Guide for Associate Editors
Douglas B. West

This document summarizes the editorial process at Discrete Mathematics. It is periodically updated and provided to new Associate Editors to provide advice and familiarity with the editorial process. Associate Editors can if desired arrange for training on the use of Editorial Manager from Elsevier staff. Other questions may be directed to the Editor-in-Chief, Managing Editor, or Journal Manager.

Receipt of Submissions

Processing of submissions to the journal is via the Elsevier Editorial Manager system (EM). Editorial Manager facilitates the selection of reviewers and tracking of the editorial process. It contains templates for letters to be sent for various purposes. An editor has the opportunity to (and should) edit these letters as appropriate before sending them.

After submission of a paper, Journal Assistants at Elsevier check whether the file is suitable for processing. If so, it then moves to the New Assignments menu of the Editor-in-Chief (EiC). Most submissions are assigned by the EiC to a Handling Editor (HE) who is either an Associate Editor (AE) or the Managing Editor (ME). The EiC may also declare a paper Out of Scope or choose to become its Handling Editor. The Handling Editor (HE) makes the final decision about the publication of a regular submission.

EM notifies the HE. The submission goes to the HE’s Main Menu having the status “With Editor.” Submissions should not remain in this status for more than a week or so. Many authors check the status of their paper; “With Editor” indicates to them that the paper has not been sent for review (true) and is being ignored (possibly not true). This comes across as neglect of the submission. Authors become upset and complain. An HE who plans to review the paper personally but not immediately can invite him/herself as a reviewer to produce “Under Review” status. Self-review should only be used when expected to speed the editorial process, such as by leading to quick rejections. Extensive self-reviews overload the HE and create too much delay.

“Action Links” allow the HE to view the submission, view summary details, invite reviewers, view reports, enter decisions, etc. The HE usually invites two reviewers to referee the paper, but there are other options.

Reject without Reports (under “Submit Editor’s Decision and Comments”). As an editor becomes more familiar with the papers we receive on a particular topic, this option can be used more frequently. We encourage use of this option to speed the editorial process at the journal. Using this option also improves quality, since editors are generally ahead of reviewers in raising the editorial standards at DM, and it becomes awkward for an editor to reject a paper when referees with insufficiently high standards give positive reports just because the results are new and correct. The HE has great latitude in determining what papers are suitable for the journal; we trust the AEs to use this power wisely.

If the HE believes initially that a paper is borderline and perhaps should be rejected but does not wish to make that decision alone, we have another option. The HE can ask an appropriate member of the Editorial Board (or someone else) for a Quick Opinion on whether the submission should be reviewed or should be rejected without review. More later on this option.
Revise before Review. This is appropriate when the mathematics looks worthwhile but the paper is poorly prepared, so that it would be an embarrassment to send it to reviewers, who may become angry that their time is being wasted. The template letter should be edited to address what aspects of the presentation need to be improved. Like most of the decision letters, it asks the author to consult the grammar page https://faculty.math.illinois.edu/~west/grammar.html for grammatical principles to follow. This option probably should be used more than it has been.

Out of Scope. This option is used mostly by the EiC without assigning an HE, but also an HE may conclude that the topic of an assigned paper is inappropriate for the journal. The template letter stresses that no opinion is being expressed on the quality of the paper, just that another venue would be more appropriate. The HE should add to the letter some evidence that the topic is inappropriate for DM, such as by searching in MathSciNet to show that only a very small proportion of the papers using the keywords actually appear in DM. The journal code for DM in MathSciNet is “0012-365X”. At the least, one can mention the main topic area and state that DM does not publish (or no longer publishes) in that area. The scope of DM is broad, and we are committed to keeping it broad relative to other journals in the field, but it has become more focused in recent years, retreating for example from abstract algebraic structures.

Reject and Recommend Transfer. Elsevier has established a cluster of its journals in discrete and combinatorial mathematics to facilitate transfers. In addition to DM, these journals include JCTA&B, Discrete Applied Mathematics, the European Journal of Combinatorics, and Advances in Applied Mathematics (this one is not as applied as it sounds). The European Journal is presently not using EM, so it is not available.

