# Standard Terminology for Peer Review

**Abstract:** This document identifies and standardizes definitions and terminology in peer review practices in order to help align nomenclature as more publishers use open peer review models. A peer review terminology that is used across publishers will help make the peer review process for articles and journals more transparent, and will enable the community to better assess and compare peer review practices between different journals.

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Developed by the
National Information Standards Organization

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This standard may be revised or withdrawn at any time. For current information on the status of this standard contact the NISO office or visit the NISO website at: www.niso.org.

# Contents

# Foreword

(This foreword is not part of the Standard Terminology for Peer Review, ANSI/NISO Z39.106-2023. It is included for information only.)

## About This Standard

STM, the International Association of Scientific, Technical and Medical Publishers, recognized a need to identify and standardize definitions and terminology in (open) peer review practices. A peer review terminology that is used across publishers will help make the peer review process for articles and journals more transparent and enable the community to better assess and compare peer review practices between different journals. With this background, STM set up a working group to develop such standardized definitions and associated best practice recommendations and in September 2021, this initiative continued as a NISO working group where it underwent a phase of publisher trials before being presented as an ANSI/NISO standard.

Suggestions for improving this standard are welcome. They should be sent to the National Information Standards Organization, 3600 Clipper Mill Road, Suite 302, Baltimore, MD 21211 or via email at nisohq@niso.org.

## NISO Information Creation & Curation Topic Committee

This standard is part of the portfolio of the NISO Information Creation & Curation Topic Committee. At the time the Topic Committee approved this standard for ballot to the consensus voting pool, the following individuals were committee members:

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## NISO Standard Terminology for Peer Review Voting Pool

At the time this standard was balloted, the following organizations were members of the Peer Review Terminology Voting Pool that approved this standard. NISO approval of this standard does not necessarily imply that all Voting Pool members voted for its approval.

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**American Library Association (ALA)**
Yuji Tosaka

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**American Psychological Association (APA)**
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**NewsBank, Inc.**
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**OCLC Online Computer Library Center**
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**Oxford University Press**
James Phillpotts

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Kirsten Leonard

**Pennsylvania Academic Library Consortium, Inc. (PALCI)**
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**SCELC Consortium**
Linda Wobbe

**Springer Nature**
Volker Boeing

**Taylor & Francis Group**
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**University of Florida Libraries**
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**Wiley**
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## Standard Terminology for Peer Review Working Group Members

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**Michael Willis**
Wiley

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# Standard Terminology for Peer Review

## 1    Scope

The scope of this terminology is external peer review[1] of journal articles. The terminology may expand to the peer review of other classes of objects (e.g., books, preprints, conference proceedings, data) at a later phase but the initial focus is on articles as the highest priority. Its successful implementation will also make it possible to effectively expand to other objects in the future.

Machine readability of the review terminology applied to journals and individual articles is a longer-term goal of this initiative, but not included in this version. The terminology does not include icons or other visual markers; these also might be included later.

The terminology is to be applied on the journal level (describing what kind of review models are used for a journal) as well as on the published article level (what kind of review did a particular article undergo), and communicated on the appropriate places and moments (e.g., Guide for Authors, Article Page).

The terminology is intended to apply to all review models. Some exceptional review models are not included as these models are fully transparent by design, and including them would make the terminology unnecessarily complex.

The scope of review (e.g., whether an article is reviewed for novelty, potential impact, rigor of methods or analysis) is not included, as these editorial approaches are not sufficiently defined and demarcated. At the same time, the scope of review should be communicated to authors and on the article page in case it clearly deviates from the standard (e.g., review on sound science, statistics).

The article acceptance decision making process (e.g., made by a single Editor-in-Chief, a panel of Editors, an Associate Editor ratified by an Editor-in-Chief) is out of scope.

The term 'blind' in 'double blind etc.' is replaced by 'anonymized' to avoid concerns about using ableist terms.

The terminology will be regularly updated and suggestions can be made. More information can be found at https://niso.org/standards-committees/peer-review-terminology.

## 2    Terminology

The terminology describes the different peer review models in four elements of the process: (1) identity transparency, (2) who the reviewer interacts with, (3) what information about the review process is published, and (4) whether post-publication commenting takes place.

The information **in bold** (in the *Type* column) should be used in communication.

## 2.1    identity transparency

This category describes the extent to which identities of participants are made visible to each other during the review process. Identities not made visible during the process may be made visible at publication on the article page (see section 2.3, Review information published).

