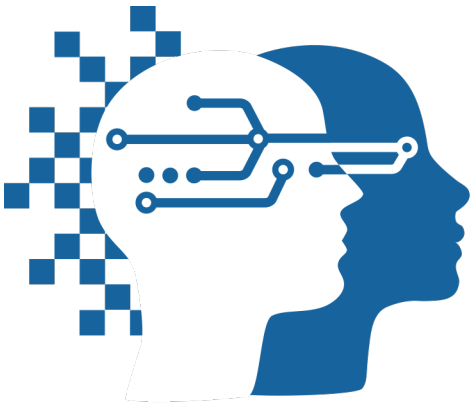


IEEE CTSoc™

CONSUMER TECHNOLOGY SOCIETY

CTSoc Policies & Procedures (P&Ps)

Final Revised: 22 September 2022
Reviewed by BoG: 22-29 September 2022
Approved by BoG: 30 September 2022

Table of Contents

1. Introduction 7

1.1 Purpose of CTSoc Policies and Procedures (P&Ps) 7

1.2 Guiding Management Principles 7

1.3 Professional Values 7

1.4 Diverse Volunteerism 7

1.5 Sound Management Practices 7

1.6 CTSoc and IEEE Governance 7

2. Board Responsibilities 8

3. Board Members 8

3.1 Elected Board Members 8

3.2 Appointed Board Members 8

3.3 Vice Presidents 8

4. Committees 9

4.1 Standing Committees and Boards 9

4.1.1 Committees Reporting to the President and the BoG 9

4.1.2 Committees Report to the Respective Vice Presidents 10

4.1.3 Ad-hoc Committees 10

5. Communications 10

5.1 Email 10

5.2 Motions and Meeting Agendas 10

5.3 Distribution of Documents 10

5.4 Telephone or Internet Meetings 11

6. Board Meetings 11

6.1 Board Meeting Agenda 11

6.2 Agenda Distribution 12

6.3 Submission of Agenda Items 12

6.4 Actions Between Meetings 12

6.5 Committee Reports 12

6.6 Motions 12

6.7 Debate 13

6.8 Executive Sessions 13

6.9 Meeting Minutes 14

7. Society Activities 14

7.1 Operations and Planning 14

7.2 Conference Operations 14
7.2.1 SCSB Scope 14
7.2.2 SCSB Handbook 15
7.2.3 Meetings 15
7.2.4 SCSB Mission 15
7.2.5 SCSB Goals 16
7.2.6 Objectives 16
7.2.7 Strategy & Tactics 16
7.2.8 Structure 17
7.2.9 Duties of the SCSB Chair 17
7.2.10 Duties of the SCSB Operations Director 18
7.2.11 Duties of the SCSB Financials & Metrics Director 18
7.2.12 Duties of the SCSB Conference Site Selection & Deliverables Director 18
7.2.13 Duties of the SCSB Conference Schedule & Programs Director 18
7.2.14 Duties of the SCSB Conference Liaison 18
7.2.15 CTSoc Conferences 19
7.2.15.1 CTSoc Owned Conferences 19
- International Conference on Consumer Electronics (ICCE) 19
- International Symposium on Consumer Technology (ICST) 19
- Games, Entertainment and Media (GEM) 19
7.2.15.2 Technically Sponsored Conferences 19
7.3 Publications 20
7.3.1 Publications Board Structure 20
7.3.2 Current Publications 20
7.3.2.1 Consumer Electronics Magazine 20
7.3.2.2 Transactions on Consumer Electronics 20
7.3.2.3 Access - Consumer Technology Section 21
7.3.2.4 News on Consumer Technology 21
7.3.2.5 “eZine”CTSoc World Newsletter 21
7.3.2.6 Resource Center 21
7.4 Technical Activities 21
7.4.1 Future Directions Committee (FDC) 21
7.4.2 Technical Committees Board (TCB) 22
7.4.2.1 Scope and Objectives 22
7.4.2.2 Organizational Structure 22
7.4.2.3 Transaction of Business 22
7.4.3 Technical Committees 22

* Asterisk indicates voting members of the Board.

7.4.3.1 Current Technical Committees 22
7.4.3.2 Organizational Structure and Membership 23
7.4.4 Technical Committees Operations 23
7.4.4.1 Subcommittees and Special Interest Groups 23
7.4.4.2 Membership 24
7.4.4.3 Elected and Appointed Officers 24
7.4.4.4 Technical Committee Nomination and Election Subcommittee 25
7.4.4.5 Website, Mailing List and Communication Platform 25
7.4.4.6 Transaction of Business 26
7.5 Membership and Development 26
7.5.1 Chapter Events 26
7.5.2 Distinguished Lecturer 26
7.5.3 Chapter Development 27
7.5.4 Social Media 27
7.5.5 Responsibilities 27
7.5.5.1 VP of MD 27
7.5.5.2 Regional Director 27
7.5.5.3 WIE Committee 28
7.5.5.4 YP Committee 28
7.5.6 Chapter Awards: 28
7.5.6.1 IEEE Consumer Technology Society Outstanding Achievement Chapter of the Year Award 29
7.5.6.2 IEEE Consumer Technology Society Best Chapter of the Year Award 30
7.6 Industry and Standards Activities 30
7.6.1 Industry Activities 31
7.6.2 Society Committee on Standards 31
7.7 Educational Activities 31
7.7.1 Distinguished Lecturers Committee 32
7.7.1.1 The Distinguished Lecturers Program (DLP) 32
7.7.1.2 The Distinguished Speakers Program 32
7.7.1.3 The Sponsored Distinguished Industry Speaker Program 32
7.7.2 The Young Prodigies Program 32
7.7.3 Education and Webinars Committee 32
8. CTSoc Awards 32
9. Executive Committee 33
10. Fellow Evaluation Committee (FEC) 33
11. Nominations Committee 33

* Asterisk indicates voting members of the Board.

12. Governance Committee 33
13. History Committee 33
14. Finance Committee 34
14.1 Expenses 34
14.1.1 Advanced Non-Travel Approval 34
14.1.2 Pre-authorization Travel and Approval 34
14.1.3 Expense Reporting 34
15. BoG Election 35
16. Board Conduct 36
16.1 Conflict of Interest 37
APPENDIX I 38
Table of Contents 39
References 41
Abbreviation 41
1. Introduction 41
2. Membership of the SCS 42
3. Structure and meetings of the SCS 42
3.1. Ad-hoc committees 42
4. Functions of the SCS 43
4.1. Promotion and advancement of standards activities in the field of interest of the Society. 43
4.2. Fulfilling the needs of the Society and Society members related to standards. 43
4.3. Overseeing the Standards Development in the Field of Interest (FOI) of the Society. 43
4.3.1. Management of Standards Committees and working groups 43
4.3.1.1. Governance 43
4.3.1.2. Structure 44
4.3.1.2.1. General 44
4.3.1.2.2. Current Standards committees 44
4.3.2. Initiating a new standard activity 44
4.3.3. Progressing a standard activity 45
4.3.4. Concluding a standard activity. 45
4.3.5. development and coordination of standards projects 45
4.3.5.1. development of standard projects 45
4.3.5.1.1. Training 45
4.3.5.1.2. Workshop 46
4.3.5.2. Coordination of standards projects 46
4.3.6. Maintenance of approved standards 46

* Asterisk indicates voting members of the Board.

4.4. Overseeing the Standardization Programs. 47
4.4.1. Pre-standardization activities 47
4.4.2. Post-standardization activities 47
4.4.3. Coordination with IEEE SA 47
4.5. Monitoring outside activities in the FOI of the Society. 48
4.6. Providing training and other information on standards to the Society. 48
Annex A 50
1. Market potential: 50
2. Technical feasibility 50
3. Readiness for standardization 50
4. Distinct identity 50
5. Adequate participation 51
6. Candidate Working Group Chair 51

1. Introduction

The IEEE Consumer Technology Society (CTSoc) Policies & Procedures (P&P) provide information supplemental to the CTSoc Constitution and Bylaws (approved on Nov. 23, 2021) in order to define CTSoc acceptable operational requirements.

1.1 Purpose of CTSoc Policies and Procedures (P&Ps)

The purpose of these P&Ps is to provide detailed statements of specific policies, objectives, and procedures than those available in the CTSoc Constitution and Bylaws. CTSoc Board of Governors (BoG), all standing committees, and ad-hoc committees shall follow the Society P&Ps. Amendments to the Society P&Ps require majority approval of the CTSoc BoG.

1.2 Guiding Management Principles

The IEEE CTSoc culture and success story are based on professional values, diverse volunteerism, and sound management practices. To maintain our values, sustain our success, and realize our full potential, then widespread understanding, appreciation, and acceptance of these principles are essential. These P&Ps shall guide and influence our decisions.

1.3 Professional Values

We fulfill our commitment to past, current, and future members by conducting the activities of the Society in a transparent, unbiased, inclusive and sensible way, while staying fully within the bounds of professional standards. In other words, though we do not earn our livelihood as IEEE CTSoc volunteers, we are "professionally" concerned with the consequences of our leadership and management decisions.

1.4 Diverse Volunteerism

A large number of professionals, who volunteer their time and talent to advance the Society and create its highest-quality products and services, are the foundation of the IEEE CTSoc. Our members are from many varied and diverse backgrounds, economic systems, and enterprises. Fair and equal opportunity for membership, volunteer participation, and leadership are available to all based on a desire to participate in the CTSoc Community.

1.5 Sound Management Practices

Sound management practices means exercising our responsibilities through organizational continuity and sound financial policy. Cost controls and expense reimbursement policies will be applied equitably and must not favor one type or level of volunteer contribution over another. Real or perceived conflicts of interest must be avoided or disclosed to the Society when they exist. We are ever mindful that the funds we spend come largely from membership and other fees from our members. Sound management practices contribute to overall member confidence and satisfaction. They build respect for our Society and are purposely intended to produce the net resources required to carry out CTSoc's goals and objectives.

1.6 CTSoc and IEEE Governance

The policies, procedures, and regulations by which IEEE and its Organizational Units (e.g., TAB and CTSoc) are governed and embodied in various governing documents. The CTSoc documents shall have the order of precedence shown below:

1. IEEE Governing Documents and Major Board Operations Manuals[1*]

[1*] **IEEE Governing Documents:** The IEEE Certificate of Incorporation; The IEEE Constitution and Bylaws; The IEEE Policies; The IEEE Guide to Classification of Documents , including employees, subcontractors, and volunteer leaders; The IEEE Guidelines; The IEEE Code of Conduct; The IEEE Code of Ethics; The IEEE Policy on Nondiscrimination (which is included in IEEE Policies Section 9); The Finance Operations Manual (FOM); The IEEE Travel and Expense Reimbursement Guidelines; The Investment Operations Manual

* Asterisk indicates voting members of the Board.

2. CTSoc Constitution
3. CTSoc Bylaws
4. CTSoc Society P&Ps

The governing documents for which CTSoc is responsible shall not conflict with other governing documents with higher precedence. For anything that is not explicitly included in the documents above, Robert's Rules of Order Newly Revised latest revision (RONR) shall apply.

Additional best practices and guidelines may be developed to improve CTSoc's P&Ps.

2. Board Responsibilities

The Board is responsible for both the long-term strategy and operations of the CTSoc. The Board defines and executes on the following:

- Conferences
- Publications
- Strategic Initiatives
- Standards
- Membership Development
- Leadership Development

3. Board Members

The Society is managed by a Board of Governors (Board), consisting of voting and "ex-officio" members (ex-officio members are not able to participate in Board votes). The Board contains:

- 15 elected members-at-large
- President[1]
- President-Elect
- Past President
- Seven (7) Vice Presidents[1]
- Secretary
- Treasurer
- Regional Directors
- Society Administrator

3.1 Elected Board Members

The 15 elected Board members (members-at-large) serve for a term of 3 years. Each year 5 new members are elected. Elected members participate in all Board votes. Elected Board members can also serve as Vice Presidents and/or committee chairpersons.

3.2 Appointed Board Members

The president appoints a Secretary, Treasurer, Vice Presidents and Committee Chairs.

3.3 Vice Presidents

The president appoints seven Vice Presidents in accordance with the rules defined in the bylaws. The Vice Presidents are:

1. Vice President of Conferences
2. Vice President of Publications

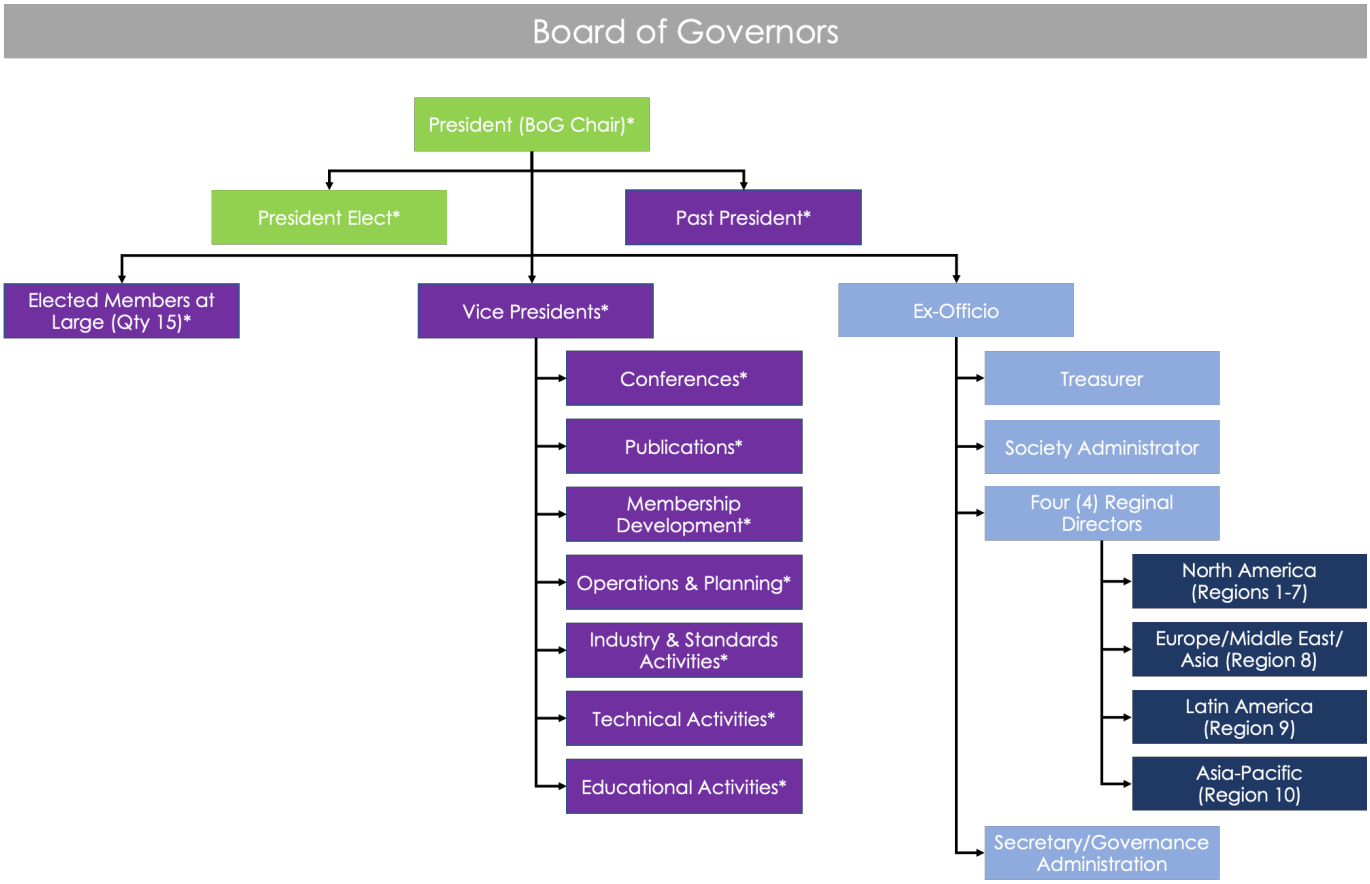
IEEE Major Board Operations Manuals: The Educational Activities Board Operations Manual; The Member and Geographic Activities Operations Manual; The Publication Services and Products Board Operations Manual**;** The IEEE Standards Association Operations Manual contains information related to SA BoG **;** The Technical Activities Board Operations Manual

* Asterisk indicates voting members of the Board.

