

# IEEE ENGINEERING IN MEDICINE & BIOLOGY SOCIETY (EMBS)

## CONSTITUTION AND BYLAWS

**Original Constitution approved:** 5/5/53

**Amended:** 11/1/57, 12/11/63, 7/22/65, 8/14/72, 3/6/73, 5/14/76, 1/1/77, 4/11/86, 11/8/89, 4/12/92, 9/15/94, 3/25/95, 09/18/95, 06/01/99, 09/16/03, 01/31/04, 04/09/05, 09/26/06, 08/20/08, 10/2010, 8/30/2011, 10/20/2013; 12/18/2015; **9/8/2020**

**Original Bylaws approved:** 5/5/53

**Amended:** 3/23/59, 12/11/63, 7/22/65, 11/1/67, 7/29/68, 2/19/71, 8/14/72, 3/26/73, 9/21/75, 2/26/75, 5/14/76, 8/1/78, 4/11/86, 11/8/89, 10/30/91, 4/12/92, 10/28/92, 9/15/94, 3/25/95, 9/18/95, 12/31/96, 6/01/99, 3/25/2000, 4/22/02, 5/2/03, 09/16/03, 01/31/04, 04/09/05, 09/26/06, 04/22/07, 08/20/08, 10/2010, 8/30/2011, 10/20/2013; 12/18/2015; **9/8/2020**

## CONSTITUTION

### ARTICLE I – Name, Purpose, Field of Interest and Mission Statement

#### Section 1. Name

The name of this organization is the Institute of Electrical and Electronics Engineers (IEEE) Engineering in Medicine and Biology Society, hereinafter referred to as the IEEE Engineering in Medicine and Biology Society, IEEE EMBS, EMB Society, EMBS or the Society.

#### Section 2. Purpose

**A.** The Society is an organizational unit of the IEEE, and its activities shall be in line with the purpose of the IEEE. The governing documents of the Society shall conform to, and not conflict with, the provisions of the governing documents of IEEE.

The governing documents of the Society shall include this Constitution, the Bylaws of the Society, and the Society Handbook. Additional governing documents may include additional operations manuals and policy statements approved by the Society's Administrative Committee (AdCom).

**B.** Specifically, the Society fosters and promotes:

- a) the advancement of the theory and practice of biomedical, electrical and electronics engineering, the allied branches of the engineering profession and the related arts and sciences;
- b) the advancement of the standing of its members;
- c) the continuing education of members;
- d) the compliance with the standards of ethical and professional conduct as set forth in the IEEE Code of Ethics, the IEEE Bylaws, and the IEEE Policy and Procedures Manual; and
- e) the close cooperation and exchange of technical information among members and with other professional societies and individuals who share common interests, as set forth in the Society's Field of Interest.

#### Section 3. Field of Interest

The EMBS field of interest is the development and application of engineering concepts and methods to biology, medicine and health sciences to provide effective solutions to biological, medical and healthcare problems. The field encompasses the development of mathematical theories, physical, biological and chemical principles, computational models and algorithms, devices and systems for clinical, industrial and educational applications.

**A.** The process for modifying the Field of Interest shall be in accordance with the procedures defined in the TAB Operations Manual.

#### Section 4. Mission Statement

*The Engineering in Medicine and Biology Society of the IEEE advances the application of engineering sciences and technology to medicine and biology, promotes the profession, and provides global leadership for the benefit of its members and humanity by disseminating knowledge, setting standards, fostering professional development, and recognizing excellence.*

### ARTICLE II – Bylaws

**Section 1.** Bylaws shall be established and shall exist for the purposes of governing the operations and administration of the society. The Term "Bylaws" as used in this Constitution refers to the EMB Society's Bylaws.

## **Section 2.** Modifications to the Bylaws

A. Proposed changes to the Bylaws and reasons therefore shall be sent so as to ensure receipt by all members of the Society's AdCom not less than 21 days before the stipulated meeting of the Society's AdCom at which the vote shall be taken. The vote of two-thirds of the members present and entitled to vote at the time of the vote, provided that a quorum is present, shall be required to approve any new Bylaw, amendment or revocation.

B. The proposed amendment shall then be forwarded to the IEEE Technical Activities Department, which will review the documentation and coordinate approval by the Vice President – Technical Activities. No amendment to the Bylaws shall take effect until it has received approval from the VP, Technical Activities.

## **ARTICLE III: Membership**

**Section 1.** A member of the Society must be an IEEE member who has an interest in the Society and its Field of Interest.

**Section 2.** An affiliate member of the Society is a non-IEEE member who has some of the rights and privileges of Society membership.

**Section 3.** The Bylaws and the Society Handbook shall provide additional information regarding the categories of membership, and rights, privileges and associated fees related to membership.

## **ARTICLE IV : Finances**

**Section 1.** The Society may collect dues and fees from its members as provided in the Bylaws.

**Section 2.** The Society may charge registration fees for its technical meetings.

**Section 3.** The Society may collect revenue through other means including, but not limited to, advertising, exhibits, and publication sales.

**Section 4.** The EMBS AdCom is the responsible guardian of all assets of the society.

**Section 5.** The fiscal year of the Society shall be the same as the fiscal year of the IEEE.

## **ARTICLE V - Technical Meetings**

**Section 1.** The Society may hold meetings, conferences, symposia, or conventions either alone or in cooperation with Sections, Regions, committees/councils/societies of the IEEE or other technical organizations, subject to IEEE rules and regulations. The Society shall sponsor at least one technical conference of national and international scope each year, which may be held at a time approved by AdCom, or during some other IEEE meetings.

**Section 2.** Meetings, Conferences, or Conventions of the Society shall be open on an equal basis to all members of the IEEE and to EMBS Affiliates. Requirements regarding meetings and their registration fees shall comply with IEEE policy.

## **ARTICLE VI – Publications**

**Section 1.** The Society may have publications. The Bylaws and the Society Handbook specify the management of the Society's publications.

**Section 2.** Publications undertaken by the Society shall be subject to IEEE policies and to any further guidance or controls prescribed by the AdCom or its duly appointed committees. The Society shall be responsible for the financial aspects of its publication program.

**Section 3.** The President, with the advice and consent of the AdCom, shall appoint editors as may be required to implement the publication program. The duties of an editor, and the compensation, if any, shall be prescribed in the Bylaws and Society Handbook.

## **ARTICLE VII – EMBS Administrative Committee**

**Section 1.** The EMBS Administrative Committee (AdCom) is the governing body of the Society.

**Section 2.** The twenty four (24) voting members of AdCom shall consist of:

- i) Five representatives from geographical zones as specified in the Bylaws
- ii) Five technical representatives of the society elected "at large"
- iii) Five practitioner representatives of the society elected "at large"
- iv) One Student representative elected "at large"
- v) One Young Professional representative elected "at large"
- vi) President
- vii) President Elect or Past President (whichever position is current)

- viii) VP Financial Planning
- ix) VP Member & Student Activities
- x) VP Publications
- xi) VP Conferences
- xii) VP Technical Activities

**Section 3.** Non-voting members of the AdCom shall consist of:

- i) VP Elect / VP Past Finance
- ii) VP Elect / VP Past Member & Student Activities
- iii) VP Elect / VP Past Publications
- iv) VP Elect / VP Past Conference
- v) VP Elect / VP Past Technical Activities
- vi) Past President (second year)
- vii) EMB sponsored publication EiC's
- viii) EMBC appointed Conference Chairs
- ix) Society Executive Director

The AdCom may also include "Ex-officio" members, as specified in the Bylaws. At least 70% of the voting members of AdCom shall be elected members.

**Section 4.** The terms of office of the seventeen (17) elected members of the AdCom shall be three years with one third of the members being elected every year to preserve continuity, as described in the Bylaws. The term of the student member and the Young Professionals member shall be two years. Only two consecutive full terms are permitted but eligibility is restored automatically after a lapse from office of one year.

**Section 5.** The newly elected officers and the members of the AdCom shall assume office on the first of January following election, unless a different date is provided by Bylaws.

**Section 6.** The AdCom may appoint committees, as it deems necessary to meet the mission of the Society as provided in the IEEE rules and regulations. The nature of such subgroups and the supervision of the subgroup's affairs other than by the AdCom shall be prescribed in the Bylaws and / or Society Handbook as needed.

**Section 7.** AdCom members from the five geographical zones may act as EMBS representatives on international bodies within those zones, as appointed by the President.