This decision option offers the author the option to transfer the submission to one of those of these journals that the HE marks. Generally, our AEs use this decision option only when a paper is inappropriate for our journal because its focus is too applied or computational. The AE can select DAM as a suggestion for such papers. It is also possible that an author may have accepted a transfer to DM from another of these journals (we have received some transfer from the European Journal and JCTB in the past.) In that case, there may be existing reports from refereeing at the other journal, which our AE can access from the Details page. A transfer decision on a paper submitted to DM can also be reached after refereeing, though this is uncommon.

Reviewer Invitations

EM facilitates inviting of referees. The database has more than 10,000 reviewers. (There were about 18,000 before inactive reviewers were removed.) The HE can search for multiple reviewer names at once at the Reviewer Selection page.

Except in unusual circumstances, a reviewer who currently has an outstanding invitation or a review in progress for DM should NOT be invited to review another paper; concurrent requests from the same journal irritate reviewers. A reviewer who has a review in progress for paper B could be invited to review a revision of paper A if he/she reviewed an earlier version of A and indicated willingness to read a later version. Any time a reviewer currently assigned a task is asked to do something else, the invitation letter should be edited to be apologetic about the imposition.
Similarly, a reviewer with an outstanding DM invitation or review in progress should not be listed as an alternate reviewer. Alternates are invited automatically by the system (“promoted”) if invited reviewers decline or are uninvited. When the HE of paper A wants to use reviewer R but sees that R is listed as an alternate on paper B, the HE of A may ask the HE of B to release the reviewer. There is no restriction on listing individuals as “Proposed reviewers” or on sending invitations to individuals who are listed as Proposed Reviewers for other papers, since the system does not automatically promote proposed reviewers. Listing individuals as Proposed Reviewers serves primarily as a reminder to the HE of potential reviewers in case initial reviewers decline or fail to produce reports.

There is a menu of template letters for reviewer invitations. Besides the default template there are invitations for Reviewer of a Revision (used when the reviewer reported on an earlier version), Reviewer as a Superreferee (discussed later), Request for Quick Opinion from an Editorial Board member or a nonmember of the Board, and Reviewer of a Perspectives paper (the EiC handles some Perspectives submissions, for which we seek twice as many reviews).

We have notified the Editorial Board (EB) that we will occasionally request Quick Opinions, Superrefereeing, or suggestions of referees. A Quick Opinion asks whether we should have the paper refereed. In the case of a negative answer, the EB member is asked to provide some justification, which the HE can use in editing the Reject without Review decision letter. With a positive answer, the EB member is asked to suggest referees.

Reviewers can be found in many ways. Looking at the references is often useful but sometimes inappropriate; researchers who have written on the same topic may not be objective about its significance. Elsevier provides Scopus, which has various search tools. Although Elsevier recommends Scopus, an HE already familiar with MathSciNet may prefer using that. Also available is Google Scholar. We hoped that under Editorial Manager it would have been made possible to require the author to provide a Math Sciences Classification code for the submitted paper, which could then facilitate searching for reviewers, but the lawyers have ruled against this.

The number of required reviews can be adjusted by the HE at the top of the Reviewer Selection page. For example, when only one reviewer requested major revisions, the HE may want to send the resubmission only to that referee for review and reduce the number of required reviews. When a submission received a Quick Opinion report within the system or later received conflicting reports and needs a Superreferee evaluation, “Under Review” status should be appropriately maintained by increasing the number of required reviews. Otherwise, the Editorial Status will change to “Required Reviews Complete”, which is another submission status that authors take as neglect and inquire about.

