IAS Awards Department

How to write a successful nomination for IEEE Fellow Elevation

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IEEE

Outline

- IAS Fellow Search Committee
- IEEE Fellow Elevation
  - What is an IEEE Fellow
  - Nominee and nominator requirements
  - Schedule nomination preparation and evaluation process
- Writing a successful nomination
- Conclusions

IAS Fellow Search Committee (IAS FSC)

FSC Member list:

- Annette Muetze (R8)
- Li Qi (R10)
- Leila Parsa (R6)
- Kevin Lee (R4)
- Louie Powell (R1)
- Akshay Rathore (R10)
- Radu Bojoi (R8) – IAS Awards Chair

Annette Muetze
R8, Academia

Leila Parsa
R6, Academia

Li Qi
R10,Academia

Akshay Rathore
R10, Academia

Kevin Lee
R4, Industry

Louie Powell
R4, Industry

Radu Bojoi
R8, Academia

FSC goals = provide tutorial material & support, identifying suitable nominees for possible elevation to IEEE Fellow, with particular emphasis on nominees who reflect the diversity of IEEE and its professional communities

What is an IEEE Fellow ?

IEEE Fellow = Highest grade of IEEE Fellowship

- Recognizes two individual significant technical contributions to the profession and society at large
- Requires a nomination process, followed by an evaluation process (described later)
- The nomination is submitted by a nominator

Number of new Fellows each year limited to 0.1% of IEEE membership!

In January 2024:

- IEEE had 328953 voting members with 8426 (2.56%) categorized as Fellows
- IAS had 9518 voting members with 341 (3.58%) categorized as Fellows = proof of the IAS value in terms of impact in general

Individual contributions categories

The IEEE specifies 5 significant contribution categories:

- **Research Engineer/Scientist (RE/S)**
- **Technology Innovator (TI)**
- **Technical Leader (TL)**
- **Educator (EDU)**
- **Standards Contributor (STDC)**

The two significant contributions must belong to the above categories

- The contributions may belong to the same category

Categories exist only to clarify differentiation between nominees

- Each category must be properly chosen and properly supported by accomplishments
- There are no quotas for elevation among categories, there is no category more important than others

Requirements for Fellow nomination = Nominee

At the time the nomination is submitted, a nominee must:

- Hold the grade of IEEE Senior member or IEEE Life Senior member
- Be a member in good standing
- Have completed a minimum of five cumulative of IEEE membership in any grade (S,M,SM)
- The age is not a factor for IEEE elevation

Non-eligibility:

- Members of the IEEE Board of Directors
- Members of the IEEE Fellow Committee
- Individuals who have been sanctioned by IEEE for violation of IEEE polices on ethical behavior, or who are under investigation for such behavior

IEEE Fellow Program Brochure

https://www.ieee.org/content/dam/ieee-org/ieee/web/org/about/fellows/fellow-brochure-2023.pdf

Requirements for Fellow nomination = Nominator (1/2)

The nominator is the person who submits the nomination to the IEEE

- Any person, including non-IEEE members, may serve as a nominator !

Individuals not eligible to serve as nominators

- Member of the IEEE Board of Directors
- Member of the IEEE Fellow Committee
- Chair, Vice Chair, or member (Evaluator) of IAS Fellow Evaluation Committee (in general, the Society Fellow Evaluation Committee evaluating the nomination)
- IEEE staff

Self-nominations are not permitted!

Requirements for Fellow nomination = Nominator (2/2)

Nominator responsibilities:

- The nominator is responsible for preparing the IEEE Fellow Grade Nomination Form through the Fellow Portal
  - ✓ **https://www.ieee.org/membership/fellows/fellows-nomination.html#nominator**
- The nominator is responsible for identifying an IEEE Society whose evaluating committee will assess the nominee's technical qualifications and contributions
- The nominator is responsible for soliciting at least three, but no more than five, references capable of assessing the nominee's contributions
  - ✓ The References are specified through the nomination form
  - ✓ A Reference must be an eligible IEEE Fellow or Life Fellow in good standing
- The nominator may (optionally) solicit up to three endorsements capable of supporting the nomination
  - ✓ The endorsers are specified through the nomination form

