CHECKLIST OF GOOD PRACTICES IN USING OPEN JOURNAL SYSTEMS SOFTWARE (OJS) FOR JOURNAL EDITING AND PUBLISHING

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One of the goals of the EIFL Open Access Programme (EIFL-OA) is to ensure the growth and sustainability of open access (OA) journal publishing platforms.

This checklist provides good practice recommendations for using Open Journal Systems (OJS) software for journal editing and publishing. OJS is created by the Public Knowledge Project (PKP), which is a multi-university initiative developing free and open source software to improve the quality and reach of scholarly publishing.

The checklist includes an overview of OJS 3 and tips on software plugins, journal procedures and policies, system security and content, usage statistics, and suggestions for improving content visibility and discoverability. It also includes a section about indexing your journals in DOAJ (Directory of Open Access Journals) and recommendations for further reading.

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This is the third updated version of the checklist.

If you have any comments and suggestions, please email them to iryna.kuchma@eifl.net.
ARE YOU USING THE LATEST VERSION OF THE SOFTWARE?

The latest OJS release (November 17, 2023) is OJS 3.4.0-4 and it can be downloaded here. The latest Long-Term Support (LTS) release is OJS 3.3.0-16, also released on November 17, 2023 and will be supported until January 1, 2025 (critical security and bug fixes will be ensured). OJS is a comprehensive tool for managing the entire submission and editorial workflow and for publishing journal articles and issues online. It offers the following features:

- **Run one or many journals:** Every installation of OJS can run one or many journals, so you can decide what suits your publishing setup.

- **Flexible editorial workflow:** Host a small editorial collective or run a streamlined publishing pipeline with editors, copyeditors and production assistants.

- **Your journals, your brand:** Create a custom theme for your journal or publishing house. Or customize one of our responsive, off-the-shelf themes.

- **Rich publication metadata:** Share your work using machine-readable metadata aligned with widely used metadata schemas (e.g. Dublin Core) via standard metadata exchange protocols (e.g. OAI-PMH).

- **Multiple languages:** Born in multilingual Canada, the software supports journals publishing in one or two or as many languages as you need (see current languages here).

- **Indexing and dissemination:** Quickly deposit your work with discovery services like Google Scholar, DOAJ, Crossref, DataCite and PubMed.

- **Long-term preservation:** Ensure your journals are preserved in permanent archiving services like PKP|Preservation Network and CLOCKSS/LOCKSS.

- **Global scholarly infrastructure:** Integrate with open industry standards such as DOIs, ORCID authentication and ROR affiliations.

- **Own your data:** No lock-ins or walled gardens. Use import/export tools to take your data anywhere, even to a different platform.

- **Stay on schedule:** Track every submission and find out quickly when editors and reviewers are falling behind.

- **Peer review:** Find the right reviewers for every submission, with reviewer interests and editorial ratings, as well as accept and decline rates.

- **Track your success:** View detailed article-by-article statistics and monitor editorial metrics like response times and reviews per submission.

- **Audio/video and datasets:** Publish audio and video files, bespoke digital humanities projects or research datasets alongside full-text PDF, Word and HTML.
● **Preserve the scholarly record**: Track changes to publications with versioned metadata and use the activity log to audit controversial editorial decisions.

See the OJS Demo [here](#).

For more information, check out Open Journal Systems 3:

- **Getting started** -
  - Frequently Asked Questions (FAQ): How to use PKP software and common troubleshooting issues.
  - A Short Guide to Starting a New Journal
  - Journal Policies and Workflows guide
- **Learning OJS 3.4: A Visual Guide to Open Journal Systems**
- **Technical documentation**
- **Designing Your Journal**

Sign up to the mailing list to receive announcements about security vulnerabilities and critical bug fixes as soon as they happen, and information about upcoming releases, community plugins, technical changes and developer documentation: mailing list for [Developer Updates](#) and mailing list for [Security Announcements](#).

![✓] HAVE YOU SECURED YOUR SYSTEM?

You will find the basic steps and recommendations for secure deployment of software and secure file management, as well as steps for configuring your software to combat spam and other forms of malicious registration activity on your site, in [Securing your system FAQ](#).

In addition, having a strong anti-virus software on your server to protect your OJS platform against viruses and other malicious code that may be present in uploaded files will be an advantage.

![✓] HAVE YOU ACTIVATED PLUGINS?

OJS plugins are listed [here](#) and below are some highlights.

