

IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY

THE PEER REVIEW PROCESS

**TBME LETTERS ONLY**

Updated, April 2010

1.0. Background

This document outlines the modifications to the Peer Review Process of the IEEE Transactions of Biomedical Engineering (TBME), necessary for the rapid publication of the new manuscript format called TBME Letters. The basic rules of the Peer Review Process for TBME Letters remain the ones contained in the original document available in the journal website at <http://bme.cnel.ufl.edu>, and here we will only address the modifications.

The publication mission, the scope, amendments, and publication of original material and copyright policies of the TBME Letters overlap with those of TBME. Please consult the website above for detailed information.

1.1. Publication Mission

Same as for TBME

1.2. IEEE EMBS Field of Interest

Same as for TBME

## 2.0. Amendments to This Guide

Same as TBME.

## 3.0. Publication of Original Material & Copyright.

Same as TBME

## 4.0. Timely Publication

The leading motivation to create the new manuscript format called Letters is to speed up the publication of original, leading edge, research and preliminary results, devices and methods in the scope of the Transactions of Biomedical Engineering. Manuscripts will be limited to 4 pages of printed material. No exceptions, i.e. there will be NO option of longer manuscripts subject to an overlength page charge. The TBME Editorial Board is committed to electronic post in IEEE Xplore accepted TBME Letters, electronically formatted by the authors according to IEEE Press templates, within TWO MONTHS of submission. This posting is called herein pre-print format. Pre-prints should be referenced as “in Press” material, but will be accessible electronically to the research community. A special link under the TBME entry in IEEE Xplore will contain all the pre-printed Letters as well as the regularly published Letters. Once posted electronically, the Letters will be regularly edited by IEEE Publication Services and will be printed in a special cover of TBME within three months of acceptance (i.e. four times a year, once the volume justifies).

In order to achieve the goal of two months from submission to electronic posting, the Peer Review Process will be modified. In a nutshell, each submitted Letter will be triaged by the Associate Editor and the Editor in Chief to be admitted to review, and either be Accepted, Rejected or Pending Acceptance. The details will be described below. Authors are requested to send to the TBME office their materials by express mail properly formatted according to the electronic IEEE templates to meet the short publication deadline.

## 5.0. Peer Review Process and Calendar

## 5.1. *Manuscript Submission*

All of the transactions of the IEEE EMBS Society publish, in each issue, Information for Authors that guide the submission process.

### 5.1.1. *New Submissions*

Starting January 1, 2006, manuscripts for TBME Letters will ONLY be accepted in electronic format through Manuscript Central. Please go to the Manuscript Central website at

