

IEEE Transactions on Robotics and Automation Procedures

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Procedures for Handling Papers

1. Submission

The author sends seven copies to the Editor-in-Chief (EIC), together with a cover letter that should include the following information:

- a. The name, address, and email address of the corresponding author
- b. The class of submission. These are:

1. Regular Papers

2. Short Papers

These are normally limited to four Transactions pages and usually describe a single result, experiment, or technique of general interest for which a short treatment is appropriate. The main difference between short papers and communications items is that the later are sufficiently significant that expedited review and publication is called for.

3. Communications and Correspondence

These items are a separate class of short manuscripts which are subject an expedited review process and substantially faster publication than regular or short papers. Appropriate items include (but are not limited to) rebuttals and/or counterexamples of previously published papers, unusual or interesting applications of wide potential interest, preliminary results of significant current research of wide potential interest, and designs of new sensors, actuators, instruments or other devices. Normally, the EIC will review if that is deemed appropriate.

4. Multi-part Papers

Multi-part papers will only be published if there is a compelling rationale for a multi-part treatment. All parts of such submissions must be accepted for any part to be published.

- c. Whether the material has been submitted or published elsewhere. Papers that have been published or are under review in other journals are normally not acceptable. Conference papers or (especially) expanded versions of conference papers may be published, provided that their publication would not violate any copyright agreement and provided that they pass peer review.
- d. Concern has been expressed by several members of the board over excessively long papers. There is a near unanimous feeling that we should set a page limit, though there is a belief that some flexibility is necessary. After much discussion, the Editorial Board recommended a 12 *Transactions* page limit.

2. Initial Processing

- a. The EIC examines the manuscript briefly and assigns it to an Editor, based on content. In the case of "Communications", he will also make a quick determination of whether this classification is appropriate. If not, he may decide to reclassify the item as a "short" paper.
- b. The EIC's assistant assigns a code to the paper, based on the EIC's classification, and enters the paper into the database, A typical code might look like this:

C96321/A95123R

Here, the "C" represents a code for the current editor. The "96321" is the current sequence number of the paper (here, the 321'st submission in 1996). The information after the "/" is a tag that helps in tracking. There are several possible values. In this case (the most common), the "A95123R" identifies the paper as a resubmission of paper A95123.

- c. The EIC's assistant mails six copies of the submission to the Editor, together with a cover letter, Author Information sheet, four copies of review forms and other related materials for the Associate Editor.
- d. The EIC's assistant also mails a letter to the author, acknowledging receipt of the manuscript, identifying the Editor to the author, and providing IEEE copyright information.

3. Editor Initial Processing

The Editor determines which Associate Editor (AE) should coordinate review of the manuscript. He then sends five copies of the paper to the AE chosen, and sends a copy (which can be electronic) of the transmittal letter to the EIC for updating the database.

4. Review

- a. The Editors shall send e-mail to the AEs each time they send them a paper so that the AE knows that he should be expecting the paper¹. The Associate Editor acknowledges receipt of the paper and that it was sent out for review. This is normally done by filling out a form telling the Editor the names of the initial set of referees and the date the papers were sent to them. This accomplishes several purposes. First, it gives the Editor some assurance that the paper has gone out for review. Second, the Editor may be able to provide additional feedback on particular referees (e.g., whether a referee is known to be unresponsive). Again, this information can be sent electronically to the Editor. A copy should also be sent to the EIC. If the Editor has not received confirmation of receipt of the paper within two weeks, he shall send it again via expedited mail.
- b. If an Associate Editor cannot handle a paper, then he/she should return it to the Editor immediately. Normally, Associate Editors should expect to handle 15-20 papers a year. The Editors will do their best to meet any special constraints (such as travel, special busy periods like conference chairmanships, etc.) that Associate Editors tell them about. Editors will also attempt to match papers to individual current interests as well as possible, although they may still ask an Associate Editor to handle other papers corresponding to past research areas or the like, if necessary.
- c. The Associate Editor selects three to four referees and sends the paper to them for review, together with review forms and a "due date", which normally should be in 45 days. In some cases, the Associate Editor may consider following up with a phone call or email to be sure that the referee is, in fact, willing to review the paper. In fact, some AEs have found it effective to send the abstract to potential reviewers first and secure their agreement to do the review. Normally papers should be sent out within one week of the time that the Associate Editor gets them.
 - Please distribute and collect the area key word lists for all the reviewers to whom you send papers. Ask them to indicate their primary and secondary interest areas. (There is a sample area key word list in Appendices B.)
- d. The Associate Editor should read the paper himself.
- e. When reviews are due, the Associate Editor should follow up with referees to get them back if they have not been received. I.e., do not rely on referee replies as timing signals for the review process. Sometimes a letter or email message will work. However, the only really reliable method of getting action is a phone call. It is not a good idea to assume that, because a referee has gotten a letter, he/she will drop everything and immediately write up an overdue report.
- f. If a referee is not responsive, the Associate Editor should find another referee (or consider making a recommendation with fewer than three reports). We have concluded that an Associate Editor can make a recommendation on the basis of two consistent referee's reports, provided that he has read the paper carefully and agrees with the recommendations.