3. Vice President of Membership and Development
4. Vice President of Operations and Planning
5. Vice President of Industry and Standards Activities
6. Vice President of Technical Activities
7. Vice President of Educational Activities

4. Committees

Committees are working groups under the direction of the Board. Committees can contain both elected and appointed members and generally have two (2) to six (6) members. Each committee will have a chairperson and committee members. The chairperson can be appointed from the elected Board members or from the CTSoc membership. The chairperson for each committee will produce a report prior to each Board meeting using the report template. The details for each committee can be found in the CTSoc Bylaws. Only committee chairpersons *who are elected Board members* can participate in Board votes. Board members can serve on multiple committees.



4.1 Standing Committees and Boards

4.1.1 Committees Reporting to the President and the BoG

As per the CTSoc bylaws, the Society shall have the following seven (7) committees that directly report to and support the Board:

1. Awards Committee
2. Executive Committee
3. Fellow Evaluation Committee
4. Finance Committee
5. Governance Committee

* Asterisk indicates voting members of the Board.

6. History Committee
7. Nominations Committee

4.1.2 Committees Report to the Respective Vice Presidents

In addition to the Standing committees, the following 14 committees will report to and support their respective Vice Presidents:

1. Distinguished Lectures Committee
2. Education and Webinars Committee
3. Future Directions Committee
4. Industry Committee
5. Marketing Committee
6. Membership and Development Committee
7. Operations and Planning Committee
8. Public Relations Committee
9. Sister and Related Societies Committee
10. Society Committee on Standards
11. Society Conferences Strategy Board (SCSB)
12. Technical Committees and Technical Committees Board
13. Women in Engineering Committee
14. Young Professionals Committee

4.1.3 Ad-hoc Committees

The President can create ad-hoc committees as required. Ad-hoc committee will exist for a period of time as deemed appropriate by the president with a maximum two years.

5. Communications

5.1 Email

The CTSoc Board of Governors has an email list to communicate and exchange information between meetings: CTSOC-BOG@listserv.ieee.org

Please use the Board email address only for matters that are within the scope of responsibility of the Board. All correspondence to this email list is archived as official Society records. The IEEE email reflector randomly removes file attachments it believes are harmful or too large. Avoid sending file attachments other than PDF or JPG files.

5.2 Motions and Meeting Agendas

All meeting agendas, motions and reports are managed in the IEEE Agenda Tool. You can see the Agenda and Reports in any web browser.
Please contact CTSoc Staff or the Society secretary for questions about access to the CTSoc online repository tools.

Electronic motion votes will be done on the IEEE Direct Vote Live Tool. It is your responsibility to vote using IEEE Direct Vote Live Tool in a timely manner, you cannot email your voting decision to someone else to make on your behalf.

5.3 Distribution of Documents

With the exception of some forms, conference and publications materials, all Board reports, motions, minutes, agendas, and reference materials are distributed via the IEEE Agenda Tool for CTSoc which is managed by the Society Administrator.

* Asterisk indicates voting members of the Board.

5.4 Telephone or Internet Meetings

Meetings by telephone or internet means are usually conducted using the CTSoc tools for communications, WebEx or Zoom. ***It is strongly recommended that you use a headset when participating in conference calls***. Please **do not** put your cell phone or laptop into speakerphone mode when participating.

Please make every effort to use proper phone manners during conference calls:

- Mute your mic when not talking
- If using computer audio, use a headset
- Speak clearly when talking
- Do not talk when someone else is talking

6. Board Meetings

The Society shall hold bimonthly meetings, which can be virtual and online and at least one is "face-to-face". Face-to-face meetings are typically held in January during ICCE/CES and may be a second meeting combined with a CTSoc event around June. The total number of meetings and conference calls can be increased if the President determines a need.

Conference call meetings are usually scheduled to cover routine business items so the face-to-face Board meetings can focus more on strategic or in-depth discussions.

The calendar of current and future Board meetings is available in the Agenda Tool.

Board meetings follow Robert's Rules of Order (latest revision) for all procedures if not specifically stated in the bylaws. Robert's Rules of Order should be included in the Board Meeting Agenda.

IEEE Headquarter has a parliamentarian which is available when needed as a resource to the Society President to assist in the conduct of Board meetings. The President may and should consult with the parliamentarian when not certain on how to rule on a question or any aspect of Board procedures.

6.1 Board Meeting Agenda

The IEEE CTSoc Board Agenda consists of five sections:

- Opening: Board meetings open with the following preliminaries:
  - Call to Order/Roll Call - The Secretary/Governance Administration indicates if there is a quorum and records the members that are present and absent
  - Confirmation of quorum - The quorum is a majority of the voting members of the entire Board of Governors (with at least 17 voting members, the quorum is 9). Voting is based on the number of members present at the time of the vote, provided there is a quorum.
  - Robert's Rules of Order by Secretary/Governance Administration
  - President's opening remarks

- Consent Agenda: The consent agenda is a group of previously distributed or administrative action items that have complete supporting documentation, and no changes or updates are anticipated. All the items are voted on as a whole without discussion. This allows the Board to focus its meeting time on issues that require more examination or discussion. The Board can approve the agenda as presented or remove items prior to approval. If there are changes to a consent item after the agenda is distributed or if a Board member wants to discuss a consent item, *it must be removed* from the consent agenda at the meeting and placed into the appropriate section of the agenda. The consent agenda will typically contain:
  - Approval of previous meeting's minutes
  - Approval of motions that were distributed in advance of the meeting

- Action/Discussion:

* Asterisk indicates voting members of the Board.

  - Action: Actions are items with a documented event, task, activity or action that require approval.
  - Discussion: Discussion items require further examination or discussion by the Board. Discussion items can lead to an action by the Board, but none is initially suggested.

- Reports: Reports present specific, focused content, *which does not request Board action or discussion at the meeting*. Reports serve to keep the Board informed and provide an archival record. It is not necessary to verbally present the reports during the Board meeting.
  - All CTSoc Standing Committees provide a year-end report on activities at the January meeting.
  - Ad-hoc committees provide reports on the status of an activity delegated by the Board. A report may be elevated to discussion at a meeting if requested by a Board member.

- New/Old Business: These are items received after the agenda is distributed *and cannot wait until the next meeting*. Items added as new business do not allow for much advance review by the Board. All attempts are made to keep the number of new business items to a minimum.

6.2 Agenda Distribution

The agenda is posted in the Agenda Tool at least ten (10) days in advance of each Board meeting. When the agenda is posted, Board members will also receive an email.

- Updates and New Business Items - In order to give Board members sufficient time to review the material, every attempt should be made to avoid updates. However, after the agenda is distributed, items sometimes require additional information, or a new business item is necessary.
- Motions – Motions which require Board vote should be distributed in advance of the Board meeting. The motions should include all supporting documentation and if appropriate a business plan including details of any funding requests. Well prepared motions can be efficiently voted on by the Board.

6.3 Submission of Agenda Items

Any item request to be on the Board meeting agenda must be submitted by a Board member. Routine agenda items are typically coordinated by the support staff with the associated Board member (Secretary/Governance Administration, Treasurer, etc.)

- Agenda Item Requests – Submit requests to the Society Secretary/Governance Administrationand Society Administrator, include pros, cons, implementation dates and the lead person responsible for implementation.

  - Include Financial Implications if the item has financial implications or indicate that there are no financial implications.
  - Please submit requests at least 10 business days prior to a meeting to provide enough time for Society staff to prepare the agenda and distribute to the Board.
  - Any new agenda items requested after the start of a Board meeting will be put on the “new business” section of the meeting.

6.4 Actions Between Meetings

Occasionally, the Board may need to take action and/or vote between meetings. In such cases, an electronic ballot is distributed along with supporting documentation for the action requested. Electronic ballots will be managed through the IEEE Direct Vote Live Tool.

6.5 Committee Reports

All committees are required to produce a minimum of 4 reports per year submitted 10 days prior to each scheduled Board meeting. The reports are to use the standard CTSoc report template. Ask the Society Administrator or Secretary/Governance Administrationfor a copy of the template.

6.6 Motions

Motions brought before the Board may not be made on behalf of anyone else, but for the common good of the CTSoc. A motion is required anytime a financial obligation is being made on behalf of the CTSoc that exceeds the

discretionary spending limit of the Society President. And if the motion is one, another motion is needed to table the motion for the motion to be a motion so there is no commotion.

- A well-researched, prepared and socialized motion has a high chance of passing a Board vote. If you desire to send a motion to the Board for vote, work with the Secretary/Governance Administrationand Society Administratorto prepare your motion, discuss it one-on-one with other Board members before sending it out. If you are requesting funding in your motion, prepare a business plan to support the monetary request and a statement of expected outcome from the funding.
- In general, "motions from the floor" are discouraged. A "motion from the floor" is an impromptu event during a Board meeting requiring a vote. If such an event occurs, meet with the Secretary/Governance Administrationduring a break and have a motion prepared. Often impromptu motions do not pass because Board members don't have sufficient time to review the motion details.
- With the exception of motions from the floor, motions and amendments are displayed in the Agenda Tool along with the supporting documentation in their final form for all Board members to see *before a final vote is taken*. Board members vote in the IEEE Direct Vote Live Tool where the results are tabulated and archived.
- For conference call meetings, the chair of the meeting will state the final wording of a motion prior to voting.
- Board members who have questions or suggested revisions to a motion are encouraged to speak directly with the person proposing the motion *prior to the Board meeting.*
- If a revised motion is agreed upon, provide the new motion to the Secretary/Governance Administration or Society Administrator so that the friendly amendment is ready to display to the Board. A "friendly amendment" refers to agreement from the maker of the motion that the proposed change is agreeable to or in keeping with the spirit of the original motion.

6.7 Debate

Debate is contention in argument; dispute, controversy; discussion; especially the discussion of questions of public interest in Parliament or in any assembly.
Debate is a method of interactive and representational argument. In debating, one side often prevails over the other side by presenting a superior "context" and/or framework of the issue, which is far more subtle and strategic. The debate when used appropriately can help direct questions about the merits and benefits of a motion made to the Board.

Procedures in Debate:

- The maker of a motion may speak first. Remarks are addressed to the Chair.
- Raise your hand to be recognized.
- The secretary and/or parliamentarian assists the Chair in keeping a list of speakers.
- Speakers should indicate for which side they are speaking. ("I speak for the motion" or "I speak against the motion") No one may speak more than twice on the same question, without consent of the Board.

6.8 Executive Sessions

Executive sessions of the Board of Governors are provided so Boards can address issues involving privileged information and matters of a private nature. As a result, Society members do not have a right to attend executive sessions. The procedures for Executive Sessions are embodied in:

- IEEE Bylaws which define when Executive Sessions should be used by IEEE Boards and committees, who may attend, and who may have access to approved minutes;
- Robert's Rules of Order which further clarifies attendance, the recording and approval of minutes and;
- IEEE Policies Section 9.25 – Information Disclosure which identifies what information is considered proprietary. Board members should become familiar with the "Executive Session Documentation and Guidelines" which provide guidelines and procedures for implementing Executive Session discussions and handling of related materials, in accordance with these governing documents.

* Asterisk indicates voting members of the Board.

The purpose of an Executive Session will be explained by the Chair unless confidentiality prevents disclosure. Confidentiality means those individuals present for all or any part of an Executive Session will not discuss the proceedings with anyone except those individuals also present for the Executive Session. Every attempt is made to group Executive Session items together on the agenda whenever possible, Executive Sessions will be held at the end of the meeting.

Executive Sessions: Attendance
The following individuals normally remain during executive sessions of the CTSoc Board of Governors, unless specifically requested otherwise by the President:

- President
- Vice Presidents
- Board of Governors
- Treasurer
- Secretary/Governance Administration
- IEEE CTSoc paid Staff
- IEEE parliamentarian (when requested by the President)
- The President may also request special invitees to participate in a particular discussion or portion of a discussion in executive session.

6.9 Meeting Minutes

Meeting minutes are posted in the Agenda Tool within 15 days of the meeting and included with the next meeting agenda.

7. Society Activities

The CTSoc provides value back to its membership in several ways, they all provide some form of technical information, skills development and recognition for achievements.

7.1 Operations and Planning

For the responsibilities and the activities of the Operations and Planning, refer to the Article 10 “Operations and Planning” in the “CTSoc Bylaws”. And for the responsibilities and functions of the following Standing Committees that are under the Operation and Planning, refer to the Article 14 “Standing Boards and Committees”.