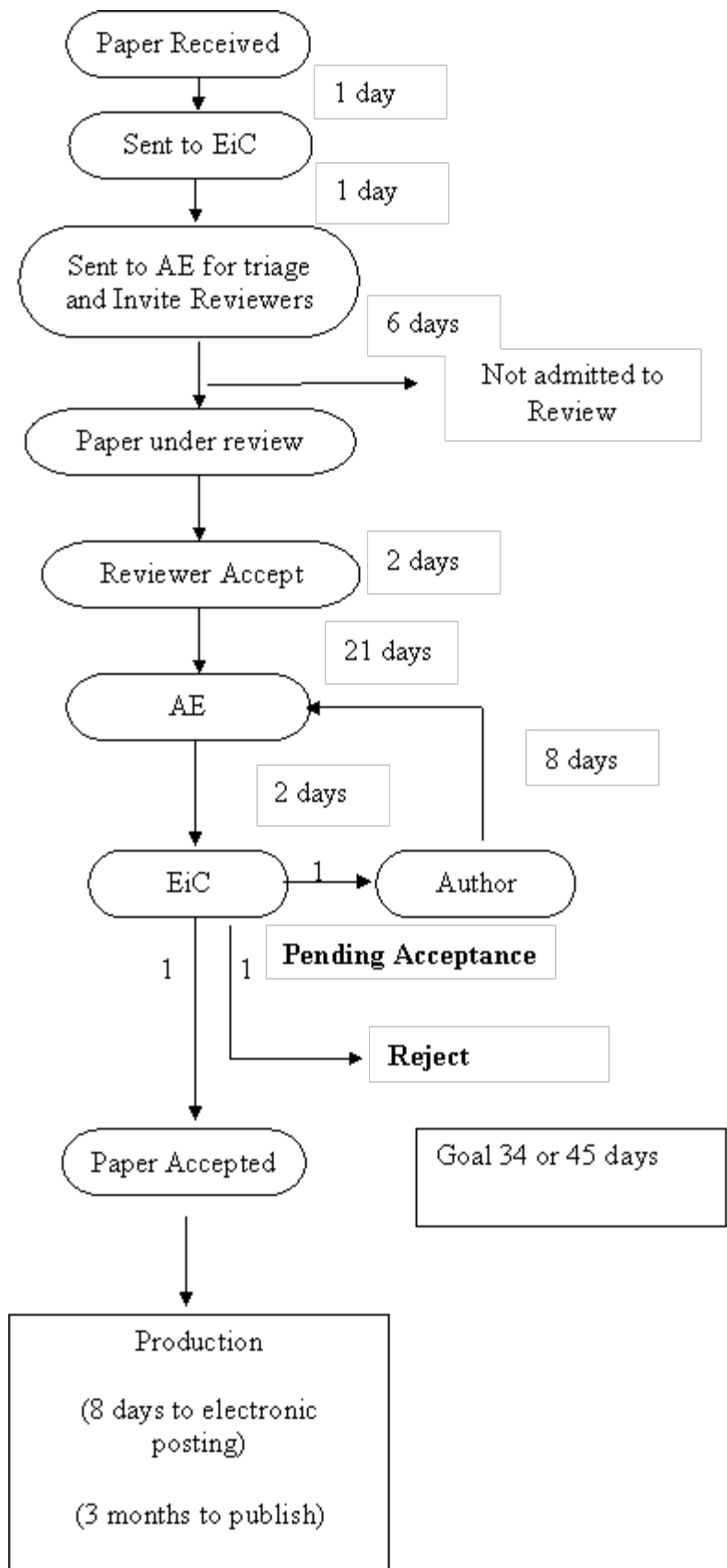
<http://embs-ieee.manuscriptcentral.com/>

In the EMBS website

<http://www.embs.org>

there are instructions to create an account and electronically submit manuscripts, to login in as a reviewer or as Associate Editor.

Below we present the flowchart for manuscript review with the duration for each review step in days. Notice that these time intervals will be monitored by computer and the person in charge at each step will be notified automatically by email when the deadline has expired. This flowchart with time intervals will be made available to the full EMBS community. Associate Editors very often perform these duties for more than one periodical, and may even serve as Associate Editor for more than one IEEE publication at the same time. IEEE publications have differences in manuscript management and peer review processes and schedules. The transactions published by the IEEE EMBS Society will function according to the following, standard timeline, and every effort will be made to keep all parties to the peer review to this schedule.



### 5.1.2. *Manuscript Submission and Tracking*

Upon submitting the manuscript to Manuscript Central, the manuscript is issued a Manuscript Tracking Number, and the author(s) and their contact information, the title of the manuscript, and other pertinent information necessary to track the manuscript through the peer review process is then available in the Database. The Publications Office staff reviews the submitted materials to determine that the manuscript meets submission requirements:

- ◆ Manuscript formatted IEEE transactions format and of no more than 4 pages;
- ◆ Names of ALL authors (including identification of the Corresponding Author), their complete contact information, affiliation;
- ◆ An Engineering TIPS (Technical Interest Profile) identifier, which will allow in the future automated selection of the next available Associate Editor to manage the peer review of the manuscript;
- ◆ An abstract of no more than 50 words that states the scope of the paper and summarizes the author's conclusions so that the abstract itself may be useful in information retrieval.

This concludes *step zero* and the manuscript is considered SUBMITTED.