**Facilitating citations and social media sharing**

Activate available plugins such as Citation Style Language and COinS plugin (that embeds OpenURL COinS in OJS articles permitting tools like Zotero to grab citations), so that your articles can be easily cited, and AddThis Social Media Sharing to make it easier for the articles to be shared and hence increase visibility.
Plugin to enable download of article metadata (BibTeX, MARC XML, RDF, RIS) in OJS

This plugin provides an export of article metadata in the following formats: BibTeX, MARC XML, RDF and RIS. In contrast to the already existing citation plugin of OJS (as part of the ‘reading tools’), the metadata are not only displayed, but also offered for download.

Crossref Reference Linking plugin

This plugin automatically adds the extracted article references to the DOI registration with Crossref. It requires Crossref DOIs to be assigned to articles, article references to be separately entered and extracted, as well as article DOIs to be deposited to Crossref from within OJS. It uses the Crossref Export/Registration plugin settings: Crossref credentials (username and password), as well as the setting for the testing mode.

- Crossref Reference Linking Plugin guide
- Crossref Reference Linking Plugin in GitHub

DOI assignment

This plugin enables the assignment of the Digital Object Identifiers (DOIs) to issues, articles and galleys in OJS. It can work in pairs with Crossref, Datacite or Medra plugins for automatic content registration. DOI plugin guide.

Ark assignment and management

This plugin enables the assignment and management of ARK ID to issue, article and galley. Ark Plugin in GitHub.

Article level metrics

Paperbuzz Plugin for OJS versions 3.1.2 and above, built in cooperation with the Paperbuzz team at OurResearch, brings free altmetrics (an alternative to traditional citation-based metrics) based on open Crossref Event data. To use this plugin, your journal must have DOIs assigned to articles and properly deposited with Crossref. Paperbuzz plugin in GitHub.

Author identification

The ORCID Profile Plugin for OJS enables the collection and display of authenticated ORCIDs (Open Researcher and Contributor IDs) of contributors to journals published with OJS. ORCID is a persistent digital identifier that distinguishes individual researchers and supports automated links between researchers and their professional activities. Check out the ORCID Plugin Guide for more details and watch video tutorials. ORCID Profile plugin in GitHub.

Organizational identifiers

This plugin integrates support for ROR (Research Organization Registry). Organizations maintained by ROR.org are automatically fetched using an auto suggesting function. For multilingual journals, additionally supported languages will be pre-filled given ROR.org has the corresponding names in the OJS supported languages.
Installing the ROR plugin
ROR plugin in GitHub

Depositing journal articles in repositories
OJS allows journal managers and authors to deposit articles in repositories (for example, institutional repositories) via the SWORD protocol (Simple Web-service Offering Repository Deposit). As a result, the publisher has a comprehensive metadata set and the full text, whereas the repository offers dissemination and archiving services.

The journal manager defines a list of repositories to which an article could be uploaded; during the article submission stage, the author ticks the box (so that upon publication the article is automatically uploaded to the selected repository), and OJS does the rest.

Annotation and commenting: Hypothes.is
This plugin adds Hypothes.is integration to the public article view, permitting annotation and commenting. It currently supports commenting on HTML galleys; see README for instructions on extending the functionality to PDF galleys.

- Hypothes.is plugin guide
- Hypothes.is plugin in GitHub.

Formats: JATS template
This plugin generates basic JATS XML documents from the OJS metadata and by full-text extraction in case the journal cannot provide better JATS XML. This plugin can be used together with the OAI JATS plugin to deliver JATS via OAI. JATS Template plugin in GitHub.

Keyword cloud plugin
This plugin provides a tag cloud of article keywords that can be added to a journal's sidebar.

- Keyword plugin guide
- Keyword plugin in GitHub

Most read articles
This plugin creates a “most read articles” section in the journal’s sidebar with five most viewed articles (with links) in the last week, along with the number of views per article. Most read plugin guide.

Recommend Articles by author
This plugin inserts a list of articles by the same author on the article abstract/landing page. Recommended Articles plugin guide.

Recommend Similar Articles
This plugin adds a list of similar articles to the bottom of the articles abstract/landing page. Recommended Similar Articles plugin guide.
DO YOU TRACK AND ANALYSE STATISTICS?

Do you have questions about statistics? Check out this handbook that explains how to configure, use, and troubleshoot PKP’s Usage Statistics Framework. It also contains some information on other statistics-gathering methods that are supported by OJS.