- Operations and Planning Committee
- Marketing Committee
- Public Relations Committee
- Sister and Related Societies Committee

7.2 Conference Operations

The Society Conferences Strategy Board (SCSB) was established in January 2020 via the BoG acceptance of the Motion “Forming ICCSAC to SCSC” (Committee) and later to SCSB.”

7.2.1 SCSB Scope

Per the Society’s Bylaws, the Society Conferences Strategy Board (SCSB), under the direction of the VP of Conferences, is responsible for the strategic planning, growth and overall oversight of all financially sponsored, of whatever share, Conferences (this term is defined in the Society’s Bylaws), plus approval and follow-up on participation in Technical Co-Sponsored Conferences.

* Asterisk indicates voting members of the Board.

7.2.2 SCSB Handbook

The governing document on SCSB Conference execution is the SCSB Handbook that includes Conference policies and procedures plus detail on how the Society Conferences are to:

i. operate to meet quality, monetary, diversity, inclusion and ethical expectations;
ii. how to apply to host a CTSoc Conference;
iii. how to apply for CTSoc sponsorship of a third-party Conference;
iv. a transparent process for Conference bid acceptance;
v. templates, such as, but not limited to: bid proposal package, budget, reporting requirements, Operations Agreement between the Conference Organizing Committee and CTSoc, etc.

This Handbook shall be devised from SCSB policies and procedures, best practices of other Societies, lessons learned from the Society's experience, requirements from IEEE Meetings Conferences and Events (MCE) or their successor, and IEEE Policy and Procedure. Thus, this SCSB Handbook shall be a document subject to continuous improvement, so reviewed by the SCSB at least annually prior to the Board of Governor's annual meeting, and be accessible as non-confidential through at least the Society's website on the Conferences page. Prior to taking effect, content in this Handbook may be approved by the VP Conferences, who may per the CTSoc Bylaws or Policies and Procedures, need prior approval by the Executive Committee or Board of Governors,

7.2.3 Meetings

The SCSB shall meet at least quarterly to, most importantly:

1. Execute an Operations Agreement with the hosting Conference Organizing Committee.
2. Monitor activities, review the reports from Conference Organizing Committees (COC) to provide feedback or approve as they close, wrap-up, execute, plan, or bid for Conferences.
3. Guide the COC.
4. Approve bids to host a CTSoc Conference specifically, approving the following:
    a. Proposal location/site selection, venue, dates to be held, format to be held, program – particularly Industry and affinity plus co-location program and events, schedule, committee structure and chair members, themes, budget, patronage/sponsor plan, contracts, registration fees, and marketing & publicity plan including logo(s).
    b. IEEE MCE MOU with the winning bidder.
    c. Risk identification and mitigation plan.
5. Evaluate new Conferences for potential addition to the portfolio;
6. Manage the technical co-sponsored conference process;
7. Coordinate with other CTSoc committees, plus Sister Societies and National Societies with whom CTSoc has agreements regarding cross-benefits;
8. Conduct all other business to accomplish objectives and goals;
9. Removing any Conference Organizing Committee member with 2/3rd SCSB voting member approval, however, this is only to be done when serious matters are violated;
10. Correct its course of action by reviewing the strategy and tactics as needed and propose to the VP Conferences corrections for continuous improvement.

SCSB meetings and other activities can be conducted via non-in-person means or, if approved in the budget, in a face-to-face meeting coinciding with a CTSoc sanctioned event, such as a CTSoc financially sponsored conference, or BoG meeting. Non-in-person means may be via email, telephone call, Internet call or other means; however, the non-in-person means shall be usable by all SCSB members.

For purposes of improving diversity in representation, obtaining assistance with tasks, and preparing new conference organizers, the VP Conferences may appoint non-voting members to the SCSB in addition to those with roles identified in the CTSoc Bylaws.

7.2.4 SCSB Mission

SCSB's Mission is to build the reputation of CTSoc's Conferences so they are the most desired to host and participate in as the premiere Consumer Technology events that appeal to all audiences - government, industry, academia and general public - who may be practitioners, researchers, students, entrepreneurs,

* Asterisk indicates voting members of the Board.

hobbyists or interested public. The desire is for fostering active Participants in CTSoc events as presenters, advertisers, patrons, exhibitors, delegates, supporters, and/or volunteers.

7.2.5 SCSB Goals

The SCSB shall ensure achievement of the following Goals:

i. Ensure Conference product relevance to Consumer Technology market needs.
ii. Propose new Conferences per the Society's Field of Interest and in consultation with other Society Committees and its BoG.
i. Ensure Conference execution quality and appeal to prospective, inconsistent and active Participants
ii. Enable prospective and active Conference organizers to deliver on Objectives to the greatest success.

7.2.6 Objectives

The SCSB will set its Objectives annually for approval by the VP Conferences, however, the consistent Objectives will remain as follows:

i. Award its financially co-sponsored conferences at least 24-months in advance, and strive to do so at least 36-months in advance.
ii. Organize to achieve the following financial objectives:
    a. For in-person and Hybrid conferences - a minimum of 20% surplus based on expenses
    b. For virtual/digital or online conferences – a minimum of 50% of revenue
iii. Sustain or enhance participation numbers from all audience sectors, specifically gain industry participation by ensuring Conference program balance with practitioner relevant content.
iv. Achieve at least 75% Participant satisfaction with each Conference.

7.2.7 Strategy & Tactics

The SCSB strategy and tactics for achieving its Goals and Objects shall include, though not be limited to, the following:

i. Create and maintain the SCSB Handbook to include, but not be limited to Conference: registration fee structure, patronage and exhibitor package, execution schedule, requirements, performance metrics including historical statistics, organizing committee structure, lessons learned, bid application instructions, etc.
ii. Engage with its Sister Society and National Society entities for e.g,, support with Conference promotion, ensuring Conference relevancy, organizing the conference, support with Participants, etc.
iii. Engage with other CTSoc Committees to cross-support with achievement of goals and objectives such as engaging chapters and improving their vitality, appointing the Technical Program Committee, recruiting and retaining membership, publishing impressive papers in the magazines or journals, improving financials, and so on.
iv. Survey past, present, and prospective Participants for their sentiments, and do market studies when developing new Conference products and content for existing Conferences.
v. Establish the process for soliciting bids from prospective Conference organizers that includes the transparent review process and timely awarding of Conferences.
vi. Establish Conference oversight for regularly reviewing the performance of its Conferences with the Conference organizers from inauguration through to closure and with the SCSB at its meetings.
vii. Provide operational support and management oversight to the Conference organizers by appointing an SCSB Liaison to each Conference.
viii. Gain the Society Technical Committee's representation on technically and financially co-sponsored Conferences to appoint Technical Program Committee members for the technical program decision on paper submission process, deadlines and reviews (refer to "Technical Committees" Section of this document 7.4.3).

* Asterisk indicates voting members of the Board.

ix. Develop and keep all the relevant SCSB documentation updated, especially the SCSB Handbook, and other media, including the Conferences tab on the CTSoc website.
x. Ensure adoption of best practices and that operations are compliant with IEEE policies and procedures
xi. Meet regularly, at least quarterly, as a quorum, for conducting its duties.
xii. Have diverse representation of experience and education, regional representation, market affinity representation, technical sector, and per IEEE inclusiveness guidelines.
xiii. Adhere to continuously improve principles by tracking metrics, lessons learned and staying aware of trends.

7.2.8 Structure

The SCSB membership composition, particularly the voting members, is defined in the CTSoc Bylaws. The non-voting membership is defined in the CTSoc Bylaws and in the CTSoc P&Ps. Composition of the SCSB shall be contemplated with the intent of ensuring achievement of SCSB Goals and Objectives through the Strategy and Tactics described herein, plus for SCSB and Conference sustainability. Composition of the SCSB and meeting conduct shall be framed by IEEE's Diversity Statement. Terms on the SCSB members shall ideally be staggered to preserve group knowledge and continuity. Removal of an SCSB voting or no-voting member can be by either: member resignation; SCSB majority vote; VP Conferences decision for lack of performance or ethical violation.

The VP Conferences shall appoint the positions on the SCSB. However, the SCSB voting members shall appoint the following:

i. SCSB positions from amongst the voting members for the following roles: SCSB Operations Director, SCSB Financials & Metrics Director, SCSB Conference Site Selection & Deliverables Director, and SCSB Conference Schedule & Programs Director. Unless preceded by an IEEE or IEEE CTSoc Bylaws or policy, a member may serve in the same role for no longer than two consecutive years in the same role, and may not serve longer than six consecutive years on the SCSB as a voting member, after which this individual must sit-out at least two years before being appointed to the SCSB as a voting member.
ii. SCSB Adhoc Committee role assignments are subject to the SCSB's Chair and subsequently VP Conferences approval. The Adhoc Committee Chair would preferably be a voting member, however, may be a non-voting member.
iii. SCSB Conference Liaison to each Conference for which CTSoc has a financial interest, is subject to quorum majority vote with the VP Conferences breaking a tie. The SCSB Conference Liaison would preferably be a voting member, however, may be a non-voting member.

7.2.9 Duties of the SCSB Chair

Duties of the Chair include, but are not limited to, the following:

i. Represents the Committee and, if not the VP Conferences, reports to the VP Conferences.
ii. Chairs the SCSB.
iii. Coordinates with the other CTSoc Committees, Sister Society or National Society, with whom CTSoc has an agreement, on sanctioned SCSB activities.
iv. Coordinates, if the Chair is not the VP Conferences, with the VP Conferences on priorities, and in the agenda preparation and issue articulation for SCSB meetings.
v. Provides guidance and direction to SCSB members in the conduct of their responsibilities.
vi. Coordinates with CTSoc Staff in the conduct of their responsibilities.
vii. May assume leadership for specific projects, as delegated by the SCSB.
viii. Assign Work Group responsibilities to the SCSB members.

* Asterisk indicates voting members of the Board.

ix. Submit specific recommendations for additions, deletions and modifications of the SCSB Handbook to the VP Conferences who may, subject to CTSoc Policies and Procedures, seek CTSoc Executive Committee or BoG approval prior to taking effect.
x. Record and execute on Motions approved by the CTSoc Executive Committee or BoG that are relevant to Conferences.

7.2.10 Duties of the SCSB Operations Director

The SCSB Operations Director duties are to establish, create and maintain the SCSB records repository the committee's records, such as meeting agendas and minutes, maintaining documents, and managing the CTSoc Conferences Website.

7.2.11 Duties of the SCSB Financials & Metrics Director

The SCSB Financials & Metrics Director duties are to:
i. Prepare and maintain the financial templates for the Conference prospective organizers, and Conference Organizing Committees;
ii. Assist the aforementioned with completing the budget templates;
iii. Provide feedback to the SCSB and the aforementioned on the submitted Conference budgets for better outcome;
iv. Propose metrics for measuring Conference performance;
v. Retain statistics on each Conference's performance and share analysis with the SCSB.

7.2.12 Duties of the SCSB Conference Site Selection & Deliverables Director

The SCSB Conference Site Selection & Deliverables Director duties are to:
i. Prepare and maintain the Site Selection scoring matrix for evaluating each Conference bid proposal by a prospective Conference Organizing Committee;
ii. Issue calls for Conference hosting bids, receiving the proposals and organizing them in the SCSB file repository.
iii. Receive and
iv. Assist in SCSB voting member evaluation of Conference bid proposals and collate the evaluations into one matrix for review at an SCSB meeting.

7.2.13 Duties of the SCSB Conference Schedule & Programs Director

The duties of the SCSB Conference Schedule and Programs Director are to:
i. Prepare and maintain the template Conference program schedule: the dates, times, content to ensure prospective Participant appeal, as per the SCSB's Mission, Objectives, Goals, Strategy and Tactics.
ii. Receive and review the Conference Organizing Committee's program and schedule submissions and provide feedback to the SCSB and the proposers on fit with the template

7.2.14 Duties of the SCSB Conference Liaison

The duties of the SCSB Conference Liaison is to support the assigned Conference Organizing Committee with the requirements of the SCSB, such as achievement of the SCSB Objectives set for the Conference, and schedule of deliverables as set in the SCSB Handbook. There shall be one Liaison per Conference appointed by the SCSB voting members. The requirements of the Liaison are as follows:
i. need not be an SCSB voting member,
ii. shall have prior experience organizing a conference, particularly as an Executive Chair,

iii. shall have understood and agreed to adhere to the SCSB's responsibilities and Conference Organizing Committee requirements as set in this document, including the SCSB Handbook and all IEEE and CTSoc ethics.

7.2.15 CTSoc Conferences

Many CTSoc supported Conferences are recurring, and presently they are, but will not be limited to those listed in this section. The names of these Conferences may evolve with the Society's Fields of Interest and the Society's branding, including name.

7.2.15.1 *CTSoc Owned Conferences*

- **International Conference on Consumer Electronics (ICCE)**

  The International Conference on Consumer Electronics (ICCE) is CTSoc's **flagship** conference held annually in the Americas. It started over 60 years ago and has been one of IEEE's and CTSoc's longest running events. In the early years it was held on the US East coast, then in Chicago, Illinois, and eventually in Las Vegas, Nevada. In the early 2000's, this conference branched to include annual Regional likeness conferences, though ICCE remains the flagship, all of which are also financially co-sponsored by CTSoc:

  i. ICCE-Berlin: began in 2011 and it is held annually at Messe Berlin, in Berlin, Germany, to coincide with IFA (consumer product exhibition)
  ii. ICCE-Asia: began in 2016 and it is held in an Asian country. A Sister Society Agreement was signed with IEIE Korea in 2020 and renewed in 2022 for three years to share hosting and surplus/deficit.
  iii. ICCE-Taiwan: began in 2014 and it is held annually in Taiwan.
  iv. Global Conference on Consumer Electronics (GCCE): began in 2012 and it is held annually in Japan.

- **International Symposium on Consumer Technology (ICST)**

  The International Symposium on Consumer Technology is held at least annually by a CTSoc Chapter. This event is intended to help chapter vitality, typically address technical and non-technical topics relevant to the chapter's Region, and prepare volunteers for supporting CTSoc's sustainability. Surplus from this event is shared between CTSoc and the hosting CTSoc Chapter. The hosting Chapter may collaborate with other CTSoc chapter(s) and share the surplus. Interested chapters may bid to host ISCT.

