

# IEEE Communications Society (ComSoc) Technical Committee on Cognitive Networks (TCCN)

## Policies and Procedures (P&P)

(Revised on 09 December 2019)

### **1. Charter and Scope**

The goal of Technical Committee on Cognitive Networks (TCCN) is to provide a platform for its members in particular, and the cognitive and artificial intelligence (AI) enabled networking research, development, policy making and standardization community in general, to interact and exchange technical ideas to identify major challenges and also drive solutions in the development of AI-enabled networking technologies. The technical issues addressed by the committee will include spectrum agile/dynamic spectrum access networks, related issues from PHY to application layers, security and privacy issues, policy issues (e.g., spectrum policy reform by U.S., Canada and European Union), implementation technologies (e.g., embedded AI, software radio, middleware), economic considerations and standardization activities.

Cognitive networks, especially AI-enabled radio and networks are touted to drive the next generations of digital communications. This technical area is attracting a tremendous amount of interest from academia, university, industry and government. New IEEE standardization activities, FCC's spectrum policy reform, federally funded research programs (e.g., DARPA XG and NSF NeTS ProWiN) are some examples of major activities supporting R&D in cognitive and AI-enabled networks.

The committee sponsors and promotes technical publications, conferences, symposia, workshops, tutorials and other related activities in the areas of cognitive radio, cognitive networks and dynamic spectrum access. The committee also assumes proactive duty to nominate suitable candidates for the IEEE Communications Society (ComSoc) and IEEE awards, propose distinguished lecturer candidates, endorse deserving candidates for the election to IEEE Senior Member and Fellow grade, and make contributions to standards in an organized form.

### **2. Policies and Procedures**

TCCN adheres to all policies specified by the IEEE Communications Society for Technical Committees (IEEE Communications Society Policies and Procedures, Sec. 7.0 - Operating Procedures Template).

#### **2.1 Membership Requirements**

Anybody can be a member of the IEEE Communications Society Technical Committee on Cognitive Networks (TCCN). To become a member, it is necessary to subscribe to the TCCN mailing list as specified on its website.

A member becomes an Active Member if he/she has attended (physically present or by teleconference) two or more of the prior five regularly scheduled TCCN meetings.

The TCCN Secretary shall maintain an attendance list for each of such meetings. All TCCN meetings are open.

## **2.2 Definition of Elected and Appointed Officer Positions**

The committee has three kinds of elected officers: Chair, Vice Chair, and Secretary. The term of each position is for two years. The Chair reports directly to the Vice President of Technical and Educational Activities (VP-TEA) of ComSoc, in accordance with the ComSoc Bylaws. The Chair represents TCCN to the Technical Council (TAC), and to any ComSoc committee or board, and provides endorsement for technical conferences that require technical co-sponsorship to ComSoc. The Vice Chairs support the Chair and take responsibility of the Chair in his/her absence. The Secretary will take care of membership list and keep meeting documents and meeting minutes.

If a TCCN officer position becomes vacant before normal conclusion of his/her term, the remaining term shall be filled by special election within TCCN. If such a special election is not held before or during the next regularly scheduled meeting, the VP-TEA, in consultation with the President of ComSoc, shall appoint someone to serve the remaining term. The positions filled shall be for completion of the interrupted term.

At the discretion of TCCN, there may be additional elected or appointed (non-officer) positions, such as standards, industry, regulation and research forum liaisons. In no case shall there be more than eight elected officers; there may be as many appointed positions as necessary for proper operation of TCCN.

## **2.3 Nomination and Election Policies and Procedures**

### **Term:**

The nominal term for Chair, Vice Chair and Secretary shall be two years. Any officer can be elected to the same position for one additional, contiguous term (i.e., continuously serve in any particular officer position for a maximum of four years). TCCN officers can be elected to a different officer position, but in no case shall one person continuously serve as a TCCN officer within the same committee for more than eight consecutive years.