Most established discrete mathematicians are in our database. One can try using also first names or shorter portions of the surname in searcher. It seems that EM now successfully ignores diacritical accents in searches (like MathSciNet); not doing so previously made it harder to find some reviewers. Due to legal issues, editors no longer can edit names or addresses in the system. If information needs to be updated, contact the Journal Manager. When a reviewer really is missing from the database, the search page will provide the opportunity to add the person. This provides a possible way to update email addresses: create a new reviewer with the new address and then merge the records.
It is occasionally difficult to find appropriate reviewers. One of our long-time Associate Editors has listed some possible reasons for this generally atypical situation, paraphrased here: “I’ve found that there can be many reasons for a large number of declinations. Sometimes papers can be poorly written, uninteresting, or lacking significant results (I try to reject such papers without reports, but sometimes I end up inviting referees when it isn’t immediately obvious, especially when I am busy or have a large pile of papers to process.) But, there are other reasons why it is hard to get two good referees enlisted. In some topics, it seems that all potential referees are flooded with requests to review papers from a variety of journals. For others, the people who work on the topic are ‘high-powered’ mathematicians who review relatively few papers. (An example of an area with potentially good papers when I have run into these problems is expander graphs.) In the past I’ve sometimes had to invite 20 or more people before I found two reviewers, even though in the end I got two positive reports. I take it as a challenge to find reviewers after a streak where many people have declined. When I’ve hit about 10 invitations with no takers, I usually examine the paper to see whether I should have rejected it without reports, but this is generally not the case. So, I look harder for potential referees. I don’t think that I have ever given up when I thought that there was no a priori reason to reject the paper. I might be different from other Associate Editors who might give up after fewer invitations, but I think you ought to ask Associate Editors not to surrender just because they can’t find referees. Maybe asking a different Associate Editor to give it a shot might be better.”

**Review Process**

If all goes well, reviewers promptly accept the review invitations and complete their reviews within the requested time. Many other things can happen.

*Reviewers may decline the invitation.* Here EM notifies the HE that the reviewer has declined, and an additional reviewer should be invited. If an alternate reviewer was specified, than an alternate will automatically be promoted and sent an invitation.

*Reviewers may fail to respond to the invitation.* The ME sends reminders via EM. If there is no response to a few such reminders, then the ME uninvites the reviewer. The reviewer can be re-invited if appropriate, such as when the HE discovers that the email address in the system is incorrect and the reviewer updates the address. Uninvitation will automatically promote an alternate if one is listed. Otherwise, another reviewer is needed.

*Reviewers may accept the invitation but fail to produce a report.* Scheduled reminders on EM (overseen by the ME) relieve the HE of the need to chase reviewers. After several reminders, the ME notifies the HE that the reviewer is unresponsive and action is needed. Many reviewers ignore standard reminders, but often a personal email from the HE elicits an explanation and a commitment to complete a report. (Email can be sent to an invited reviewer by clicking on the envelope icon next to the reviewer’s name on the Details page. This brings up the menu for letter templates, one of which is the Editor query to Reviewer.) Such an email can say for example that incurring further delay by inviting a new reviewer would be unfair to the authors. If the response is suitable, then on the Details page the HE can record the promise, set the flag to not uninvite the reviewer, change the requested date for the report, etc. If there still is no response, then the HE can invite another reviewer or make a decision based on the report(s) received. It is particularly important to act
promptly to restart the process when author inquiries alert the editor to such a stalled situation. Such inquiries from authors should be answered promptly.

Reviewers may produce conflicting reviews. The HE may then invite a superreferee, sending the prior reports for comparison. A superreferee may be an EB member but often is just another qualified reviewer. The template invitation letter for superreferees stresses that an additional full report is not needed, just advice on which original report is correct; the reports should be included or at least offered (reports entered as text can be included by checking a box before the letter is selected; uploaded pdfs can be made visible to reviewers with more effort).

Inviting a superreferee is not absolutely necessary; the existence of one negative report is often sufficient for rejection. Under the principle of raising standards, borderline papers are generally not ones we want. The HE can also serve informally as a superreferee by taking a closer look at the paper and writing a couple of paragraphs supporting one of the reports (especially if the decision is to reject).

