IEEE FELLOW COMMITTEE HANDBOOK

1. INTRODUCTION 2
1.1 Section Labeling 2
2. THE FELLOW EVALUATION PROCESS 2
3. NOMINEE DATA DISTRIBUTION/ASSIGNMENT OF JUDGING GROUPS 3
4. SCORING PROCEDURE 3
4.1 The scoring procedure 3
4.2 Calculation of the Average Total Score 3
4.2.1 The Role of Normalization 4
4.3 Final Ranking at the IEEE Fellow Committee Meeting 5
4.3.1 Judging Group in-person meetings: first part of day one 6
4.3.2 Judging Group in-person meetings: second part of day one 6
4.3.3 IEEE Fellow Committee in-person meeting: day two 6
5. ANNOUNCEMENTS OF THE OUTCOME OF FELLOW NOMINATIONS 6
5.1 E-mail to Successful Nominees 7
5.2 Letter to Unsuccessful Nominees (FC 2016) 8
5.2.1 Simple regret letter 8
5.2.2 Regret letter with feedback (FC 2016) 8
6. EXPEDITED EVALUATION PROCEDURE (FSPS 2017) 9
6.1 EEP for Top/Bottom Nominees (FSPS 2017) 10
6.1.1 Recommended initial set of T and B values (FC 2017) 10
6.2 Number EE Judges (FSPS 2017) 10
6.3 Duties of EE Judges (FSPS 2017) 10
6.4 Assignment to Judging Groups (FSPS 2017) 10
6.5 EEP core procedure (FSPS 2017) 11
6.6 Other Tasks by Chair/Vice Chair or Staff or the scoring Web application (FSPS 2017) 12
7. MINIMUM NUMBER OF EVALUATIONS PER NOMINEE (FSPS 2017) 12
8. SCORING PROCEDURE WHEN A JUDGE HAS A CONFLICT-OF-INTEREST WITH A NOMINEE (FSPS 2017) 12
9. ELECTION OF FSPS MEMBERS AT THE IN-PERSON FALL MEETING (FSPS 2017) 14
9.1 Minimum Number of Fellow Committee Members on the FSPS (FC 2017) 14
10. PROCESS FOR CHANGING A CITATION AFTER IEEE BOARD APPROVAL (FSPS 2019) 14
11. GUIDELINES FOR CRAFTING FELLOW CITATIONS (FSPS 2019) 15
11.1 Examples: 16
12. FURTHER READING 16
APPENDIX (INFORMATIVE) 17
1. Introduction

The IEEE Fellow Committee (IEEE FC) Operations Manual (hereafter referred to as “Manual”) contains the main policies for the Fellow Nomination and Evaluation process. This normative Handbook complements the Manual and provides additional policies and operational details on the Fellow Nomination and Evaluation process. This Handbook shall be reviewed at least annually to ensure that the procedures and information are up to date, and shall be posted on the IEEE Fellow webpage. In case of any discrepancy, the Manual take precedence over this Handbook.

Amendments to this Handbook shall require approval of the IEEE Fellow Strategic Planning Subcommittee (FSPS) and the IEEE FC Chair. The IEEE FC and the IEEE Board of Directors shall be notified in a timely fashion of any revision of this Handbook.

Hereafter, IEEE FC Members (except the Chair and Vice-Chair) shall be referred to as “IEEE Judges.”

1.1 Section Labeling

With the goal of maintaining some history on who and when policies were approved, labels have been added to the end of a Section title followed by the year the decision was made.

The labels are:

1. “BoD”: consequence of a resolution of the IEEE BoD or change in higher precedence documents (IEEE Constitution, Bylaws, and Policies)
2. “FC”: resolution of the IEEE Fellow Committee
3. “FSPS”: resolution of the IEEE Fellow Strategic Planning Subcommittee

If a Section title has no label, then it means that what is specified is a legacy policy inherited from the 2015 Manual or a policy added to align with practices in use up to June 2016.

2. The Fellow Evaluation Process

The Fellow evaluation process shall involve the following sequence of steps:

1. Eligible Nomination and Endorsement Forms shall be submitted to the IEEE Society/Technical Council Evaluating Committees (S/TC-FECs) by a deadline set by the IEEE FC Chair (typically, in April);
2. The S/TC-FECs shall submit their evaluations by a deadline set by the IEEE FC Chair (typically, in June);
3. The entire nomination package (Nomination, Endorsements, References, and S/TC-FEC Evaluation Forms) shall be submitted to the IEEE Judges by a deadline set by the IEEE FC Chair (typically, in July);
4. IEEE Judges shall complete their assessments of the Nomination packages by a deadline set by the IEEE FC Chair (typically, in September).
5. At the in-person meeting of the IEEE FC (typically, in October), the IEEE Judges shall finalize the list of Nominees recommended for elevation to the IEEE Fellow grade. In addition, the IEEE FC shall also provide an appropriate citation for each Nominee recommended for elevation.
The IEEE FC and the IEEE S/TC-FECs shall adhere strictly to deadlines and no extensions shall normally be authorized. However, the IEEE FC chair may approve exceptions if it is deemed to be in the best interest of the IEEE FC.