**Article VIII. Officers**

**Section 1. The Society officers shall be:**

- President
- Vice-President for Conferences
- Vice-President for Publications
- Vice-President for Member and Student Activities
- Vice-President for Financial Planning
- Vice-President for Technical Activities
- President-Elect and Past President

The Society Handbook and Bylaw's specify the title and responsibilities of each vice president.

**Section 2. President**

- a) The President is the presiding officer of the EMBS Society.
- b) The President shall serve as an ex-officio (having voting rights, in accordance with Robert's Rules of Order) member of all committees within the Society, except where prohibited in the Bylaws.
- c) The President shall serve as a member of the IEEE Technical Activities Board (TAB) and represent the Society on the TAB. Alternates may be designated in accordance with IEEE procedures and the procedures defined in the TAB Operations Manual.
- d) The Past President or President Elect (whichever is current) shall act on behalf of the President in the absence of the President.

### **Section 3. Terms of Service**

The term of service shall be 4 years for all officers, consisting of:

One year as Officer Elect,  
Two years as Officer, and  
One year as Past Officer.

Upon approval by the AdCom, terms of service shall progress as follows:

The President Elect serves alongside the President for one year to ensure continuity of initiatives and strategic plans; after one year she / he becomes the President; after two years she / he becomes the Past President and shall assist the succeeding President during her or his first year.

This pattern of overlap is the same for all Vice-Presidents. Thus, for each elected officer, she / he will overlap with the current office holder for 1-year. As past officer, she or he will overlap with the current/new officer for 1-year.

The Society Executive Committee, hereinafter referred to as the ExCom, will consist of the President and the Vice-Presidents and will include both the President Elect and Past President (for two years). However, it will not include Vice Presidents Elect or Past Vice Presidents.

All officers shall have a limit of service in a given office of one term. The AdCom shall elect officers of the Executive Committee (the President-Elect and the Vice Presidents-Elect) from its current and previous members (elected or appointed) who have served as AdCom or ExCom members within the previous eight (8) years.

If a candidate for any of these offices (President-Elect or one of the Vice Presidents Elect) cannot be found among those serving on ExCom during the previous eight years, then candidates may be chosen from those who have served on ExCom during the previous ten (10) years.

**Section 4.** Election of Officers (ExCom) The President, Vice-President for Conferences and the Vice-President for Member and Student Activities shall be elected to begin their Elect terms in even numbered years and their full office terms in the following odd numbered years. The Vice-President for Publications, the Vice-President for Financial Planning, and the Vice President for Technical Activities shall be elected to begin their elect years in odd numbered years and their full terms in the following even numbered years.

**Section 5.** The duties and responsibilities of the officers shall be defined hereunder and, in the Bylaws, and as delineated by the AdCom and Society Handbook.

**Section 6.** The President shall supervise the affairs of the Society, shall make known to all AdCom members the duties of all the officers and other members of the AdCom, and shall speak for the Society on all matters. The President shall preside at meetings of the AdCom and ExCom and at general meetings of the Society and have, such other powers and perform such other duties as may be provided in the Society's Bylaws or as may be delegated by vote of the Society AdCom. The President shall have no vote except if the vote is by secret ballot or unless the President's vote can change the outcome of a vote that is tied. In the President's absence or incapacity these duties shall be performed by the Past President or President-Elect whichever position is current.

**Section 7.** The President shall be an ex-officio member (non-voting) of all Committees of the Society. The President is a member of the IEEE Technical Activities Board and when notified of a meeting of said Board, the President shall insure representation of the Society at such a meeting by attending, or by designating an alternate in accordance with the the procedures outlined in the TAB Operations Manual.

**Section 8.** The AdCom may establish standing or ad-hoc committees as prescribed in the Bylaws, including both technical and functional committees. Technical Committees (TC) may be established, dissolved, or modified as needed to develop specific areas in a field of interest. The Technical Committees chairs are selected and managed according to the Society Handbook. The President shall appoint a Chair for other standing and ad hoc Committee as well as appoint EMBS representatives for IEEE and non-IEEE / EMBS entities. All such appointments to committees and similar posts will be for a term of one year, unless otherwise specified in the Bylaws or Society Handbook or until successors are appointed, or the committees are dissolved by AdCom.

**Section 9.** AdCom shall have full / open access to any and all financial transactions / expenditures of the society and current, future and any and all past expenditures. Financial transparency should be maintained by the VP Finance/Treasurer.

**Section 10.** No officer or IEEE representative thereof shall have the authority to contract debts for, pledge the credit of, or in any way bind the IEEE or EMBS, except in accordance with a previously approved budget by AdCom.

**Section 11.** The Secretary shall be responsible for sending out notices of AdCom meetings and other notices, according to the plans delineated by the AdCom or laid down by the Society Bylaws. The Secretary shall keep the records of the AdCom and general meetings of the Society and shall make such reports of activities as may be required by the AdCom and the IEEE Bylaws.

The Secretary shall prepare detailed minutes of the AdCom meeting and shall forward the minutes to the President and ExCom members within 30 days of the conclusion of each AdCom and ExCom meeting for review and approval. The Secretary and President shall be responsible for insuring that copies of all society records / meeting minutes are forwarded to IEEE headquarters for archival storage. Further duties of the Secretary are defined in the Society Handbook.

#### **ARTICLE IX: Election of Administrative Committee**

**Section 1.** The nominating procedures shall include provision for petition by Society members to place names on the ballot.

**Section 2.** Election of members to fill vacancies, which occur as a result of, expired (or vacant unexpired) terms on the AdCom shall be by ballot as prescribed in the Bylaws.

**Section 3.** Within-term vacancies on the AdCom shall be filled as specified in the Bylaws.

#### **ARTICLE X: Meetings of the Administrative Committee**

**Section 1.** An in-person meeting of the AdCom shall be held once yearly at the EMBC annual meeting. Meetings of the AdCom may be also be called by the President of the Society on a discretionary basis, or upon request by at least three other members of the AdCom with at least twenty days notice. Two supplemental AdCom meetings shall be carried in the Fall and Spring periods.

**Section 2.** As specified in the Bylaws, all business / voting / participation of the AdCom, including supplemental meetings, may be handled by such means as video-conference, electronic mail, telephone, or written correspondence where, in the opinion of the President, matters requiring action can be adequately handled in that manner.

**Section 3.** A simple majority of the elected members of the AdCom shall constitute a quorum at any meeting. All voting members of the AdCom shall have a single vote. Each ex-officio member shall have a vote only as provided by the Bylaws.

**Section 4.** Vote of the Presiding Officer The presiding officer of the AdCom shall have no vote on the AdCom except if the vote is by secret ballot or unless the presiding officer's vote can change the outcome of the vote.

#### **ARTICLE XI: Vacancies**

Section 1. The existence of a vacancy on the AdCom will be determined by the AdCom or in accordance with the Bylaws.

Section 2. The Bylaws specify how vacancies on ExCom will be filled.

#### **ARTICLE XII: Nominations, Elections and Appointments**

Section 1. The Bylaws specify how members of the AdCom are nominated and elected.

Section 2. The Bylaws specify how officers of the Society are nominated and appointed.

#### **ARTICLE XIII: Amendments to the Constitution**

**Section 1.** Proposed Amendments: Amendments to this Constitution shall be passed by a vote of the voting members of the Society. They may be proposed by the AdCom or by petition.

**A.** For an amendment proposed by the AdCom, a resolution adopted by vote of at least two-thirds of those present at a regularly constituted meeting of the AdCom is necessary to submit a proposed amendment to the voting members of the Society.

**B.** For an amendment proposed by petition, a petition must be signed by at least two percent of the total number of voting members of the Society as listed in the official membership records of the IEEE at the end of the previous year, but in no case shall the number be less than one hundred (100).

**C.** The proposed amendment shall then be forwarded to the IEEE Technical Activities Department, which will review the documentation and coordinate approval by the Vice President of Technical Activities

**Section 2.** Approval by the Society Voting Members: Approval for any proposed amendments shall follow this procedure

**A.** Any proposed amendments shall be publicized in the Society Transactions and/or on the Society web site, or by direct mailing (via paper or electronic means) to all Society members, with notice that the amendment becomes effective unless at least ten percent of the Society members object within 30 days after the publication or distribution of such notices.

- B.** If such objections to any proposed amendments are received, then a vote by members of the Society must take place.
- C.** A copy of all of the proposed amendments must be mailed (via paper or electronic means/ email) to all members of the Society at least 30 days before the date appointed for return of the ballots.
- D.** The ballots must carry a statement of the time limit for their return to the IEEE Office. When a vote of the entire Society membership is made necessary, approval of the proposed amendments by at least two-thirds of the returned ballots is necessary for their enactment / approval.

