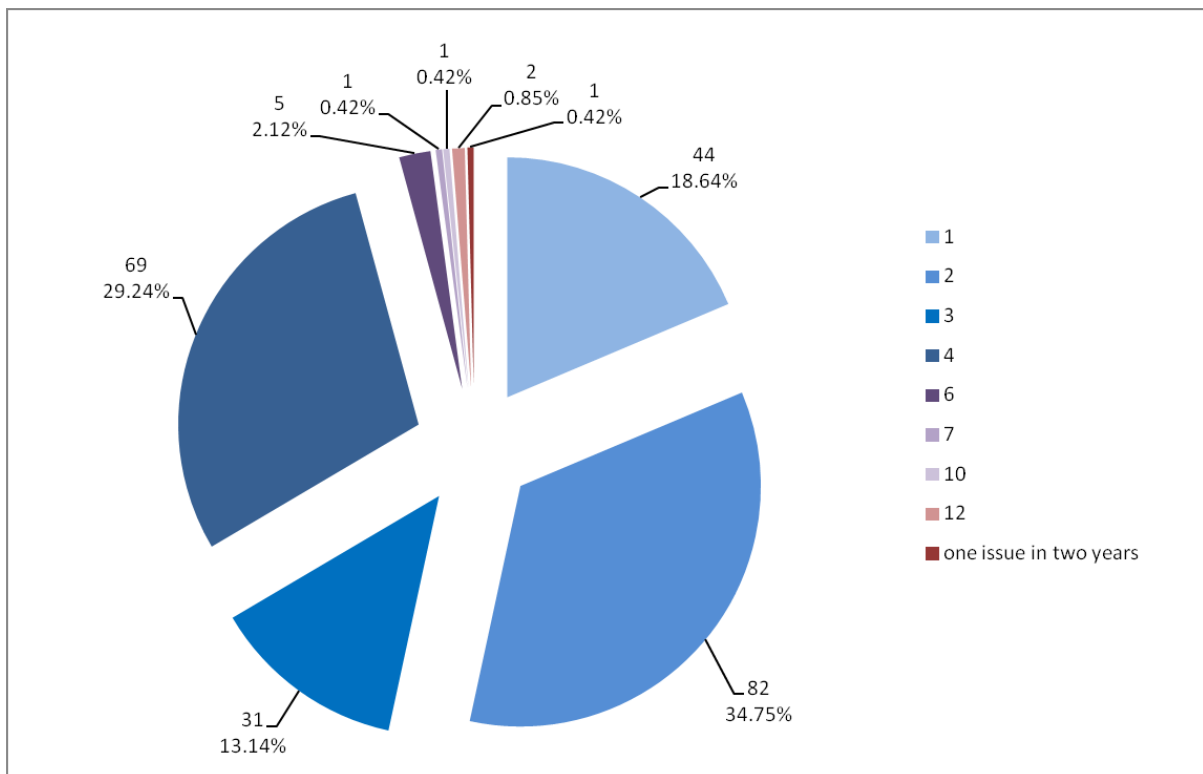


Figure 2 The number of issues a year

²⁴ Double issues were counted as one issue. Special issues were taken into consideration only if they were regularly published. The question was open-ended and the respondents could enter numbers and explanations. The categories shown in Figure 3 reflect the most distinct groups of responses.

Table 2 The number of issues a year by groups of disciplines

| NO. OF ISSUES A YEAR | NO. OF JOURNALS | | | % in the sample |
|----------------------|-----------------------------------|--------------------------------|-------|-----------------|
| | Physical sciences and engineering | Social sciences and humanities | Total | |
| 1 | 10 | 34 | 44 | 18.64% |
| 2 | 37 | 45 | 82 | 34.75% |
| 3 | 15 | 16 | 31 | 13.14% |
| 4 | 41 | 28 | 69 | 29.24% |
| 6 | 5 | 0 | 5 | 2.12% |
| 7 | 1 | 0 | 1 | 0.42% |
| 10 | 1 | 0 | 1 | 0.42% |
| 12 | 2 | 0 | 2 | 0.85% |
| 1 in two years | 0 | 1 | 1 | 0.42% |

Nearly 60% of the respondents (59.32%, 140 journals) published between 11 and 30 research papers (citable articles) a year.²⁵ Journals in Serbia less commonly published more than 40 research papers a year. Physical science and engineering journals and social sciences and humanities journals were rather evenly represented in the 1–10, 21–30 and 31–40 groups. Journals in physical science and engineering prevailed in the 41–50 (66.67%), 51–100 (60%) and the 201–400 (100%) categories. On the other hand, journals in social sciences and humanities prevailed in the 11–20 (63.85%) group.

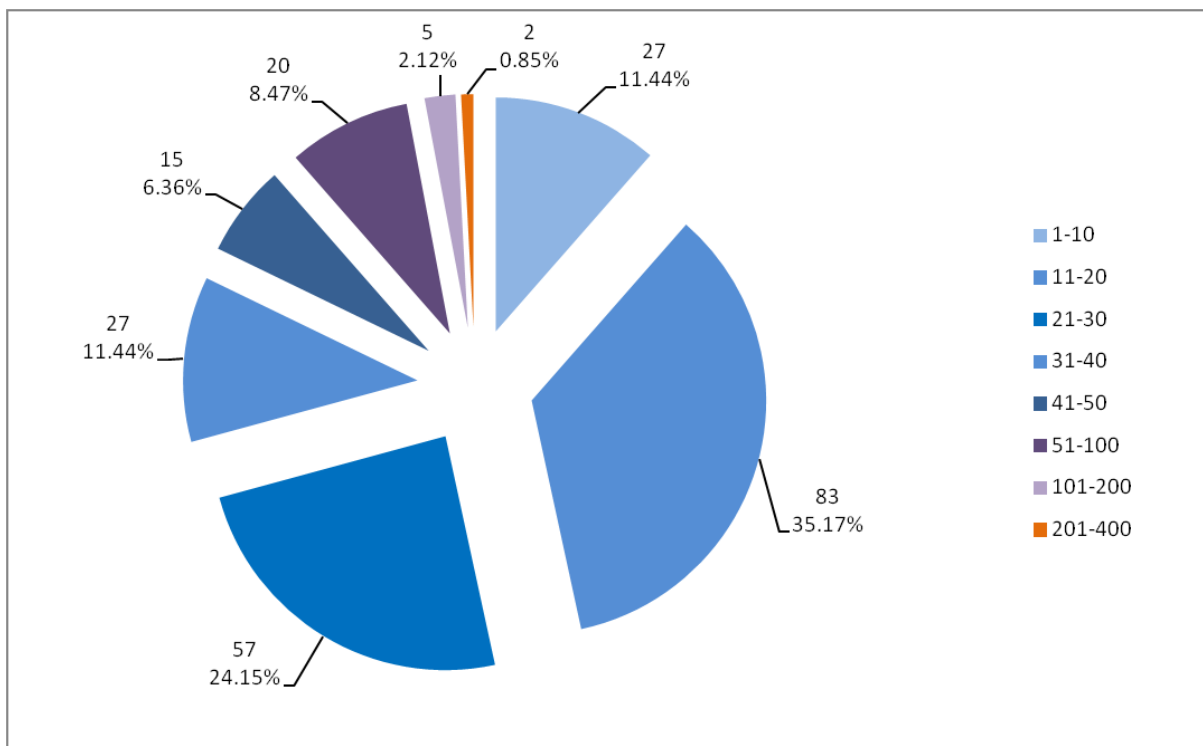


Figure 3 The average number of research papers a year

²⁵ Instead of providing the average number of articles a year, some respondents provided the average number of papers per issue. The responses were checked and corrected.

Table 3 The average number of research papers a year by groups of disciplines

| AVERAGE NO. OF RESEARCH PAPERS A YEAR | NO. OF JOURNALS | | | % in the sample |
|---------------------------------------|-----------------------------------|--------------------------------|-------|-----------------|
| | Physical sciences and engineering | Social sciences and humanities | Total | |
| 1-10 | 13 | 14 | 27 | 11.44% |
| 11-20 | 30 | 53 | 83 | 35.17% |
| 21-30 | 28 | 29 | 57 | 24.15% |
| 31-40 | 14 | 13 | 27 | 11.44% |
| 41-50 | 10 | 5 | 15 | 6.36% |
| 51-100 | 12 | 8 | 20 | 8.47% |
| 101-200 | 3 | 2 | 5 | 2.12% |
| 201-400 | 2 | 0 | 2 | 0.85% |

The average number of papers per issue was calculated from data provided by the respondents. Nearly half of the journals covered by the survey (47.88%, 113 journals) published 6–10 citable articles per issue. The vast majority (92.37%, 218 journals) of the journals covered by the survey published up to 20 articles per issue.

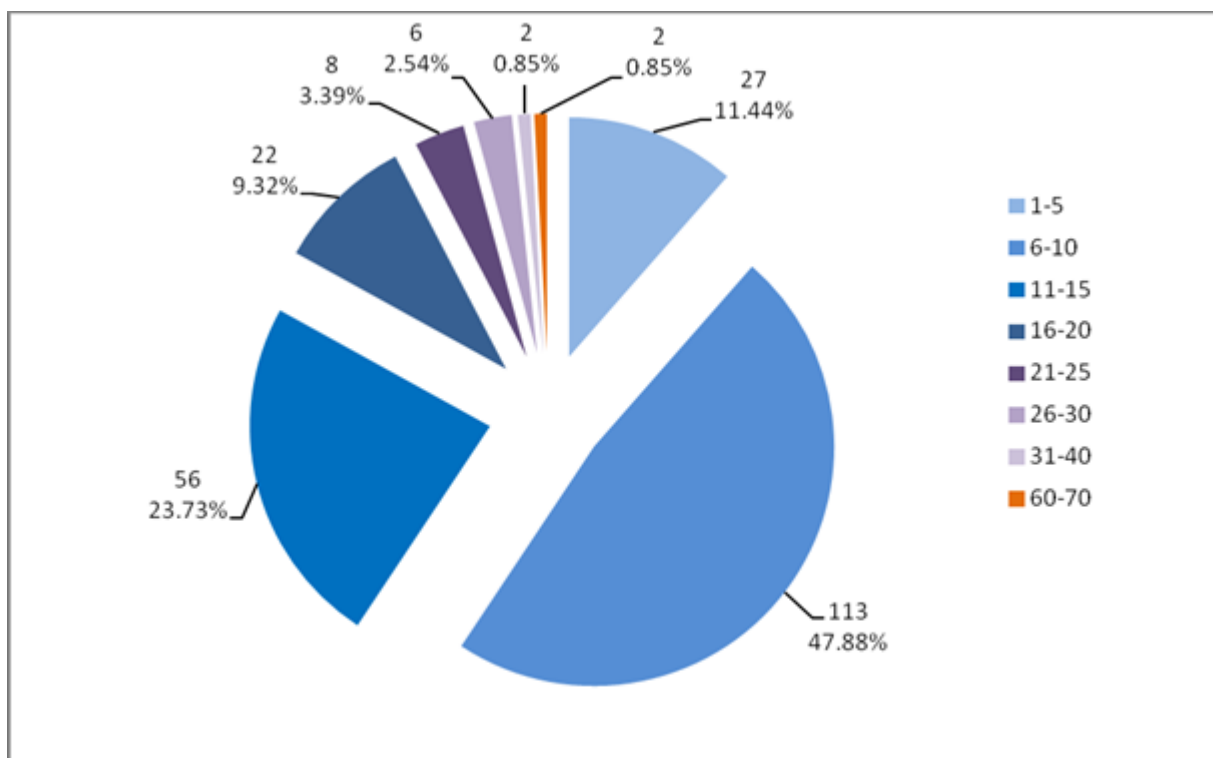


Figure 4 The average number of research papers per issue

Table 4 The average number of research papers per issue by groups of disciplines

| AVERAGE NO. RESEARCH PAPERS PER ISSUE | NO. OF JOURNALS | | | % in the sample |
|---------------------------------------|-----------------------------------|--------------------------------|-------|-----------------|
| | Physical sciences and engineering | Social sciences and humanities | Total | |
| 1-5 | 14 | 13 | 27 | 11.44% |
| 6-10 | 51 | 62 | 113 | 47.88% |
| 11-15 | 31 | 25 | 56 | 23.73% |
| 16-20 | 10 | 12 | 22 | 9.32% |
| 21-25 | 4 | 4 | 8 | 3.39% |
| 26-30 | 0 | 6 | 6 | 2.54% |
| 31-40 | 1 | 1 | 2 | 0.85% |
| 60-70 | 1 | 1 | 2 | 0.85% |

Most respondents (72.88%, 172 journals) said that the number of papers to be published in an issue was not limited and it depended on the number of submissions and the outcome of the peer review process. Sixty-four respondents (27.12%) claimed that the number of papers per issue was limited. Journals from this group either published the same number of papers in every issue or limited the maximum number of papers to be published in each issue. In the former case, delays in publishing occurred if the inflow of submissions was poor because publishers did not want to publish content online before compiling (and printing) a whole issue. Due to this, some publishers actually reduced the number of issues per year and marked them as double issues. These practices are typical of the so-called 'print mindset'.

3.2. Content types

Almost one-half of the respondents (49.15%, 116 journals) published conference papers, either as considerably improved peer reviewed papers that showcased research originally presented at conferences, or selected conference papers (peer reviewed or not peer reviewed), or special issues that could serve as conference proceedings. Their peer review practices relating to conference papers will be discussed under [9.3. Peer review](#).

Most journals (65.25%, 154 journals) did not publish only research papers but also book reviews, news, reports, comments, etc. These types of content were usually not assigned DOIs in the journals covered by the survey.

3.3. Languages

Over the past 10–15 years, most journals in Serbia have introduced an abstract or summary in English. This is in line with the requirements set out in the Act on Editing Scholarly Journals ('Akt o uređivanju naučnih časopisa' 2009)²⁶ and the Web of Science and Scopus indexing requirements

²⁶ According to the Act, research papers must have abstracts in Serbian and English. Only in exceptional cases may the English-language abstract be replaced with an abstract in another foreign language relevant for the area of study. It is noteworthy that most Serbian journals that publish content only in English do not provide abstracts in Serbian.

(Testa 2016; ‘Scopus Journal FAQs : Helping to Improve the Submission & Success Process for Editors & Publishers’ 2014). At the same time, a significant number of journals have switched to publishing full-text papers in English, which is reflected in the responses in the survey: 44.92% of the respondents (106 journals) answered that they published papers only in the English language. Less than 10% of the analyzed journals published full-text papers only in Serbian.

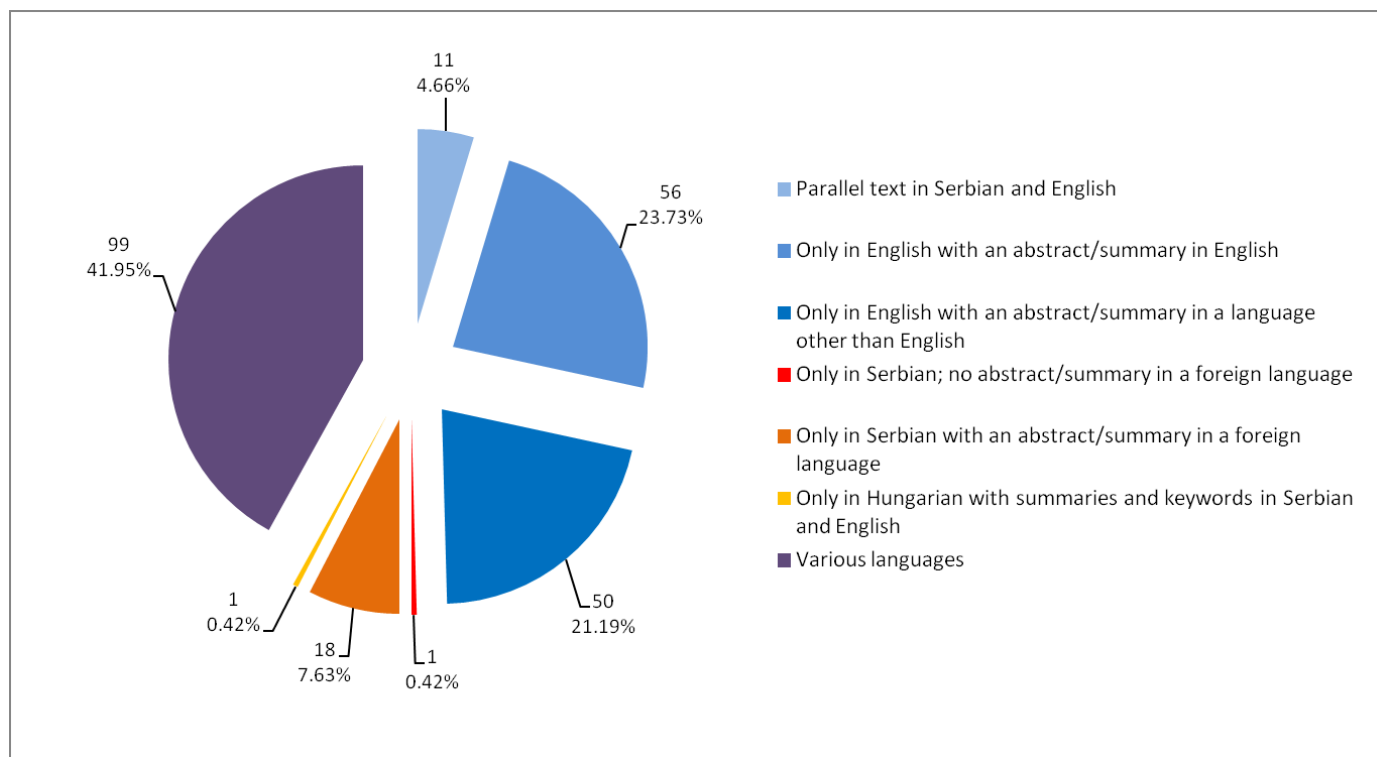


Figure 5 Languages of research papers

Table 5 Languages of research papers by groups of disciplines

| LANGUAGES OF RESEARCH PAPERS | NO. OF JOURNALS | | | % in the sample |
|---|----------------------------------|--------------------------------|-------|-----------------|
| | Physical science and engineering | Social sciences and humanities | Total | |
| Full text in Serbian and English (parallel text) | 5 | 6 | 11 | 4.66% |
| Full text in English; abstract/summary in English | 38 | 18 | 56 | 23.73% |
| Full text in English; abstract/summary in a language other than English | 38 | 12 | 50 | 21.19% |
| Full text in Serbian; no abstract/summary in a foreign language | 0 | 1 | 1 | 0.42% |
| Full text in Serbian; abstract/summary in a foreign language | 7 | 11 | 18 | 7.63% |
| Full text in Hungarian; summary in Serbian and English | 0 | 1 | 1 | 0.42% |
| Full text in various languages | 24 | 75 | 99 | 41.95% |

There were also 11 journals (4.66%) where each paper was published both in Serbian and English. Judging by the respondents' comments, the practice of publishing parallel text in multiple languages was being gradually abandoned due to high costs of translation.

When a paper published in English had an abstract in another language, this was usually Serbian. Only one journal published papers only in Serbian without an abstract in a foreign language. In most journals that published papers in Serbian with an abstract/summary in a foreign language this foreign language was English, though it was still possible to find abstracts/summaries in German, Russian or French.²⁷

The practice of publishing research papers in various languages is primarily associated with the long-established tradition in local journals in humanities. The majority of journals that provided full-text content in various languages²⁸ belonged to the areas of social sciences and humanities. The proportions of full-text content in various languages varied from journal to journal (and even from issue to issue). On the other hand, physical science and engineering journals from the 'various languages' group usually published research papers only in Serbian and English. In most cases, these were journals that had recently introduced full-text content in English.

3.4. DOI

The *doiSerbia* platform was created in 2005 with the idea of increasing the visibility of Serbian Open Access journals ("*doiSerbia*" 2011; Kosanović 2012). The National Library of Serbia deposits metadata in CrossRef and assigns DOIs to individual papers in 55 active journals. At the same time, the implementation of DOIs is enabled due to the structure of the *doiSerbia* platform, where each article in each journal is assigned a landing page that contains metadata and a link to the full text in PDF, which is also deposited in the platform. Most journals have been indexed since 2002. The platform has largely made up for the drawbacks of technically poor journal websites (or the lack of journal websites) and has certainly facilitated the acceptance of Serbian journals in DOAJ, Web of Science and Scopus ("*doiSerbia*" 2011). The platform grew until 2011, when the inclusion of new journals stopped, not only due to the fact that the ministry responsible for science continued to fund DOIs only for the journals already included in *doiSerbia* but also due to limited human resources. Since then, other journals have managed to implement DOIs either independently (directly through CrossRef) or through *SCIndeks*, De Gruyter and even Zenodo.²⁹ At the time when the survey was conducted (May–July 2016), 170 journals (including the inactive ones) assigned DOIs to their papers. In March 2016, there were 188 journals that used DOIs.

According to the survey results, 54.24% (128 journals)³⁰ of the respondents assigned DOIs to their papers, whereas 108 journals (45.76%) did not use DOIs. The survey results did not reflect the real situation and the proportion would be considerably different if all journals in Serbia responded to the survey. The vast majority of journals not covered by the survey do not use DOIs. It is reasonable to assume that journals that use DOIs account for between 35% and 40% of all journals in Serbia.

²⁷ Increasingly often, abstracts in the English language were provided along with them.

²⁸ Most commonly German, French, Russian or Greek.

²⁹ Several journals in Serbia deposit full text article PDFs in Zenodo before publication in order to obtain DOIs.

³⁰ At the time when the survey was conducted, they accounted for 77.06% of all Serbian journals implementing DOIs.

We also sought to investigate whether journals used DOIs, whether they assigned them to current peer-reviewed research papers only, or also to papers published in back issues and non-scientific papers. At the international level, there is a growing trend of assigning DOIs to various types of content, and not only research papers, and we sought to investigate whether this trend was present in Serbia as well. It turned out that the choices offered as possible answers (yes, to all papers in all issues available online; yes, but only to research papers in all issues available online; yes, but not to all papers available online, and no) were not properly formulated, but responses are nevertheless valuable.

Table 6 Assigning DOIs

| Are DOIs assigned to journal content? | NO. OF JOURNALS | | | % in the sample |
|--|-----------------|--|-------|-----------------|
| | Research papers | Research papers and other types of content | Total | |
| DOIs assigned but not to all papers available online | 7 | 22 | 29 | 12.29% |
| DOIs assigned to all research papers available online | 2 | 43 | 45 | 19.07% |
| DOIs assigned to all types of content in all issues available online | 48 | 6 | 54 | 22.88% |
| DOIs not assigned | 25 | 82 | 108 | 45.76% |

According to the responses, in 54 journals (22.88%) DOIs were assigned to all papers available online,³¹ while 45 journals (19.07%) assigned DOIs only to research papers, and not to other content types (e.g. book reviews, in memoriams, letters, reports, etc.). Table 6 shows that Serbian journals usually assigned DOIs only to research papers and only rarely to other content types. The 29 journals (12.29%) where DOIs were not assigned to all papers available online included 24 journals that had recently began to use DOIs,³² as well five *doiSerbia* journals that had uploaded issues published before 2002 to their websites, outside *doiSerbia*.

While it was still possible to find a considerable number of journals whose editors did not realize the value and benefits of persistent identifiers,³³ Skype sessions and consultations within the project showed that for many publishers the implementation of DOIs was a priority issue. DOIs enable a greater visibility and make it possible to identify (Sieck 2003) and track papers across various platforms, e.g. Altmetric (Adie and Roe 2013; “What Metadata Is Required to Track Our Content?” 2016). However, a major obstacle to the implementation of DOIs is the fact that many journal websites in Serbia lack landing pages for articles (see [10.4. Journal websites](#)). Other problems related to DOIs include various non-standardized ways of their implementation – e.g. some journals include DOIs only in PDFs and not in HTML pages (landing pages for articles). DOIs are sometimes assigned as plain text along with other metadata on HTML pages, rather than as interactive links. In some journals, DOIs are not included in the PDFs. During the project, we sought to explain to publishers why it was important to clearly indicate DOIs on article landing pages and in PDFs and make them interactive.

³¹ The majority of the journals (46) published only research papers. Only six journals assigned DOIs to other content types.

³² As part of a *SCIndeks* package – 19; through De Gruyter – 1; independently – 2; through Zenodo – 2 journals.

³³ One of the frequent questions during Skype sessions was whether it was necessary to use DOIs if articles were assigned UDC (Universal Decimal Classification). Such questions indicate that there are still those who do not understand the purpose, structure and functioning of persistent identifiers.

4. Editorial Board

Questions nos. 24 and 25 (see [Appendix 1: Questionnaire](#)) were intended to check whether the information about editorial board members was available on journal websites and how detailed this information was. The latter question (details about editorial board members) and the possible answers were formulated with the primary target group in mind – the *doiSerbia* journals, for which a list of the editorial board members is provided with the *doiSerbia* platform. As the number of respondents was greater than expected, dealing with the responses took an unexpected turn. It turned out that the possible answers provided failed to cover a large number of situations that could be encountered in Serbian journals.

It was assumed that the editorial board information was available on the website if it could be found on the webpage and even in a PDF document (containing only the editorial board information) identifiable by a URL. If the list was available only in the PDF version of a journal volume, it was considered that the information was not available on the website but only in the print version. About three-quarters of the respondents (76.69%, 181 journals) provided a list of editorial board members on their websites, while in 55 journals (23.31%) this information was either available only in journal volumes or was impossible to find. Thirty-six responses (15.25%) were incorrect: 33 respondents claimed that there was a list of editorial board members on the website, though it was not possible to find it, while three respondents said that no editorial board information was provided, though the website contained a list of editorial board members (in all three cases, it was rather detailed).

Although the Act on Editing Scholarly Journals ('Akt o uređivanju naučnih časopisa' 2009) requires that the names, roles and affiliations of editorial board members be provided, Table 7 shows that a significant number of journals failed to provide all of the required pieces of information. The survey data and consultations during the project showed that some publishers implied only an institution's name under 'affiliation', due to which they did not find it necessary to provide city and country information.

The analysis covered all respondents, including the journals where this information could be found only in the print version. In seven journals, even the print versions did not contain a list of editorial board members, whereas in one journal it was impossible to check the print version.³⁴ In 34 journals (14.41%) practices were inconsistent: the affiliation, country and city information was provided only for international members. One-fifth of the respondents (20.76%, 49 journals) listed only names or names and titles – in other words, practically nothing was known about editorial board members.

³⁴ The respondent said that no information was available on the website and skipped question no. 25.

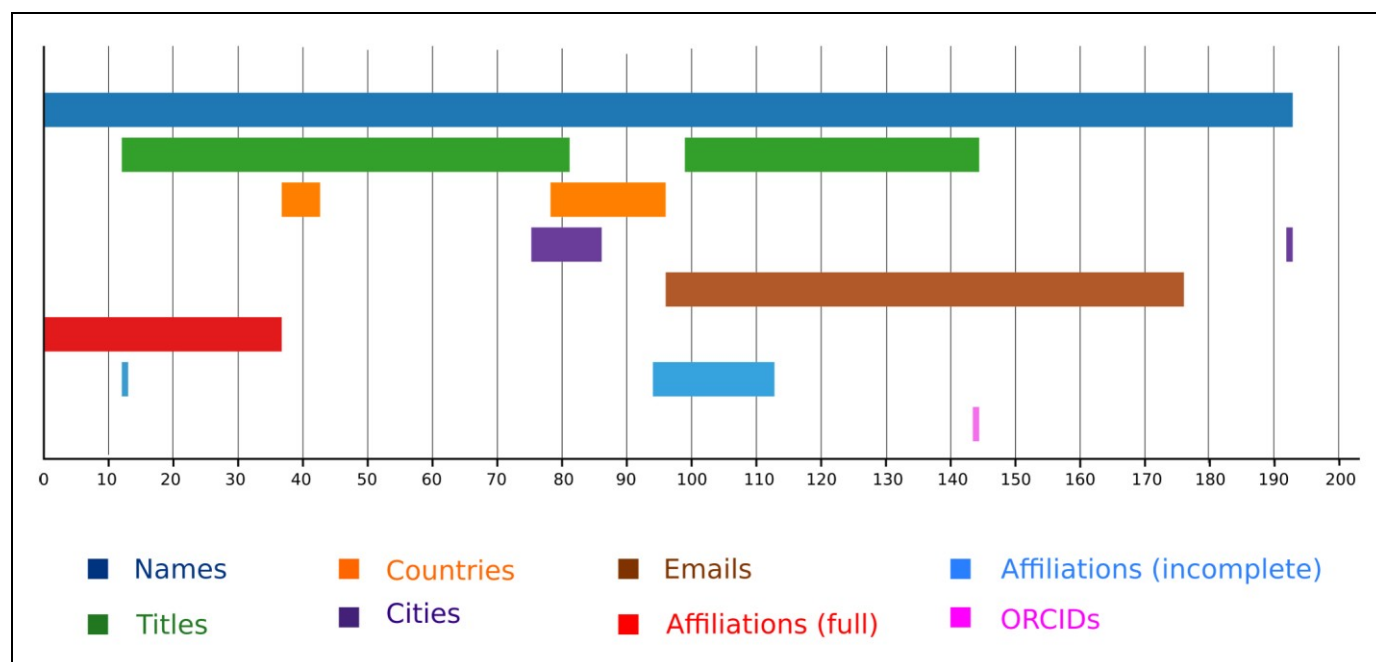


Figure 6 Linear diagram showing the information provided in the lists of editorial board members³⁵

Table 7 Information provided in the lists of editorial board members

| INFORMATION PROVIDED IN THE LIST OF EDITORIAL BOARD MEMBERS | no. of journals | % in the sample |
|---|-----------------|-----------------|
| Names only | 16 | 6.78% |
| Names and titles | 33 | 13.98% |
| Names and countries | 8 | 3.39% |
| Names and cities | 1 | 0.42% |
| Names, cities and countries | 5 | 2.12% |
| Names, countries and emails | 2 | 0.85% |
| Names and affiliations (full) | 32 | 13.56% |
| Names and affiliations (incomplete) | 12 | 5.08% |
| Names, affiliations (full) and emails | 3 | 1.27% |
| Names, titles and cities | 3 | 1.27% |
| Names, titles and countries | 6 | 2.54% |
| Names, titles, cities and countries | 3 | 1.27% |
| Names, titles and affiliations (full) | 31 | 13.14% |
| Names, titles and affiliations (incomplete) | 24 | 10.17% |
| Names, titles, affiliations (full) and emails | 14 | 5.93% |
| Names, titles, affiliations (incomplete) and emails | 1 | 0.42% |
| Names, titles, affiliations (full) and ORCID | 1 | 0.42% |
| Inconsistent | 34 | 14.41% |
| No information | 7 | 2.97% |

³⁵ All linear diagrams in the study were created using the Linear Diagram Generator, developed by Peter Rodgers, Gem Stapleton and Peter Chapman, <https://www.cs.kent.ac.uk/people/staff/pjr/linear/index.html>.

Figure 6, which summarizes 195 valid responses (82.63%)³⁶, shows that a significant number of the journals (85; 36.02%) did not provide affiliation information. This illogical practice was difficult to explain. Perhaps it was adopted from the print version, where layout editors often sought to save space. It may also be assumed that publishers implied that the members of the editorial board were known to their audience, due to which they saw the affiliation information as redundant. One respondent said that only the names and countries of editorial board members were provided because all of them were ‘well-known experts’. In some journals published by scholarly organizations, the affiliation information was provided only for those members of the editorial board who were not affiliated with the publishing institution. This infers that Serbian journal publishers are not fully aware that the potential audience of online journals is not necessarily limited to their regular readership. This is also confirmed by the fact that city and country information was sometimes missing for the local members of the editorial board even when the affiliation information was provided. Apart from these cases, the affiliation information was incomplete in 36 journals (15.25%) both for local and international members.³⁷

Less than 20% of the respondents (8.9%, 21 journals) provided email information for editorial board members and only one journal provided links to their ORCID profiles at the time when the survey was conducted.

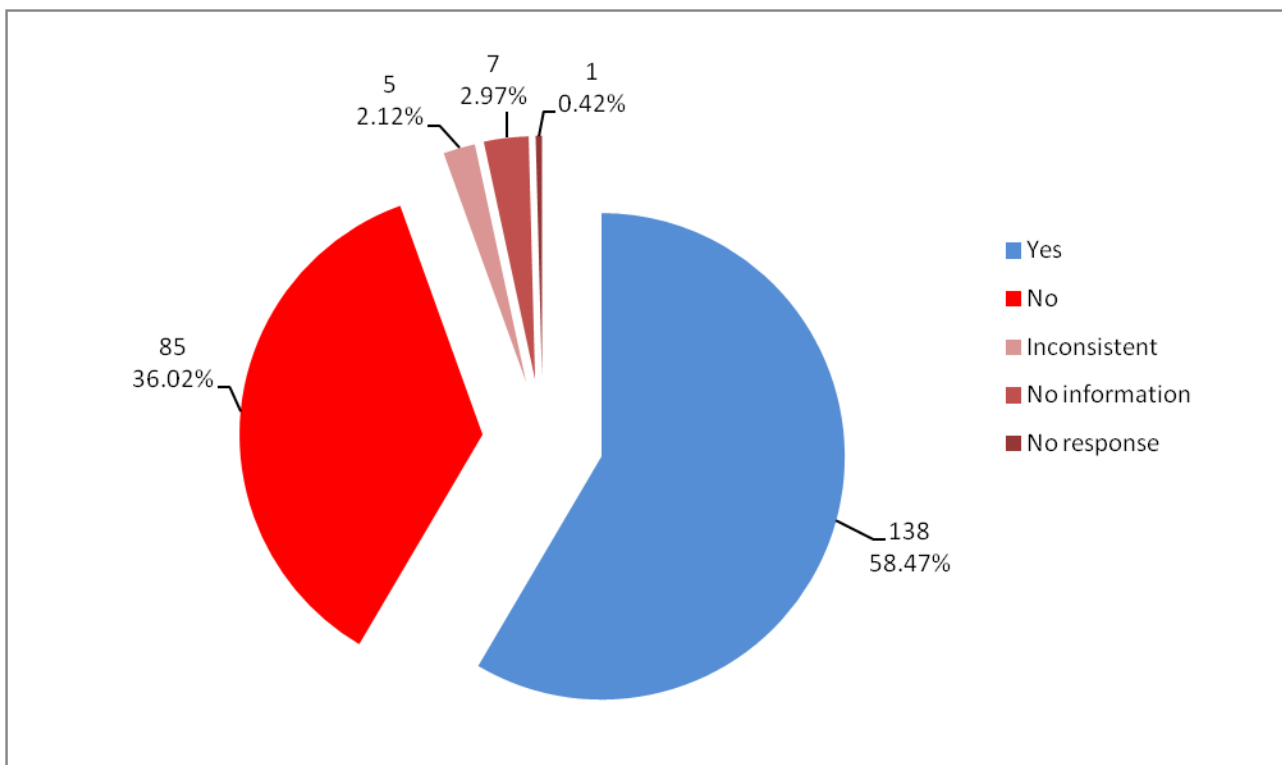


Figure 7 Affiliation information for editorial board members

³⁶ Each unit on the X-axis represents one journal.

³⁷ The name of the department is provided but the name of the university is missing and *vice versa*; no country and/or city information

We did not venture into analyzing in detail whether the affiliations were given in a parsing-friendly manner (university, department, subdepartment) because this would make Table 7 even more complicated, but even a superficial look at journals reveals inconsistent approaches. In the Act on Editing Scholarly Journals, it is recommended that the number of editorial board members not affiliated with the publishing institution be at least one-half of all members. Keeping in mind the number of journals with missing or incomplete affiliation data, this would be practically impossible to check.

It is very important to ensure that the members of the editorial board be unambiguously identifiable. One of the reasons that may be particularly interesting to those Serbian journals that aspire to qualify for indexing in international databases is the role of this information in the selection process. For example, in the Web of Science Core Collection journal selection process, the citation history of editorial board members is checked in order to determine whether the journal is able to attract established scholars as potential authors (Testa 2016). Citation data cannot be checked for authors who cannot be unambiguously identified. Scopus accepts only international journals and one of the criteria used to determine a journal's international character is the composition of its editorial board ('Scopus Journal FAQs: Helping to Improve the Submission & Success Process for Editors & Publishers' 2014). If there is no country and/or full affiliation information, it is impossible to determine the number of international editorial board members. In the DOAJ application form it is stated that at least five editorial board members 'must be clearly identifiable with their affiliation information' (DOAJ, n.d.).

5. Author guidelines

According to the Act on Editing Scholarly Journals, journals are required to define author and submission guidelines³⁸ and to publish them at least once a year in the print version, or to make them available on the website. Journals are also encouraged to provide manuscript templates (“Akt o uređivanju naučnih časopisa” 2009). Unlike documents related to editorial policies, author guidelines are common in Serbian journals. Most journals either publish them in print versions and/or make them available on the website (on an HTML/PHP page or a downloadable PDF, or both), which is confirmed by our survey.

The respondents were required to state whether their author guidelines were available in the print version, on an HTML/PHP page within the website or as a PDF document on the website. The responses relating to journal websites were checked and corrected. Some journal websites contained an HTML/PHP page named ‘author guidelines’ or ‘instructions for authors’ but its only content was a link leading to a PDF document. In these cases, it was considered that author guidelines were provided only as a downloadable PDF document. It was considered that a journal had author guidelines in the online version even if they were available only in their profiles in *SCIndeks*. The information relating to print versions could only partially be checked relying on journal websites and we did not venture into checking them, as the issue was of little importance for this study. Therefore, the data relating to print versions reflect the responses and not necessarily the real situation. One response was considered invalid, as the information relating to the print version was inconsistent. At the same time, it was impossible to verify data relating to the online version because the website was still under construction.

Figure 8 shows that the majority of the journals covered by the survey (85.17%, 201 journals) had author guidelines on their websites, in one form or another (or both). Sixty-five journals (27.54%) had author guidelines only on the website, whereas 28 (11.86%) published them only in the print version – either once a year (five journals) or in every issue (23 journals³⁹). In six journals, it was impossible to find instructions for authors either in the print or online version. In 37 journals, author instructions were available only as a downloadable PDF, whereas in 15 journals they were given only on a page within the website.

³⁸ On the structure of author guidelines in general cf. Solomon 2008, 104–9.

³⁹ Including journals published annually.

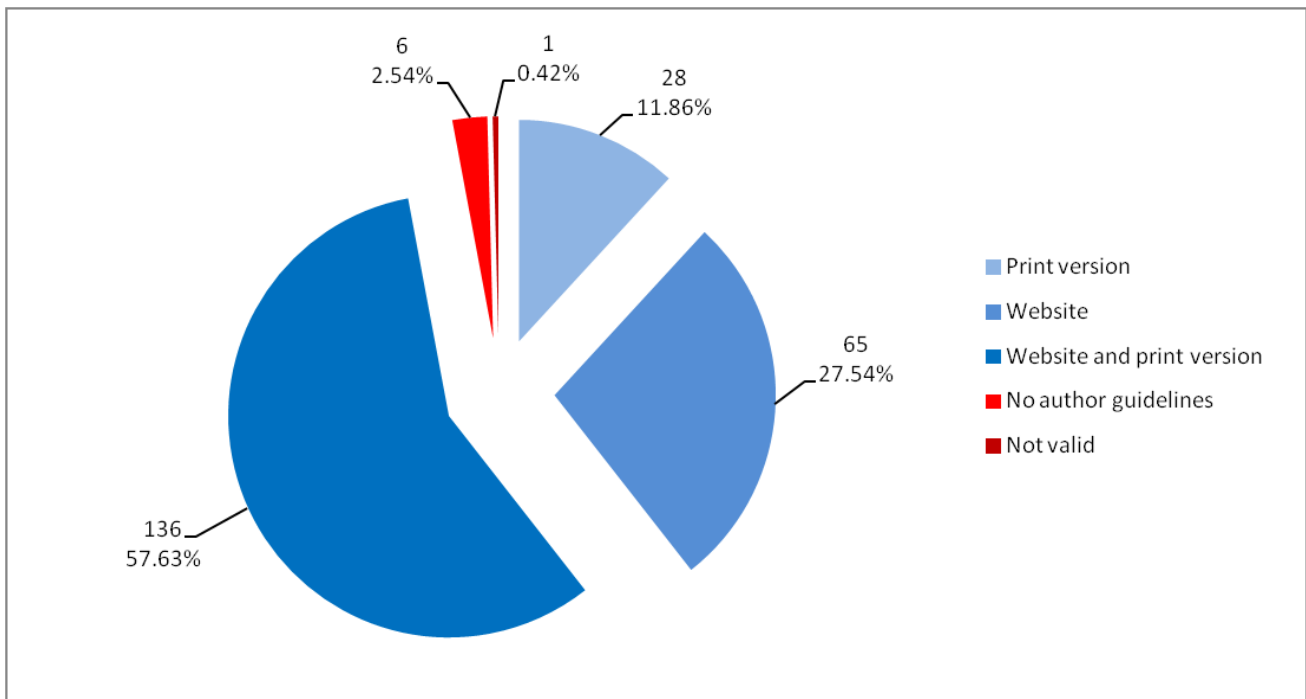


Figure 8 The availability of author guidelines

The content of author guidelines was not the subject of the survey. While checking the websites, it was possible to see that they were usually rather detailed. The journals that used Open Journal Systems (OJS), the CEON/CEES Aseestant or De Gruyter's platform usually provided submission guidelines, along with instructions how to prepare a manuscript. Although it was possible to find journals that required authors to use manuscript templates, this was not a common practice.

6. Publication ethics

Unlike author guidelines, statements relating to publication ethics⁴⁰ are not required by the Act on Editing Scholarly journals. This might be one of the reasons why Serbian journals have begun to introduce statements on publication ethics fairly recently. This process coincides with an increased interest for indexing in Scopus. A publicly available document on publication ethics and malpractice is one of the minimum eligibility criteria for Scopus review (“Scopus Journal FAQs : Helping to Improve the Submission & Success Process for Editors & Publishers” 2014). At the time when the survey was conducted, a statement on publication ethics could mostly be found in the journals already accepted for indexing in Scopus⁴¹ and those that had applied or were preparing to apply for indexing. Furthermore, it was more commonly found in medical journals, where special attention was paid to the conflict of interest and which also adopted ethical standards relevant for research involving human subjects and animals. In the scope of the project *Revisiting open access journal policies and practices in Serbia*, the elements of publication ethics were extensively covered in the editorial policy template offered to journals. Due to this, the current situation is considerably different from that captured by the survey.

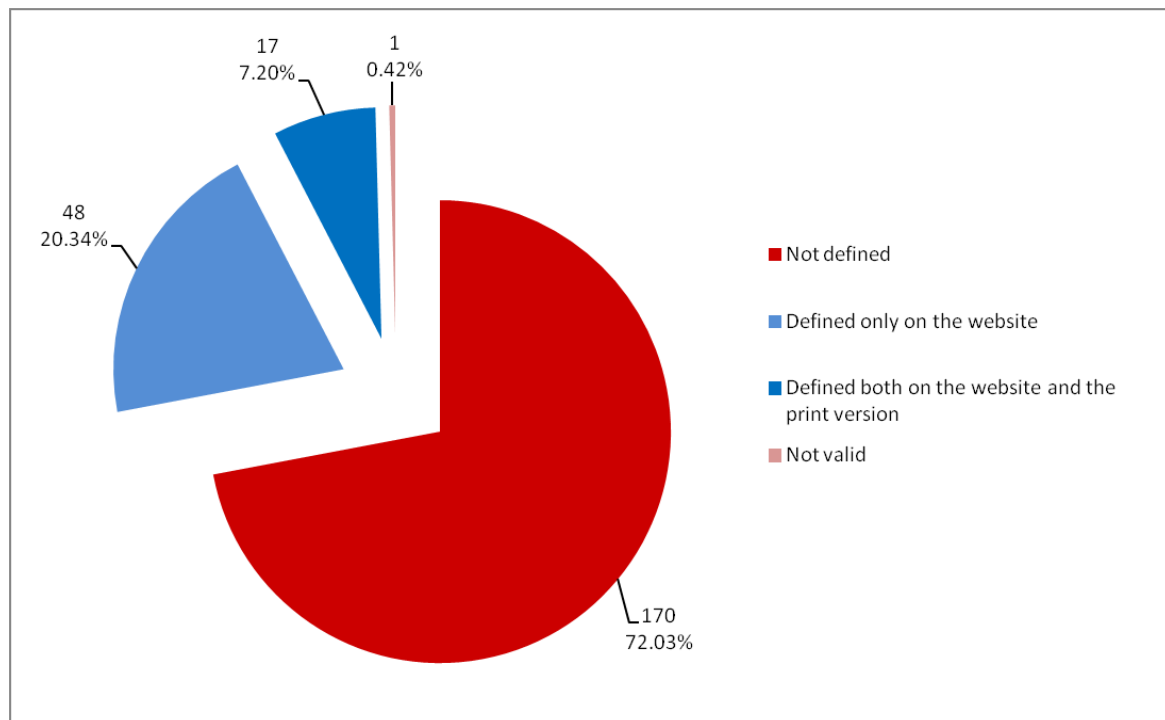


Figure 9 The responsibilities of authors, editors and reviewers

⁴⁰ On journal policies in general, including publication ethics cf. Solomon 2008, 91–104.

⁴¹ Not even in all of them.

The respondents were asked whether they had explicitly defined the responsibilities of authors, editors and reviewers anywhere in the print or online version. As expected, the responses were highly unreliable: 64 respondents (27.12%) provided answers that could not be confirmed by checking their websites and/or print versions. All except one claimed that it was possible to find elements of publication ethics either in the online or the print version, though no such elements could be found. All of these responses were corrected and the corrected data were subject to analysis. One respondent provided inconsistent responses that could not be checked because the website was under construction. When checking websites, we searched for elements of publication ethics everywhere – e.g. in author guidelines, privacy statements, and not only in editorial policies. It was assumed that the responsibilities of various participants in the publication process were defined even if only the most basic ethical standards were defined. Not all print versions could be checked and the data pertaining to them are certainly less reliable. However, statements relating to publication ethics are less commonly found in print versions than on journal websites because there has never been an established practice of publishing such documents in Serbian journals.

At the time when the data were collected, most respondents (72.03%, 170 journals) did not have a policy on publication ethics and responsibilities and it was also impossible to find elements of publication ethics in other documents or policies. In 65 journals (27.54%), either a policy or elements of publication ethics could be found on the journal website.⁴² According to the responses, in 17 journals elements of a policy on publication ethics and responsibilities could be found both in the print and online versions. It must be highlighted that this information may be unreliable as it was impossible to check the print versions of all journals. There were no journals where ethical considerations could be found only in the print version.

6.1. Dealing with unethical behaviour

Resolving misconduct cases and dealing with retractions are areas where it has been possible to observe some progress already during the implementation of the project. These issues were extensively discussed during consultations and they are covered in the proposed policy template. The proposed statements were adopted in journals whose editorial staff undertook to define a journal policy. Accordingly, it must be pointed out that the data presented here do not reflect the current situation but they rather depict the situation that we faced at the beginning of the project. A preliminary insight into the current situation suggests that about one hundred journals have defined their policies for dealing with misconduct and retraction policies since the closing of the survey.

The issues of dealing with misconduct, retraction policies and corrections were covered in questions nos. 46–50 (See [Appendix 1: Questionnaire](#)).

6.1.1. Misconduct

The question regarding procedures for dealing with various types of misconduct turned out to be challenging for some respondents. Some of them did not understand it and their answers either

⁴² In seven journals, both on an HTML/PHP page and in a PDF document; in 23 journals only as a PDF; in 35 journals only on an HTML/PHP page.

expressed their implied (but not stated) attitude to misconduct or pointed to a rudimentary ethical statement or author guidelines. It was usually highlighted that it was the authors' duty to ensure that ethical requirements were met, but there was no indication of what would happen if they failed to do so. The purpose of the question was not to see whether the editorial staff approved or disapproved of particular types of misconduct but to establish whether they had an explicitly defined set of actions to be undertaken when suspicion of misconduct occurred. Therefore, the responses were checked and (if necessary) corrected. We considered a journal to have a policy for dealing with various types of misconduct if it was possible to find it on the journal's website, or if it was clearly indicated that the journal followed the guidelines provided by the Committee on Publication Ethics (COPE). Thirty-one (13.13%) respondents claimed that they had a defined policy, though they did not have it. Table 8 shows that more than 80% of the analyzed journals did not have a defined policy for dealing with misconduct at the time of the survey. The percentage would have been even greater if all journals in Serbia had responded to the survey. Less than 10% (21 journals, 8.9%) had fully defined policies and 14 journals (5.93%) had policies for dealing with some types of misconduct. Out of the 35 journals that had fully or partially defined misconduct-related policies, 15 (6.35%) explicitly mentioned that they followed the guidelines provided by COPE.

Table 8 Procedures for dealing with misconduct

| PROCEDURES FOR DEALING WITH MISCONDUCT | No. of journals | % in the sample |
|---|-----------------|-----------------|
| Conflict of interest on the part of the editor, conflict of interest on the part of a reviewer, plagiarism, a situation that requires a retraction of a paper, ethical misconduct | 21 | 8.90% |
| Conflict of interest | 1 | 0.42% |
| Ethical misconduct | 11 | 4.66% |
| Plagiarism, conflict of interest, ethical misconduct | 1 | 0.42% |
| Plagiarism | 1 | 0.42% |
| Not defined | 198 | 83.90% |
| No response | 3 | 1.27% |

The most common sanctions applied by the journals with a defined policy were retraction and permanent or temporal ban on publishing in the journal in case of plagiarism. Only one journal stated that a formal notice or an editorial might be published in order to inform the readership about a particular case of misconduct.