3. **Nominee data distribution/assignment of Judging Groups**

IEEE Judges shall be divided into Judging Groups. Attention shall be given to ensuring a balance of expertise within each Judging Group. The current practice utilizes ten Judging Groups composed of five Judges each\(^1\).

Assignment of Nominees to Judging Groups shall be done in the following way:
- Nominees are sorted alphabetically, from A to Z.
- Nominees are assigned a progressive Nominee ID, starting with Nominee ID = 1.
- Nominees shall be assigned to the Judging Group number \( G = \text{mod}\{(\text{Nominee ID}), 10\} \), where \( G = 0 \) means Judging Group 10.

IEEE Judges shall be allowed to see only the Fellow Nominations packages assigned to their Judging Group.

4. **Scoring Procedure**

4.1 **The scoring procedure**

IEEE Judges shall use the IEEE web-based scoring application to score Nominees and submit their scores. A tutorial regarding the Fellow Scoring Program shall be given during the first IEEE FC orientation teleconference, while additional details are given in the “IEEE Help Guide for using the IEEE web-based Fellow application” posted on the Fellow website.

4.2 **Calculation of the Average Total Score**

IEEE Judges shall assign a numerical score (called “raw” score) between 0 and 100 (with 100 the strongest and 0 the weakest) to each of the four rating categories specified in the Manual. Judges shall submit their scores via the dedicated IEEE Web-Application by the deadline (see §2). Within a rating category, no two Nominees can be given the same raw score (see §4.2.1).

The “raw” scores of individual IEEE Judges are first normalized and then combined with the weights assigned to the rating categories yielding a Normalized Weighted Score per Nominee. The Normalized Weighted Scores of all Judges in a Judging Group are then averaged, yielding an Average Weighted Score per Nominee.

An “experience recognition” (0.1 points for each year since the Nominee’s first degree) is then added to the Average Weighted Score creating an Average Total Score for each Nominee. Nominees in all Judging Groups shall then be ranked based on their Average Total Score.

---

\(^1\) Once the EEP in §6 is implemented, there shall be ten Judging Groups composed of four Judges, and the remaining ten Judges shall serve as EE Judge.
4.2.1 The Role of Normalization

IEEE Judges score Nominees differently from each other. This is a problem since IEEE Judges’ scores must be averaged within a Judging Group and then used to create the ranking of all the Nominees across all judging groups.

“Normalization” is a rank-preserving transformation of the set of IEEE Judges’ raw scores into a set of homogeneous scores and serves the function of removing scoring disparities among IEEE Judges. The goal of normalization is to “enforce” a uniform way of scoring across IEEE Judges so that the independent scores of all IEEE Judges across Judging groups can be merged together to yield a single ranking for all Nominees. In the case of the EEP specified in §6, then normalization is applied only to the scores assigned to Nominees undergoing a full evaluation and thus outside of the EE List.

For every IEEE Judge and for every rating category:

- Nominees are first ranked in ascending order of raw scores
- The raw score of a Nominee ranked in the \( k \)-th position is replaced by the following normalized score:
  \[
  y(k) = \left(100/N\right)k - 50/N \quad (k=1, \ldots, N),
  \]
  where \( N \) is the number of the Nominees evaluated in the Judging Group the IEEE Judge belongs to. Note that the normalized score is independent of the original raw score provided by the Judge.
- \( y(1) \) and \( y(N) \) are the normalized scores of the lowest and highest ranking Nominees, respectively.

The normalized scores, \( y(k), k=1, \ldots, N \), form a monotonically increasing sequence of numbers equally spaced on the straight line and independent of the original raw scores. Since there must be a one-to-one mapping between a Nominee and his/her normalized score, no two Nominees can be given the same raw score by an IEEE Judge – the web scoring program enforces this to avoid ties.