**Section 3.** If by amendment, officers and officers-elect are changed in status or the number of AdCom members is reduced, each officer and each AdCom member shall continue to serve until the term expires.

Original Bylaws approved: 5/5/53

**Amended:** 3/23/59, 12/11/63, 7/22/65, 11/1/67, 7/29/68, 2/19/71, 8/14/72, 3/26/73, 9/21/75, 2/26/75, 5/14/76, 8/1/78, 4/11/86, 11/8/89, 10/30/91, 4/12/92, 10/28/92, 9/15/94, 3/25/95, 9/18/95, 12/31/96, 6/01/99, 3/25/2000, 4/22/02, 5/2/03, 09/16/03, 01/31/04, 04/09/05, 09/26/06, 04/22/07, 08/20/08, 10/2010, 8/30/2011, 10/20/2013; 12/18/2015, 4/28/2020

## BYLAWS

These Bylaws are supplemented by a Society Handbook. The Society Handbook provides rules, procedures, and detailed information to aid the AdCom and ExCom in its governance of the Society. Modifications to the Society Handbook shall be subject to the same rules as modifications to the Bylaws, except that no publicizing of the modifications shall be required.

### Definitions, Acronyms and Initials

**AdCom** Administrative Committee of the Society.

**Electronic transmission** Any form of electronic communication, such as e-mail, not directly involving the physical transmission of paper, that creates a record that may be retained, retrieved and reviewed by a recipient thereof, and that may be directly reproduced in paper form by such a recipient.

**EMB Society** Engineering in Medicine and Biology Society

**Member** where used in these Bylaws, the term “member,” when printed without an initial capital letter, includes all grades of membership.

**N&A** Nominations and Appointments

**Society** IEEE Engineering in Medicine and Biology Society

**TAB** IEEE Technical Activities Board

### Governing Documents

- A.** The principal governing documents for the IEEE EMB Society are (1) its Constitution, (2) its Bylaws, and (3) the Society Handbook.
- B.** Amendments to the Constitution shall be proposed, approved and adopted in accordance with the Constitution.
- C.** Modifications to the Bylaws shall be in accordance with the procedures set forth in the Constitution.
- D.** The Society Handbook provides rules, procedures, and detailed information to aid the AdCom and ExCom in its governance of the Society. Modifications to the Society Handbook shall be subject to the same rules as modifications to the Bylaws, except that approval is by majority vote, VP-TA (Vice President, Technical Activities) approval is not required, and no publicizing of the modifications shall be required.

In fulfilling its mission to advance diversity, the Society seeks to elect, nominate and identify exceptionally talented people from different racial, cultural, economic and ethnic backgrounds regardless of their gender, sexual orientation or disability status. Through effective and fully compliant affirmative action and equal opportunity policies of IEEE, EMBS strives to recruit members of groups traditionally underrepresented and to increase the number of minority and women candidates in its membership, including leadership positions such as officers, Editors-In-Chiefs of its journals, and on its Technical Committees.

Building a diverse community shall be sustained by commitment, concerted effort, and the attention of all EMBS members. These By-Laws express the Society's commitment to the realization of inclusion and excellence as a core value.

## **1. Membership**

### **1.1 Members**

Society membership is available to all IEEE members. Categories of Society membership shall be in accordance with IEEE Bylaws and EMBS Bylaws.

### **1.2 Affiliates**

In addition, members of designated societies who are not members of IEEE are eligible for automatic election to Society membership. Such designated societies are those that have been recognized for this purpose by specific action of the AdCom. A list of designated societies shall be maintained by the Secretary of the Technical Activities Board of IEEE. Affiliates may vote in the elections for members of the AdCom and may hold office on the AdCom but may not hold office as the President-Elect or the President.

### **1.3 Students**

Student members of the IEEE may join the Society as Student Members.

### **1.4 Privileges**

1. Members who hold the grade of Student Member, Graduate Student Member, Senior Member, or Fellow in the IEEE shall have all the rights and privileges of membership within the Society unless otherwise specified in these Bylaws.
2. Student Members shall have all the rights and privileges of membership within the Society with the exception of the right to vote on matters presented to the Society membership. Associate Members and Affiliates shall have all the rights and privileges of membership within the Society with the exception of the right to vote on matters presented to the Society member.

## **2. Administrative Committee:**

The activities of the Society shall be managed by an Administrative Committee, hereinafter referred to as the AdCom. AdCom members are responsible for the stability and longevity of the Society in all areas of interest (including conferences, publications, finances, technical activities, and member and student activities). They are also charged with providing strategic guidance of the Society regarding the introduction of new products / programs / technical activities and benefits, and shall participate fully in all discussions and vote on to approve all related issues.

Officers who hold VOTING positions must resign those AdCom positions at the time they assume their duties as officers of the Society. No VOTING member of the AdCom may concurrently hold more than one AdCom position. No member of the ExCom may concurrently hold more than one ExCom position. All officers of the Society shall be ex-officio members of the AdCom with vote during their terms of office.

In order to ensure a continuously active AdCom, elected AdCom members who miss two consecutive meetings shall be dropped from membership in the absence of extenuating circumstances submitted to the Secretary in advance of the next regular meeting.

### **2.1 Rules of Order**

Roberts Rules of Order (latest revision) shall govern conduct of AdCom meetings on all matters not otherwise specified in these Bylaws or the Constitution.

### **2.2 Responsibilities of the Administrative Committee**

In addition to attending the AdCom meetings, AdCom members are expected to participate in committee activities, submit reports to the archives for committees that they chair and/or submit reports as delegates or representatives of EMBS. AdCom members should address the needs of EMBS members in their geographical regions and maintain contact with local Chapters. AdCom members are responsible for the financial stability and longevity of the Society in all areas of interest (including conferences, publications, finances, technical activities, and member and student activities), strategically guide the Society regarding new products and benefits, and participate fully in discussions and voting on all related issues.

## **3. Nomination and Election of the Administrative Committee:**

### **3.1 Nominating Committee**

The Chair of the Nominating Committee shall be either the Past-President or the most recent Past President. If neither is available the immediate Past Chair of the Nominating Committee shall be Chair. Chairs shall not be eligible to be elected to the AdCom during their

term of service. This committee shall consist of the Chair and six additional members of the Society approved by the ExCom, in addition to the Society President serving ex-officio without vote. At least three members of the Nominating Committee shall not be members of the current AdCom or ExCom. The Nominating Committee shall prepare a slate of qualified candidates for all vacancies for submission to the membership. All nominees listed must have agreed to serve if elected. These candidates shall include a full set of nominees in addition to such candidates as have been nominated by the petition process as set forth in the following paragraph. A member of the Nominating Committee may be nominated and run for a position for which such member's respective N&A Committee is responsible for making nominations only on the following conditions: (i) the nomination is not made by a member of the same N&A Committee and (ii) the member resigns from the N&A Committee prior to its first meeting of the year in which the nomination shall be made.

In accordance with Article VI, Section 1 of the Constitution, individual voting members of the Society may, by petition, propose names to be added to the ballot for any vacancy on the AdCom provided such nominations are made at least 28 days prior to the date of the election. For each elective office of the Society, individual voting members eligible to vote in such election may nominate candidates either by a written petition or by majority vote at a nomination meeting of the organizational unit, provided such nominations are made at least 28 days before the date of election. The number of signatures required on a petition shall be determined in accordance with IEEE Bylaws as follows. For all positions where the electorate is less than 30,000 voting members, signatures shall be required from 2% of the eligible voters. For all positions where the electorate is more than 30,000 voting members, 600 signatures of eligible voters plus 1% of the difference between the number of eligible voters and 30,000 shall be required.

Members shall be notified of all duly made nominations prior to the election. Prior to submission of a nomination petition, the petitioner shall have determined that the nominee named in the petition is willing to serve, if elected; evidence of such willingness to serve shall be submitted with the petition.

Signatures can be submitted electronically through the official IEEE society annual election website, or by signing and mailing a paper petition. The name of each member signing the paper petition shall be clearly printed or typed. For identification purposes of signatures on paper petitions, membership numbers or addresses as listed in the official IEEE membership records shall be included. Only signatures submitted electronically through the IEEE society annual elections website or original signatures on paper petitions shall be accepted. Facsimiles, or other copies of the original signature, shall not be accepted.