6.1.2. Retraction

A set of questions were dedicated to retraction policies and procedures. Although retraction notices had been occasionally published by Serbian journals, the topic became increasingly interesting only in 2015, when the *Archives of Biological Sciences* had to retract more than a dozen papers (Ross 2015; Teixeira da Silva 2015). In Serbia, retractions are more common in journals with an impact factor. It may be argued that this is due to the greater awareness of their editors or the fact that they are exposed to greater scrutiny. Similarly to the international context, the reasons are complex (Williams and Wager 2013; Resnik, Wager, and Kissling 2015). However, it is noteworthy that journals

indexed in *doiSerbia* and *SCIndeks* are more familiar with retraction procedures as they are not only advised by the staff of the National Library and CEON/CEES but also guided through the procedure. In these two platforms retractions are transparent (retracted papers are retained in the electronic version of the journal, retraction notices are published as separate items and are linked with the retracted papers) and they are indexed in CrossRef. Nevertheless, most journals, including some of those that had already published retraction notices, did not have an explicitly defined policy regarding retractions and corrections.

At the time when the survey was conducted, 89.41% of respondents (211 journals) did not have an explicitly defined retraction policy. We considered a journal to have a retraction policy if statements in which circumstances that might lead to retraction could be found on the journal's website, or if it was clearly indicated that the journal followed the guidelines provided by COPE. The percentage of respondents with a defined retraction policy was 9.32% (22 journals). Three respondents skipped the question.

Similarly to the previous question, this one was misunderstood by many respondents, due to which we had to check all responses and correct those which did not reflect the information on the journal's website. There were 59 incorrect answers (in which respondents claimed that they had a retraction policy, though they did not have it) and they accounted for 25% of all responses.

In the following question, respondents were asked to list circumstances mentioned in their retraction policy as leading to retraction. This was yet another question that was largely misunderstood by the respondents: 117 of those who did not have a retraction policy responded. Assuming that the responses reveal their attitude as to when it is necessary to retract a paper, as well as some misconceptions, we will briefly refer to them.

A number of respondents sought to explain why they did not need a retraction policy. The most common explanations included the following:

- "Such decisions are made by the editor." (one journal);
- "No papers have ever been retracted, mostly because no circumstances that lead to retraction have arisen." (27 journals);
- "Thorough checks are performed by the editorial staff, including the use of plagiarism detection tools." (three journals)
- "It is up to authors to ensure that circumstances that could lead to retraction be eliminated." (seven journals).

Several responses indicate that there were some misconceptions as to the purpose of retractions:

- "Retractions are not 'possible', as the journal does not have an electronic version." (one journal);⁴³
- "Two negative reviews lead to retraction." (one journal);
- "Despite two positive reviews, there were cases when the editor decided not to publish a paper because he established that the results largely repeated those presented in an earlier paper." (one journal);⁴⁴

⁴³ The electronic version of the journal is available through *doiSerbia*.

- “Any circumstance can lead to retraction if authors refuse to make corrections.”⁴⁵ (one journal).

One respondent said that the journal had never retracted any papers, proceeding to describe a situation very similar to retraction: the PDF version of a paper containing elements of plagiarism was marked with the watermark ‘plagiarism’. Another respondent without a retraction policy reported a retraction due to a serious technical error.

Table 9 shows a summary of the responses provided by journals without a retraction policy. It may be observed that plagiarism and duplicate publication were identified by them as the main reasons that could lead to retraction.

Table 9 Reasons for retraction cited by journals without a defined retraction policy

| REASONS FOR RETRACTION | No. of journals | % in the sample |
|---|-----------------|-----------------|
| Fabrication | 2 | 0.85% |
| Authorship issues | 4 | 1.69% |
| Plagiarism, self-plagiarism, duplicate publication, authorship issues, conflict of interest; fraudulent use of data and data manipulation; image manipulation; major technical errors | 7 | 2.97% |
| Plagiarism, duplicate publication | 1 | 0.42% |
| Plagiarism, duplicate publication, conflict of interest | 1 | 0.42% |
| Plagiarism, duplicate publication, major technical errors | 1 | 0.42% |
| Plagiarism, duplicate publication, fabrication | 2 | 0.85% |
| Plagiarism | 31 | 13.13% |
| Duplicate publication | 23 | 0.97% |

As for the journals that had a defined retraction policy, we relied on what was stated on their websites rather than their answers in the survey and the information is summarized in Table 10. The most of them mentioned all of the reasons for retraction offered in the survey.

⁴⁴ It seems that these respondents actually meant rejection and not retraction and this may be due to the ambiguity of the Serbian term ‘povlačenje’ (often used to designate retraction), which may also be understood as withdrawal. This probably suggests that some respondents were not familiar with the concept of retraction.

⁴⁵ It is not clear whether the respondent referred to corrections in published papers or those prior to publication.

Table 10 Reasons for retraction in journals that had a defined retraction policy

| REASONS FOR RETRACTION | No. of journals | % in the sample |
|--|-----------------|-----------------|
| Major technical errors, ethical misconduct | 1 | 0.42% |
| Plagiarism, duplicate publication, authorship issues, major technical errors | 1 | 0.42% |
| Duplicate publication, major technical errors, Major technical errors | 1 | 0.42% |
| Plagiarism, duplicate publication, major technical errors | 1 | 0.42% |
| Conflict of interest, major technical errors | 1 | 0.42% |
| Plagiarism, self-plagiarism, duplicate publication, authorship issues, conflict of interest; fraudulent use of data and data manipulation; image manipulation; major technical errors | 14 | 5.93% |
| Violation of the publishing policy, significant inaccuracy, misleading statement or distorted report | 1 | 0.42% |
| Plagiarism, fabrication, falsification manipulative citation practices | 1 | 0.42% |

The answers to the question related to retraction procedures confirm that the concept of retraction is not sufficiently clear to many people involved in journal publishing in Serbia. Although a significant number of journals defined their retraction policies during the project, there are still reasons for concern. Namely, we do not know whether they will be able to implement them in practice and we can only hope that they will seek the assistance of the National Library and CEON/CEES when circumstances that should lead to retraction arise. The responses, which are largely inconsistent, suggest that problems may arise. Many responses came from journals that did not have a retraction policy and those which had never published retractions.⁴⁶ We did not venture into checking every single fact stated in the answers, as this was not the purpose of the survey. The answers were merely treated as symptoms of problems that need to be addressed. The question was skipped by 70 respondents (29.66%), including one journal with a defined retraction policy.

⁴⁶ Fifty-four respondents from the group of journals that did not have a retraction policy answered that they had never faced the need to retract a paper. One of them even highlighted that their journal was a 'serious' one and nobody would 'dare' submit a paper failing to meet the journal's standards. Again, some respondents explained that the lack of retractions was due to the high quality of the editorial process. Nevertheless, some of them also said what they would do if they had to retract a paper.

What is particularly worrying is the number of journals which stated that they simply removed or would remove the retracted paper from the electronic version – 42 (17.8%). This answer was provided by six journals with defined retraction policies (Table 11). One of them explicitly stated this in the journal policy. Another respondent chose the answer that contradicted the journal’s retraction policy.⁴⁷ One of the six journals was indexed in *doiSerbia*, three in *SCIndeks*, and one was part of the De Gruyter Open platform. This last journal claimed in its policy that it followed the guidelines provided by COPE, though these guidelines required that a retracted paper be linked with the corresponding retraction notice (“Retraction Guidelines” 2009).

Fifteen journals (6.35%) with a defined retraction policy retained the disputed papers. Some of the answers contradicted the journal’s policy – e.g. one respondent claimed that it was impossible to retract a paper that was already published, although circumstances that could lead to retraction were mentioned in its statement on publication ethics. The answers provided by the journals that had a defined retraction policy are summarized in Table 11.

Table 11 Retraction procedure in journals with a defined retraction policy (according to survey data)

| RETRACTION PROCEDURE | No. of journals | % in the sample |
|--|-----------------|-----------------|
| The retracted paper is removed from the electronic version of the journal. | 1 | 0.42% |
| The retracted paper is removed from the electronic version of the journal. Retraction notices are published together with corrections, in the Errata section. | 1 | 0.42% |
| The retracted paper is removed from the electronic version of the journal. Retraction notices are published together with corrections, in the Errata section. The authors of the retracted paper are notified | 2 | 0.85% |
| The retracted paper is removed from the electronic version of the journal. The authors of the retracted paper are notified. | 1 | 0.42% |
| The retracted paper is removed from the electronic version of the journal. Retraction notices are published together with corrections, in the Errata section. Persons who have reported that there might be reasons for retraction are notified. The authors of the retracted paper are notified. | 1 | 0.42% |
| The retracted paper remains in the electronic version of the journal. A brief note is added. Retraction notice is not published as a separate item. A retracted paper is clearly marked, e.g. with the watermark ‘RETRACTED’. Persons who have reported that there might be reasons for retraction are notified. The authors of the retracted paper are notified. Retractions are announced in the News section. | 1 | 0.42% |
| Retraction notices are published together with corrections, in the Errata section. | 1 | 0.42% |
| Retraction notices are published together with corrections, in the Errata section. Each retraction notice is assigned a DOI (or other persistent identifier). The authors of the retracted paper are notified. | 1 | 0.42% |

⁴⁷ According to it, retracted articles were retained, marked on every page to show that they were retracted, and linked with retraction notices.

| RETRACTION PROCEDURE | No. of journals | % in the sample |
|--|-----------------|-----------------|
| Retraction notices are published together with corrections, in the Errata section. Each retraction notice is assigned a DOI (or other persistent identifier). A retracted paper is clearly marked, e.g. with the watermark 'RETRACTED'. A retracted paper and the corresponding retraction notice are linked. Persons who have reported that there might be reasons for retraction are notified. The authors of the retracted paper are notified. | 1 | 0.42% |
| Each retraction notice is assigned a DOI (or other persistent identifier). A retracted paper is clearly marked, e.g. with the watermark 'RETRACTED'. A retracted paper and the corresponding retraction notice are linked. Persons who have reported that there might be reasons for retraction are notified. The authors of the retracted paper are notified. | 3 | 1.27% |
| Each retraction notice is assigned a DOI (or other persistent identifier). A retracted paper is clearly marked, e.g. with the watermark 'RETRACTED'. A retracted paper and the corresponding retraction notice are linked. | 1 | 0.42% |
| Each retraction notice is assigned a DOI (or other persistent identifier). A retracted paper is clearly marked, e.g. with the watermark 'RETRACTED'. The authors of the retracted paper are notified. | 1 | 0.42% |
| A retracted paper is clearly marked, e.g. with the watermark 'RETRACTED'. | 2 | 0.85% |
| A retracted paper and the corresponding retraction notice are linked. | 2 | 0.85% |
| Procedure in accordance with COPE guidelines | 1 | 0.85% |
| Retractions are not possible | 1 | 0.42% |
| No response | 1 | 0.42% |

Thirty-six journals (15.25%) that did not have a retraction policy at the time when the responses were collected stated that they deleted or would delete a retracted paper from the online version, which clearly shows that they were not aware of the standards relating to retraction. This group of respondents included five journals indexed in *doiSerbia*, ten indexed in *SCIndeks* and one indexed in both databases. It is interesting that at least three of these journals had published retraction notices in full compliance with the standards adopted by *doiSerbia* and *SCIndeks* before the survey, but this fact was apparently not known to the persons who filled in the questionnaire on their behalf. Some of the responses provided by the journals without a retraction policy contained contradicting claims:

- retracted papers were removed from the online version, and the PDFs were marked with the watermark 'retracted' (three journals);⁴⁸
- retracted papers were removed from the online version, and the retracted papers were linked with the retraction notice (one respondent);
- retraction notices were not published as separate items and, but at the same time, they were not only published in the Errata section, but were also published as separate items and assigned DOIs).

⁴⁸ It remains unclear whether the 'removed' and 'watermarked' papers were meant to be visible and where.

According to responses,⁴⁹ no more than six journals from the 'no retraction policy' group dealt or planned to deal with retractions in accordance with the procedure adopted as standard in *doiSerbia* and *SCIndeks*.

The survey also reveals that many respondents⁵⁰ (27.54%, 65) considered it important to notify the authors of the retracted paper. Those who also notified (or would notify) the persons who reported the reasons for retraction were considerably fewer in number: 28 journals (11.84%). Only 15 respondents (6.35%) said that they announced (or would announce) retractions in the news section on their website. For three of them this was the only measure (to be) undertaken in case of retraction.

6.1.3. Corrections

The purpose of the question dedicated to corrections and errata was to check whether journals dealt with errors transparently. Although the question was clear,⁵¹ judging by other responses, there were indications that it was answered by a number of journals that had never published corrections. Nevertheless, all consistent answers were taken into account, as it was impossible to check every single claim. Two responses were not valid: one was not clear, while in the other the respondent listed the reasons for corrections and claimed that the journal had never published any corrections.

Forty-two respondents (17.72%) skipped the question. The journals which had never published corrections accounted for 46.41% (110 journals). Many of them highlighted that they had never faced the need to publish corrections. One respondent said that the editor was just about to publish a correction for the first time. In two journals, minor correction (typos and technical errors) were made in already published papers but no notice of them was published.

According to the responses, the most common reason for publishing corrections was (or would be) a technical error that occurred during prepress (24.15%, 57 journals). In 21 journals (8.05%) this was the sole reason for corrections, while 36 journals (15.25%) also mentioned other reasons. The second most common reason for corrections was a content error that did not challenge the integrity of the paper (17.37%, 41 journals). For 14 journals (5.93%) this was the sole reason for publishing corrections. Other choices offered in the questionnaire were considerably less common: 23 respondents mentioned the omission of an author's name, 16 the omission of a table or an image, 11 mentioned the need to remove the name of a person erroneously credited as an author and the same number of respondents claimed that errata were published to correct errors in acknowledging funding agencies or grants under which research was conducted. Other reasons mentioned by respondents include the need to correct typos in the author's name (two journals), incorrect affiliations (one journal), the uncredited source of an image (one journal), a sentence containing incorrect data (one journal), a substantial error that challenged the integrity of the paper (one journal) and plagiarism (one journal). The last two cases show that situations that would normally require retraction were sometimes resolved through publishing corrections.

⁴⁹ Only valid and consistent responses were taken into consideration.

⁵⁰ Including both journals that had a retraction policy and those that did not have it.

⁵¹ Under which of the following circumstances have you published a correction? and not Under which of the following circumstances would you publish a correction?

7. Open Access policy and practice

7.1. Open Access statement

The respondents were asked whether it was stated explicitly on the journal's website that the journal was Open Access. They were also required to provide the URL where this information could be found. Our criteria were considerably less strict than those set by DOAJ (DOAJ, n.d.) and we considered that a journal had an OA statement if it was possible to find at least a phrase such as 'This is an Open Access journal' or 'The content of this journal is freely available' anywhere on the website. Two respondents mentioned in the 'About' section only that their journals were indexed in DOAJ and other databases of Open Access journals and we accepted even those responses as valid. At the time when the survey was undertaken, we were aware that few journals could fully meet the requirements for an OA statement as set by DOAJ and the main purpose of the question was to check whether they were at all aware of their Open Access status. All of the responses were checked⁵² and, where necessary, corrected because some respondents implied that the journal's Open Access status was apparent from the fact that PDFs on the website could be downloaded free of charge.⁵³ Thirty-eight responses (16.03%) were incorrect: 35 respondents (14.77%) claimed that they had an OA statement though they did not have it, whereas three respondents said that they did not have an OA statement though it was possible to find it on their website. More than a half of the respondents – 58.65% (139 journals) did not have an OA statement, whereas on the websites of 97 journals (40.93%) it was possible to find at least a phrase indicating that a journal was Open Access or a sentence saying that it was 'indexed in the Directory of Open Access Journals'.

The responses show that journal editors in Serbia are not sufficiently aware of the importance of clearly defined policies. First of all, electronic journals have to meet certain standards of scholarly publishing. On the other hand, for an increasing number of researchers who are expected to meet the requirements of Open Access mandates⁵⁴ it is important to know which journals are OA. During the project, the problem has been addressed by offering an editorial policy template that includes an OA policy.

7.2. The online availability of journal content

A set of questions were intended to investigate the scope of the availability of journal content online – namely, whether papers were available online, whether they were regularly uploaded on journal websites, when they were uploaded, how long it took between submission and publication, etc.

⁵² The authors checked not only the URLs provided by the respondents but also the full websites.

⁵³ They provided the URLs of their volume archives.

⁵⁴ See "Welcome to ROARMAP," n.d.; European Commission 2016s.

Keeping in mind that the content of Serbian journals is often scattered on multiple websites, and is sometimes also available through *doiSerbia* and *SCIndeks*, the question concerning the OA status of journals ('Does the journal offer open access to its content?') was accompanied with an explanation: "Are the full-text electronic versions of journal papers freely available on the journal's websites, in *doiSerbia*, *SCIndeks* or any other website? The vast majority of the respondents (94.92%, 224) enabled access to the full content of journal volumes either through an independent website, or within the publisher's website; through *doiSerbia* and *SCIndeks*; and even through Academia.edu. Six respondents (2.54%) uploaded only research papers.⁵⁵ One journal has recently switched to a subscription-based model but all papers published until then are still freely available. Five respondents (2.12%) said that journal content was either not yet available online or was only partially available.⁵⁶

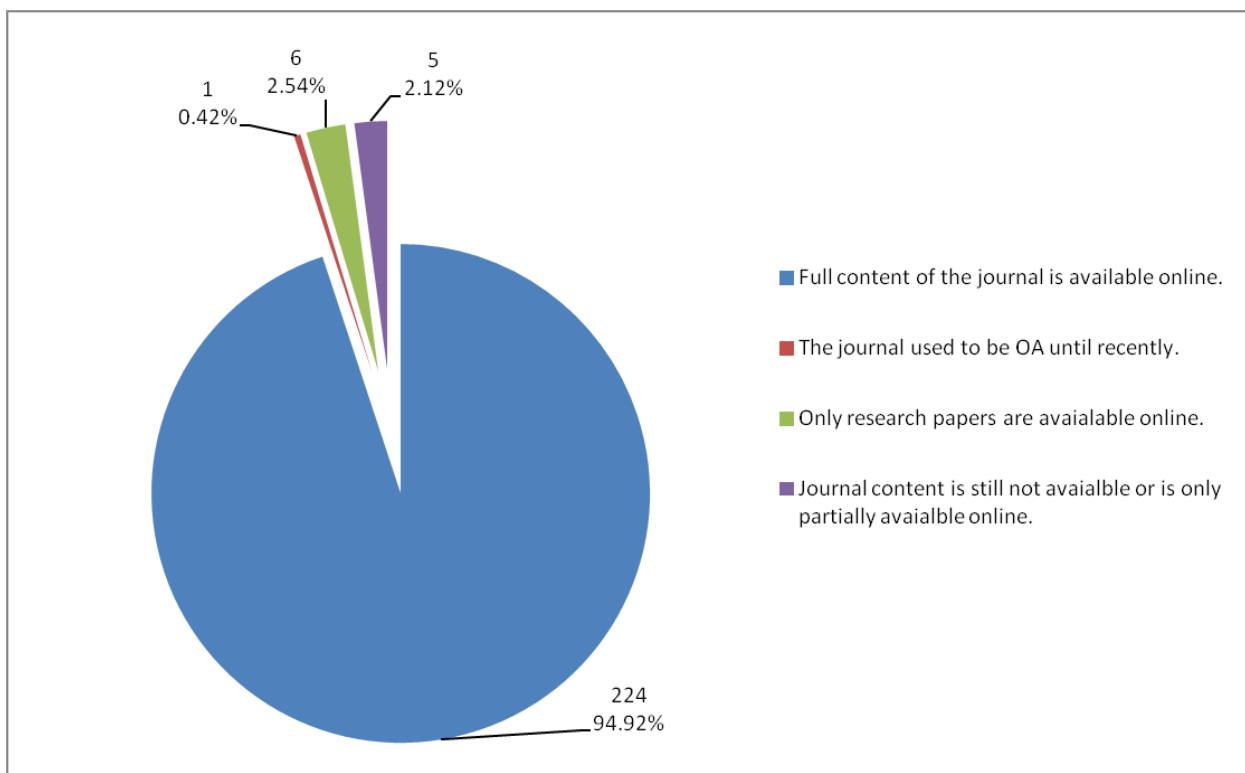


Figure 10 Online availability of journal content

The respondents were further required to provide the publication year of the first volume of the journal available online. The purpose of the question was to get an idea of the volume of their digital archives and to see whether they were interested in digitizing the back issues and making them available online. At the time when the data were collected, two journals had no uploaded content on their websites⁵⁷ and they skipped the question. All responses were checked and we did not only

⁵⁵ Three of these journals were available through *doiSerbia* and one through *SCIndeks*. On both platforms, only scientific papers were available.

⁵⁶ At the time when responses were collected, one journal had uploaded five latest volumes on the publisher's website, whereas four were in the process of finding solutions to make their content available online; two of them had already made some volumes available on the publishers' websites. In the meantime, one journal has become available through *SCIndeks*, one has established a website, while two are still working to build their sites.

⁵⁷ Their websites were under construction.

search the official journal websites but also the inactive ones, as well as *doiSerbia* and *SCIndeks*. While checking data, we also sought to identify the journals that were freely available electronically from the first volume, no matter whether their volumes were scattered on multiple websites. It was found that 74 journals (31.36%) were available beginning with Vol. 1. The majority of them (63 journals) started publishing following 2000 and some of them were actually the continuations of earlier journals or revived journals that had previously been discontinued. Nevertheless, several respondents felt the urge to highlight that they had fully digitized not only the back issues of the current title but also all volumes of all preceding titles. During consultations and Skype sessions, this issue was repeatedly raised – not as a priority issue, but rather as something that journal publishers and editors considered worthwhile in building a good image of the journal, especially if it had had a long tradition. Limited funds and the unavailability of equipment seem to be the main obstacle. We instructed journal editors how to find and unlock the volumes that had already been digitized within the Google Books Library Project, but still, not all Serbian journals had been digitized by Google. Some editors suggested that libraries could help through joint projects.

Figure 11 shows the distribution of the respondents according to the period when their first issues available online were published. As expected, 75% of journals were available online starting with 2000 and later.

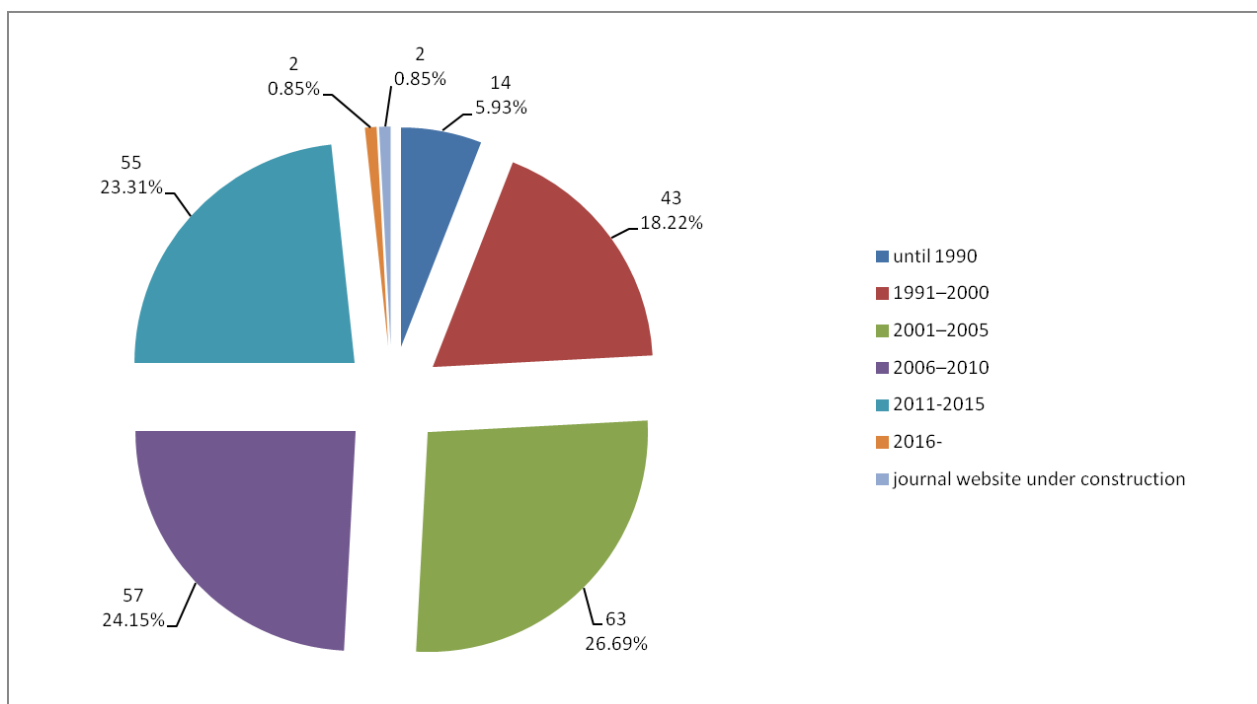


Figure 11 Publication year of the first volume available online

Figure 11 shows the share of journals available online beginning with the first volume in each period. The 14 respondents from the ‘until 1990 group’ were traditional print journals that also introduced an online version. They largely digitized their back issues. In most cases, whole volumes were uploaded as single files, PDFs were not searchable (no OCR was performed) and the discoverability of this content was rather poor. The majority (34 out of 43) of the respondents from the ‘1991-2000’

group were traditional print journals with an online version, whereas the minor part of journals (9) were started in this period. They were still print journals but in most cases, their online version was born digital. The period between 2001 and 2005 was the time when most traditional print journals became available online through *SCIndeks* and *doiSerbia* (Šipka and Kosanović 2008). These journals accounted for the most part of the respondents represented by the blue section of the bar. The discoverability of their content was significantly improved as these two platforms offered not only PDFs but also metadata ("*doiSerbia*" 2011).

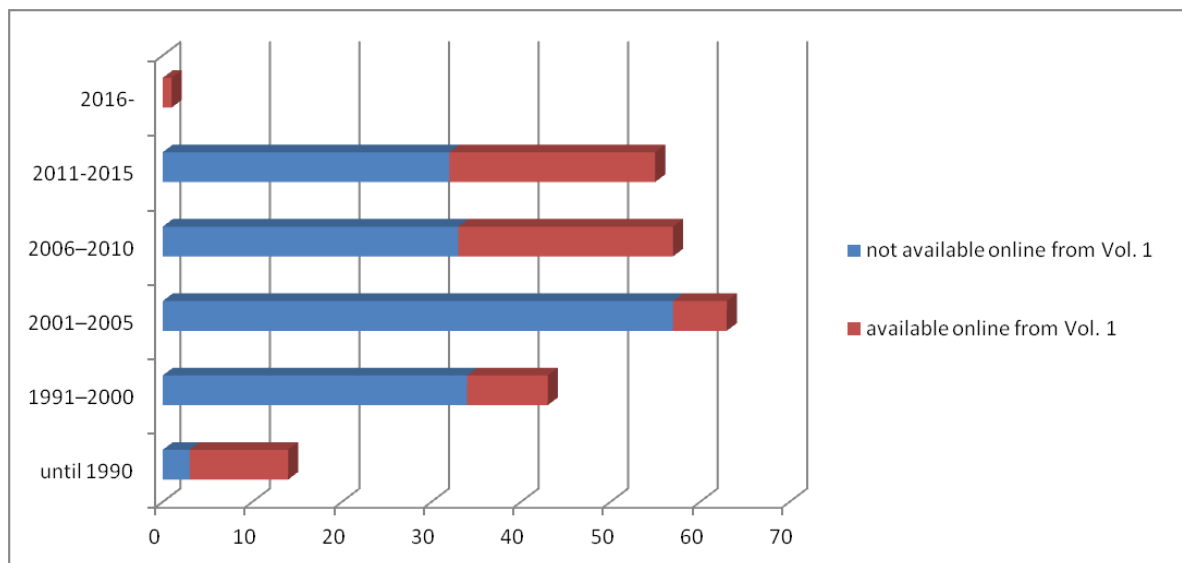


Figure 12 The share of journals available from Vol. 1

During the consecutive periods, the number of new journals apparently increased. It is interesting that even the new journals still had a print version and that purely online journals were still rare in Serbia. This topic will be discussed in greater detail under [10.4. Journal websites](#).

7.3. Online publishing

The purpose of questions nos. 18–21 was to see when (in relation to the publication of the print version) Serbian OA journals made their content available online and to check whether they did it regularly. We also sought to check whether the respondents used options known as OnlineFirst or Ahead of Print.⁵⁸ The journals included in *doiSerbia* are offered the opportunity to publish peer-reviewed and accepted manuscripts immediately upon acceptance. These versions are assigned DOIs, which make them discoverable and citable. According to data provided by KoBSON, at the time when the survey was conducted only 17 *doiSerbia* journals (out of 55 active) used this option – three of them only occasionally, and we sought to discover reasons for this. The following figures and the analysis are based on data collected from responses to questions nos. 18 and 19 (see [Appendix 1: Questionnaire](#)).

⁵⁸ Publishing accepted manuscripts online, either immediately after acceptance or after copyediting, most commonly before the issue for which the paper is intended is compiled.

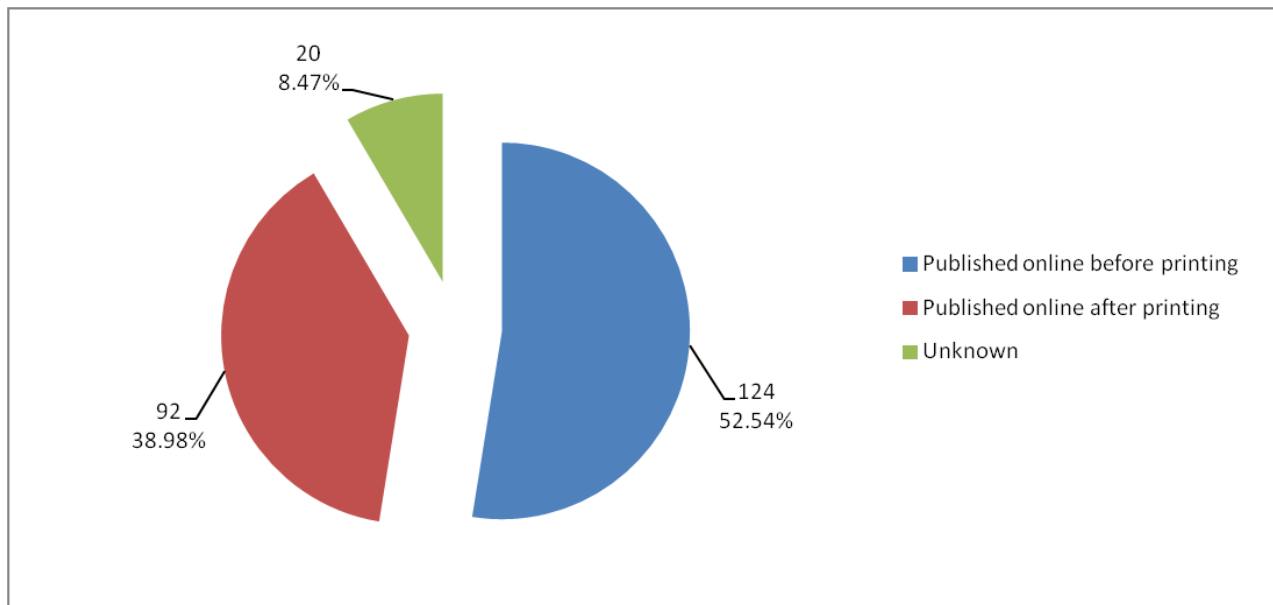


Figure 13 Is journal content available online before printing or after?

Judging by responses, about one-half of the respondents (52.54%, 124) made their content available online before printing. The respondents whose volumes were available online only after printing accounted for nearly 40%, which confirms that the transition towards electronic publishing was not completed. Some journals sold subscriptions to their print versions but this did not seem to be the reason, as most of them uploaded the electronic version practically simultaneously with releasing the print version. Responses to the question whether journal issues were regularly uploaded on the journal website show that some answers might be inconsistent or that respondents did not understand them as intended. Four respondents claimed that content was available online before printing but that they sometimes uploaded it only after a delay. It is unclear whether printing was the reference point for defining 'a delay' or the respondents wanted to say that their volumes were not published regularly. In any case, it was apparent that the websites of these journals were not properly maintained.

Most respondents (91.95%, 217) answered that they regularly uploaded content to their websites (or *doiSerbia* and *SCIndeks*). Eleven respondents (4.66%) said that there were sometimes delays in making content available online. In five journals, some issues were missing (the print version was published but the files have never been uploaded). The websites of two journals were under construction. One respondent said that they ceased uploading content on the website. This was because the journal was switching to a different platform at the time when the data were collected.

Table 12 Is journal content regularly made available online?

| CONTENT AVAILABILITY ONLINE | No. of journals | % in the sample |
|-----------------------------|-----------------|-----------------|
| Regularly uploaded | 217 | 91.95% |
| Some issues are missing. | 5 | 2.12% |
| Delays may occur. | 11 | 4.66% |
| Not uploaded any more | 1 | 0.42% |
| Website under construction | 2 | 0.85% |

One of the strongest indicators that Serbian journals did not optimally adopt electronic publishing was the fact that the vast majority of them did not publish papers ahead of print. Table 13 shows that only 13.56% of the respondents (32 journals)⁵⁹ used OnlineFirst / Ahead of Print, whereas 86.44% (204 journals) uploaded content only after a complete issue was ready for printing or even after printing. A number of respondents only said that they did not publish papers ahead of print (8.74%).

Table 13 When the content is published online?

| TIME OF PUBLISHING | No. of journals | % in the sample |
|---|-----------------|-----------------|
| Ahead of print | 32 | 13.56% |
| When a complete issue is ready for printing | 92 | 38.98% |
| Immediately after printing | 88 | 37.29% |
| After printing, with great delays | 4 | 1.69% |
| Content is not published ahead of print | 20 | 8.47% |

Although the question why they did not use the OnlineFirst option was primarily intended for *doiSerbia* journals, some journals that were not included in the platform also provided answers. The responses were informative and revealed that some respondents were not familiar with this practice, as well as that they had various misconceptions not only about the practice of publishing papers ahead of print, but also of the purpose and functioning of *doiSerbia* and electronic publishing in general. Out of 80 responses, only 11 came from *doiSerbia* journals: three respondents said that they were not familiar with the option, two that they simply did not consider the idea; one did not need it, one was not ready to implement it, one was getting ready to use it and one did not specify the reason. Two respondents whose journals were part of *doiSerbia* said that they did not use OnlineFirst because the journal did not have a website. This supports the assumption that they were not familiar with the fact that the service was provided within *doiSerbia* and had nothing to do with the journal's website. The majority of other respondents mentioned various technical reasons and workflows as major obstacles to introducing the practice. Main obstacles include – amongst others – the following:

- the journal's online version was part of an institutional website and it would be difficult to organize work so as to achieve this;⁶⁰
- limited human resources;
- it would be difficult to organize copyediting and translation for individual papers over a longer time span;⁶¹
- publishers were not familiar with the concept or they did not know that such a possibility existed;
- publishers did not know how to implement the 'OnlineFirst' option;

⁵⁹ This number includes 16 *doiSerbia* journals. As previously mentioned, at the time when the survey was conducted only 17 *doiSerbia* journals used the OnlineFirst option.

⁶⁰ In such cases, the members of the editorial staff usually do not have full control of the journal website. This problem will be highlighted under [10.4. Journal websites](#).

⁶¹ This problem is typical of the journals which receive submissions based on calls for papers. This is especially the case in the journals where the appointment of reviewers, the acceptance or rejection of manuscripts and the final content of issues depend on the decisions of the Editorial Board. These decisions are made at the meetings of the editorial board, which are not very frequent.

- long-established practices and habits that were not compatible with the concept of publishing individual papers online before an issue was fully prepared for publishing.

Eight respondents said that they planned to start publishing papers ahead of print. Fifteen responses either revealed misconceptions or did not make sense at all. Most journals mentioned financial constraints as a concern, whereas some respondents said that they could not or did not want to pay for this service to *doiSerbia*, which shows that they were not aware that the service was provided free of charge only to the journals included in the platform. At the same time, they apparently did not know that it was possible to implement 'OnlineFirst' on any journal website practically without cost or at a small cost.

7.4. Submission Charges and Article Processing Charges

While it is still possible to find the journals that charge subscriptions for the print version, submission charges and APCs are still rare in Serbia. As it has been explained in the introduction, it is a standard practice among most journals not to charge any fees to authors or readers, and therefore journals regard it as unnecessary to explicitly state this fact.⁶² Soon after the survey had been launched, it was realized that respondents did not understand the questions relating to submission charges and APCs, though both questions were accompanied with explanations. The Skype sessions organized while the survey was still open confirmed that many of them were not familiar with the concepts or were poorly informed. Some editors mentioned their concern with the prejudice against the 'author pays' system. This concern is best illustrated by the fact that in several journals which introduced APCs the statement took the form of an 'apology'. At first, participants in the sessions asked that the distinction between the two types of charges be explained, and the question was repeatedly raised in several sessions. Later, they also inquired about waiver policies and various details regarding the implementation of APCs. It took great effort to explain that there was nothing bad in charging authors, as long as this was done transparently and that it was not recommendable to disguise APCs using terms such as 'donation', 'membership' or 'subscription'. Author charges were covered in great detail in the policy template devised during the project *Revisiting open access journal policies and practices in Serbia*. Due to this, the current situation is considerably different to that captured in the survey.

It was obvious from the outset that some responses would be unreliable. Therefore, we checked the respondents' websites and contacted some of them by e-mail. Still, there were cases where it was impossible to establish the actual state of affairs.

7.4.1. Submission charges

A vast majority of journals (78.39%, 185) did not charge submission charges but this information could not be found anywhere on their websites. In 33 cases respondents claimed that a 'no submission charge' statement was present on their websites although no such statement could be found. In 25 journals (10.59%), it was possible to find a statement saying that no submission charges

⁶² It is interesting that nine respondents paid honoraria to the authors whose papers were published. Decades ago, this was a common practice, especially in journals dealing with humanities. It has been increasingly abandoned over the past fifteen years.

applied. In the editorial policy of six journals there was a statement saying that no ‘page charges’ applied. They shared the same publisher and this wording unusual for OA journals must have been adopted from the same source. It is known to the authors that none of these journals charge either submission charges or APCs. It may be concluded that at least 91.53% of the respondents (216 journals) did not charge submission charges at the time when the survey was conducted.

Table 14 Submission charges

| | | No. of journals | % in the sample | |
|----------------------|--|-----------------|-----------------|--------|
| SUBMISSION CHARGE | Submission charge; explicitly stated on the website | 4 | 1.69% | 2.54% |
| | Submission charge; not explicitly stated on the website; authors are informed after submission | 2 | 0.85% | |
| NO SUBMISSION CHARGE | No submission charge; explicitly stated on the website | 25 | 10.59% | 91.53% |
| | No submission charge; not explicitly stated | 185 | 78.39% | |
| | Unclear statement on the website; no fee is charged. | 6 | 2.54% | |
| | A fee is charged but it is unclear whether it is a submission charge, an APC, or both. | 7 | 2.97% | |
| | No response / Invalid response | 7 | 2.97% | |

It is difficult to establish how many respondents applied submission charges because some of them obviously did not understand the question, while others provided contradictory responses. Two journals charged authors at submission but this information could not be found on their websites. According to their responses, the submission charge amount was the same for all authors and no APC was charged. In one journal, the submission charge ranged between 10 and 50 EUR, whereas in the other it was between 50 and 100 EUR. The former journal issued a receipt, whereas the latter did not issue any documents to prove the payment. One respondent said that both a submission charge and an APC were charged and this information could be found in the author guidelines. No amount was stated; it was only said that a small fee was charged “for article submission and processing charges (APCs)”. In the survey, the respondent said that the fees were 200–300 EUR each and that a receipt was issued to the payee.⁶³

Three journals charged authors at submission, they clearly stated this on their websites, but they did not use the term ‘submission charge’. Authors were required to subscribe to the print version of the journal if they wished to submit a paper. This is obviously an outdated practice that is not only incompatible with OA publishing but is also ethically disputable. In all of these journals charges were

⁶³ It seems that the journal abandoned the practice. According to the most recent author guidelines, neither a submission charge nor APC are charged.

different for local and international authors and they ranged between 50 and 100 EUR. No APCs were charged. Seven respondents provided unclear answers, indicating that some fees were charged, but it is not possible to conclude whether authors were required to pay a submission fee, or APC, or both.

7.4.2. Article processing charges

The situation regarding APCs was much the same. The majority of journals (75%, 177 journals) did not charge APCs but this information could not be found on their websites. Twenty-five of them claimed in the survey that it was possible to find a 'no APC' statement on their websites, though there was not such information. Twenty-six journals (11.02%) had an explicit 'no APC' statement. It may be concluded that at least 88.56% of the respondents (209 journals)⁶⁴ did not charge APCs at the time when the data were collected.

Table 15 Article processing charges

| | | No. of journals | % in the sample | |
|--------|---|-----------------|-----------------|--------|
| APC | APC; explicitly stated on the website | 8 | 3.39% | 5.51% |
| | APC; not explicitly stated on the website; authors are informed after peer review, when a manuscript is accepted | 5 | 2.12% | |
| NO APC | No APC; explicitly stated on the website | 26 | 11.02% | 88.56% |
| | No APC; not explicitly stated on the website | 177 | 75.00% | |
| | Unclear statement on the website; no fee is charged. | 6 | 2.54% | |
| | A fee is charged but it is not clear whether it is ACS or APC, or both. | 7 | 2.97% | |
| | No response / Invalid response | 7 | 2.97% | |

Eight journals had APC information, either in the journal policy or in the author guidelines. In all of the journals, APC amounts were stated on the website. Six of them issued a receipt to authors, one skipped the question and one respondent said that the charge was actually treated as a donation.⁶⁵ In five journals, all authors paid the same amount, which was not higher than 300 EUR.⁶⁶ In three journals different amounts were charged to local and international authors. Five journals charged APCs but this was not stated anywhere on the website. They informed authors only after manuscript acceptance.

⁶⁴ Including the aforementioned six journals with unusual 'no APC' statements.

⁶⁵ It is interesting that the information available on the journal website clearly defined the charge (up to 10 EUR) as the cost of publication. In the meantime, the journal abandoned the practice and it does not charge any fees.

⁶⁶ In one journal, the APC was between 50 and 100 EUR, in three journals it ranged between 100 and 200 EUR, in one journal, it was between 200 and 300 EUR.

Two of them issued a receipt to confirm the payment, while two did not issue any document to the payees. One respondent skipped the question. The APC amount was not higher than 200 EUR.⁶⁷

According to data presented by Walt Crawford in his SPARC-supported study on the Open Access situation in individual countries based on journals indexed in DOAJ, the average APC in Serbia per article in APC-charging journals was 395 USD, whereas the overall average was 115 USD (Crawford 2016b, 133). The study covered 102 journals from Serbia listed in DOAJ before May 2016. There was only one journal classified as 'the largest' and it also charged the highest APCs – an average of 545 USD per article. This journal did not respond to the survey. The average APC per article in other APC-charging journals was 138 USD (Crawford 2016b), which is consistent with data presented in this study.

Several journals in Serbia introduced APCs after they had been accepted for indexing in the Web of Science because this made them increasingly interesting for international authors, enabling them to ensure and maintain a stable submission rate. The respondents were asked whether they planned to introduce APCs if they managed to be accepted for indexing in the Web of Science and Scopus. We received 165 valid responses. Nine respondents⁶⁸ said that they planned to introduce an APC vs. 51 that planned to remain APC-free. The majority of the respondents (105 journals) answered that they might introduce article charges but that the issue was not seriously considered at the moment when they provided the response.

It may be expected that most OA journals in Serbia will remain APC-free for at least several years or more. The vast majority of them heavily rely on local authors, whose payment potential is low. Local authors seek to publish their research in journals which do not charge authors. As there is no explicit requirement or recommendation for Serbian researchers to publish in OA journals, they usually choose subscription-based journals. If local APC-free journals introduced APCs, this would certainly discourage the majority of local authors to submit their papers. Furthermore, there are not many local authors who could afford an APC higher than 100 EUR; if they could, they would seek to publish their research in a better-ranked international journal. The highest APC recorded in our survey was 200–300 EUR. In most cases it is between 10 and 150 EUR, falling in the range of APCs charged by predatory journals (Xia 2015). Some editors are aware of this and they have expressed their concern that by introducing low APCs they would risk being seen as 'suspicious'. They also fear that low APCs could attract authors who normally publish in predatory journals, which would force them to deal with an increased number of poor-quality submissions. In some journals it would be difficult to organize the work associated with the processing of payments due to limited human resources.

⁶⁷ In three journals, it ranged between 10 and 50 EUR, in one journal it was 100–200 EUR. One respondent skipped the question.

⁶⁸ They include one journal already indexed in the Web of Science and Scopus which is still APC-free.

8. Copyright, user rights and self-archiving

It is not an exaggeration to say that, in general, Serbian scholarly community is poorly aware of copyright issues. It is possible to find dozens of PhD theses, university textbooks and institutional websites where various types of content, mostly images, are taken from the Internet and used without citing the sources, let alone asking permission to reuse them. However, in most cases, this practice is not driven by dishonest intentions but rather has to do with the lack of copyright culture. Local researchers who use other people's work without asking permission usually do not mind if their own work is used in the same manner. This approach is probably associated with the tradition of the 'Socialist copyright system' (von Lewinski 1997).

Scientists who publish in international journals are more familiar with copyright rules and procedures but the fact that they conform to them does not necessarily mean that they fully understand their implications – e.g. most of them do not familiarize themselves with licensing and copyright agreements. Most researchers are still not familiar with Creative Commons licenses and the concept of self-archiving. This is partially due to the fact that Serbia does not have a national OA mandate for publications (Kosanović 2017).

The survey vividly reflects the situation. The respondents were asked whether they required authors to transfer copyright to the publisher (and whether the transfer was exclusive), whether they used Creative Commons licenses, and which rights authors retained or were granted. The purpose of the last question was to identify explicitly defined self-archiving policies or their elements in Serbian journals. The responses to this set of questions (nos. 77–84; see [Appendix 1: Questionnaire](#)) were highly unreliable, contradicting or illogical. It was necessary to check them thoroughly, but not all of them could be confirmed or corrected because it was often impossible to find any relevant information on journal websites. The situation depicted in the following passages is somewhat different from the current situation. Copyright issues were covered in the policy template devised during the project *Revisiting open access journal policies and practices in Serbia*. Most publishers who undertook to define their editorial policies also defined copyright policies, user rights and self-archiving policies. However, these are areas where major developments are still to be expected in the years to come.

8.1. Copyright

At the time when the data were collected, in nearly one-half of the journals covered by the survey (46.61%, 110 journals) rights were not defined – authors were not required to transfer copyright to publishers, but at the same time, it was not stated that they retained copyright. About one-fifth of the responses (21.19%, 50 journals) were either impossible to confirm by checking journal websites

(42 journals)⁶⁹ or they were inconsistent with other information provided by the same respondents and/or the information available on the website (eight journals). Responses were corrected whenever it was possible to find unambiguous and consistent information on the website. When this information was incomplete, inconsistent and/or illogical, responses were marked as ambiguous or invalid – e.g. when copyright information on the website differed from that in PDFs, or if a respondent claimed that authors retained copyright without restriction, while at the same time transferring copyright to the publisher in an exclusive manner. The responses are summarized in Table 16.

Table 16 Copyright

| | COPYRIGHT | No. of journals | % in the sample | |
|-----------------------|--|-----------------|-----------------|--------|
| COPYRIGHT TRANSFER | Copyright transfer explicitly required; copyright transfer agreement | 31 | 13.14% | 24.15% |
| | Copyright transfer explicitly required; no copyright transfer agreement | 18 | 7.63% | |
| | Copyright transfer required, but not explicitly stated; copyright transfer agreement | 8 | 3.39% | |
| AUTHORS RETAIN RIGHTS | Authors retain some rights and this is explicitly stated. | 3 | 1.27% | 5.51% |
| | Authors retain rights without restriction. | 10 | 4.24% | |
| | Not defined | 110 | 46.61% | |
| | Ambiguous/invalid responses | 50 | 21.19% | |
| | No response | 6 | 2.54% | |

In 13 journals (5.51% of the respondents), authors retained either some rights (three journals) or full copyright (10 journals) and this was explicitly stated either in the journal policy or the author guidelines. Almost one-quarter of the respondents (57 journals, 24.15%) required authors to transfer copyright to the publisher. Eight respondents said that they did not find it necessary to inform their audience that copyright transfer was required but authors had to cede rights by signing an agreement.⁷⁰ This is certainly not a good practice. Authors must be informed about the terms and conditions under which they are expected to publish their work before they submit their papers. In all other cases, this information was available on the website. In 18 journals it was not necessary to sign an agreement, while in 31 journals authors signed a copyright transfer agreement.

⁶⁹ Seventeen respondents claimed that copyright transfer was required and that this information was publicly available; 12 did not require authors to sign a copyright transfer agreement, while five did. It is interesting that 25 respondents claimed that authors retained either some rights (three journals) or full copyright (22 journals). In none of these cases was it possible to find relevant information on the website and/or in the print version.

⁷⁰ These responses were accepted as valid because the information had already been known to the authors from other sources.

Soon after the survey had been closed, Jeffrey Beall published a blog post where he questioned the practice of copyright transfer in OA journals. He stressed that the practice was contrary to the *libre* (free to re-use) segment of OA (Beall 2016). His comments were discussed with the editors of the local journals in which copyright transfer was required. From their perspective, the purpose of copyright transfer agreements was to ‘protect the rights of both authors and publishers’ and to prevent unwanted uses on the part of third parties. The most of them were prepared to allow authors to reprint their own works, to modify them and even to use them commercially but they wanted to be sure that the works would be re-used appropriately and that the original work would be duly cited.⁷¹ The most of them did not charge APCs. As publishers carried out the entire publication process at no cost to authors and readers, they believed that it was right to have some control. Several journals used copyright transfer forms in which it was explicitly stated that authors were allowed to use their own works in whatever way they wanted, while third parties were required to seek permission.