¹ This is to help detect failure of the postal system.

- Associate Editors should keep track of their most effective (both in terms of quality of reviews and timeliness of reviews) reviewers. When the EIC asks for the list of reviewers each fall, these most effective reviewers should be identified. The EIC will then send them a special letter of thanks for their effective service. Similarly, Associate Editors should keep a list of slow reviewers. If this is done in a factual manner, i.e., keeping log of the reviewer's name and time to complete a review, there should be no legal ramifications. Associate Editors can then share these lists.
- Associate Editors are urged to avoid getting all reviews from the same place, such as graduate students in their laboratories.
- g. When sufficient reviews have been obtained, the Associate Editor makes a recommendation to the Editor. The "meat" of the recommendation should take the form of a draft letter to the Editor, stating a decision and summarizing the reasons for the decision (from the reviews). Here are some examples:
 - This paper should be accepted as a regular (short) paper as is.
 - This paper should be accepted as a regular (short) paper, provided that the authors fix the typographical errors indicated on the accompanying review manuscript and make the following minor changes, which can be verified by the authors (checked by the Associate Editor)... (what the changes are) ...
 - This paper should be conditionally accepted as a regular (short) paper, provided that minor changes are made, as indicated below. First, as Reviewers A and B indicate, .. (1 or 2 sentence summary of their main points) ... Second, ... (and so on) ...

If the authors revise this paper within (however many) days, then I will be able to verify that the revised manuscript is acceptable for publication. (I think that Referee X probably should be asked to verify the changes).

- This paper should be rejected for the following reasons. ... (short summary of main reasons) ...
- This paper should be rejected for the following reasons. ... (short summary of main reasons) ... However, the author should consider resubmitting this paper after substantially revising (shortening) it.

The Associate Editor should also include the referees' reports in the "package" returned to the Editor.

- h. The Associate Editor should be sensitive to the fact that Editors must handle a very large number of papers in deciding whether a required change is sufficiently minor so that the Editor can check it. (Of course, the Editor can also make up his/her own mind on this).
- i. Normally, the Associate Editor should not contact the author directly. If he/she believes that there is a reason to do this, then he/she should check with the Editor first.
- j. It is mandatory for the Associate Editor to send a copy of their recommendation letter to the EIC for inclusion in the master files. This information (AE recommendation and date made to Editor) can also be sent to the Editorial Assistant electronically.
- k. The EIC will send out an electronic list of papers assigned to AEs once a month. This list reflects papers assigned to AEs for the past year. Each AE will receive their own listing. They should check this list carefully and update any items with the EIC. A full listing, which also serves as a load report, will go to all Sr. Editors.

5. Handling Old Papers

Reviews not completed within five months of submission will be considered very late (we should strive to complete them sooner), and the EIC is to send a letter of explanation to the author. The Editors and AEs will be asked to supply information for this letter.

The Editorial Board will be used as a set of reviewers for papers over 9 months old. Thus, you may occasionally be asked to do a review in a short time for a paper which another AE has failed to get sufficient reviews. With this is mind, please use great discretion in using AEs as reviewers, as they already carry a heavy load.

6. Editor Decision

The Editor reviews the Associate Editor's recommendation and writes the author to inform him/her of the decision. The Editor sends a copy of this letter to the Associate Editor and to the EIC. A copy of the referees' reports should also be included with the letter to the EIC.

- a. If the paper is accepted, and no further changes are needed, then the Editor should let the author know that the EIC will be contacting him in the near future about items needed for the final submission to IEEE.
- b. If the paper is accepted, with only minor changes needed that the Editor does not to need to verify, he should instruct the author to make the final changes and wait for instructions from the EIC.
- c. If an Editor needs to verify changes, then the paper is Conditionally Accepted. The Editor should instruct the author to return however many copies are needed of any revised manuscript within a specified period (usually 60-90 days). The author should also be instructed to send one copy of the revised paper directly to the EIC, so that the second review cycle can be properly tracked. The Editor may indicate whether he will verify the changes himself or will return it to the Associate Editor for verification. The author should be told that papers received after this date will be treated as new submissions (seven copies should be sent to the Editor).
- d. If the paper is rejected, then any future submission will be treated as a new submission. The Editor may want to include additional advice (such as consider rewriting as a short paper).

7. Revisions of Conditionally Accepted Papers

If a paper was conditionally accepted, the author will normally send the revised manuscript back to the Editor, together with a cover letter summarizing what changes were made.