Termination vs. Uninvitation. Reviewers who fail to produce a review are uninvited, which is a black mark against the reviewer. Sometimes the HE makes a decision on a paper when one review is in hand. For any such reason, when the HE wants to enter a decision while review invitations remain outstanding, EM will ask whether the HE wants to terminate outstanding invitations. There will be opportunity to edit the termination letter with suitable apologies and thanks. The point is that “termination” is for editorial reasons, chosen by the editor, while “uninvitation” suggests negligence by the reviewer.

Publication Standards

In 2006, DM accepted most of what was submitted. In 2009, the rejection rate was 58%. Now the rejection rate is about 70%. The rejection rate at JCTB is 80% or more. Our goal is not necessarily to match JCTB, but rather for DM to be highly respected and viewed as an appropriate venue for strong papers. AEs should apply high standards.

In order to reach this goal, weak papers need to be rejected. Feedback indicates that one of the most helpful tools in this direction has been the statement in reviewer invitation letters that publication standards have recently been raised. Present for more than ten years, it has remained true; the increase in standards has continued, as evidenced by the increasing rejection rate.

Another step toward the goal involves encouraging submissions of strong papers. How best to do this remains unknown. We have asked the EB to help, and AEs can also be attentive to it, encouraging students and colleagues to send us good papers. We want strong researchers to view DM as a worthy outlet for their work. Toward this end, in 2015 we reduced the number of issues per year from 24 to 12; this was strongly supported by AEs and by the EB. In fact, this did not much change our yearly number of pages, since the increase in rejections had already led to publishing somewhat less, and issues had been getting a bit thin. Nevertheless, it did help improve our reputation. The reduction in number of issues is consistent with publishing fewer Special Issues; we are now more selective about Special Issues to maintain higher quality.

Due to idiocy at Elsevier, DM published 24 one-issue volumes in 2014. Since 2015 we have published one yearly volume with 12 issues.
Decision Terms (and Letters)

“Submit Editor’s Decision and Comments” provides various options with corresponding template letters. Mostly the titles are self-explanatory. The author does not see the term that was chosen, receiving only the corresponding letter as edited by the HE.

Before sending a decision letter, check the box that makes reports uploaded to EM as pdf attachments accessible to the author. If you forget, then under the “View Reviews and Comments” action link there is a link to “Manage Review Attachments” where you can check boxes to make reviews accessible (this is also where prior review attachments can be made visible to superreferees). The previous editorial system could not attach pdfs to letters, so authors had to log in to retrieve such reports. Maybe this has been corrected.

Authors sometimes overlook such reports, leading to delays and frustrations later. It can be helpful to make sure the listing of comments at the bottom of a decision letter indicates whether there are uploaded review attachments.

The AE can edit reports, especially those that were typed in without being pdf files. For example, this can be appropriate when the reviewer does not state clearly enough in comments that the paper should be rejected. The author does not see the system review term that was chosen by the reviewer.

Reject without Reports and Out of Scope (discussed above). Generally used when no reports have been solicited. It is important to note that the longer a paper remains in With Editor status, the less appropriate it becomes to use Reject without Reports (called “Desk Reject” by Elsevier). Part of the rationale for this decision, as explained in the template letter, is to save time for the author by avoiding the wait for an expected rejection. This becomes inappropriate when a paper has been neglected by remaining With Editor. This is yet another reason why AEs should check regularly for new assignments or submissions with Required Reviews Complete.

Reject with One Report. Generally used when a second reviewer is very late, having ignored reminders and inquiries. The delay becomes unfair to the author, especially if the first review is negative. It then is too late to seek another reviewer. The template letter explains the situation and apologizes for the delay; then the decision is given. This decision is also used when the second reviewer is not late if it is noticed that the first report received is strongly negative.

Rejection and Possible Resubmission. Used when there is something worthwhile in the paper, but so much improvement is needed (generally improved results) that it is not clear that the authors will be able to produce such an improvement. Even if they can, it may take a long time. Hence it is better not to keep the file open, but rather to offer the possibility of resubmission if sufficient improvements are made. The letter stresses that a resubmission will only be considered if significant improvement is made and that there is no guarantee that a resubmission will be accepted.