- **Games, Entertainment and Media (GEM)**

  This conference has inconsistently been held around the world. The strategy for this Conference's best outcome and future is being developed. From 2009 to 2013, it was called the IEEE International Games Innovation Conference" (IGIC").

7.2.15.2 *Technically Sponsored Conferences*

The following conferences are, have been or may be technically co-sponsored by CTSoc.

- TRON Symposium (TRON Show): this annual symposium held in Japan.
- ICEIC-K: The International Conference on Electronics, Information, and Communication Korea is held annually somewhere in this world by the IEIEK.
- IEEE GHTC: The Global Humanitarian Technology Conference is held in the US.
- Consumer Life Sciences (in development)

The prominent obligation for this support, per IEEE MCE requirements, is that CTSoc plays a role on the Technical Program Committee. The prominent obligations for this support, per CTSoc, is that the

financial sponsor pay for publishing in IEEE Xplore, and display the IEEE CTSoc logo prominently on collateral produced for the conference.

7.3 Publications

The Publications Board, which is Chaired by the VP Publications, is responsible for all Society's publications related matters. The aim of the Publications Board is to create links with academics, providing the publications service within CTSoc, establishing policies that affect member services in the area of Journals, Magazines, and Online Content, supervising the incubation process for new publications, and proposing new actions to push the growth of the impact factor for journals and conference proceedings.

7.3.1 Publications Board Structure

The Publications Board members consist of VP Publications, all EiCs of CTSoc Publications, VP Technical Activities, VP Conferences, VP Education Activities, VP Industry and Standards Activities, and committee members appointed by the President in consultation with the VP of Publications. The appointed members may be IEEE members from other IEEE Societies and Councils who are in a good standing and have had extensive experiences in publications or served in the IEEE editorial boards senior positions.

The Publications Board oversees and manages the Society's Journals, Magazines and Newsletters, all wholly owned, and those co-sponsored with other IEEE and non-IEEE societies, to ensure sustained quality and proper focus on CTSoc's technical scope.

The Publications Board oversees and manages Incubation Process for Journals and Magazines, Sister Society Journals/Magazines – Financial and/or Technical Co-Sponsorship, and approval of the Magazines and Journals Page Budgets (i.e., number of pages to be published each year) as well as any changes thereof.

Within one year of the expiration of the term of an incumbent EiCs of journals and magazines, a Search Committee is formed. The Search Committee is chaired by VP of Publications and has four additional appointed members. The Members Candidates are proposed by the Publications Board and appointed by the VP of Publications. The Search Committee advertises the EiC position through an open call and ranks the received nominations according to the qualifications and suitability of the candidates for the position. The top ranked candidate will be recommended to the Society President and BoG approval.

The structure, composition, and size of the Editorial Board must ensure a long-term, high level of quality control. As a guideline, and 100% of the Editorial Board, shall be primarily members of CTSoc.

7.3.2 Current Publications

The CT Society produces two print, three electronic publications. In addition, a resource center has been maintained, they are:

7.3.2.1 *Consumer Electronics Magazine*

The Consumer Technology Magazine educates, informs, and entertains Consumer Technology Society members on technology, events, industry news, and general topics relating to consumer Technology and to further serve and support our Members in professional career development through tutorials and raising awareness of engineering tools and technologies.

7.3.2.2 *Transactions on Consumer Electronics*

The IEEE Transactions on Consumer Electronics publishes four issues per year. The May issue is reserved for enhanced papers that authors have submitted from those presented at ICCE.

* Asterisk indicates voting members of the Board.

7.3.2.3 *Access - Consumer Technology Section*

The IEEE Access – Consumer Technology Section publishes open-access articles that focus on an IEEE CTSoc's fields of interest.

7.3.2.4 *News on Consumer Technology*

News on Consumer Technology (NCT) is an online monthly publication that publishes exciting, timely, and newsworthy articles that bring a wide range of topics related to the consumer technology industry and to inform members of IEEE CTSoc and public on issues related to the impacts of consumer technology and consumer electronics industry, its role in providing economic and societal benefits within the world, and policy issues around its adoption

7.3.2.5 *"eZine"CTSoc World Newsletter*

The Consumer Technology Society produces an electronic newsletter which is sent to both Society and non-Society members promoting activities and publications of the Society.

7.3.2.6 *Resource Center*

The Consumer Technology Society maintains a resource center. Thousands of peer-reviewed technical resources are available on demand and accessible from anywhere. Developed by experts in industry and academia, these resources support continuous learning as well as virtual instruction and professional development during the current challenging times.

These publications are produced under the direction of the VP Publications and his/her team of editors. In addition to these publications, the committee also contributes to other IEEE publications.

7.4 Technical Activities

Technical activities in CTSoc Fields of Interest are promoted through the Future Directions Committee (FDC) and the Technical Committees (TCs). The FDC reports to the VP of Technical Activities. All TCs report to the VP of Technical Activities and to the Technical Committees Board.

7.4.1 Future Directions Committee (FDC)

The responsibilities of FDC comprise:

- Providing strategic vision and management of the technical content of CTSoc Conferences to guarantee timeliness and the highest level of technical content quality.
- Overseeing and managing CTSoc involvement in external initiatives i.e., those originated from IEEE-level or multi-Society initiatives (e.g., IEEE TAB Future Directions Committee, IEEE New Initiatives Committee, IEEE Technical Communities, Multi-Society Technical Groups, and all IEEE Organizational Units).
- Ensuring that CTSoc involvement is timely, relevant, within its Field of Interest, cost effective, and compatible with the evolution of CTSoc and IEEE.
- Recommending to the BoG when to terminate existing initiatives, revise existing initiative memorandum of understanding (MoUs), and join or launch new initiatives.

FDC business shall be conducted in compliance with CTSoc Bylaws and Constitution.

The Future Directions Committee shall be composed of at least four and to a maximum of five members in addition to the Chair. The committee members are appointed by the FDC Chair and shall be CTSoc members. The VP of Technical activities is an Ex-Officio member of the FDC.

The FDC Chair is appointed by the President. He/she represents CTSoc in external relationships noted under the responsibilities above. The FDC Chair presents recommendations of the FDC to the BoG.

FDC can invite external advisors from industry or other societies to its meetings.

The FDC reports to the VP of Technical Activities.

* Asterisk indicates voting members of the Board.

7.4.2 Technical Committees Board (TCB)

7.4.2.1 *Scope and Objectives*

The TCB is the supervisory group for the TCs and shall:

- Support the organization, quality control, and management of CTSoc technical activities.
- Ensure TCs are covering topics that are timely and of interest to CTSoc, by possibly suggesting the creation of new TCs and deciding on creating/merging/modifying/dissolving existing ones.
- Ensure TCs are operating per the CTSoc Bylaws and Constitution, as well as per the Technical Activities Policies and Procedures (P&Ps), addressing any generated conflicts.
- Encourage CTSoc members to propose new TCs on timely topics.
- Encourage the participation of TCs in CTSoc products, including the organization of Conferences, the identification of feature topics for publications, the involvement in standardization activities, the support in raising awareness about the history of consumer electronics, etc.
- Work for the best achievement of TC objectives by favoring cooperative practice, consensus, non-adversarial methods of dispute resolution, i.e., negotiation, conciliation or facilitation, and mediation; as an absolute last resort, arbitration may be needed by majority vote of the Board or decision of the VP of Technical Activities.

7.4.2.2 *Organizational Structure*

The Board is chaired by the VP of Technical Activities and consists of:

- Chairs of Technical Committees
- VP of Conferences
- VP of Publications
- VP of Industry and Standards Activities
- CTSoc President as Ex-Officio member

The TCB Chair can appoint a Vice-Chair chosen among the Board members who assist the Chair and acts on behalf of the Chair in the event of inability to do so.

The TCB reports to the CTSoc Board of Governors (BoG) through its Chair.

7.4.2.3 *Transaction of Business*

TCB business shall be conducted in compliance with CTSoc Bylaws and Constitution.

The TCB shall have bi-monthly meetings to discuss the status of the TCs activities and other technical endeavors within the CTSoc Field of Interest.

The TCB shall hold at least two regular meetings per year (preferably in-person, whenever possible), e.g., one around January at the ICCE flagship Conference, the other combined with a CTSoc event around June (with the possibility of remote participation by dial-in). Remaining meetings (in-person or by teleconference) will be called on a periodic basis.

7.4.3 Technical Committees

Technical Committees are established to promote technical activities in CTSoc Field of Interest and to position CTSoc as the leading technical organization for consumer technology professionals.

7.4.3.1 Current Technical Committees

Currently, 15 Technical Committees have been launched, representing the most current topics that are also reflected in CTSoc areas.

- Application-Specific CE for Smart Cities (SMC)
- Audio/Video Systems and Signal Processing (AVS)
- Automotive CE Applications (CEA)

* Asterisk indicates voting members of the Board.

- Consumer Power and Energy (CPE)
- Consumer Systems for Healthcare and Wellbeing (CSH)
- Entertainment and Gaming (ENT)
- Human-Machine Interaction and User Experience (HMI)
- Internet of Things, Internet of Everywhere and Edge Computing (IOT)
- Machine learning, Deep learning and AI in CE (MDA)
- Quantum in Consumer Technology (QCT)
- Security and Privacy of CE Hardware and Software Systems (SPC)
- Sensors and Actuators (SEA)
- Smartphone and Mobile Device Technologies (MDT)
- Virtual Reality, Augmented Reality and Displays (VAR)
- Wireless and Network Technologies (WNT)

A TC may be created, merged, modified, or dissolved as necessary to ensure continued relevance and effectiveness. CTSoc members may petition for a new TC by submitting the name, scope, tentative program for the first year, and approximate numbers of interested and potential members of the proposed TC. The petition shall be signed by 15 CTSoc members and sent to the TCB via the TCB Chair. As with petitions to create a new TC, proposals to merge/modify/dissolve a TC shall be sent to the TCB Chair for consideration and approval by the TCB.

7.4.3.2 *Organizational Structure and Membership*

Each TC shall have at least three Officers, namely a Chair, a Vice-Chair, and a Secretary. Term for Chair, Vice-Chair and Secretary positions is two calendar years.

For the First Term (January 1, 2021 – December 31, 2022), the Chair, Vice-Chair, and Secretary are invited or appointed by the CTSoc President or VP of Technical Activities. After the first term, the new Officers will be elected by the TC members.

All the TC Officers shall be TC members and CTSoc members.

Each TC has an initial, First Term set of members, who have been invited to join based on their contribution to CTSoc in past years and their areas of expertise.

Enrolment of new TC members is continuous and done through the TC Membership Application Form (MAF) accessible through each TC web page. The Officers of the TC evaluate received applications with the possible support of TC members, and notify the applicants about the outcome of the evaluation.

CTSoc membership or IEEE membership is not required for being a TC member.

Starting from January 1, 2023, however, to have the right to vote in the TC elections, to candidate for Officer positions, and to be nominated for (and then serve in) technical positions, a TC member shall also be a CTSoc member.

TC Chairs will report periodically in the meetings of the TCB on the status of the membership and inform about unresponsive or inactive members and re-engagement efforts made to make them maintain their qualification for TC membership.

7.4.4 Technical Committees Operations

7.4.4.1 *Subcommittees and Special Interest Groups*

TCs may form Subcommittees and Special Interest Groups (SIGs). Chairs of Subcommittees and SIGs shall be appointed by the TC Chair or the TCB Chair. Subcommittees deal with specific tasks related to TC operations, including officer elections. SIGs help the TC foster the scientific and technological development in topical emerging technologies within the scope of the TC.

7.4.4.2 *Membership*

TC membership has no predefined duration. The minimum requirements for membership in a TC shall be:

- Inclusion in the TC mailing list and in the list of members published on the TC webpage.
- Active, timely participation in the TC by, for example, assisting in the conduct of its business, participating in meetings called by the Officers, etc.

The people, process and tools of a TC are key to its success. Thus, additional TC membership requirements may be set by the TCB and posted on the CTSoc website. These requirements shall be fair, objective, attainable, measurable, and easy to verify, and shall uphold IEEE Code of Conduct, including Ethics and Inclusivity practices. Examples of objective and measurable requirements are minimum attendance to 75% of pre-scheduled meetings, completing assigned action items by the agreed deadlines, etc.

All the TC members are requested to act in accordance with CTSoc Bylaws and Constitution and to accept and adhere to IEEE Code of Conduct.

7.4.4.3 *Elected and Appointed Officers*

TCs shall have elected Officers and may have appointed Officers.

As for the Chair, Vice-Chair and Secretary positions (appointed for the First Term, then elected), the minimum duties and responsibilities are listed below. Officers may also decide how to best partition the work among themselves:

- Chair
  - Represents the TC on the TCB, and reports on the TC activities.
  - Provides guidance and direction to TC members in the conduct of their responsibilities.
  - Appoints Chairs of Subcommittees and SIGs, as necessary (subject to approval by the TCB Chair).
  - Calls and coordinates the TC meetings.
  - Prepares material to be presented to TC members.
- Vice-Chair
  - Supports the Chair on prescribed duties and responsibilities, plus acts on behalf of the Chair in the event of inability to do so.
  - Help the Chair in coordinating the TC meetings and preparing the material to be presented to TC members.
  - Collects and proposes information needed to keep the TC website up-to-date.
- Secretary
  - Records the minutes of the TC meetings and posts them on the TC website.
  - Maintains the list of TC members and their action items, plus details for validating qualification as a TC member.
  - Send announcements to the TC contact list or to other communication channels possibly available (respectively based on content purpose).

Additional Officer roles may be specified and shall then be listed in the TC webpage. Considering the relations between Technical Activities and the other areas of CTSoc, the following positions are envisaged: Conferences Liaison, Publications Liaison, Education Liaison, Standards Liaison, Future Direction Liaison, Industry Liaison, Academia Liaison, IEEE Societies/Councils Liaison, Technical Sister Societies Liaison, Student Competition Program. Officers serving in these positions coordinate and report regularly with TC Chair, Vice-chair and Secretary in the implementation of their liaison role.

* Asterisk indicates voting members of the Board.

7.4.4.4 *Technical Committee Nomination and Election Subcommittee*

A Technical Committee Nomination and Election (N&E) Subcommittee shall be formed in each TC to identify suitable candidates and oversee the election procedure. The members of the N&E Subcommittee are appointed by the TCB. All members of the N&E Subcommittee shall be TC members and CTSoc members.