The normalization operation preserves the original ranking provided by Judges. Furthermore, it assigns a normalized score to Nominees ensuring that every Nominee that occupies the same rank \( k \) in a Judge’s ranking has the same normalized score \( y(k) \) regardless of the raw score assigned by the Judge. Note that this will happen if and only if the two sets of scores are normalized using the same value \( N \) in eq. (1), i.e., the sets of scores being normalized must all contain the same number of scores/Nominees (very small differences like plus/minus one can be tolerated). For this reason, the scores on the S/TC-FEC Evaluation Forms are not normalized as there is no common and unique \( N \) across all S/TCs (the number of Nominees evaluated by S/TCs can vary from one to over one hundred). Therefore, IEEE Judges are asked to assign their own assessment of the “strength of support” of a S/TC to a Nomination (this is one of the four rating categories specified in the Manual) and not to use the S/TC score itself.

Examples of scores on \( N \)-normalized grids and their associated ranking:

<table>
<thead>
<tr>
<th>Rank #1 (lowest)</th>
<th>N=10</th>
<th>N=49</th>
<th>N=50</th>
<th>N=99</th>
<th>N=100</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>5.020</td>
<td>1.020</td>
<td>1</td>
<td>0.505</td>
<td>0.5</td>
</tr>
<tr>
<td>15</td>
<td>3.061</td>
<td>3</td>
<td>1.515</td>
<td>1.5</td>
<td></td>
</tr>
</tbody>
</table>

The normalized scores, \( y(k), k=1, \ldots, N \), form a monotonically increasing sequence of numbers equally spaced on the straight line and independent of the original raw scores. Since there must be a one-to-one mapping between a Nominee and his/her normalized score, no two Nominees can be given the same raw score by an IEEE Judge – the web scoring program enforces this to avoid ties.
An example of score normalization is shown in Figure 1.

4.3 Final Ranking at the IEEE Fellow Committee Meeting

After IEEE Judges submit all their scores, the final selection of Nominees that shall be recommended to the IEEE Board of Directors for elevation to Fellow Grade shall be determined at the IEEE FC in-person meeting, typically held in the fall.

Prior to the face-to-face meeting, a second IEEE FC orientation teleconference call shall be held and the following items shall be distributed:

1. To all IEEE Judges regardless of their Judging Groups:
   a. Score and rank of all Nominees by Nominee ID only (no Nominee names)

2. To all IEEE Judges, but on a per Judging Group basis:
   a. The Discussion List, containing a list of Nominees to be discussed on the first day of the in-person fall meeting
   b. Individual IEEE Judges’ raw and normalized scores

Fellow Committee members shall meet in person for two days in the fall, as specified in the Manual. IEEE Judges shall meet on a per Judging Group basis on the first day, and the entire Fellow Committee shall hold their annual meeting on the second day.
4.3.1 Judging Group in-person meetings: first part of day one
IEEE Judges shall review the Nominees on their Judging Group’s Discussion List. The IEEE Fellow Activities Staff shall prepare the Discussion List based on the maximum number (elevation cutoff) of Nominees that can be recommended for elevation in the current year. This elevation cutoff number is set by the IEEE FC in the previous calendar year, as specified in the Manual. The Discussion List (DL) shall contain the following Fellow Nominees:

- Nominees ranked within ± 10% of the elevation cutoff (borderline DL Nominees)
- Nominees ranked within ± 20% of the elevation cutoff with a standard deviation greater than 15.0 (non-borderline DL Nominees)
- Any Nominee that a IEEE Judge brings to the attention of his/her Group, provided that the majority of the Group agrees to add the Nominee to the Discussion List

The IEEE Judges in a Judging Group shall be allowed to decide which (if any) of the borderline Nominees assigned to their Judging Group may be moved above or below the elevation cutoff. However, approval by the entire IEEE FC shall be required if a Judging Group recommends moving above or below the elevation cutoff either non-borderline Nominees or Nominees brought to the attention of the Group by an IEEE Judge. In any case, the number of Nominees moved above the elevation cutoff (i.e., recommended for elevation) shall always be less than or equal to the number of Nominees moved below the elevation cutoff (i.e., not recommended for elevation). Furthermore, if a Judging Group moves below the elevation cutoff more Nominees than those that were moved above it within that Judging Group, no other Judging Group shall be allowed to fill the available slots for elevation.

4.3.2 Judging Group in-person meetings: second part of day one
In part two of day one, the IEEE Judges shall prepare the following items:

- The final citation for each Nominee recommended for elevation. The citation shall be decided by the IEEE Judges in the Judging Group that evaluated the Nominee, using the citations proposed by the Nominator and the S/TC-FEC (if any) as a starting point.
- The final Fellow Nomination category for each Nominee that is being recommended for elevation. The Fellow Nomination category shall be decided by the IEEE Judges in the Group that evaluated the Nominee taking into consideration the Fellow Nomination category proposed by the Nominator and the S/TC-FEC (if any).
- A publicity list based on the specification given in the Manual.