If we take into account the local context, the practices associated with copyright transfer appear as a transitional solution – an effort towards bringing some order in an environment with poor copyright culture. The group of journals that required copyright transfer included some of the first local journals that had reached the international scene. In order to get there, they relied on the model of international journals known to their editors and editorial board members. As a rule, their models were not OA journals. Most high-quality OA journals were beyond the reach of Serbian researchers due to high APCs. The editors of local journals, who were at the same time authors, mostly published in subscription-based journals, they were familiar with their practices and, naturally, they identified models among them. During the project, it was possible to see that their approach to copyright issues was more flexible than their policies might suggest. Therefore, a shift towards practices that are typical of OA journals is yet to be expected.

The major problem in the local context is caused by those journals whose editorial offices continue to neglect the importance of policies and copyright issues. Furthermore, the process of defining journal policies revealed that, despite guidelines and ready-to-use models, some editors still did not understand copyright and user rights. The policy template offered to journals contained various solutions ranging from copyright transfer to leaving copyright to authors, each of them clearly marked and supplied with explanations. It was up to journals to choose the most suitable option and delete the rest. While reviewing journal policies,⁷² we encountered several dozen cases where in one paragraph it was stated that copyright must be transferred to the publisher, whereas in the other the authors were allowed to retain copyright without restriction. Despite clear guidelines, the obvious contradiction of the two statements went unnoticed, which indicated that the concepts behind the statements were not understood. This raises concerns as to the implementation of the adopted journal policies.

The answers to the question whether copyright transfer was exclusive or non-exclusive confirm that the situation was complicated in practice. Out of 24 journals which, according to responses, required an exclusive copyright transfer, only three made this information public. Judging by other responses, one could not be sure whether the remaining 21 journals in reality required exclusive rights to be

⁷¹ Some of them experienced ‘unwanted uses’. Also, it often happened that the original publication was not credited.

⁷² During the project, all those who decided to define the editorial policy could have their draft reviewed by the project team.

transferred (by means of a signed agreement) or whether they assumed that the transferred rights were exclusive, though this was not specified in the agreement.

8.2. User rights

In the majority of journals in Serbia, user rights are still not defined, despite the fact that several dozen journals adopted Creative Commons (CC) licenses during the project. At the time when the survey was conducted, 101 respondents (42.80%) said that user rights were not defined, four (1.69%) that no licenses were used, whereas 62 (26.27%) claimed that all rights were reserved. Although the answers to the questions were checked and corrected, the 'not defined', 'no license' and 'all rights reserved' categories were formed based on the responses. Based on the information available on journal websites (i.e. due to the lack of information), it was impossible to determine to which of those categories they really belonged. The selected responses might still reflect their attitude towards user rights. This is confirmed by the fact that the 'all rights reserved' group largely coincided with the group of journals in which authors were required to transfer copyright, whereas the 'not defined' group overlapped with the group of journals where no copyright policy was defined. The 'not defined' and 'all rights reserved' groups contained both journals that had a default 'all rights reserved' phrase embedded in the website's footer and those where no rights-related information could be found. As it is considered that all rights that are not explicitly granted are actually reserved, it is correct to say that all these journals, which accounted for 70.76% of the respondents, in fact reserved all rights.

Table 17 User rights and Creative commons licenses

| | | No. of journals | % in the sample | |
|-----------------|--|-----------------|-----------------|--------|
| LICENSE | Creative Commons license; explicitly stated; each paper marked | 14 | 5.93% | 20.34% |
| | Creative Commons license; explicitly stated; papers not marked | 31 | 13.14% | |
| | Other license | 3 | 1.27% | |
| RIGHTS RESERVED | No license | 4 | 1.69% | 70.76% |
| | All rights reserved | 62 | 26.27% | |
| | Not defined | 101 | 42.80% | |
| | Ambiguous/invalid responses | 15 | 6.36% | |
| | No response | 6 | 2.54% | |

At the time when the data were collected, less than one-fifth of the journals covered by the survey (19.07%, 45) used Creative Commons licenses and had the license information on their websites. Only in 14 journals (5.93%) each paper was marked with the appropriate license. Ten respondents claimed that they used Creative Commons licenses though no license info could be found on their websites. Although Creative Commons licenses are intended to be simple to understand and implement, this has been one of the most frequently discussed topics during the project. The explanations of the concept and implementation guidelines have been provided repeatedly. Nevertheless, not only did a significant number of editors find Creative Commons licenses complicated and would rather not use them, but also we cannot be sure that all of those who decided to implement them fully understand their purpose.

Table 18 Creative Commons licenses used by the analyzed journals

| LICENSE TYPE | No. of journals | % in the sample |
|--------------|-----------------|-----------------|
| CC BY | 13 | 5.51% |
| CC BY-SA | 1 | 0.42% |
| CC BY-NC | 7 | 2.97% |
| CC BY-NC-SA | 2 | 0.85% |
| CC BY-NC-ND | 22 | 9.32% |

As far as license types are concerned, CC BY-NC-ND (22 journals) and CC BY (13 journals) prevailed. The proportion of the two prevailing license types remained almost the same as new journals adopted CC licenses, but instead of CC BY-NC, the third most commonly used license was CC BY-SA. It is expected that new journals will select more liberal license modules, most commonly CC BY.

8.3. Rights retained by authors and the self-archiving policy

Apart from the journals in which both the rights granted to third parties and those retained by authors were defined using Creative Commons licenses, nine journals explicitly defined (in author guidelines or copyright transfer agreements) what authors could do with their work. In more than three-quarters of the journals covered by the survey (77.12%, 182) these issues were not explicitly defined.

Question no. 82 sought to establish which uses journals allowed to authors without the need to ask permission (esp. where all rights were reserved or rights were not defined), e.g. to reprint their work or publish a translation. Its purpose was also to identify journals with defined self-archiving policies. The respondents were asked whether they allowed authors to make the published version, post-print or pre-print⁷³ publicly available on a personal or institutional website, in an institutional repository or on social networking sites for scientists without the need to ask permission. Although clear instructions were provided – to select only those uses that were explicitly defined and/or covered by

⁷³ For definitions of terms see: (“SHERPA RoMEO Colours, Pre-Print, Post-Print: Definitions and Terms” 2006).

the license, we received answers from about one hundred journals⁷⁴ on whose websites (or in print versions) it was impossible to find any elements of a self-archiving policy.

According to the responses, journals would more readily allow authors to share and deposit the final, published version (publisher's PDF) than post-prints or pre-prints.⁷⁵ The same trend was observed in the process of aligning journal policies. One of the reasons for this may be the reluctance of most editors to make public the versions that have not undergone copyediting. This is often the case in humanities journals. The other reason is probably the fear that a version other than the final version may be uploaded without crediting the journal as the source. Publisher's PDFs usually contain headers or footers where the journal title and other bibliographic information can be found, enabling unambiguous identification of an article. A great number of authors, either local or international, who publish in Serbian journals are not aware of the standards that apply to self-archiving, and the practice of uploading papers without proper credit is not uncommon.

Forty-nine journals (20.76%) said that they would allow authors to publish translations and reprints of their papers without asking permission under the condition that the source was duly cited. It is noteworthy that four of them used the CC BY-NC-ND license, which did not allow translation. This might suggest that they were not fully aware of the license terms. At the same time, there were 30 journals (12.71%) where authors would have to seek written consent for some types of use.⁷⁶ In 12 of them, authors would have to ask permission even for self-archiving.

Eight respondents (3.39%) said that they had embargo periods but only four specified its duration. Two journals made the online version available a few months after the publication of the print version and authors were allowed to start sharing their papers as soon as the online version was available. In two journals, a 24-month embargo period applied to self-archiving. One of them required exclusive copyright transfer, reserved all rights and did not allow authors to self-archive the publisher's PDF. Keeping in mind that the journal did not have a print version and that it enabled immediate and free access to its content, the purpose of the embargo and the consistently restrictive policy remains unclear. The same applies to the other journal, though it had a less restrictive policy and there was no mention of the embargo period on the journal's website. Generally speaking, embargoed access was rare in Serbian OA journals. If there were delays in providing access to the online version, they were usually due to technical reasons.

At the time when the survey was conducted, it was possible to find only five self-archiving policies of Serbian journals on SHERPA/RoMEO. Eight respondents (3.39%) said that they had submitted a request to SHERPA/RoMEO to be registered and were awaiting response.

⁷⁴ The question was answered by 151 journals.

⁷⁵ Eighty-two respondents would allow authors to upload the published version to personal websites, 81 to institutional websites, 75 to institutional repositories and 73 to social networking sites. At the same time, about half the number of journals would allow to upload post-prints to the same places, while only 14 journals would allow authors to upload pre-prints to personal websites, 13 to institutional sites and 12 to repositories and social networking websites.

⁷⁶ It is interesting that two of these journals used CC licenses – CC BY and CC BY-NC.

9. Editorial process

9.1. The length of the editorial process

The purpose of questions nos. 20–22 (see [Appendix 1: Questionnaire](#)) was to establish the average length of the editorial process. The respondents were asked how long it took between the submission and acceptance of a paper (i.e. how long it took to complete the peer review process) and between acceptance and publishing. Those who published papers online ahead of print were asked how long it took from the moment when a paper first appeared online and the publishing of the final (paginated) version. The first two questions were taken from the DOAJ application form. Before the re-application process in DOAJ, few journals from Serbia provided this information in their print and/or online versions. According to the Act on Editing Scholarly Journals (“Akt o uređivanju naučnih časopisa” 2009), adopted by the Serbian ministry responsible for science, published papers are supposed to contain information relating to the submission and acceptance dates, as well as the dates when revisions were submitted. Although the practice is meant to be mandatory, it has not been adopted by all journals. Therefore, we had to rely on the information provided by the respondents.⁷⁷

Figure 14 shows that 96.19% of the respondents managed to complete the peer review process within six months. In more than 60% of journals (67.37%, 159) peer review normally took up to three months. Out of seven journals (2.97%) in which the process took 6–12 months, six belonged social sciences and humanities. It is interesting that journals dealing with social sciences and humanities, on one side, and physical sciences and engineering, on the other, had almost equal shares in all other categories.

Figure 15 shows that the review procedure and preparations for publication took almost equal time on average and that the latter could even last a little bit longer: 91.53% of the respondents published papers up to six months after acceptance and 61.02% managed to complete this work within three months. The figures can also be seen from a reverse perspective: in 73.30% of journals involved in the survey, it took more than one month to publish an accepted paper. It is interesting that in almost 30% of the journals (15 journals, 29.41%) where peer review was conducted quickly and efficiently (up to one month) preparations for publication took considerably longer (3–12 months). Out of 13 journals where papers were published within two weeks after acceptance, eight used the OnlineFirst option.

⁷⁷ These were open-ended questions and the respondents could include comments, if they wished. Nevertheless, no more than a few respondents made comments, suggesting that the duration of the procedures depended on reviewers, or authors, or the scale of the revision required, or funds available. Most responses were rather precise. We defined the categories shown in Figures 21 and 22 based on them and fitted the remaining responses into these categories to make the analysis easier.

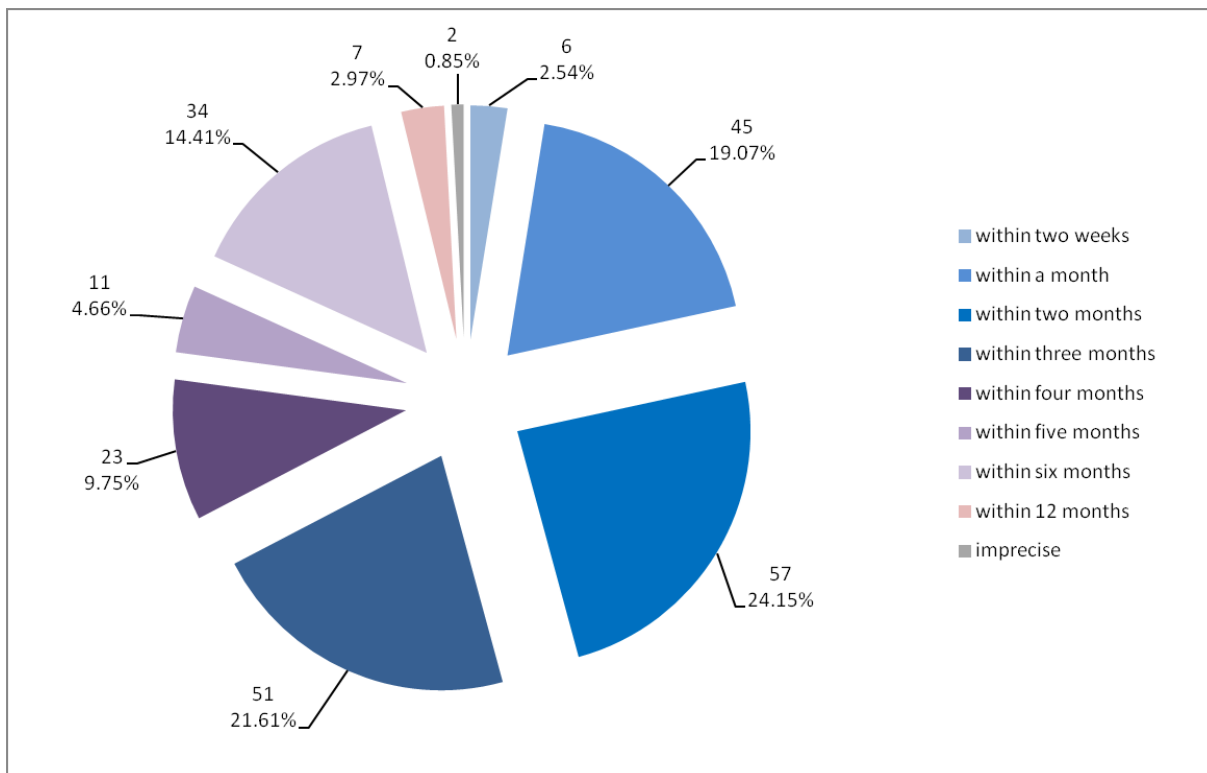


Figure 14 Time frame within which peer review is completed

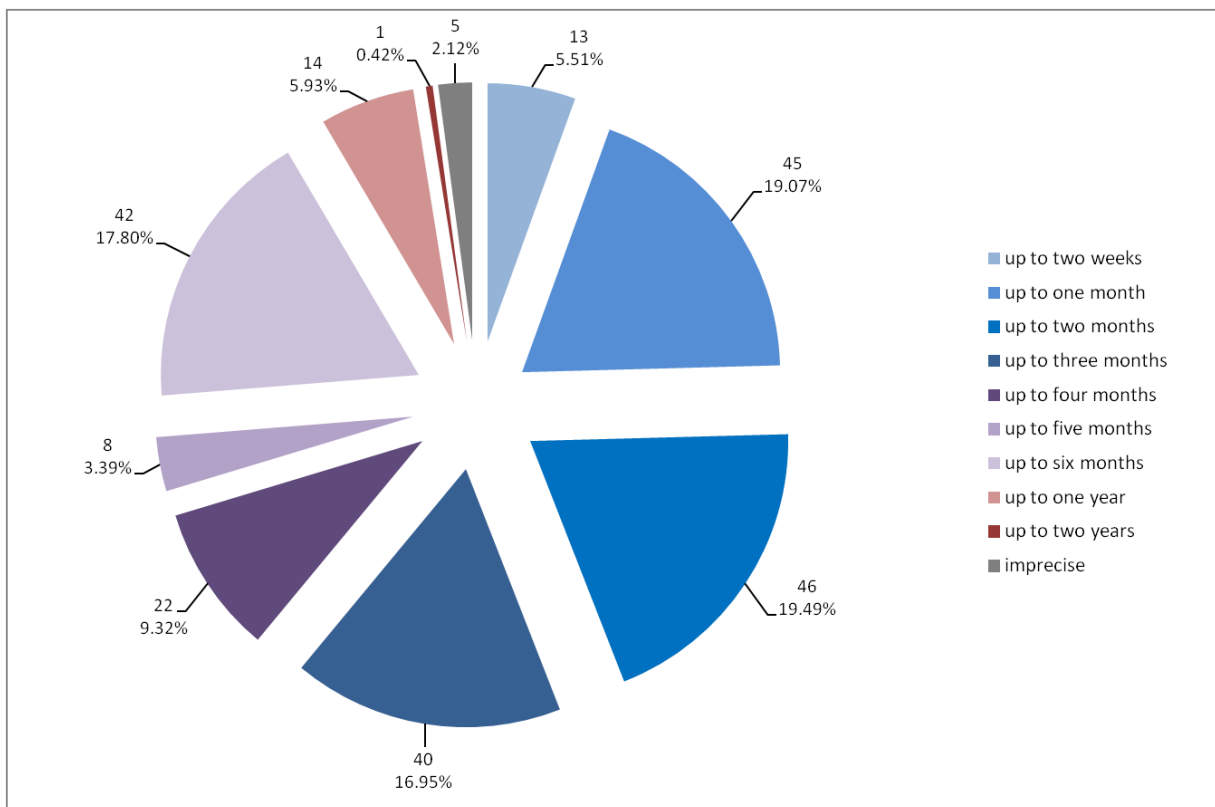


Figure 15 How long does it take between acceptance and publication?

In the context of electronic publishing, one would expect papers to be published faster. These rather long time frames have to do with the respondents' publishing practices. As demonstrated above, most of them make content available only when a complete issue is ready for printing. Most journals that publish one issue a year collect submissions based on calls for papers, over a limited period of time. If a journal publishes a limited number of papers, the papers that receive positive reviews but cannot be included in the issue published in the year of the submission are either rejected or have to wait, unpublished, for the following issue. In the latter case, authors sometimes withdraw such papers. Some journals, especially in humanities, would not venture into publishing online the papers that have not been checked and corrected by a copyeditor. However, in many journals, the funds provided by the ministries responsible for science and culture are the only funds they have and their organization of work largely depends on the availability of these funds and not on the submission dynamics. These practices may discourage some authors interested in submitting their papers.

9.2. Submissions

The purpose of question no. 28 was to identify the most common submission channels and to check whether journals were open for submissions throughout the year or whether manuscripts were received based on calls for papers.⁷⁸ The presented data reflect the responses and not necessarily the real situation. Two respondents skipped the question.

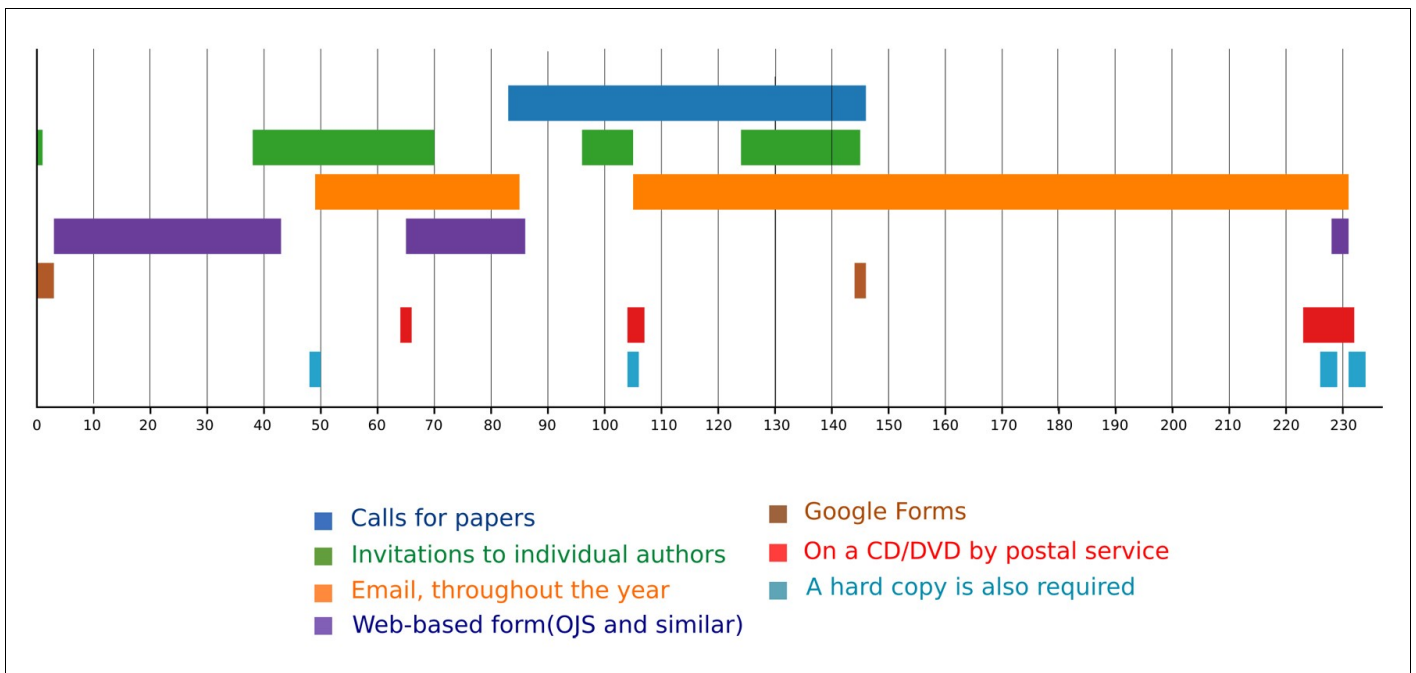


Figure 16 Linear diagram showing the use of various manuscript submission channels

⁷⁸ Calls for papers are announced a few months before a new issue is due and the entire editorial process has to be completed in a limited time frame. Even if journals received submissions by email throughout the year, most authors submitted manuscripts near the deadline.

According to the information provided by the participants in the survey, most journals (68.64%, 162) received submissions by email throughout the year. In 77 journals (32.63%), this was the only submission channel. In 43 journals, editorial offices also announced calls for papers, usually months before a new issue was to be published, whereas 42 journals invited individual authors to send their contributions or invited papers. In ten journals (4.24%), submissions were entirely based on calls for papers. Judging by the responses, the practice of announcing calls for papers was not common in journals relying on a journal management system. Five journals (2.12%) received only papers submitted by invited authors.

Table 19 Combinations of various submission channels

| CHANNEL | No. of journals | % in the sample |
|--|-----------------|-----------------|
| Calls for papers | 10 | 4.24% |
| Calls for papers Invitations sent to individual authors | 8 | 3.39% |
| Calls for papers Invitations sent to individual authors Regular postal service, on a CD/DVD A hard copy of the manuscript is also required. | 1 | 0.42% |
| Calls for papers Invitations sent to individual authors Email, throughout the year | 20 | 8.47% |
| Calls for papers Email, throughout the year | 17 | 7.2% |
| Calls for papers Email, throughout the year Regular postal service, on a CD/DVD | 1 | 0.42% |
| Calls for papers Email, throughout the year Regular postal service on a CD/DVD A hard copy of the manuscript is also required. | 1 | 0.42% |
| Calls for papers Web-based submission form (OJS, CEON/CEES Aseestant, etc.) | 1 | 0.42% |
| Calls for papers Email, throughout the year Web-based submission form (OJS, CEON/CEES Aseestant, etc.) | 2 | 0.85% |
| Calls for papers Email, throughout the year Web-based submission form (Google Forms) | 1 | 0.42% |
| Calls for papers Invitations sent to individual authors Email, throughout the year Web-based submission form (Google Forms) | 1 | 0.42% |
| Invitations sent to individual authors | 5 | 2.12% |
| Invitations sent to individual authors A hard copy of the manuscript is also required. | 1 | 0.42% |
| Invitations sent to individual authors Email, throughout the year | 14 | 5.93% |
| Invitations sent to individual authors Email, throughout the year A hard copy of the manuscript is also required. | 1 | 0.42% |

| CHANNEL | No. of journals | % in the sample |
|--|-----------------|-----------------|
| Invitations sent to individual authors Web-based submission form (OJS, CEON/CEES Aseestant, etc.) | 5 | 2.12% |
| Invitations sent to individual authors Email, throughout the year Web-based submission form (OJS, CEON/CEES Aseestant, etc.) | 4 | 1.69% |
| Invitations sent to individual authors Email, throughout the year Web-based submission form (OJS, CEON/CEES Aseestant, etc.) Regular postal service, on a CD/DVD | 1 | 0.42% |
| Invitations sent to individual authors Web-based submission form (Google Forms) | 1 | 0.42% |
| Invitations sent to individual authors Email, throughout the year Regular postal service, on a CD/DVD | 1 | 0.42% |
| Email, throughout the year | 77 | 32.63% |
| Email, throughout the year Regular postal service, on a CD/DVD | 3 | 1.27% |
| Email, throughout the year Regular postal service, on a CD/DVD A hard copy of the manuscript is also required. | 2 | 0.85% |
| Email, throughout the year Web-based submission form (OJS, CEON/CEES Aseestant, etc.) | 13 | 5.51% |
| Email, throughout the year Web-based submission form (OJS, CEON/CEES Aseestant, etc.) Regular postal service, on a CD/DVD | 2 | 0.85% |
| Email, throughout the year Web-based submission form (OJS, CEON/CEES Aseestant, etc.) Regular postal service, on a CD/DVD A hard copy of the manuscript is also required. | 1 | 0.42% |
| Web-based submission form (OJS, CEON/CEES Aseestant, etc.) | 35 | 14.83% |
| Web-based submission form (Google Forms) | 2 | 0.85% |
| Regular postal service, on a CD/DVD A hard copy of the manuscript is also required. | 1 | 0.42% |
| A hard copy of the manuscript is also required. | 2 | 0.85% |

Sixty-nine journals (29.24%) used web-based submission forms, most commonly OJS or the CEON/CEES Aseestant (64). A few journals used other solutions: their own improvised journal management systems (1), OpenConf (2), ScholarOne through De Gruyter (2) and Google Forms (5). All of them received submissions throughout the year. In 35 journals (14.83%), this was the only submission channel. It is interesting that eleven journals that had an online journal management system did not receive submissions using web-based forms at the time when the responses were collected.⁷⁹ Generally speaking, the editors of the journals that used online journal management systems sought to discourage email submissions as much as possible because they required additional effort on the part of the editorial staff. Email submissions usually had to be entered into the online system by editors or editorial assistants. Some authors refused to use the online system and they sometimes kept on using email for correspondence throughout the editorial process. During

⁷⁹ The most of them used email. There was one journal where submissions were received by regular postal service, on a CD/DVD. Four journals had introduced a journal management system a few months before the survey and it is possible that it was not fully configured at the time of the survey.

the project, editors were strongly advised to reject all submissions that did not comply with the author guidelines. Nevertheless, some editors still tolerated such practices, especially when submissions came from renowned and elderly scholars.

Ten journals (4.24%) required authors to send a hard copy along with the electronic version of the manuscript. The purpose of the hard copy is unclear. It may be inferred that the practice has survived from the early days of electronic publishing, when non-Unicode character sets were used and when text display could be different on different computers. Fourteen journals (5.93%) received submissions on CDs/DVDs sent by regular postal service. One of these journals used a journal management system, but according to the answers,⁸⁰ it received submissions only by regular postal service, on a CD/DVD.

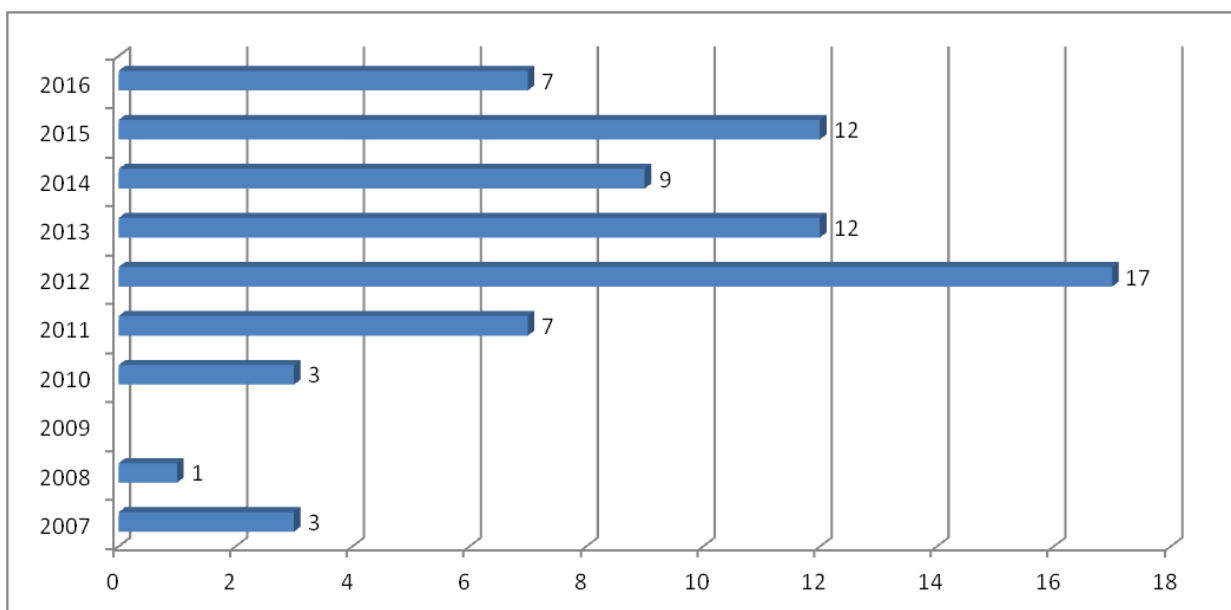


Figure 17 When did you start using a journal management system?

The respondents were asked when they started using a journal management system. There were 71 valid responses. None of the respondents used a journal management system before 2007. A more intensive development in this area could be observed after 2011.⁸¹

9.2.1. Technical quality of submissions

The purpose of questions nos. 30–31 and 51 (see [Appendix 1: Questionnaire](#)) was to check the efficiency of the editorial process. As most journals in Serbia have limited financial and human resources, it is important to find ways to optimize the editorial process. The presented data reflect the responses, as it was impossible to check them.

The respondents were asked what happened if a manuscript was not formatted in accordance with the guidelines for authors. The offered choices described typical situations, as identified based on informal conversations with journal editors. We basically sought to check whether the journals’ editorial and technical staff invested their efforts in correcting something that must have been done

⁸⁰ The submission procedure was not described in the instructions for authors.

⁸¹ Data for 2016 are incomplete, as the survey was closed in July 2016.

by authors. A little more than one-third of the respondents (36.86%, 87) returned 'untidy' manuscripts to authors after the initial editorial check. The manuscripts could be resubmitted only if they were reformatted according to the author guidelines. Based on the information disclosed in informal conversations with editors, manuscripts were most commonly returned due to the poor language quality (especially if they were written in a foreign language), because they exceeded the length limit, or because the authors did not use the template offered by the journal, and less often due to the improper formatting of references or the poor quality of images.

More than one-half of the respondents (52.97%, 125) assigned reviewers even to the manuscripts that did not conform to the journal's style guidelines. If a manuscript eventually received positive reviews, it was either returned to the authors for reformatting and correcting (38.98%, 92) or the corrections were done by the editorial and technical staff. In both cases, delays occurred, while in the latter situation human resources and/or money were wasted. Nearly ten percent of the respondents (9.32%, 22) invested effort and time to format and correct manuscripts before sending them to reviewers. In other words, they invested effort to correct even the manuscripts that were eventually rejected.

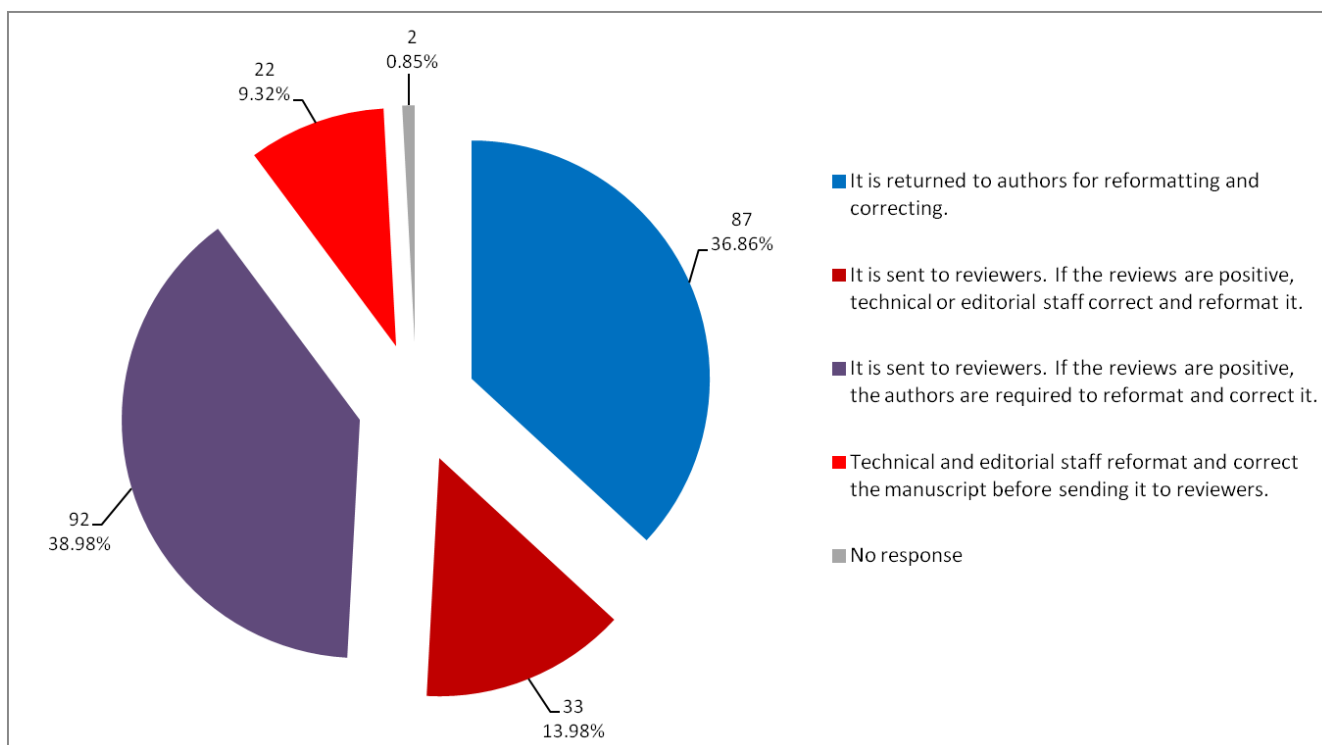


Figure 18 What happens if a manuscript does not comply with the journal's style guidelines?

Editors highlighted the lack of discipline on the part of authors as a major issue. At the same time, it seems that journals fostered such behaviour by tolerating it. Some local authors used different standards when preparing papers for international and local journals. While they sought to conform to the guidelines provided by international journals, especially if they were high-ranking, because they knew that manuscripts would be returned if they failed to comply with the rules, they were rather negligent when preparing papers for local journals. When asked why they kept on tolerating

such practices, some editors expressed the concern that they would ‘lose authors’. This may be understandable for journals with few submissions. However, the editors who receive many papers should understand that as long as they remain trapped in a vicious circle of wasting time and funds on poor-quality papers and irresponsible authors, they will be unable to reach a higher ranking.

9.2.2. Response to reviewers

If authors failed to provide a timely response to reviewers, most journals sent a reminder and extended the deadline (84.74%, 200). A great part of them (46.61%, 110) also warned the authors that the manuscript would be rejected if they missed the new deadline, whereas 90 journals (38.14%) just notified the authors and kept on waiting. Twelve respondents (5.08%) just kept on waiting, without notifying the authors. Three journals (1.27%) rejected a paper once the original deadline had passed. Ten journals (4.24%) notified authors that the manuscript would be rejected if they failed to respond within 48 hours. Out of nine respondents classified as ‘other’, six said that their authors always provided responses on time. Two responses were not clear, whereas one journal rejected manuscripts if the authors failed to provide a response within six months.

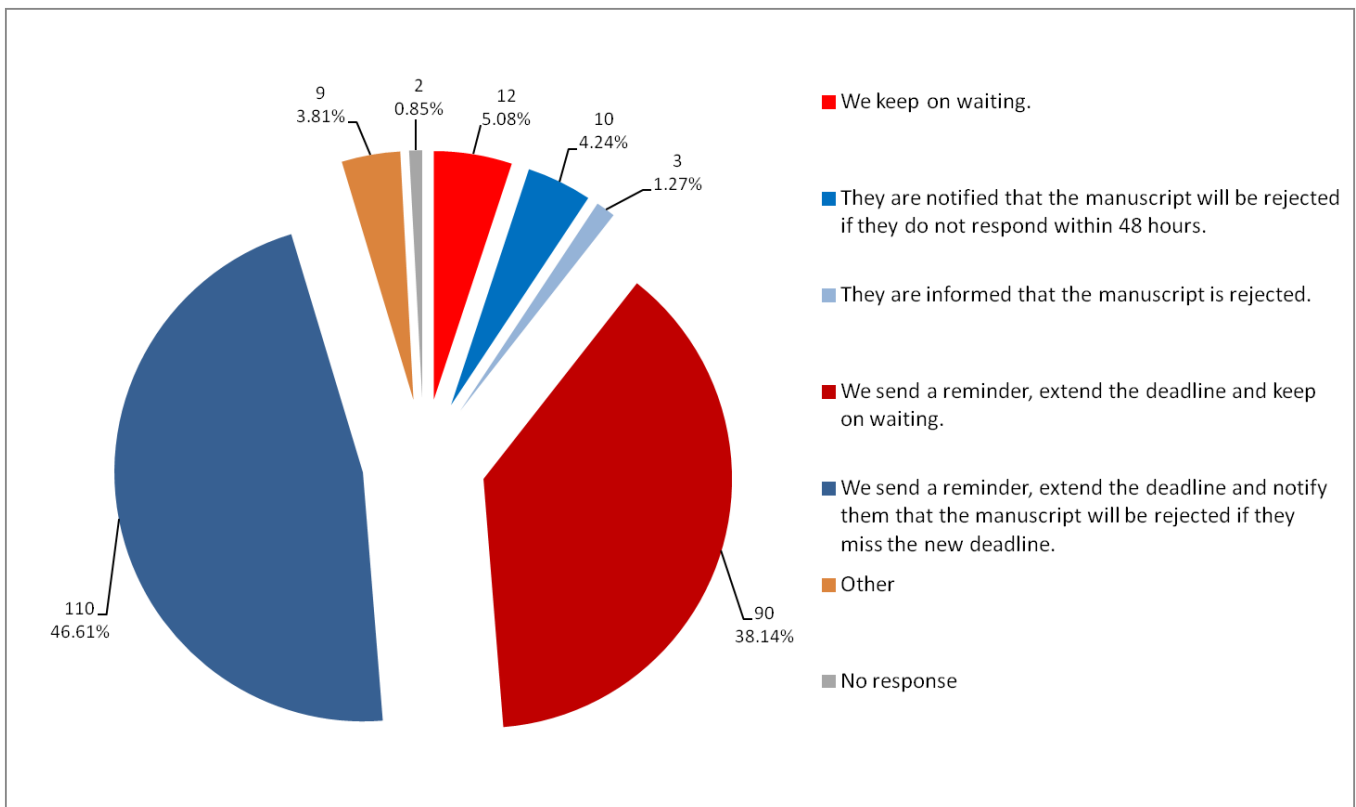


Figure 19 What happens if the authors are late with their response to the reviewers?

9.2.3. References

Figure 20 shows that in most journals references were checked by the editorial staff and even editors, though both authors and reviewers were required to ensure their correctness. About one-half of the respondents (51.69%, 122) said that it was the usual practice, while in 44 journals

(18.64%) this was not normally done, but references were corrected if errors were observed during copyediting and technical editing.

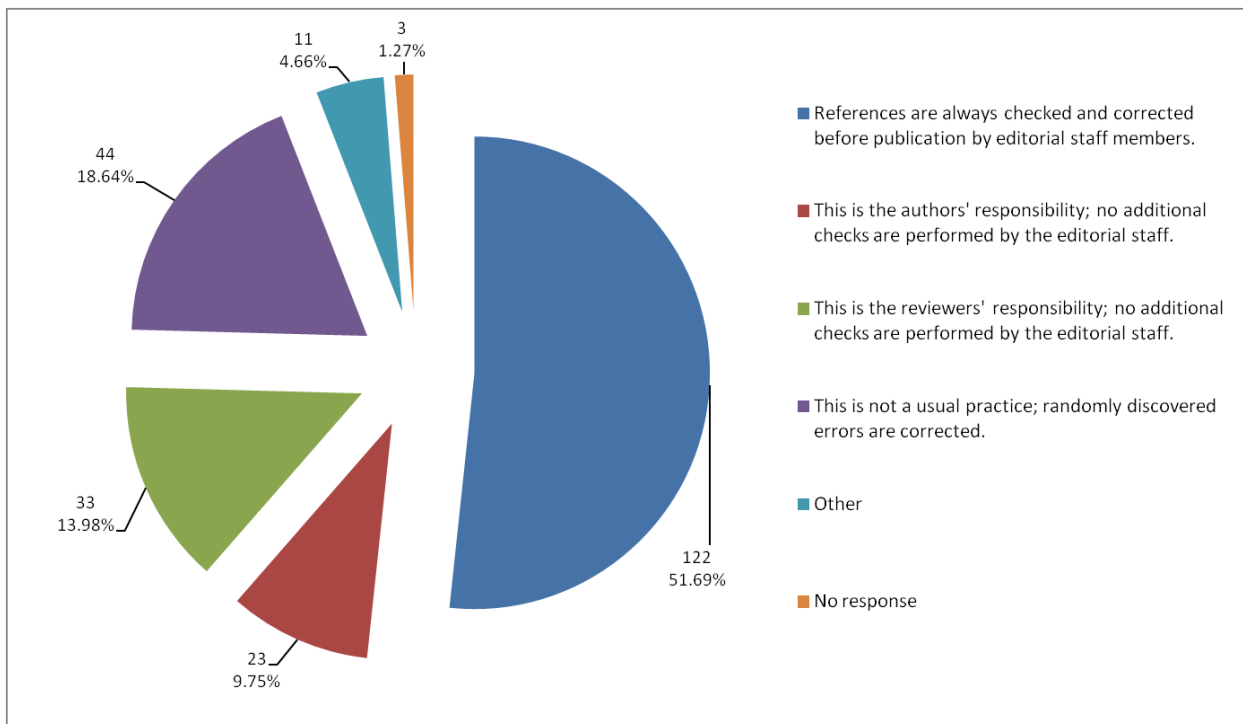


Figure 20 Do you check and correct references/bibliography?

In 56 journals (23.73%) the editorial staff did not check references, as this was considered to be either the authors' (9.75%, 23) or the reviewers' responsibility (13.98%, 33). The eleven respondents that selected none of the offered choices said either that it was both the authors' and reviewers' duty to ensure that references be correct or that multiple checks were performed by reviewers, members of the editorial staff and even editors. Two respondents stressed that only the formatting of references was checked, not their bibliographic quality.

For journal editors, the quality of bibliographic references is a major issue. The topic was widely discussed at the workshops and during the Skype sessions. Most editors highlighted a negligent approach on the part of authors when it came to bibliographic references. Also, the majority of their authors did not use reference management tools. Furthermore, some journals in Serbia still used non-standard citation styles, though the Act on Editing Scholarly Journals ("Akt o uređivanju naučnih časopisa" 2009) offered clear recommendations regarding this issue.⁸² Due to this, even the authors who used reference managers had to format references manually, which increased the possibility of errors. During the project, editors were advised to abandon non-standard citation styles, as well as to use CrossRef's Simple Text Query to check whole lists of references.⁸³ Although the tool has its limits, as it can identify only the bibliographic entries that have a DOI or a PMID, it saves from checking

⁸² It was even possible to find journals that did not use uniform citation styles but they varied from one paper to another.

⁸³ OJS has a plug-in that should do this automatically but some editors who use OJS have reported that it either does not work or has bugs.

every single reference. Instead of correcting references themselves, editors may send the results from Simple Text Query to authors and require them to verify the entries not recognized by CrossRef.

9.3. Peer review

The Act on Editing Scholarly Journals (“Akt o uređivanju naučnih časopisa” 2009), sets standards to be adopted and implemented by Serbian journals evaluated and financially supported by the national ministry responsible for science. It also offers the basic framework for defining peer review policies for all other journals and it seeks to direct their practices. According to the Act, every scholarly journal is obliged to define guidelines for reviewers – a document that not only contains instructions how to evaluate a manuscript but also draws attention to ethical standards and issues. In order to be accepted for publication as a research paper, a manuscript must receive two positive reviews in a double-blind procedure. Journals are required to maintain a list of reviewers and an archive of reviews. Editorial boards should seek to involve as many international reviewers as possible in order to avoid situations that may involve a conflict of interest. Journals are recommended to publish a list of recent reviewers at least once a year.

When undertaking the survey, we were aware that many journals in Serbia did not explicitly define the peer review procedure and the time frame within which it must be completed. As for the practices, a more orderly situation was expected. Although it must be pointed out that most journals indexed in *doiSerbia* and *SCIndeks* conducted peer review in accordance with the standards defined by the Act, even among them it was possible to find some unexpected practices.

Table 20 Information about the peer review process

| | | No. of journals | % in the sample | |
|--|---|-----------------|-----------------|--------|
| D E F I N E D | Peer review process defined both in the online and print versions | 49 | 20.76% | 38.98% |
| | Peer review process defined only in the print version. | 4 | 1.69% | |
| | Peer review process defined only in the online version | 39 | 16.53% | |
| Partially defined peer review process | | 51 | 21.61% | |
| N O T D E F I N E D | Peer review process not defined | 90 | 38.14% | 38.14% |
| | No response | 3 | 1.27% | |

Peer review policies and practices were covered in questions 33–45 (see [Appendix 1: Questionnaire](#)). Respondents were first asked whether the peer review process was explicitly defined on their website and whether the duration of the peer review was indicated. We considered that the procedure was explicitly defined if it was stated that peer review was conducted, which type of peer review was applied and how many reviewers were involved. If any piece of information was missing, we considered it only partially defined. The respondents were also expected to say whether the procedure was defined only on the website, or only in the print version, or in both places. All responses were checked and corrected, and they are summarized in Table 20. Approximately 20% of the answers were incorrect (20.76%, 49 responses,). In most cases (9.74%, 23) respondents claimed that the peer review process was fully or partially defined, though it was not defined at all.

Nineteen respondents (8.05%) said that it was possible to find full information relating to peer review both on the website and in the print version, though it was merely stated that peer review was performed without discussing the process. The journals where the peer review process was fully defined (49) accounted for 20.76% of the respondents. In 39 journals (16.53%), the information about the peer review procedure was defined only on the website, whereas in four journals (1.69%) it was defined only in the print version. The journals where the information about peer review was only partially available accounted for 21.61% of the respondents (51 journals), whereas in 90 journals involved in the survey (38.14%) no information about the peer review process could be found either on the website or in the print version.

The responses relating to the length of the review process were also checked; 9.32% of answers turned out to be incorrect. More than a half of the respondents (61.44%, 145 journals) did not inform potential authors and the readership about the average length of the review procedure. Some of them (25.85%, 61 journals) said that it was impossible to provide this information due to delays in the review process. Only 27 respondents (11.44%) specified the period of time within which peer review was to be completed. Information relating to peer review procedures was addressed in the policy template offered to Serbian journals.

Table 21 Is it indicated on the journal's website and/or in the print version how long it normally takes to complete peer review?

| | | No. of journals | % in the sample | |
|-----|--|-----------------|-----------------|--------|
| YES | Yes | 27 | 11.44% | |
| NO | No. We cannot provide this information due to reviewers' delays. | 61 | 25.85% | 87.29% |
| | No | 145 | 61.44% | |
| | No response | 3 | 1.27% | |

At the time when the survey was conducted, more than one-half of the respondents did not provide information regarding the type of peer review. Therefore, it was impossible to check all answers. The data presented in the following sections are based on what the respondents said.

Most respondents used a double-blind procedure – 66.95% (158 journals). More than 60% of journals from this group belonged to social sciences and humanities. Although double-blind review is recognized as the only legitimate peer review type in the Act (“Akt o uređivanju naučnih časopisa” 2009), 26.69% of the respondents said that they applied a single-blind procedure. The majority of journals (about 85%) from this group belonged to the areas of physical sciences and engineering. Eight respondents (3.39%) indicated that no external peer reviews were conducted, and that editors and editorial board members would assess submitted manuscripts. Three of these journals dealt with humanities but were not really academic journals. Four journals (1.69%) applied a procedure that can be described as open peer review – the authors’ identities are known to reviewers and vice versa, but reviews are not published along with papers.

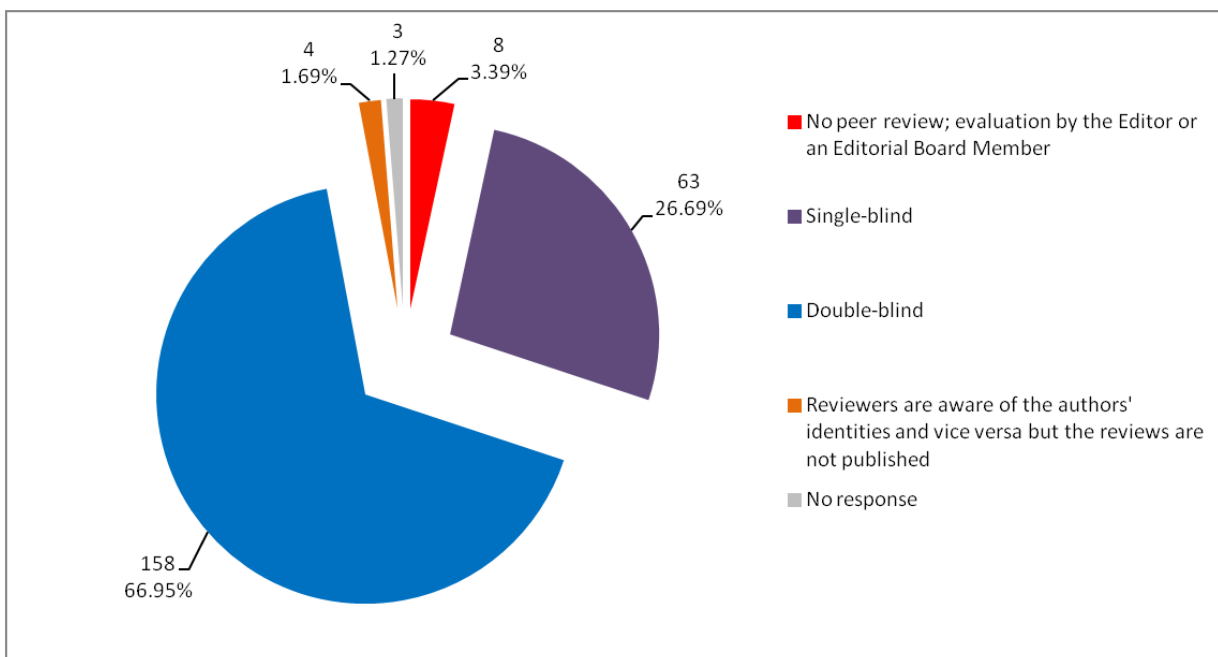


Figure 21 Peer review

Based on the literature data (Bachand and Sawallis 2003; Ware 2008; Mulligan, Hall, and Raphael 2013), the prevalence of double-blind peer review in social sciences and humanities and a greater inclination towards single-blind review among journals in natural sciences and engineering were not unexpected. Nevertheless, some editors expressed their concern regarding the functioning of double-blind review in the journals that were still local in character in a small research community such as Serbia's. Both authors and reviewers were too often able to guess who the 'other person' is, due to which it was impossible to ensure that bias be eliminated. When the topic was narrow and the paper was written in Serbian, the circle of potential reviewers was often limited and sometimes they could not be found outside the group of the author's collaborators. It is noteworthy that a few editors of journals in humanities considered the idea of abandoning double-blind review and making authors and reviewers communicate directly during the peer review process. Others planned to keep the process 'blind' until manuscript acceptance, but to reveal the reviewers' names in the published paper. The group of journals that used a single-blind procedure included several journals indexed in the Web of Science and Scopus. They had a large number of submissions from all over the world and

many of them were poor-quality papers. Their editors argued that it was easier for reviewers to check the profiles of authors, to see whether they had been involved in misconduct and to detect self-plagiarism if the authors' names were known to them.