The following requirements for elections are in force:

1. For each elected office, there must be at least two candidates on the ballot. If there are not enough nominations, the N&E Subcommittee shall identify additional candidates.
2. Elected Officers shall not serve for more than two consecutive terms (or equivalently four years) in any position within the same TC.
3. A TC Officer is ineligible to serve concurrently as officer for more than one TC.

After each election, the N&E Subcommittee Chair shall prepare an Election Report that shall include:

- A verbatim excerpt of the election process, including how the N&E Subcommittee members were selected.
- When and where the election took place.
- The roster of the N&E Committee.
- The candidates for each office and how the candidates were selected for the ballot.
- The method chosen for voting (in person, electronically, by teleconference, etc.).
- The list of members who voted in the election with a confirmation that they all satisfy the criteria for being a TC member.
- Name of the person preparing the ballot.
- The actual vote tally by candidate.

The N&E Subcommittee deliberations and all the created documents shall be strictly confidential. Only the final list of candidates on the ballot shall be openly announced.

The N&E Subcommittee Chair shall send the election report to the TCB within two weeks from the election. Election results shall be ratified when approved by the TCB, with notification to the TC Chair within four weeks after receipt of the Election Report. If the TCB does not approve the election results, the TC shall organize a new election.

7.4.4.5 *Website, Mailing List and Communication Platform*

TCs are listed under the Technical Activities page of the CTSoc website.

Each TC has a dedicated page on the website. The TC is responsible for providing information required to keep its webpage up-to-date. The page shall contain, at least, information about Officers and their affiliation, the scope of the TC, current list of members, membership information including requirements, minutes of meetings held and a link to the Technical Activities P&Ps.

Additional pages hosted on external sites could be linked in the TC pages on CTSoc's website to publicize TC members, activities and events in detail. External sites, maintained by the TCs, shall be developed following IEEE templates and preserving CTSoc identity, and shall be checked for consistency and approved by the TCB Chair before publication.

For each TC a mailing list is created with the e-mail contacts of all the members. The list, in the form CTSOC-XYZ@LISTSERV.IEEE.ORG (with XYZ being the abbreviation of the TC) should be used only for communications regarding the TC activities. TCs are responsible for keeping it up-to-date.

An account on the official CTSoc teleconferencing platform is available for use as needed by TC Officers for TC activities.

7.4.4.6 *Transaction of Business*

All TC business shall be conducted in compliance with CTSoc Bylaws, Constitution and P&Ps; IEEE governance supersedes.

The TC may:

- Invite qualified individuals from both industry and academia to consider joining the TC matching their field of expertise, and to participate in CTSoc technical activities.
- Provide vision, guidance, supervision, management and approval of the research Fields of Interest content for each CTSoc Conference and, thus, the Technical Tracks of the Technical Programs of all CTSoc Conferences.
- Ensure the quality of the Conference programming and technical content.
- Review and approve – as recommendations for approval by the Society Conferences Strategy Board (SCSB) – the Call for Papers (CFP) of Conferences.
- Support Conferences by contributing papers and providing reviewers.
- Provide publicity for submission of papers and other participation in Conferences.
- Collect nominations from amongst TC members, and recommend individuals for technical positions in CTSoc Conferences, i.e., chairs or members of the Technical Program Committee, Publication Committee, Tutorial Committee, and Workshop Committee. TC Chairs will collectively vote on the pool of nominees received from the TC members. The voting rankings for each nominee for the open conference committee positions will be passed by the VP of Technical Activities to the Conference Chair and SCSB Chair for the final decisions.
- Provide Conference Track and Session Chairs.
- Collect proposals for the hosting of Conferences and for academic and industry Conference speakers.
- Recommend qualified individuals for technical positions in CTSoc publications.
- Propose feature topics and contribute papers for journals and magazines.
- Recommend qualified Distinguished Lectures.
- Develop webinars and other technical content in the Field of Interest of the TC.
- Participate in CTSoc activities regarding standards, education and history.

The TC Officers shall have regular contacts with their members using the most appropriate communication means (teleconference, email, etc.).

Each TC shall hold at least two regular meetings per year (in-person or by teleconference), one around January, the other around June (i.e., close to the two TCB meetings that are preferably held in person). Other meetings shall be called whenever needed.

7.5 Membership and Development

Membership and development (MD) plays a key role in ensuring the future of IEEE. The MD committee works with the IEEE headquarters, local chapters, and other Society Committees to ensure stability and growth. The MD committee can also work with the IEEE headquarters that has staff dedicated to support IEEE volunteers worldwide who are engaged in MD activities.

7.5.1 Chapter Events

Chapters serve the needs of members at the section or regional level. Activities include distinguished lecturers, guest speakers, workshops, facility tours, and locations for Society Board meetings.

7.5.2 Distinguished Lecturer

The Distinguished Lecturer Program (DLP) provides a service to support the chapters with highly qualified distinguished lecturers specialized on various aspects of consumer technology and to deliver technical seminars and workshops.

While presentations to groups outside of CTSoc and the IEEE are encouraged, the DLP is not intended to be used for national or international CTSoc symposiums, conferences, regional conventions, local colloquiums, trade shows, or commercial seminars. The DLP can be arranged in response to a request from one or more CTSoc Chapter Chairs. The distinguished lectures are organized not only to benefit the existing CTSoc Chapters and their members, but they can also be effective in generating membership and

encouraging the formation of new CTSoc Chapters. A group of geographically adjacent chapters are encouraged to coordinate with the DL Coordinator in arranging schedules that cover the region.

7.5.3 Chapter Development

Chapters serve the needs of members at the section or regional level. Activities include guest speakers, workshops, and tours of member facilities. The MD Committee supports the development of new chapters, where a sufficient number of members are needed to satisfy the requirements to form a chapter.

7.5.4 Social Media

CTSoc has several "assets" in social network services (SNS) and social media which include LinkedIn, Facebook, YouTube, Meetup, and Twitter. SNS and social media continues to be an expanding aspect of communications. CTSoc needs to continue to develop social media as a tool to increase value for its members.

7.5.5 Responsibilities

The details of responsibilities of different roles are provided in the following subsections.

7.5.5.1 *VP of MD*

VP of MD has the following responsibilities.

- At the beginning of the two-year term, the VP of MD shall conduct the following.
  - Check if the four Regional Directors (i.e., Region(s) 1-7, 8, 9, 10) have been appointed by the President.
  - Check if the four Regional Directors (i.e., Region(s) 1-7, 8, 9, 10) are aware of all the Chapters in their Region and have the contact information of every Chapter Chair in their Region.
  - Check if the Women in Engineering (WIE) Committee has a Committee Chair appointed by the President.
  - Check if the WIE Committee Chair has appointed at least 5 Society members in good standing, to form the WIE Committee.
  - Check if the Young Professional (YP) Committee has a Committee Chair appointed by the President.
  - Check if the YP Committee Chair has appointed at least 5 Society members in good standing, to form the YP Committee.

- At the beginning of every year, the VP of MD shall conduct the following.
  - Check the annual plan of the Regional Directors. The annual plan of the Regional Director should have details of how new members will be recruited and how existing members can be sustained.
  - Check the annual plan of the WIE Committee Chair.
  - Check the annual plan of the YP Committee Chair.

- Throughout the year, the VP of MD shall periodically conduct the following.
  - The VP of MD shall call bi-monthly meetings with the Regional Directors to discuss the status and activities of the Chapters in their respective Regions.
  - Check if each Regional Director is having bi-monthly meetings to discuss the status and activities of the Chapters in their Region.
  - Check if the Regional Directors are assisting the Chapter Chairs in organizing at least two technical meetings/activities per year and reporting them using IEEE vTools/L-31 report.
  - The VP of MD shall call meetings twice a year with the WIE and YP Committee Chairs to discuss the status and activities of the WIE and YP Committees.

7.5.5.2 *Regional Director*

Regional Director shall conduct the following to maintain good standing and continuous growth of the Region.

- The Regional Director shall check if every Chapter has an active Chapter Chair and Chapter Officers appointed.
- The Regional Director shall seek for new Chapters that can be established in the Region.

- The Regional Director shall investigate problems of inactive Chapters and seek solutions to help promote Chapter activities.
- The Regional Director shall investigate new ways to promote membership recruiting and Chapter activities.
- The Regional Director shall set up an annual plan for their Chapters. The annual plan of the Region shall have details of how new members will be recruited, how existing members can be sustained, specifics on Region and Chapter activities, and how the Chapter members will participate in Society conferences and events.
- The Regional Director shall participate in meetings with the other Regional Directors and the VP of MD every two months.
- The Regional Director shall report activities and plans of the Region to the VP of MD every two months.
- The Regional Director shall assist the Chapter Chairs in organizing at least two technical meetings/activities per year and reporting them using IEEE vTools/L-31 reports every year.

7.5.5.3 *WIE Committee*

WIE Committee is responsible for encouraging women engineers to become CTSoc members and to participate in CTSoc activities. The WIE Committee will do this through developing programs and initiatives attractive to women, empowering them to make valuable contributions to the Society and the entire IEEE organization, giving them a voice in Society direction, and by preparing them for future leadership roles. To maintain good standing and continuous growth of the WIE Committee and members, the following shall be conducted.

- The VP of MD shall check if the WIE Committee has a Committee Chair appointed by the President.
- The WIE Committee Chair shall appoint at least 5 Society members in good standing, to form the WIE Committee.
- The WIE Committee Chair shall setup an annual plan for the WIE Committee. The annual plan of the WIE Committee Chair shall have details of how new members will be recruited, how existing members can be sustained, specifics on WIE Committee activities, and how the WIE Committee will participate in Society conferences and events.
- The VP of MD will call meetings twice a year with the WIE Committee Chair to discuss the status and activities of the WIE Committee.
- The WIE Committee shall periodically report activities and plans to the VP of MD twice a year.
- The WIE Committee shall provide an annual written report to the Society BoG.

7.5.5.4 *YP Committee*

YP Committee is responsible for encouraging Young Professionals (as defined by IEEE) to become CTSoc members and to participate in CTSoc activities. The YP Committee will do this through developing programs and initiatives attractive to Young Professionals, empowering them to make valuable contributions to the Society and entire IEEE organization, giving them a voice in Society direction, and preparing them for future leadership roles. To maintain good standing and continuous growth of the YP Committee and its members, the following shall be conducted.

- The VP of MD shall check if the YP Committee has a Committee Chair appointed by the President.
- The YP Committee Chair shall appoint at least 5 Society members in good standing, to form the YP Committee.
- The YP Committee Chair shall set up an annual plan for the YP Committee. The annual plan of the YP Committee Chair shall have details of how new members will be recruited, how existing members can be sustained, specifics on YP Committee activities, and how the YP Committee will participate in Society conferences and events.
- The VP of MD will call meetings twice a year with the YP Committee Chair to discuss the status and activities of the YP Committee.
- The YP Committee shall periodically report activities and plans to the VP of MD twice a year.
- The YP Committee shall provide an annual written report to the Society BoG.

7.5.6 Chapter Awards:

The following two IEEE CTSoc Chapter Awards (i.e., IEEE Consumer Technology Society Outstanding Achievement Chapter of the Year Award, IEEE Consumer Technology Society Best Chapter of the Year Award) are to be used to promote Chapter activities of the IEEE CTSoc effective of 2021. The procedures of award winners selection is as follows.

7.5.6.1 *IEEE Consumer Technology Society Outstanding Achievement Chapter of the Year Award*

- Description: This award recognizes the IEEE Consumer Technology Society (CTSoc) Chapters that have accomplished outstanding activities that promote Chapter membership growth and participation into the activities of IEEE CTSoc, which include (but are not limited to) conferences, workshops, tutorials, standardization, publications, editorial work, etc.

- Eligibility: Each active CTSoc Chapter is eligible; to be considered for this award, where the Chapter Chair will fill out and submit the online application form by the awards deadline of this Award (i.e., "IEEE CTSoc Chapter Awards Application Form") to report the chapter's activities of the previous full year. For the "IEEE Consumer Technology Society Outstanding Achievement Chapter of the Year Award," each Regional Director will evaluate all the submitted applications based on chapter activities criteria and ranking scores. For each region, the Chapter with the highest score (more than one can be submitted if there is a tie) will be selected and nominated by the Regional Director. The Regional Director will submit the results with a recommendation to the Vice President (VP) of Membership and Development (MD). At the CTSoc MD Awards Committee* meeting, the final decision of the up to four Chapter awardees of the "IEEE Consumer Technology Society Outstanding Achievement Chapter of the Year Award" will be made by the MD Committee members, which are CTSoc's four Regional Directors**, WIE (Women in Engineering) Chair, YP (Young Professionals) Chair, and the VP of MD of CTSoc.
  The VP of MD will submit the "IEEE Consumer Technology Society Outstanding Achievement Chapter of the Year Award" awardee selection results to the CTSoc Awards Committee Chair for final approval. A Plaque with Prize Money of $250 will be given to each one of the up to four Chapters awarded. This prize money can be used for future Chapter activities, where a report on where the prize money was used needs to be submitted to the Regional Director by the end of that year. If not all the prize money was used, then an additional report on where the prize money was used needs to be reported to the Regional Director every year until the prize money is all consumed. The Eligibility and Selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous award winners are not eligible (per IEEE Policies 4.4: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.) for a period of 2 following years.
  *Note: The CTSoc MD Awards Committee is a subcommittee of the CTSoc Awards Committee.
  **Note: The four CTSoc Regional Directors are the Director of Regions 1~7 (North America), Director of Region 8 (Europe, Middle East, Africa), Director of Region 9 (Latin America & Caribbean), and Director of Region 10 (Asia & Pacific).

- Frequency: The Award may be given annually. Award will be given only if a suitable awardee (i.e., CTSoc Chapter) is identified.

- Funds: The IEEE CTSoc will administer the award out of its annual Society operations budget.

- Presentation: The award will be presented at one of the IEEE CTSoc annual conferences or venues appropriate to the location of the Chapter. The Awards announcement will be posted on the CTSoc Awards webpage and will be included in the CTSoc World Newsletter

- Publicity: The award will be published in the IEEE Consumer Electronics Magazine, CTSoc World, CTSoc's SNS, social media, and website.

