SECTION 5. TECHNICAL ACTIVITIES

5.1.1. Technical Directions Boards. (approved 8 December 2009)
The Technical Directions Board has oversight of the Technical Committees and sets up policies and procedures for all of them. While Technical Committees may have additional Bylaws and Policies and Procedures, the Society’s Policies and Procedures will take precedence in case of conflict.

5.1.2. Creation of New Technical Committees. From time to time, consonant with advances to the fields of signal processing, and in order to service the many activities of the Society (publications, conferences, awards, etc.) requiring easy access to a cadre of experts in a specific technical area, it may be appropriate to create a new Technical Committee (TC).

5.1.1.1. Recommendation for a New Technical Committee. A proposal for a new Technical Committee (TC) shall be brought to the attention of the Technical Directions Board (TDB). The proposal shall contain as much information as possible in support of the proposal for a new TC and will include a suggested scope and a rationale as to why the TC is needed at that particular time. The TDB will review, investigate, and discuss the proposal and then shall vote to recommend action by the Board of Governors. The Board shall then, at its next regular meeting, consider the proposal and the TDB’s recommendation, and may act to approve, in concept, the creation of the new TC.

Following the Board’s approval, as noted above, for a new TC, the Vice President-Technical Directions shall empanel a working group to develop the name, scope, management, and membership of the new TC. The efforts of the working group will be reported back to the Board by the Vice President-Technical Directions, which shall then be asked to provide final approval of the new TC.

5.1.2. Change of Technical Committee Name/Scope. In response to changes within the technical community, it may be advisable to change the name of a technical committee. Name changes may be recommended in order to keep current with the changing vocabulary of technology or to reflect a change in scope of an existing TC.

As technology advances, activities surrounding certain disciplines may evolve, making both a change of name and of scope of a Technical Committee appropriate. In the event that such change is believed by a particular TC to be warranted, the Chair of that TC shall bring the suggested name change and change of scope to the Technical Directions Board for deliberation, discussion, and recommendation to the Board of Governors. The Board of Governors will take final action on the recommendation of the TDB.

5.2. Technical Committee Reviews. No later than 31 January of each year, the TC Review Committee shall provide to each Technical Committee Chair being reviewed the TC Review template. The template provides a “snapshot” of the TC’s membership and activities, including, but not limited to, sponsored/co-sponsored workshops; paper review for sponsored/co-sponsored major conferences; session organization for major sponsored/co-sponsored conferences; awards nominations; associate editor nominations by EDICS and journal; distinguished lecturer nominations; TC bylaws; number of TC meetings, attendance and quorum; diversity of membership; web page address and date of last update. The TC Review Committee will individually meet with each TC Chair at ICASSP to discuss the review report. The TC Review Committee will study the reports and make formal remarks and recommendations via the review report. The TC Review Committee will submit the final report, which includes their recommendations, for every Technical Committee reviewed to the Board of Governors for formal acceptance.
5.3. Technical Committee Membership.

5.3.1. Members.
   a. All Technical Committee members must be current IEEE and SPS members of good standing. They must be willing to review papers within the area of the TC submitted to the Society’s conferences, review papers for workshops owned or co-owned by the Technical Committee, serve in the subcommittees established by the TC, and perform other duties of membership.
   b. Members will serve a term of three-years, starting 1 January. All terms run on a calendar year.
   c. Membership on the Technical Committee may be terminated by the Technical Committee Chair, with the consent of the Vice President-Technical Directions, provided that the Chair and Vice Chair concur that the member has been inactive in the sense of little or no participation in Technical Committee responsibilities.
   d. Technical Committees shall have at least 20 elected members so that they have critical mass, and may have up to 40 elected members. A TC Chair can request a larger number of elected members to the VP Technical Directions who, in consultation with the TC Review committee, may approve an increase in the number of members for Technical Committees with a large paper reviewing load.
   e. The Vice President-Technical Directions shall be an ex-officio member, without vote, of all Technical Committees.