The number of signatures required on a petition shall depend on the number of eligible society voters, as listed in the official IEEE membership records at the end of the year preceding the election.

### **3.2 AdCom Nominations.**

Notices shall be sent to each member, affiliate and student member of the Society (by insertion in the Magazine or otherwise) of the name of the Chair of the Nominating Committee together with a call for recommendations of potential nominees. The petitioning procedure shall also be fully described.

### **3.3 Election of AdCom members.**

The 17 elected voting members of AdCom will be selected from the EMBS membership from:

## **5 Geographical zones**

- NA: North America (R 1-7) – 1 representative
- LA: Latin America (R 9) – 1 representative
- EU: Europe (per World Health Org) – 1 representative
- MEA: Middle East & Africa – 1 representative
- AP: Asia-Pacific (R 10) – 1 representative

**Technical Representatives – 5**

**Practitioner Representatives – 5**

**Student Representative (R1-10) - 1**

**Young Professionals Representative (R1-10) – 1**



The Student Representative will represent student interests, especially at the graduate and postdoctoral level.

The Young Professional Representative will represent the interests of our early career members as they transition from student to regular careers.

The Technical AdCom representatives are to be individuals who have shown significant career technical expertise as well as contributions to the organization and leadership of technical activities in the profession. Such leadership could include leadership within formally organized EMBS Technical Committees, equivalent committees in appropriate other organizations, or exceptional involvement in publications, conference and reviewing activities. The goal is that these individuals will represent and advocate for the technical strengths of EMBS.

Practitioner AdCom Representatives are to be individuals who have shown significant career achievement and leadership in clinical, industrial and governmental activities. Examples include medical doctors, engineers in industry, clinical engineers, government or non-academic policy makers (e.g. FDA), and those with experience commercializing biomedical devices. The goal is that these individuals will strongly represent and advocate for the biomedical application strengths of EMBS.

Both Technical and Practitioner Representatives will be **Member** grade or higher within EMBS.

AdCom representatives will serve a 3-year appointments and are eligible as a candidate for only one additional term. The society will elect one-third of the AdCom members every year and attempt to distribute this renewal evenly among the representative categories.

Election to fill vacancies in the AdCom shall be by ballot distributed to the membership in a timely fashion such that ballots will be returned for counting by October 31st of each year. For each Adcom position designated for a geographical area, the voters are the members from that area. Young Professional and Student members of the Society shall receive ballots for the Student and Young Professionals positions only. All Member grade and higher shall receive ballots for the Technical and Practitioner representatives. Ballots shall be returned to the office of the Technical Activities Board Secretary, or to the EMB Society AdCom Secretary, or to a third party vendor, who shall be responsible for counting the ballots and reporting the results to the Chair of the Nominating Committee. Election shall be based on the highest number of votes in each category; for Technical and Practitioner representatives, the electees will be taken in descending vote total order. Ties shall be broken by the AdCom.

The AdCom may fill vacancies temporarily if an elected member is unable to serve in office, through appointment by the President. The un-expired term shall be filled at the next regular election to the AdCom. The names of AdCom (elected or appointed) members shall be transmitted every year to the Chair of the TAB, and through that office, to the IEEE Executive Committee. Unless disapproval of such members is received within 60 days of such transmittal the election shall become final.

### **3.4 ExCom Nominations**

The Nominating Committee shall propose to the AdCom before the fall meeting of odd numbered years the names of the candidates for the office of President-Elect, Vice-President for Conferences, and the Vice-President for Member and Student Activities and in the fall of even numbered years the names of the candidates for the office of, the Vice-President for Publications, the Vice-President for Financial Planning and the Vice President for Technical Activities.

### **3.5 Student eligibility**

For purposes of election of a student member to the AdCom, a student shall be defined as a Society member who is registered in a college or university either as a full-time undergraduate or as at least a one-half time graduate student pursuing a degree in biomedical engineering or a related field. The student may be either an IEEE member or an IEEE student member.

### **3.6 Young Professionals member eligibility**

For purposes of election of a Young Professionals member to the AdCom, a Young Professionals member shall be defined as a Society member who fulfills the requirements of the Young Professionals (IEEE Member who has received their first professional degree within the last fifteen years)

## **4. Officers**

**4.1** The AdCom at its Meeting in the fall of odd numbered years shall elect the President-Elect, the Vice-President Elect for Conferences, and the Vice-President Elect for Member and Student Activities and in the fall of even numbered years shall elect the Vice-President Elect for Publications, the Vice-President Elect for Financial Planning, and the Vice-President Elect for Technical Activities for terms beginning on the succeeding January 1. The length of the terms for all positions shall be one year as Officer-Elect,

two years as full Officer, and one year as Past Officer for a total term of 4 years. As per the Constitution (Article IV, section 4) Vice-Presidents may compete for election after one cycle absence, while the office of President is non-renewable.

**4.2** *The Society Executive Director will be the Secretary of the Society* and a non-voting ex officio member of the AdCom.

**4.3** The Society Executive Director, as Secretary, shall be responsible for keeping the records of the AdCom. The Secretary shall prepare the minutes of the AdCom meeting and shall forward the minutes to the President in a timely manner.

**4.4** The Vice-President for Conferences shall provide direction for the conference activities of the Society. He or she shall assume the Chair of the Conference Committee. He or she shall provide direction for planning, coordinating, and monitoring the annual conferences of the Society and all conferences co-sponsored by or affiliated with the Society.

**4.5** The Vice-President for Publications shall provide direction for the publications of the Society. He or she shall assume the Chair of the Publications Committee. This Vice-President shall consider, with the participation of the Publications Committee, the publication needs of the Society and shall propose to AdCom the creation, cancellation, expansion, or contraction of Society publications.

This Vice-President with the participation of the Publication Committee and the Editor of each Society-sponsored publication considers matters such as the designation and development of special issues and recommendation for a change in the number of published pages.

**4.6** The Vice-President for Financial Planning shall be the fiscal officer of the Society and shall plan and monitor all financial transactions of the Society. He or She shall chair the Finance Committee and direct the preparation of long-range financial projections and interaction with the IEEE Headquarters in such matters.

**4.7** The Vice-President for Member and Student Activities shall provide direction for the member and student services and the membership development activities of the Society. He or she shall assume the chair of either the Member Activities Committee or the Student Activities Committee at his or her discretion, shall recommend to the President a Chair for the alternate committee, and shall serve as ex-officio member of the alternate committee. This Vice-President, if he or she is not the Chair of the Member Committee, shall coordinate the publicity activities of the Society along with membership development activities, coordinate and facilitate local chapter development, and shall provide direction for activities such as updating membership application forms and membership brochures with the participation of the Chair of the Member Activities Committee. He or she, if not the Chair of the Student Activities Committee, shall, with the participation of the Chair and the Student Activities Committee, coordinate student activities, and facilitate Student Branch Chapter and Student Club development. This individual shall provide direction for activities such as the annual student paper and design competitions.

**4.8** The Vice-president for Technical Activities shall chair the Technical Activities Committee. He or she shall coordinate the activities of all the technical committees, the Clinical Engineering Committee, the Emerging Technologies Committee, the Standards Committee, and the Distinguished Lecturer Program Committee.

**4.9** The Past-President shall assume the Chair of the Nominating Committee for two (2) years after his/her term as President, unless another delegate is accepted by ExCom. In the President's absence or incapacity, the Past President or President-Elect, whichever is active, shall perform his or her duties.

**4.10** The President-Elect shall perform duties as designated by the President. Normally this will include at least one special project of relevance to the Society as a whole. The President-Elect or a delegate appointed by the President shall coordinate all Society activities related to transnational and/or inter-society activities. This will include determining the general guidelines for such interactions, formulating the agenda for the specific activities, and representing the Society in communications with other professional organizations. In the absence or incapacity of both the President and the Past-President, the duties of the President shall be performed by the President-Elect.

**4.11** Vice-Presidents-Elect will shadow the current Vice-Presidents (during their second year) to assist and learn the duties of the position and to ensure a smooth transition at the end of the year. Past Vice-Presidents will assist current Vice-Presidents (during their first year) also so as to ensure smooth transition.

## **5. Meeting of Administrative Committee**

**5.1** The AdCom shall hold an Annual Meeting each year. In addition, two or more AdCom meetings may be held through a virtual conference mechanism each year. Ballots for elections and motions to pass laws may be conducted through virtual mechanisms ensuring voter anonymity.

**5.2** No ordinary meeting of the AdCom shall be held for the purpose of transacting business unless each member shall have been sent notice of time and place of such meeting in person or virtually, 30 days prior to the scheduled date of the meeting.