4.3.3 IEEE Fellow Committee in-person meeting: day two
During the first part of day two, IEEE Judges shall finalize the slate of Nominees to be recommended to the IEEE Board of Directors. This part shall be held in Executive Session – see the IEEE Executive Session Documentation and Guidelines.

Part two of day two consists of a general business meeting, where IEEE FC members will hear reports from officers and staff, discuss/propose motions, etc.

5. Announcements of the Outcome of Fellow Nominations
The names of Nominees recommended for elevation shall not be disclosed by anybody prior to the date when the IEEE BoD has taken formal action of approving such recommendation at their
November meeting. Upon BoD approval of the list of Nominees recommended for elevation, Fellow Activities Staff shall prepare a series of actions to inform Nominees and also publicize elevations, as specified in the Manual. Among those actions, some details related to informing Nominators/Nominees of the outcome of their Nomination fall under the control of the FSPS and are addressed in the next Subsections.

5.1  E-mail to Successful Nominees

As specified in §19 of the Manual, an e-mail shall be sent to successful Nominees and their Nominators advising them of their elevation to Fellow grade.

The text of the e-mail currently used is reported below:

    Dear <Nominee Name>:

    Recognizing the achievements of its members is an important part of the mission of the IEEE. Each year, following a rigorous evaluation procedure, the IEEE Fellow Committee recommends a select group of recipients for elevation to IEEE Fellow. Less than 0.1% of voting members are selected annually for this member grade elevation.

    It is my great pleasure to inform you that the IEEE Board of Directors, at its November <year> meeting, elevated you to IEEE Fellow, effective 1 January <year>, with the following citation:

    <insert citation>

    Within the next two months, you will receive your IEEE Fellow pin and certificate. Both serve as visible recognition of your elevation to the highest grade of membership in the IEEE.

    **Profile Verification** - Please verify the spelling of your name as you want it to appear on your Fellow certificate plus the address to mail your Fellow pin and certificate.

    **Employer Notification** - Please advise us if you would like an electronic letter sent to your employer advising them that you have been elevated to IEEE’s highest honor.

    **Alumni Notification** - Please advise us if you would like an electronic letter sent to the University/College that you graduated from advising them that you have been elevated to IEEE’s highest honor.

    Please click [here](https://www.ieee.org/conferences_events/index.html?WT.mc_id=uem_conf_srch) to respond to the above requests. The requested information must be received no later than **December <day>, <year>**.

    **IEEE Recognition** - If you would like your elevation to Fellow recognized at an IEEE Conference, Society, Region or Section event, please contact the appropriate IEEE Society President, Region Director, or Section Chair directly. You may also visit the following URL to obtain conference contact information:

    [https://www.ieee.org/conferences_events/index.html](https://www.ieee.org/conferences_events/index.html)

    **News Release Template** – Attached to this correspondence is a news release template. You can use this outline to notify newspapers, publications, associations, of your choice. Insert your essential information in the yellow highlighted area and then you submit to the appropriate Editor/s.
You bring honor to yourself and to IEEE by your achievements. Congratulations!

Sincerely,

<Name of current IEEE President>

<Year and title>

5.2 Letter to Unsuccessful Nominees (FC 2016)

As specified in §19 of the Manual, an e-mail shall be sent only to Nominators regarding the unsuccessful outcome of their Nomination and expressing appreciation for their participation in the Fellow Nomination process. In §19 of the Manual, it is specified that the IEEE FC may make additional announcements as specified in this Handbook.

With the goal of encouraging “self-restraint” in the resubmission of Nominations of low-ranked Nominees, the IEEE Fellow Committee passed a motion at its 2016 in-person meeting that provides for two different letters to be sent to the Nominators of unsuccessful Nominees, depending on the final IEEE ranking of the Nominee:

1. Simple regret letter – to be used for Nominees that ranked above position #F.
2. Regret letter with feedback – to be used for low-ranked Nominees.

5.2.1 Simple regret letter

The text of the e-mail currently sent to the Nominators of unsuccessful Nominees ranked above position #F is reported here below:

Dear <Nominator Name>:

The IEEE Fellow Committee is most appreciative of your efforts in submitting a Fellow nomination for <Nominee Name>. Unfortunately, the nomination was not successful this year. Due to the confidentiality of the process, no additional feedback will be specified at this time.