IEEE Fellow nomination and evaluation process = steps

(1) Prepare and submit the nomination - deadline 7 February 2025

- Includes submission of References and Endorsements

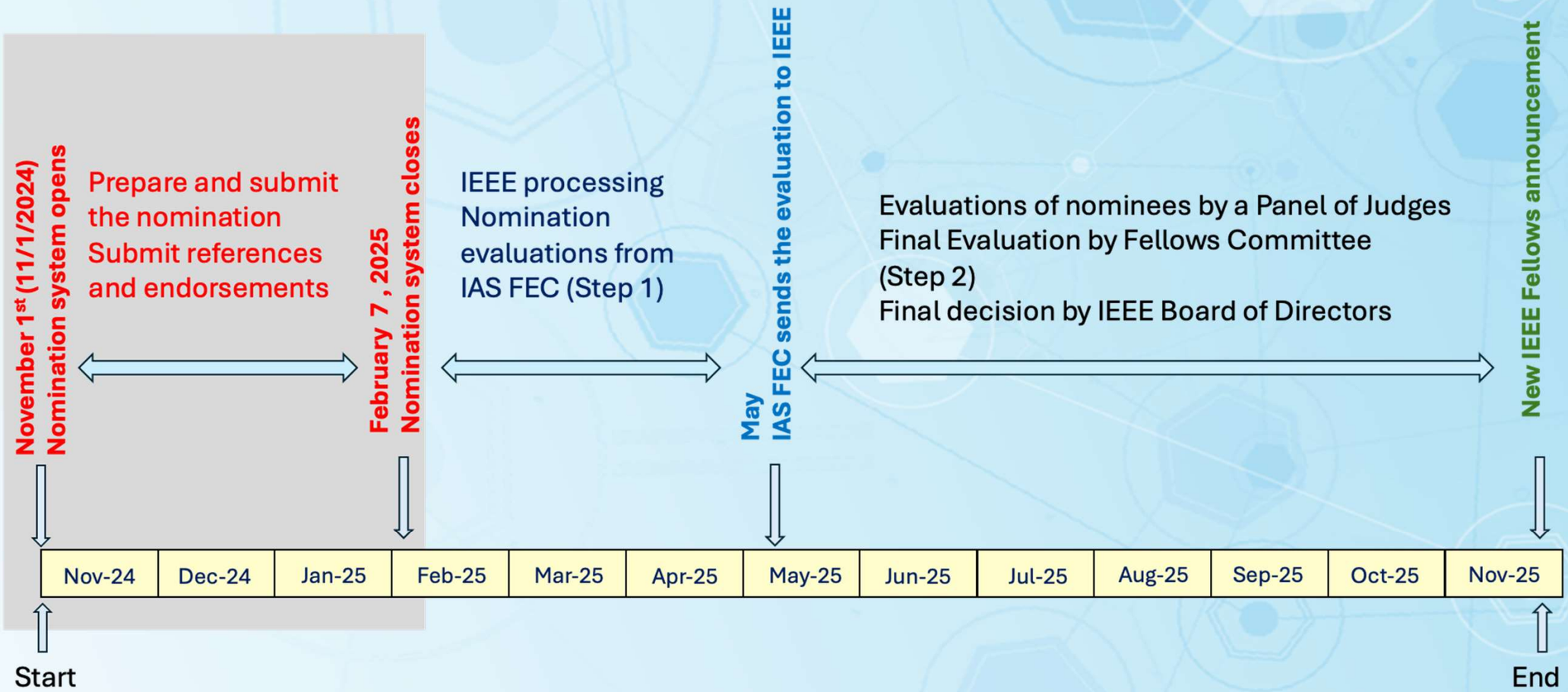
(2) Evaluation of nominations = 2 step process

- Initial IEEE Staff analysis
  - ✓ Assure compliance with minimum requirements
- Evaluation step 1: Evaluation by the IAS Fellow Evaluation Committee (FEC) of:
  - ✓ Technical accomplishments and professional activities
  - ✓ Strength support for references and endorsers
  - ✓ FEC provides a ranking and narratives (written by the IAS FEC Chair) for all nominations
- Evaluation step 2: IEEE Fellows Committee evaluation and recommendation
  - ✓ Initial evaluation and ranking by a Panel of IEEE Judges
  - ✓ Fellows Committee evaluation and recommendation