- a. Except as otherwise noted, the vote of a majority of the votes of the members present and entitled to vote at the time of vote, provided a quorum is present, shall be the act of the AdCom or any committee thereof.
- b. The AdCom or any committee thereof may meet and act upon the vote of its members by any means of telecommunication. The normal voting requirements shall apply when action is taken by means of telecommunications equipment allowing all persons participating in the meeting to communicate with each other at the same time.
- c. The AdCom or any committee thereof may take action without a meeting if applicable (e.g., e-mail voting may be used). An affirmative vote of a majority of all the voting members of the AdCom or any committee thereof shall be required to approve the action. The results of the vote shall be confirmed promptly in writing or by electronic transmission. The writings or electronic transmissions shall be filed with the minutes of the proceedings of the AdCom or any committee thereof. "Electronic transmission" means any form of electronic communication, such as email, not directly involving the physical transmission of paper, that creates a record that may be retained, retrieved and reviewed by a recipient thereof, and that may be directly reproduced in paper form by such a recipient.
- d. Voting. Individuals holding more than one position on the AdCom or any committees thereof shall be limited to one vote on each matter being considered by the AdCom or committee.
- e. Proxy voting is not allowed.

**5.3** A Society ExCom shall be comprised of all the officers of the Society: namely, the President, the President-Elect alternating with the immediate Past-President, the Vice-President for Conferences, the Vice-President for Publications, the Vice-President for Member and Student Activities, the Vice-President for Financial Planning, and the Vice-President for Technical Activities. The ExCom will, if required, manage the affairs of the Society between AdCom meetings, with the consent of the AdCom. Minutes of all ExCom meetings shall be distributed to the AdCom members in a timely manner.

#### **5.4 Removal of a Member**

1. Vote to Remove an Appointed Member of the Society [Governing Body] or Committee. A member of a Society [Governing Body] or committee may be removed as a member of that Board or Committee, with or without cause, by affirmative vote of two-thirds of the votes of the members of the appointing body present at the time of the vote, provided a quorum is present, to remove such Board or Committee member.
2. Vote to Remove an Elected Member of the Society [Governing Body]. An Officer/Elected Member elected by the voting members of IEEE [Organizational Unit] may be removed from office, with or without cause, by a vote of the voting members of the IEEE [Organizational Unit] who elected that person, within thirty days following either:
  - (a) the affirmative vote of two-thirds of the votes of the members of the [Governing Body] present at the time of the vote, provided a quorum is present, on a motion to remove such individual, or
  - (b) the receipt by IEEE of a petition signed by at least 10% of the total number of voting members in the society moving for the removal of such individual, a ballot on such motion shall be submitted to the voting members of the society. If a majority of the ballots cast by the voting members for or against such motion are to remove such individual, the individual shall be removed from such positions.

#### **6. Publications**

The Society shall sponsor such publications as are recommended and approved by the AdCom. The President, with the advice and consent of the AdCom, shall appoint the Editor for each publication.

**6.1** Term of Office: Editors-in-Chief (EiC) are appointed for 3-year terms by the President, with the consent of AdCom. An EiC shall serve normally no more than two such three-year terms. A third term may be added under special conditions with the permission of AdCom. An EiC may be removed before the expiration of his/her term by a two-thirds vote of AdCom.

**6.2** The Editors-in-Chief of all publications sponsored by the EMBS Society and the EMBS liaison Editor to the IEEE Press are Ex-Officio members of AdCom without vote unless they already hold an elected position on AdCom. In the latter case, the editor will instead keep his elected AdCom position, so long as bylaw 8.5 is satisfied.

**6.3** Editors-in-Chief (or in the case of Co-Editors, one or both) of all EMBS publications and the EMBS liaison Editor to the IEEE Press are full voting members of the Publication Committee and are expected to report in person and in writing on the editorial activities of their publication at all Publication Committee meetings and associated AdCom meetings. Failing to appear personally at two consecutive AdCom meetings without substantive reason is grounds for a recommendation to AdCom for removal from office via the procedure outlined in Bylaw 5.4.

**6.4** The TRANSACTIONS/JOURNAL Editors shall be responsible for implementing the publications program defined by the AdCom or its duly appointed Publications Committee. In accordance with the guidance of this Committee and the general IEEE rules and regulations, the TRANSACTIONS Editors shall designate associate editors, special guest editors, and manuscript reviewers.

**6.5** Editorial expenses and any compensation shall be subject to review and approval by the AdCom.

**6.6** Editors-In-Chief shall not have access to review materials for his/her own paper submissions. Any submission by an EiC to the journal in which he/she is serving as EiC shall be handled by a special editor appointed by the EiC of the journal and the decision of the special editor is final.

## **7. Society Funds**

The Society may raise funds as specified by Article IV of the Constitution and the IEEE Bylaws and rules and regulations.

**7.1** The Society fees shall be adopted by a two-thirds majority vote of the members of the AdCom.

**7.2** The AdCom through a budgeting process (see the Handbook for the responsibilities of the VP Finance and Fiscal Committee) shall establish the membership dues as well as expenses for services rendered to the Society.

**7.3** AdCom will also be responsible for approving all expenditures and obligations of the Society. The VP Finance will work closely with the EO to ensure there is timely preparation, accounting and approval of all Society expenses (see the Handbook). All financial reports will be prepared by the Society EO and IEEE and presented in a transparent manner to members of the AdCom.

**7.4** IEEE Headquarters shall act as bursar for all Society funds except as specified hereunder. All other fiscal affairs shall be handled through the office of the IEEE Technical Activities Department.

**7.5** The general committee for a symposium or technical conference may, with the advice and consent of the AdCom, authorize the symposium treasurer or fiscal officer to open accounts as needed to be used for the deposit and disbursement of funds related to the symposium or technical conference. In each case, the AdCom shall be advised of the name of the bank, the anticipated size of the account, the names of the account signatories, and the arrangements for insurance and for bonding. Symposia or technical conferences sponsored jointly with other technical societies shall be exempt from this provision whenever a charter of operations with these societies shall have been approved by the AdCom and IEEE. The Conference Organizers with the approval of AdCom will also provide input into the selection of the PCO (Professional Conference Organizer) for the Conference, using guidelines provided in the Handbook.

**7.6** For other special circumstances, such as co sponsorship of a symposium or technical conference, the AdCom shall make prudent arrangements to safeguard any funds that may be provided by the Society.

**7.7** No member of the ExCom or voting members of the AdCom may receive a salary in any form from the Society or IEEE or be a private contractor to the Society or IEEE. All expenses incurred by members of ExCom for the benefit of the Society should be made available in a transparent manner and properly justified.

**7.8** Members of ExCom and Society employees shall be required to disclose any Conflict of Interest (COI) with any private contractor and / or personal / familial relationships that can be considered as a conflict of interest. All COI's should be shared openly with AdCom members.

## **8. Committee Chairs**

Chairs of Standing Committees, subcommittees, and Ad Hoc committees shall report to the AdCom at its Annual Meeting in person or by mail or delegate such responsibility. Committee Chairs shall have no vote on the committee he/she is chairing except if the vote is by secret ballot or unless the Chair's vote can change the outcome of the vote.

## **9. Standing Committees**

New Standing Committees shall be appointed by the President with the advice and consent of the AdCom. The terms of office of the Chairs of each Standing Committee shall be for one year or until a successor is appointed unless a different term of office is designated in the Bylaws or by the AdCom. The immediate past Chair shall serve as a member of the Committee for at least one year. Standing Committees include the following:

### **9.1 Awards Committee**

The Awards Committee shall identify and recommend those individuals it deems worthy of special recognition or awards, both for those awards offered or administered by the Society as well as other IEEE awards for which it believes it has identified appropriately

qualified candidates from the membership of the Society. It will also, under appropriate circumstances, recommend Society recognition and special awards for individuals making contributions that do not fulfill the requirements and regulations governing existing awards. *The Committee shall report to the Vice President of Technical Activities.*

### **9.2 Clinical Engineering Committee**

The Clinical Engineering Committee shall identify and address issues pertaining to the professional development of practicing clinical engineers and clinical engineering students, including their education and continuing education needs. The Committee shall review and recommend requirements for credentials and professional engineering registration. The Committee shall facilitate intra- and inter-disciplinary communication among health care professionals and provide information on medical device legislation and regulations. The Committee shall provide advice and assistance to the Standards Committee in formulating standards and shall assist in formulating policy positions on the development, application and operation of medical equipment. The Committee shall provide clinical engineering information and advice to the Conference and Publications Committees when appropriate. *The Committee shall report to the Vice-President for Technical Activities*

### **9.3 Conference Committee**

The Conference Committee shall meet in conjunction with each regularly scheduled EMBS AdCom meeting. It shall assist Conference Chairs in planning and coordinating the conferences of the Society, and monitor and evaluate Society conferences, Symposia and Summer Schools and conferences co-sponsored by the Society. On the basis of its findings, it shall recommend to AdCom actions intended to enhance the effectiveness of subsequent conferences. It shall review conference budgets and technical plans and prepare its recommendation for approval by AdCom. The Committee shall be chaired by the Vice-President for Conferences, and include the two past conference and program chairs, the present conference and program chairs, the duly appointed conference and program chairs of future conferences, and the Editor-in-Chief of the Conference Editorial Board. Additional members may be appointed by the President.