### 5.2. *Peer Review Schedule*

#### *Step 1* New Manuscript Received ---- 1 day

After the manuscript has been received and qualified as to appropriate submission criteria, an email is automatically issued to the Editor in Chief to acknowledge receipt of a new manuscript.

#### *Step 2* Selection of Associate Editor---up to 1 day

The Editor in Chief assigns the manuscript to an Associate Editor according to TIPS and assures that no AE receives more than three manuscripts per month. The Associate Editor is directly contacted via email from Manuscript Central with the tracking number of the manuscript such that the AE can have access to the

abstract and paper, and download the manuscript if he/she so wishes. Manuscript Central acknowledges receipt of the manuscript via correspondence with the "Corresponding" Author, and advises the author of the name and contact information of the Associate Editor assigned to manage the manuscript. Here the Corresponding Author is the author him/herself, or the author designated by all authors of the paper to act as interface for the paper with the Associate Editor and the transactions.

### *Step 3 Admission to Review --- up to 2 days*

The Associate Editor triages the manuscript for novelty, quality and appropriateness. If the AE feels that the manuscript has pitfalls or does not address emerging topics nor novel techniques he/she will write a REVIEW and contact the EiC thru MC. The EiC will further review the manuscript and when in agreement will NOT ADMIT the manuscript for peer review.

If the manuscript is judged appropriate, it is formally considered UNDER REVIEW.

### *Step 4. Reviewer Contacts and acceptance of the review ---- up to 6 days.*

In case the manuscript is considered worthy for review, reviewers are selected. The reviewers can be selected from the reviewer database available in Manuscript Central or by personal contacts. In the case that the reviewer is not in the database, the AE will have to enter the pertinent information in the database, focusing on name and e-mail contact. This reviewer can then login and complete his/her MC personal information to allow the electronic review system to proceed. Manuscript Central contacts automatically the reviewer through email with the title, and abstract of the manuscript. However, we recommend that the Associate Editor also contact the reviewers to obtain their agreement to complete the review within THREE (3) weeks from receipt of the manuscript. This new procedure for gaining agreement from reviewers assures that personal contact is established between the Associate Editor and the reviewers and that the reviewers agree to the four weeks review period. TBME Letters are shorter manuscripts and the intent is to speed up the review, so timeliness in this step is crucial. The new letter of invitation explicitly states if the request is for a TBME LETTER, PAPER or COMMUNICATION. Once the reviewer accepts or declines to review the manuscript by responding to the MC request, the AE will be automatically advised by Manuscript Central. In order to minimize delays, we suggest that four reviewers be initially contacted.

The Associate Editor will be informed by Manuscript Central when the 2 days period for reviewer acceptance has elapsed. When a reviewer accepts the review, the system automatically sends the manuscript tracking number such that the reviewer will have access to the full paper (for download or for review in the computer). A link to the review guidelines will also be emailed to the reviewer.

*Step 5. Paper Revision ---- up to 21 days.*

The Reviewer completes the review and electronically enters the review in the forms available in Manuscript Central. At twenty-one days, Manuscript Central will begin to send reminders to the reviewer, with a copy to the Associate Editor. Manuscript Central will also email the AE to inform him that the review was completed by that particular reviewer. If the reviewer appends marked up portions of the manuscript, an e-mail attachment may be sent to the AE.

*Step 6. Associate Editor Decision ----- up to 2 days*

The Associate Editor, based on the reviews of the manuscript, determines whether or not, and under what circumstances, the manuscript can be published. The AE must make sure that the reviewer remains anonymous, i.e. he/she must check if the information stored in MC does not carry any information about the reviewer such as author tags in Microsoft software.

There are five courses of action: An Associate Editor may decide:

R - to Reject the paper.

A - to Accept the paper with no changes, or in the case the paper needs very minor revisions that the AE can review. He or she should indicate that in the acceptance letter to the EiC, who will assign a Pending Acceptance. The author will return the amended manuscript to Manuscript Central, where it will be re-logged and then forward directly to the Associate Editor.

MiR - to accept the paper with minor but required changes which the Associate Editor can adjudicate directly. The author will return the amended manuscript to Manuscript Central, where it will be re-logged and then forward to the Associate Editor.