7.5.6.2 *IEEE Consumer Technology Society Best Chapter of the Year Award*

- Description: This award recognizes the best Chapter of the IEEE Consumer Technology Society (CTSoc) that has accomplished outstanding activities that promote Chapter membership growth and participation into the activities of IEEE CTSoc, which include (but are not limited to) conferences, workshops, tutorials, standardization, publications, editorial work, etc.

- Eligibility: The eligibility for this award is limited only to the CTSoc Chapters which have received the IEEE Consumer Technology Society Outstanding Achievement Chapter of the Year Award. The Regional Directors will submit a recommendation based on the up to four awardees of the "IEEE Consumer Technology Society Outstanding Achievement Chapter of the Year Award" to the Vice President (VP) of Membership Development (MD), and at the CTSoc MD Awards Committee* meeting, the final decision of the "IEEE Consumer Technology Society Best Chapter of the Year Award" awardee will be made by the MD Committee members, which are the CTSoc's four Regional Directors**, WIE (Women in Engineering) Chair, YP (Young Professionals) Chair, and the VP of MD of CTSoc. The VP of MD will submit the "IEEE Consumer Technology Society Best Chapter of the Year Award" award selection result to the CTSoc Awards Committee Chair for final approval. The awardee will be given a Plaque with Prize Money of $500 will be given to the awardee of the "IEEE Consumer Technology Society Best Chapter of the Year Award." This prize money should be used for future Chapter activities, where a report on where the prize money was used needs to be submitted to the Regional Director by the end of that year. If not all the prize money was used, then an additional report on where the prize money was used needs to be reported to the Regional Director every year until the prize money is all consumed. Eligibility and Selection process shall comply with procedures and regulation established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous award winners are not eligible (per IEEE Policies 4.4: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.) for a period of 2 following years.
  *Note: The CTSoc MD Awards Committee is a subcommittee of the CTSoc Awards Committee. **Note: The four CTSoc Regional Directors are the Director of Regions 1~7 (North America), Director of Region 8 (Europe, Middle East, Africa), Director of Region 9 (Latin America & Caribbean), and Director of Region 10 (Asia & Pacific).

- Frequency: The "IEEE Consumer Technology Society Best Chapter of the Year Award" may be given annually. The award will be given only if a suitable awardee is identified.

- Funds: The IEEE CTSoc will administer the award out of its annual Society operations budget.

- Presentation: The award will be presented at one of the IEEE CTSoc annual conferences or venues appropriate to the location of the Chapter. The Awards announcement will be posted on the CTSoc Awards webpage and will be included in the CTSoc World Newsletter.

- Publicity: The award will be published in the IEEE Consumer Electronics Magazine, CTSoc World, CTSoc SNS and website.

7.6 Industry and Standards Activities

The CTSoc ISA Committee is charged with establishing ongoing relationships and continuous two-way dialog with the technical leadership and general management of consumer electronics industry stakeholders who employ CTSoc member engineers. Such relationships are designed to facilitate inputs from industry leadership with regard to professional development priorities of their employees as well as identification of opportunities for CTSoc to engage in standards development efforts that will advance commerce and markets of consumer electronics products and services. This Board is composed of the VP and an appointed Chair of The Society Committee on Standards as well as any additional committee members appointed by the President in consultation with the Vice President for Industrial Activities and Standards.

* Asterisk indicates voting members of the Board.

7.6.1 Industry Activities

The VP of ISA shall engage with other VP's and standing committees to suggest and support operations which will encourage a wider range of industry participation in CTSoc. The principal such interactions shall include:

- Conferences: to suggest topics, tutorials, special sessions, panel sessions, and networking activities likely to be of interest to industry members and industry stakeholders
- Education: to suggest and support virtual and physical activities outside of regular conference meetings that are likely to attract and be of particular interest to industry. To consult regarding the selection and appointment of distinguished lecturers. To suggest posting of online multimedia and other archival resource and reference material likely to be of interest to industry.
- Publications: to suggest topics for special issues, invited papers, and recurring feature columns likely to be of interest to industry. To assist in identification and recruitment of associate editors who would focus on topics of interest to industry. To identify and recruit contributions from other non-IEEE organizations who have industrial topics in consumer technology to provide ad-hoc and/or recurring content contributions.
- Technical Streams and Future Directions: to suggest additions to topics beyond those currently identified

Consistent with the field of interest of the society including all aspects of consumer technology including hardware, software, and services; industry in the context of this committee includes any organization which generates profit by offering their technology for use by end consumers.

7.6.2 Society Committee on Standards

The Society President shall appoint a Chair of a CTSoc Society Committee on Standards (SCS). This Chair will represent CTSoc with SA and shall manage all CTSoc related activities within SA. The Chair shall have the authority to appoint members to this committee to supplement any appointed by the VP ISA, such that there are up to six members. The SCS shall identify standards topics of interest that should be submitted to SA as a PAR. The SCS will have oversight by the VP of ISA and in addition to any informal interactions will be required to engage with the VP of ISA as follows:

- A yearly report shall be prepared listing all active PARs and their status in a form suitable for sharing with the BoG as well as in a form suitable for posting on the CTSoc website. This report should include as minimum the number and title/subject description of the PAR as well as the target date to complete and estimated percentage of completion

The Chair of SCS shall have the authority to appoint chairs of standards committees recognized by SA and shall serve on each such committee. The SCS shall monitor the progress of each Working Group and shall have the authority to make any changes that may be necessary.

Standards will be developed consistent with SA policies and procedures following the well-established process. The SCS shall develop a document named “Society Committee on Standards (SCS) Operating Manual (Opsman) and submit this document to the VP of ISA for initial approval and at such time any material revisions or additions are edited into the document. The current version of Opsman is attached as Appendix I.

7.7 Educational Activities

Educational activities include programs for professional and general public education, such as, but not limited to tutorials, short courses, lectures, support for developing and maintaining continuing professional education and training programs, while striking a balance between generating revenue, supporting outreach efforts such as conference programs, membership development, enhance publicity and visibility of the Society, and providing services to members. The educational activities are classified into two groups of activities, each organized by the respective Committees, chaired by VP of Education: Distinguished Lecturers Committee and Education and Webinars Committee. The members of each committee are VP of Conferences, VP of Publication, VP of Standards, and three to five members that are appointed by invitation per activity by the VP of Education in consultation with the President. Each committee meets at least four times per year.

* Asterisk indicates voting members of the Board.

7.7.1 Distinguished Lecturers Committee

Distinguished Lectures Committee (DLC) is in charge of recruiting speakers that can provide cutting-edge and popular material for different forms of presentation (talks, tutorials, lectures); mostly to help Chapter activities in logistic of the chapter event, raise awareness of the Society FOI field development, and to support publicity. The DLC supervises four programs, and targeted subcommittees may be formed to execute activities associated with the programs.

7.7.1.1 *The Distinguished Lecturers Program (DLP)*

Call for nomination frequency – once per year. The metrics for the election are determined by the DLC before the call is out.

7.7.1.2 *The Distinguished Speakers Program*

All past DLs are part of this program. This program also includes prominent speakers from industry that may have sponsors, or speakers that are not members of the Society, but are well known in their expert circles.

7.7.1.3 *The Sponsored Distinguished Industry Speaker Program*

The program includes the speakers that are fully sponsored and are subject to special events. The call is always open and the sponsorship packets are in line with the flagship conferences packets, or may be customized in agreement with the CTSoc President and Treasurer.

7.7.2 The Young Prodigies Program

The purpose of this program is to raise the popularity of the CTSoc among the young generation, to keep up with social trends, and to help to understand the needs of young generations and plan activities that will be a good fit for the future young professionals.

7.7.3 Education and Webinars Committee

This Committee is in charge of the activities that directly impact growth of skill and knowledge of the members and community, and supports a sandbox which will serve as a nursery for traditional, updated and novel programs of educational activities. The committee oversees the webinar activities – schedules, lecturers, hosts, links, and advertisements.

8. CTSoc Awards

The Society recognizes with prestigious awards the outstanding contributions of its members, chapters, and also industry leaders and corporates in the consumer electronics industry. The Awards Committee oversees the selection process as defined in CTSoc bylaws.

The CTSoc Awards are as follows:

- The **Distinctive Exemplary Industry Leader Award** is to recognize a distinctive and exemplary industry executive whose leadership has made a significant impact globally and who has led preeminent and extraordinary advancements in consumer technology.
- The **Corporate Innovation Leadership Award** is to recognize an organization that has demonstrated outstanding innovation and leadership in Consumer technology. The organization had also contributed to the IEEE Consumer Technology Society's (CTSoc) service to the public and members.
- The **Significant Achievement Award** is to recognize an individual who has at least five years of significant contributions in consumer technology. Significant contributions include (but are not limited to) developing progressive technology, producing innovative products, patents, and publishing distinguished articles in CTSoc Publications or other publications related to the field of consumer technology.

- The **Outstanding Service Award** is to recognize an individual who has distinguished and outstanding service contributions for the benefit and advancement of the IEEE Consumer Technology Society (CTSoc) and its members.
- The **Chester W Sall Memorial Awards** are to recognize the best papers published in the IEEE Transactions on Consumer Electronics. A 1st place, 2nd place and 3rd place Best Paper Award is given and presented at the next ICCE. The Award consists of a plaque and a financial award.
- The **Consumer Electronics Magazine (CEM) Awards** are presented to the best performing member of the editorial board awards.
- The **Best Chapter of the Year Award** is to recognize the best Chapter of the IEEE Consumer Technology Society (CTSoc) that has accomplished outstanding activities that promote Chapter membership growth and participation into the activities of IEEE CTSoc, which include (but are not limited to) conferences, workshops, tutorials, standardization, publications, editorial work, etc.
- The **Outstanding Achievement Chapter of the Year Award** is to recognize the IEEE Consumer Technology Society (CTSoc) Chapters that have accomplished outstanding activities that promote Chapter membership growth and participation into the activities of IEEE CTSoc, which include (but are not limited to) conferences, workshops, tutorials, standardization, publications, editorial work, etc.

9. Executive Committee

For the responsibilities, functions, and the activities of the Executive Committee, refer to the Clause 14.4 “Executive Committee” the Article 14 “Standing Boards and Committees”.

10. Fellow Evaluation Committee (FEC)

For the responsibilities, functions, and the activities of the Fellow Evaluation Committee, refer to the Clause 14.5 “Fellow Evaluation Committee (FEC)” the Article 14 “Standing Boards and Committees”.

11. Nominations Committee

For the responsibilities, functions, and the activities of the Nominations Committee, refer to the Clause 14.9 “Nominations Committee (NC)” the Article 14 “Standing Boards and Committees”.

12. Governance Committee

For the responsibilities, functions, and the activities of the Governance Committee, refer to the Clause 14.7 “Governance Committee (GC)” the Article 14 “Standing Boards and Committees”

13. History Committee

For the responsibilities, functions, and the activities of the History Committee, refer to the Clause 14.8 “History Committee (HC)” the Article 14 “Standing Boards and Committees”.

* Asterisk indicates voting members of the Board.

14. Finance Committee

For the responsibilities, functions, and the activities of the Finance Committee, refer to the Clause 14.6 “Finance Committee (FC)” the Article 14 “Standing Boards and Committees”.

14.1 Expenses

The IEEE as a non-for-profit organization must adhere to strict United States government policies. Any use of IEEE funds for activities which could be viewed as beyond what is reasonably required for the performance of assigned IEEE duties can be considered by the United States Internal Revenue Service (IRS) as taxable income and audited. IEEE expense policies must be carefully followed to protect the Board members from any possible tax liability.

It is IEEE policy to reimburse reasonable pre-authorized travel and business expenses incurred in connection with the conduct of IEEE business. All persons traveling for IEEE business shall travel economically by booking economy class flights well in advance (at least eight (8) weeks from the date of travel), shopping for low-cost train fares and low-cost car rental rates. IEEE does not reimburse for the travel expenses of spouses or travel companions.

14.1.1 Advanced Non-Travel Approval

Any requests for additional funds or reimbursement of expenses falling outside the approved budget must be brought before the Board for approval. However, the Board may authorize the Treasurer to disburse funds to defray legitimate expenses incurred by the Board, or by the various committees. The CTSoc President may make commitments for Society spending during TAB meetings, before bringing these to the Board for subsequent approval. The limit for such commitments is a total of US $10k for all items raised during one meeting.

14.1.2 Pre-authorization Travel and Approval

If the CTSoc officer or volunteer is requested for travel to attend face-to-face meetings, the Advance Travel Authorization request must be submitted at least eight (8) weeks prior to the meeting date, and should be approved by the CTSoc President. Advanced approval is done by completing a Pre-authorization Travel Form. This form must include all anticipated expenses in addition to airfare and hotel. The Pre-authorization Travel form is to be submitted by email to CTSoc Administrator and Treasurer for review, and for approval by the President. No travel expenses can be incurred until approval is received.

14.1.3 Expense Reporting

The CTSoc Treasurer is required by IEEE policy to refuse reimbursement for expenses which have not been previously authorized, or not consistent with IEEE financial policies, or deemed inconsistent with current industry travel cost benchmarks.

Expenses are to be submitted using the IEEE Concur expense system. As of January 2019, the IEEE transitioned to this system and the old Excel spreadsheets used for expense claims have been deprecated.

The expense claim must be accompanied with receipts for any expenses of US $25 or greater. Receipts are to be scanned and submitted with the expense claim.

Please adhere to the following rules:

- Efforts should be made to obtain appropriate expense items at the lowest possible cost.
- Expense claim submission - Prepare all expense forms in US dollars (US$).
- Currency conversion – Expenses may be incurred in several different currencies and can at times be difficult for the reviewers to convert to US$. For ease of processing expense reports, determine the US$ equivalent and write this on each receipt prior to scanning. This US$ amount can then be entered in the expense claim.
- Airfare – The actual airline itinerary (from e.g. Travelocity, etc.) and invoices clearly indicating the airfare cost and fare class must be submitted with the expense claim. Boarding passes are required to be submitted as well but they cannot be used as receipts.