PKP Usage Statistics Report plugin generates a CSV spreadsheet containing monthly views for the journal homepage; issue Table of Contents (TOCs); article abstract/landing pages; and file downloads. It can provide country information (if configured). Usage Statistics Report plugin guide.

The Usage Statistics plugin displays the number of article downloads on the article page, in bar or line chart format. Usage Statistics plugin guide.

The View Report plugin generates a CSV spreadsheet describing readership for each article, including article title, issue, date published, and view counts (for abstracts, individual galleys, total galleys). View Report plugin guide.

Consider installing Matomo (formerly Piwik) plugin that also tracks usage statistics. Matomo plugin in GitHub.

HOW VISIBLE AND DISCOVERABLE IS YOUR JOURNAL?

As most readers discover online content through internet searches, greater visibility and discoverability make it possible to reach out to a greater audience.

Enable OAI-PMH protocol and register with OA content aggregators

Index your journal with search engines

One of the principal ways in which websites are found and indexed by internet search engines is through metatags. Metatags are bits of HTML on your webpage that aren't visible to users but are visible to search engines and the bots they employ to crawl the web for content. OJS supports metatags on the journal and on the article level. OJS allows you to fill in relevant metadata describing your journal to ensure better findability.

If you are a Journal Manager you can go to: Journal Manager > Setup > 1. Details
You can fill out description and keywords information that provides your site with important metadata that is crawled by the search engines. Be as thorough as you can. There is also a Custom Tags field that can be used for special use terms that might be unique to your journal.

- From Getting Your Journal Indexed PKP Wiki.

Metatags for individual articles can be embedded in the HTML code of the article landing pages using the Dublin Core Indexing plugin and the Google Scholar Indexing plugin, which are integrated in the OJS installation package.

- Tips for indexing with Google Scholar

There is no need to register your site for it to be indexed. The Google Scholar crawler will automatically find the site. The standard OJS URL structure has worked well for a long time. Avoid customizing URLs, which makes it more difficult to identify a journal site, and as a result takes longer to index.

For indexing, Google Scholar needs URLs for all articles and bibliographic information in the form of machine-readable metadata tags ("metatags"). You can find more information about metatags in the Google Scholar inclusion guidelines:

In OJS you can view metatags in the source code from the article landing page by right clicking or keyboard command to ‘View Page Source’, depending on your browser, and search HTML source for “citation_” to view metatags. Metatags should match the published PDF: for example, title, author, and publication dates match and bibliographic metatags written in (only) language/script of the published full text article. Don’t duplicate metatag information in multiple languages and scripts.

Common mistakes include inconsistent “first name last name” or “last name, first name” format, incomplete author names, and errors in spelling and capitalization. List complete author names in citation_author tags as they are written in the published PDF, in the same order as the author order of the published PDF. Use either “last name, first name” or “first name last name” format in metatags.

If metatags are no longer included after OJS upgrade, which was a known issue for journals upgrading from OJS 2.x to OJS 3.0.1, 3.0.2, 3.1.0, and 3.1.1., when the Google Scholar plugin was not automatically enabled, then -

**Test:** view the source code for a few articles in each journal that upgraded. If there is no citation_title tag, your site is affected.

**Fix:** re-enable “Google Scholar Indexing Plugin” manually for individual journals via admin dashboard for OJS instances with a small number of journals. And upgrade to OJS 3.1.2. Use an SQL command for large OJS instances with many journals:
https://github.com/pkp/ojs/blob/stable-3_1_2/dbscripts/xml/upgrade/3.1.2_update.xml#L41..L42
Tips for using Google Search Console

Setting up a Google Search Console account will allow you to register your site for indexing and submit its XML sitemap. OJS has an inbuilt sitemap. This is the usual path to the sitemap: http(s)://journal domain/index.php/journal/sitemap.

This is an optional step, but it does speed up the indexing process, especially in Google Scholar. Google will automatically detect ‘scholarly’ article content once you have published it, and will add that to Google Scholar, so no other manual steps are required of you.

Please Note: Setting up Google Search Console will require a Google account. Additionally, if you use Google Analytics for collecting the OJS usage statistics, the two services can be used together.