In most journals (73.73%, 174) each paper was reviewed by at least two reviewers. In six journals (2.54%), each paper was assessed by at least three reviewers. On the opposite side, there were 36 journals (15.25%) where each paper was reviewed by a single reviewer, and eight journals (3.39%) where manuscripts were peer reviewed by the editor or an editorial board member only. These 36 journals failed to meet the requirement that a scientific paper must receive two positive reviews in order to be published, as set in the Act on Editing Scholarly Journals. The 'other' group included seven journals where one or two reviewers were assigned to each paper and two journals where 2–3 or more than three reviewers assessed each paper.

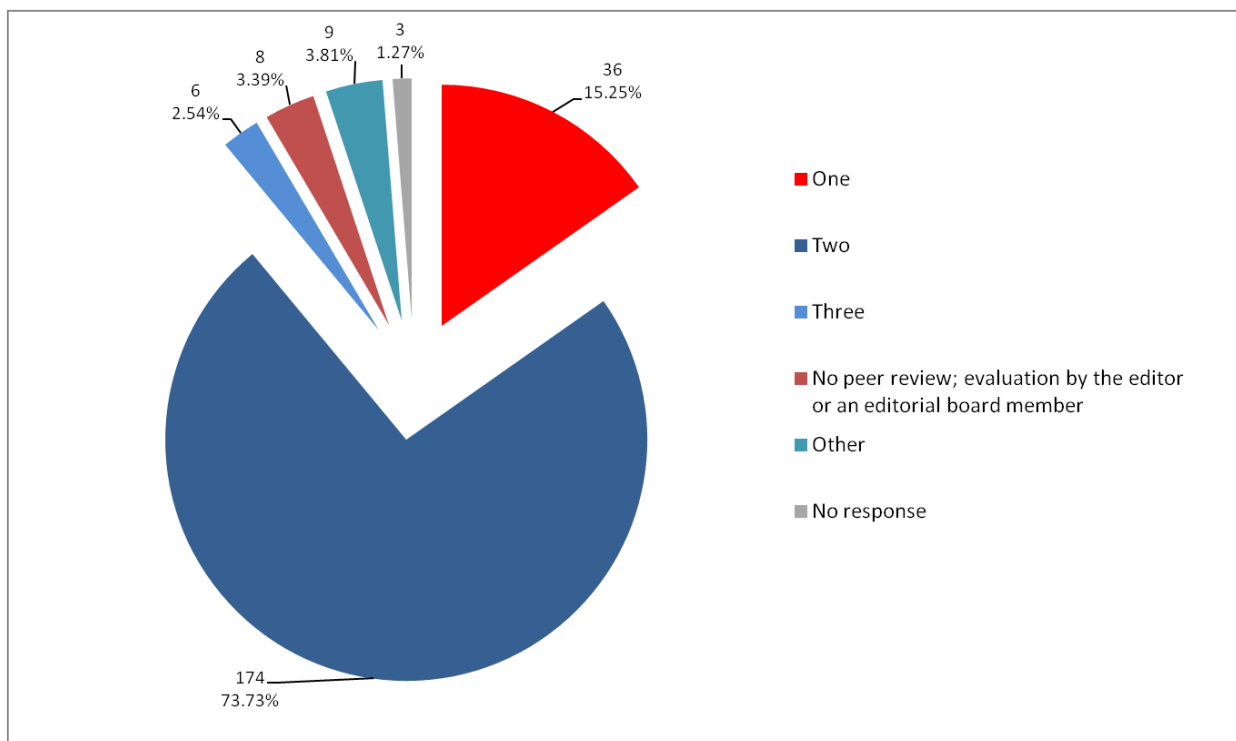


Figure 22 How many reviewers evaluate a manuscript (under normal circumstances)?

More than one-half of the respondents (52.54%, 124) assigned additional reviewers when the original reviewers disagreed. In 36 journals (15.25%), it was for the editor to decide whether a paper would be published or not, whereas in 25 journals (10.59%) the decision was made by the editorial board. Although this approach did not necessarily lead to unbiased decisions, those who applied it argued that the assessment by the editor or the editorial board could be counted as a third review and stressed that it saved time. In four journals (1.69%), two opposing reviews led to manuscript rejection. Although the question was not mandatory, it was answered by most journals where less than two reviewers assessed each paper. These responses were considered invalid (16.10%, 38).

According to responses, most journals (84.75%, 200) never faced appeals or complaints regarding peer review. Three respondents skipped the question, while 36 (15.25%) said that they had to deal

with complaints. In most cases, complaints were reviewed by the editorial board. If a complaint was justified, new reviewers were assigned; if it was unfounded, the editor or the editorial board supported the reviewer(s) decision.

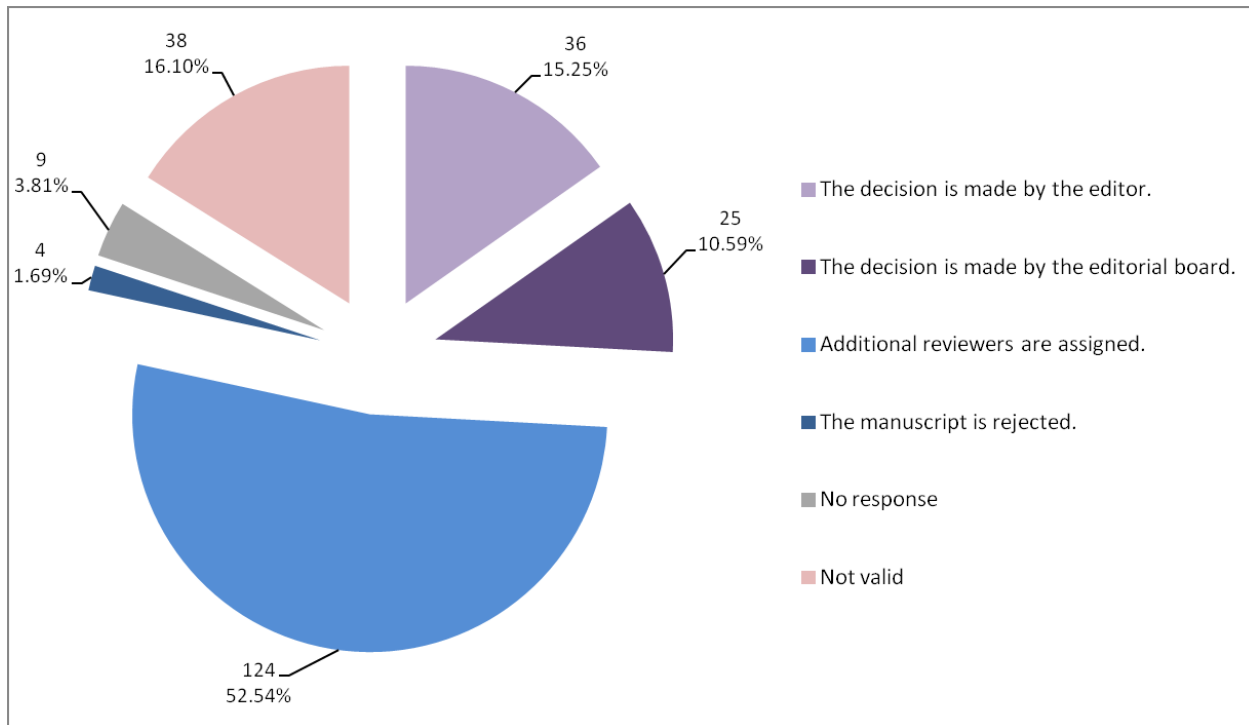


Figure 23 What happens if the decisions of the reviewers are not the same (accept/reject)?

The purpose of question no. 39 was to identify the most common ways of selecting (and recruiting) reviewers in Serbian journals. The responses are summarized in Figure 24 and Table 22. In most journals (75.42%, 178), it was the editor’s task to select reviewers. In 82 journals (34.74%), the selection of reviewers was the full responsibility of the editor. The editor sometimes selected reviewers from among the members of the editorial board, a narrow circle of experts who often reviewed for the journal, or, less commonly, persons suggested by authors. Reviewers were selected among the members of the editorial board in 85 journals (36.02%); in 24 journals (10.17%) this is the only way of finding reviewers. Fifty-one journals (22.88%) relied on a narrow circle of experts who frequently reviewed for them. In 17 journals (7.2%), they were the only reviewers. Less frequently, editors took into account the notes of interest submitted by scholars who would like to serve as reviewers (11.86%, 28) and authors’ suggestions. In some journals authors’ suggestions were used only to form a database of potential peer reviewers, whereas manuscripts were not sent to the experts suggested by authors. Two responses contained contradicting claims.⁸⁴ Three respondents skipped the question.

⁸⁴ The contradicting claim: manuscripts were usually sent to the reviewers suggested by authors, while at the same time, the suggestions were used merely to compile a database of potential reviewers, while manuscripts were sent to other reviewers.

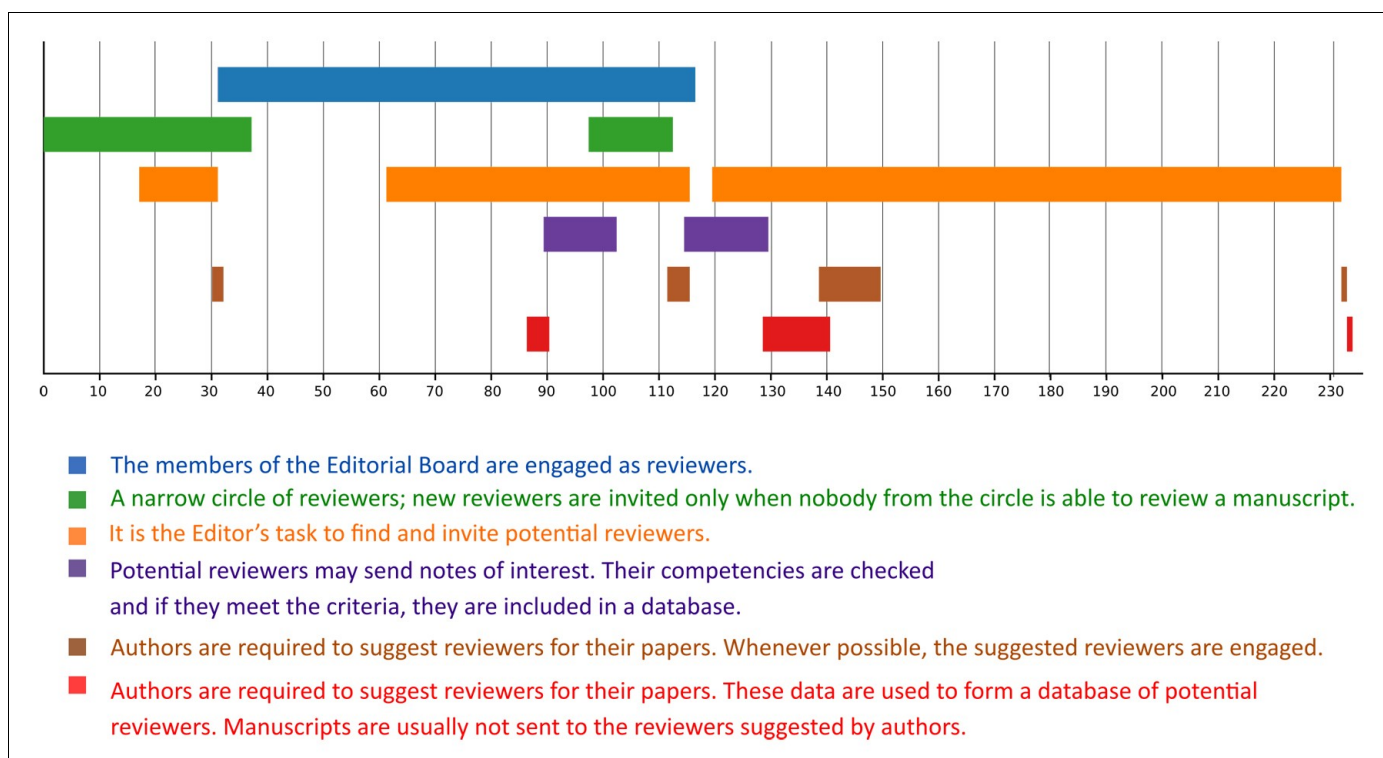


Figure 24 Linear diagram showing various ways of recruiting reviewers

Table 22 Recruiting reviewers

| THE WAYS OF SELECTING/RECRUITING REVIEWERS | No. of journals | % in the sample |
|---|-----------------|-----------------|
| The members of the Editorial Board are engaged as reviewers. | 24 | 10.17% |
| The members of the Editorial Board are engaged as reviewers. A narrow circle of reviewers; new reviewers are invited only when nobody from the circle is able to review a manuscript. | 5 | 2.12% |
| The members of the Editorial Board are engaged as reviewers. A narrow circle of reviewers; new reviewers are invited only when nobody from the circle is able to review a manuscript. It is the Editor's task to find and invite potential reviewers. | 9 | 3.81% |
| The members of the Editorial Board are engaged as reviewers. It is the Editor's task to find and invite potential reviewers. | 25 | 10.59% |
| The members of the Editorial Board are engaged as reviewers. It is the Editor's task to find and invite potential reviewers. Potential reviewers may send notes of interest. Their competencies are checked and if they meet the criteria, they are included in a database. | 7 | 2.97% |
| The members of the Editorial Board are engaged as reviewers. Potential reviewers may send notes of interest. Their competencies are checked and if they meet the criteria, they are included in a database. | 1 | 0.42% |

| THE WAYS OF SELECTING/RECRUITING REVIEWERS | No. of journals | % in the sample |
|--|-----------------|-----------------|
| <p>The members of the Editorial Board are engaged as reviewers.</p> <p>A narrow circle of reviewers; new reviewers are invited only when nobody from the circle is able to review a manuscript.</p> <p>It is the Editor's task to find and invite potential reviewers.</p> <p>Potential reviewers may send notes of interest. Their competencies are checked and if they meet the criteria, they are included in a database.</p> | 5 | 2.12% |
| <p>The members of the Editorial Board are engaged as reviewers.</p> <p>It is the Editor's task to find and invite potential reviewers.</p> <p>Authors are required to suggest reviewers for their papers. Whenever it is possible, reviewers suggested by authors are engaged.</p> | 2 | 0.85% |
| <p>The members of the Editorial Board are engaged as reviewers.</p> <p>It is the Editor's task to find and invite potential reviewers.</p> <p>Potential reviewers may send notes of interest. Their competencies are checked and if they meet the criteria, they are included in a database.</p> <p>Authors are required to suggest reviewers for their papers. These data are used to form a database of potential reviewers. Manuscripts are usually not sent to the reviewers suggested by authors.</p> | 1 | 0.42% |
| <p>The members of the Editorial Board are engaged as reviewers.</p> <p>It is the Editor's task to find and invite potential reviewers.</p> <p>Potential reviewers may send notes of interest. Their competencies are checked and if they meet the criteria, they are included in a database.</p> <p>Authors are required to suggest reviewers for their papers. Whenever it is possible, reviewers suggested by authors are engaged.</p> | 1 | 0.42% |
| <p>The members of the Editorial Board are engaged as reviewers.</p> <p>It is the Editor's task to find and invite potential reviewers.</p> <p>Authors are required to suggest reviewers for their papers. These data are used to form a database of potential reviewers. Manuscripts are usually not sent to the reviewers suggested by authors.</p> | 3 | 1.27% |
| <p>The members of the Editorial Board are engaged as reviewers.</p> <p>A narrow circle of reviewers; new reviewers are invited only when nobody from the circle is able to review a manuscript.</p> <p>Authors are required to suggest reviewers for their papers. Whenever it is possible, reviewers suggested by authors are engaged.</p> | 1 | 0.42% |
| <p>The members of the Editorial Board are engaged as reviewers.</p> <p>A narrow circle of reviewers; new reviewers are invited only when nobody from the circle is able to review a manuscript.</p> <p>It is the Editor's task to find and invite potential reviewers.</p> <p>Authors are required to suggest reviewers for their papers. Whenever it is possible, reviewers suggested by authors are engaged.</p> | 1 | 0.42% |
| <p>A narrow circle of reviewers; new reviewers are invited only when nobody from the circle is able to review a manuscript.</p> | 17 | 7.2% |
| <p>A narrow circle of reviewers; new reviewers are invited only when nobody from the circle is able to review a manuscript.</p> <p>It is the Editor's task to find and invite potential reviewers.</p> | 13 | 5.51% |
| <p>A narrow circle of reviewers; new reviewers are invited only when nobody from the circle is able to review a manuscript.</p> <p>It is the Editor's task to find and invite potential reviewers.</p> <p>Authors are required to suggest reviewers for their papers. Whenever it is possible, reviewers suggested by authors are engaged.</p> | 1 | 0.42% |
| <p>It is the Editor's task to find and invite potential reviewers.</p> | 82 | 34.74% |

| THE WAYS OF SELECTING/RECRUITING REVIEWERS | No. of journals | % in the sample |
|---|-----------------|-----------------|
| It is the Editor's task to find and invite potential reviewers. Potential reviewers may send notes of interest. Their competencies are checked and if they meet the criteria, they are included in a database. | 9 | 3.81% |
| It is the Editor's task to find and invite potential reviewers. Potential reviewers may send notes of interest. Their competencies are checked and if they meet the criteria, they are included in a database. Authors are required to suggest reviewers for their papers. These data are used to form a database of potential reviewers. Manuscripts are usually not sent to the reviewers suggested by authors. | 1 | 0.42% |
| It is the Editor's task to find and invite potential reviewers. Authors are required to suggest reviewers for their papers. Whenever it is possible, reviewers suggested by authors are engaged. | 9 | 3.81% |
| It is the Editor's task to find and invite potential reviewers. Authors are required to suggest reviewers for their papers. Whenever it is possible, reviewers suggested by authors are engaged. Authors are required to suggest reviewers for their papers. These data are used to form a database of potential reviewers. Manuscripts are usually not sent to the reviewers suggested by authors. | 2 | 0.85% |
| It is the Editor's task to find and invite potential reviewers. Authors are required to suggest reviewers for their papers. These data are used to form a database of potential reviewers. Manuscripts are usually not sent to the reviewers suggested by authors. | 9 | 3.81% |
| Potential reviewers may send notes of interest. Their competencies are checked and if they meet the criteria, they are included in a database. | 3 | 1.27% |
| Authors are required to suggest reviewers for their papers. Whenever it is possible, reviewers suggested by authors are engaged. | 1 | 0.42% |
| Authors are required to suggest reviewers for their papers. These data are used to form a database of potential reviewers. Manuscripts are usually not sent to the reviewers suggested by authors. | 1 | 0.42% |

The majority of respondents (73.73%, 174) said that reviews were most commonly delivered on time (but delays could occur). Sixteen 16 (6.78%) respondents said that delays were usual, while 43 respondents (18.22%) answered that reviews were always delivered in a timely manner.

The responses to question no. 41, regarding measures undertaken when reviewers were late in delivering their reviews, reveal two prevailing approaches.⁸⁵ Both involve sending a reminder and extending the deadline, but while one group of journals (47.03%, 111) assigned new reviewers if the new deadline was missed, the other (41.53%, 98) kept on waiting even after the deadline. Five journals just waited, while another five informed the reviewers that the task would be assigned to other reviewers if they failed to deliver their reviews within 48 hours.

⁸⁵ Nine respondents (3.81%) said that their reviewers had never been late, stressing that their answers reflected what they would do and not what they had already done. Keeping in mind the number of the respondents who said that reviews were always or usually delivered on time, it may be assumed that there are also other journals whose answer was only hypothetical.

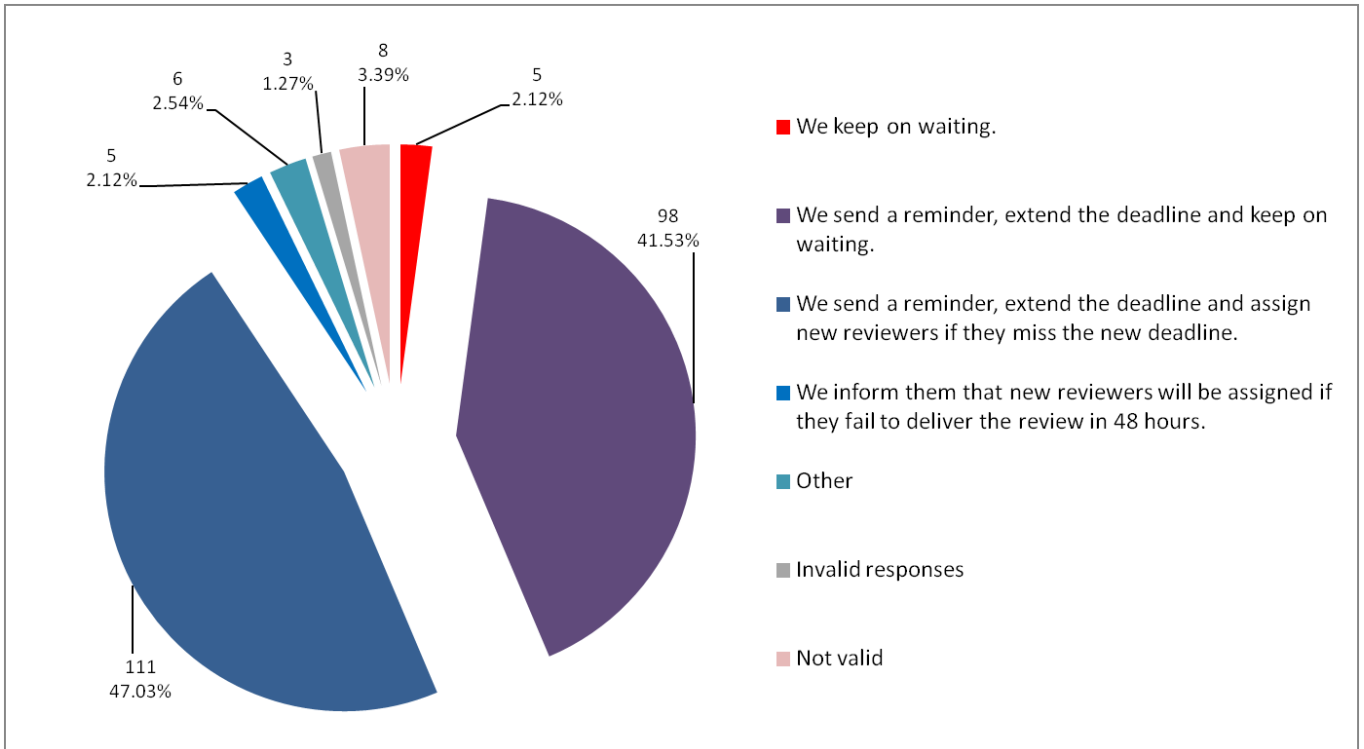


Figure 25 What happens if reviewers are late in submitting their reviews?

The purpose of the following questions was to establish what types of content, except research papers, are subject to peer review. The responses indicated that 66.10% of journals (156) published invited papers but not all of them conducted standard peer review for this type of content: in 33 journals (13.98%), invited papers were not subject to peer review. In most cases, this fact was not clearly indicated in the editorial policy and/or instructions for authors and the invited papers that had not been subject to peer review were not clearly marked.

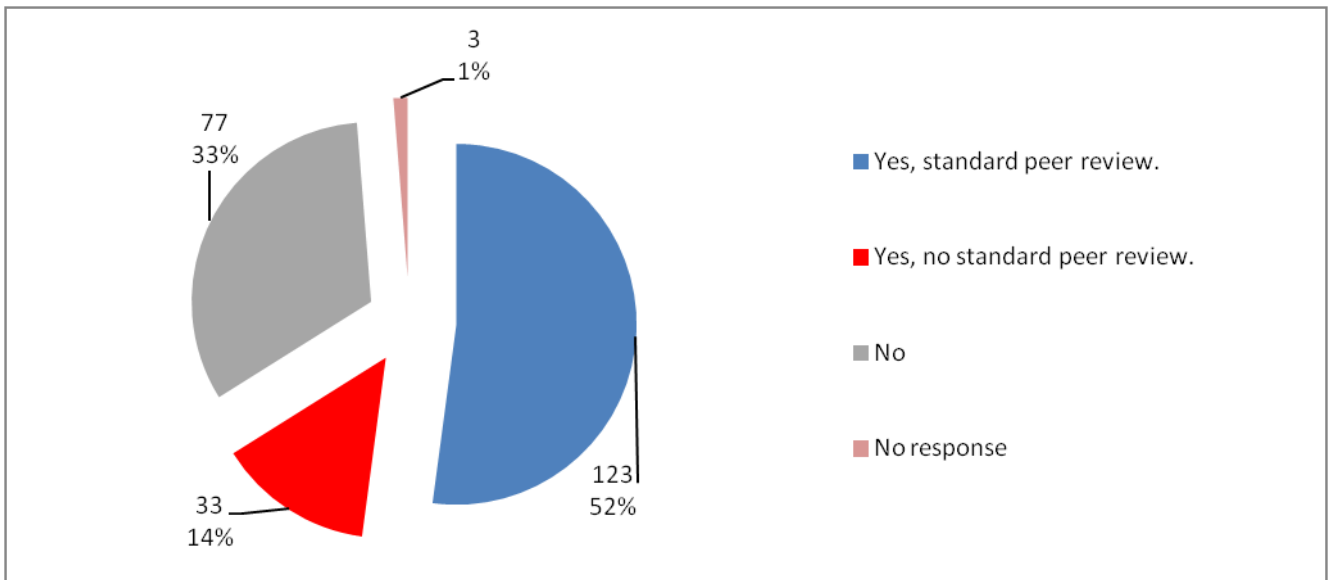


Figure 26 Does the journal publish invited papers? Are they peer-reviewed?

Conference papers were covered in two questions – 14 and 34 (see [Appendix 1: Questionnaire](#)). The purpose of the former question was to establish whether conference papers were published in journals, whereas the latter sought to identify peer review practices that applied to this type of content. Some responses were inconsistent. Ten respondents claimed in the ‘content’ section that the journal published conference papers, while in the ‘peer review’ section they provided the opposite answer. At the same time, 15 respondents claimed that they did not publish conference papers in the ‘content’ section, though in the ‘peer review’ section they said they did. It is possible that some respondents did not understand the questions. This resulted in the responses considered invalid.

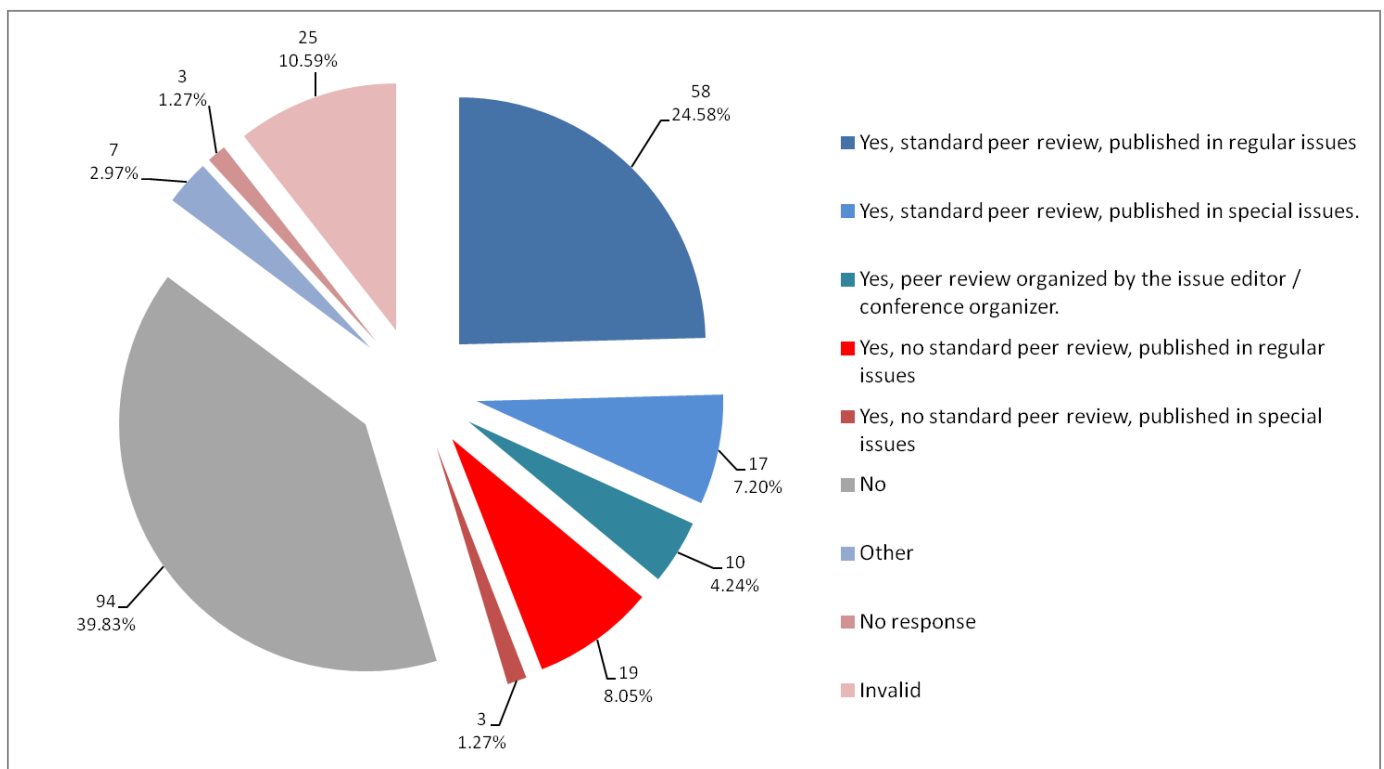


Figure 27 Does the journal publish conference papers? Are they peer-reviewed?

Almost 40% of the respondents (39.83%, 94) said that they did not publish conference papers. Seventy-five journals (31.78%) published papers presented at conferences but they subjected them to a regular peer review procedure. The majority of them (24.58%, 58) included such papers in regular issues,⁸⁶ whereas 17 journals (7.20%) published them in special issues. In three journals (1.27%), conference papers were published in special issues without a standard peer review procedure. In 19 journals (8.05%), they were not peer reviewed and were included in regular issues. This practice is particularly problematic as there is usually no information that a paper has not been peer reviewed. In ten journals (4.24%), peer review was organized by a guest editor or a conference organizer. In informal conversations, journal editors reported that they were often pressurized to introduce special issues or supplements where only conference papers would be published or to include such papers in regular issues. This problem was especially common in journals indexed in the

⁸⁶ These papers mostly featured research presented at a conference and published as an abstract. The authors were usually required to disclose that a paper had originally been presented at a conference in a footnote or the Acknowledgments.

Web of Science and Scopus, as well as those published or co-published by professional associations that also organized conferences. During the project, they were advised not to yield under this pressure. It is usually difficult to ensure the quality of peer review when the selection of reviewers and the review process are not under the full control of the Editor-in-Chief or the procedure is different from the standard review process.

Most respondents (88.56%, 209) said that reviewers were not paid for their work. However, in 20 journals (8.47%) peer reviewers received honoraria. It is interesting that only two of them charged APCs. In all other cases, this was an old practice that had not been abandoned.⁸⁷ Four journals reward reviewers in other ways, by granting a free subscription to the print version of the journal and/or a free membership of the association that published it (two journals), granting a free conference fee for the conference organized by the publisher (one journal) and a diploma for the most active reviewer (one journal).

Although it was apparent that the editors of Serbian journals were either not familiar with the concept of post-publication peer review or were aware that their audience would not be interested in getting involved in this type of communication, we nevertheless asked them whether their readers were offered an opportunity to make comments about published papers. Seven respondents said that it was possible to make comments and that readers commented on their papers. However, only one of these journals had a comments module on the website. In the remaining six, it was not possible to make comments on the online platform and these answers were considered invalid. Although 17 respondents said that comments were enabled on their websites but readers never commented on papers, an investigation of the website showed that only one of them had a comments module. Two respondents were not aware that comments were enabled on their websites. Most journals (87.71%, 207) did not enable commenting on their websites.⁸⁸ It should be pointed out that a major technical obstacle to enabling comments for individual papers was the fact that a significant number of journals did not have landing pages for articles (see [10.4. Journal websites](#)), but this was by no means a major reason for not offering the possibility to comment on papers. The true reasons should be sought for in long-established practices.

9.4. Similarity checking and plagiarism detection

Journal publishers in Serbia report similarity checking and plagiarism detection as a major problem primarily due to limited funds and the inability to afford reliable commercial software for this purpose. The use of similarity checking software was covered in question no. 52. It was possible to verify the majority of the positive responses (in *SCIndeks* and/or journal websites). In cases where respondents stated that journals used similarity checking software though the information could not be confirmed (no information was provided on the journal websites of 15 journals), we assumed that the responses were true, except for three journals where the answer to the latter question

⁸⁷ In Serbian journals, the practice of paying reviewers for their work has been increasingly abandoned over the past ten years. It has survived the longest in journals published by public institutions.

⁸⁸ Some journal websites powered by Wordpress or Joomla have a comments module but commenting is not enabled for individual articles. These cases are not of interest for this study as the availability of commenting options is here analyzed in the context of post-publication peer review.

indisputably suggested that they did not use any specialized software.⁸⁹ In these cases, the responses were corrected and included in the “No” group. Four respondents skipped the question.

The survey data showed that 62.71% of the respondents (148 journals) did not use any similarity checking tools at the time when the survey was conducted. The percentage of journals that claimed to use plagiarism tracking software was 36.02% (85 journals), while the percentage of journals for which this information was transparent and could be checked was 30.93% (73 journals). Keeping in mind the profile of the respondents, it is reasonable to assume that the percentages would have been different if all journals in Serbia had responded – namely, the share of journals that used plagiarism detection tools would have been lesser.

Table 23 The use of similarity checking tools

| Does the journal use similarity checking software? | No. of journals | % in the sample |
|--|-----------------|-----------------|
| Yes | 85 | 36.02% |
| No | 148 | 62.71% |
| Invalid response | 3 | 1.27% |

The most common similarity checking tools used in Serbian journals included:

- iThenticate through CEON/CEES, as part of a publishing package (34 journals);
- iThenticate through De Gruyter (5 journals);
- iThenticate obtained independently (4 journals);
- Ephorus/Turnitin (11 journals)
- Viper Anti-Plagiarism scanner (6 journals)
- Plagiarisma (3 journals)
- Grammarly (2 journals)
- Plagiarism Checker X (2 journals)
- PlagiarismChecker.com (2 journals);
- Antiplagiarism.net (2 journals);
- other free tools (5 journals).

Five journals used multiple similarity checking tools. They mostly combined various free tools, but there was one journal where iThenticate and Ephorus/Turnitin were used in parallel. Ephorus/Turnitin was a preferred solution in journals published by universities, where this tool was used for screening student papers.

Manuscripts were screened for plagiarism at various stages: in some journals, all of the submitted manuscripts were screened before peer review, while in others only papers that had passed peer review were checked. Some respondents reported that plagiarism checks were performed only if editors or reviewers suggested that there might be traces of plagiarism.

Conversations with editors revealed that publishers were not fully aware of the operation of similarity checking tools and their limitations (Spinak 2014). Furthermore, they were mostly unaware

⁸⁹ The responses included: “citation manager [sic!]”, “Google”, “by checking keywords, author names and affiliations”.

of the privacy policies and the possibility of misuse (Bailey 2010, 2013). During the project, journal publishers were advised to be cautious when using free tools which required to upload papers, as most of these tools did not have a defined or sufficiently transparent privacy policy. Since journals are required to treat submitted manuscripts as confidential materials, the use of such tools is accompanied with the risks of stealing uploaded manuscripts.

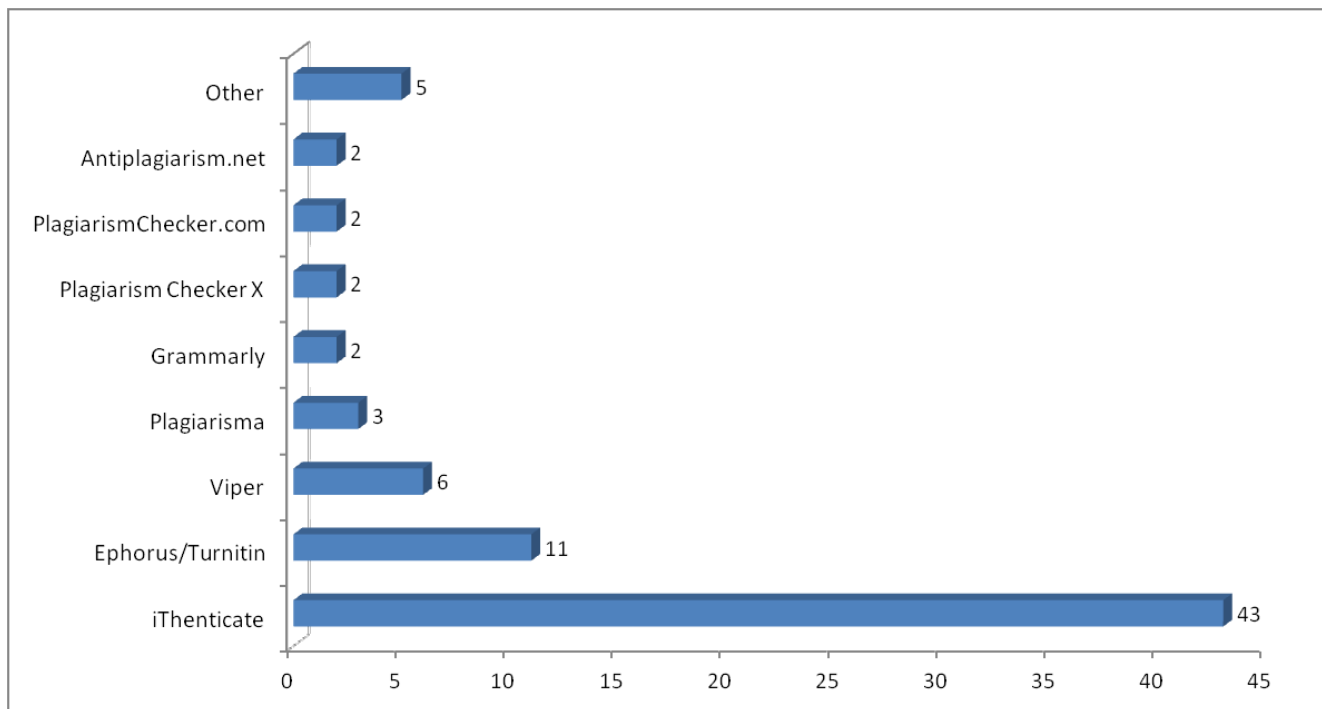


Figure 28 The most commonly used similarity checking tools

Approaches to plagiarism and especially self-plagiarism and duplicate publication in Serbia have slightly changed over the past decades primarily due to the internationalization of local journals and their inclusion in international databases, such as the Web of Science and Scopus. There are areas of research in Serbia where it is considered acceptable to publish (almost) the same paper in a conference proceedings and a journal, without crediting the original publication; or to publish the same paper in Serbian and in English (or other language) without indicating that the latter publication was only a translation; or to include a substantial proportion of a paper in a monograph without citing the original publication, or even to publish the same paper in the same language in multiple journals (*Measures against Plagiarism and Related Phenomena: A Proposal* 2011). The plagiarism checks performed by CEON/CEES and even informal and friendly notices of plagiarism are still a source of anger among some journal publishers, who regard them as ‘accusations’ rather than warnings and calls to make put additional measures in place, aimed at safeguarding the integrity of journals. The journals already indexed by the Web of Science and Scopus, as well as those striving to be included in these databases, show a greater awareness of the importance of plagiarism checking, which is expected, as they are not only visible to a greater audience but they may also face sanctions if they do not comply (e.g. suspension from citation indexes). However, it is still possible to hear the question: “What percentage of repeated text is tolerable?” Authors suspected of plagiarism often try to justify themselves by saying that they were not aware that it was necessary to cite a particular

reference or that they copied whole phrases due to their limited knowledge of English. It seems that some Serbian journals are still prone to tolerating such behaviour, or at least they are reluctant when it comes to sanctioning it. In cases of suspected self-plagiarism or duplicate submission, one of the common explanations (Wiwanitkit and Wiwanitkit 2017) is that the authors have submitted the manuscript to another journal because there has been no response from the journal where they sent it originally. It sometimes happens that emails end up as spam but authors are obliged to withdraw the manuscript from one journal before submitting it to another.

During the project, we also sought to explain to publishers that there were procedures to be undertaken in case plagiarism was discovered in already published papers: establishing the responsibility for plagiarism in individual cases and retracting plagiarized papers. Some editors sought to encourage authors to initiate requests for retractions and corrections whenever it was possible, thereby enabling them to alleviate the burden of responsibility. On the other hand, authors always opted for a correction rather than a retraction of a paper. Many editors were reluctant when it came to retractions because they were often exposed to personal pressures (especially when plagiarized papers were authored by local researchers) and criticism.

Journals largely depend on the volunteer or poorly paid work on the part of editors and other members of the editorial staff. Editorial work is usually handled as a part-time commitment. Under the circumstances, plagiarism checking and dealing with notices that report plagiarism in published papers are seen as unpleasant and time-consuming. Editors sometimes contact the editorial staff of the journals where the disputed papers were published originally, but this is not a common practice and is done only when necessary. Also, editors are still reluctant to get involved in discussions on platforms such as PubPeer, as they object the communication where journals and authors are publicly exposed by anonymous commenters.

9.5. Editorial documentation

According to the Act on Editing Scholarly Journals (“Akt o uređivanju naučnih časopisa” 2009), scholarly journals in Serbia are obliged to maintain a register of submitted manuscripts, an archive of authors’ statements, instructions for reviewers, a list of reviewers and a register of reviews. If a journal uses an electronic journal management system approved by the ministry responsible for science, then it is not necessary to maintain the register of reviews. As the majority of journals in Serbia still do not use online journal management systems, the above-mentioned documentation often has to be maintained manually. The purpose of questions nos. 53–56 (see [Appendix 1: Questionnaire](#)) was to identify the most common practices in maintaining editorial documentation – namely to see whether they archived the files (and not only the above-mentioned lists and registers) in an organized manner. It was impossible to check all responses. It could merely be established whether a journal had an online management system or not. Therefore, the presented data reflect the responses and not necessarily the real situation.

According to the responses, nearly three-quarters of the journals covered by the survey (72.88%, 172 journals) regularly archived the correspondence with authors and reviewers (including reviewers

reports and authors' responses to reviewers) either within a journal management system⁹⁰ (22.88%, 54) or in the editorial office (50%, 118). In those journals where the documentation was archived manually, the correspondence was saved on a local computer, backed-up on CDs, DVDs or external HDs, copied to Dropbox and sometimes even printed.⁹¹

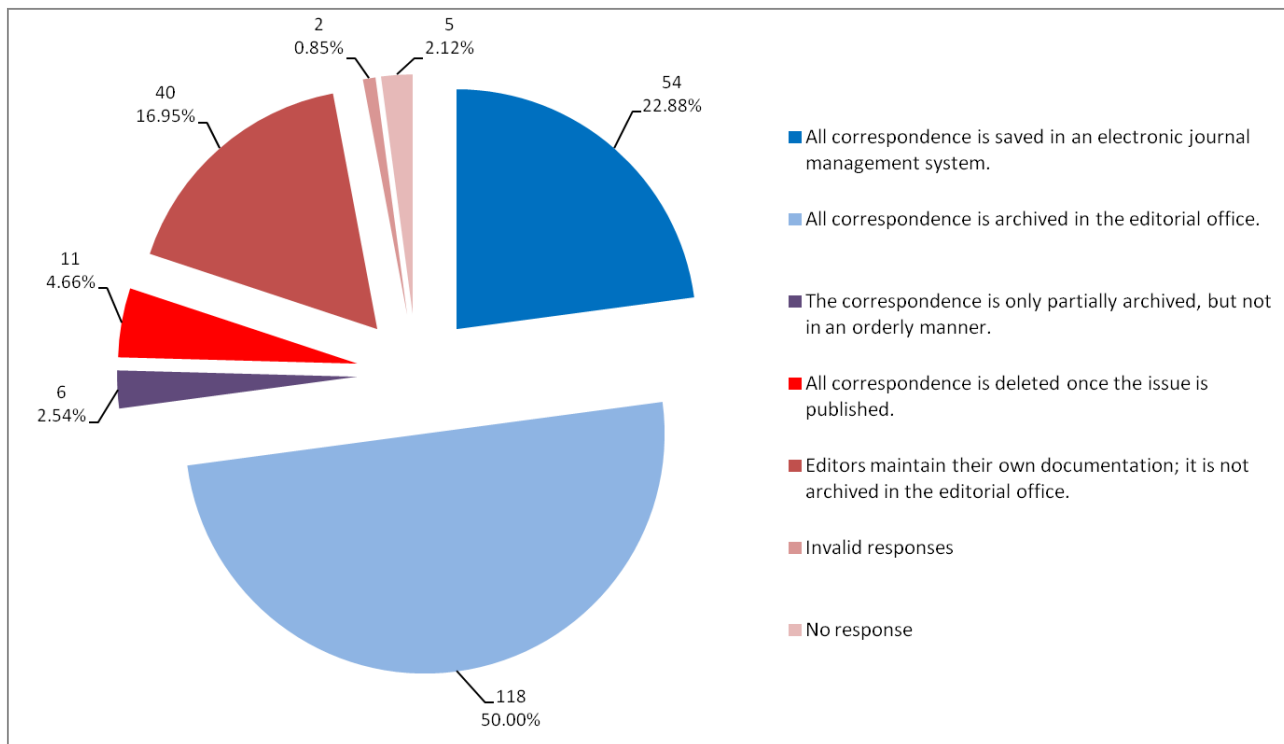


Figure 29 Correspondence with authors and reviewers

On the other hand, 24.15% of the respondents (57 journals) did not have established practices regarding editorial documentation. Eleven respondents (4.66%) deleted all correspondence once the current issue was published, six (2.54%) archived it partially and/or in a random manner, while the editors and section editors of 40 journals (16.95%) kept their own archives and the correspondence only rarely or never reached the editorial office. This is a serious problem, especially in case of dispute or investigation, when it is necessary to check the editorial documentation. Furthermore, this practice makes it difficult for new editors to get an insight into the activities of the previous editorial staff. Five respondents skipped the question, while two said that they used a journal management system, though they did not use it. These responses were considered invalid.

Most journals covered by the survey (66.95%, 158) archived all versions of accepted manuscripts, from submission to the published version.⁹² The majority of them (41.95%, 99) did it manually, whereas 59 journals (25%) used an online journal management system. The fact that 36 journals (15.25%) deleted all previous versions of manuscripts once they were published should be a reason

⁹⁰ Most commonly, Open Journal Systems or the CEON/CEES Aseestant.

⁹¹ This group also included some journals that used a journal management system and archived the correspondence within the system. They also saved copies of the correspondence on a local computer.

⁹² The original, submitted manuscripts, the versions corrected in accordance with the reviewers suggestions, the accepted version, corrected proofs and the final PDFs.

for concern. In 24 journals (10.17%) it was up to editors to archive all versions of accepted manuscripts, but one could not be sure whether they were doing this, or not. Five respondents skipped the question, while 13 responses (5.51%) were considered unreliable because the respondents claimed that they used a journal management system, which could not be confirmed.