5.3.2. Associate Members.
   a. The TC Chair can also appoint a small number of Associate Members, who are non-voting members of the Technical Committee. These can include past chairs.
   b. Relevant Transactions Editors-in-Chief should be invited as Associate Members. Special effort should be made to coordinate with them for nomination of new members, nomination of best paper awards, EDICS alignment between the periodicals and the Society’s conferences.
   c. The TC Chair may appoint Associate Members as reviewers for one of the Society’s conferences, and may also appoint them to subcommittees.
   d. Associate Members shall receive calls for member and Vice Chair nominations, as well as any Newsletters the TC may have.

5.3.3. Affiliate Members.
   a. IEEE student members and all grades of IEEE SPS members interested in the scope of a given TC may freely join that TC as Affiliate Members by signing up in the Society’s website.
   b. Members of some professional organizations in interdisciplinary fields within the Society’s TCs scope, such as language processing or biological sciences, are not IEEE members. TCs may allow individuals from such professional organizations to join their TC as Affiliate Members.
   c. Affiliate Members are non-elected, unlimited in number, and non-voting members of the Technical Committee.
   d. The Chair may appoint Affiliate Members as reviewers for one of the Society’s conferences, and may also appoint them to subcommittees.
   e. Relevant Transactions Associate Editors should be invited as Affiliate Members.
   f. Affiliate Members shall receive calls for member and Vice Chair nominations, as well as any Newsletters the TC may have.

5.4. Technical Committee Management.

5.4.1. Vice Chair.
   a. The Vice Chair position automatically succeeds to the position of Chair then Past Chair. The term for Vice Chair shall be two years.
   b. The Vice Chair is a voting member of the Technical Committee.
   c. The Vice Chair is responsible for recording of minutes of all committee meetings, and assisting the Chair in paper review and session assignment process for ICASSP, maintenance of a roster of the membership, EDICS and a list of reviewers for the Society’s conferences.
   d. The Vice Chair will assist the Chair in preparing the TC Review Report and attending the TC Review meeting, if requested.
5.4.2. **Chair.**

a. The term of office of the Chair shall be two calendar years. A second term as Chair is permitted but may not be consecutive. The Chair automatically succeeds to the position of Past Chair.

b. The Chair is a voting member of the Technical Committee.

c. The Chair is a voting member of the Technical Directions Board and must attend meetings and participate in the board’s processes.

d. The Chair is responsible for organizing the activities of the Technical Committee and maintaining communication with the Vice President-Technical Directions, the Officers of the Society and other similar organizations.

e. The Chair is responsible for appointing members to the TC’s subcommittees.

f. The Chair is responsible for maintaining a roster of the membership.

g. The Chair shall maintain the EDICS and a list of reviewers for the Society’s conferences. The Chair also oversees the paper review and session assignment process for ICASSP.

h. The Chair is responsible for preparing the TC Review Report and attending the TC Review meeting.

i. The Chair is responsible for preparing bi-yearly activity reports.

5.4.3. **Past Chair.**

a. The term for Past Chair shall normally be one year, unless the TC specifically approves a two year term.

b. The Past Chair is a voting member of the Technical Committee.

c. The Past Chair is responsible for providing guidance and continuity to the Technical Committee Officers and members of the Technical Committee.

d. The Past Chair will assist the Chair in preparing the TC Review Report and attending the TC Review meeting, if requested.

5.5. **Technical Committee Organization.**

5.5.1. **Subcommittees.**

a. Technical Committees shall normally have subcommittees to accomplish the duties of the TC.

b. The TC Chair shall appoint TC members to the subcommittees.

c. The TC Chair may also appoint Associate and Affiliate Members to subcommittees, unless specified otherwise. Such Associate and Affiliate members must confirm in writing their willingness to serve and perform the duties of the subcommittee, and can be removed from the subcommittee if the TC Chair and Vice Chair concur they have been inactive.

d. The Chairs of each subcommittee must be elected members of the Technical Committee, unless specified otherwise.