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[1] Contrary to peer review conducted by editorial boards or publishing staff

| Type | Description |
|---|---|
| **all identities visible** | Reviewer identity is visible to author, author identity is visible to reviewer, reviewer and author identity is visible to (decision-making) editor |
| **single anonymized** | Reviewer identity is not made visible to author, author identity is visible to reviewer, reviewer and author identity is visible to (decision-making) editor |
| **double anonymized** | Reviewer identity is not made visible to author, author identity is not made visible to reviewer, reviewer and author identity is visible to (decision-making) editor |
| **triple anonymized** | Reviewer identity is not made visible to author, author identity is not made visible to reviewer, reviewer & author identity is not made visible to (decision-making) editor |

## 2.2    reviewer interacts with

This category relates to direct interaction or exchange of information (e.g., via submission systems or email) during the peer review process. Multiple types of this category may be selected where applicable. Whatever is communicated about the review process after publication is included in section 2.3, Review information published.

| Type | Description |
|---|---|
| **editor** | Communication between editor and reviewer (traditional model). Also known as 'independent review'. Identities can be anonymized or visible |
| **other reviewers** | Direct interaction/collaboration (e.g., via submission system or email) between reviewers, or the possibility to receive and/or comment on each other's reports before reviewer makes recommendation to the editor. Identities can be anonymized or visible |
| **authors** | Direct interaction/collaboration (e.g., via submission system or email) between author and reviewer before reviewer makes recommendation to the editor. Identities can be anonymized or visible |

## 2.3    review information published

This relates to information that is published about the review process on the article page. Select and list the items that are applicable.

| Type | Description |
|---|---|
| **none** | No information about the review process or editorial decision process is published |
| **review summaries** | Can be summaries or parts of the reviews, or a summary of the review process |
| **review reports** | Full content of the reviewer reports is published |

| review reports (author opt in) | Full content of the reviewer reports is published if the corresponding author opts for this |
|---|---|
| review reports (reviewer opt in) | Full content of the reviewer reports is published if the reviewer(s) opt(s) for this |
| submitted manuscript | The version of the manuscript that the author submitted for peer review is published. |
| submitted manuscript (author opt in) | The version of the manuscript that the author submitted for peer review is published if the corresponding author opts for this. |
| author/editor communication | Including editor decision letter and reviewer responses (rebuttals) |
| reviewer identities | Identities of the reviewers are published |
| reviewer identities (reviewer opt in) | The identities of the reviewers are published if the reviewers opt for this |
| editor identities | Identities of the handling editors |

## 2.4    post publication commenting

Relates to comments on the online published version of the version of record on the publishing platform, and does not include possible integrations with third party platforms (e.g., PubPeer). Article types such as comment / reply / letter are not considered post publication commenting as they are stand-alone publications. Only use this category when applicable.

| *Type* | *Description* |
|---|---|
| **open** | Commenting open to anybody. Can be anonymous, require signing in and/or registration (e.g., via ORCID) |
| **on invitation** | Only editor- (or publisher-) selected and/or invited individuals can comment on the article post publication |

# Appendix A:
## informative
## Use of Terminology and Further Information

(This appendix is not part of ANSI/NISO Z39.106-2023, *Peer Review Terminology*. It is included for information only.)

## A.1. Use of Terminology

As an example, the description of a (traditional) review process to authors (e.g., on the Guide for Authors) would be:

> **identity transparency: single anonymized**
> **reviewer interacts with: editor**
> **review information published: none**

Publishers can include links in these descriptions which lead to a page where the terms are explained.

In case journals allow authors to choose between review models, all the options should be listed. E.g.,

> **identity transparency: single anonymized, double anonymized**

It should be actively communicated when post publication commenting is adopted. For example:

> **identity transparency: all identities visible**
> **reviewer interacts with: editor, other reviewers**
> **review information published: review reports, reviewer identities**
> **post publication commenting: open**

The tables below summarize which elements of the terminology should be used to describe the review models **to authors** through the appropriate channels (e.g., Guide for Authors, Journal Homepage, Submission Systems), and **to readers** on the article page (print, PDF and online).

1. identity transparency

| To Authors (e.g., Guide for Authors) | On Article Page |
|---|---|
| Display review model(s) used in the journal | Display model used for article |

2. reviewer interacts with

| To Authors (e.g., Guide for Authors) | On Article Page |
|---|---|
| Display review model(s) used in the journal | Display model used for article |

3. review information published

| To Authors (e.g., Guide for Authors) | On Article Page |
|---|---|
| Display what will be published (multiple options possible) | Not necessary to display policy (as information itself is published there) |

4. post publication commenting

| To Authors (e.g., Guide for Authors) | On Article Page |
|---|---|
| Display model, but only if applicable | Not necessary to display policy (as comments themselves are published on the article page (online)) |

## A.2. Further Information

In some cases, publishers are encouraged to provide more details in the description. For example, if registration is needed for post publication commenting ('Post publication commenting: Open'), it should be specified.

Journals are encouraged to communicate whether they accept manuscripts and/or reviews from other journals ('cascades' or 'transfers') or platforms (e.g., Review Commons). In case the journal uses alternative forms of peer review (e.g., review done by editors vs. external reviewers), journals are encouraged to mention this as well.

In addition to describing the review model that was used for the submitted manuscript on the article page, it is encouraged that the following information is displayed:

- Date of submission

- Date of acceptance

- Date of publication

- Whether the manuscript was fast-tracked

- Number of reviewer reports submitted in first round

- Number of revision rounds

- Whether any technical tools (including AI/ML) were used in the editorial process such as:

    o Plagiarism checks

    o Tools to assess the validity or consistency of statistics

    o Tools to assess the reproducibility or methodological rigor of research

    o Tools to detect image manipulation

    o Tools to check references

It is recommended that the use of technical tools be included in summary form in any journal level communication, e.g., in the Guide for Authors.