The Editor-in-Chief (EIC) of the Conference Editorial Board is appointed for a two-year term by the President, with the consent of AdCom. The EIC shall serve normally no more than two consecutive two-year terms. The EIC may be removed before the expiration of his/her term by a two-thirds vote of the AdCom. The EIC is an Ex-Officio member of AdCom without vote. Editorial expenses and any compensation shall be subject to review and approval by the AdCom. *The Conference Committee and the EIC of the CEB shall report to the Vice-President Conferences.*

### **9.4 Distinguished Lecturer Program Committee**

The Distinguished Lecturer Program Committee shall be responsible for maintaining the list of qualified speakers for the Society's Distinguished Lecturer Program according to the guidelines established by the AdCom. This Committee shall be comprised of eight members, all of whom are members of the Society: the Chair of the Member and Chapter Activities Committee (ex-officio), the Student Representative (ex-officio), three Senior Members or Fellows, and three other members of the Society who may or may not be Senior Members or Fellows. This Committee shall report any additions or deletions to the list of Distinguished Lecturers at the Fall Meeting of the AdCom each year. *The Committee shall report to the Vice-President Technical Activities.*

### **9.5 Education Committee**

The Education Committee shall address biomedical engineering matters pertaining to undergraduate, graduate and continuing education, including the formulation and updating or recommendations for educational standards and practices. The Committee shall coordinate its activities with the IEEE Educational Activities Board in matters relevant to the Board. *The Committee shall report to the Vice-President for Member and Student Activities.*

### **9.6 Emerging Technologies Committee**

The Emerging Technologies Committee shall investigate which biological and biomedical engineering technologies are likely to become important within the next 10 years and shall propose strategies for the Society to use in order to play an important role in these new technologies as they emerge. *The Committee shall report to the Vice-President for Technical Activities.*

### **9.7 Ethics and Professional Responsibility Committee**

The Ethics and Professional Responsibility Committee shall promote discussions of issues pertinent to the ethical and professional responsibilities of Society members, and shall arrange to disseminate their findings to the Society members. The Committee may commission or draft articles for Society publications and organize special sessions at the Society's Annual Meeting or other appropriate conference.

This Committee may draft statements pertaining to the ethical responsibility of biomedical engineers for AdCom approval. The Committee shall consider IEEE statements of ethical responsibilities for engineers, and if appropriate, extend them to respond to the special circumstances of members of the Society. The Committee shall not undertake to consider or adjudicate cases of alleged

misconduct or unethical actions of members brought to their attention. The Committee shall refer all such matters to the appropriate entities within the IEEE for their consideration. *The Committee shall report to the Vice-President for Member and Student Activities.*

#### **9.8 Fellows Committee**

The Fellows Committee shall solicit nominees for Fellow Grade of IEEE from the Society membership, deliberate on the qualifications of those proposed and recommend suitable candidates to the Fellows Committee of IEEE. The Committee shall review the decisions of the IEEE Fellows Committee in order to evaluate whether or not equitable consideration has been given to Society member nominees. *It shall report its findings to the President and to AdCom.*

#### **9.9 Finance Committee**

The Finance Committee shall prepare the annual budget, develop long range financial projections, and propose new mechanisms for generating income for the Society. This committee shall be chaired by the Vice-President for Financial Planning who shall appoint additional members with the advice and consent of the President.

#### **9.10 Industry Relations and Professional Activities Committee**

The Industry Relations Committee shall strive to improve participation by representatives of the medical engineering industry in Society activities.

The Committee through its meetings and communications with Society members and the medical engineering industry shall identify issues of mutual interest and programs to address these issues. The Committee may study an issue, make recommendations to AdCom and, with approval by AdCom, implement the recommendations. Whenever appropriate, the Committee will recommend that action items be referred to other established committees of the Society or of IEEE. *The Committee shall report to the Past-President or President-Elect, whichever is active.*

#### **9.11 Member Activities Committee**

The Member Activities Committee in coordination with the IEEE Membership Committee shall initiate membership drives to increase Society membership. The Committee shall consider student and regular member requests (e.g. speakers, coordination of events) and shall respond appropriately. The Chair shall be either the Vice-President for Member and Student Activities or his or her designee. In the latter case the Chair shall report to that Vice-President.

#### **9.12 Nominating Committee**

The Nominating Committee shall consider the requirements of the Society offices to be filled by vote of the membership as specified in the Constitution and Bylaws. It shall consider the qualifications of candidates for office, and it shall submit the names of at least one nominee for each vacancy in accordance with the provisions of paragraph 3.1 of the Bylaws. It shall consider in like manner potential candidates for the offices specified in paragraph 3.4 of the Bylaws and shall propose a list of candidates for each office in accordance with that Bylaw. The Committee shall be chaired by the Past-President, though the President may make an alternate appointment with consensus from ExCom as specified in paragraph 3.1 of the Bylaws. *No member of the nominating committee may be a candidate for office.*

#### **9.13 Publications Committee**

The Publications Committee shall meet in conjunction with each regularly scheduled EMBS AdCom meeting. Under advisement from the Editors of Society-sponsored publications, it shall consider matters such as the designation and development of special issues, and recommendations for changes in the number of published pages.

The Publications Committee shall have among its voting members at least three (3) elected AdCom representatives who are not Editors-in-Chief, the past V.P. Publications and the current V.P. Finances. The Chair of the committee may appoint additional voting members who are not AdCom representatives, so long as they are members of the EMBS in good standing. All Editors-in-Chief of EMBS sponsored publications and the EMBS liaison Editor to the IEEE Press are full voting members of the Publications Committee. *The Vice-President for Publications shall chair the committee.*

#### **9.14 Standards Committee**

The Standards Committee shall recommend standards of engineering practices to be followed in the field of Engineering in Medicine and Biology by the electrical, electronic, and allied industries, and by health care providers. In relevant areas this Committee shall coordinate its activities with the IEEE Standards Board and other appropriate standards committees. The Chair of this Committee or his or her designee shall represent the Society on the IEEE Standards Board. *The Committee shall report to the Past-President or President-Elect, whichever is active.*

### **9.15 Student Activities Committee**

The Student Activities Committee shall promote plans and implement student activities and programs, including technical and professional enrichment for graduate and undergraduate students. Through these activities and programs, the Committee shall recognize and respond to students' interest and involvement in the Society. The Chair shall be either the Vice-President for Member and Student Activities or his or her designee. In the latter case the Chair shall report to that Vice-President.

### **9.16 Technical Activities Committee**

The Technical Activities Committee shall oversee and coordinate the activities of the various Technical Committees. The Technical Activities Committee shall coordinate the formulation of technical information statements in response to requests by the AdCom, IEEE, and other public entities. It will evaluate the needs of the society and propose to AdCom the creation, cancellation, expansion, or contraction of any Society technical activities.

The Committee shall provide support and technical assistance to the EICs of EMBS sponsored and co-sponsored Journals, the EIC of the Conference Editorial Board, and the Conference Program chairs of EMBS sponsored and co-sponsored Conferences; work with the EMBS Awards Committee to identify technical experts as candidates for Society Awards and Distinguished Lecturer positions and to identify technical experts to represent EMBS for presentations and media interviews.