The subcommittees may address the following activities:

a. **Awards Subcommittee.** Members of this subcommittee preferably should include IEEE Fellows or individuals that have received an award as to bring experience to the Awards nominations process. This committee collects nominations from Technical Committee members and the community as a whole (nomination process is open) and narrows down the list, with the final names being voted on by the Technical Committee, which then passes its recommendations to the Awards Board. This procedure applies for all the SPS awards and Distinguished Lecturers. This subcommittee will also identify Senior Members that are considered qualified for elevation to Fellow and help find an individual that can nominate the candidate (neither the subcommittee nor the TC will nominate or endorse Fellow candidates). The Chair of this subcommittee would act as a liaison to the Society’s Awards Board.

b. **Nominations and Elections Subcommittee.** Membership in the nominations subcommittee is restricted to elected Technical Committee members. The role of this subcommittee is to collect nominations for Technical Committee members and Vice Chair positions, and conduct the election process. The Nominations Subcommittee shall ensure that the candidate pool for new TC members represents the diversity of SPS members in the Technical Committee area, which
includes: gender, geographic, academic/industry, junior/senior, etc. This subcommittee will also help nominate Associate Editor candidates to relevant Editors-in-Chief in the Society.

c. **Workshops Subcommittee.** This involves soliciting proposals for workshops, helping volunteers with access to historical data regarding workshops and best practices, as well as putting in place a process to ensure there are enough proposals in time for voting and TC decision making.

d. **Industry/Government Subcommittee.** This involves supporting the Membership Board in industry and government activities. Responsibilities include forwarding information to relevant members from industry and the government, who are interested in activities of the Technical Committee and keeping them involved, as appropriate. Responsibilities include liaison with the Industry DSP standing Committee.

e. **Webmaster Subcommittee.** This subcommittee maintains the Technical Committee web site together with SPS staff.

f. **Newsletter Subcommittee.** The newsletter shall include open calls for new Technical Committee members and TC Vice Chair-elect, plus information on SPS elections, the Society’s e-newsletter, as well as other information such as relevant Calls for Papers. The Speech and Language TC newsletter is a good example.

g. **Area Chairs.** A Technical Committee may have several Area Chairs within their Technical Committee. Such Area Chairs shall normally be elected Technical Committee members and shall drive the review of papers for that area submitted to the Society’s conferences and workshops. Each Area Chair will have a number of reviewers, which shall normally include elected, Associate and Affiliate Technical Committee Members. Other responsibilities may include proposal of special sessions and special issues in that area.

h. **Student Subcommittee.** This subcommittee will be formed by students, either elected members or Affiliate TC members. The Chair of the Student Subcommittee will be a Student. This subcommittee may provide tutorials for students, courses, networking events, access to job postings, student grants, and other activities of interest to students.

i. **Education Subcommittee.** Responsibilities of the subcommittee include liaison with the Signal Processing Education Technical Committee, and creation of content of interest to SPS members involved in the Technical Committee that is not appropriate for publication in the Society’s conferences and periodicals (such as tutorial style articles on Wikipedia or Connexions, etc).

j. **Four Regional Representatives.** (Regions 1-6, Regions 7/9, Region 8, and Region 10). The four regional representatives shall support the Society’s Regional Directors-at-Large in the area of expertise of the Technical Committee. The representatives shall promote and foster local activities of that Technical Committee (such as conferences and meetings) and encourage new chapter development; publicize the activities of the Technical Committee in that region and help attract members from that region to the Technical Committee.

k. **Other.** The TC is free to create other subcommittees to cover areas that have not been specifically addressed in the above list.