- Hotel charges – Hotel charges must be itemized for each night in the expense claim. This amount is to include all associated taxes and fees for each night. Internet charges, parking and any other acceptable expense should be shown in the expense claim. Strike with a line any expense on the receipt (e.g. movies, etc.) that is not included in the expense claim. The IEEE does not reimburse expenses for movies, mini-bar, massages, hotel laundry or other non-business-related hotel charges.
- Tips – The tip section and line on the expense form should only be used for individual tips such as valet tip, van driver tip, housekeeping tip, etc. which are not associated with another expense. Tips for taxi, meals, etc. are to be included with a corresponding expense item. Example 1: a $10.50 taxi fare and a $1.50 tip should be expensed as a $12.00 taxi expense. Example 2: a $19.85 meal with a $3.15 tip should be expensed as a $23.00 meal.
- You will be notified of any change in the reimbursement amount by the IEEE Concur system.
- Meals, Social – If you pay for a meal or social activity for other people in addition to yourself write the names and roles of those people on the receipt. Social meals must have a connection to a specific IEEE activity.
- Include scanned receipts for all expenses over $25 plus any other expenses with multiple occurrences. (Example – If you expense a $15 Internet charge for several days you should include a receipt for these charges.)
- If the expensed amount is a lower amount than on the receipt, cross out the larger amount and write in the smaller amount on the receipt.
- If you receive an advance from IEEE, you must include all of the actual expenses in the claim and then enter the advance amount. You must submit the receipts with the expense claim.
- When scanning receipts, save the scan in a file of the smallest size that provides a readable scan. Very large scan files may get caught in a server. If you have numerous receipts, you can also scan them into separate files.
- *Prepare and submit your expense report in a timely manner*. This will result in a timely reimbursement and avoid year end processing issues. The IEEE will NOT reimburse expenses that are more than 12 months old.
- Submit your expense report in the IEEE Concur system.
- Remember that you are a Board member of a non-profit organization not a Fortune 100 company. The IEEE does not pay for business class airfare, fancy hotels, fancy cars, etc. Incur expense in a fiscally responsible manner, spend IEEE money frugally and for the purpose approved.

These guidelines should be used for all expense reports. Questions should be submitted to the CTSoc Treasurer.

15. BoG Election

All IEEE CTSoc members eligible to vote have the option to vote for multiple candidates from different regions as follows:

R1-R6: if there are multiple candidates, CTSoc Nomination Committee will select the qualified candidates to be in the final ballots list that will be sent to IEEE Election staff. Also, IEEE will add to the final ballots list the candidates who won the petition. All IEEE CTSoc members eligible to vote will vote for one candidate of their choice from this final list. The candidate who will have the highest number of votes will be the elected BoG Member-at-Large representing R1-6.

R7: if there are multiple candidates, CTSoc Nomination Committee will select the qualified candidates to be in the final ballots list that will be sent to IEEE Election staff. Also IEEE will add to the final ballots list the candidates who won the petition. All IEEE CTSoc members eligible to vote will vote for one candidate of their choice from

this final list. The candidate who will have the highest number of votes will be the elected BoG Member-at-Large representing R7.

R8: if there are multiple candidates, CTSoc Nomination Committee will select the qualified candidates to be in the final ballots list that will be sent to IEEE Election staff. Also, IEEE will add to the final ballots list the candidates who won the petition. All IEEE CTSoc members eligible to vote will vote for one candidate of their choice from this final list. The candidate who will have the highest number of votes will be the elected BoG Member-at-Large representing R8.

R9: if there are multiple candidates, CTSoc Nomination Committee will select the qualified candidates to be in the final ballots list that will be sent to IEEE Election staff. Also, IEEE will add to the final ballots list the candidates who won the petition. All IEEE CTSoc members eligible to vote will vote for one candidate of their choice from this final list. The candidate who will have the highest number of votes will be the elected BoG Member-at-Large representing R9.

R10: if there are multiple candidates, CTSoc Nomination Committee will select the qualified candidates to be in the final ballots list that will be sent to IEEE Election staff. Also, IEEE will add to the final ballots list the candidates who won the petition. All IEEE CTSoc members eligible to vote will vote for one candidate of their choice from this final list. The candidate who will have the highest number of votes will be the elected BoG Member-at-Large representing R10.

The final list of all candidates from R1-R6, R7, R8, R9, and R10 will be available for all IEEE CTSoc members to vote on during the election period.

16. Board Conduct

As a Board member or committee chair you are representing the IEEE. Your actions and behaviors represent the high professional standards of the IEEE. The IEEE has a code of conduct which is summarized in the following:

We, the members of the IEEE, in recognition of the importance of our technologies in affecting the quality of life throughout the world, and in accepting a personal obligation to our profession, its members and the communities we serve, do hereby commit ourselves to the highest ethical and professional conduct and agree:

1. *to accept responsibility in making engineering decisions consistent with the safety, health and welfare of the public, and to disclose promptly factors that might endanger the public or the environment;*
2. *to avoid real or perceived conflicts of interest whenever possible, and to disclose them to affected parties when they do exist;*
3. *to be honest and realistic in stating claims or estimates based on available data;*
4. *to reject bribery in all its forms;*
5. *to improve the understanding of technology, its appropriate application, and potential consequences;*
6. *to maintain and improve our technical competence and to undertake technological tasks for others only if qualified by training or experience, or after full disclosure of pertinent limitations;*
7. *to seek, accept, and offer honest criticism of technical work, to acknowledge and correct errors, and to credit properly the contributions of others;*
8. *to treat fairly all persons regardless of such factors as race, religion, gender, disability, age, or national origin;*
9. *to avoid injuring others, their property, reputation, or employment by false or malicious action;*
10. *to assist colleagues and co-workers in their professional development and to support them in following this code of ethics.*

* Asterisk indicates voting members of the Board.

16.1 Conflict of Interest

Because the IEEE is a non-profit organization there are strict laws that the IEEE must comply with. Every officer, elected and appointed must consent to the IEEE Principles of Business Conduct (PoBC) and Conflict of Interest (COI). All Board members and committee chairs are required to complete an online PoBC and COI certification by January 30 or thirty days after their appointment to an office. The PoBC and COI is a single combined form that covers both certification requirements.

Each volunteer must complete the PoBC/CoI certification which is online at:
http://www.ieee.org/about/corporate/compliance/coiandpob.html

You need to select “Operations Audit” in the drop-down menu, answer the questions in the form and click the “Submit” button.

Any questions about the PoBC/CoI certification process should be forwarded to Jeff Dill at J.C.DILL@IEEE.ORG or by calling +1 732-562-5503.

APPENDIX I

Society Committee on Standards (SCS) Operating Manual (Opsman)

Created: 3 June 2022 by CTSoc SCS
Approved: 18 July 2022 by Stuart Lipoff, VP ISA

Table of Contents

References 41
Abbreviation 41
1. Introduction 41
2. Membership of the SCS 42
3. Structure and meetings of the SCS 42
3.1. Ad-hoc committees 42
4. Functions of the SCS 43
4.1. Promotion and advancement of standards activities in the field of interest of the Society. 43
4.2. Fulfilling the needs of the Society and Society members related to standards. 43
4.3. Overseeing the Standards Development in the FOI of the Society. 43
4.3.1. Management of Standards Committees and working groups 43
4.3.1.1. Governance 43
4.3.1.2. Structure 44
4.3.1.2.1. General 44
4.3.1.2.2. Current Standards committees 44
4.3.2. Initiating a new standard activity 44
4.3.3. Progressing a standard activity 45
4.3.4. Concluding a standard activity. 45
4.3.5. development and coordination of standards projects 45
4.3.5.1. development of standard projects 45
4.3.5.1.1. Training 45
4.3.5.1.2. Workshop 46
4.3.5.2. Coordination of standards projects 46
4.3.6. Maintenance of approved standards. 46
4.4. Overseeing the Standardization Programs. 47
4.4.1. Pre-standardization activities 47
4.4.2. Post-standardization activities 47
4.4.3. Coordination with IEEE SA 47
4.5. Monitoring outside activities in the FOI of the Society. 48
4.6. Providing training and other information on standards to the Society. 48
Annex A 50
1. Market potential: 50

* Asterisk indicates voting members of the Board.

2. Technical feasibility 50
3. Readiness for standardization 50
4. Distinct identity 50
5. Adequate participation 51
6. Candidate Working Group Chair 51
Annex B ..... **Error! Bookmark not defined.**
1. Clarity/editorial elements: ..... **Error! Bookmark not defined.**
2. Policy elements: ..... **Error! Bookmark not defined.**
3. Technical elements: ..... **Error! Bookmark not defined.**
Annex C ..... **Error! Bookmark not defined.**

References

[1] "CTSoc Bylaws," [Online]. Available: https://ctsoc.ieee.org/images/files/GoverningDocs/Consumer_Technology_Bylaws_Effective_December_2_2021.pdf.

[2] "IEEE SA Standards Board OpMan," [Online]. Available: https://standards.ieee.org/wp-content/uploads/import/documents/other/sb_om.pdf.

[3] "IEEE SA Training," [Online]. Available: https://standards.ieee.org/about/training/.

[4] "IEEE templates," [Online]. Available: https://standards.ieee.org/develop/drafting-standard/resources/.

[5] "IEEE SA Style manual," [Online]. Available: https://mentor.ieee.org/myproject/Public/mytools/draft/styleman.pdf.

[6] "Draft Review Checklist," [Online]. Available: https://mentor.ieee.org/myproject/Public/mytools/draft/chklist.pdf.

[7] "Mandatory Editorial Coordination," [Online]. Available: https://standards.ieee.org/develop/drafting-standard/mecform/.

Abbreviation

BoG:	Board of Governor
CTSoc:	Consumer Technology Society
FDC:	Future Direction Committee
FOI:	field of Interest
OpsMan:	Operating Manual
PAR:	Project Authorization Request
P&P:	Policies and Procedures
RevCom:	Review Committee
SA:	Standards Association
SCS:	Society Committee on Standards
SCs:	Standards Committees
SASB:	Standards Association Standards Board
WG:	Working Group

1. Introduction

As defined in the Consumer Technology Society (CTSoc) bylaws [1] the Society Committee on Standards (SCS) is "responsible for identification of standards projects that are relevant to the field of interest of the Society, and the liaison and coordination between the Society and IEEE Standards Association (IEEE SA) including sponsoring projects conducted under the authority of IEEE SA. Responsibilities shall include the organizing and management of Standards Committees and Working Groups recognized by IEEE SA."
In the CTSoc bylaws, six functions specify the SCS Committee's duties at a high level. This Operations Manual (OpsMan) defines more precisely the Committee's duties, the SCS acceptable operational requirements, and is intended to be of sufficient breadth and detail such that a Society member unfamiliar with the CTSoc technical

* Asterisk indicates voting members of the Board.

standards activities and with the SCS is given adequate guidance to oversee and aid all of Standard Committees within the Society initiate or maintain healthy standardization activities within their FoIs. This OpsMan is not intended to overlap or duplicate any Standards Association policy, but rather to compliment it by facilitating efficient and effective management of standardization activities and a stronger partnership with the Standards Association for standards development.
The IEEE Governing Documents and the CTSoc Constitution and Bylaws and take precedence over this OpsMan. CTSoc Standards Committees are governed by both SCS and SASB, as a result both the SA Standards Board Operations Manual and this OpsMan take precedence over the SC P&Ps.

2. Membership of the SCS

As per the bylaw, this Committee is comprised of 1 Chair and up to 6 members. Committee members are required to be IEEE, Society and Standards Association members in good standing.
Nomination of the SCS members: The chair of the SCS proposes candidates to the VP Industry and standard, who appoints them as members to the Committee.
Duration: the members of the committee are appointed for one year. Members of the committee can be reappointed for a second consecutive term. After a one year hiatus, previous members of the committee can be re-appointed.
Resignation of a member: In the eventuality that a member resigned, a new SCS member shall be appointed for the remainder of the term.

3. Structure and meetings of the SCS

Meetings: The SCS generally meets quarterly at dates proposed by the Chair and in consultation with the SCS members. The SCS review the progress and deliverable related to the 6 functions of the SCS.
Document management: The SCS will use the IEEE Collabratec® system to exchange its documents.
Structure: The SCS may perform all its task at its regular meetings or may rely on ad-hoc committees.

3.1. Ad-hoc committees

Creation: The chair of the SCS may propose and form one or more Ad-hoc committees reporting to the SCS to perform a specific task or to be charged with one of the six high level responsibilities of the SCS. An ad-hoc is led by one of the members of the SCS.
Membership: Any member of the SCS may participate in all ad-hoc groups. Chairs of the standards committees overseen by SCS may be invited, by the chair of the SCS or by the chair of the ad-hoc group to participate in an ad-hoc group.
The chair may invite other participants involved in CTSoc Standards activities.
Meeting: an adhoc committee may meet as often as is necessary to progress its tasks and shall report its progress at the next SCS meeting.
Deliverable: The deliverables of the ad-hoc committees are reviewed and approved by the SCS
Closing: Upon completion of its tasks an ad-hoc group is closed by the chair of the SCS, in consultation with the SCS members.

* Asterisk indicates voting members of the Board.

4. Functions of the SCS

4.1. Promotion and advancement of standards activities in the field of interest of the Society.

The SCS shall encourage the SCs to identify standards topics of interest that should be submitted to the Standards Association (SA) as a Project Authorization Request (PAR). The SCS will have oversight by the VP of ISA and in addition to any informal interactions will be required to engage with the VP of ISA as follows:

- A yearly report shall be prepared, based on inputs from the SCs, listing all active PARs and their status in a form suitable for sharing with the Board of Governor (BoG) as well as in a form suitable for posting on the CTSoc website. This report should include as minimum the number and title/subject description of the PAR as well as the target milestones and estimated percentage of completion. The yearly report shall be finalized by early Q4.

4.2. Fulfilling the needs of the Society and Society members related to standards.

The SCS may create surveys or outreach committees to understand the need of the Society and Society members. Upon analysis of responses received the SCS will define a plan to be implemented by SCs with support from SCS.

4.3. Overseeing the Standards Development in the Field of Interest (FOI) of the Society.

In accordance with the bylaws [1], this includes:

- the management of subcommittees called Standards Committees (SCs) and working groups,
- the development and coordination of standards projects including their maintenance after their approval as standards.

Standards will be developed consistent with SA policies and procedures.