(3) Final Decision by the IEEE-Board of Directors (BoD) and notification of results

IEEE Fellow nomination and evaluation process = schedule

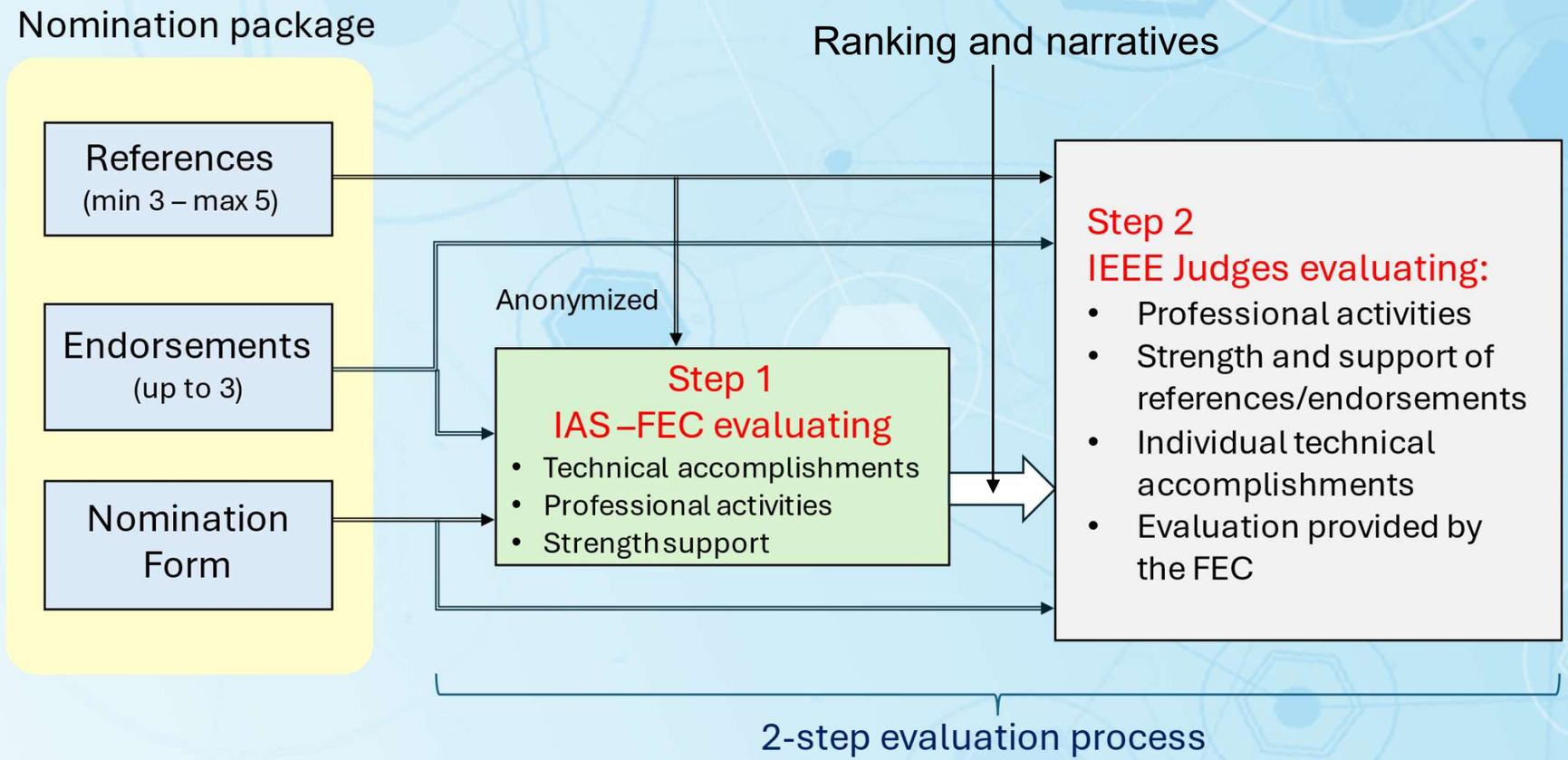
IEEE Fellow nomination closes on February 7, 2025!