- a. If the revised manuscript is overdue, the Editor has the following options:
 - 1) Process it anyhow (see below).
 - 2) If there are enough copies, send them on to the EIC.
 - 3) Send everything back to the author, with instructions to send seven copies to the EIC.
 - 4) Send the insufficient number of copies on to the EIC directly. This should not be done routinely, but may be appropriate in some circumstances (e.g., the paper was earlier badly delayed in review through no fault of the author).
- b. If the manuscript is within the deadline, the Editor has several options:
 - 1) He can determine if the changes make the paper acceptable for publication.
 - 2) He can determine that the author's changes are clearly insufficient to merit further review.
 - 3) He can send the paper back to an Associate Editor for checking.

- c. If the changes can be checked immediately, he should write the author with his decision, sending a copy to the EIC. Otherwise, he should send the author an acknowledgment, with a copy to the EIC.
- d. If the paper is sent to an Associate Editor by an Editor,
 - 1) A copy of the transmittal letter should be sent to the EIC for tracking purposes.
 - 2) There should be two levels of conditionally accepted papers. The AE should indicate explicitly the category into which a conditionally accepted paper is recommended.
 - One which represents a paper close enough to final form that only the Editor of AE need to check the revisions.
 - One which should be back to the reviewers.
 - 3) The Associate Editor should make every effort to check the changes within 2-6 weeks, depending on how substantial the revisions were and how difficult they are to check. Revised conditionally accepted papers should not routinely be sent back to referees unless there is a real reason for doing so, since this greatly increases the total review cycle. If it really is necessary to send a paper back to referees for checking, then the Associate Editor should actively "close the loop" with the referee.
 - 4) If an Associate Editor cannot react essentially immediately on receipt of a revised, accepted manuscript, he should send an acknowledgment similar to the one for a new manuscript.
- f. The EIC and his assistant have electronic versions of the review forms. Please contact them if this is necessary for a quick review.

8. Resubmitted, Previously Rejected Manuscripts

Revised, previously rejected manuscripts are treated as new submissions, with the following exceptions:

- a. The log number reflects the previous submission.
- b. The authors should include a cover letter explaining what changes have been made to the manuscript, compared to previous versions, and should explicitly address the points raised in the rejection letter.
- c. The Sr. Editors will determine whether the changes are sufficient for re-review. This is a successive "filtration" process. The EIC will try to catch the most glaring cases. The Editors will look more carefully, and decide whether the author has made a prima facie case for re-review. The Associate Editors should look more carefully yet.
- d. To the extent feasible, the paper will be assigned to the same Editor, and AE that handled the previous submission.
- e. The AE should consider using the same reviewers that handled the original review. However, if any reviewer did not do a careful job or seemed biased, the AE should seek a replacement reviewer.
- f. The original reviews should be sent to each reviewer so that he/she can compare the change/s made with the original comments.

9. Communication Items

Communication items are intended to have quick review. Normally, they should be reviewed entirely within the Editorial Board.

- a. Associate Editors should not send these items on to referees unless there is a strong reason to do so and the Editor agrees. In this case, the Associate Editor needs to get an affirmative commitment from the referee to respond very quickly. Normally they should handle the review themselves.
- b. In the case of rebuttals to earlier published papers, the EIC or Editor will contact the author of the original paper for comment. If necessary and appropriate, he will then send both the rebuttal and the author's reply to an Associate Editor for a recommended action. We will make every effort to publish both rebuttal and author's replying the same issue. If appropriate, both the original author and the rebuttal author may be encouraged to shorten or further revise their remarks or (even) to agree to a joint statement. Specific decisions will be made on a case-by-case basis.
- c. Other communications items may be reclassified as short items if there is no strong reason for expedited review or if the item is too long or substantial for a communication item.

10. Accepted Manuscripts

- a. When the EIC receives a copy of the Editor's acceptance letter, he (actually, the Editorial Assistant) sends the author a checklist of missing items needed to make up a complete package.
- b. Final submission of manuscripts must be sent in electronic form.
- c. Once the package is complete, it is sent to the IEEE office in New Jersey for copy editing and inclusion in an issue.
- d. Normally, manuscripts are published in the order they were originally submitted. There are, however, some expectations:
 - 1) Communication items should appear in the first possible issue after they are accepted.
 - 2) The EIC may expedite publication for unusually old papers where publication was badly delayed through no fault of the author. The Editors should flag any cases that seem especially worthy of consideration.
 - 3) The queue may be shuffled so that papers with an unusual affinity appear in the same issue. (The extreme case is special issues or sections).
- e. Associate Editors and Editors will be recognized for recommending papers for acceptance. The names will be give as "fist initial", "middle initial", and "last name". This recognition began with the June 1996 issue.

11. Best Paper Award

The Transactions would like to award a best paper award each year. The following format has been decided upon by the Editorial Board.

- Associate Editors, Editors and reviewers can nominate papers from the previous year. Nominations are due on February 15. Everyone should pay particular attention to this as they handle papers and send the EIC nominations throughout the year. If there are none at the end of the year, the table of contents of all issues will be distributed, and all members of the Board will be asked to nominate two papers for the award.
- The Sr. Editors will select the winner.
- The winning author(s) will be notified in March, and the award presented at the ICRA.