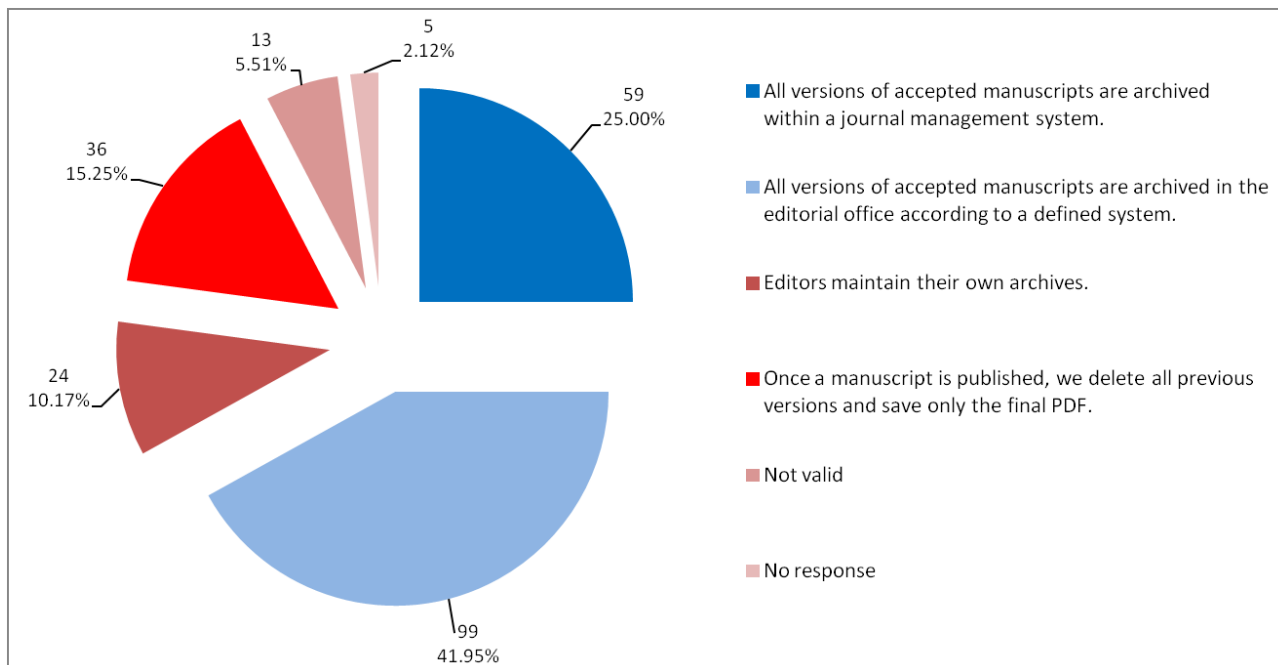


Figure 30 Archiving various versions of accepted manuscripts

As far as keeping track of rejected manuscripts is concerned, the situation is similar: three-quarters of the respondents (75.85%) archived rejected manuscripts, either in the editorial office (51.27%, 121) or within an online journal management system (24.58%, 58). Two respondents said that they kept all rejected manuscripts for a while but that eventually they were deleted. One respondent commented that the previous editor had deleted rejected manuscripts but the practice was abandoned when a new editor was appointed. The number of the journals where rejected manuscripts were deleted almost immediately was not insignificant (8.90%, 21). In 19 journals (8.05%), editors maintained their own archives. Nine responses were either not clear or not reliable, while six respondents skipped the question.

If we look at the answers that individual respondents provided to all three questions it is clear that only a little more than a half of them (58.05%, 137) consistently applied good practices. In all other cases, answers suggested that not everything was done in accordance with standards. Judging by the responses, 29 journals (12.29%) have extremely messy, scattered and incomplete documentation, mostly due to the fact that there was no central system for archiving editorial documentation but it was up to individual editors to preserve it (9.75%, 23). In six journals (2.54%), the correspondence with authors and editors, the previous versions of accepted manuscripts and rejected manuscripts were deleted once the current issue was published.

The respondents were also asked whether they tracked the statistics of accepted and rejected manuscripts. A little more than one-half provided a negative answer (53.29%, 126), whereas 106

respondents (44.92%) claimed that they tracked the ratio of accepted and rejected manuscripts. However, keeping in mind the answers to other questions, five (positive) responses might be unreliable. During the project, editors were advised to keep track of statistical data such as the acceptance rate, the ratio of papers by local and international authors, the shares of papers in various languages, the average number of co-authors per paper, etc. This type of information is important because it enables the editorial staff to analyze the efficiency of their editorial practices and individual actions and track the development of a journal over various periods of time.

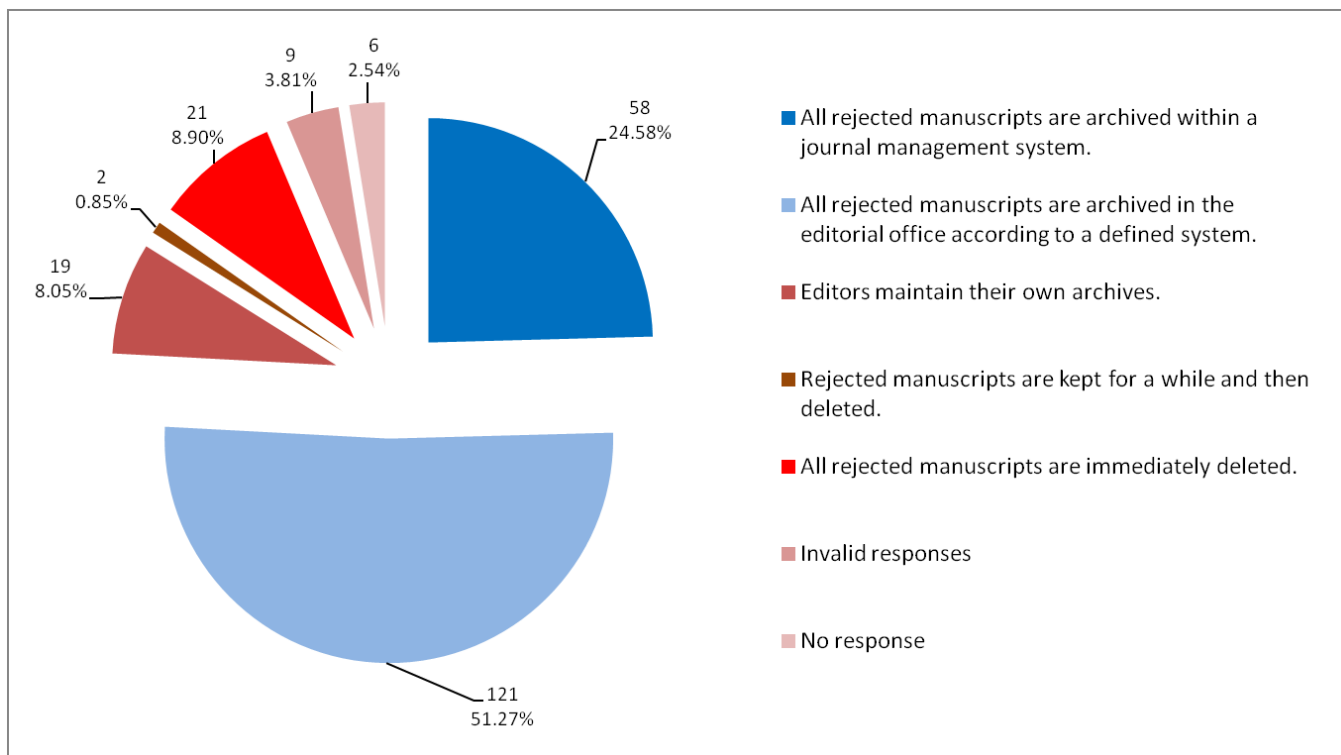


Figure 31 Keeping track of rejected manuscripts

Based on the questions in the survey and responses, it was not possible to assess the quality of the editorial documentation of the journals where it was maintained manually. The practices usually relied on those that were common in print journals – a local traditional know-how, though translated into an electronic environment. Based on information disclosed in informal conversations with editors and editorial staff members, most journals used Excel or MS Word tables, where they registered each submitted manuscript and entered the dates when each stage in the editorial process was started and completed. They also had a system of folders where they stored various versions of manuscripts, reviews, responses to reviewers, etc. There were still some journals where it was possible to find handwritten notebooks that (along with Excel tables) served as registers of submissions and reviews. Some editorial secretaries still printed parts of the documentation. The storage of editorial documentation was not always the only purpose of the computers used by the editorial staff, which made it difficult to ensure the safety of data. It was sometimes difficult to ensure regular backup, contributing to an increased risk of losing the data.

10. Publication process

The survey covered the following segments of the publication process: copyediting, translation, desktop publishing, printing, and maintaining the journal website.⁹³ The respondents were asked who performed the tasks related to these segments of the process. They were also required to give an estimation of the costs for each of the segments. The responses offer a rough insight into the structure of priorities and costs, and reveal a rather conservative publishing landscape, where the emphasis is still very much on printing. At the same time, journal websites often fail to meet the minimum technical standards.

10.1. Copyediting

The summary of responses⁹⁴ presented in Table 24 shows that the practices associated with copyediting were rather diversified. Although more than 50% of the respondents relied on professional copyeditors, either hired or employed by publishers, a significant number of journals (67, 28.39%) depended on volunteers, where the volunteers were mostly editorial staff members (24.15%, 57 journals). Employed copyeditors could be found in institutions that published multiple journals, or universities, where those persons also edited other publications or documents. In one journal (0.42%), papers were edited by a professional copyeditor selected by the publisher but the costs were covered by authors. In 26 journals (11.02%), copyediting was done only if necessary and the authors covered the costs.⁹⁵ The 'other' category included less typical solutions (e.g. an English copyeditor was employed with the publisher, while those for other languages were hired for a fee; returning the manuscript to the authors with the request to have it edited by a professional editor and additional corrections by the editorial staff, if necessary, etc.). Fifteen responses (6.35%) were inconsistent with the other answers of the same respondents and they were considered invalid.

Nearly 40% of the analyzed journals did not have any costs associated with copyediting, because editing was done by volunteers, or authors were required to cover the costs. The costs of copyediting usually did not account for more than 20% of the journal's budget. It is interesting that two journals in which copyediting was done by professionals employed by the publishers still spent up to 30% of the journal budget on copyediting. This probably means that editing of articles was not a part of their regular duties (those covered by the salary).

⁹³ Journal websites will be discussed in a separate section.

⁹⁴ As it was impossible to check information provided by the respondents, the presented data reflect the responses. Therefore, they are not necessarily reliable.

⁹⁵ Authors were required to submit manuscripts that met the linguistic standards. If they failed to do so, the editorial office selected a copyeditor but the authors were required to pay for this.

Table 24 Copyediting

| | | Copyediting | No. of journals | % in the sample | |
|-------------------------|--------------------|--|-----------------|-----------------|--------|
| EDITORIAL STAFF | NO COST | Hired volunteers | 10 | 4.24% | 31.35% |
| | | No copyediting, minor corrections by the editorial staff | 3 | 1.27% | |
| | | Editorial staff member, volunteer | 54 | 22.88% | |
| PROFESSIONAL COPYEDITOR | PAID BY PUBLISHERS | Editorial staff member, for a fee | 17 | 7.20% | 50.42% |
| | | Professional copyeditor, for a fee | 90 | 38.14% | |
| | PAID BY AUTHORS | Professional copyeditor employed with the publisher (costs are not necessarily deducted from the journal's budget) | 12 | 5.08% | 54.66% |
| | | Professional copyeditor selected by the publisher, paid by authors | 1 | 0.42% | |
| | | Organized by the publisher, paid by authors, only if necessary | 26 | 11.02% | |
| | | | Other | 5 | 2.12% |
| | | Invalid responses | 14 | 5.93% | |
| | | No response | 4 | 1.69% | |

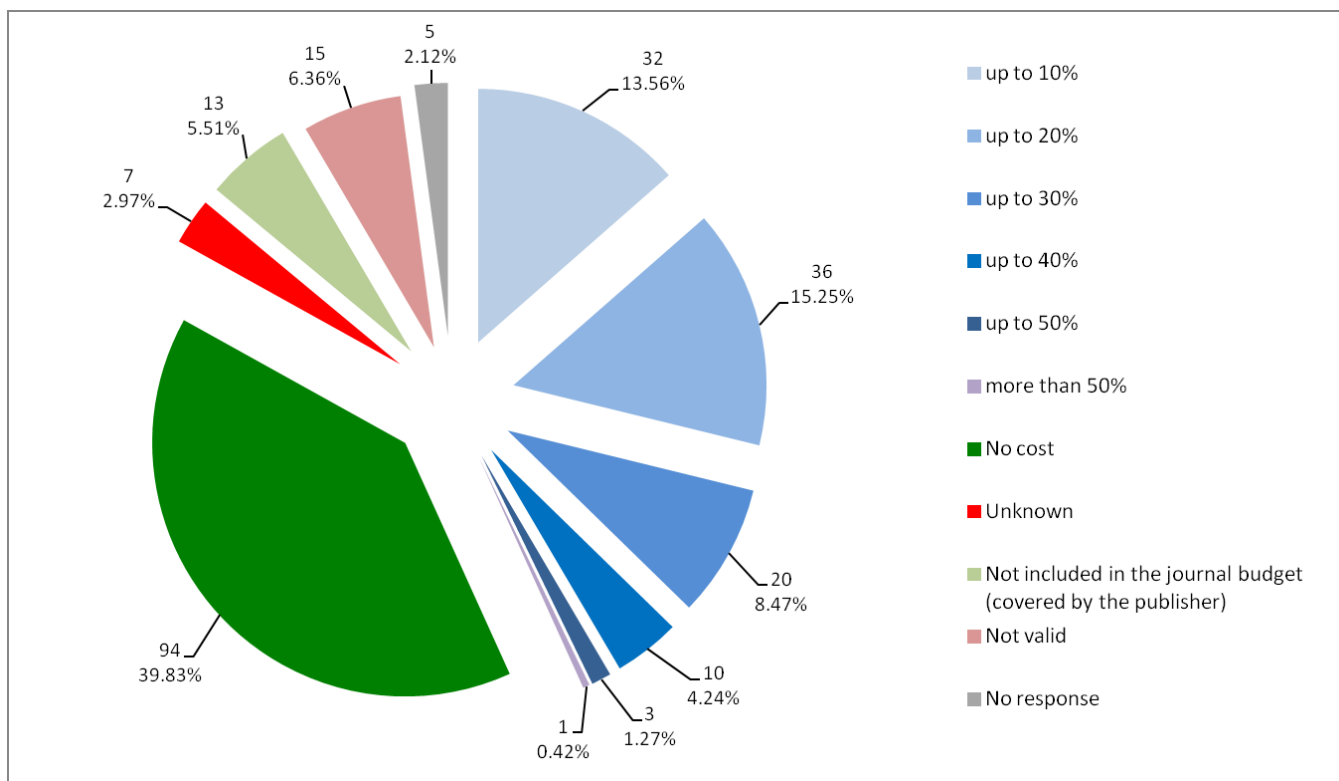


Figure 32 Copyediting costs

10.2. Translation

As previously mentioned, nearly half of the analyzed journals published full-text papers only in English and there were also journals that published papers in various languages, both local and foreign. Even if authors were required to provide papers and abstracts in foreign languages,⁹⁶ it was usually necessary to check them and/or do editing, which often involved some costs. In nearly 90% of the analyzed journals (87.29%, 206), there was no need to translate full-text papers into foreign languages.⁹⁷ In some of these journals, accepted manuscripts were edited by professional foreign-language copyeditors, while in others they were returned to authors with a request to correct grammar and style. Due to this, the quality of language greatly varied. In three (1.27%) bilingual journals, texts were translated and the translation costs were covered from the journal’s budget. In eight journals (3.39%), the editorial board selected the best submissions in Serbian to be translated and published in English.⁹⁸ The ‘other’ category (2.97%, 7) included various less common solutions (e.g. in a bilingual journal, authors were required to submit papers both in Serbian and English; selected papers in foreign languages were translated into Serbian by editorial staff members, etc.). In other words, full-text papers were translated in less than 10% of the journals covered by the survey. Four respondents (1.69%) skipped the question.

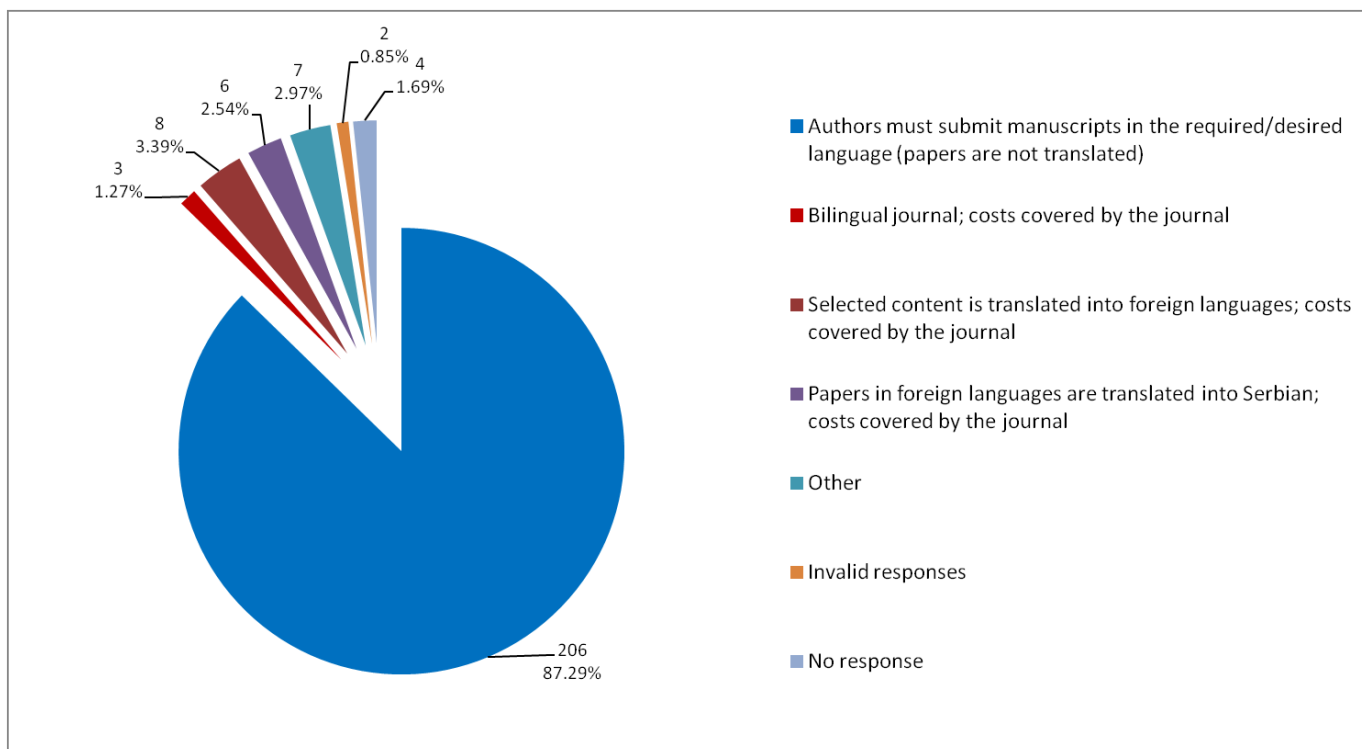


Figure 33 Translation of papers

⁹⁶ Languages other than Serbian and minority languages used in Serbia.

⁹⁷ This group of journals included those that published papers only in Serbian, as well as the journals where authors had to submit manuscripts in the required or desired foreign language.

⁹⁸ One of the journals published an annual special issue that contained the translations of selected papers previously published in Serbian. This is an old practice, nowadays largely abandoned.

As far as abstracts are concerned, the situation was slightly different. Although most journals (68.64%, 162) required that abstracts be submitted in English (or another language),⁹⁹ the number of those where abstracts were translated by a professional translator, for a fee (13.14%, 31), or an editorial staff member (11.87%, 28), either as a volunteer or for a fee, was not insignificant. In those journals where authors submitted abstracts in English, they usually underwent editing by a professional foreign-language copyeditor.

Table 25 Translation of abstracts

| | | ABSTRACTS – TRANSLATION | | No. of journals | % in the sample | |
|-------------------------|--------------------|---|--|-----------------|-----------------|--------|
| EDITORIAL STAFF | NO COST | Hired volunteers | | 3 | 1.27% | 12.29% |
| | | Editorial staff member, volunteer | | 26 | 11.02% | |
| | PAID BY PUBLISHERS | Editorial staff member, for a fee | | 2 | 0.85% | 11.86% |
| PROFESSIONAL TRANSLATOR | | Professional translator | | 31 | 13.13% | 13.98% |
| | | Authors must submit abstracts in English or another language (abstracts are not translated but may be copyedited) | | 162 | 68.64% | |
| | | Other | | 8 | 3.39% | |
| | | No response | | 4 | 1.69% | |

It is interesting that journals in humanities prevailed among those in which abstracts were translated by professional translators: out of 31 journals (13.13%), 19 (8.05%) were in humanities. There were also seven journals (2.97%) in humanities where the editorial board selected peer-reviewed and accepted manuscripts submitted in Serbian to be translated and published in English. This largely explains the observation of CEON/CEES that the quality of the English language in the papers published in Serbian journals in humanities is generally better than in their counterparts in other areas of science (Centar za evaluaciju u obrazovanju i nauci 2016, 22). It is also interesting that out of 22 journals (9.32%) where editorial staff members as volunteers translated abstracts into English only two (0.85%) belonged to the area of humanities.

About 40% of the analyzed journals had no costs associated with translation. In most cases, authors who wished or had to publish a paper in English (or another foreign language) were required to submit it in that language. It should be pointed out that a significant proportion of the translation-

⁹⁹ Some journals also publish abstracts in Serbian. When the original text is in a foreign language, the abstract is usually translated into Serbian by a member of the editorial staff.

related costs presented in Figure 34 were actually the costs of foreign-language copyediting and occasional translations.¹⁰⁰ These costs rarely accounted for more than 20% of the journal's budget.

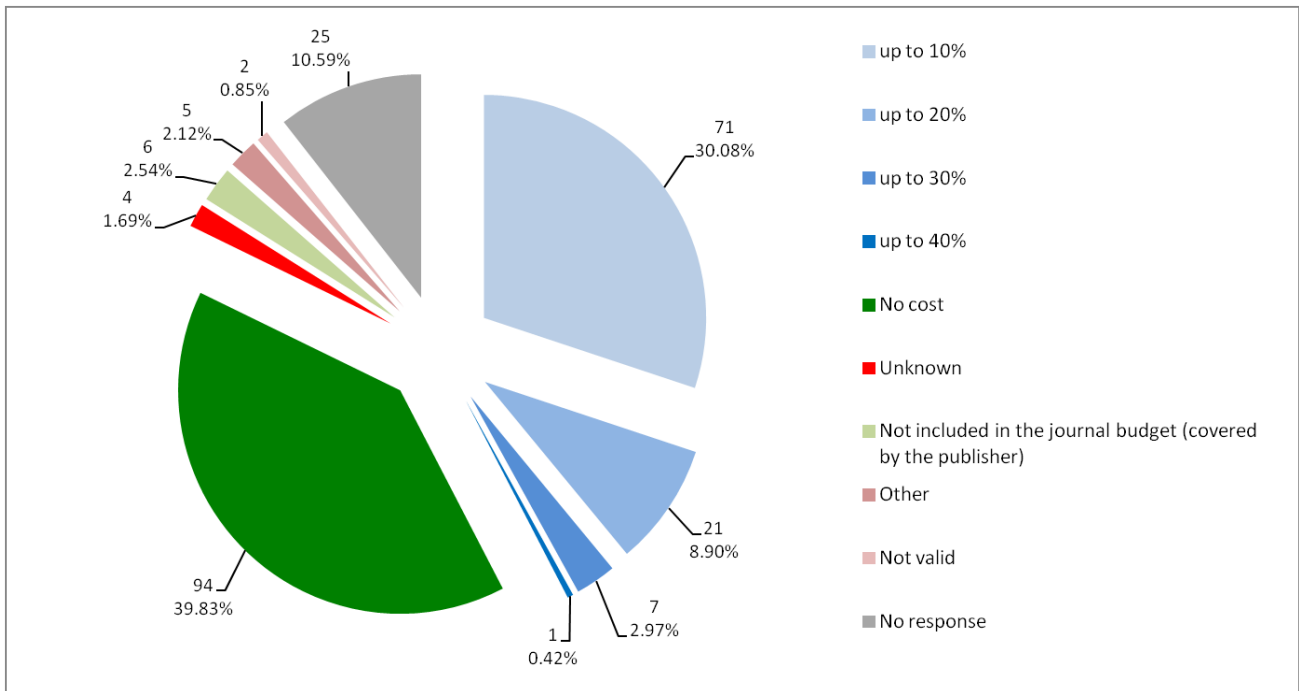


Figure 34 Translation-related costs

10.3. Desktop publishing and printing

Questions nos. 62–68 (see [Appendix 1: Questionnaire](#)) were related to the process of desktop publishing and printing. Their purpose was to identify the current practices and the respondents' attitudes towards electronic publishing and the reduction of printing costs.

10.3.1. Desktop publishing

Desktop publishing was yet another area where journals relied considerably on volunteer work: for about one-quarter of the analyzed journals (25.85%, 61) computer layout was done by volunteers, either members of the editorial staff (22.46%, 53) or external volunteers (3.39%, 8). About 10% (24 journals) of them were supported by publishing units or individual employees within their publishing institutions, which means that the cost of desktop publishing was covered by the publisher, through regular salaries, and was not necessarily deducted from the journal's budget. Nearly 60% of the analyzed journals (141) paid for desktop publishing either to an editorial staff member, a hired technical editor or a printing company. All responses from the 'other' (2.54%) category indicated that desktop publishing was done by technical editors or members of the editorial staff but did not say whether they were paid for their work or not.

¹⁰⁰ The journals that published papers in Serbian and other languages usually hired both Serbian and foreign-language copyeditors. The latter were also required to translate editorials, missing keywords and titles, etc.

Table 26 Computer layout

| DESKTOP PUBLISHING | | No. of journals | % in the sample | | |
|------------------------|-----------------------------------|---|-----------------|--------|--------|
| EDITORIAL STAFF | No cost | Hired volunteers | 8 | 3.39% | 25.85% |
| | | Editorial staff member, volunteer | 53 | 22.46% | |
| | Editorial staff member, for a fee | 18 | 7.63% | 30.08% | |
| PROFESSIONAL DESIGNERS | Paid by publishers | Publishing unit within the institution or a person employed with the publisher (costs are not necessarily deducted from the journal's budget) | 24 | 10.17% | 69.92% |
| | | Hired technical editor, for a fee | 53 | 22.46% | |
| | | Printing company | 70 | 29.66% | |
| | | Other | 6 | 2.54% | |
| | No response | 4 | 1.69% | 62.29% | |

The most commonly used desktop publishing software tools were MS Word¹⁰¹ (37.29%, 88) –actually a text processing software, and Adobe InDesign (23.73%, 56) – a professional desktop publishing tool. As expected, LaTeX was mostly used in mathematical and physical journals (5.93%, 14) and it was sometimes used along with MS Word (0.85%, 2). QuarkXPress, which used to be very popular in Serbia 10–15 years ago, was used by only nine journals (3.81%). Two journals (0.85%) used Corel Ventura. Almost one-quarter of the respondents did not know which desktop publishing software was used because the work was entrusted to a printing company or a professional technical editor.

MS Word was predominantly used in those journals where desktop publishing was done by editorial staff members or volunteers.¹⁰² InDesign prevailed in those journals where computer layout was entrusted to professional technical editors or printing companies.¹⁰³ This is easy to explain: professional desktop publishing software tools require not only specific training but also funds to buy a license. Corel Ventura was used by publishing units within publishing institutions, while QuarkXPress was mostly used by publishing units and printing companies.

¹⁰¹ The choice offered in the questionnaire included Word Perfect and Libre Office Writer, along with MS Word. Nevertheless, MS Word prevails and the other two tools are rarely used.

¹⁰² Out of 88 journals that used MS Word as a desktop publishing tool, for 56, computer layout was done by editorial staff members or volunteers.

¹⁰³ Out of 56 journals that used Adobe InDesign, for 42 desktop publishing was done by professionals (hired technical editors, printing companies and publishing units within institutions).

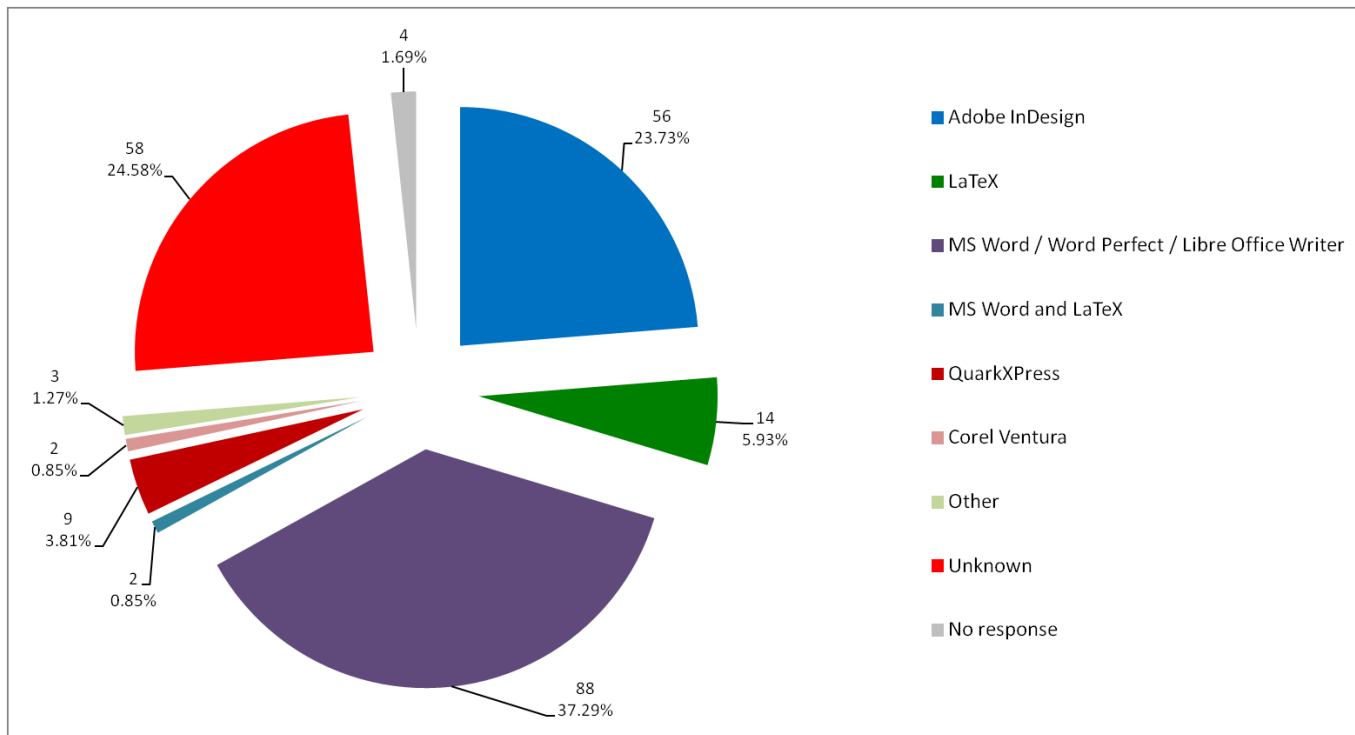


Figure 35 Desktop publishing software

10.3.2. Printing

Printing was usually performed by printing companies and only rarely by printing offices within publishing institutions. In order to estimate the cost-efficiency of printing, we asked the respondents to provide details regarding the type of printing, the quality of paper and illustrations, print-run and the estimated share of desktop publishing and printing costs in the journal’s budget.

The respondents were asked whether the journal was printed using the conventional offset method or digital printing. The latter method is suitable for small print-runs, especially print-on-demand, as the cost of printing per page is still higher than in offset printing. The responses indicated that a large proportion of editorial staff members were not familiar with the technical details related to the printing process. Nearly one-half of the respondents (48.73%, 115) skipped the question, and many of those who said that their journals were printed digitally most probably provided an unreliable answer.¹⁰⁴ It may be argued that people whose main concern is the journal’s scientific quality do not need to know technical details. Editors in Serbia usually do not have management teams behind them to take care of technical issues. Nevertheless, if an editor is expected to make decisions associated with various technical stages of the publication process and allocate funds (often provided from public sources) to them, then he or she must be at least superficially familiar with the available

¹⁰⁴ Eleven journals were not printed (online version only); 60 respondents said that offset printing was used, 47 claimed that their journals were printed digitally, whereas three selected both options. The data will not be analyzed further as it is unreliable. In some cases where respondents claimed that their journals were printed digitally, the print version revealed that the offset method was used. Furthermore, the print runs reported by some ‘digitally printed’ journals were too high to be cost-effective. Keeping in mind the cost of printing in Serbia, it is not very probable that more than 200 copies are printed digitally and less than 50 copies are printed using the offset method.

solution and their cost in order to make the right decisions, particularly keeping in mind that it is indeed possible to find good local examples of editors and other editorial staff members who are well-informed and who competently oversee the whole publication process.

In the majority of the analyzed journals (52.12%, 123) only the covers were in full colour, while the illustrations inside the journal were printed black-and-white, though they were available in full colour in the online version. Only 34 journals (14.41%) were printed in full colour, which was a more expensive method.

Table 27 Colour printing

| COLOUR PRINTING | No. of journals | % in the sample |
|---|-----------------|-----------------|
| Colour covers, black-and-white inside pages | 123 | 52.12% |
| Full colour covers and inside pages | 34 | 14.41% |
| Not printed – online only | 11 | 4.66% |
| Invalid response | 1 | 0.42% |
| No response | 67 | 28.39% |

Thirty-seven journals (15.68%) were printed on uncoated offset paper, as opposed to 31 (13.13%) printed on glossy paper. The question was skipped by 156 respondents (66.1%). The fact that a high percentage of the respondents failed to provide an answer indicates that the information was probably not known to them. Printing in full colour and/or on glossy paper increases costs. Therefore, it is very important to take these details into consideration when planning expenditures.

Table 28 Paper quality

| PAPER QUALITY | No. of journals | % in the sample |
|---------------------------|-----------------|-----------------|
| Uncoated offset paper | 31 | 13.13% |
| Glossy paper | 37 | 15.68% |
| Not printed – online only | 11 | 4.66% |
| Invalid response | 1 | 0.42% |
| No response | 156 | 66.1% |

The print-runs of Serbian scholarly journals were not high: in almost one-half of the analyzed journals (49.15%, 115) they ranged between 101 and 300 copies and they were never higher than 1000 copies. Over the past two decades, print-runs had been constantly declining due to the development of the Internet and reduced budgets. Nevertheless, the share of purely online journals and those printed on demand was still very small: taken together, they accounted for less than 6% of the analyzed journals.

Though small, these print runs accounted for a significant share of the budget. In nearly one-half of the journals covered by the survey (46.61%, 110), printing costs made more than 50% of the journal's budget.

Open Access Journals in Serbia

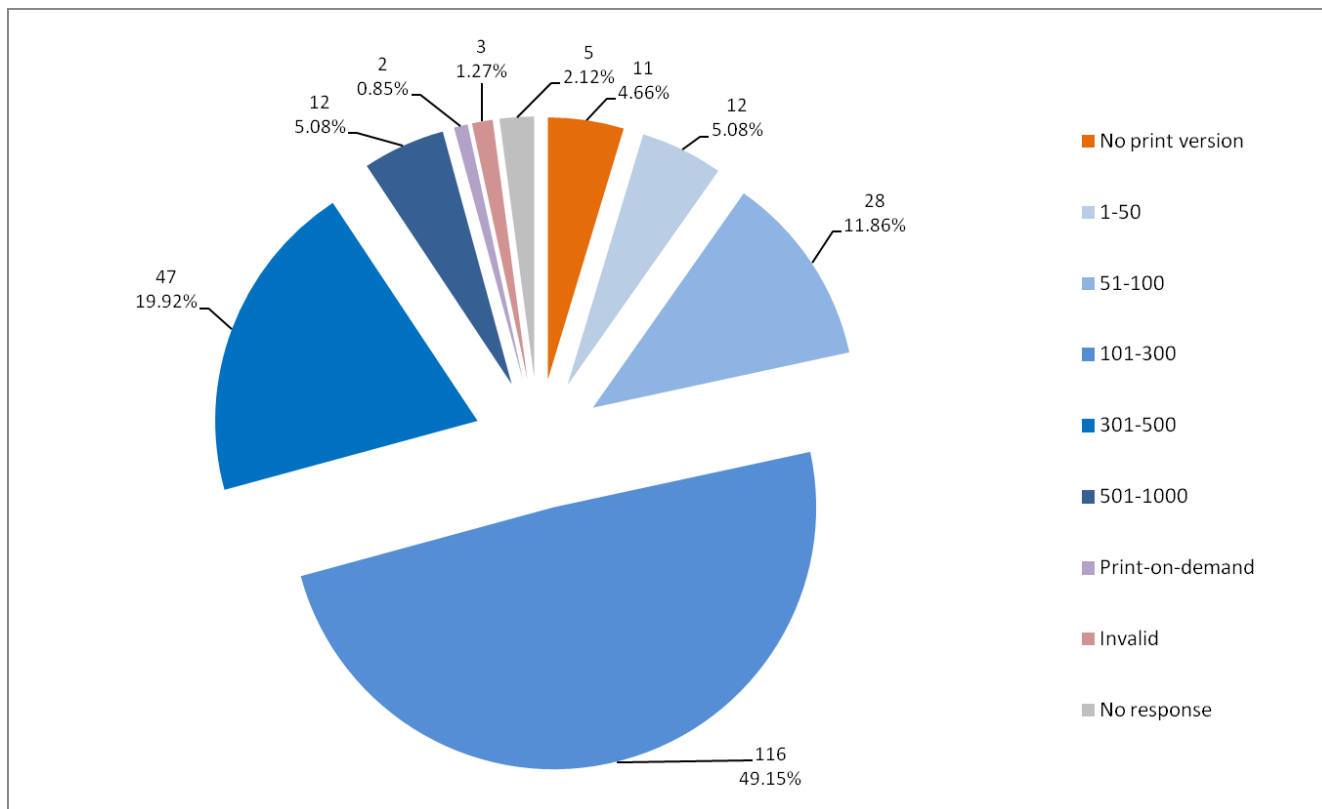


Figure 36 Print-run

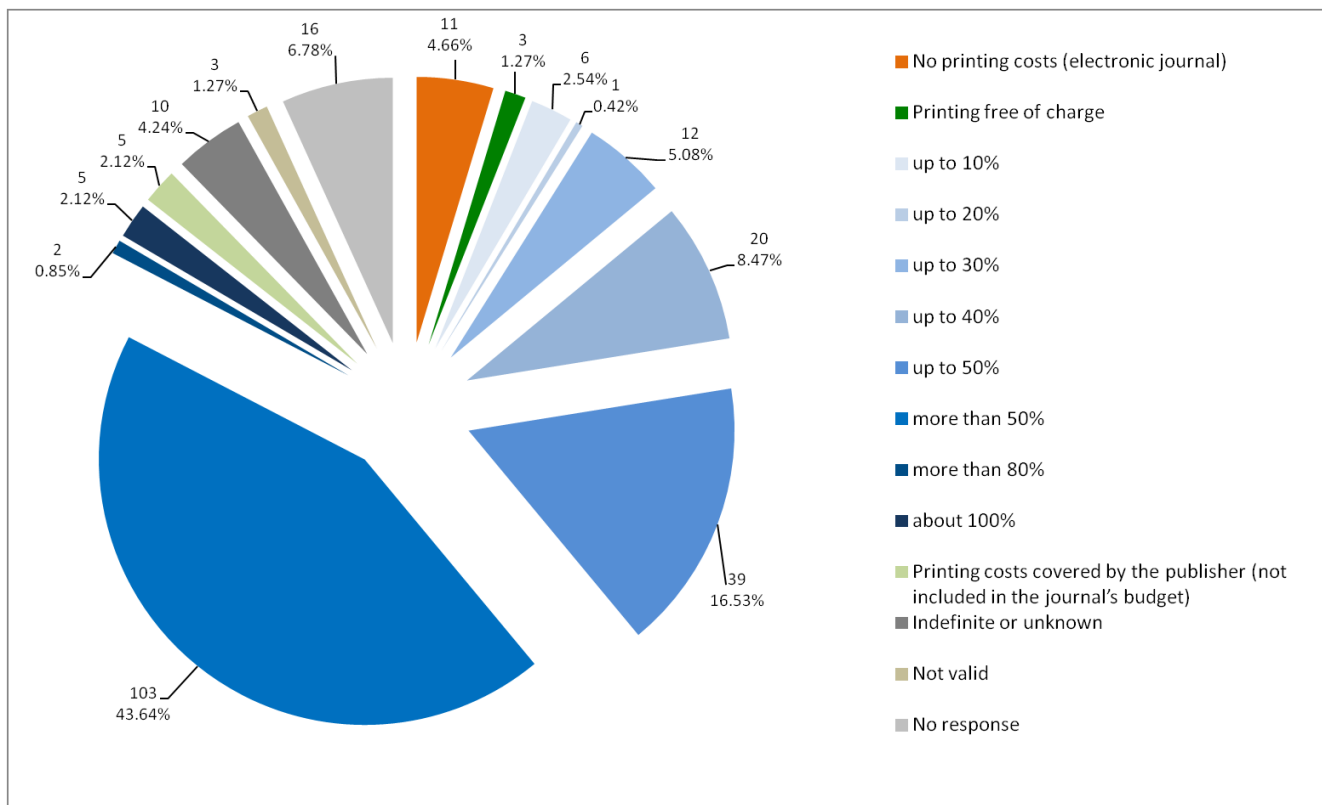


Figure 37 The cost of printing

The large share of printing costs in the budget reveals that journal publishers in Serbia assign a high importance to the print version. The true meaning of the figures is gained when they are analyzed in conjunction with the size of the print-run and, as it will be shown later, with the expenditures for journal websites. Figure 38 shows that nearly 60% of the 110 journals that spent more than 50% of their budget on printing were issued in 101–300 copies. Keeping this in mind, it is worthwhile to question the cost-effectiveness of investing such a large share of the budget into no more than several hundred copies. At the same time, the same journals invested considerably less in their websites, though websites could help them reach out to practically unlimited audiences.

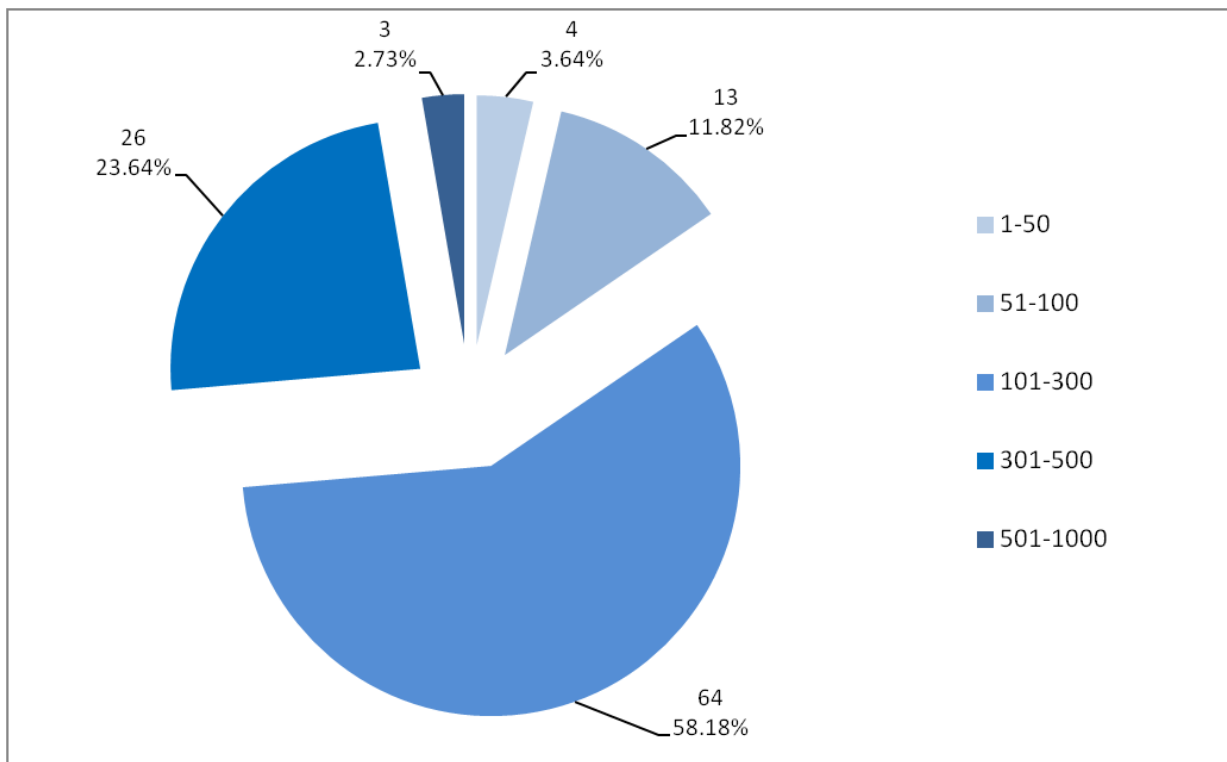


Figure 38 The print-run of the journals that spend more than 50% of their budget on printing

The responses to questions nos. 67 (reducing the print-run) and 68 (abandoning printing; see [Appendix 1: Questionnaire](#)) revealed an interesting pattern. While most journals had already reduced the print-run and planned to reduce it further, the majority of them were not ready to abandon the print version and switch to electronic publishing. Figure 39 shows that nearly one-half of the respondents (47.88%, 113) had already reduced the print-run,¹⁰⁵ while about one-quarter of them (25.42%, 60) planned to do it.¹⁰⁶ Three journals (1.27%) planned to abandon printing and 11 (4.66%)

¹⁰⁵ Nearly one-half of these 113 journals (46.9%, 53) still spent more than 50% of their budget on printing. After the reduction, more than a half of them (53.98%, 61) had a print run between 101 and 300 copies. In seven journals, the print-run was reduced to 1–50 copies, in 19 to 51–100, in 20 to 301–500, and in three to 501–1000. Two journals printed copies on demand. One response was not reliable.

¹⁰⁶ More than one-half (56.67%, 34) of the journals that planned to reduce the print-run spent more than 50% of their budget on printing. Half of them had a print-run between 101 and 300 copies, three were printed in 1–50 copies, four in 51–100 copies, 17 in 301–500 copies and five in 501–1000 copies. One respondent did not provide the print-run information.

were already online-only. Forty-one journals (17.37%) did not plan to reduce the print-run. Ten of them sold subscriptions to the print version.¹⁰⁷ The remaining 31 journals¹⁰⁸ distributed print copies free of charge to libraries and their print-run¹⁰⁹ had already been optimized to meet that need.

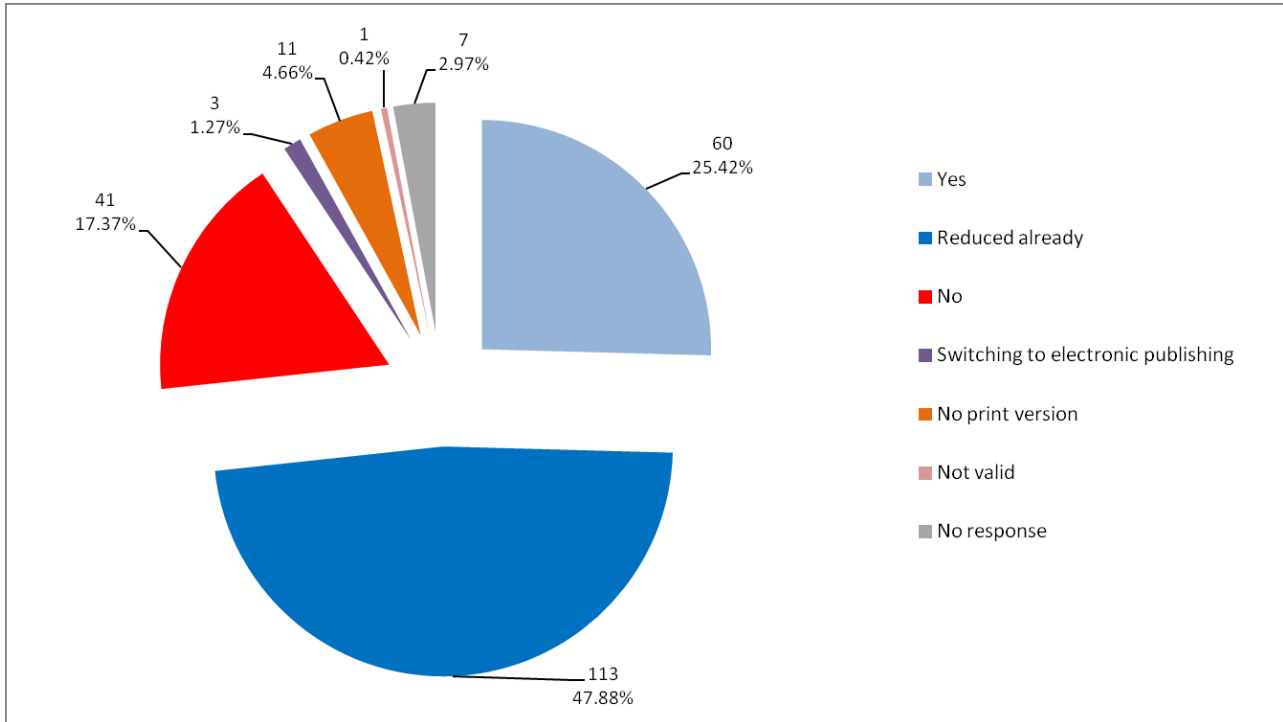


Figure 39 Reducing the print-run

Despite the relatively high cost of printing, nearly 70% of the respondents (68.22%, 161) did not plan to abandon the print version, though half (80 journals) of them spend more than 50% of their budget on printing. About one-quarter of the respondents (25.42%, 60) were considering the idea, whereas nearly 5% (4.66%, 11) had already converted to electronic publishing. Along with the expected answers that the print version was sold to subscribers, exchanged or distributed free of charge to libraries,¹¹⁰ it was possible to read that the academic community regarded only print journals as ‘serious’, whereas online-only journals did not have credibility, or that all ‘relevant’ journals in humanities were print journals, or that the print version had to be preserved as part of ‘intangible heritage’, etc. Most respondents from this group highlighted the journals’ ‘long tradition’ and the habits of their readership, who were not accustomed to reading on a screen or who were ‘elderly’. Several respondents stressed that their budget still allowed them to have both a print and an online version. However, some respondents said that the idea of abandoning printing was advocated by a part of the editorial staff but was rejected by elderly members of the editorial board.