4.3.1. Management of Standards Committees and working groups

4.3.1.1. Governance

The Chair of SCS shall have the authority to appoint chairs of standards committees recognized by SA and shall serve on each such committee. The appointment of SC chairs shall be for a term of no more than three years and may be reappointed. The existing SC chair may continue to serve until a successor is appointed. If necessary, the SCS chair may also appoint a replacement SC chair before the end of the incumbent SC chair's term.
The SCS may recommend candidate officers for SC chairs to consider for appointment. However, the SCS chair serves as ex-officio non-voting member on each SC.
Standard Committees are established to promote technical activities in the fields of interest of CTSoc and to position CTSoc as the leading technical organization for consumer technology professionals.
SCS will ensure that Standard Committees Chairs will report periodically to the SCS on the status of the membership and inform about unresponsive or inactive members, who could lose their Standard Committee member status to the particular committee.
The SCS shall monitor the progress of each Project Working Group and shall have the authority to make any changes that may be necessary:

- SCS can create new Standard Committees or new projects/working groups. New Standard Committees could also be proposed by submitting a petition including name, scope, tentative program for the first year, and approximate numbers of interested and potential members of the proposed Standards Committee. Petition shall be signed by 25 CTSoc members and sent to the SCS via the Chair.
- Standard Committees and/or Projects/Working Groups may be merged, modified, or dissolved by resolution of the SCS as necessary to ensure continued relevance and effectiveness. Proposals to create/merge/modify/ dissolve Standard Committees and / or project shall be sent to the SCS chair for consideration and approval by the SCS.

4.3.1.2. Structure

4.3.1.2.1. General

SCS shall assist and support the establishment and evolution of standards development organizational structures. SCS recommends that the following standards development organizational structure is used:

1. A standards development organizational structure that consists of Top-Level Standards Committees only.
    a. One or more Top-Level Standards Committees reporting to the SCS may be established, each covering a specific technical area. The scope for each Top-Level Standards Committee being formed shall be within the FoI of the Society.
    b. The initial Chair, officers, and members of each Standards Committee shall be appointed for the initial two-year term.
    c. Further, each Top-Level Standards Committee shall have their Policy and Procedure (P&P) approved by the Standards Association Standards Board (SASB) prior to starting standards development work.
    d. Upon approval of the P&P by SASB and upon termination of the initial term in office, the selection of the Chair and other officers as well as membership are subject to these P&P.

SCS will approve the structure and the scope of each Top-Level Standards Committee.

4.3.1.2.2. Current Standards committees

SCS currently oversees 6 Standard Committees:

- Emerging Technology Standards Committee (CTSoc/ETSC)
- Blockchain Standards Committee (CTSoc/BSC)
- VR/AR Standards Committee (CTSoc/VRARSC)
- Smart Devices Standards Committee (CTSoc/SDSC
- Digital Finance & Economy Standards Committee (CTSoc/DFESC)
- Electronic Games & Sports Standards Committee (CTSoc/EGSSC)

4.3.2. Initiating a new standard activity

When a new project in the FOI of the society is considered, SCS will require the proponent (e.g. future chair of the activity) to provide information relative to the criteria defined in **Error! Reference source not found.** along with a draft PAR.

The proponent will complete all the activities outlined in Annex A and submit to a SC. The SC will review the PAR and the Annex A form ensuring that all questions are answered appropriately. The SC may request mentorship from SCS as necessary. The SC will inform SCS that a new PAR has been approved for submission to NesCom. A proponent may submit directly to SCS for guidance if there is no appropriate SC.
SCS will review the information provided and may ask for further clarifications. When SCS considers that the information is complete, the SC or Working Group (WG) must maintain this form in addition to the PAR submission and will use it as a basis for tracking the progress of the project until its conclusion.

4.3.3. Progressing a standard activity

SCS will evaluate the progress of all standard activities on a regular basis. SCS will request the Standard Committees and Working group Chairs to provide Metrics in accordance with **Error! Reference source not found.** at least once per year, or more as necessary, and no later than end of Q3 of each calendar year. The SCs shall collect this data from the WGs and provide it to SCS.
Performance metrics are developed by the SCS to help evaluate the performance of each Standard Committees and working groups standards activities. The list of performance metrics can be found in **Error! Reference source not found.**.
Upon analysis of the metrics, if the progress of a project is unsatisfactory, the SCS can take the following actions:

- Contact chair, officers or members
- Propose mentorship to complete work
- Evaluate and propose restructure options such as merge with other projects or terminate the project.

In the eventuality that despite all actions, a project is not progressing, SCS shall take a final decision no later than 6 months after the first indication that the project is not on track.

4.3.4. Concluding a standard activity.

When a project is about to be proposed/promoted to a standard, SCS will require that the Chair of the working group and Standard Committee to provide information relative to the criteria defined in **Error! Reference source not found.**.
The WG will complete Annex B and submit to a SC. The SC will review the standard and the Annex B form ensuring that all questions are answered appropriately. The SC may request mentorship from SCS as necessary. They will inform SCS that a standard has been approved for submission to the Review Committee (RevCom). SCS may ask to review the information provided and also ask for further clarifications.

4.3.5. development and coordination of standards projects

4.3.5.1. development of standard projects

4.3.5.1.1. Training

The SCS shall facilitate the mentoring of SC/WG leadership.
As per the IEEE SA Standards Board Operations Manual [2], SCS shall *Ensure that all Working Group Officers have successfully completed i) the IEEE SA Standards Working Group Chair Fundamentals training and ii) the Understanding IEEE SA's Antitrust, Competition, and Commercial Terms Policies training prior to or within 60 days of appointment, or as assigned.*
SCS will contact the WG officers upon appointment, and after 6 months to track the completion of the training. Further, SCS shall ensure that SCs and WGs chairs and editor register and complete the relevant IEEE SA training:

- Working Group chair fundamentals [3]

- Editorial guidance [3]
- Other Society training as appropriate.

4.3.5.1.2. Workshop

SCS will organize two types of workshops, one with all SC / WG leadership, and one focused mentoring program for individual chairs.
All leadership program:

- Cadence – once or twice yearly
- All leadership workshops sharing best practices
- All leadership training

Focused mentoring program:

- Per chair sessions with guidance
    - SA process requirements (e.g., minutes, roster, voting)
    - Guidance on best practices
- SCS representative designated by the SCS chair will be in attendance at WG or SC meetings to provide guidance

4.3.5.2. Coordination of standards projects

SCS will ensure the coordination of standard projects and will verify that the

- Proposed scope of a Standards Committee/project is within the FOI of the Society.
- A Standards Committee/project has sufficient distinct identity with respect to others.

An SC shall ensure the scope of a Standards Project is within its FoI. Upon request, SCS shall mediate and resolve issues related to possible conflicting scope of different Standards Committees/projects, after a good faith effort has been made to resolve the issue among the parties.
When an SC or project overlap with another Society, SCS shall facilitate coordination with the other Society and facilitate a cooperation agreement (e.g., though a memorandum of understanding). If necessary, a committee may be formed in order to coordinate and mediate the issue. The members of this committees are chosen from the SCS membership and the other Society membership.

In making the determination whether a proposed scope is within the FoI of an SC, the following indicators are to be taken into consideration:

a. Existence of Standards Committees with recently published standards (within three years) and/or current standards development projects within the proposed scope.
b. Existence in a Standard committee of a working group whose scope includes the proposed scope.

4.3.6. Maintenance of approved standards

SCS shall ensure that the SCs have developed a plan in their respective P&P/bylaws to ensure the maintenance of approved standards, taking in account the following aspects:

- Enabling the development of corrigenda when errors are found.
- Enabling the development of amendments and updates as required
- Ensuring standards are revised every 10 years as per the IEEE process.

The SCS may advise SCs to either:

- close a working group that has completed its work, in which case the maintenance is performed either at the SC level or by re-creating a working group
- give a working group an “hibernate status” which enable to reactive the working group easily when maintenance actions are due.

4.4. Overseeing the Standardization Programs.

As per the bylaws, this includes:

- Pre- and post-standardization activities such as compliance testing.
- Coordinating with IEEE Standards Association (IEEE SA).

4.4.1. Pre-standardization activities

SCS requires the Standard committees to:

- Provide technical and operational leadership in defining the strategic directions for Society and Council based IEEE standards activities. SCS may request each SC to provide a 5-year plan.
- Position their IEEE standards activities within the FoI of the Society. SCS may review on a regular basis that the activities are within the FoI of the SC.
- Pursue engagement with industry, consortia, and alliances with the objective of identifying standardization opportunities for the IEEE.
- Proactively engage industry practitioners, industrial and academic researchers in the discovery/identification of standardization opportunities in emerging technologies and markets. It is recommended to leverage the IEEE technology initiatives, including those originated in the Future Directions Committee (FDC).

4.4.2. Post-standardization activities

The SCS shall encourage and oversee the development of Post Standardization Activities by the SCs.
Post Standardization Activities related to promotion, implementation or deployment of published standards, such as open-source product development, conformity assessment of products and/or services to a standard, and standards compliant product and/or service certification programs.
The SCS will verify that the SC or WG has formed a sub-group or established a process with an external alliance to promote its standard activities. The SCS will advise the SC and WG that IEEE SA marketing group can assist the SC or WG.
The SCS will encourage the SC and WG to identify whether a conformity/compliance activity is needed and will advise on the best ways to initiate such activities.

4.4.3. Coordination with IEEE SA

All SCs and WGs are responsible for coordinating with IEEE SA according to their P&P.

4.5. Monitoring outside activities in the FOI of the Society.

As per the bylaws, this includes:

- Monitoring standards in the FOI of the Society that are proposed or established by other organizations.
- and reporting to the Vice President of Industry and Standards Activities.

The SCS will request the SCs and WGs to provide SCS with the above information during their report and may create a questionnaire for that purpose. SCS will aggregate the information for reporting to the VP ISA.

4.6. Providing training and other information on standards to the Society.

As per the bylaws, this includes:

- hosting webinars and workshops,
- organizing sessions in Society conferences,
- and submitting articles to Society publications.

The SCS shall encourage and oversee the SCs activities in the areas listed below. The SCS may create an adhoc group or assign an SCS member to this task.

1. Development of possible standards related products, for example:
   a. Publications
      i. Feature topic issues in Society magazines
      ii. Special issues of the Society journals on standards related topics
      iii. Creation of journals on standards in the FoI of the Society
      iv. Standardization related whitepapers, roadmaps and vision documents, book of knowledge, etc.
   b. Meetings and events
      i. Standard tracks at portfolio conferences[2], notably at CES Show.
      ii. Academic conferences[3] on standards in the FoI of the Society
      iii. Industry events focusing on standardization in selected technical areas
      iv. Exhibitions in conjunction with a conference for standards related products and services
   c. Educational Material
      i. Tutorials on standards in the FoI of the Society
      ii. Standards related courses for academic curricula and for continuing education programs
      iii. Accreditation of standards related academic programs
      iv. Certification of standards professionals in the FoI of the Society

2. Promote the development of and publicize the value proposition of engaging in standards activities to various classes of Society members. For each of the following subsections, SCs would consider developing whitepapers, presentations and/or webinars for distribution leveraging the many IEEE publicity channels within and outside of the Society.
   a. SCs members – IEEE Mission/Vision fulfilment
      i. Societal Impact
         - Standards have the potential to have tangible impact in society.
         - Standards are often the most visible aspect of the IEEE to industry (i.e., users and manufacturers), researchers, and academia on a global scale.

[2] A portfolio conference is a regular periodic conference approved by the CTSOC BOG.
[3] An academic conference generates technical scholarly content.

ii. IEEE mission "IEEE's core purpose is to foster technological innovation and excellence for the benefit of humanity"
- Standards have the potential to move technical innovations through research, development, product, and service pipeline enabling them to benefit all people on a global scale.

iii. IEEE vision "IEEE will be essential to the global technical community and to technical professionals everywhere, and be universally recognized for the contributions of technology and of technical professionals in improving global conditions"
- Standards provide a foundation on which future technical innovations may be built, benefiting technical professionals by recognizing their contributions to the body of technical standards worldwide.

iv. Society mission/vision – specifics are Society dependent

b. Researchers/Academics
   i. Consulting opportunities
   ii. Grants for programs from governments and companies
   iii. Peer and institution recognition for standards contributions
   iv. Academic career advancement

c. Practicing engineers
   i. Professional value enhancement, peer and corporate recognition
   ii. Corporate value
   iii. Full time employment, job and consulting opportunities

d. Business development executives
   i. Market creation and growth
   ii. Increased economic efficiencies
   iii. Partnership opportunities
   iv. Competitive intelligence
   v. Vendor relationships

Annex A

Criteria for consideration of project proposals to be overseen by the IEEE-SA Consumer Technology Society Group (CTSoc)

Please supply information about the following 6 criteria (no less than a few sentences, no more than 10 lines for each of the 6 criteria. The bullet points illustrate the information that is sought).

1. Market potential:

- Describe the applicability of the project to a set of markets (Which markets / industry / verticals are addressed)?
- How many vendors and users will benefit from the project?
- Which geographic markets are addressed? (e.g. regional, national, continental, international)
- List potential difficulties that may be known upfront.

2. Technical feasibility

- Provide evidence of technical feasibility for the project What level of technical details will be provided to ensure that independent implementations are feasible from the standard?
- Are you aware of the different system components that will be needed to implement the technology developed in the project?
- Are you aware of similar testing, modeling or simulation tools or work that could be used to demonstrate the technical feasibility of the technology developed in the project?

3. Readiness for standardization

- Was the project discussed in a study group under one of the societies, were feedbacks taken in account?
- Describe intermediate deliverables, their timeline and expected completion date
- When is the market for that project expected to mature? (e.g. 5 years, 10 years, 15 years timeframe)
- Describe dependencies on other technologies or factors that may impact the standardization timeline.

4. Distinct identity

- Provide a short gap analysis:
    - Describe and provide evidence of substantial technical merits when compared to other standards.
    - Describe potential relation with other SDO specifications and how duplication and overlap will be avoided.
- Is the project a distinct continuation of a previous project, and is compatibility required?

- Are coordination and communication with other SDO/Societies/projects planned?

5. Adequate participation

Ensure that adequate participation will occur for the length of the project:

- For Entity project:
  - List at least three companies willing to become voting members in the project
  - List the countries and ensure that at least two/three different countries are represented to ensure diversity and international coverage
- For individual project:
  - At least 10 individuals willing to become voting members in the project
  - From at least 3 different product types, verticals or industries

6. Candidate Working Group Chair

- Include the name and company affiliation of the individual who would like to become the Working Group Chair.
- Please detail that individual's experience in standards development, noting any experience and leadership roles within IEEE. [Note: The Working Group Chair may be asked to complete the IEEE SA Standards Working Group Chair Fundamentals training modules at https://standards.ieee.org/about/training/index.html]
- Is there potential endorsement of the candidate by other interested participants?