The Committee looks forward to your continued interest and participation in the IEEE Fellow nomination process in the coming year.

<Name of current Fellow Chair>

<Year and Title>”

5.2.2 Regret letter with feedback (FC 2016)

Specifically, the motion states that the Nominators of Nominees ranked in position #F or below in the final IEEE ranking shall receive the following information via e-mail:

- The Nominee was ranked in position #F or below out of #N total Nominees.
- There were #E Nominees recommended for elevation.
- It is further suggested to wait additional years before submitting a re-nomination, allowing more time for the Nominee’s contributions and impact to become more evident.
- The Nominator is encouraged to share the feedback with the Nominee.

The number “F” shall be decided by the Fellow Committee at its fall face-to-face meeting for the current [same] year. “N” is the number of nominations received that year.

The text of the e-mail sent to the Nominators of unsuccessful Nominees ranked at or below position #F is reported here below:
Dear <Title> <Nominator Name>,

The IEEE Fellow Committee is most appreciative of your efforts in preparing and submitting a Fellow nomination for <Nominee>.

Unfortunately, the nomination was not successful this year. The Fellow Committee recognizes the time and commitment that preparing an effective nomination package entails, not only for you but also for the references and endorsers. In light of this, the Fellow Committee is providing you additional feedback.

As a result of the evaluation process, this nomination was ranked at or below <min number> out of the <max number> nominations received this year, while a total of <num_elevations> Nominees were elevated this year. To create a more competitive nomination package for a potential resubmission, you may consider waiting additional time for the Nominee’s contributions to become more evident, or devoting additional time to clarify the importance and impact of those contributions. You are encouraged to share this feedback with the Nominee, if and where appropriate.

The Committee looks forward to your continued interest and participation in the IEEE Fellow nomination process.

<Chair Name>
<Year IEEE Fellow Chair>


This procedure is scheduled to be used for the evaluations done in 2018 (Fellow Class 2019), when the scoring web application will likely be updated.

In the 2016 FSPS report it was shown that the S/TC Evaluators and the IEEE Judges had very high levels of agreement for the Nominees ranking in the top T% and bottom B% of the S/TC rankings of S/TCs that evaluated at least 10 Nominees (with T,B ≤ 25%). The recommendation made in §7.3 of the 2016 FSPS report was to introduce a practice that took advantage of the very high elevation probability of Nominees ranked in the top of the S/TC rankings and the very low elevation probability of Nominees ranked in S/TC bottom quartile.

This Section specifies such practice which is called the “Expedited Evaluation Procedure” (EEP). The EEP shall be used to evaluate the top/bottom ranked Nominees in the S/TC rankings and the usual full evaluation shall be used for the middle-ranked Nominees (see §4). Experienced Judges shall be appointed as Expedited Evaluation (EE) Judges. EE Judges shall perform an EE of top/bottom Nominees and assess whether:

- The degree of qualification of a top Nominee is high enough to place immediately the Nominee on the list of Nominees recommended for elevation without undergoing a full evaluation
- The degree of qualification of a bottom Nominee is low enough that it can be immediately decided that the Nominee be not recommended for elevation without undergoing a full evaluation

Each top/bottom Nominee shall be evaluated by two EE Judges.

If the two EE Judges agree, then the Nominee shall be placed immediately in the pass/fail lists.

If they disagree, then the Nominee shall be added to the set of Nominees undergoing the usual full evaluation and shall then be evaluated together with the middle-ranked Nominees by the
Judges in a Judging Group (see §4). EE Judges shall evaluate Top/Bottom Nominees in parallel to all other Judges performing the usual full evaluation on the middle-ranked Nominees (parallel evaluation of Nominees by EE Judges and regular Judges is a 2017 FC resolution).

An overview of the EEP is shown in Figure 2 while the details of the EEP are specified in the next Subsections.

6.1 EEP for Top/Bottom Nominees (FSPS 2017)

1. The EEP shall be limited to S/TCs that have evaluated at least 10 Nominees.
2. Nominees in the Top T% and Bottom B% shall be placed on the EE List.
3. Values for T%≤25% and B%≤25% shall be set each year by the IEEE FC Chair, with the concurrence of the Vice-Chair. The goal is to ensure a target workload of around 600 full evaluations. If less than around 600 Nominations are received, then T% and B% may be set to zero.

6.1.1 Recommended initial set of T and B values (FC 2017)
When the Expedited Evaluation Procedure has been implemented, it is recommended to set the values of T=10% and B=25%.