¹⁰⁷ The majority of them (7) had a print-run between 101 and 300 copies; two journals were printed in 501–1000 copies and one had a print-run between 301 and 500 copies.

¹⁰⁸ Eleven of them spent more than 50% of their budget on printing.

¹⁰⁹ The majority of them (60%, 18) had a print-run between 101 and 300 copies. Seven journals were printed in 301–500 copies, five in 51–100 and one in 1–50 copies.

¹¹⁰ Which means that postage and packing costs should be covered either from the journal’s budget or from other funds provided by the publisher.

Various misconceptions were put forward in defending the need for a print version. Some respondents said that they were afraid of losing their ranking because the national journal evaluation system did not recognize online-only journals, which was not true.¹¹¹ Also, libraries do not require journals to send them hardcopies if they are available through an online platform. If an Open Access journal discontinues the print version, libraries will update their records to inform users that the journal is available online. Library users in Serbia and abroad are more likely to discover and access Serbian journals through online aggregators such as *SCIndeks*, DOAJ, EBSCO, ProQuest, etc. than to borrow hardcopies from local libraries.

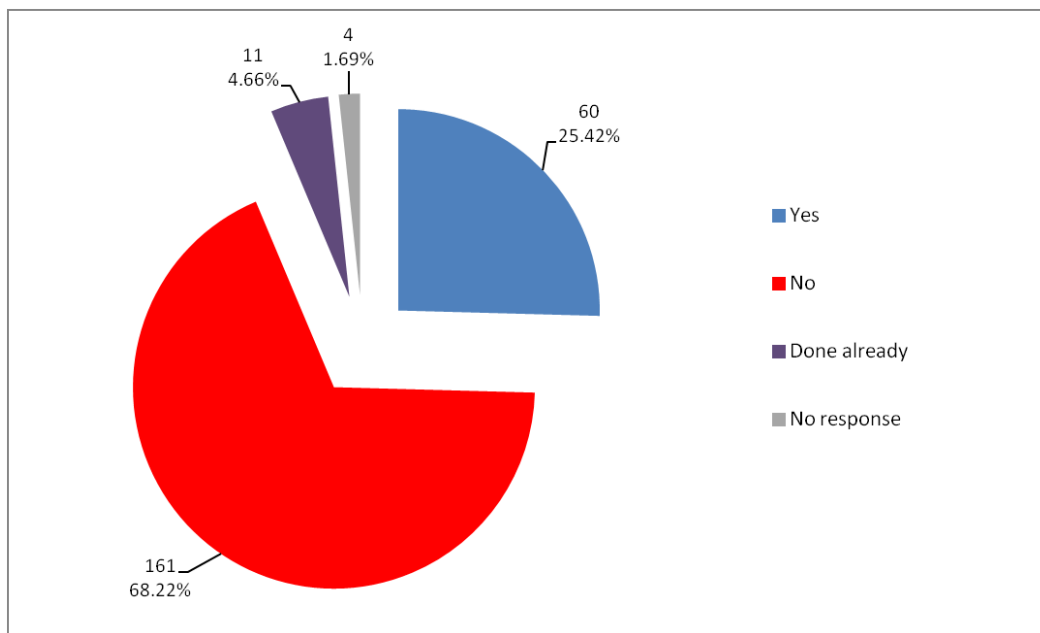


Table 29 Do you plan to abandon printing and migrate to electronic publishing?

After the preliminary results of the survey had been presented at a workshop, we received feedback from several journal editors who were appalled to have heard that we advocated for doing away with print journals. The purpose of presenting the data is not to advocate for abandoning printing but rather to draw attention to the fact that printing is too often done at the expense of the quality and functionality of journal websites, which should be the main dissemination channel, especially in Open Access journals. As it will be shown in the following section, most journals in Serbia have technically poor websites and it is apparent that this segment of publishing and dissemination of research outputs is largely underestimated and even neglected. If a journal has an online version, its audience, both current and future, is not limited to the readership of the print version. Tradition makes sense only if it is continued. The essence of tradition does not rest in a particular communication medium but rather in the rigorous process of selection and the publisher’s commitment to publishing only relevant research.

¹¹¹ The Act on Editing Scholarly Journals explicitly stresses the advantages of online-only journals (“Akt o uređivanju naučnih časopisa” 2009)

10.4. Journal websites

A journal website is a publication medium that ensures the journal's online presence and visibility and enables access to its content by a worldwide audience. In OA publishing, a website is the key element of the publishing infrastructure. Unfortunately, in too many Serbian journals the website is perceived merely as an accessory, an addition to the print title. Due to this, it is possible to find a full range of outdated, incomplete and illogical web solutions, content scattered across several domains and platforms, abandoned old websites that sometimes rank better in Google searches than the active ones, new websites that have been under construction for too long, etc. But does this have to be so? Compared to the figure spent on printing, it is certainly not unaffordable for journals to have functional websites. Furthermore, the fact that some journals have brand new websites, but with a poor navigation structure is a clear indication that the problem is not related to the lack of funding. Where OJS – which allows for an integrated website and journal e-workflow – is used, it is not properly managed and implemented, and metadata and policies are mostly incomplete. We are apparently dealing with a multilevel problem the key features of which are the poor awareness of the true purpose of journal websites and, consequently, the lack of clear publishers' policies on their maintenance; the lack of knowledge regarding the technical requirements they should meet, which often leads to wasting funds on technically poor solutions; and insufficient funds allocated for websites.

The Act on Editing Scholarly Journals does not deal with journal websites in detail but it sets out very clearly the distinction between full-text archives (PDFs of the printed version) and online journals. It even says that it is desirable that journals are published only electronically or that they have an online version along with the print form and highlights the advantages of the electronic form (“Akt o uređivanju naučnih časopisa” 2009). The document does not define the preferred formats and technical standards related to the electronic form. Nevertheless, good examples, both international and local have been available. A journal website should have either its own domain or a distinct subdomain.¹¹² Apart from the content (papers), it should contain the basic information about the journal (ISSN, eISSN, publication frequency, etc.), an ‘aims and scope’ section, the names of the editor and editorial board members,¹¹³ a clearly defined editorial policy, guidelines for authors and contact details. Instead of uploading whole volumes as PDFs, the table of contents for each volume should be displayed on an HTML/PHP page. Individual articles should be assigned the so-called landing pages: HTML/PHP pages that contain article metadata (volume, issue, publication year, pages, DOI, article title, authors, their affiliations, contact details, abstract, keywords, license, and, preferably, funding information, references and submission/acceptance dates). As far as article-level metadata are concerned, *SCIndeks*¹¹⁴ has set the standard that could easily be downscaled and applied even in the simplest static websites. In Serbia, the process of adopting standards typical of online publishing has been slow and, as it will be shown, a significant number of journal websites in Serbia are merely full-text archives.

The problems are so diversified that it is impossible to devise a universal solution. Therefore, the original idea was to focus on a rather limited group of scholarly journals. The questions dedicated to journal websites (nos. 85–99; see [Appendix 1: Questionnaire](#)) were drafted with the primary target

¹¹² On web domains and various hosting solutions cf. Solomon 2008, 71–81.

¹¹³ And optionally, other members of the editorial staff. A list of reviewers may also be published.

¹¹⁴ Affiliations, contact details and references are not provided on landing pages for articles in *doiSerbia*.

group in mind – the *doiSerbia* journals. One of the main objectives of the project was to support them by upgrading the *doiSerbia* platform and help them abandon technically poor websites. The purpose of the questions was to see whether the problems were identified correctly and to identify new areas of potential action. Quite unexpectedly, a significant part of the primary target group was unresponsive and rather uninterested in the project, while the strongest feedback was received from the journals whose online life had begun fairly late or was yet to begin. It turned out that the offered choices could not cover the range of solutions applied by so many journals. Furthermore, some respondents did not understand the questions related to technical details. On the other hand, even the simplest questions yielded incorrect answers, as if the persons who filled in the questionnaire had not seen the journal websites they were referring to. As a consequence, this section of the survey yielded the most unreliable responses.

The respondents were asked where the journal website was hosted, which software platform it used, who maintained it. They were also required to give an estimation of the share of website costs in the overall budget. We further asked them whether individual articles were assigned landing pages or if only PDFs were uploaded, and which metadata were displayed on article landing pages (if any). A set of questions were meant to check their responsiveness to the needs and feedback of readers (enabling users to read content on mobile devices, web analytics, altmetrics, the search module and share buttons on the website) and their readiness to widen the audience using social networking websites.

10.4.1. Domain and hosting

Though intended to be simple, the question concerning hosting yielded answers that were difficult to analyze. Some respondents could not select any of the offered choices (paid hosting, paid cloud hosting, free cloud hosting, free hosting within the Academic Network, *doiSerbia* or *SCIndeks* used as the journal's website). Their journals did not have their own websites, but were part of institutional websites, and they did not know which hosting solution the publishers¹¹⁵ used. Some journals had their own websites but also used *doiSerbia* and/or *SCIndeks*, or were published online by De Gruyter. As the respondents were not sure what was targeted by the question, they provided answers under 'other', explaining the complex situation. Instead of being able to make a rough but instant estimation whether OA journals in Serbia primarily relied on free hosting or had to pay for it, we had to deal with heterogeneous data.

Some OA journals in Serbia had fully functional websites on their own domains or defined subdomains, and they were able to provide a straightforward answer to the 'hosting' question. Others were limited to one or more pages within institutional websites. If that was the only place where the journal was presented online, they perceived it as the journal's website. In the survey, this group of the respondents simply indicated that the problem of hosting was solved through the publishing institution. However, some of the journals presented on institutional websites used the CEON/CEES Asestant platform¹¹⁶ – a journal management system that offered them an opportunity to create fully functional websites. At this point the situation got complicated. Even when they had a website created using the CEON/CEES Asestant, they kept on uploading PDFs on the pages within the institutional website and kept on citing this as the journal's main site. The same applies to some journals published

¹¹⁵ Most commonly universities, institutes, museums, scholarly associations.

¹¹⁶ Thirty-seven journals included in the survey use the CEON/CEES Asestant.

using the De Gruyter Open platform. It seems that some Serbian journal publishers perceived the CEON/CEES Asestant and De Gruyter merely as tools for the management of the publication process and not publishing platforms. This group of the respondents provided the most confusing answers because they were not sure as to what they perceived as the 'journal's website'. Full-text journal content was also available on *doiSerbia* and *SCIndeks*. It seems that they were usually perceived merely as aggregators, though the technical characteristics of these journal repositories (e.g. article-level metadata, OAI-PMH) were much better and more suited to the purpose (of a journal website) than the PDFs uploaded on the publishers' websites. As a result, some respondents provided precise information regarding hosting, whereas others explained where the full-text content was available. In order to make data usable, it was necessary to check the responses and amend data by collecting information from journal websites, publishing platforms and journal repositories.

Before answering the 'hosting' question, we tried to establish the number of journals with distinct domains/subdomains, those presented on the website of the publishing institution and those available across multiple platforms. Figure 40 and Table 31 show that more than a half (56.35%, 133) of the journals covered by the survey had a website with a distinct domain or subdomain,¹¹⁷ whereas 40.25% (95 journals) were limited to pages within the publishing institution's website. A significant number of the journals from the latter group (14.41%, 34) were available only through the publisher's website. This considerably diminished their discoverability and made them vulnerable to 'hijacking'.¹¹⁸ It was usually difficult to locate them in the complex tree of menus on the publishers' websites and navigate through their content. Most commonly, there were no landing pages for individual articles. Complete issues/volumes or papers were uploaded as PDFs. In 57 journals (24.15%), these drawbacks were mitigated by indexing in *doiSerbia*, *SCIndeks* or other repositories.

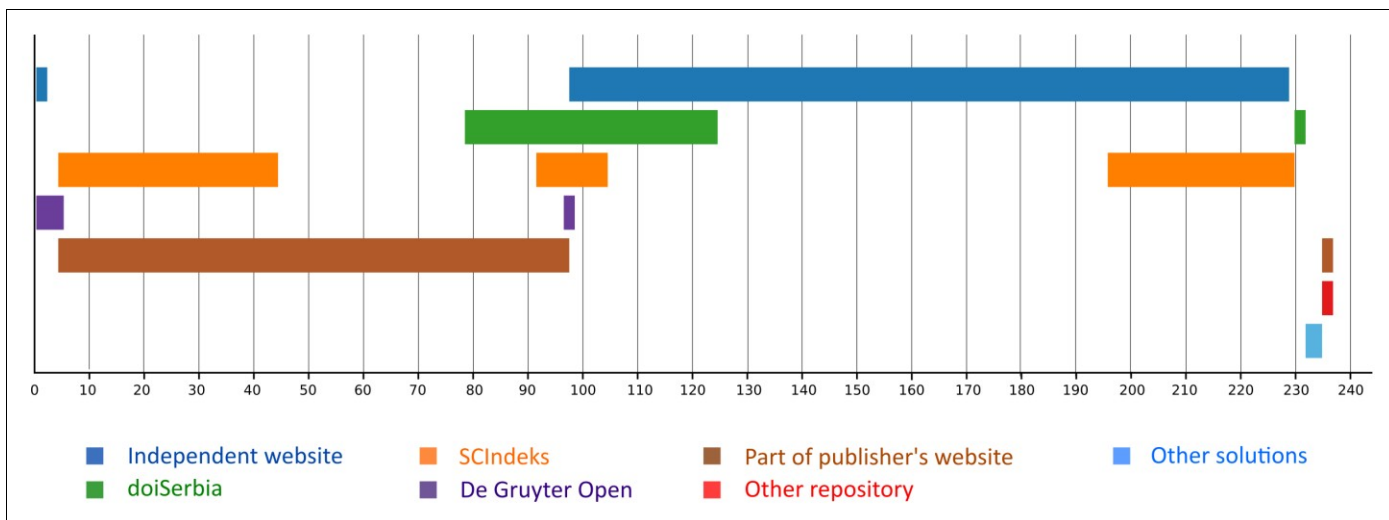


Figure 40 Linear diagram showing the availability of journal content across platforms

¹¹⁷ The two journals that used the De Gruyter Open platform as their website were taken into consideration, while the journals available only through *doiSerbia* and *SCIndeks* were not. At the time when the survey was conducted, the platforms were not yet upgraded.

¹¹⁸ On hijacked journals: Lukić et al. 2014; Bohannon 2015; Jalalian and Dadkhah 2015. The most common victims of 'hijacking' are journals that have only a print version or those that have poorly designed websites not optimized for search engines.

Table 30 Various combinations of journal platforms

| PLATFORM | No. of journals | % in the sample |
|--|-----------------|-----------------|
| Independent website | 71 | 30.08% |
| Independent website + doiSerbia | 20 | 8.47% |
| Independent website + SCIndeks | 33 | 13.98% |
| Independent website + DeGruyter | 2 | 0.85% |
| Independent website + doiSerbia + SCIndeks | 6 | 2.54% |
| Independent website + doiSerbia + SCIndeks + DeGruyter | 1 | 0.42% |
| Part of publisher’s website | 34 | 14.41% |
| Part of publisher’s website + doiSerbia | 13 | 5.51% |
| Part of publisher’s website + SCIndeks | 39 | 16.53% |
| Part of publisher’s website + doiSerbia + Scindeks | 5 | 2.12% |
| Part of publisher’s website + Scindeks + DeGruyter | 1 | 0.42% |
| Part of publisher’s website + doiSerbia + Scindeks + DeGruyter | 1 | 0.42% |
| Part of publisher’s webiste + other repository | 2 | 0.85% |
| doiSerbia only | 2 | 0.85% |
| SCIndeks only | 1 | 0.42% |
| De Gruyter only | 2 | 0.85% |
| Other | 3 | 1.27% |

The same data, summarized and simplified, are given in Figure 41. They clearly show that more than one half of the analyzed journals (129) were available in full text in repositories or alternative publishing platforms, whereas 44.49% (105) were available only on their websites or the websites of their publishing institutions.

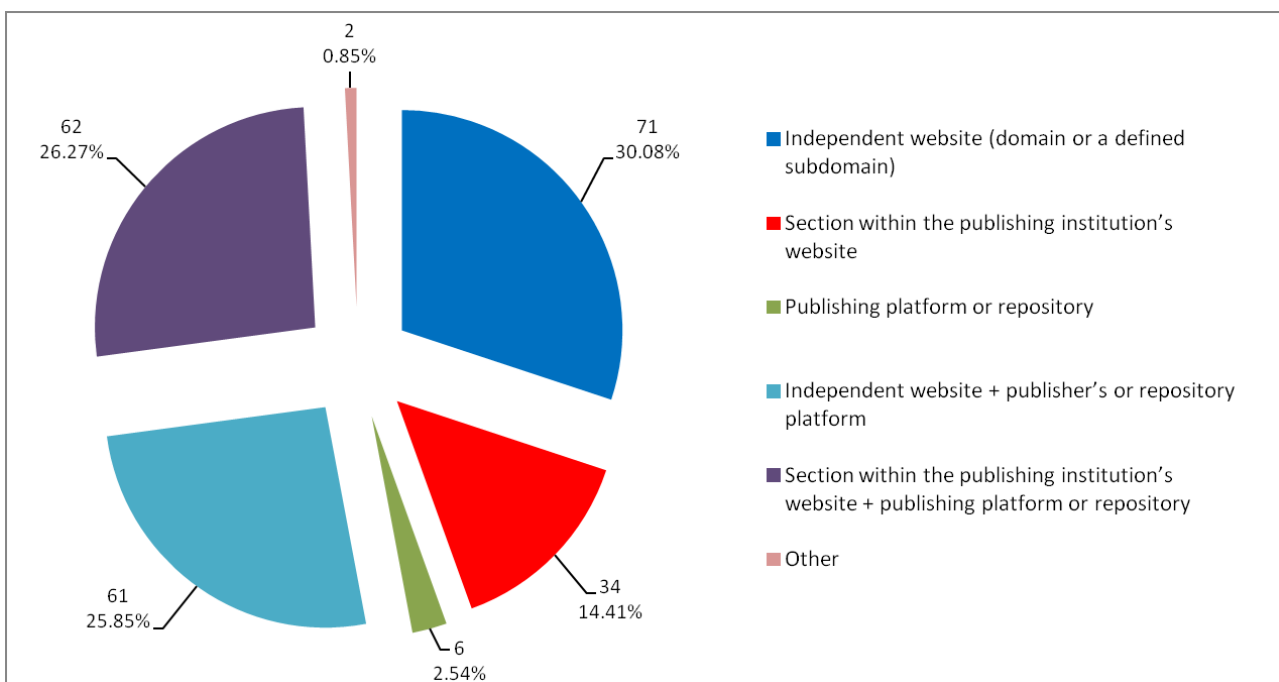


Figure 41 The availability of journal content across platforms (summarized)

Open Access Journals in Serbia

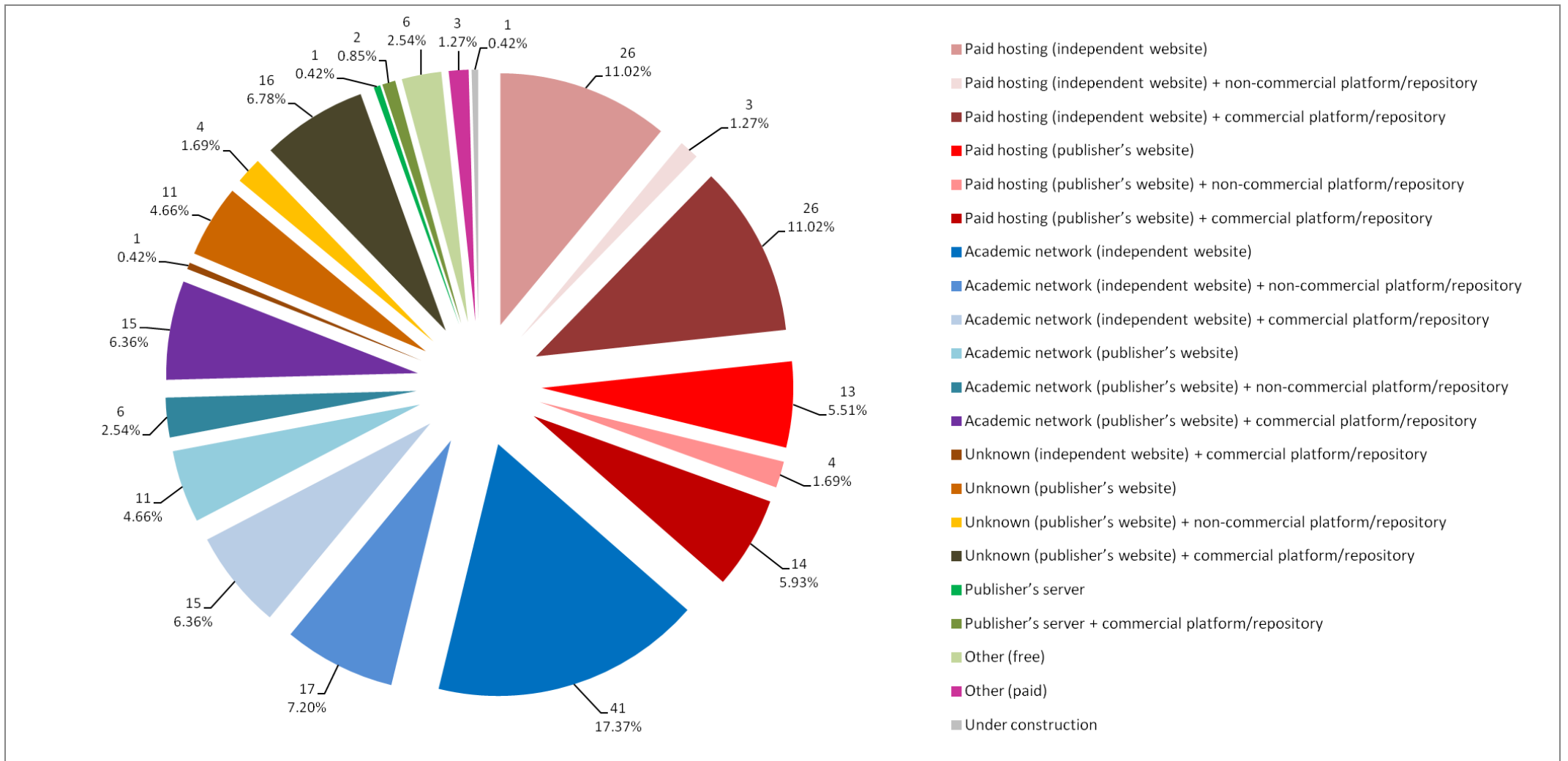


Figure 42 Hosting solutions, including repositories

Figure 42 shows the full range of hosting solutions, or rather hosting combinations used by the analyzed journals. As the primary goal was to identify the expenditures, if a journal was available both on a free and on a commercial platform,¹¹⁹ only the latter was taken into consideration. In a rather diversified landscape, three groups slightly stood out: the journals with a distinct domain or subdomain hosted within the Academic Network and not available on any other platform (17.37%, 41); those with a distinct domain hosted with a commercial provider and not available on other platforms (11.02%, 26); and journals with a distinct domain hosted with a commercial provider and available on a commercial platform (most commonly *SCIndeks*; 11.02%, 26 journals). From the data it is clear that 58,05% of the analyzed journals (137) had expenditures either for hosting or for a commercial repository, or for both, whereas 34.74% (82 journals) had free hosting and some of them were also part of a non-commercial platform or a repository. For 32 journals, it was impossible to establish whether they used free or paid hosting.

The ‘main’ journal sites and their pages within institutional websites heavily relied on the Academic Network – 44.49% of the analyzed journals (105 journals) were hosted within the Academic Network, free of charge. Fifty-five journals (23.31%) paid hosting, while 31 (13.14%) used institutional websites hosted on commercial servers.

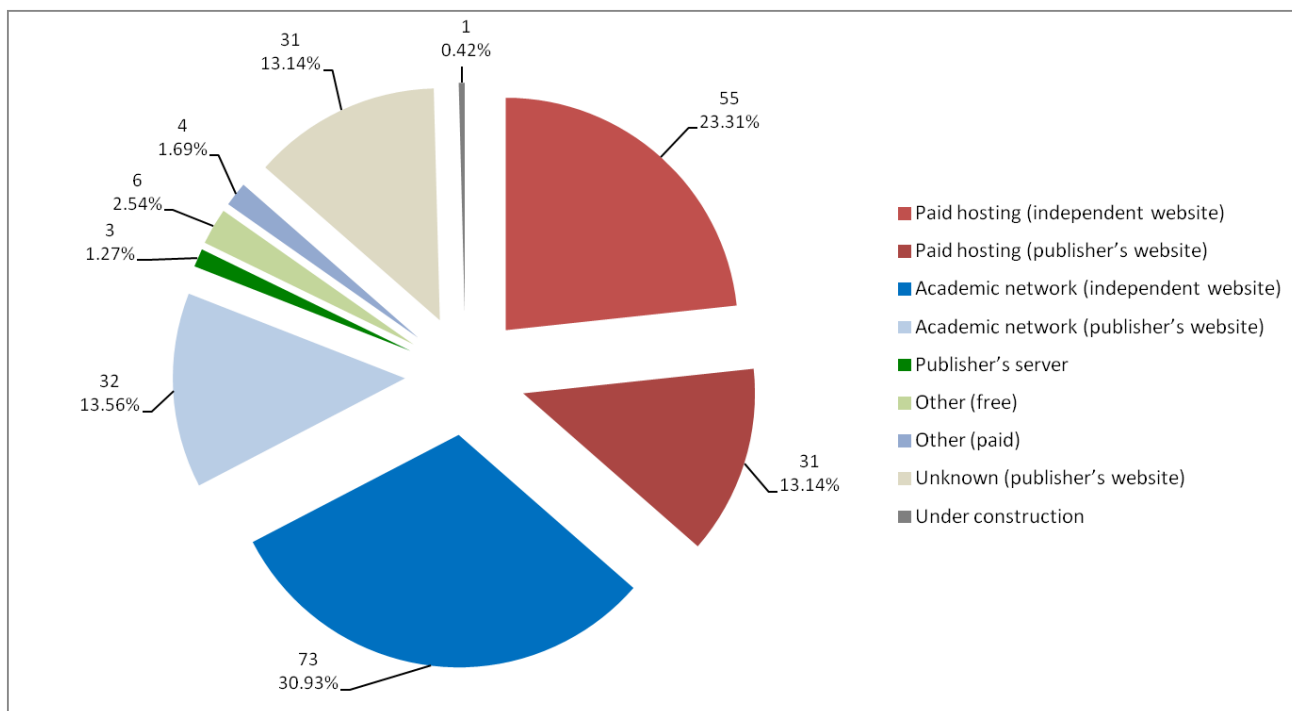


Figure 43 Hosting solutions (journal websites)

10.4.2. Landing pages for articles and metadata

A great proportion of Serbian OA journals could not implement DOIs if they relied only on their ‘main’ websites (or the pages within institutional websites) because not all of them had landing

¹¹⁹ Non-commercial platforms/aggregators mentioned in the responses include *doiSerbia*, *Komunikacija.org* and *AnthroSerbia*, whereas the commercial ones include *SCIndeks* and *De Gruyter Open*.

pages for individual articles. Three-quarters of the analyzed journals (177) could not implement DOIs relying on their ‘main’ sites because they merely upload PDFs – either complete issues/volumes¹²⁰ (34.32%, 81) or individual papers (40.68%, 96).¹²¹ The remaining 58 journals (24.58%) had landing pages for articles. Most commonly, the basic metadata, with (12.29%, 29) or without references (10.59%, 25), were accompanied with a link to the full-text in PDF. Only in four journals, full text (as HTML) was provided on the landing pages.

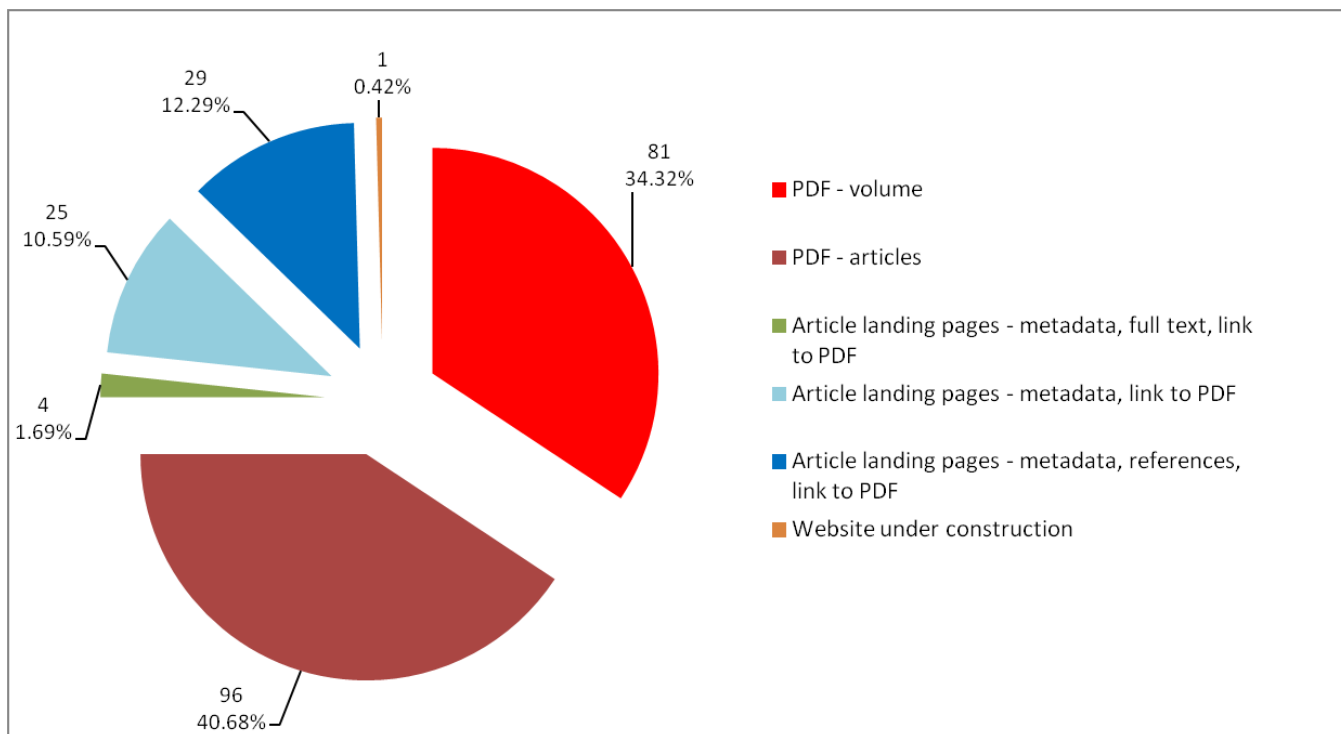


Figure 44 Article-level metadata (journal websites)

Figure 45 reveals the current and potential role of platforms such as *doiSerbia* and *SCIndeks* in overcoming the most common drawbacks of journal websites in Serbia. The journals where landing pages for articles were provided in *doiSerbia* and *SCIndeks* were subtracted from the two groups of journals which did not have landing pages on their ‘main’ websites in Figure 44. They are shown as separate groups in Figure 45. More than one-half of the journals that did not have landing pages on the ‘main’ websites (41.10%, 97) were covered by *doiSerbia* and *SCIndeks*.¹²² This means that the presentation of articles on these platforms was better articulated, more user-friendly and more functional (in terms of online harvesting and machine-readability) than on their ‘main’ websites.

¹²⁰ According to the criteria set by the Act on Editing Scholarly Journals, these journals could not be classified as electronic journals but merely as full-text archives.

¹²¹ The journals that uploaded individual articles as PDFs usually linked them from a table of contents. Several journals used a sort of an extended table of contents for each volume: abstracts and keywords were given for each paper but all were placed on a single HTML/PHP page.

¹²² If a journal was present on both platforms, only *doiSerbia* was taken into account because these journals are assigned DOIs through *doiSerbia*.

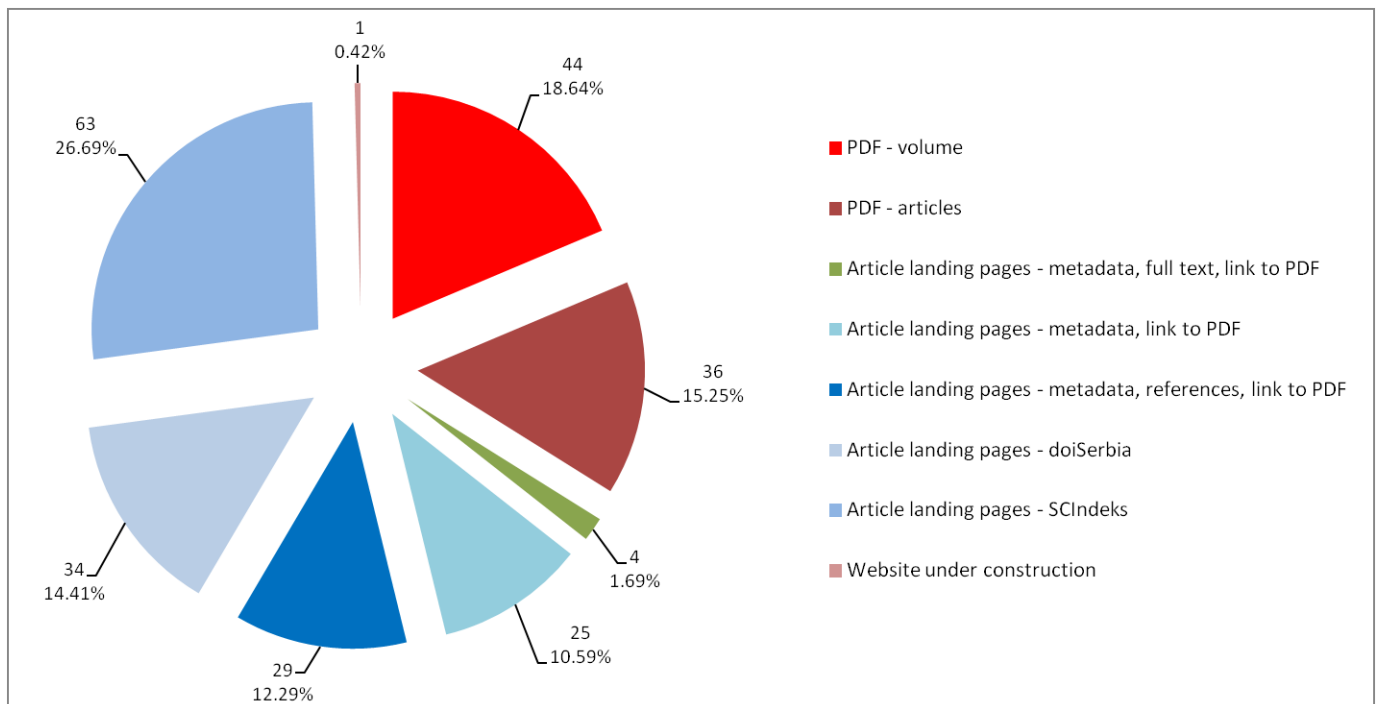


Figure 45 Article-level metadata (including doiSerbia and SCIndeks)

The questionnaire contained a whole set of questions relating to metadata available on article landing pages. However, they were misunderstood by most respondents and the responses were highly unreliable, practically useless. For example, the respondents said that the submission and acceptance dates or acknowledgments were available on landing pages, though this information could be found only in PDFs; or that all relevant metadata were available on article landing pages though there were no landing pages, etc. As it was estimated that checking and correcting them would be a fruitless venture, only a summary of the most typical problems observed while checking journal websites will be presented:

- if there were landing pages for articles, they usually contained the article title, the names of authors and the abstracts;
- keywords were most commonly present, but it was still possible to find journals where they were missing;
- the affiliations of the authors were not always visible on the landing pages and could be found only in PDFs;¹²³
- the email of the corresponding author was sometimes present only in PDFs;
- DOIs were not always shown on landing pages;
- DOIs were sometimes not displayed as permanent URLs and interactive links, though CrossRef provided clear guidelines (“DOI Display Guidelines,” n.d.; Crossref, n.d.);
- DOIs were rather often missing from PDFs;

¹²³ This is the case with *doiSerbia*. The idea of adding the affiliations, submission and acceptance dates and references to landing pages in *doiSerbia* was considered during the project but it was concluded that it would be difficult for the current staff of KoBSON to handle such an undertaking.

- acknowledgments and submission and acceptance dates were more often provided only in PDFs;
- the practice of displaying references cited in papers on landing pages was more common in journals that used OJS;
- references were slightly more often present on landing pages than not (Figures 44 and 45);¹²⁴ however, they were usually not linked to the papers available on the Internet;
- quite unexpectedly, volume and issue information, as well as pagination, and even the publication year were often missing from landing pages, making it difficult for readers who did not access articles from the table of contents (but rather from Internet browsers or through being passed on via emails) to identify them.

In most journals, Creative Commons licenses had been introduced fairly recently and they were still only occasionally available on article landing pages and even less often in PDFs.¹²⁵ During the project, guidelines for their implementation were provided. It is expected that an increasing number of journals will make licenses visible both on landing pages in PDFs in the future.¹²⁶

10.4.3. Machine-readable metadata

Though crucially important in online publishing, article-level machine-readable metadata have not been a priority for journal publishers in Serbia. It is not an exaggeration to say that the vast majority of them have not even been familiar with the concept. As a rule, only the journals that use Open Journal Systems and the CEON/CEES Aseestant, or are part of *doiSerbia*, *SCIndeks* or De Gruyter Open, have landing pages with embedded Dublin Core metadata. Machine-readable metadata facilitate harvesting by aggregators, enable readers to import articles into reference managers and enable tracking by altmetric services.¹²⁷ This issue was discussed at workshops and it may be expected that it will be dealt with greater attention in the future. To the best of our knowledge, only one journal from Serbia embedded Dublin Core metadata in PDFs before the commencement of the project. Its editor shared with the project team the instructions on how to do this¹²⁸ and the practice was immediately introduced to about a dozen journals. This is yet another field where major changes are yet to be expected.

10.4.4. Website platform

At the time when the survey was conducted, 28 respondents used OJS. Three journals used it only for the management of the editorial process but published content on a different platform. Thirty-nine respondents used the CEON/CEES Aseestant, but some of them used it only for the management of the editorial process, while journal content was displayed on parallel websites or sections within institutional websites, though the CEON/CEES Aseestant supported content display. Five journals

¹²⁴ References were available on article landing pages in *SCIndeks* and they were linked to the articles available on the Internet.

¹²⁵ More commonly in journals that used OJS.

¹²⁶ Some editors were reluctant to include license signs in PDFs because they did not want to 'spoil' the article layout. Several editors even asked whether it was possible to include license signs in PDFs uploaded on the website and omit them from the print version.

¹²⁷ See "What Metadata Is Required to Track Our Content?" 2016.

¹²⁸ See "XMP Metadata Support in JabRef," n.d.

were part of De Gruyter Open. All other journals covered by the survey used a variety of other solutions that were not fully suited for online publishing.

Figure 46 shows a summary of responses and the most striking detail about it is the large red slice: the respondents who did not know which platform the journal website used. They accounted for nearly 40% of all respondents (39.41%, 93). This certainly reveals a lack of interest in the technical aspects of online publishing. While members of the editorial staff are normally not expected to be able to set up a journal website and maintain it all alone, they should have the basic understanding of the available solutions and their advantages and disadvantages. Otherwise, they will be unable to make informed decisions.

Only 24 respondents (10.17%) said that they used the CEON/CEES Aseestant, while the remaining 15 (6.35%) whose journals rested on this platform said that they did not know which platform was used. Similarly, only three respondents (1.27%) said that their journals were part of De Gruyter Open; the remaining two (0.85%) ended up in the 'unknown' group. On the other hand, it was very interesting that the representatives of all 28 journals (11.86%) whose websites were powered by OJS provided precise and correct answers. Ten respondents (4.24%) said that they used Joomla, whereas 11 (4.66%) used Wordpress. These open-source software tools were much more commonly used than suggested by the survey, but a great deal of them were 'hidden' in the 'unknown' group. A significant number of journal websites (15.68%, 37) were static HTML websites. Although the majority of them were technically outdated, it was possible to find a few examples with a neat, simple and functional design, especially in small journals.

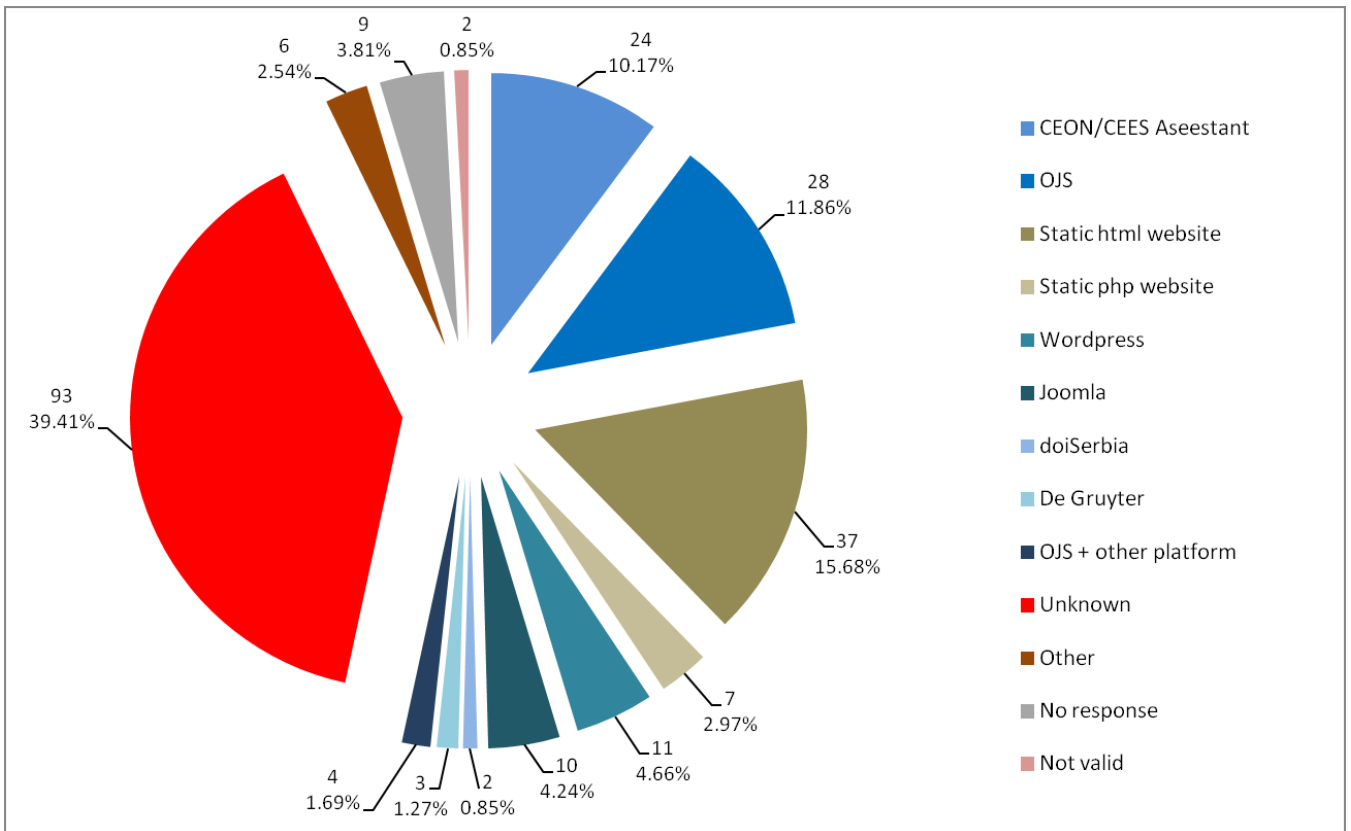


Figure 46 Website platform

Questions nos. 92, 96 and 97 (see [Appendix 1: Questionnaire](#)) were related to some technical aspects of the websites. The respondents were asked whether the website design was responsive, i.e. whether the page display adjusted to various screen sizes (including those used in mobile devices), whether the website had a search module and whether it offered widgets for sharing and emailing.

10.4.5. Responsive design

It turned out that most respondents were not familiar with the concept of responsive design. Though an explanation was provided in the question, already the first responses that were submitted were apparently unreliable. Due to this, additional explanations were provided during Skype sessions.¹²⁹ Nevertheless, the trend continued until the end of the survey. All responses had to be checked – 46.19% were unreliable (the respondents claimed that the website was responsive though it was not). In most cases content display was not adjusted to various screen sizes (Figure 47). At the time of the survey,¹³⁰ 28 journals (11.86%) had fully responsive websites, whereas the websites of 14 journals (5.93%) were partially responsive (adjusted to the tablet size). All journals from the latter group used OJS Version 2.x. In 16 journals, only PDFs were uploaded (no landing pages for articles) but the publishing institution’s website used responsive design. As an increasing number of readers access content using mobile devices, it is necessary to adjust journal websites to their needs. Reading habits have changed and readers increasingly often use the benefits of hypertext and annotation tools (Hillesund 2010; Shimray, Keerti, and Ramaiah 2015). These issues are heavily neglected in Serbian OA journals.

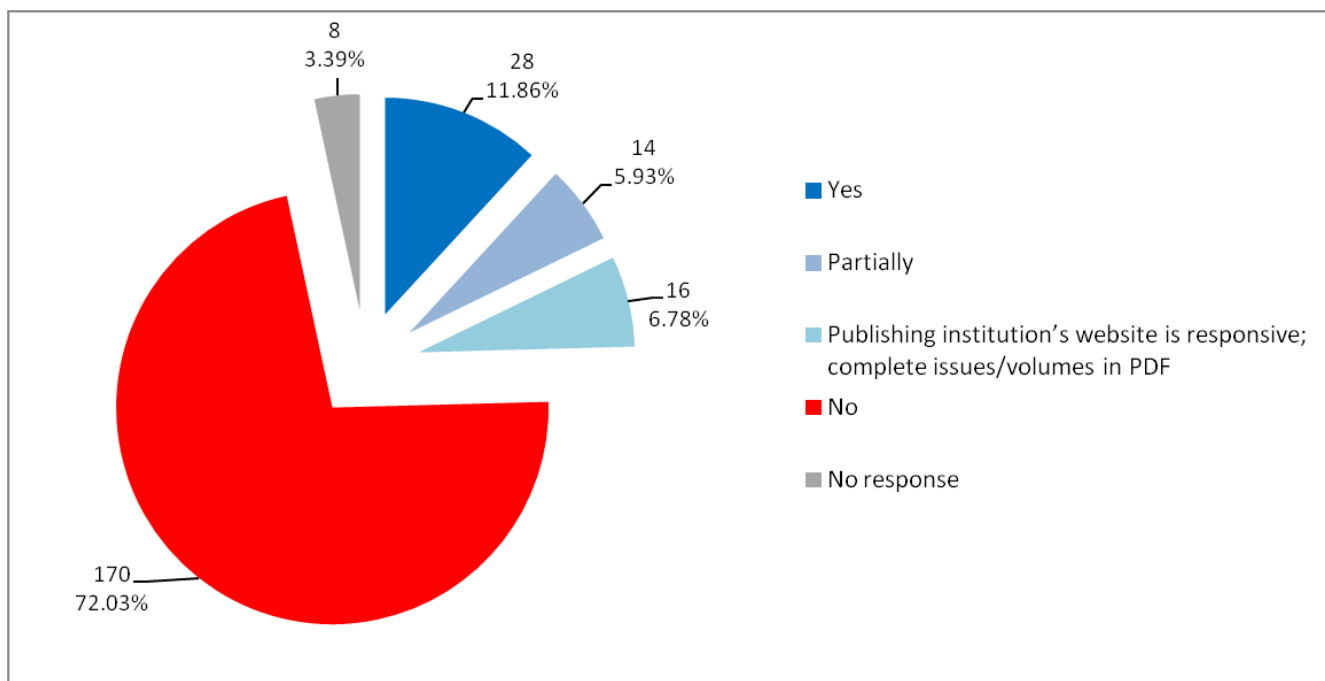


Figure 47 Responsive design

¹²⁹ Detailed notes were made after each session and delivered to all journals from the mailing list (about 500).

¹³⁰ In the meantime, some journals upgraded their websites or switched to OJS.

10.4.6. Search

About one-half of the respondents (52.54%, 124) had a search module on their websites. In most cases, the search was not fully functional and was limited to HTML/PHP pages –the full text in PDF was not searchable. The integrated Google Site Search widget was sometimes used. Some journals were searchable only in *SCIndeks*. *DoiSerbia* does not have a search module.

10.4.7. Social buttons

Very few journal websites had widgets that enabled readers to email or share journal content across social networking sites (the so-called ‘social buttons’). The responses were highly unreliable but they were not thoroughly checked for several reasons. First of all, social buttons are useless if journal content is available only as PDF (no landing pages for articles). Secondly, these widgets sometimes do not work.

10.4.8. Website maintenance

According to the responses, in nearly 40% of the analyzed journals (39.83%, 94) the websites were maintained by editorial staff members. A considerable number of editors and editorial staff members (21.19%, 50) also developed websites for their journals. In other cases (18.64%, 44), the website had been designed and set up by a professional designer but was maintained by the editorial staff. A number of publishers (7.20%, 17), mostly universities, employed professional webmasters who maintained the websites of all journals published by them. Nearly one-quarter (22.88%, 54) of the analyzed journals were maintained by a professional webmaster or a company. In Serbian OA journals, website maintenance was yet another segment of the publication process that relied on volunteer work. Not only was the process of online publishing entrusted to volunteers (usually students or PhD students) in 15.68% of the analyzed journals, but unpaid work could also be found in those journals where the key role in creating and updating websites was played by editorial staff members.

The quality of maintenance varied. Based on informal conversations with editors, journal websites were the most efficiently maintained when this work was done by editorial staff members. Problems usually arose when the online version of the journal was part of an institutional website and was maintained by the same webmaster as the publisher’s website. Most commonly, these webmasters were not well paid and their duties also included the administration of the institution’s network and even minor computer repairs. In such cases, the work related to the journal was seen as a low-priority assignment and was done in an *ad hoc* manner. Some editors reported that it usually took months to make small changes, e.g. replacing an outdated list of editorial board members, or upload an already prepared and printed issue. Even when editors required that landing pages for articles be created, this was impossible to negotiate with webmasters. The reliance on volunteer work also had its drawbacks, especially when the work was done by PhD students or researchers. They were usually not ready to keep on working without reward (not necessarily financial) for an unlimited period of time. When they left, it was difficult to ensure uninterrupted maintenance, especially if the new webmaster was also expected to work as a volunteer.