Export DOI and associated metadata export
PKP and Crossref continually collaborate to improve the level of overall DOI export support provided within OJS and to help publishers and journals using OJS take better advantage of Crossref services. PKP is also the Sponsoring Organization of Crossref and can now act as a sponsor representative for OJS journals wishing to apply for Crossref membership, and is in some cases able to waive fees. Crossref Global Equitable Membership (GEM) programme covers almost sixty countries and the annual membership fee and all content registration fees are waived for all record types. Participation in other paid services, such as Similarity Check and Metadata Plus, will be charged at the usual fees. See recording and slides from the CARLIGH/Crossref/EIFL webinar for journal editors and librarians to learn more about GEM, the value and use of metadata for content discovery, how to become a member of Crossref, how to register content with the Open Journal Systems Crossref plugin or via manual web deposit form or XML file, and use other Crossref services for journals editors. Check out this manual and learn more about DOIs, how to set up the Crossref Plugin, reference linking and deposit, how to enable the funding information plugin, and do a similarity check. CrossRef XML Export plugin supports the automatic registration of DOIs with CrossRef and the export of XML metadata in Crossref format for manual DOI deposits. See CrossRef XML Export Plugin guide.

OJS also has a Datacite export plugin that exports or registers content metadata in DataCite format.

- Datacite export plugin guide
- Datacite export plugin in GitHub.

Register with DOAJ
Directory of Open Access Journals - DOAJ is a community-curated index of high-quality open access journals. It includes over 20,200 journals covering all areas of science, technology,
medicine, social science and humanities. The content of the journals indexed in DOAJ is automatically indexed by other content aggregators (for example, Dimensions.ai, EBSCO Discovery Service, OpenAIRE).

The DOAJ Journal Application Form is available here: https://doaj.org/application/new and you will need to log in or register to fill out the form. You will be able to save your progress and review all your answers before you submit them. A PDF version of the application form is available for reference only. Before you start, read the DOAJ Guide to applying, also available in French (Canadian) and the Copyright and Licensing guide. The DOAJ Application Guide for OJS Journals from PKP is another useful resource for you to consult. The benefits of DOAJ indexing are highlighted in these African and Eastern European stories: The story behind the journal: Conspectus; Edinost in Dialog (Unity and Dialogue) and Physics Access. See some more journal stories from Australia, Brazil, the Netherlands, Sri Lanka, the UK and the US here.

And when registered, use a DOAJ Export plugin that allows journals to manually or automatically deliver articles to DOAJ with a DOAJ API Key. DOAJ Export plugin guide.

More about improving visibility and discoverability of your journal
Consult the revised edition of the Getting Found, Staying Found, Increasing Impact: Enhancing Readership and Preserving Content for OJS Journals guide, that highlights many aspects of the publishing process that are important for increasing your journal’s “findability” and building a wider audience. Moreover, it will also show you how to ensure reliable and ongoing access to your valuable content. Much of the information in this resource is intended to be generic and could be applied to any journal, using any software platform. However, the authors have opted to include additional information pertaining to the OJS software to provide further illustrations of how to apply this information in a real-world setting.

See the Index Application Guide for selecting the appropriate indexes for your journal and understanding an index’s criteria for inclusion. It also provides guidance on setting up OJS to meet common requirements for inclusion, as well as detailed information about application and technical requirements for PubMed Central, Medline, Scopus, and Web of Science.

ARE YOUR JOURNAL PROCEDURES AND POLICIES AVAILABLE ONLINE?

One way of demonstrating your journal’s ethical and professional standards is to publish your policies and procedures online. In line with publishing best practices, document and publish procedures and policies, such as review process, access policy, quality control, research data policy, policies for dealing with unethical behaviour, Article Processing Charges (APCs, if you charge any), author guidelines, copyright and licensing policy (e.g. Creative Commons licences).

OASPA (Open Access Scholarly Publishing Association) strongly encourages the use of the CC-BY license, rather than one of the more restrictive licences or a custom licence that is functionally equivalent to CC-BY, read more in Best practices in licensing and attribution: What you need to know.
Below are open access journal policy templates developed within the ‘Revisiting open access journal policies and practices in Serbia’ project and updated in 2023:

- Diamond (no fee) policy template
- Policy template for an open access journal charging APCs

Consult the Journal Publishing Guide: Copyright and licensing by the University of Toronto Libraries Journal Production Services for more information. And check out the Journal Policies and Workflows Guide by PKP. To learn which information and policies should be displayed on publishers’ and journals’ web pages, check out the DIAMAS Best Practices checklist for Diamond OA publishers.

☑️ **DO YOU PARTICIPATE IN THE PKP PROJECT PRESERVATION NETWORK?**

The Public Knowledge Project Preservation Network (PKP PN) offers free-of-charge, low-barrier preservation through the global LOCKSS Network for OJS journals. The PKP PN deposits content using the LOCKSS Program, which offers decentralized and distributed preservation. This is a free preservation option for journals using OJS 3.1.2 and newer, which are not part of any other digital preservation service (such as CLOCKSS or Portico).