MaR - to accept the paper with major, required revisions that will require a second full review cycle by the original and/or additional reviewers. The author will return the amended manuscript to Manuscript Central which will then forward the manuscript to the Associate Editor and reviewers.

WD - manuscript is considered withdrawn (this will affect manuscripts requiring amendment (PA)) which have not been returned to Manuscript Central at the end of the 8 days of amendment period.

*Step 7. Editor in Chief Decision----* 1 day

The EiC makes the final decision of acceptance or rejection of a manuscript upon the information received from the AE. The reviews and the AE opinion is in the database, so it will be invoked in the letter to the authors. For rejected papers no further action is required.

*Step 8. Accepted paper.*

In the final acceptance letter to the author the EiC requests a formatted version of the accepted manuscript submitted online with the implicit agreement to pay mandatory overlength page charges.

*Step 9. Pending Acceptance (PA) of the Manuscript ----* 8 days.

The author is informed by the EiC of the revisions and has 8 days to complete the review and resubmit electronically the manuscript to Manuscript Central with explanations of the modifications in the comment to the AE. If the paper is not returned in 8 days, it will be withdrawn. The AE checks the minor modifications requested by the reviewers. The most likely result of this review is acceptance of the manuscript, and the AE communicates the decision to the EiC for action. If the AE considers that the the minor modificatoins have not been implemented appropriately he will recommend REJECTION to the EiC.

*Step 10. Preparation of Final Version -----* 8 days.

Author(s) has 8 days to provide the final accepted manuscript in an electronic format specified by IEEE Press according to the templates available at <http://www.ieee.org/organizations/pubs/transactions/information.htm>.

We will only honor the target two month deadline for manuscripts that: (a) are received within 8 days of acceptance in the TBME Office and (b) are electronically formatted by the author, since this is the version that will be posted in IEEE Xplore. This means that the pre-print created by the author will be the one posted on the server without any edits by IEEE. IEEE accepts now color

figures in the electronic posting without color charges (valid only for electronic posting).

*Step 11. Assembly of the Issue and Publication ----- 90 days.*

The Editor-in-Chief Office assembles the table of contents of the transactions, and forwards to IEEE Press the materials submitted by the authors. TBME Letters will be formatted by IEEE staff following the stringent quality control of the Papers and Communications. Color figures are allowed subject to the same charges as papers and communications. Overlength page charges for TBME Letters are NOT available. TBME Letters will be assembled in a special cover supplement of the IEEE TBME at least four times a year (when the volume justifies this periodicity). Authors will then be able to reference TBME Letters as any other manuscript.

## 6.0. Quality Publication

### 6.1. *Novelty, Quality and Appropriateness*

The three most important scores a manuscript will receive are:

Novelty--Does the manuscript disclose new science, or contain fresh new approaches to established science?

Quality of technical content - Is the manuscript methodologically correct? Does it present the information well? Is the data analysis adequate? Is the writing appropriate? Is the manuscript "complete," not requiring propping up by other work to permit understanding of the disclosure.

Appropriateness--Is the manuscript a good "fit" for the publication, appealing to the publication's "audience?"

These criteria must be affirmative for the manuscript to be accepted.

TBME Letters will be subject to the same reviewing quality requirements of regular papers and communications,

### 6.2. *Disclosure*

The transactions are published in English. The manner of disclosure of the author's findings must be sufficiently literate in English to convey the author's ideas. While current trends in academic writing show a preference for "active voice" (making the author an active player, rather than a passive observer, in the science), such considerations are not necessary to the selection of a manuscript for publication. However, manuscripts that are loosely written and repetitious, and that restate established scientific principles, instead of merely providing the appropriate reference to such science, will require reworking. It will be up to the reviewers and the Associate Editor to determine whether this is an easy fix (accomplished in one more round of reviews), or a major undertaking (in which case the author probably should be advised to withdraw the manuscript and resubmit it after major revamping has occurred).