6.2 Number EE Judges (FSPS 2017)

1. Ten experienced Judges shall serve as EE Judges. The remaining forty Judges shall be divided into ten Judging Groups, with four Judges per Judging Group.
2. The IEEE FC Chair shall appoint the ten EE Judges with the concurrence of the Vice-Chair. Preference should be given to Judges with substantial experience on the IEEE FC and attention should be given to ensuring diversity of S/TCs among the EE Judges.

6.3 Duties of EE Judges (FSPS 2017)

1. EE Judges shall perform all assigned EEs of the top/bottom ranked Nominees in the S/TC rankings within four weeks, while the other Judges shall perform in parallel the usual full evaluation of the middle-ranked Nominees.
2. EE Judges shall normally perform only EEs. However, they may perform full evaluations in the following cases:
   a. In case any Judge has declared a Conflict-of–Interest.
   b. In case Judges withdraw from the IEEE FC and not enough alternates are available.

6.4 Assignment to Judging Groups (FSPS 2017)

1. Since the operation of score normalization requires assigning Nominees to Judging Groups as uniformly as possible, the following procedure ensuring the same number ±1 of Nominees shall be adopted for assigning Nominees to Judging Groups:
   a. Assignment to Judging Groups of Nominees outside the EE List shall be done in the usual fashion (see §3).
   b. A Nominee on the EE List referred to full evaluation shall be assigned to any of the Judging Groups with fewer Nominees.
6.5 **EEP core procedure (FSPS 2017)**

1. There shall be at least 2 EE Judges evaluating a Nominee, and they shall not be members of the same S/TC that evaluated the Nominee under consideration.

2. EE Judges shall indicate their agreement or disagreement for the elevation (top Nominees) or rejection (bottom Nominees) of a Nominee on the EE List.
c. If the two EE Judges agree on elevating/rejecting a Nominee, then that Nominee shall be added to the set of pass/fail Nominees and shall not undergo a full evaluation.
d. If the two EE Judges disagree on a Nominee, then that Nominee shall be placed in the pool of Nominees undergoing a full evaluation. The Nominee shall undergo the usual full evaluation in a Judging Group and shall be evaluated as any other Nominee that was not on the EE list.

3. Working in parallel with EE Judges, the other Judges shall perform the usual full evaluation of Nominees not on the EE List and of those Nominees flagged by the EE Judges for full evaluation.

4. The two EE Judges evaluating a Nominee shall evaluate the Nominee without communicating with each other.

5. If an EE Judge has a Conflict-of-Interest in evaluating a Nominee, then the Chair or Vice Chair or another EE Judge (appointed by the Chair with the concurrence of the Vice-Chair) can replace the conflicted Judge in the evaluation of that Nominee.

6.6 Other Tasks by Chair/Vice Chair or Staff or the scoring Web application (FSPS 2017)
   1. Create the EE List
   2. Identify experienced Fellow Committee members for serving as EE Judges
   3. Handle Conflicts of Interest cases among EE Judges
   4. Update the EE List based on the decisions made by the EE Judges
   5. Ensure that the EEs are completed in a timely fashion, and that the appropriate four Judges are alerted when a Nominee originally on the EE List has been flagged for full evaluation by the EE Judges.

7. Minimum Number of Evaluations per Nominee (FSPS 2017)
   There shall be at least four evaluations per Nominee. If one or more Judges declare a Conflict-of-Interest that prevents them from scoring a Nominee, then replacement Judges shall be appointed to provide evaluations for that Nominee and ensure a total of four evaluations. The IEEE FC Chair shall make such appointments with the concurrence of the Vice-Chair, choosing from among existing IEEE FC Members.

8. Scoring procedure when a Judge has a Conflict-of-Interest with a Nominee (FSPS 2017)
   In the case of a Conflict-of-Interest (CoI), two situations can arise depending on whether four evaluations for a Nominee are available or not from the assigned Judging Group (see §7):
   1. If four evaluations are available, the \( N-1 \) scores of the conflicted Judge must be normalized over the same \( N \) used for normalizing the scores of the other Judges.
   2. If four evaluations are not available, then a replacement Judge must be appointed to evaluate the Nominee as specified in §7. The evaluations provided by the replacement Judge must be harmonized with the other scores of the conflicted Judge. This is necessary because the conflicted and replacement Judges may have different scoring methodologies,
and problems may arise when “mixing” the single “set of raw scores”\(^2\) assigned by the replacement Judge with the other \(N-1\) sets of raw scores assigned by the conflicted Judge to the other \(N-1\) Nominees.