*This Committee shall be chaired by the Vice President for Technical Activities.*

### **9.17 Constitution and Bylaws Committee**

The Constitution and Bylaws Committee shall consider all changes proposed by any EMBS member and report on their relevance. It shall draft and present to the AdCom all proposed changes to the Constitution and Bylaws of the Society. It shall be responsible for following the procedures outlined in Article IX, Section 2 of the Constitution. The Secretary shall be responsible for reporting changes in the Society's Constitution and Bylaws to IEEE headquarters. *The Committee shall be chaired by the Past-President, though the President may make an alternate appointment with consensus from ExCom.*

### **9.18 History Committee**

Working closely with the IEEE History Center and in consultation with the ExCom, AdCom, the Editors and technical conference organizers, the EMBS History Committee leads, oversees and implements archival projects which document the evolution of the field of Biomedical Engineering and mark the historical milestones achieved by the Society and its members. Historical projects are viewed as an integral part of the technical activities and the public education services of EMBS. The Historian has responsibility for their promotion within IEEE, in the broader engineering community as well as in the public domain.

The Chair of the EMBS History Committee is recognized as the EMBS Historian and serves a three-year term. The term is renewable.

*The Historian reports to the President and submits activity reports to the AdCom in time for the Fall and Spring meetings.*

### **9.19 Infostructure Committee**

The Infostructure Committee is mandated to oversee the design, implementation and management of an integrated information infrastructure to support the technical activities of the Society.

The Committee membership shall comprise the Chair, the EMBS Executive Director (ex-officio with vote) and three additional members, each appointed by the chair in consultation with the VP-Conferences, VP-Members and VP-Publications. The Chair may appoint additional members as appropriate. The Chair reports to the President and submits activity reports to the AdCom in time for the AdCom Meetings.

### **9.20 Technical Committees (TCs)**

The Vice-President for Technical Activities will oversee the Technical Committees (TCs) as Chair of the Technical Activity Committee. TCs will be established and maintained to cover the technical interests of EMBS. The number of TCs and specific topics will evolve to represent the present scope of EMBS. TCs will provide guidance to the EMBS Annual International Conference and relevant Special Topics Conferences. TCs will be proposed by the Vice-President for Technical Activities for approval by AdCom. Membership of each TC shall include a chair, regular voting members and associate non-voting members. The Chair of each TC will be elected by the TC or appointed by the President to serve up to three years. Members and associate members of each TC will be appointed annually by the Chair of the TC, with approval by the voting members of the TC and in consultation with the VP for Technical Activities. An existing TC can be disbanded on the recommendation of the Vice-President for Technical Activities upon approval by AdCom.

### **9.21 Strategic Planning Committee**

The Past-President or President-Elect, whichever is active, will over see the Committee. The Committee will evaluate the current state of the society, evaluate current status for all aspects of the society, and propose plans for future development. Issues will be discussed with ExCom and with AdCom at its annual meetings.

### **9.22 Member Recognition Committee**

The Committee will actively solicit nominations for EMBS Awards, IEEE Awards, and identify candidates for higher grade membership. *The committee will report to the Vice-President for Members and Student Activities.*

### **9.23 Chapter Development Committee**

The Committee will actively support and encourage the development of new EMBS local chapters, assist existing chapters when needed, and offer suggestions for helping struggling chapters. *The committee will report to the Vice-President for Members and Student Activities.*

## **10. Special or Ad Hoc Committees**

**10.1** These may be created by the AdCom. For each such case, the AdCom shall specify the number of members the committee shall have and how the members shall be elected, and the terms of the members if other than for the life of the committee. Special or ad hoc committees may be reappointed after two years upon review of their activities by the AdCom.

## **11. Policy Statements.**

Decisions of the AdCom having lasting significance shall be recorded in the form of policy statements, which shall constitute attachments to the Bylaws. The Secretary shall be responsible for drafting and revising the Policy Statements in accordance with the decisions of AdCom and such drafts and revisions shall be submitted for approval at the next regular meeting of AdCom. A majority vote shall suffice for adoption of policy statements and revisions.

## **12. Local, Regional, and National Meetings**

Applications for endorsement of meetings shall be treated in accordance with the following Policy Statement.

**12.1** The Society shall sponsor each year at least one International Conference for which the Society has a share of the administrative responsibility and for which the Society's financial responsibility exceeds 50% of the total responsibility of the Conference.

**12.2** From year to year, the International Conference should be held in different IEEE regions to promote equal access by all members. The President of the Society shall propose to the AdCom the sites and approximate dates of future annual international conferences at least three years before the year of the proposed conference. Each site shall be approved by AdCom.

**12.3** A General Conference Chair is the Chief Operating Officer of each Annual Conference. A General Conference Co-chair can be appointed to aid the General Conference Chair, and act in his or her absence. The General Conference Chair, and General Conference Co-chair if used, shall be nominated by the President of the Society at least three years but not more than five years before the year of the Conference. Such nominations must be approved by AdCom. The General Conference Chair shall prepare and present to AdCom for approval a detailed budget for the Conference at the spring AdCom meeting in the year preceding the Conference. The General Conference Chair shall manage the Conference in accordance with that budget, after it has been approved by AdCom and by IEEE headquarters. The Conference Chair shall be the final arbitrator of all Conference matters except for technical program content.

**12.4** A Conference Program Chair shall organize the contents of the Conference Technical Program and shall be the final arbitrator of that Technical Program. A Conference Program Co-chair can be appointed to aid the Conference Program Chair, and act in his or her absence. The Conference Program Chair and Co-chair, if used, are to be nominated by the President of the Society at least three years but not more than five years before the year of the Conference. Such nominations must be approved by AdCom.

**12.5** The Society ExCom shall oversee the performance of the Conference General and Program Chairs. The Conference or Program Chair can be removed by a two-thirds vote of AdCom.

**12.6** The Society will offer a Student Paper Competition at any EMB conference provided that appropriate budgeting or sponsorship has been arranged to cover the cost of the Competition.

## **13. Executive Office**

Subject to compliance with all applicable IEEE Bylaws and Policies, the Society may create an Executive Office supported by IEEE staff. The Society's Executive Office functions to coordinate and carry-out the day-to-day operations, policies and procedures concerning all



aspects of the Society's business. The Office also maintains corporate memory and provides ongoing and ad hoc management reports/documents. In addition, the Society's Executive Office serves as one of the Society's primary points of contact for both members and IEEE staff.

Subject to compliance with all applicable IEEE Bylaws and Policies, the Society may determine the budget for the Executive Office. The staff is hired by the IEEE and all conditions of employment will be based upon IEEE Bylaws, staff policies and practices and all applicable laws and regulations. Office organization, job descriptions, IEEE staff policies and employment practices are available from the IEEE Human Resources Department.

The Society Executive Director is the most senior position on the IEEE staff that supports the Society, and as such, he/she manages and develops, personally and through subordinate management staff, the paid IEEE staff members that support the Society's operations and activities. The Society Executive Director supports the Society President, officers and volunteer leadership to achieve the Society goals. This Society Executive Director reports through the Managing Director, Technical Activities, to the IEEE Executive Director.

The EMBS Society Executive Director will be a member of the Society and will serve as an ex-officio member, without vote, of all boards and standing committees of the Society with the exception of the Awards, Fellows and Nominations Committees.

Any consultants or hired service providers contracted by the Society will be managed through the EMBS Executive Office, and shall follow the appropriate IEEE guidelines.

## **11. POLICY STATEMENTS**

### **A Endorsement of Meetings**

#### **A.1 Definitions/Types of Meetings**

##### **A.1.1 Local Meetings**

These are meetings which are organized by an IEEE Section and which are only brought to the attention of members of the IEEE Section concerned. Speakers may be invited from outside the geographical bounds of the section. No action or endorsement by AdCom is needed.

##### **A.1.2 Regional Meetings**

These are meetings which are planned and for which financial responsibility is assumed by an IEEE Region. Calls for papers and announcements seeking attendance should be sent to those residing inside the Region. Attendance is expected primarily from within that Region. Proposals for regional meetings shall be submitted to the AdCom for its approval.

##### **A.1.3 National Meetings**

These are meetings for which calls for papers and announcements are sent to all members belonging to the sponsoring IEEE Society. Oversight of financial responsibility is channeled through a national committee. Proposals for national meetings shall receive Committee approval is needed for both Regional and National meetings.

#### **A.2 Type of Endorsement**

The general guidelines for the endorsement of conferences by the EMBS will be as laid out in the IEEE Conference Organizers Manual.

##### **A.2.1 Cooperation**

The Society provides publicity through announcements in its Magazine and other appropriate publications and permits use of all or part of the Society Mailing Lists at the conference's expense. Cooperation of the Society and its constituent entities with any of the meetings cited in policy statement A implies that it will encourage its members to take part on an individual basis, through the contribution of papers for the technical program and attendance at technical sessions. The Society may supply mailing address labels of its membership at standard IEEE cost for such service. The Society will publicize the event through notices in its publication (i.e. TRANSACTIONS, Magazine, and Bulletins). When the Society is mentioned in publicity issued by others for the event, the appropriate form to be used by the issuers shall be: "In cooperation with IEEE EMBS".