5.5.2. **Conduct of Business.**
a. The Technical Committee will hold at least one meeting per year, normally at one of the Society’s sponsored conferences.

b. TCs are encouraged to hold meetings at their workshops too, and consider making them open to Associate and/or Affiliate Members if there is a large enough room available and an appropriate time slot in the workshop schedule.

c. A quorum of the TC shall be a majority of those members having voting rights. An affirmative vote of a majority of all the voting members of the Technical Committee shall be required to
approve the action.

d. The TC 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 hear each other at the same time.

e. The Technical Committee may conduct business via e-mail. The results of the vote shall be confirmed promptly in writing or by electronic transmission. The writings and/or electronic transmission shall be filed with the minutes of the proceedings of the committee.

f. The order of business for TC meetings shall be organized by the Chair and made available to the members prior to the meeting.

g. Only elected Members of the TC, including the Chair, Vice Chair and Past Chair, are allowed to vote in matters that come before the TC. Associate and Affiliate Members of the TC do not have a vote. Individuals holding more than one position on the TC shall be limited to one vote on each matter being considered by the TC.

5.6. Technical Committee Election Procedures.

5.6.1. Vice Chair.

a. The Vice Chair election shall be organized by the Nominations Subcommittee. The Nominations Subcommittee shall bring forward one or more candidates for the position of Vice Chair. The Nominations Subcommittee is responsible for making an open call for nominations, and conducting the balloting.

b. Nominations for Vice Chair shall be restricted to individuals who are currently serving or have previously served as elected members of the Technical Committee. Vice Chair candidates that are part of the Nominations Subcommittee shall withdraw from such subcommittee. Vice Chair nominees are not eligible to vote in Vice Chair elections.

c. Vice Chair elections will take place every two years and results shall be finalized by October, so election results will be known before the end of the year and the results can be reported to the Society’s Executive Office. All terms are on a calendar year basis (1 January-31 December).

d. Each nominee must confirm in writing their willingness to serve and perform the duties described in the Society’s Bylaws and Policies and Procedures if elected. Each nominee must also submit a one-page position statement and/or vitae to be distributed before the election.

e. The Vice Chair candidate shall be elected by a majority of the legal votes cast by the Technical Committee elected members, provided a quorum of the Technical Committee members responded to the ballot. In the event of a tie, the run-off ballot will include only those candidates who are tied for the lead. In the run-off tally, the candidate receiving a majority of the votes shall be declared the winner.

f. The election shall be conducted by an e-mail ballot, unless another means is proposed and approved by the Technical Committee.

5.6.2. Members.

a. The new member election shall be organized by the Nominations Subcommittee. New member elections shall be held once each year, so one-third of the TC’s membership turns over each year.

b. The Nominations Subcommittee is responsible for making an open call for nominations in the Society’s e-Newsletters and the website. The Nominations Subcommittee shall come up with a slate of candidates representative of the diversity of SPS members in the Technical Committee area, which includes: gender, geographic, academic/industry, junior/senior, etc. The slate shall include at least as many candidates that have never served in the TC as open slots. The Nominations Subcommittee will also conduct the balloting.

c. Candidates can be self-nominated or nominated by Technical Committee members. Each nominee must confirm in writing their willingness to serve and perform the duties described in the Society Bylaws and Policies and Procedures. Each nominee must also submit a one-page position statement and/or vitae, as determined by the TC, to be distributed before the election.

d. Past TC members are eligible to be nominated for a second term. Current TC members may also be nominated for a second consecutive term, but are not eligible to vote in that new member election and shall not be part of Nominations Subcommittee for that election. Additional terms
are allowed, but at least a 3 year gap in service is required.

e. Technical Committee members shall be elected by the members of the Technical Committee itself based on the needs of the Technical Committee. Each year the new member election results shall be finalized by October, so election results will be known before the end of the year and the results can be reported to the Society’s Executive Office. All terms are on a calendar year basis (1 January-31 December).

f. The new members shall be elected by a majority of the legal votes cast by the Technical Committee elected-members, provided a quorum of the Technical Committee members responded to the ballot. In the event of a tie, the run-off ballot will include only those candidates who are tied for the lead. In the run-off tally, the candidate receiving a majority of the votes shall be declared the winner.

g. The election will be conducted by e-mail, unless another means is proposed and approved by the TC.