### *6.3. Appropriate Publication Length*

A manuscript needs to be long enough to meet the burden of disclosure; but every effort must be exercised to eliminate "waste" of space. The Society has established four (4) pages as the maximum length for Letters. No overlength page charges are possible for the Letters format. If authors are unable to meet this page requirement they will have to submit the manuscript as a regular paper to TBME.

## 7.0. Summary of Review Status for Letters

### *7.1. Status of A*

This manuscript requires no additional reviews and can be published as is.

### *7.2. Status of PA*

If there are minor fixes--typos, etc. to be corrected that do not require the intervention of the reviewers, the Associate Editor assigns the status of "Pending Accept"

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### *7.3. Status of R*

This manuscript has been rejected for one or more reasons. Manuscripts that fall into this category fail to meet the criteria of novelty and appropriateness; may be

poorly written or targeted for a different audience; or require such significant editing that the edit cannot reasonably occur in the eight days the author is allotted to correct it. The EiC will invite the author to resubmit the Letters as a new manuscript, in case the manuscript has valuable content for TBME. Otherwise the author has to find other options for publication of the work.

#### *7.4. Status of WD*

An author may, at any point of the peer review, choose to withdraw a manuscript from consideration. Authors who do not return their materials to the Publications Office on schedule and do not respond to attempts to contact them regarding the material may have their manuscripts withdrawn as a matter of process.

#### *7.5. Status of MiR*

This manuscript, although meeting the criteria of novelty and appropriateness, requires a few fixes, usually of the technical variety (more than typos or grammatical corrections), which are considered to be quite minor, but which the Associate Editor uses judgment in re-engaging reviewers.

#### *7.6. Status of MaR*

This manuscript, although meeting the criteria of novelty and appropriateness, is seriously flawed as to disclosure (either technical, or literary, or both), and requires a major rework by the author. Manuscripts accorded a status of MaR will require a second round of reviews by the original reviewers (and possibly an additional reviewer).

No manuscript will be accorded the status of MaR more than once. That is, no manuscript will receive more than two full rounds of peer review. If the manuscript cannot be upgraded to a status of A or MiR by the Associate Editor at the end of the second round, it must be rejected.

### 8.0. Sanctions

Authors are expected to submit ORIGINAL manuscripts that have not been submitted to any other publication for consideration. On submission of the manuscript, the author must sign a Copyright Form which is the author's oath that the manuscript he/she has submitted meets these criteria. Unfortunately, it seems that lately there are more instances of submissions of material that is not original, and may even be plagiarized, and that has been submitted to other publications, despite the signed "oath" that no other submissions have been

undertaken. When such instances arise, and it has been established that the author(s) acted knowingly, the Society will apply sanctions.

In some cases, because the peer community for a certain portion of biomedical engineering is small, it has occurred that the same individual may be called on by both publications to review the duplicate papers. In such instances, plagiarism and/or duplicate submission are easily established. In other cases, the misdeed is not caught, and in one rare instance, the same manuscript was published in two different publications (although not of the same Society). Reviewers and AEs must be vigilant and report suspicions.

Sanctions regarding plagiarism shall be adjudicated by IEEE when discovered and documented. Such behavior not only constitutes a publishing misdeed, but may be actionable by IEEE under the rules of Member Conduct. When it occurs that an entire manuscript or large parts (more than 25%) of a manuscript exactly mirrors a second manuscript, this must be reported immediately to the transactions Editor-in-Chief.

When approved, the EMBS Society is prepared to exert the following sanctions regarding duplicate submissions. When duplicate submissions (the same manuscript submitted to two different publications for consideration) are discovered and found to be deliberate:

- (1) the manuscript submitted to the Society's transactions will be immediately rejected;
- (2) all authors [that is, any single, paired, or group of the authors to the duplicate manuscript] of that manuscript will be prevented from submitting new manuscripts to any of the Society's publications for one calendar year; and,
- (3) any manuscripts under review by any of the authors of the duplicate submission will have their manuscripts returned to them immediately, regardless of the stage of peer review.

Note that this sanction will not harm innocent co-authors on manuscripts other than the duplicate submission.