Prepare and submit the nomination for IEEE Fellow Elevation

Nomination package is under the direct responsibility of the nominator

- Nomination form, references and endorsements



The evaluation results provided by the IAS FEC (step 1) to the IEEE judges (step 2) are strictly confidential, not available to the IAS officers

Writing a successful nomination

Steps performed by the Nominator:

(1) Make sure that the Nominee is extremely qualified and identify properly the two technical contributions and the categories they belong to

- The nominator is providing a first critical (not official) evaluation of the nominee

(2) Write the nomination

- General fields (A)
- Technical contribution fields (B)
- Awards and Professional activities (C)
- Proposed citation (D)
- References and endorsers (E)

(3) Submit the nominations by February 7, 2025 (23:59 ET) !

- Hard deadline, no flexibility allowed

Writing a successful nomination

Step 1: Make sure that the Nominee is extremely qualified and identify properly the two technical contributions and the categories they belong to

- Identify two specific individual technical accomplishments by the Nominee
- Identify which category each accomplishment falls into from:
  - ✓ Research Engineer/Scientist (RE/S)
  - ✓ Technology Innovator (TI)
  - ✓ Technical Leader (TL)
  - ✓ Educator (EDU)
  - ✓ Standards Contributor (StdC)
- The contributions must be already done and effective, and not potential

Writing a successful nomination

Step 2: Write the nomination (1/4)

The nomination is submitted on-line at

https://www.ieee.org/membership/fellows/fellows-nomination.html

Available sample nomination form at

https://www.ieee.org/content/dam/ieee-org/ieee/web/org/about/fellows/fellow-committee/sample-nomination-form.pdf

(A) General information fields

- Field 1: Nominee information
- Field 2: Nominator information
- Field 3: Recommended IEEE Society = IAS, other sister societies are fine
- Field 4: Nominee Education and affiliation information
- Field 5: Relationship with the nominee

Writing a successful nomination

Step 2: Write the nomination (2/4)

Limited word count for each field, so the nomination must exploit well the fields with convincing argument in favor of the Nominee!

Avoid abbreviations, acronyms and technical jargon!

(B) Contribution fields

- **Field 6. First individual contribution**
  - ✓ Field 6a. Identify the first contribution (max 200 words)
  - ✓ Field 6b. Verifiable evidence of first contribution (max 400 words)
  - ✓ Field 6c. Impact of first contribution (max 200 words)
  - ✓ Field 6d. Verifiable evidence of impact of first contribution (max 200 words)
- **Field 7. Second individual contribution**
  - ✓ Field 7a. Identify the second contribution (max 200 words)
  - ✓ Field 7b. Verifiable evidence of second contribution (max 400 words)
  - ✓ Field 7c. Impact of second contribution (max 200 words)
  - ✓ Field 7d. Verifiable evidence of impact of second contribution (max 200 words)

Writing a successful nomination

Step 2: Write the nomination (3/4)

(C) Awards and professional activities

- Field 8. IEEE Awards and Non-IEEE Awards
  - ✓ Field 8a. List of IEEE Awards (max 250 words)
  - ✓ Field 8b. List of Non-IEEE Awards (max 250 words)
- Field 9. IEEE and Non-IEEE activities
  - ✓ Field 9a. List of IEEE activities (max 250 words)
  - ✓ Field 9b. List of Non-IEEE activities (max 250 words)

Elevation to Fellow is based on individual technical accomplishments!

The IEEE Awards and Activities help differentiate between otherwise highly qualified nominees!

Outstanding IEEE activity alone will not lead to IEEE elevation

(D) Proposed citation

- For contribution to …….. (max 15 words)

Writing a successful nomination

Step 2: Write the nomination (4/4)

(E) Insert the references and endorsers

- Field 11: References (first name, last name, e-mail)
- Field 12: Endorsers (first name, last name, e-mail)

Need to identify enthusiastic endorsers who can and will add additional information to support the nomination !

Step 3 : submit within the deadline

- The endorsers and references must submit their forms within the deadline as well!

No attachments are allowed as support material for the nomination form !

The nomination cannot be submitted with two different societies at the same time!