Table 31 Who created the website and who maintains it?

| | | No. of journals | % in the sample | |
|------------------|--|-----------------|-----------------|----------------------------------|
| N O | Hired volunteers | 37 | 15.68% | |
| | Editorial staff members | 50 | 21.19% | EDITORIAL STAFF 39.83% |
| C O S T | Created by a professional designer or a company; maintained by the editorial staff | 44 | 18.64% | |
| P A | Webmaster employed by the publishing institution | 17 | 7.20% | |
| I | Hired associate (for a fee) | 4 | 1.69% | |
| D | Professional designer or a company | 54 | 22.88% | |
| | Not known | 3 | 1.27% | |
| | Other | 5 | 2.12% | |
| | No response | 22 | 9.32% | |

10.4.9. Website costs

Website costs normally include the cost of hosting, website design and development, regular maintenance and updating, as well as digital archiving. As it has already been mentioned, more than 40% of the analyzed journals did not have hosting expenses. At least 15% of them had webmasters who worked free of charge. Free digital archiving for all journals was provided through the digital legal deposit, which was a limited scheme, as only the digital copies of whole issues were archived. An insignificant number of journals in Serbia used digital archiving schemes, such as LOCKSS. The journals available in full text through *SCIndeks* were archived in the *SCIndeks* repository. As it can be seen in Figure 48, nearly 10% of the analyzed journals (9.40%, 22) had no website-related expenses. Most of them had independent websites hosted within the Academic Network or were limited to pages within institutional websites. For 23 journals (9.83%) website costs were covered by the publishing institution.

More than one-third of the analyzed journals (36.32%, 85) spent up to 10% of their budgets on website maintenance. It is interesting that free and paid hosting and free and paid maintenance were almost equally represented in this group. About 10% of the respondents (10.26%, 24) allocated up to 20% of their budget to the website. The journals that spent more than 20% on the website accounted for less than 5% of the respondents (4.24%, 10). Only one respondent said that the whole budget was spent on the website, as the print version had been abandoned and copyediting and desktop publishing were done by editorial staff members employed with the publisher. Fourteen respondents (5.98%) could not provide the information, whereas 54 respondents (23.08%) skipped the question.

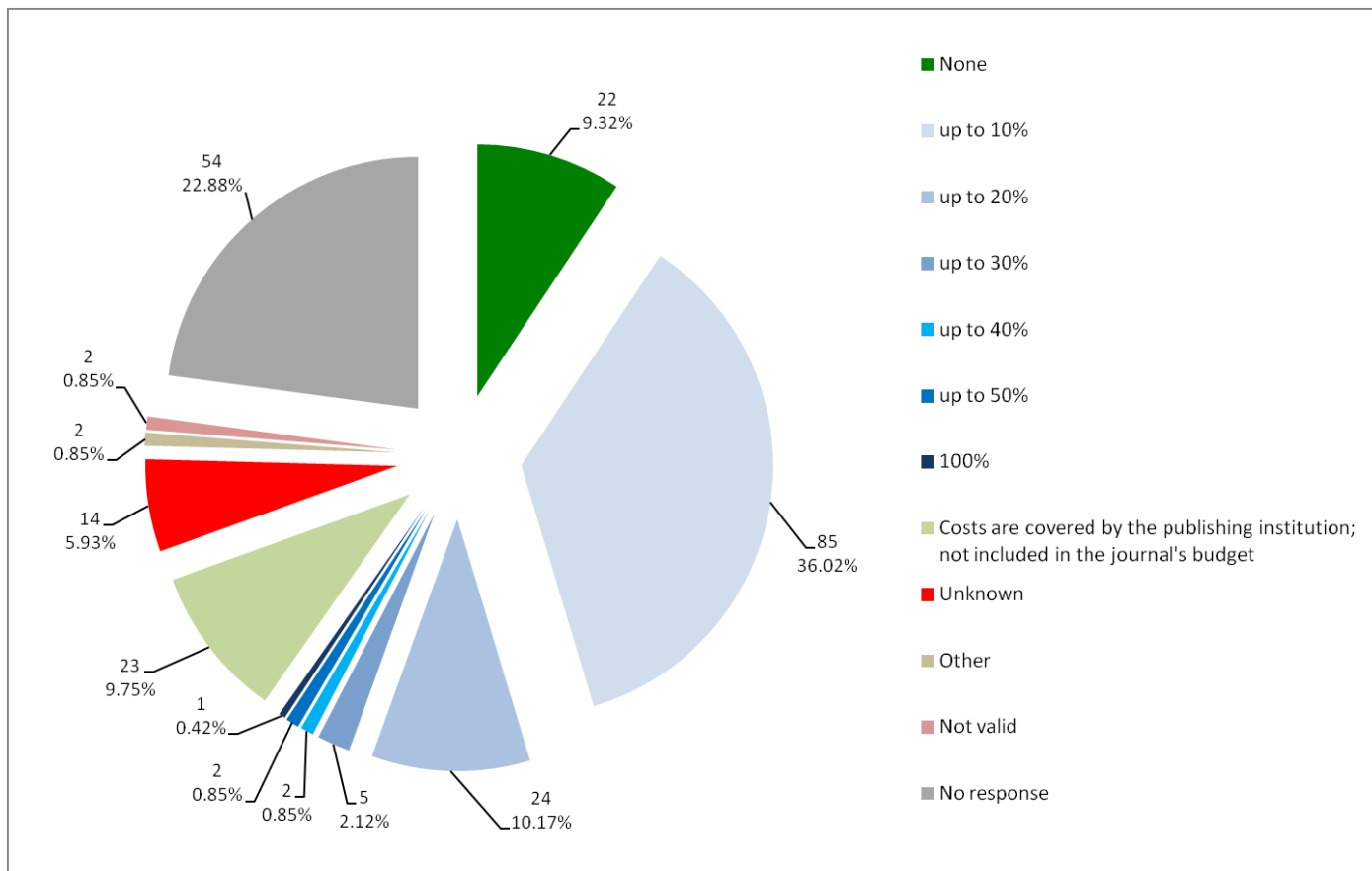


Figure 48 The share of website costs in the total journal budget

The data speak for themselves, especially when compared to printing costs. In 65.25% of the analyzed journals website costs did not exceed 20% of the journal budget. At the same time, 46.61% journals spent more than 50% of their budget on printing.

10.4.10. Web analytics and altmetrics

More than a half of the respondents (54.66%) did not use web analytics tools. Keeping in mind that it was impossible to check the responses and taking into account the overall unreliability of the responses relating to journal websites, it may be assumed that this percentage was in reality smaller. This is partially due to the fact that many editors were not familiar with web analytics tools. On the other hand, conventional web analytics were of little use to the websites where only PDFs were uploaded (no landing pages for articles). Google Analytics (which was the most commonly used tool), does not track PDFs automatically. It may be adjusted for this purpose but this requires some technical skills. Also, if only whole issues are uploaded as PDFs, it is impossible to know which articles were read even when PDF tracking is enabled.

The concept of altmetrics was still unknown to most journal publishers in Serbia. The only altmetric tools used in Serbian OA journals were various modules included in OJS, but even those were used extremely rarely. The journals that had publicly available statistics (downloads, views) were less than

a dozen. The presented data are not based on the responses but on an immediate insight into journal websites. The vast majority of the respondents skipped the question and the submitted answers were mostly incorrect.

10.4.11. Social networking websites

In Serbia, social media are still rarely used in promoting research outputs. At the time of the survey, about 10% of the respondents (10.17%, 24) used general social networking tools: Facebook, LinkedIn, and less commonly Google +, Twitter and Instagram. Twenty-two journals (9.32%) had their profiles on Academia.edu or ResearchGate or were in the process of establishing them. Not all of the profiles were regularly updated. As it has already been mentioned, one journal (0.42%) did not have a website but used Academia.edu as the only online dissemination channel. It was possible to observe in informal conversations that most editors encouraged authors to share their papers on social networking sites for scholars.

11. Indexing and abstracting

The questionnaire contained a set of questions relating to indexing in international databases, primarily the Web of Science, Scopus and DOAJ. DOAJ was included as a major database of Open Access journals, whereas the Web of Science and Scopus were highlighted due to the fact that data provided by them played an important role in the national system of evaluating research outputs. The national evaluation system puts emphasis on the journal ranking according to the Journal Citation Reports. The main document that governs the evaluation of the research results of individual scientists is the Rule Book on the Procedure and Aspects of Evaluation and Quantitative Expression of Scientific Research Results. According to this document, journals are classified into several categories. The highest ranks, international journals (M21a–M23), cover the journals included in the Science Citation Index, Social Sciences Citation Index and Arts and Humanities Citation Index and the journal rankings in the national system largely reflect their ranking in JCR. According to the latest version of the Rule Book, SCImago rankings (based on Scopus data) are also taken into account for social sciences and humanities and they play a role in defining some of the categories of national journals ('Pravilnik o postupku, načinu vrednovanja i kvantitativnom iskazivanju naučnoistraživačkih rezultata istraživača' 2017).

11.1. Web of Science and Scopus

At the time of the survey, 23 journals published in Serbia were indexed in SCI, SSCI and AHCI and 68 journals were indexed in Scopus (including discontinued journals). It is noteworthy that 17 journals (out of 23) included in SCI Expanded, SSCI and AHCI were accepted between 2007 and 2009, whereas only two journals were accepted in the years to follow. In the same period, 25 journals were accepted for indexing in Scopus but the positive trend continued – additional 22 journals were accepted in following years ("Referisani časopisi," n.d.).

It is generally believed in Serbia that it is very difficult (and even impossible for journals published in Serbian, especially in humanities) to meet the requirements for inclusion in these indexes. While the authors were more or less familiar with the outcomes of the initial screening and applications of the journals included in *doiSerbia*, they had no insight into the experience of other journals, beyond *doiSerbia*. Therefore, the respondents were asked whether they applied for indexing in the Web of Science and Scopus. If they did, they were required to state the outcome of the application and, if they were rejected, the reasons for rejection. As for the reasons for rejection, it was possible to select one or multiple answers from a defined list of choices (undefined editorial policy, poor geographic influence, low citation counts, the journal is not sufficiently interesting for the Web of

Science / Scopus as the quota of journals from a particular geographic region is already filled, no particular reason is stated) and/or state 'other' reasons. The offered choices were defined based on the information available to the authors before the survey, obtained from journal editors or established during the pre-evaluation of the *doiSerbia* journals conducted by Scopus in 2015. Based on these data, the most common reasons for rejection included low international impact (few international members of the editorial board, few international authors and low citation counts), undefined journal policies (ethical standards not explicitly defined; no information about peer review, etc.) and technical issues (e.g. no HTML landing pages for individual articles).

Out of 236 respondents, eight skipped the questions related to the Web of Science. The results (Figure 49) revealed that 66.53% (157) of the analyzed journals had never tried to apply for indexing in the Web of Science. Fifty-five journals (23.31%) applied once: 19 (34.54% of those that applied) were rejected, 17 (30.91% of those that applied) were accepted; for 16 journals (20.09% of those that applied) the evaluation procedure was pending and one response was not valid.¹³¹ One respondent did not state the outcome of the procedure. Out of 13 journals (5.51%) that applied twice, four were rejected (30.77% of those that applied), another four were accepted¹³² and five journals (38.46% of those that applied) were awaiting decision. Three journals applied more than twice: one was rejected (33.33% of those that applied), one accepted and one is awaiting decision. The respondents applied for indexing in the Web of Science accounted for 30.08% and the success rate was about 30%.

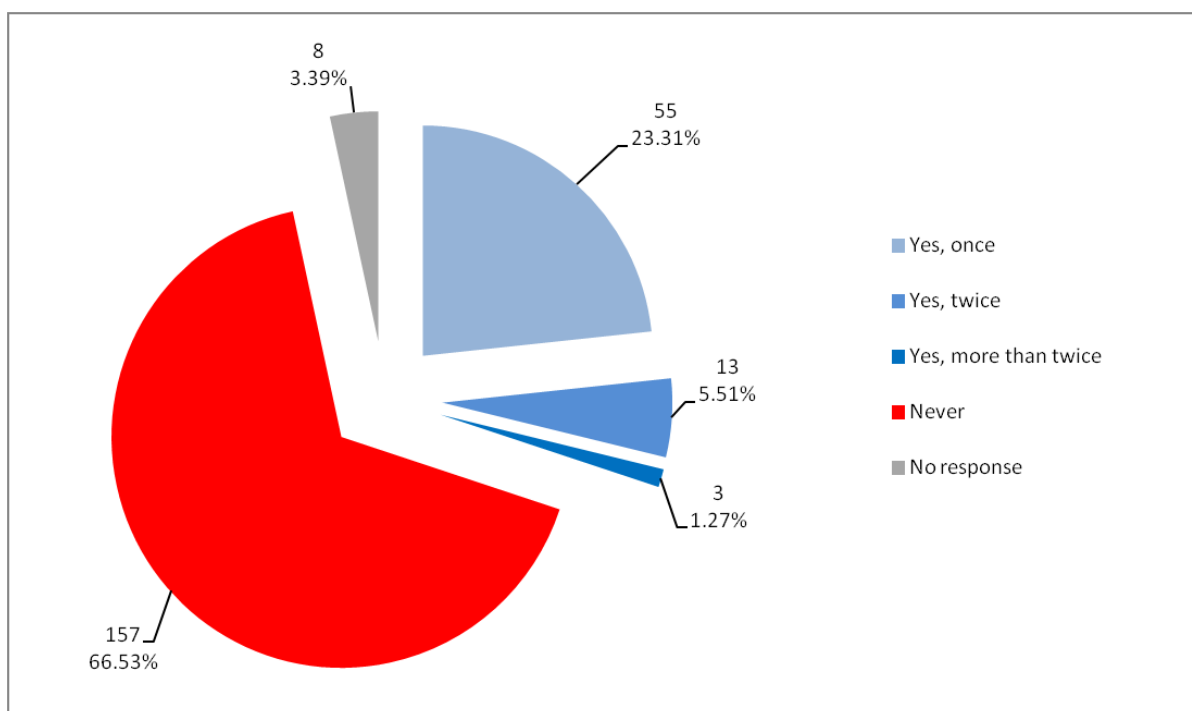


Figure 49 Have you ever applied for indexing in the Web of Science?

¹³¹ The respondent claimed that the journal was accepted, which was not true.

¹³² One of them was dropped in 2015.

Judging by the responses, the most common reason for rejection was a small number of citations. Other reasons included irregular publishing, the fact that the journals are published in Serbian, cited references in the Cyrillic alphabet and inconsistent citation styles. It is interesting that one of the respondents mentioned a bad editorial practice as the reason for rejection: authors were required to cite papers/books published by the journal’s publisher.

The journals indexed in the Web of Science¹³³ were asked whether they still sent print versions for indexing or whether their content was indexed electronically. According to responses, 13 (5.51%) of them were indexed electronically, six (2.54%) still sent print versions, whereas one journal (0.42%) was switching to electronic indexing. This indicates a good trend. It began late in 2012 and early in 2013, when due to delays in funding many Serbian publishers were unable to print the issues that were already available online. Faced with the threat of exclusion from the Web of Science, they began to switch to electronic indexing.

Out of 236 respondents, seven (2.97%) skipped the questions related to Scopus. Four journals (1.69%) indexed in Scopus responded that they were not indexed in this database. For the purpose of analysis, these data were corrected. The results of the survey (Figure 50) revealed that the share of journals that had never applied for indexing in Scopus was almost equal to the percentage of journals that had never tried to enter the Web of Science – 65.25% (154 journals). The percentage of those that applied once was higher (29.66%). Only five journals applied twice and there were no journals which applied more than twice. The total percentage of the respondents who had submitted their journals for indexing in Scopus was 31.78%.

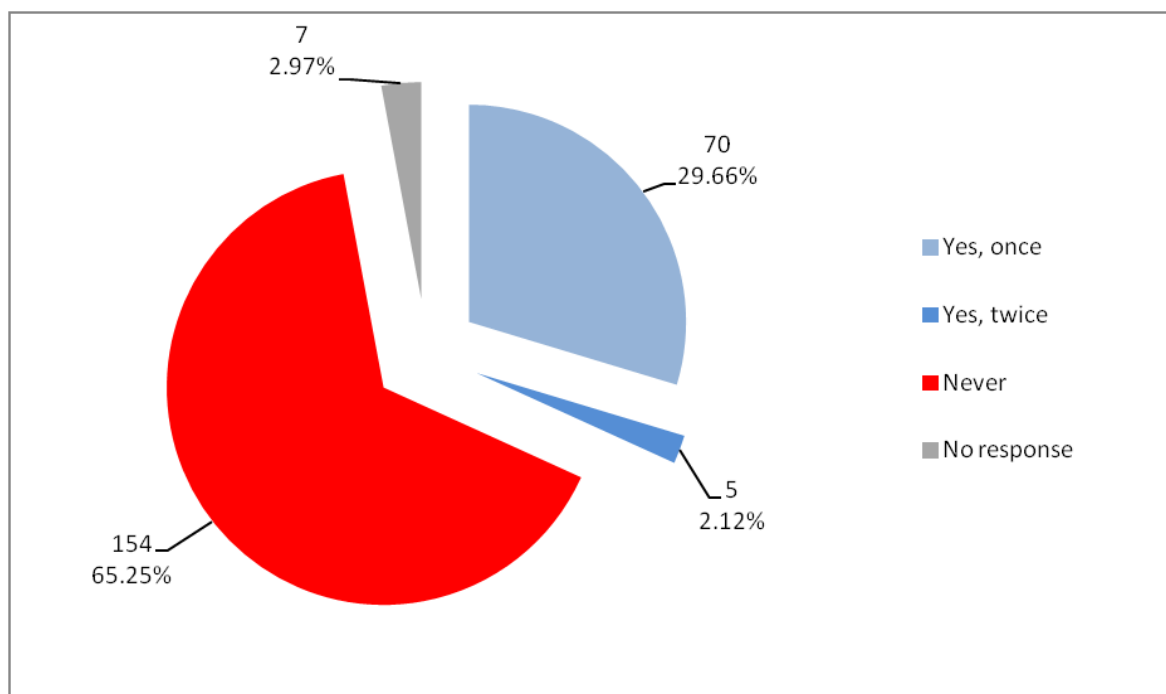


Figure 50 Have you ever applied for indexing in Scopus?

¹³³ Out of 23 journals indexed in the Web of Science, 21 responded. Response was also received from one journal that had previously been indexed in the Web of Science, but was dropped in 2015.

As the most common reasons for rejection, the respondents cited undefined editorial policies and poor citation counts. Other reasons included irregular publishing. However, the acceptance rate was higher in Scopus: 56% of those that applied at least once were accepted (vs. 30.98% in Web of Science). The journals included in *doiSerbia* were asked whether they had used the opportunity to apply for pre-evaluation by Scopus organized by the National Library of Serbia in 2015. Fourteen respondents answered positively. Three of them were accepted for indexing soon thereafter.

It is interesting that there was a significant overlap between the journals that had never applied for indexing in Web of Science and those that had never tried to meet criteria for indexing in Scopus – 148 (62.71%). Keeping in mind that most journals that had the status of an international journal and highly ranking national journals responded to the survey, it is reasonable to assume that the share of those who had never applied for indexing in the two databases would have been considerably greater if the survey had covered all journals published in Serbia.

The disciplinary structure of the journals that had never applied for indexing in these two databases and those that applied at least once is shown in Table 33. The majority of the 157 journals that had never applied for indexing in Web of Science, belonged to social sciences and humanities (including multidisciplinary journals that also covered other areas of study) – 98 (62.42%).¹³⁴ The data related to Scopus revealed a similar trend: out of 154 journals that had never applied for indexing in Scopus, 96 (62.34%) belonged to the areas of social sciences and humanities.

Table 32 The disciplinary structure of the journals that applied / did not apply for indexing in the Web of Science and Scopus

| GROUPS OF DISCIPLINES | | WEB OF SCIENCE | | SCOPUS | |
|-----------------------|-----------------------------------|-----------------|---|-----------------|---|
| | | No. of journals | % (of those that applied / did not apply) | No. of journals | % (of those that applied / did not apply) |
| APPLIED | Physical sciences and engineering | 45 | 63.38% | 47 | 62.67% |
| | Social sciences and humanities | 26 | 36.62% | 28 | 37.33% |
| NEVER APPLIED | Physical sciences and engineering | 60 | 38.21% | 58 | 37.66% |
| | Social sciences and humanities | 97 | 61.78% | 96 | 62.34% |

The authors of this study were rather surprised with the survey results (assuming that they were reliable). Keeping in mind the scale of complaints disclosed in informal conversations with journal editors, it was expected that a considerably greater number of journals had applied for indexing at

¹³⁴ The situation was quite opposite as regards to Serbian journals indexed in the Web of Science: only three journals already indexed in Web of Science (13.04%) belonged to the areas of social sciences and humanities.

least once. Due to this, the survey was focused on identifying the reasons for rejection. Due to this the opportunity to investigate in greater detail the reasons for not applying was missed. Judging by the survey, it was apparent that the complaints that it is impossible for local journals in social sciences and humanities to meet the requirements set by the Web of Science and Scopus were not based on the editors' own experience. The widespread opposition to bibliometric methods among Serbian scholars in social sciences and humanities (Kovačević 2013) might be a reason for not applying. While it may be understandable why they opposed the application of bibliometric criteria in the evaluation of research outputs, it remains unclear why they failed to see the Web of Science and Scopus as means of increasing the international visibility of their journals and attracting international readers and authors. Other segments of this study suggest that along with opposing bibliometric indicators and 'refusing' to apply for indexing in international databases, the majority of journals in social sciences and humanities also failed to comply with editorial and technical standards that online journals were expected to meet.

Having failed to investigate these problems, we will only mention a few points disclosed in informal conversations during the project and share our impressions, fully aware that they may be equally misleading as the above-mentioned complaints shared before the survey. There was an impression that a significant number of journals in Serbia tended to be self-sufficient and closed systems. These journals were publicly funded, they had a closed circle of authors, reviewers and readers¹³⁵ and, as a rule, a high self-esteem. Accordingly, they sought to maintain the *status quo* and establish an evaluation system based on 'expert assessment'.¹³⁶ When setting aims and standards, they tended to limit themselves to the local context and compare themselves to local journals, even though their peers did not necessarily set the best example. Nevertheless, it was possible to identify two major reasons for undertaking to make improvements and depart from the *status quo*: one was the threat of cutting public funding; the other was the appointment of an ambitious editor with international experience.

However, the growing number of journals indexed in Scopus in the past several years and the fact that out of 22 journals from Serbia accepted in the Emerging Sources Citation Index (ESCI),¹³⁷ 14 can be roughly classified as dealing with social sciences and humanities ("Naši časopisi u ESCI" 2016) indicate that the situation is gradually changing. Already early in 2017, the situation was slightly different, as some journals had applied for indexing in Scopus and Web of Science in the meantime, while some of those initially rejected by the Web of Science were later accepted in ESCI.

¹³⁵ It was also possible to identify a group of journals that did not have international ambitions, as they regarded themselves to be a link between high science and elementary and secondary education. Their audience was mostly limited to teachers and university students. Their situation was complicated because local authors tended to publish their research in international journals (in order to meet the requirements set by the national system for evaluating scholars' performance), due to which only papers of a poor quality reached them. Some editors of these journals suggested that it was necessary to 'protect' them by giving incentives to local authors who published their high-quality research in such journals or giving warrants that their funding would not be cut. Furthermore, several editors expressed their concern that a greater visibility and presence in international databases would put them in a situation that they would not be able to handle: it would be necessary to check an increased number of submissions without similarity checking software (they were unable to afford it), find a greater number of reliable English-speaking reviewers, hire copyeditors for English, etc., which would be difficult to ensure with limited human and financial resources. On the other hand, the introduction of APCs would discourage local authors.

¹³⁶ Cf. Centar za evaluaciju u obrazovanju i nauci 2016.

¹³⁷ On ESCI, see Testa 2016.

11.2. Directory of Open Access Journals (DOAJ)

Before launching the re-application process ('Update on Reapplications and New Applications' 2016) in March 2014, DOAJ had indexed more than 100 journals from Serbia. In May 2017, only 73 journals were indexed in this database: 71 were accepted according to the new, more detailed and rigorous criteria, and two were awaiting the results of re-evaluation. Several dozen journals from Serbia were excluded from DOAJ either because they failed to submit a re-application or because they failed to meet the new requirements – most commonly, they lacked an Open Access statement or license information. From the perspective of the KoBSON team, who submitted re-applications for 44 journals included in *doiSerbia*, this was an extremely frustrating process and, as stated above, it revealed the need for developing a greater awareness of the current standards in international scholarly publishing among local journal editors and publishers. Some *doiSerbia* journals were removed from DOAJ in May 2016 because they had failed to re-apply. Furthermore, the integrity and correctness of information provided by some re-applicants were disputable. At the time when the project team invited the *doiSerbia* journals to define their journal policies (July 2016) and upload them to the upgraded *doiSerbia* platform, thereby solving the disputable issues and meeting the requirements set by DOAJ, it was still possible to change and correct data in re-application forms. Nevertheless, the response was poor. It was only late in November 2016, when it was announced that 27 journals which had not provided license information would be removed from DOAJ, that most *doiSerbia* journals undertook to define their journal policies. And yet, six journals failed to respond to the repeated call and provided no response whatsoever even after the removal from DOAJ.

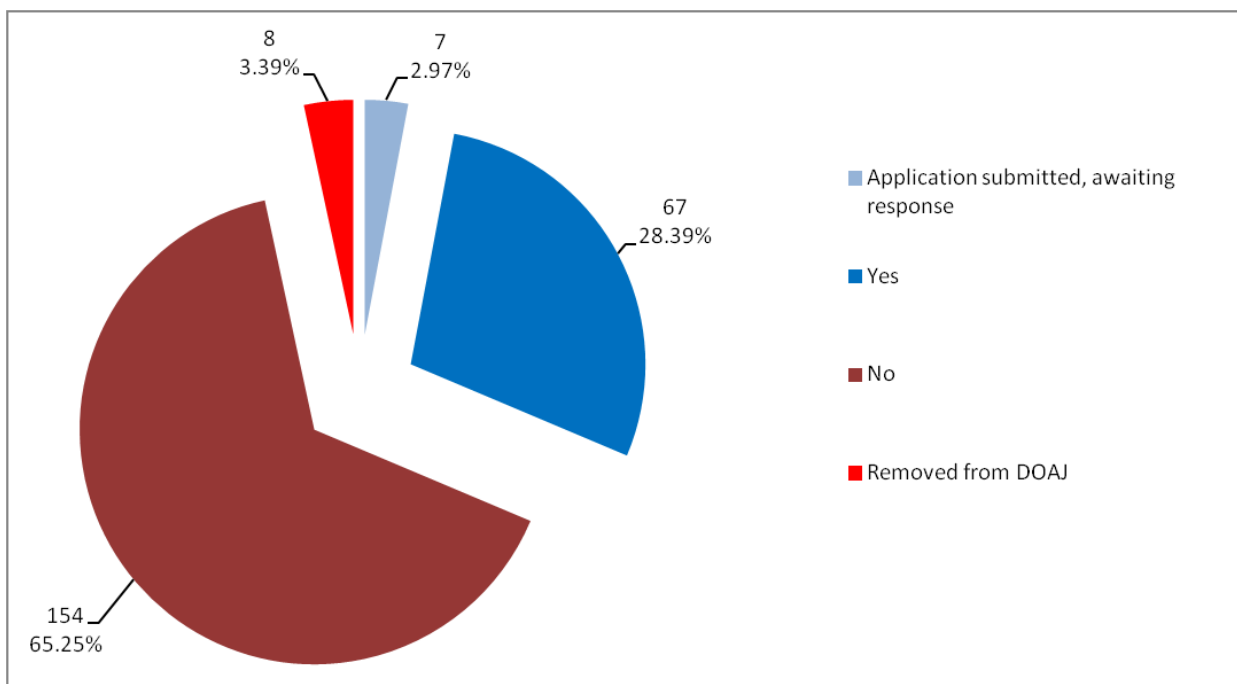


Figure 51 Is the journal indexed in DOAJ?

This situation was reflected in the survey results. While most respondents knew whether their journals were indexed in the Web of Science and Scopus, 12.29% (29 journals) provided incorrect answers when asked about their status in DOAJ. Ten respondents (4.24%) indexed in DOAJ claimed that they were not included in this database; 15 journals (6.35%) not indexed in DOAJ claimed that they were indexed, while four journals (1.69%) removed from DOAJ in May 2016 (because they had failed to reapply) claimed that they were indexed in this database, though they must have been familiar with the fact that they had already been removed at the time when they filled in the questionnaire. Therefore, it was necessary to check and correct data and the consolidated results are presented in Figure 51. At the time when the survey was conducted, 71.61% (169 journals) of the respondents were not indexed by DOAJ.

The share of journals indexed in DOAJ accounted for 28.81% of respondents (68 journals). The share of new applications (2.97%, 7) was rather small. These trends are not difficult to explain: journals were not interested in indexing in DOAJ because it required effort to comply with the DOAJ standards, while the mere fact that a journal was indexed in this database did not improve its ranking in the national evaluation system. Also, it would be beneficial for journals accepted for indexing to supply article metadata to DOAJ. For the *doiSerbia* and *SCIndeks* journals, this would be done by KoBSON and CEON/CEES, respectively, whereas other journals would be supposed to upload metadata themselves. For many journals, this would be a major problem because they used web platforms that did not contain article-level metadata and/or did not allow for metadata export.

11.3. Other databases

Indexing in other databases was covered in question no. 109. The results revealed the same trend as the data relating to the Web of Science, Scopus and DOAJ: 71.19% of the respondents (168 journals) had never applied for indexing in any database, vs. 25.85% (61 journals) that had applied. Seven respondents (2.97%) skipped the question.

Most respondents applied for indexing in ERIH Plus: 17 (7.2%) were accepted, one (0.42%) was rejected, while five (2.12%) were awaiting response. The increased interest in this database,¹³⁸ was most probably associated with the efforts of some circles in the Serbian academic community to use it as a reference list in the national system of evaluating scholarly outputs (Radosavljević, n.d.). Forty journals from Serbia were included in ERIH Plus at the time of the survey.

Six journals (2.54%) had a distribution arrangement with EBSCO. Other databases included PubMed, EMBASE, Agris, EconLit and ProQuest but they still indexed too few journals from Serbia.¹³⁹ The journals indexed in the mentioned databases reported increased downloads and citations due to the greater visibility of their content. Many of them had poor websites and the presence in aggregators and subject-based journal databases brought their content closer to a wider audience at no cost.

¹³⁸ ERIH Plus which is not an abstracting database but merely a list of journals (Centar za evaluaciju u obrazovanju i nauci 2016)

¹³⁹ Three respondents are indexed in PubMed, two were rejected, one is awaiting response and one applied long ago but has never received any response. One respondent is indexed in EMBASE, one was rejected and one has not received any response. One journal is indexed in each of the following databases: ProQuest, EconLit, Agris and ProQuest.

12. Conclusions and recommendations

The survey provided plenty of information, though the responses were not always reliable. As it can be seen, even when they were unreliable, the answers still reveal what the respondents did not know,¹⁴⁰ or some deeply rooted practices, misconceptions, relationships, etc., and make it possible to outline roughly the major clusters of problems in the overall situation, which can be described as a slow and incomplete transition towards electronic publishing. The following issues constitute the challenges that need to be addressed in order to ensure the sustainability of Serbian OA journals:

- journal websites and electronic publishing, including e-workflow;
- policies in general but specifically copyright and licensing;
- ensuring a continuous inflow of manuscripts, and
- funding.

12.1. Journal websites and electronic publishing

As already mentioned, journal websites are expected to meet some interoperability standards: XML-formatted OAI-PMH-compliant metadata, usually in accordance with the Dublin Core standard. This enables various aggregators to harvest metadata, making both journals and articles visible, searchable and retrievable across multiple platforms, including Google Scholar.¹⁴¹ Apart from the journals using OJS and the CEON/CEES Aseestant, these technical requirements are met by *doiSerbia* and *SCIndeks*. If a journal website has landing pages for articles but no XML metadata, it will not be harvestable by OAI aggregators but a good optimization for search engines may make it easy to find the journal and associated articles in general Internet browsers. However, when only PDFs are available, it normally takes longer for search engines to crawl content.¹⁴² PDFs without structured metadata are practically useless for OAI aggregators. Google Scholar extracts some metadata by parsing PDFs but the extracted data may contain errors. As most readers discover online content through search, a greater visibility and discoverability make it possible to reach out to a greater audience and, indirectly, increase citation counts. These technical standards must be taken into consideration when developing a functional journal website. A website may be modern, well-designed and expensive but as long as it does not meet the basic technical requirements it will not offer an optimal infrastructure for an online journal.

The main reason why so many journal websites in Serbia do not meet the basic technical requirements lies in the fact that most publishers are not familiar with technical standards. But this is not the only reason. Although free open-source software (OJS) is available, not all journals can

¹⁴⁰ It may be assumed that not all responses were provided by editors but rather by various editorial assistants and even librarians who were only loosely tied to editorial offices.

¹⁴¹ Indexing standards for Google Scholar: 'Inclusion Guidelines for Webmasters' 2017.

¹⁴² Esp. when PDFs contain complete journal issues, text is in the Cyrillic alphabet and there are no embedded metadata.

implement it: some cannot arrange for hosting and technical support within the publishing institutions, others find it difficult to set up all details and maintain the system. It happens that they get OJS installed, try to set it up and test it, but eventually give it up for various reasons – usually because there is opposition on the part of the editorial staff and unwillingness to learn and adopt new skills and procedures.¹⁴³ In order to ensure that the necessary technical standards are implemented, the editorial staff should include people who are familiar with the technology of electronic publishing. Yunta and Artigas (2013) propose the introduction of a new editorial role – that of a technical editor. Technical editors should have a new mindset that involves digital thinking, as well as new technical skills (XML, metadata, content management and journal management systems, new formats adjusted to mobile devices). They should also be familiar with publishing mechanisms and copyright issues in an online environment.

Finally, there is the lack of funds for journal websites – either because there are really no funds available or because all funds are spent on printing. In the latter case, we also face the lack of awareness of the role of the online version in the life of a journal. Under the circumstances, it may be expected in the following years that a number of journals will implement OJS or CEON/CEES Asestant, or find another solution that meets the above-mentioned technical standards, but the overall state of awareness is not promising.

A major obstacle in the transition to online publishing is the current set of criteria of the national ministry responsible for science for allocating subsidies to scholarly journals in Serbia. These criteria do not foresee the costs of establishing and maintaining journal websites. The applicants are required to submit a cost estimate for printing all issues to be published in a year. The costs are further specified in the application form for subsidies and they include the costs of printing, computer layout, copyediting, proofreading, translation and the cost of postal services (distributing print copies). As proof that the issues covered by subsidies have been published, journals are required to send a hard copy of each issue published to the ministry of Education, Science and Technological Development. The current criteria for subsidies appear to be a limiting factor for the development of Serbian scholarly journals. Instead of offering guidance towards achieving greater visibility and reaching out to new audiences, they hinder journals into an outdated system of print-only publishing.

The purpose of scholarly journals is the dissemination of scientific outputs and the size of their audience should be taken into consideration when allocating public funds for their development. Publishing electronically fosters scholarly exchange and enables journals to reach the target audiences more efficiently and without delay. In order to facilitate and foster the development of Serbian scholarly journals it is necessary to draft a new Act on Editing Scholarly Journals that would define the minimum standard technical requirements that journal websites have to meet in order to receive funding.¹⁴⁴ It is also necessary to redefine the criteria for allocating subsidies for scholarly

¹⁴³ Structured metadata and OAI compliance are not the only advantages of journal management systems. As it could be seen, the maintenance and archiving of editorial documentation is a major problem in Serbian journals. Journal management systems offer a solution to this problem by archiving all submissions, correspondence and reviews in a database.

¹⁴⁴ The data presented in this study show that the current Act has been applied too 'flexibly', i.e. some negative trends have not been identified and sanctioned. A greater discipline is necessary and it is reasonable to restrict funding for journals that fail to comply with the defined standards.

journals so as to accommodate the costs associated with publishing the online versions of journals. In this respect, it would be very useful to prepare a standardized cost estimate that would guide fund allocation. This would enable those who want to abandon the print version and publish only electronically to qualify for funding.

The project *Revisiting open access journal policies and practices in Serbia* sought to mitigate the mentioned problems by upgrading *doiSerbia*. Two pages were added to journal profiles: one for the editorial policy and another for author guidelines. A list of editorial board members was already a part of the journal profile, while Aims and Scope were provided at the beginning of the editorial policy. The purpose of the upgrade was to enable those journals which did not have landing pages for articles, XML metadata and the OAI PMH protocol on their 'main' sites to use the *doiSerbia* journal profiles as their websites. Late in 2016, *SCIndeks* was upgraded in a similar manner (Aims and Scope and the editorial policy were added to journal profiles). These changes enabled the journals that published only research (citable) papers¹⁴⁵ to rely entirely on *doiSerbia* and *SCIndeks* and use them as their websites.¹⁴⁶ This improvement will not solve the problem of non-citable (and non peer-reviewed) articles, which are not assigned DOIs. A possible solution to this problem could be the migration of these content types to publishers' websites or blogs. With the exception of some humanities journals, non-citable articles have either already been eliminated from journals or are published only rarely. Another solution would be to assign DOIs to all articles, both citable and non-citable.

There are indications that the purpose of the upgrade was not understood by all *doiSerbia* journals. Most of them were well-established print journals and, as mentioned previously, they showed the least interest in the project. Months after the invitation to send documents necessary to update their profiles on *doiSerbia*, no more than six journals responded.¹⁴⁷ It was only under an imminent threat of removal from DOAJ that other journals began updating their profiles.

12.2. The implementation of copyright policies and licenses

Thirty-seven *doiSerbia* journals eventually defined their editorial policies relying on the template devised by the project team (see [Appendix 2: Editorial Policy \(template\)](#)). The journals that were not included in this platform showed a considerably greater interest in the project and throughout the implementation period, they were submitting their policies for revision. It is estimated that about 100 journals defined the policies their policies towards the end of the project. The sections of the policy template that dealt with responsibilities, peer review, ethical issues and self-archiving were understood very well and it may be expected that these segments of the policy will be implemented

¹⁴⁵ These two platforms index only citable articles.

¹⁴⁶ This will further enable them to fully abandon their old websites (and save money) or at least to stop uploading content to multiple places.

¹⁴⁷ Four of them had fairly good sites and had no need to use *doiSerbia* profiles as their websites. Apart from these six journals, one journal submitted a policy but it did not meet the minimum standard requirements and was not published on *doiSerbia*.

smoothly. While most journals adopted all segments of the policy template, some publishers¹⁴⁸ removed whatever they considered superfluous. It is interesting that the most commonly removed sections were copyright and licensing issues. As already mentioned under [8. Copyright, user rights and self-archiving](#), these segments often contained contradictory statements. There are many reasons for concern as regards to their implementation. After defining the editorial policies in *doiSerbia* or *SCIIndeks*, some journals did not update the relevant information on their 'main' websites, nor have they uploaded the policy there. For example, according to the policy available in *doiSerbia*, authors retain copyright, while the publisher's website says that an exclusive copyright transfer is required. Furthermore, it is stated in the policy that authors transfer copyright to the publisher, while the copyright information accompanying each paper clearly indicates that authors retain copyright. The license module mentioned in the policy differs from that used in individual papers, or the licensees in PDFs differ from those found on article landing pages.¹⁴⁹ Due to these inconsistencies they risk being identified as poor-quality or questionable journals.

Additional education on copyright and licenses will certainly be provided but this is not likely to solve the problem. It would be necessary to check all journal websites from time to time and contact editors whenever such inconsistencies are observed. Not only will this be difficult to achieve due to limited human resources, but some editors would certainly reject the advice.

12.3. Ensuring a continuous inflow of manuscripts

The national system for the evaluation of scientific outputs largely relies on the impact factor for journals and citation counts. Local scientists, especially in physical science and engineering, seek to publish their research in highly ranked, mostly subscription-based, international journals. When they decide to publish in local journals without an impact factor, they usually submit results that do not merit publication in international journals. 'Recycled' or translated papers are also submitted. Such papers are often accepted for publication even when the editors are aware of their poor quality, either because the authors are well known to the editors, or due to the fear that rejection may lead to a decreased inflow of manuscripts. Not only do such papers contribute little to increased citation counts and better ranking, but they sometimes turn out to be plagiarized or self-plagiarized. When misconduct is discovered, journals are more likely to publish corrections, even when it is necessary to retract a paper, and editors are sometimes exposed to pressures and threats. When the inflow of submissions is poor, editorial staff members waste their time on correcting manuscripts that should be immediately returned to authors. This approach only fosters the undesired behaviours (poor and/or untidy submissions and misconduct) and the journal remains in a vicious circle: time and money are wasted to correct poor submissions in order to compile journal volumes. At the same time, serious authors avoid the journal due to the poor quality of the published papers. In order to make an essential change, it is necessary to stop this practice and undertake long-term actions aimed at improving the journal's outlook. It is better to decrease the number of papers per volume (or the

¹⁴⁸ A number of publishers used the offered templates but did not send their policies to the project team for revision. All publishers were free to use the templates. The policies of the *doiSerbia* journals had to be approved by the project team before being uploaded to the platform. All other publishers could send their policies for revision, if they wished.

¹⁴⁹ Some editors do not distinguish between the license module and license version – e.g. they see no difference between CC BY 3.0 and CC BY-NC-ND 3.0, but believe that there is a major difference between CC BY 3.0 and CC BY 4.0.

number of issues per year) and publish only those manuscripts that meet high quality standards. Irresponsible authors should be avoided. Journals should seek to attract new, young and, if possible, international authors who could contribute in a long term. The academic diaspora and international collaborators can be invited to support the journal by submitting and reviewing papers and inviting international authors.

12.4. Funding

The sources of funding were not covered in the survey as it was presumed that the respondents would be unwilling to disclose this type of information. They were only asked whether the journals were subsidized by the ministry responsible for science (or culture) and whether they published paid advertisements. According to the responses, 42.80% (101 journals) were regularly allocated funds based on calls for subsidizing journals, 40.25% (95 journals) did not receive subsidies, whereas 13.98% (33 journals) received subsidies only occasionally. However, the 'no' group included many journals that relied on public funds provided through the publishing institutions or local communities. The majority of OA journals covered by the survey depended in one form or another on public funding.¹⁵⁰ It is also interesting that at least two APC-charging journals received public subsidies based on annual calls for funding.

Less than 5% of the respondents (11 journals, 4.66%) said that they regularly published advertisements. Commercial content was occasionally published by 25 journals (10.59%), while the vast majority (193 journals, 81.78%)¹⁵¹ did not publish advertisements. As a rule, they were published in the print version. Potential sources of funding were discussed in a Skype session. Journal publishers were generally hesitant to publish advertisements on their websites because they were afraid that the practice may be perceived as inappropriate. Some of them occasionally receive donations but, generally, they had no experience in fundraising.

As it has been explained, introducing APCs may be an option for journals that are internationally recognized, while those that rely on local authors are hesitant regarding the introduction of APCs. Mechanisms for collecting APCs were the subject of the project *Supporting Serbian journal publishers in switching to the article processing charges model*, implemented by CEON/CEES and supported by EIFL in 2012 (EIFL, n.d.). As a result, software support for collecting APCs was provided within *SCIndeks*, but only five journals introduced APCs. A study conducted by Walt Crawford¹⁵² shows a slight increase of paid OA in Serbian journals between 2011 and 2015: in 2011, 96% of journals were APC-free, while in 2015, the journals that did not charge APCs accounted for 94%. At the same time, the share of APC-free papers dropped from 82% to 71% (Crawford 2016a, 78, 2016b) because the journals that charged APCs published a greater number of papers. It may be expected that this trend will continue: a small number of APC-charging journals will publish an increasing number of papers, while most journals will remain APC-free. During the project, it was possible to see shifts in both

¹⁵⁰ In practice, only the journals published by privately owned universities or colleges and some associations are not funded from public sources.

¹⁵¹ Seven respondents skipped the question.

¹⁵² The study covers 102 Serbian journals indexed in DOAJ before May 2016. It also offers statistical data for the journals removed from DOAJ after May 2016.

directions – several journals introduced or increased APCs, while others decided to stop charging authors. It may be concluded that, following this pace, APCs are not likely to become the main source of funding for Serbian journals in the years to come.

What would happen if the subsidies from public funds were cut? It seems that most journals are not prepared for the scenario. Subsidies have been decreased over the past several years and most journals have adjusted to the situation primarily because they largely rely on volunteer work. However, if the decrease continued in the long run, this would mean the end of some journals. Instead of allocating and cutting public subsidies in an unplanned manner, it is necessary to devise a national strategy to OA journals because they may be an asset in a global landscape marked by the growth of OA mandates. Therefore, it would be reasonable to provide greater support to those journals which seek to switch to electronic publishing and intend to remain APC free. It would be also logical and fair to ensure that the journals supported by tax payers' money are optimally visible and accessible to their true funders.

The strongest advantage of Serbian OA journals lies in the fact that their OA status in the future is not disputed. They rely on the good sides of the traditional publishing system, which provides subsidies for scholarly publications, enabling them to be APC-free. Keeping in mind the growing number of OA mandates at the international level, Serbian OA journals may become increasingly attractive for international authors if they manage to improve their visibility and online outlook.

The editorial practices of Serbian OA journals are generally sound and deliberate misconduct is rare. Disputable practices are extremely rarely associated with the manipulative use of the concept of Open Access. This is largely due to the fact that the development of OA journals in Serbia has been guided, since the early 2000s, by the Serbian Library Consortium for Coordinated Acquisition (KoBSON) and the CEON/CEES (Popovic, Antonic, and Filipi Matutinovic 2012; Šipka and Kosanović 2008). The prevailing types of misconduct may be described as 'traditional' – as they had been practiced before the emergence of Open Access – and they usually have to do with a high tolerance to the poor quality of papers and plagiarism. These bad practices are more likely to occur in the journals relying on a narrow circle of local authors and a poor inflow of manuscripts. Opening up for international authors and reviewers would help improve the academic integrity of OA journals. In order to eliminate unintended flaws, it is necessary to provide continued education for editors and editorial staff members. Journal editors should seek to be better informed about the current standards and practices. They currently rely more on what they hear from their colleagues than on the vast body of freely available verified sources of information.

Volunteer work is a valuable, though underrated asset of Serbian OA journals. While the work of volunteer editors is taken into account in the evaluation of research outputs of individual researchers, the volunteer work of other participants in the publication process is not rewarded and is often not appreciated. If Serbian OA journals are to rely on volunteer work in the future, a system of non-financial rewards should be devised to compensate for the efforts invested on the part of volunteers.

In order to ensure a sustainable and cost-effective development of Serbian OA journals, public authorities responsible for science and culture need to support and facilitate the transition to electronic publishing, which is a necessary precondition for establishing efficient scholarly communication. Publicly funded journals should be required to be open effectively, which namely means that their electronic versions must be made available online without delay, that they should meet certain technical requirements (at least landing pages for articles; preferably Dublin Core metadata in XML and OAI-PMH) and that their OA and copyright policies must be explicitly defined so as to facilitate the exchange of scientific information. The local rules and regulations that currently apply to scholarly journals do not set clear requirements regarding these issues. Serbian journals supported by public funds are currently not required by funding authorities to be Open Access.¹⁵³ They are not even required to have an online version and they are particularly not required to have an explicit OA policy. These rules need to be updated in order to ensure public access to publicly funded publications and publicly funded research published in them. As demonstrated, the idea of OA is voluntarily embraced by journal editors and publishers in Serbia but its implementation is often partial and piecemeal.

Introducing a national green OA mandate accompanied with a recommendation to publish in gold OA journals whenever possible and plausible would provide indirect support to local OA journals. First of all, it would help raise the overall, collective awareness of OA and the relationship between public funding and public access to what is funded publicly. Local researchers (some of whom are authors, reviewers and editors in local journals) would have to familiarize themselves with the basic elements of OA policies, the concept of self-archiving, copyright issues, licensing, etc., and this would certainly help improve local journals' editorial practices and eliminate the above-mentioned unintended flaws.

The project *Revisiting open access journal policies and practices in Serbia* addressed the problem of missing or incomplete journal policies rather successfully by devising easily applicable and adjustable templates for [journal policies](#) and the accompanying documents ([author statements](#) and [license agreements](#)). In drafting the templates, the project team relied on the guidelines provided by COPE ('Promoting Integrity in Research Publication' 2017) and DOAJ (DOAJ 2017), as well as on some provisions of the Act on Editing Scholarly Journals ('Akt o uređivanju naučnih časopisa' 2009). The policy template (see [Appendix 2: Editorial Policy \(template\)](#)), available in Serbian and English, covers:

- the responsibilities of the main participants in the publishing process (editors, reviewers and authors);
- a description of the peer review procedure;
- procedures for dealing with plagiarism and other forms of misconduct;
- a retraction policy;
- an OA statement; and
- copyright and licensing.

As the local context is rather diversified, the template does not offer optimized uniform solutions but rather seeks to bring some order in a whole range of situations captured in various types of local journals. While the sections dealing with responsibilities and ethical considerations are more or less the same for most journals, in the sections dealing with copyright editors/publishers are able to

¹⁵³ Only journals included in *doiSerbia* are explicitly required to be OA.

select whether they want to let authors retain copyright or require them to transfer it to publishers. They can also choose a Creative Commons license to be applied to all articles in the journal or even let authors choose the license. Although few journals in Serbia charge APCs, the section dealing with submission charges and APCs is rather detailed in order to reduce chances for unintentional misconduct in case a journal decides to introduce an APC. The proposed templates offer a flexible framework that can be adjusted to the needs of individual journals. For example, journals in psychology or biomedical journals can easily add ethical guidelines for research involving human subjects. Conflict of interest may be covered in greater detail, if necessary. New roles (e.g. section editors) may be included and their responsibilities may easily be defined by adjusting the wording of the provisions already existing in the template.