We specify here a procedure that allows doing this “mixing” in the right way. According to this procedure, the replacement Judge shall assign a *rank* to the Nominee, not a raw score like a Judge would normally do. It is a single procedure with two variants for assigning a rank to a Nominee that has one or more conflicted Judges. The two variants allow assigning a rank to Nominees in two ways:

A. Non-automated, i.e. with human intervention in assigning a rank

B. Automated, i.e. without human intervention

The automated rank-assignment shall be used if there are already four evaluations for the Nominee. The non-automated rank-assignment shall be used in those cases when replacement Judges perform evaluations and assign ranks.

The CoI-Handling procedure is specified below. Depending on the type of rank-assignment, either Step 3.a) or 3.b) shall be used.

1. Judge A has provided \(4(N-1)\) raw scores, where Judge A is the Judge that had a CoI with Nominee X. Judges B, C, and D have provided \(4N\) raw scores.

2. The system ranks the Nominees of all Judges normalizing over \(N\) (see §4.2 and §4.2.1):
   a. The \(N-1\) Nominees of Judge A are ranked in terms of “Normalized Weighted Score” and are ranked from \(\#1\) to \(\#(N-1)\), with no Nominee assigned to rank \(\#N\).
   b. The \(N\) Nominees of the other three Judges (B, C, D) are ranked in terms of “Average Normalized Weighted Score”, where the averaging is over the three Judges.

3. The proper placing of Nominee X in the rank of Judge A can be done in either an Automated or Non-Automated fashion, depending on the situation:
   a. NON-AUTOMATED (a person, the “replacement Judge,” is designated to fill-in for the conflicted Judge A): The replacement Judge J assigns rank \(#R\) to Nominee X based on his/her personal experience as a senior Judge.
   b. AUTOMATED (no human intervention): The system checks what the ranking of Nominee X is at Step 2.b). Let this rank be \(#R\). Let this rank be \(#R\).

4. The system inserts Nominee X at rank \(#R\) in the ranking of conflicted Judge A calculated in 2.a), sliding down of one position all the Nominees below rank \(#R\). All Judges now have a ranking of \(N\) Nominees.

5. The system now computes the “Average Normalized Weighted Score” of all \(N\) Nominees, where the averaging is done over the four Judges (A, B, C, and D).

The replacement Judge assigns a rank to Nominee X, not a score as in previous practice. This rank \(#R\) \((1 \leq R \leq N)\) should be a function of the level of qualification of the Nominee, the max number of elevation recommendations that the Fellow Committee can make to the BoD (set the year before), the number \(N\) of Nominees in the Judging Group, the set of Nominees that will likely receive the discouraging feedback letter (exact threshold will be known only later, at the in-person meeting), and any other appropriate variable in the discretion of the replacement Judge. This is not an easy task, so it is very important that the replacement Judge has a

---

\(^2\) The “set of raw scores” is constituted by the four raw scores assigned by Judges to each Nominee in the four rating categories specified in the Manual.
substantial experience in evaluating Nominees. With this experience, even though the replacement Judge will not have seen the other (N-1) Nominees in the Judging Group of Judge A, the assigned rank would likely place the Nominee in the “ballpark” rank where Nominee X should be among the N Nominees in his/her group. This method is preferable to the previous practice where the replacement Judge assigned a score to Nominee X, not a rank.

If a Nominee on the Discussion List was evaluated using this CoI procedure (non-automated case), then the Judge who replaced the conflicted Judge shall be present at the face-to-face meeting discussion of borderline Nominees.

9. Election of FSPS members at the in-person fall meeting (FSPS 2017)

As specified in §3.2 of the Manual, the Fellow Committee shall appoint at its in-person meeting seven members to serve on the FSPS the following year. FSPS members may be current or past IEEE FC members. This Section specifies how to perform the appointment.

A couple of months prior to the in-person IEEE FC meeting, the IEEE FC Chair shall make a “Call for Candidates” for serving on the FSPS in the following year. The only two eligibility criteria for volunteering are: (a) being a current member of the IEEE FC; (b) willingness to serve on the FSPS. The Call shall expire a couple of weeks before the start of the IEEE FC in-person meeting.

Candidates who volunteer shall provide the following material (election package): a short bio (up to 150 words), a position statement (up to 150 words), and a picture. The IEEE FC Chair shall distribute to the IEEE FC the election packages of all candidates at least two weeks before the IEEE FC in-person meeting.

At the meeting, every IEEE FC member shall vote via secret ballot for up to seven candidates. The ballot shall include the list of all candidates who volunteered and a “write-in” option. The seven candidates that receive the most votes shall be appointed FSPS members for the following year. Should the 7th and 8th top candidates receive the same number of votes, then a second vote via secret ballot shall be carried out to select one of the two tied candidates.