Recommend Withdrawal. Used when the processing of this particular file will not continue, but for reasons that occur rarely. For example, the author may have notified the editor that the result was previously published by someone else. Another possibility is that two teams of authors with the same result are going to produce a combined paper.

Major Revision. Used when the results are promising but have gaps or errors in the proofs, additional results are suggested or requested by referees, major changes and
improvements are needed in exposition, etc. The template letter requests revision but stresses that there will be a full evaluation of the new version and that acceptance is not guaranteed. A brief indication of the main deficiencies should be added.

Revise. This suggests an inclination toward publication (“the reports are generally positive”), but publication is not guaranteed (“the revision will need to be reviewed”). The referees suggest nontrivial changes and may have expressed concerns of a mathematical nature that need to be addressed.

Revise and Reduce to Note. Here the paper has been written too expansively or pedantically or contains irrelevant material or is just too long relative to its content.

Accept Subject to Minor Revision. Here the requested changes are relatively minor, though there may be many of them, especially when of a grammatical nature. The letter states that the paper will be accepted if suitable changes are made. Authors often think this is acceptance, but it is not acceptance. Often the HE expects not to send the revised version again to referees, except perhaps to check that the requested changes have been made when there are many of them.

Accept. This decision sends the submission back to Elsevier for production.

Rescind Decision. This Action Link gives the HE a way to change a decision and return to the review process. For example, sometimes the author effectively rebuts an incorrect conclusion by a referee.

Difficulties and Support

For technical difficulties in using EM, ask the Journal Manager (JM) or ME or EiC. Such inquiries from authors can be referred to the JM.

Much information and support is available on EM. There is status history, correspondence history, ability to send various kinds of letters or generate various kinds of reports, etc. AES can learn as much about the system as they want, but what is described in this Guide is sufficient to perform the editorial duties.

To further ease the difficulty of obtaining various kinds of information, we have recently decided that the JM will send each AE a bimonthly report about the status of submissions assigned to that AE. It is hoped that this information will be useful. This does not mean that editorial responsibilities should be addressed only once every two months! We hope that AEs remain current with submissions needing action, especially so that submissions stay only very briefly in the status of “With Editor” or “Required Reviews Complete”. As noted earlier, authors (often rightly) see this editorial status as editorial neglect of their submissions. AEs should also check any report when notified of arrival since a single report may suffice for rejection and since it may be noticed that no other invitations are active. Submissions should not languish for long periods when there are no active reviewers due to all declining or being uninvited; the status will remain “Under Review” without notice in this situation.

Authors may complain about delays or rejections. Such complaints often go first to the JM, who handles some of them directly by explaining the status to the author. Others are forwarded to the HE or EiC. Please respond respectfully and promptly to such inquiries. Sometimes it suffices to reply directly to the email from the JM, indicating what should be done or should be said to the author. To reply to the author directly, click “Send Email”
under Action Links and choose the appropriate letter option. When the complaint is about delay, often one should also (or first) send an inquiry to the late reviewer.

*An author may argue that the reviewers’ conclusion was incorrect.* If the author is right, then “Rescind Decision” under “Action Links” reopens consideration. More often, the HE responds with a letter supporting the expert reviewer. The complaint may state that DM has published similar papers in the past, perhaps even a paper that the submitted paper improves. Here it is important to point out that the field and the topics in DM have changed or that the standards of DM have been raised. In particular, the earlier paper possibly would not be publishable in DM if submitted now, etc.

*Reviewers may notice ethical problems.* Instances of explicit plagiarism are rare. However, there may be duplicate submission, inappropriately large overlap with other papers by the author, etc. Elsevier provides a flowchart for editors as guidance in responding to plagiarism, and other matters can be handled on an individual basis. Also, we have now added a requirement at submission of acknowledging whether a version of the paper has previously appeared in a conference proceedings. We do not prohibit such publications if there is substantial additional material or the proceedings were unrefereed, and openness about the status from the start avoids later difficulties. Consult the EiC, ME, or publisher about any problems.

It is an interesting job. Have fun!