

This document is meant to be part of CTSoc Policies and Procedures (P&Ps)

1.1. 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.

1.1.1. 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.

1.1.2. Technical Committees Board (TCB)

1.1.2.1. 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.

1.1.2.2. 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.

1.1.2.3. 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.

1.1.3. 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.

1.1.3.1. Current Technical Committees

Currently, 14 Technical Committees have been launched, representing the most current topics that are also reflected in CTSoc publications.

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

1.1.3.2. 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 webpage. 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, 2022, 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.

1.1.4. Technical Committees Operations

1.1.4.1. 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.

1.1.4.2. 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.

1.1.4.3. 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.

1.1.4.4. 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.

1.1.4.5. 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.

1.1.4.6. 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 Committee (SCSC) – 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 SCSC 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 meeting that are preferably held in person). Other meetings shall be called whenever needed.