##### **A.2.2 Participation**

The Society shall provide the above cooperation in publicity, as well as representatives to be appointed to the technical program committees of the meeting.

### **A.2.3 Co-Sponsorship or Sponsorship**

The Society shall provide cooperation in publicity, as well as representation on the technical program committee, and shall assume an appropriate share of administrative and financial responsibility. The Society shall be provided appropriate membership on the conference technical program committee, to help plan the technical program and to assist with the review and acceptance of contributed papers, procurement of special invited papers, and organization of panel discussions.

As appropriate and negotiated with the other cosponsor(s), the Society shall assume full fiscal and administrative responsibility for post-conference sales of the conference publications through the IEEE Book Broker Program. This will include the obligation of obtaining an assignment of an IEEE catalog number, leading to indexing of the conference publication, participation in the IEEE Book Broker Program, with listing in the IEEE Master Meeting Schedule and other related procedures, including budgetary reviews.

In addition to the financial implications above, the Society may share administrative and financial responsibilities, including a share of any net surplus or deficit resulting from the conference. Under such conditions, the Society shall have appropriate representation on the conference organizing committee.

**For any degree of co-sponsorship, the appropriate form for publicity referring to IEEE shall be "Cosponsored by IEEE EMBS".**

### **A.3 Boundaries**

Sections have geographical boundaries and Groups/Societies have technical boundaries. A section or Group/Society is free to organize any sort of symposia or conference desired insofar as it remains within the prescribed boundaries. If the Section or Group/Society desires to extend these boundaries, special coordination and approval would be necessary.

### **A.4 Non-discrimination**

When a non-IEEE organization, e.g. a university, is primary sponsor of a meeting or conference and applies to the Society for endorsement, the policy described in the previous paragraph shall apply. IEEE entities and their members wishing to participate shall be accorded treatment no different from that accorded members of the non-IEEE sponsoring entity.

### **A.5 Topics**

**A.5.1** Topics for Local Meetings may be either general or specialized.

**A.5.2** Topics for Regional Meetings shall be in conformity with agreements made with the various organizations with which IEEE is affiliated.

**A.5.3** Topics for National Meetings may be either general or specialized and must be in conformity with agreements which IEEE has established among its constituent entities or with other societies or organizations.

### **A.6 Policy**

The Society may support national meetings which are judged by its ExCom not to be in direct conflict with the Society's Annual Conference, or are general meetings which are local in character or confined to a limited region.

### **A.7 Procedures**

Applications for sponsorship or co-sponsorship of a meeting organized primarily by any local, regional or national group wishing to sponsor a meeting on some phase of engineering in medicine and biology shall be submitted in writing to the AdCom and presented in person at least one year in advance of the meeting before commitments for time and speakers have been made. Applications for cooperation or technical co-sponsorship shall be submitted in writing to the President at least six months in advance of the meeting. The application for sponsorship or co-sponsorship shall include a short statement on each of the following:

1. Local and/or national sponsoring groups
2. Organizing Committee
3. Time and Place
4. Topics to be included
5. Reasons for holding meeting
6. Methods of calling for papers
7. Criteria for attendance
8. Invited or submitted papers and screening methods

9. Program Format
10. Type of publication
11. Exhibits
12. Tours
13. Plans for publicity
14. Project planning time table
  - (a) Call for papers, announcements, etc.
  - (b) Budget and financial support
  - (c) Expected attendance

Applications for cooperation or technical co-sponsorship shall include the same headings but can exclude items 11.12 and 14b. In this case, the Vice-President for Conferences and ExCom are empowered to approve EMBS participation when appropriate, and inform AdCom at its next meeting.

AdCom, or the Society President if empowered by AdCom, shall determine at the time of an acceptable submission whether the proposed meeting conforms to this policy statement and shall determine the level of endorsement.

**B The Annual International Conference**

**B.1** By statute, each conference has a Conference Chair and a Program Chair appointed by the President with the consent of AdCom. ExCom looks to the Program Chair for the creativeness and quality of the program and to the Conference Chair for all other aspects of the conference.

**B.2** Conflicts in interpretation of these respective roles are to be resolved by ExCom.

**B.3** In the interest of continuity for future years and recognizing that the conference represents a substantial portion of the Society's annual budget, ExCom affirms that it must take an active interest in the oversight of each annual conference. In view of this, ExCom requires that each Conference and Program Chair submit periodic reports to the Secretary for distribution to ExCom and the Conference Committee Chair with a reporting frequency and format to be determined by the Vice-President for Conferences. The contents of the report shall include general status, accomplishments, problems, innovations, and other items of specific relevance.

**B.4** The point of contact for quality control and oversight shall reside with the Chair of the Conference Committee. All Conference and Program Chairs for current and future Conferences are ex-officio members of the Conference Committee.

**B.5.** As responsibility for the overall financial state of the Society rests with the VP for Financial Planning, he or she is responsible for oversight of the finances of the conference. Accordingly, this VP may impose certain auditing procedures to be followed for each conference and shall request periodic financial reports.

**B.6** The ExCom recognizes that its conferences are possible only through dedicated volunteer effort and will attempt to provide the necessary resources to the extent possible, so as to enable all conference volunteers to carry out their respective roles.

**B.7** The Conference Chairs of the Annual International Conference sponsored by the EMBS Society are Ex-Officio members of AdCom without vote unless they already hold an elected position on AdCom. In the latter case, the Conference Chair will instead keep his elected AdCom position, so long as bylaw 8.5 is satisfied.

**C. AdCom Representation & Election**

**C.1 AdCom Representation**

The regular elected members of AdCom will be drawn from the EMBS membership in 5 geographical zone allocations which approximate the membership distribution in each zone. They will have 3-year terms. Zone allocations may be reevaluated every 3 years by AdCom and altered, if warranted by Society priorities. Such 3-year reviews will be guided by the recommendations of the Nominating Committee.

The current allocation of 15 seats is

	<b># Reps</b>
Geographic Representation	5

North America – 1 representative	
Latin America – 1 representative	
Europe – 1 representative	
Middle East & Africa – 1 representative	
Asia-Pacific – 1 representative	
Technical Representation	5
Practitioner Representation	5
Student Representation	1
Young Professional Representation	1

The student member can be elected from any zone and will have a 2-year term.

The Young Professionals member can be elected from any zone and will have a 2 year term.

### **C.2. Election Schedule**

Renewal of AdCom representatives for 3-year appointments will elect one-third of the AdCom members every year

- together with in Odd-numbered years  
1 Young Professionals Member
- together with in Even-numbered years  
1 Student Member

Hence a total of 5 AdCom members would be renewed every year and 1 student member and 1 Young Professionals member in alternate years. Election will be by plurality of votes as outlined in section 4.3 of the Bylaws, taking into account the restrictions on country/continent participation. The paper ballots will recommend that EMBS members restrict their votes to selecting AdCom Geo candidates in their own assigned zone, while electronic balloting will automate the same intent.

## INDEX

<b>CONSTITUTION</b>	<b>1-6</b>
Article I: Name, Purpose, Field of Interest and Mission Statement	1
Article II: Bylaws	1-2
Article III: Membership	2
Article IV: Finances	2
Article V: Technical Meetings	2
Article VI: Publications	2
Article VII: EMBS Administrative Committee	2-3
Article VIII: Officers	3-5
Article IX: Election of Administrative Committee	5
Article X: Meetings of the Administrative Committee	5
Article XI: Vacancies	5
Article XII: Nominations, Elections and Appointments	5
Article XIII: Amendments to the Constitution	5-6
<b>BYLAWS</b>	<b>6-17</b>
Definitions, Acronyms and Initials	6
1. Membership	7
2. Administrative Committee	7
3. Nomination and Election of the Administrative Committee	7-9
4. Officers	9-10
5. Meeting of Administrative Committee	10-11
6. Publications	11
7. Society Funds	12
8. Committee Chairs	12
9. Standing Committees	16
10. Special or Ad Hoc Committees	16
11. Policy Statements	16
12. Local, Regional, and National Meetings	16
13. Executive Office	16-17
<b>POLICY STATEMENT</b>	<b>17-20</b>
A. Endorsement of Meetings	17-18
B. The Annual International Conference	18
C. AdCom Representation	19-20