If less than seven candidates volunteer, then the IEEE FC Chair shall continue to ask for volunteers after the “Call for Candidates” deadline has passed and during the IEEE FC meeting until there are at least seven candidates. If the number of candidates is still less than seven at the time of voting, then the IEEE FC meeting shall vote to confirm the appointment of the available slate. The incoming (new) IEEE FC Chair and Vice-Chair shall appoint the remainder FSPS members choosing from current and past IEEE FC members and possibly giving precedence to those who will be IEEE FC members in the following year.

9.1 Minimum Number of Fellow Committee Members on the FSPS (FC 2017)

The incoming FSPS Chair shall appoint FSPS members taking into account the following FC resolution: at least three FSPS members shall be concurrent Fellow Committee members.

10. Process for Changing a Citation after IEEE Board Approval (FSPS 2019)

If after the new elevations are announced the Nominator of an elevated nominee expresses concerns or disappointment for the final citation of his/her nominee, then the FC Chair will work with the Judges that have evaluated that nominee to ascertain whether the citation is appropriate.
or not. If the FC Chair believes that changes in the citation are needed, he or she shall propose a new citation to the nominator after consulting with the Judges that have evaluated the nominee.

11. **Guidelines for Crafting Fellow Citations (FSPS 2019)**

Fellow citations cannot exceed 15 words, as approved by the Fellow Committee in October 2017. The following guidelines for crafting Fellow citations are set:

1. Make an attempt to start citations with a word that will identify it with the category of interest such as:
   - For research of….
   - For application of…..
   - For leadership in…..
   - For development of……
   - For contributions to……

2. Avoid words that tend to exaggerate accomplishments such as:
   - Significant
   - Numerous
   - Frequently
   - Sustained
   - Big
   - Large
   - Tremendous
   - Extraordinary

3. Avoid words that have no means by which to measure effect or value such as:
   - Seminal
   - Pioneering
   - Sophisticated
   - Smart (unless used as part of a smart system, et. al.)
   - Robust (unless used as part of robust system et. al.)
   - Novel
   - Innovative
   - Creative
   - Understanding
   - Outstanding

4. Minimize or avoid use of phrases such as:
   - Systems and standards
   - The science and technology
   - Understanding and application
   - Theory and development
   - Discovery and development
   - Innovative research and widespread education activity
   - To the development, application and standardization

5. Avoid use of persons name in citation.

6. Avoid use of “his”, “her”, “their”, “they”.

7. Use “the” only where it denotes “the only one, et.al”.
11.1 Examples:
Original: for technical and professional leadership of practical application engineering to the pulp and paper industry.
Final: for leadership in engineering applications for the pulp and paper industry.

Original: for contributions to the understanding of the electrophysiology of the atrial cardiac arrhythmias and electro technology for their management.
Final: for contributions to the electrophysiology of atrial cardiac arrhythmias.

12. Further Reading
For further details on the normative requirements for the IEEE Fellow Nomination and Evaluations process as well as the eligibility requirements of all the participants in the IEEE Fellow process, please see the IEEE Fellow Committee governing documents and Recommendation Guides posted at http://www.ieee.org/fellows.
Appendix (informative)

List of motions for the Fellow Committee at the fall in-person meeting

The goal of this Appendix is to provide a list of the motions that must be made at the fall face-to-face Fellow Committee meeting. Only motions specific to the Fellow Committee shall be listed here, not the usual procedural ones established in Robert Rules of Order, e.g., approval of Agenda, approval of previous meeting minutes, etc.

This Appendix is informative. In case of any discrepancy, the Manual and the main body of the Fellow Committee Handbook take precedence over this Appendix. As Manual and Handbook evolve, this Appendix shall be kept up to date by the FSPS Chair. No FSPS approval is needed, simple notification to the FSPS of any update will suffice.

A. Motions that take effect the same year
   1. Approve the slate of Nominees (and their Citations) recommended for elevation to the IEEE Board of Directors (IEEE Bylaws I-305.6, in Executive Session).
   2. Set the threshold of the rank #F for the use of the regret letter with feedback (this Handbook, §5.2.2).

B. Motions that take effect the following year
   1. Set the maximum number of Nominees that will be recommended for elevation to the IEEE Board of Directors for the following Fellow Class (Manual §14, in Executive Session).
   2. Appoint seven members to the FSPS at the IEEE FC face-to-face meeting (Manual, §3.2) – for the election procedure, refer to §9 of this Handbook.