The PKP PN functions as a “dark” archive, meaning that end-users will not have access to the preserved content until after a “trigger event”, such as explicit notification by OJS Journal Manager or cessation of deposits into the PKP PN (after a period of inactivity). After a trigger event, PKP staff will import the preserved content into one or more OJS instances hosted by PKP member institutions. Once loaded into these host OJS instances, the content will be openly accessible.

Using the PKP PN only requires installing the PKP PN plugin in your OJS journal and agreeing to the terms of service. See more information about the PKP PN, the PKP Preservation Network Guide and PKP PN plugin in GitHub, which requires ZipArchive support.

☑️ **HOW ACCESSIBLE IS YOUR JOURNAL CONTENT?**

Check out The Creating Accessible Content guide that covers the general principles of creating universally accessible content published on the web. It highlights techniques to address specific limitations for the use of assistive technologies, such as screen readers for people with visual impairment or sign language for those with auditory limitations. Finally, it gives specific tips on creating different galley formats in an accessible way. This guide will be useful for authors in preparation of their manuscripts and for editors in formatting materials for publication and adding content to journal websites.
And see the Accessibility Statement that includes technical and legal coverage and disclaimer.

Also consult Designing Your Journal guide that gives advice and information on how to make your OJS journal attractive, accessible and unique.

Read The South African Journal of Science Inclusive Language Policy as an example and listen to the interview between Prof Leslie Swartz and Dr Nkosinathi Madondo (South African Journal of Science) who explain the importance of inclusive language in journal articles as most readers of articles do not have English as a first language, and how inclusive language policies aim to assist and include rather than to exclude readers.

FURTHER READING

- DIAMAS Best Practices checklist for Diamond OA publishers that covers legal and financial aspects and transparency, editorial quality, editorial management and research integrity, open science practices, technical service efficiency, visibility, indexation, communication, marketing and impact and Equity, Diversity and Inclusion (EDI): accessibility, gender equity, multilingualism.
- Ten Core Practices - 10 best practice guidelines for editors and journal publishers, covering issues like how to deal with allegations of misconduct; authorship and contributorship; conflicts of interest, post publication corrections, etc., developed by COPE - Committee on Publication Ethics; also see a collection of COPE Guidelines https://publicationethics.org/guidance/Guidelines
- Journal Publishing Guide: Publishing Best Practices Checklist by the University of Toronto Libraries Journal Production Services
- Basic Steps for Starting a New Journal by PKP
- PKP School - an online, open, self-paced collection of courses:
  - Becoming an Editor
  - Becoming a Reviewer
  - Writing for Publication
  - Library Publishing courses: Getting Started in Library Publishing; Attracting, Selecting, and Disseminating Content for your Library Publishing Program; Building and Measuring Impact for your Library Publishing Program.

- If you publish a student journal, check out the Student Journal Toolkit by PKP
- Handbook for Journal Editors by INASP
- Frequently Asked Questions (FAQ): How to use PKP software and common troubleshooting issues
- Better Practices in Journal Metadata by the Coalition Publica.
- Guide to Plan S compliance in OJS.
- GDPR Guidebook for PKP Users that provides advice for users of PKP applications on how to approach the EU General Data Protection Regulation (GDPR), how to best configure
OJS to be GDPR-compliant, and includes information on some of the policies that those using OJS with EU citizens data will want to consider.

- **Using PKP Software in Multiple Languages guide.**
- Checklist for open access publishers on implementing the UNESCO Recommendation on Open Science available in [Arabic](https://example.com), [English](https://example.com), [French](https://example.com) and [Spanish](https://example.com).
- **New university press toolkit**: Supporting and giving guidance to new university presses and library-led publishing ventures, JISC.
- **Open Access Journals Toolkit**.
- **OASPA Open Access Publishing Resources**.
- **The Publishers Learning And Community Exchange (PLACE)** is an online public forum created for organizations interested in adopting best practices in scholarly publishing. New scholarly publishers can access information from multiple agencies in one place - the Committee on Publication Ethics (COPE), Crossref, the Directory of Open Access Journals (DOAJ), and the Open Access Scholarly Publishers Association (OASPA), ask questions of the experts and join conversations with each other.
- **Library Publishing Coalition Zotero Library**.