During the project, there were several occasions when it was necessary to correct or update the policy template, and, accordingly, the accompanying statements and license agreements. Due to this, the project team decided to make all of these documents publicly available on Google Drive,¹⁵⁴ where they can be easily replaced with updated versions, so that potential users always have access to the latest version. It is intended to gradually shift the solutions offered in the policy template towards optimized uniform solutions and a greater compliance with the *libre* segment of OA (e.g. free culture licenses).

Although it is too early to evaluate the effects of the policy template, some results are already visible. The template fully covers the policy-related requirements set by DOAJ and Scopus, which is confirmed by the fact that all journals that aligned their policies with the proposed model have successfully passed the (re)evaluation procedure in DOAJ, and one journal has been accepted for indexing in Scopus. The feedback received from some editors suggests that a precisely defined journal policy may be useful in dealing with pressures (e.g. to publish below-standard papers or already published conference papers) or even unethical attempts. Requests that a paper be published without peer review or accepted by a journal though it has already been published elsewhere are not uncommon in Serbia but, according to early response received from editors who have used the policy template, those who make them are more likely to give up when the relevant provisions of the journal policy are brought to their attention. This has encouraged some editors to include in the policy procedures for dealing with specific problematic situations encountered in their work.¹⁵⁵ The policy template developed during the project will probably be the most useful for new journals, as it will help them establish their practices on a sound basis from the very outset. The template may also be useful for journals from other countries.

¹⁵⁴ Links are provided in the Appendices 2–4.

¹⁵⁵ E.g. to require all authors to sign the authors' statement, or specify circumstances under which new authors may be added after a manuscript is accepted for publication.

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14. List of tables

| | |
|---|-----|
| Table 1 Journal publishers | 20 |
| Table 2 The number of issues a year by groups of disciplines | 22 |
| Table 3 The average number of research papers a year by groups of disciplines | 23 |
| Table 4 The average number of research papers per issue by groups of disciplines | 24 |
| Table 5 Languages of research papers by groups of disciplines | 25 |
| Table 6 Assigning DOIs | 27 |
| Table 7 Information provided in the lists of editorial board members | 29 |
| Table 8 Procedures for dealing with misconduct | 36 |
| Table 9 Reasons for retraction cited by journals without a defined retraction policy | 38 |
| Table 10 Reasons for retraction in journals that had a defined retraction policy | 39 |
| Table 11 Retraction procedure in journals with a defined retraction policy (according to survey data) | 40 |
| Table 12 Is journal content regularly made available online? | 47 |
| Table 13 When the content is published online? | 48 |
| Table 14 Submission charges | 50 |
| Table 15 Article processing charges | 51 |
| Table 16 Copyright | 54 |
| Table 17 User rights and Creative commons licenses | 56 |
| Table 18 Creative Commons licenses used by the analyzed journals | 57 |
| Table 19 Combinations of various submission channels | 62 |
| Table 20 Information about the peer review process | 68 |
| Table 21 Is it indicated on the journal's website and/or in the print version how long it normally takes to complete peer review? | 69 |
| Table 22 Recruiting reviewers | 73 |
| Table 23 The use of similarity checking tools | 79 |
| Table 24 Copyediting | 86 |
| Table 25 Translation of abstracts | 88 |
| Table 26 Computer layout | 90 |
| Table 27 Colour printing | 92 |
| Table 28 Paper quality | 92 |
| Table 30 Do you plan to abandon printing and migrate to electronic publishing? | 96 |
| Table 31 Various combinations of journal platforms | 100 |
| Table 32 Who created the website and who maintains it? | 109 |
| Table 33 The disciplinary structure of the journals that applied / did not apply for indexing in the Web of Science and Scopus | 115 |

15. List of figures

| | |
|--|----|
| Figure 1 The structure of journal publishers..... | 19 |
| Figure 2 The number of issues a year | 21 |
| Figure 3 The average number of research papers a year..... | 22 |
| Figure 4 The average number of research papers per issue | 23 |
| Figure 5 Languages of research papers..... | 25 |
| Figure 6 Linear diagram showing the information provided in the lists of editorial board members | 29 |
| Figure 7 Affiliation information for editorial board members | 30 |
| Figure 8 The availability of author guidelines | 33 |
| Figure 9 The responsibilities of authors, editors and reviewers | 34 |
| Figure 10 Online availability of journal content..... | 44 |
| Figure 11 Publication year of the first volume available online..... | 45 |
| Figure 12 The share of journals available from Vol. 1..... | 46 |
| Figure 13 Is journal content available online before printing or after? | 47 |
| Figure 14 Time frame within which peer review is completed..... | 60 |
| Figure 15 How long does it take between acceptance and publication?..... | 60 |
| Figure 16 Linear diagram showing the use of various manuscript submission channels | 61 |
| Figure 17 When did you start using a journal management system?..... | 64 |
| Figure 18 What happens if a manuscript does not comply with the journal's style guidelines? | 65 |
| Figure 19 What happens if the authors are late with their response to the reviewers? | 66 |
| Figure 20 Do you check and correct references/bibliography? | 67 |
| Figure 21 Peer review | 70 |
| Figure 22 How many reviewers evaluate a manuscript (under normal circumstances)? | 71 |
| Figure 23 What happens if the decisions of the reviewers are not the same (accept/reject)? | 72 |
| Figure 24 Linear diagram showing various ways of recruiting reviewers | 73 |
| Figure 25 What happens if reviewers are late in submitting their reviews? | 76 |
| Figure 26 Does the journal publish invited papers? Are they peer-reviewed?..... | 76 |
| Figure 27 Does the journal publish conference papers? Are they peer-reviewed?..... | 77 |
| Figure 28 The most commonly used similarity checking tools | 80 |
| Figure 29 Correspondence with authors and reviewers..... | 82 |
| Figure 30 Archiving various versions of accepted manuscripts | 83 |
| Figure 31 Keeping track of rejected manuscripts | 84 |
| Figure 32 Copyediting costs | 86 |
| Figure 33 Translation of papers | 87 |
| Figure 34 Translation-related costs..... | 89 |
| Figure 35 Desktop publishing software..... | 91 |
| Figure 36 Print-run | 93 |
| Figure 37 The cost of printing | 93 |
| Figure 38 The print-run of the journals that spend more than 50% of their budget on printing | 94 |

| | |
|---|-----|
| Figure 39 Reducing the print-run | 95 |
| Figure 40 Linear diagram showing the availability of journal content across platforms | 99 |
| Figure 41 The availability of journal content across platforms (summarized)..... | 100 |
| Figure 42 Hosting solutions, including repositories | 101 |
| Figure 43 Hosting solutions (journal websites) | 102 |
| Figure 44 Article-level metadata (journal websites) | 103 |
| Figure 45 Article-level metadata (including doiSerbia and SCIndeks) | 104 |
| Figure 46 Website platform | 106 |
| Figure 47 Responsive design | 107 |
| Figure 48 The share of website costs in the total journal budget..... | 110 |
| Figure 49 Have you ever applied for indexing in the Web of Science? | 113 |
| Figure 50 Have you ever applied for indexing in Scopus?..... | 114 |
| Figure 51 Is the journal indexed in DOAJ? | 117 |

Appendix 1: Questionnaire

General journal details¹⁵⁶

- * 1. Title
- * 2. URL
- * 3. URL in *doiSerbia* (if the journal is included in *doiSerbia*)
- * 4. URL in *SCIndeks* (if the journal is indexed in *SCIndeks*)
- * 5. ISSN (Print ISSN)
- * 6. eISSN (Online ISSN)
- * 7. Publisher
- * 8. e-mail
- *9. Does the journal offer open access to its content (i.e. are the full-text electronic versions of journal articles freely available on the journal's websites, in *doiSerbia*, *SCIndeks* or any other website)?
 - No
 - Yes, all articles are available as full text
 - Only scholarly papers are available
- * 10. Is it stated explicitly on the journal's website that the journal is Open Access?
 - Yes
 - No

If the answer is yes, provide the URL where this information can be found.
- * 11. How many issues are published annually?
- * 12. How many scholarly papers are published annually (on average)?
- * 13. Is the number of papers per issue limited?
 - Yes
 - No, the size of an issue depends on the number of accepted papers.
- * 14. Does the journal publish conference papers?
 - Yes
 - No
 - Other (Please provide details.)

¹⁵⁶ Mandatory questions are marked with *.

* 15. The languages of citable (research) papers:

- Only in Serbian; no abstract/summary in a foreign language
- Only in Serbian with an abstract/summary in a foreign language
- Only in English with an abstract/summary in English
- Only in English with an abstract/summary in a language other than English
- Parallel text in Serbian and English (or another language)
- Various languages
- Other (Please provide details.)

* 16. Does the journal publish other types of contributions, part from research papers (e.g. technical papers, books reviews, news, in memoriams, etc.)?

- Yes
- No
-

* 17. The publication year of the first volume available online:

* 18. Is the content regularly made available online?

- Yes
- Sometimes, there are delays in making content available online.
- Some issues are missing.
- We ceased uploading journal content.

*19. Publishing online

- We use the OnlineFirst service offered by *doiSerbia*, where we publish papers after acceptance, before the final layout is ready. Once the layout is ready and the PDFs are checked and approved, we make the content (individual papers) available online. The print version often comes later due to the work schedule of the printing office.
- Each paper is made available online immediately after acceptance, before the final layout is ready. Once the issue is compiled and computer layout is completed, these versions are replaced with final PDFs. Issues are printed when funds are available.
- We make journal issues available online as soon as computer layout is completed; issues are printed when funds are available.
- Immediately after printing
- After printing, with great delays.
- We do not use OnlineFirst.

Why don't you use OnlineFirst? (Please provide details.)

* 20. How long does it take (on average) between the submission and acceptance of a manuscript?

*21. How long does it take between acceptance and publication (in the online or print version)?

22. If you use OnlineFirst, how long does it take from the moment when an article first appears online and the publishing of the final version?

* 23. Are DOIs assigned to journal content?

- Yes, to all papers, in all issues available online.
- Yes, but only to research papers in all issues available online.
- Yes, but not to all papers available online.
- No.

- * 24. Is it possible to find a list of the Editorial Board members on the journal's website?
- Yes
 - No
 - Other (Please provide details.)
- *25. Details about the Editorial Board members on the journal's website (or the print version):
- Names and titles
 - Names, titles and affiliations
 - Names, titles, affiliations and emails
 - Other (Please provide details.)
- * 26. Author guidelines are available (select all relevant answers)
- In the print version, in every issue
 - In the print version, once a year
 - Online, as an html/php page
 - Online, as a downloadable PDF
- * 27. Are the responsibilities of authors, editors and reviewers explicitly defined anywhere within the journal's website and/or the print version? (Select all relevant answers.)
- In the print version
 - On the website, within an html/php page
 - On the website, in a PDF file
 - Not defined

Submission of manuscripts

- * 28. Which manuscript submission methods do you use? (Select all relevant answers.)
- Calls for papers are announced for every issue (on the websites, forums, social networking sites, by e-mail, etc.).
 - Individual authors are invited to submit their contributions.
 - Manuscripts are submitted by e-mail throughout the year.
 - Manuscripts are submitted using web-based submission forms (CEON/CEES Aseestant or Open Journal Systems).
 - Manuscripts are submitted using web-based submission forms (e.g. Google Forms)
 - Authors are required to send a hard copy, along with the electronic version of the manuscript.
 - Authors send their manuscripts on CDs/DVDs by regular postal service.
29. When did you start using the CEON/CEES Aseestant or Open Journal Systems (or other journal management system)? (If you use a journal management system, please provide the starting year.)
- *30. What happens if a manuscript does not comply with the journal's style guidelines (i.e. when it does not meet the required technical standards)?
- It is returned to authors for reformatting and correcting.
 - Technical and editorial staff members reformat and correct the manuscript before sending it to reviewers.

- It is sent to reviewers. If the reviews are positive, the authors are required to reformat and correct it.
- It is sent to reviewers. If the reviews are positive, technical or editorial staff correct and reformat it.
- Other (Please provide details.)

* 31. What happens if the authors are late with their response to the reviewers?

- We keep on waiting.
- We send a reminder, extend the deadline and keep on waiting.
- We send a reminder, extend the deadline and notify them that the manuscript will be rejected if they miss the new deadline.
- They are notified that the manuscript will be rejected if they do not respond within 48 hours.
- They are informed that the manuscript is rejected.
- Other (Please provide details.)

* 32. Do you pay honoraria to the authors whose papers are published in the journal?

- Yes
- No

Peer review

* 33. Is the peer review process explicitly defined on the journal's website and/or in the print version?

- Yes, both on the website and in the print version.
- Yes, only in the print version.
- Yes, only in the online version.
- No
- It is partially defined.

* 34. Is it indicated on the journal's website and/or in the print version how long it normally takes to complete peer review?

- Yes
- No
- No. We cannot provide this information due to reviewers' delays.

* 35. Which type of peer-review do you use?

- Double-blind (authors are anonymous to reviewers and reviewers are anonymous to authors)
- Single-blind (reviewers know the identity of the authors, but the reviewers' identities are kept anonymous)
- Reviewers are aware of the authors' identities and vice versa but the reviews are not published.
- Reviews are published along with papers.
- There is no peer review in the true sense. The decision whether a manuscript will be published is made by the Editor or the Editorial Board.
- Other (Please provide details.)

- * 36. How many reviewers evaluate a manuscript (under normal circumstances)?
- There is no peer review in the true sense. The decision whether a manuscript will be published is made by the Editor or the Editorial Board.
 - One
 - Two
 - Three
 - More than three
 - Other (Please provide details.)
- * 37. What happens if the decisions of the reviewers are not the same (accept/reject)?
- The decision is made by the Editor.
 - The decision is made by the Editorial Board.
 - Additional reviewers are assigned.
 - The manuscript is rejected.
 - The manuscript is accepted.
- * 38. Have you ever faced complaints on the part of authors regarding the integrity, professionalism and objectivity of peer review?
- Yes
 - No

If the answer is 'yes', what measures have you taken?

- * 39. Selecting/recruiting peer reviewers (Select all relevant answers.)
- Most commonly, the members of the Editorial Board are engaged as reviewers.
 - We have a narrow circle of reviewers; new reviewers are invited only when nobody from that circle is able/competent to review a particular manuscript.
 - It is the Editor's task to find and invite potential reviewers.
 - Potential reviewers may send notes of interest. We check their competencies and if they meet our criteria, we include them in our database of potential reviewers.
 - Authors are required to suggest reviewers for their papers. Whenever it is possible, we engage the reviewers suggested by authors.
 - Authors are required to suggest reviewers for their papers. We use these data to form a database of potential reviewers. The paper is usually not sent to the reviewers suggested by authors.
- * 40. Do reviewers deliver their reviews in a timely manner?
- Yes
 - Mostly
 - No
 - Other (Please provide details.)
- * 41. What happens if reviewers are late in submitting their reviews?
- We keep on waiting.
 - We send a reminder, extend the deadline and keep on waiting.
 - We send a reminder, extend the deadline and assign new reviewers if they miss the new deadline.
 - We inform them that new reviewers will be assigned if they fail to deliver the review in 48 hours.
 - Other (Please provide details.)

* 42. Does the journal publish invited papers?

- Yes and they are subject to standard peer review.
- Yes, but they are not subject to standard peer review.
- No
- Other (Please provide details.)

* 43. Does the journal publish conference papers?

- Yes. They are subject to standard peer review and are published in regular issues.
- Yes. They are subject to standard peer review and are published in special issues.
- Yes, but they are not subject to standard peer review. Conference papers are published in regular issues.
- Yes, but they are not subject to standard peer review. Conference papers are published in special issues.
- Yes, peer review is organized by the issue editor / conference organizer.
- No
- Other (Please provide details.)

* 44. Do readers have an opportunity to make comments about published papers?

- Yes and they do make comments.
- Yes, but they never make comments.
- No

* 45. Do reviewers receive honoraria for their work?

- Yes
- No
- They are rewarded in other ways.
- Other (Please provide details.)

What kind of reward do you offer to reviewers (if they are rewarded in other ways)?

Procedures for dealing with misconduct

* 46. Is it possible to find in the editorial policy, instructions for authors or anywhere else in the website explicitly defined procedures for dealing with the following situations (select all relevant answers):

- Conflict of interest on the part of the Editor (regarding a manuscript or its authors)
- Conflict of interest on the part of a reviewer (regarding a manuscript or its authors)
- Plagiarism
- A situation that requires a retraction of a paper
- Ethical misconduct
- Other (Please provide details.)

* 47. Is there a statement on the journal's website, in the instructions for authors or anywhere in the journal regarding the circumstances that lead to the retraction of a paper? In other words, are potential authors informed before submission that a published paper may be retracted in case misconduct (plagiarism, data manipulation, etc.) is discovered?

- Yes
- No

48. What reasons for retraction are listed? (Select all relevant answers.)

- Plagiarism, self-plagiarism
- Duplicate publication
- Authorship issues (bogus claims of authorship, crediting as authors persons who were not involved in writing the manuscript or not crediting those who have contributed as authors)
- Conflict of interest;
- Fraudulent use of data and data manipulation;
- Image manipulation;
- Major technical errors, such as the omission of whole sections of text, errors in reproducing images;
- Other (Please provide details.)

49. Describe the retraction procedure. (Select all relevant answers.)

- The retracted paper is removed from the online version of the journal.
- The retracted paper remains in the online version of the journal. A brief note is added saying that it is retraced. Retraction notice is not published as a separate item.
- Retraction notices are published together with other corrections, at the end of the issue in the Errata section.
- Each retraction notice is assigned a DOI (or other persistent identifier).
- A retracted paper is clearly marked, e.g. with the watermark 'RETRACTED'
- A retracted paper and the corresponding retraction notice are linked, enabling readers to see immediately that the paper is retracted.
- Persons who have reported that there might be reasons for retraction are notified of the measures undertaken by the editorial staff and (if relevant) retraction.
- The authors of the retracted paper are notified.
- Retractions are announced in the News section.
- Other (Please provide details.)

50. Under which of the following circumstances have you published a correction (erratum/corrigendum)? (Select all relevant answers.)

- A technical error that occurred during prepress
- A content error that did not challenge the integrity of the paper
- Omitted figure or table
- Omitted author
- Removing the name of a person erroneously credited as an author
- Errors in acknowledging funding agencies or grants under which research was conducted
- We have never published corrections.
- Other (Please provide details.)

* 51. Do you check the correctness of the cited references/bibliography in the papers accepted for publication?

- References are always checked and corrected before publication by editorial staff members.
- This is the authors' responsibility; no additional checks are performed by the editorial staff.
- This is the reviewers' responsibility; no additional checks are performed by the editorial staff.
- This is not a usual practice; randomly discovered errors are corrected.
- Other (Please provide details.)

*52. Does the journal use plagiarism detection software?

- Yes
- No

If the answer is 'yes', please provide the name of the plagiarism tracking tool used in your journal.

Editorial documentation

* 53. Correspondence with authors and reviewers

- All correspondence is saved in an electronic journal management system (OJS or CEON/CEES Aseestant).
- All correspondence is archived in the editorial office.
- The correspondence is only partially archived, but not in an orderly manner.
- Editors maintain their own documentation. Documentation is preserved but it is not duly archived.
- Other (Please provide details.)

* 54. Archiving various versions of accepted manuscripts

- All versions of accepted manuscripts are archived in a journal management system.
- All versions of accepted manuscripts are archived in the editorial office according to a defined system.
- Editors maintain their own archives.
- Once a manuscript is published, we delete all previous versions and save only the final PDF.
- Other (Please provide details.)

* 55. Do you keep track of rejected manuscripts?

- All rejected manuscripts are archived in a journal management system.
- All rejected manuscripts are archived in the editorial office according to a defined system.
- Editors maintain their own archives.
- Rejected manuscripts are kept for a while and then deleted.
- All rejected manuscripts are immediately deleted.
- Other (Please provide details.)

* 56. Do you track the statistics of accepted and rejected manuscripts?

- Yes
- No

Copyediting

Copyediting

* 57. The copyediting of accepted manuscripts

- It is the authors' duty to ensure that their papers are copyedited. If a paper fails to meet linguistic standards, the authors are required to cover the cost of copyediting.
- A professional copyeditor is appointed by the editorial staff, but the cost is covered by the authors.
- A professional copyeditor is hired and paid by the publisher.
- Copyediting is done by an editorial staff member, for a fee.

- Copyediting is done by an editorial staff member, as a volunteer.
- Copyediting is done by volunteers hired by the publisher.
- Other (Please provide details.)

* 58. The share of copyediting costs in the journal's budget (rough estimation)

- No cost
- Up to 10%
- Up to 20%
- Up to 30%
- Up to 40%
- Up to 50%
- More than 50%
- Other (Please provide details.)

Translation

* 59. Translation – full text

- Authors who wish to publish a text in English or other foreign language must submit the paper in that language.
- The Editorial Board members decide which papers will be translated into foreign languages and appoint translators. The costs are covered by the journal.
- Bilingual journal; translators are appointed by the Editorial Board and costs are covered by the journal.
- Papers submitted in foreign languages are translated into Serbian; costs covered by the journal
- Other (Please provide details.)

* 60. Translation of abstract/summaries into foreign languages

- Authors are required to provide an abstract/summary in English (or another foreign language).
- A professional translator is appointed and paid by the journal.
- Translation is done by an editorial staff member, for a fee.
- Translation is done by an editorial staff member, as a volunteer.
- Translation is done by volunteers hired by the publisher.
- Other (Please provide details.)

61. The share of translation costs in the journal's (rough estimation)

- Up to 10%
- Up to 20%
- Up to 30%
- Up to 40%
- Up to 50%
- More than 50%
- Other (Please provide details.)

Desktop publishing

- * 62. Which software is used for desktop publishing?
- MS Word / Word Perfect / Libre Office Writer
 - LaTeX
 - InDesign
 - QuarkXPress
 - We don't know. Desktop publishing is done by a professional designer / company.
 - Other (Please provide details.)
- * 63. Computer layout for your journal is done by
- A hired technical editor for a fee
 - A member of the editorial staff, for a fee
 - A member of the editorial staff, as a volunteer
 - Hired volunteers
 - Printing company
 - Other (Please provide details.)
- * 64. Printing (Select all relevant answers.)
- Traditional offset printing
 - Digital printing
 - Full colour
 - Black-and-white with a full-colour cover. If there are full-colour illustrations in the text, they can be seen in the online version. In the print version, they are black-and-white
 - On uncoated offset paper
 - On glossy paper
 - The journal is not printed. It is published online.
 - Other (Please provide details.)
- * 65. Print-run
- Print-on-demand
 - 1-50 copies
 - 51-100 copies
 - 101-300 copies
 - 301-500 copies
 - 501-1000 copies
 - More than 1000 copies
 - Other (Please provide details.)
66. The share of printing costs in the journal's budget (rough estimation)
- Up to 10%
 - Up to 20%
 - Up to 30%
 - Up to 40%
 - Up to 50%
 - More than 50%
 - Other (Please provide details.)

* 67. Have you considered the idea of reducing the print-run?

- Yes
- Print-run has already been reduced.
- No, because we have income from selling subscriptions to the print version.
- Other (Please provide details.)

* 68. Have you considered the idea of abandoning printing and migration to electronic publishing?

- No
- Yes

If the answer is 'no', please explain the reasons why you do not want to abandon printing.

Submission Charges and Article Processing Charges

* 69. Do you require authors, their institutions or their funding agencies to pay a submission fee regardless of the outcome of the review process (i.e. do you charge Article Submission Charges)?

- Yes and this is explicitly stated on the website.
- Yes, but this information is not available on the website; after submission, authors are informed about the fee and the payment procedure.
- No and this is stated on the website.
- No, but this information is not available on the website. We assume that it is apparent that no fee is charged.

70. Is the amount of the charge the same for all authors, or different categories of authors pay different amounts?

- The amount is the same for all authors and is explicitly stated on the website.
- The amount is the same for all authors but is not explicitly stated on the website.
- Local and international authors pay different amounts and the amounts are explicitly stated on the website.
- Local and international authors pay different amounts but the amounts are not explicitly stated on the website.
- The total amount depends on the number of authors.
- The amount is determined by the Editorial Board for each submission individually.

71. Article Submission Charge (on average)

- 10-50 EUR
- 51-100 EUR
- 101-200 EUR
- 201-300 EUR
- 301-500 EUR
- More than 500 EUR

* 72. Do you require authors, their institutions or their funding agencies to pay a publication fee or an Open Access fee after a manuscript is accepted for publication (i.e. do you charge Article Processing Charges)?

- Yes and this is explicitly stated on the website.
- Yes, but this information is not available on the website; after submission and before peer review, authors are informed about the fee and the payment procedure.

- Yes, but this information is not available on the website; after peer review, if the paper is accepted for publication, authors are informed about the fee and the payment procedure.
- No and this is stated on the website.
- No, but this information is not available on the website. We assume that it is apparent that no fee is charged.

73. After the Article Submission / Article Processing Charge is paid...

- The journal issues a payment receipt, where the purpose of the payment and the amount are clearly stated.
- Authors and the journal conclude a kind of a contract, but the charge is actually treated as a donation.
- No receipt is issued to the authors.

74. Is the amount of the charge the same for all authors, or different categories of authors pay different amounts?

- The amount is the same for all authors and is explicitly stated on the website.
- The amount is the same for all authors but is not explicitly stated on the website.
- Local and international authors pay different amounts and the amounts are explicitly stated on the website.
- Local and international authors pay different amounts but the amounts are not explicitly stated on the website.
- The total amount depends on the number of authors.
- The amount is determined by the Editorial Board for each submission individually.

75. Article Processing Charge (on average)

- 10-50 EUR
- 51-100 EUR
- 101-200 EUR
- 201-300 EUR
- 301-500 EUR
- 501-1000 EUR
- 1001-2000 EUR
- More than 2000 EUR

* 76. Do you plan to introduce Article Processing Charges in the future, e.g. after acceptance for indexing in the Web of Science or Scopus?

- Yes
- No
- This is not impossible, but the idea is not seriously considered at the moment.

Copyright and licenses

* 77. Are the authors required to transfer copyright to publishers?

- Yes, this is explicitly stated on the website and in the print version. Authors are required to sign a copyright transfer agreement.
- Yes, this is explicitly stated on the website and in the print version, but authors are not required to sign a copyright transfer agreement.

- Yes, but this is not explicitly stated on the website and in the print version. Authors are required to sign a copyright transfer agreement.
- No, authors are not required to transfer copyright (they retain some rights) and this is explicitly stated on the website and/or in the print version.
- The issue of copyright transfer is not defined.
- Authors retain rights without restriction.

* 78. If the authors are required to transfer copyright to the publisher, do they transfer exclusive rights?

- Yes
- No, authors retain some rights.
- This is not defined.

* 79. Do you use Creative Commons licenses?

- Yes, this is explicitly stated on the journal's website and each paper is marked with the appropriate license.
- Yes, this is explicitly stated on the journal's website but papers are not marked with the appropriate license.
- This is not explicitly stated on the journal's website but each paper is marked with the appropriate license.
- No, all rights are reserved.
- User rights are not defined.
- We use a different type of licenses.
- Other (Please provide details.)

80. If you use Creative Commons license, which license module do you use?

- Authors can choose the license module.
- CC0
- CC-BY
- CC-BY-NC
- CC-BY-ND
- CC-BY-SA
- CC-BY-SA-NC
- CC-BY-NC-ND
- Other (Please provide details.)

* 81. Are the ways in which authors can use their published papers explicitly defined on the website or in the print version (e.g. are they allowed to reprint it and under what conditions, or to deposit it in and OA repository or social networking sites)?

- Yes
- No
- Other (Please provide details.)

82. Authors are allowed to... (Select all relevant answers.)

Note: If the rights are not explicitly stated or are not defined by a license, it is implied that no rights are granted.

- Reprint the paper or its translation (e.g. in a collection of papers), under the condition that the source is duly cited.

- Upload the final, published PDF to a personal website, under the condition that the source is duly cited.
- Upload the final, published PDF to an institutional website, under the condition that the source is duly cited.
- Deposit the final, published PDF in an institutional or thematic digital repository, under the condition that the source is duly cited.
- Upload the final, published PDF to social networking sites (ResearchGate, Academia.edu, Mendeley, etc.).
- Upload the accepted, peer-reviewed version to a personal website, under the condition that the source is duly cited.
- Upload the accepted, peer-reviewed version to an institutional website, under the condition that the source is duly cited.
- Deposit the accepted, peer-reviewed version in an institutional or thematic digital repository, under the condition that the source is duly cited.
- Upload the accepted, peer-reviewed version to social networking sites (ResearchGate, Academia.edu, Mendeley, etc.).
- Upload the original (not peer-reviewed) version to a personal website, under the condition that the source is duly cited.
- Upload the original (not peer-reviewed) version to an institutional website, under the condition that the source is duly cited.
- Deposit the original (not peer-reviewed) version in an institutional or thematic digital repository, under the condition that the source is duly cited.
- Upload the original (not peer-reviewed) version to social networking sites (ResearchGate, Academia.edu, Mendeley, etc.).
- The authors who wish to reprint or translate their papers, or to use the illustrations published in them, or deposit them in a repository, upload to a website, etc. must seek permission from the publisher. The Editorial Board will consider permission requests. The publisher reserves the right to refuse permission.
- Other (Please provide details.)

83. If authors are allowed to upload any version of their paper to a personal website, an institutional website or a digital repository, is there an embargo period (a period between the publication and the moment when they are allowed to upload the paper)?

- Yes
- No

If the answer is 'yes', how long is the embargo period (and does it apply to personal websites, institutional websites or OA repositories)?

* 84. Is the journal's self-archiving policy registered with Sherpa/RoMEO?

- The journal cannot be found in Sherpa/RoMEO.
- The journal can be found in Sherpa/RoMEO but it does not have a defined self-archiving policy.
- The journal can be found in Sherpa/RoMEO, its self-archiving policy has been defined but we have not submitted a request to Sherpa/RoMEO to update the information.
- The self-archiving policy has been defined and a request has been sent to Sherpa/RoMEO to update the information, but this has not been done as yet.
- The self-archiving information for our journal in Sherpa/RoMEO is up-to-date.

Journal website

- * 85. The journal's website is hosted on:
- Commercial server (paid hosting)
 - Cloud system (paid hosting)
 - Non-commercial cloud system (free hosting)
 - Server located within the Academic Network
 - The journal does not have a website but uses *doiSerbia* as its site.
 - The journal does not have a website but uses *SCIndeks* as its site.
 - Other (Please provide details.)
- * 86. Website platform
- Open Journal Systems
 - CEON/CEES Aseestant
 - Scholastica
 - Wordpress
 - Joomla
 - Drupal
 - Static HTML website
 - We don't know. The work is done by a professional webmaster.
 - Other (Please provide details.)
87. The journal's website has been designed and maintained by
- A professional webmaster or a company
 - A hired volunteer
 - An editorial staff member
 - It was designed by a professional web designer of a company, and is maintained by the editorial staff.
 - Other (Please provide details.)
88. The share of website costs in the journal's budget (rough estimation)
- Up to 10%
 - Up to 20%
 - Up to 30%
 - Up to 40%
 - Up to 50%
 - More than 50%
 - Other (Please provide details.)
- * 89. The presentation of the journal content on the website
- Only the PDFs of complete issues are uploaded.
 - Only the PDFs of individual papers are uploaded.
 - Each paper is assigned an html/php landing page, which contains the basic metadata and a link to the PDF version.
 - Each paper is assigned an html/php landing page, which contains the basic metadata, cited references and a link to the PDF version.
 - Each paper is assigned an html/php landing page, which contains the full text (as html/pho/xml), along with the basic metadata and a link to the PDF version.
 - Other (Please provide details.)

90. Full text is available in the following formats (select all relevant answers)

- PDF
- HTML
- XML
- Other (Please provide details.)

91. Article landing pages contain the following metadata (select all relevant answers)

- Title
- Author names
- Affiliations
- Corresponding author's e-mail
- E-mails of all authors
- Authors' ORCID IDs
- Abstract
- Keywords
- DOI
- Volume and issue
- Pages
- ISSN
- eISSN
- Submission, acceptance and publication dates
- References
- License information
- Funding information
- Acknowledgments
- Other (Please provide details.)

* 92. Is the website design adjusted to various screen sizes (i.e. does the website use responsive design)?

- Yes
- No

* 93. Do you track visits to the website (e.g. using Google Analytics or similar tools)?

- Yes
- No

If the answer is yes, which tools do you use?

* 94. Do you use altmetric tools? (Altmetric, Plum Analytics, OJS tools, etc.)

- Yes
- No

If the answer is yes, which tools do you use?

* 95. Do you publish article usage data (downloads, visits, etc.) or other metrics on the journal's website?

- Yes
- No

If the answer is yes, which data are available?

* 96. Is it possible to search the website content (i.e. is there a search module)?

- Yes
- No

* 97. Does the website have widgets (the so-called 'social buttons') that enable readers to email or share journal content across social networking sites?

- Yes
- No

* 98. Does the journal have its profile on general social networking sites (Twitter, Facebook, Google+, etc.)?

- Yes
- No

If the answer is yes, which social networking sites do you use?

* 99. Does the journal have its profile on social networking sites for scientists (ResearchGate, Academia.edu, etc.)?

- Yes
- No

Indexing in international databases

* 100. Have you ever applied for indexing in the Web of Science?

- Yes, once
- Yes, twice
- Yes, more than twice
- No

101. What was the outcome of the (last) application?

- Rejected
- Accepted for indexing
- The procedure has not been completed yet.
- Other (Please provide details.)

102. If the journal was rejected, what was the reason for rejection? (Select all relevant answers.)

- Undefined editorial policy
- Poor geographic influence
- Low citation counts
- The journal is not sufficiently interesting for the Web of Science as the quota of journals from a particular geographic region is already filled.
- No particular reason is stated.
- Other (Please provide details.)

103. Is the indexing in the Web of Science done electronically? (only journals indexed in the Web of Science)

- Yes
- No
- A request for electronic indexing has been submitted. We are awaiting response.

If yes, provide the URL from which the Web of Science downloads papers.

104. Have you ever applied for indexing in Scopus?

- Yes, once
- Yes, twice
- Yes, more than twice
- No

105. What was the outcome of the (last) application?

- Rejected
- Accepted for indexing
- The procedure has not been completed yet.
- Other (Please provide details.)

106. If the journal was rejected, what was the reason for rejection? (Select all relevant answers.)

- Undefined editorial policy
- Poor geographic influence
- Low citation counts
- The journal is not sufficiently interesting for Scopus as the quota of journals from a particular geographic region is already filled.
- No particular reason is stated.
- Other (Please provide details.)

107. Have you used the opportunity to submit the journal for pre-evaluation in Scopus through *doiSerbia*? (only journals indexed in *doiSerbia*)

- Yes
- No

* 108. Is the journal indexed in DOAJ?

- Yes
- No
- The application has been submitted. We are awaiting response.
- It has been removed from DOAJ.

* 109. Have you ever applied for indexing in PubMed EMBASE, ERIH or other journal databases?

- Yes
- No

If yes, list the databases. What was the outcome of the application?

Funding

* 110. Does the journal receive subsidies from the relevant ministry (for science, culture, etc.)?

- Yes
- No
- Yes, but not regularly.

* 111. Does the journal publish advertisements?

- Yes
- No
- Occasionally

Appendix 2: Editorial Policy (template)ⁱ

The journal *Journal's title* is dedicated to **define aims and scope**.

You may also provide a short history of the journal, the previous title (if applicable, etc.)

The journal *Journal's title* publishes original papers that have not been published previously. **(Define article types: scientific articles, reviews, communications, letters, conference papers, etc.)**.

Journal's title is an Open Access journal.

Contributions to the journal shall be submitted in **language(s)**, with summaries in **language(s)**.

The Journal is issued _____ times a year.

The journal is indexed in _____.

Digital copies of the journal are archived in theⁱⁱ

EDITORIAL RESPONSIBILITIESⁱⁱⁱ

The **Editor / Editor-in-Chief / Section Editor / Editorial Board^{iv}** is responsible for deciding which articles submitted to *Journal's title* will be published. The **Editor / Editor-in-Chief / Section Editor / Editorial Board** is guided by the Editorial Policy and constrained by legal requirements in force regarding libel, copyright infringement and plagiarism.

The **Editor / Editor-in-Chief / Section Editor / Editorial Board** reserves the right to decide not to publish submitted manuscripts in case it is found that they do not meet relevant standards concerning the content and formal aspects. The Editorial Staff will inform the authors whether the manuscript is accepted for publication within _____ from the date of the manuscript submission.

ⁱ For the latest version, see <https://goo.gl/ixgoEN>. The red text should be replaced with relevant information. The dark blue text and the footnotes should be removed once the final document is drafted.

ⁱⁱ E.g. Digital Repository of the National Library, *SCIndeks* Repository, LOCKSS, CLOCKSS, Portico.

ⁱⁱⁱ In case the journal has the Editorial Council or a similar advisory body:

Duties of the Editorial Council (or Advisory Board)

The Editorial Council is an advisory body that actively contributes to the development of the journal. The tasks and duties of the Editorial Council include: the support to the development of the journal, its promotion, encouraging experts in the area of ___ to get involved as journal's authors and/or reviewers, writing editorials, reviews and commentaries.

^{iv} Select or add the relevant option.

Editor / Editor-in-Chief / Section Editor / Editorial Board must hold no conflict of interest with regard to the articles they consider for publication. If an Editor feels that there is likely to be a perception of a conflict of interest in relation to their handling of a submission, the selection of reviewers and all decisions on the manuscript shall be made by the _____.^v

Editor / Editor-in-Chief / Section Editor / Editorial Board shall evaluate manuscripts for their intellectual content free from any racial, gender, sexual, religious, ethnic, or political bias.

The Editor and the Editorial Staff must not use unpublished materials disclosed in submitted manuscripts without the express written consent of the authors. The information and ideas presented in submitted manuscripts shall be kept confidential and must not be used for personal gain.

Variant 1 (in case of single-blind peer review)^{vi} Editors and the Editorial Staff shall take all reasonable measures to ensure that the reviewers remain anonymous to the authors before, during and after the evaluation process.

Variant 2 (in case of double-blind peer review)^{vii} Editors and the Editorial Staff shall take all reasonable measures to ensure that the reviewers remain anonymous to the authors before, during and after the evaluation process and the authors remain anonymous to reviewers until the end of the review procedure.

AUTHORS' RESPONSIBILITIES

Authors warrant that their manuscript is their original work, that it has not been published before and is not under consideration for publication elsewhere. Parallel submission of the same manuscript to another journal constitutes a misconduct and eliminates the manuscript from consideration by *Journal's title*.

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In case a submitted manuscript is a result of a research project, or its previous version has been presented at a conference in the form of an oral presentation (under the same or similar title), detailed information about the project, the conference, etc. shall be provided **in a footnote / Acknowledgments**. A paper that has already been published in another journal cannot be reprinted in *Journal's title*.

^v If the decision whether to accept the manuscript or not is made by the Editorial Board: In case one or more members of the Editorial Staff hold a conflict of interest regarding a submitted manuscript, these members of the Editorial Staff shall withdraw from the selection of reviewers and all decisions related to the manuscript.

^{vi} If the journal uses open peer review, this provision should be deleted.

^{vii} If the journal uses open peer review, this provision should be deleted.

It is the responsibility of each author to ensure that manuscripts submitted to *Journal's title* are written with ethical standards in mind. (If necessary, cite the relevant codes of conduct.)^{viii} Authors affirm that the manuscript contains no unfounded or unlawful statements and does not violate the rights of third parties. The Publisher will not be held legally responsible should there be any claims for compensation.

Reporting standards

A submitted manuscript should contain sufficient detail and references to permit reviewers and, subsequently, readers to verify the claims presented in it. The deliberate presentation of false claims is a violation of ethical standards.^{ix}

Authors are exclusively responsible for the contents of their submissions and must make sure that they have permission from all involved parties to make the data public.^x

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Acknowledgment of Sources

Authors are required to properly cite sources that have significantly influenced their research and their manuscript. Information received in a private conversation or correspondence with third parties, in reviewing project applications, manuscripts and similar materials, must not be used without the express written consent of the information source.

Plagiarism

Plagiarism, where someone assumes another's ideas, words, or other creative expression as one's own, is a clear violation of scientific ethics. Plagiarism may also involve a violation of copyright law, punishable by legal action.

^{viii} Depending on the area of science covered by the journal, relevant ethical guidelines may be specified (e.g. research involving human subjects or experimental animals, privacy issues).

^{ix} If the journal publishes technical papers or book reviews: Book reviews and technical papers should be accurate and they should present an objective perspective.

^x Authors may be required to provide the proof that they have obtained such permission.

^{xi} Authors may be required to provide the proof that they have obtained such permission (...to include evidence that such permission has been granted when submitting their manuscripts).

Plagiarism includes the following:

- Word for word, or almost word for word copying, or purposely paraphrasing portions of another author's work without clearly indicating the source or marking the copied fragment (for example, using quotation marks);
- Copying equations, figures or tables from someone else's paper without properly citing the source and/or without permission from the original author or the copyright holder.

Please note that all submissions are thoroughly checked for plagiarism. **If a plagiarism detection software is used, state here the name of the software.**

Any manuscript that shows obvious signs of plagiarism will be automatically rejected and **define other sanctions (if any).**

In case plagiarism is discovered in a paper that has already been published by the journal, it will be retracted in accordance with the procedure described below under Retraction policy, and authors will **define other sanctions (if any).**

Conflict of interest

Authors should disclose in their manuscript any financial or other substantive conflict of interest that might have influenced the presented results or their interpretation.

Fundamental errors in published works

When an author discovers a significant error or inaccuracy in his/her own published work, it is the author's obligation to promptly notify the journal Editor or publisher and cooperate with the Editor to retract or correct the paper.

By submitting a manuscript, the authors agree to abide by the **Journal's title** Editorial Policies.

REVIEWERS' RESPONSIBILITIES

Reviewers are required to provide written, competent and unbiased feedback in a timely manner on the scholarly merits and the scientific value of the manuscript.

The reviewers assess manuscript for the compliance with the profile of the journal, the relevance of the investigated topic and applied methods, the originality and scientific relevance of information presented in the manuscript, the presentation style and scholarly apparatus.

Reviewers should alert the Editor to any well-founded suspicions or the knowledge of possible violations of ethical standards by the authors. Reviewers should recognize relevant published works that have not been cited by the authors and alert the Editor to substantial similarities between a reviewed manuscript and any manuscript published or under consideration for publication elsewhere, in the event they are aware of such. Reviewers should also alert the Editor to a parallel submission of the same manuscript to another journal, in the event they are aware of such.

Reviewers must not have conflict of interest with respect to the research, the authors and/or the funding sources for the research. If such conflicts exist, the reviewers must report them to the Editor without delay.

Any selected referee who feels unqualified to review the research reported in a manuscript or knows that its prompt review will be impossible should notify the Editor without delay.

Reviews must be conducted objectively. Personal criticism of the author is inappropriate. Reviewers should express their views clearly with supporting arguments.

Any manuscripts received for review must be treated as confidential documents. Reviewers must not use unpublished materials disclosed in submitted manuscripts without the express written consent of the authors. The information and ideas presented in submitted manuscripts shall be kept confidential and must not be used for personal gain.

PEER REVIEW

The submitted manuscripts are subject to a peer review process. The purpose of peer review is to assist the **Editor / Editor-in-Chief / Section Editor / Editorial Board** in making editorial decisions and through the editorial communication with the author, it may also assist the author in improving the manuscript.

Define the type of peer review.^{xii}

The number of peer reviewers.

It is recommended to define the time frame within which the peer review procedure is normally completed! You may also mention whether reviewers receive honoraria for their work or not.

The choice of reviewers is at the Editors' discretion.^{xiii} The reviewers must be knowledgeable about the subject area of the manuscript; they must not be from the authors' own institution and they should not have recent joint publications with any of the authors.

If necessary, describe the peer review process in greater detail.^{xiv}

^{xii} Options: **Open peer review**, where the identity of the author is known to reviewers and *vice versa*; **Single-blind peer review**: the identity of the authors is known to reviewers, but the identity of reviewers is not known to the authors; **Double-blind peer review**: the identity of the authors is unknown to the reviewers and identity of reviewers is not known to the authors.

The authors may be required to suggest the names of potential reviewers. Some journals send manuscripts to reviewers suggested by the authors, but the most of them choose other reviewers and use the suggested named only to form a database of potential reviewers for future use. Bearing in mind cases like this <http://retractionwatch.com/category/by-reason-for-retraction/faked-emails/>, we do not recommend to sent manuscripts to reviewers recommended by the authors, unless you are familiar with their work and competence and positively know that they do not have the conflict of interest in relation to the authors.

^{xiii} This is a typical situation. In journals with several section editors, reviewers are commonly assigned by section editors.

^{xiv} If a reviewer's evaluation form is used: In the main review phase, the Editor sends submitted manuscripts to **the number of reviewers** experts in the field. The reviewers' evaluation form contains a checklist in order to help referees cover all aspects that can decide the fate of a submission. In the final section of the evaluation form, the reviewers must include observations and suggestions aimed at improving the submitted manuscript; these are sent to authors, without the names of the reviewers.

All of the reviewers of a manuscript act independently and they are not aware of each other's identities.^{xv} If the decisions of the two reviewers are not the same (accept/reject), the Editor may assign additional reviewers.^{xvi}

During the review process Editor may require authors to provide additional information (including raw data) if they are necessary for the evaluation of the scholarly merit of the manuscript. These materials shall be kept confidential and must not be used for personal gain.

The Editorial team shall ensure reasonable quality control for the reviews. With respect to reviewers whose reviews are convincingly questioned by authors, special attention will be paid to ensure that the reviews are objective and high in academic standard. When there is any doubt with regard to the objectivity of the reviews or quality of the review, additional reviewers will be assigned.

PROCEDURES FOR DEALING WITH UNETHICAL BEHAVIOUR

Anyone may inform the editors and/or Editorial Staff at any time of suspected unethical behaviour or any type of misconduct by giving the necessary information/evidence to start an investigation.

Investigation

- Editor / Editor-in-Chief will consult with the Section Editors / Editorial Board on decisions regarding the initiation of an investigation.
- During an investigation, any evidence should be treated as strictly confidential and only made available to those strictly involved in investigating.
- The accused will always be given the chance to respond to any charges made against them.
- If it is judged at the end of the investigation that misconduct has occurred, then it will be classified as either minor or serious.

Minor misconduct

Minor misconduct will be dealt directly with those involved without involving any other parties, e.g.:

- Communicating to authors/reviewers whenever a minor issue involving misunderstanding or misapplication of academic standards has occurred.
- A warning letter to an author or reviewer regarding minor misconduct.

Major misconduct

The Editor / Editor-in-Chief, in consultation with the Section Editors / Editorial Board, and, when appropriate, further consultation with a small group of experts should make any decision regarding the course of action to be taken using the evidence available. The possible outcomes are as follows (these can be used separately or jointly):

Single-blind peer review: All of the reviewers of a manuscript remain anonymous to the authors before, during and after the evaluation process.

Double-blind peer review: All of the reviewers of a manuscript remain anonymous to the authors before, during and after the evaluation process and the authors remain anonymous to reviewers until the end of the review procedure.

^{xv} Except in case of open peer review.

^{xvi} In some journals, the decision is made by the Editor or the Editorial Board.

- Publication of a formal announcement or editorial describing the misconduct.
- Informing the author's (or reviewer's) head of department or employer of any misconduct by means of a formal letter.
- The formal, announced retraction of publications from the journal in accordance with the Retraction Policy (see below).
- A ban on submissions from an individual for a defined period.
- Referring a case to a professional organization or legal authority for further investigation and action.

When dealing with unethical behaviour, the Editorial Staff will rely on the guidelines and recommendations provided by the Committee on Publication Ethics (COPE): <http://publicationethics.org/resources/>.

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Please note that the payment of this charge does not guarantee acceptance of the manuscript for publication and does not influence the outcome of the review procedure.

Define and describe the method of payment and indicate whether there are additional costs of money transfer and who is to bear these costs (i.e. whether they are deducted from the amount paid by the author or not). Certain categories of authors may be partially or fully exempt from paying the fee (e.g. PhD students, or authors from certain institutions or countries, or members of some professional associations). In this case, a waiver policy should be defined, specifying the categories of authors exempt from paying or the contact address should be provided for submitting requests for exemption from payment. Define whether the amount is the same for all authors.

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If authors are required to pay a fee, the purpose of payment and the amount should be explicitly stated and a valid receipt should be issued by the publisher. There is no need (and this is not acceptable) to disguise a Submission Charge or an APC under terms such as 'donation', especially if the fee is mandatory (while a donation is a voluntary payment). The APC is a legitimate compensation for publication in open access. Paying an APC by no means implies (and must not imply) that the manuscript will be accepted without the peer review procedure and this should be clearly stated in the Editorial Policy. Submission charges (regardless of the outcome of the peer review process) are also charged by some subscription-based journals. The introduction of APCs sometimes attracts poor-quality submissions because some authors expect to avoid serious peer review if they pay a fee. The only way to deal with this problem is to reject uncompromisingly poor-quality submissions.

Journals may also receive donations. In this case, it is necessary to define who may give donations and for what purposes, in order to avoid the conflict of interest.

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The journal *Journal's title* allows authors to deposit **pre-print / post-print / Publisher's PDF^{xx}** in an institutional repository and non-commercial subject-based repositories or to publish it on Author's personal website (including social networking sites, such as ResearchGate, Academia.edu, etc.) and/or departmental website, at any time^{xxi} **after submission / after acceptance for publication / after publication.**^{xxii} Full bibliographic information (authors, article title, journal title, volume, issue, pages) about the original publication must be provided and a link must be made to the article's DOI^{xxiii}.

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Appendix 3: License agreements (templates)

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Signature(s)

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