Writing a successful nomination = contribution fields tailored for the category

(1) Research engineer/scientist (RE/S)

- Focus on technical inventions, pioneering research, new ideas, all with solid societal impact
- Relevant evidence must be directly connected to the one or two contributions listed in the nomination, not the whole body of work done by the nominee during her/his career
  Examples:
  - ✓ Patents, milestone papers (high citation count) and other verifiable evidence
  - ✓ Recognized work by the peers = the bibliometric indexes should not be abused, hyper-prolific authors are not a good example
  - ✓ Specify the role of the nominee in the papers or patents
- Avoid describing an entire technical career, it is not necessary!
  - ✓ Focus only on two specific technical accomplishments (contributions)

Writing a successful nomination = contribution fields tailored for the category

(2) Technology Innovator (TI)

- TI may make significant technical contributions to the design and/or evolution into manufacturing of products or systems, the use, operation, or application of such products or systems, and the advancement of industry practices
- Find clear and convincing evidence that such contributions are the direct result of the Nominee's personal effort and that the contributions have had impact on industry, the profession, or society at large
- Look for innovation, creativity, importance of the contribution, impact on industry, the profession or society at large, and documentation of the specific technical contributions
- There should be a clear evidence of specific technical contributions: documented contributions to industry practices and standards, patents, reports, endorsements, articles, recognitions provided by experts in the community and beyond the Nominee's institution
- Scholarly publication metrics are not meaningful for TI nominees

Writing a successful nomination = contribution fields tailored for the category

(3) Technical Leader (TL)

- Technical leadership of a managerial team or company-wide effort that led to an important benefit to technical innovation, the advancement of a device, idea or system leading to development, application and/or production
  - ✓ The technical innovation, risk involved, performance improvement, economic results, or other advantages must be above the norm
  - ✓ Nominee's leadership and technical role must be crucial for the successes of the cited accomplishments, and his/her specific technical contributions must be supported by verifiable evidence
- Scholarly publication metrics are not meaningful for TL nominees
- This category is not for managers or executives that are not deeply involved in the project's technical development aspects
  - ✓ Organizational positions cannot be used as sole evidence of technical leadership

Writing a successful nomination = contribution fields tailored for the category

(4) Educator (EDU)

- The Nominee must have had impact on education in the fields of interest of IEEE, e.g., as a teacher or as an administrator
- Contributions are to be judged based on uniqueness, innovation, and the degree of acceptance (national, international)
- Nominee's personal contributions may include:
  - ✓ Development of a new curriculum or courses that are innovative or unique
  - ✓ Authoring an accepted and widely used pioneering educational textbook
  - ✓ Published books or papers on education, e.g. IEEE Transactions on Education or other journals on education and pedagogy, or also related articles in the popular press
  - ✓ Publications unrelated to the advancement of education are to be considered of lesser importance
- It is not sufficient to have taught for many years or held an administrative role to qualify for Fellow elevation under EDU

Writing a successful nomination = contribution fields tailored for the category

(5) Standards Contributor (STDC)

- Contributions may: (a) define the framework, reference, functional or design architectures for a standard or family of standards, OR (b) demonstrate strong technical skill in leading a standards project or task or in building technical consensus
- STDC directly or indirectly provides original technical content to a standard project, which ultimately is adopted into the published standard or widely accepted specifications
- Evidence of impact of the contribution may include:
  - ✓ Role in development of the standard, as shown by reference and endorser testimony, related publications and patent activity
  - ✓ IEEE or other awards with citations to the standard; and broader impact of the standard, including functional, scientific, economic, market and societal aspects
- Scholarly publication metrics are not meaningful for STDC nominees

Writing a successful nomination = assessment of impact (1/2)

Assessing publications, products, patents

- Impact of papers = type of articles (tutorial or not), the number of co-authors, impact on literature, impact on technology/practice, impact on new products, impact on international standards, impact on society at large
- Impact of products = can be measured by popular usage, mentions in press releases, level of innovation versus state of the art, revenue stream generation, etc. Having the right endorser could clarify these things, shedding light on the individual role of the Nominee
- Impact of patents = a right endorser can help providing useful info on:
  - ✓ Which patent claims (independent or dependent) were contributed solely by the Nominee, in the case there is more than one inventor associated with a patent
  - ✓ Has the patent been sold or licensed to a third party for use? If yes, what are the revenues?
  - ✓ Is the patent important for the assignee to remain on the cutting edge of the technology area being described? If yes, is it clear what competitive edge the patent describes?
  - ✓ Has the patent been deemed essential to products or international standards?
  - ✓ Has the patent been often cited?

Writing a successful nomination = assessment of impact (2/2)

Impact on standards

- A technical leader who submitted influential contributions, led technical discussions, and drove the Working Group to consensus
- Influential paper containing findings that were adopted in a popular international standard
- A technologist whose forward-looking patents became later essential to popular international standards

Peer recognition can take many forms:

- Awards (technical, best paper, company recognitions, induction in national academies, inventor's hall of fame, etc.), keynotes, honorary degrees, invited paper, etc.
- Broad public dissemination (TV, newspapers, etc)

Endorsements are very useful when no other verifiable evidence of impact exists

- Company officers, Government program directors, representatives of standards bodies
- The endorsers must be credible sources

Writing a successful nomination = identify and select the References (1/2)

Eligibility:

- A Reference must be an eligible IEEE Fellow or Life Fellow in good standing
  - ✓ Exception to the rule: if a nominee resides in Region 9, references will be accepted from Senior Members, as well as both IEEE Fellows and Life Fellows, in good standing
- The ideal reference is a person who would not benefit in any way if the Nomination is successful

Non-eligibility:

- Member of the IEEE Board of Directors
- Member of the IEEE Fellow Committee
- Chair, Vice Chair or Member (Evaluator) of the IAS Fellow Evaluation Committee (in general, the Society Fellow Evaluation Committee evaluating the nomination)
- Nominator for the same nomination
- IEEE Staff

Writing a successful nomination = identify and select the References (2/2)

The References

- Minimum 3, maximum 5
- They must know very well the activity of the nominee and they must be experts in the field
- They must be enthusiastic and must agree unanimously on the nominee qualification
- Avoid generic languages, such as “good guy” language and “career evaluation” language

Make sure that the References will submit their reference on-time!

Reference quick reference guide

https://www.ieee.org/content/dam/ieee-org/ieee/web/org/about/fellows/fellow-committee/reference-quick-help-guide-updated.pdf

Writing a successful nomination = identify and select the Endorsers (1/2)

The Endorsers

- Are optional, maximum 3 are allowed

Eligibility:

- Any person, including a non-IEEE member, or those writing on behalf of an organization may serve as an Endorser
- The ideal endorser is a person who would not benefit in any way if the Nomination is successful

Non-eligibility:

- Member of the IEEE Board of Directors
- Member of the IEEE Fellow Committee
- Chair, Vice Chair or Member (Evaluator) of IAS Fellow Evaluation Committee (in general, the Society Fellow Evaluation Committee evaluating the nomination)
- IEEE Staff

Writing a successful nomination = identify and select the Endorsers (2/2)

Endorsements are extremely important

- They can provide an additional and unique perspective on the Nominee's work not widely available from literature or internet

Endorsements can be most effective if submitted by:

- A company officer, program director, committee chair for a technical community or standards body
- In general, anyone who can attest and verify the Nominator's claims on the impact and individual role of the Nominee
- The endorsers should focus a specific technical accomplishment/contribution, instead of pointing at the nominee's career, using generic appreciation

Endorser quick reference guide

https://www.ieee.org/content/dam/ieee-org/ieee/web/org/about/fellows/fellow-committee/endorsement-quick-help-guide.pdf

Conclusions

Writing a good nomination is crucial for successful IEEE elevation

- Realistically and objectively appraise the qualifications of the potential Nominee before developing the Nomination
- Avoid using acronyms and use a simple language = the IEEE judges are not experts in the Nominee's field of work
- Focus on the two identified contributions/accomplishments
- Identify well the IEEE and non-IEEE activities
- Avoid "good guy" language

Be prepared to resubmit in the following year, if the nomination was not successful

- Different years means different competition
- However, take time and improve the resubmitted nomination
- The resubmission is not automatic, it must be performed as NEW submission for nomination form, references and endorsements