### **Nomination:**

To facilitate the election of officers, TCCN establishes an ad hoc Nominations & Elections (N&E) Committee, made up members of TCCN. The N&E Committee shall come into existence at the TCCN meeting first preceding the actual election and shall be dissolved after the election and installation of officers.

The members of the N&E Committee consist of the current TCCN Chair and other TCCN members assigned by the current Chair and the number of the N&E Committee members should be more than (or equal to) three and less than (or equal to) five. The N&E Committee is chaired by the current TCCN Chair. The purpose of the N&E Committee is to offer candidate names for officer positions. It is desirable that the N&E Committee identifies at least two candidates for each officer position.

Eligible candidates for an officer's position are those who have already been Voting Member of the TCCN (the definition of Voting Member is given in another paragraph below.)

The N&E Committee shall announce its slate of candidates at least two weeks before an election is to be held. Such announcement shall be via email.

At any point, TCCN members shall be able to submit nominations via email by communicating to the current Chair, Vice Chairs, Secretary, or directly to the N&E Committee. Such "write-in" candidates should receive at least three supporting "signatures".

During an election, actual nominations from the floor shall also be invited. All candidates, if they are identified, will have consented to being nominated and will have shown a willingness to serve, if elected. Again, it is desirable that extemporaneous, from-the-floor nominations, receive support from three or more members at the meeting.

It is desirable that biographies and position statements of candidates be available to TCCN members. Candidates shall be permitted to "advertise" their candidacy on the TCCN email distribution list. All candidates shall be informed of election results and be permitted to appeal the outcome.

### **Election:**

The TCCN elections shall be administered by the TCCN Chair, or in his/her absence, any other elected officer. In the case of two candidates for a position, election is by simple majority. For the case of more than two candidates, selection proceeds through a series of elections: at each stage, the individual garnering the fewest votes is eliminated, until only two remain. In the event of a tie, votes shall again be cast until the tie is broken. If that is not possible, the person running the election (any of the elected TCCN officers) shall cast a tie-breaking vote.

The TCCN elections will normally be open. However, upon the request of any member, the election shall proceed by a secret ballot. Votes will be counted by at least one officer of the TCCN and any other member (officer or not) on-site. A record of votes cast must be retained for post-election audit purposes.

### **Voting:**

A TCCN Voting Member shall be any individual who: 1) is an Active Member; or 2) has contributed substantially to the TCCN activities. The Voting Member of the second category should be recommended by TCCN members and should be approved by the TCCN Chair.

The TCCN Secretary shall maintain an attendance list for each such meeting. That attendance list shall be part of the Meeting Minutes prepared and issued by the Secretary.

A TCCN Voting Member shall be permitted to vote electronically for a specific individual and position, if applicable to an actual live election.

The outgoing TCCN chair shall report the provisional results of the election to the Director-Technical Committees and the VP-TEA within two weeks. Election results shall be authorized by the Director - Technical Committees upon consultation with the VP-TEA. Election results become valid when approved by the Director - Technical Committees and the VP-TEA. The Director - Technical Committees or the VP-TEA shall accordingly notify the outgoing TC chair within two weeks after receipt of the Election Report. If the Director – Technical Committees does not authorize the election results, the Director shall organize a new election on behalf of the TC. All candidates shall be informed of election results and be permitted to appeal the outcome. The TCCN Secretary shall keep record of votes cast for post-election audit purposes. The outgoing TC chair shall then notify the final results to the TCCN membership.

Newly elected TCCN officers will take place on 1st January following the election at the Globecom meeting where the N&E Committee ratifies the election.

## **2.4 Conducting TCCN Meetings**

The TCCN meetings are usually scheduled during ICC and GLOBECOM, twice a year. The meetings are open to any conference attendee. The meetings are advertised at least two months in advance on the web and again via the email list shortly before ICC and GLOBECOM.

The TCCN Chair or a designated substitute, typically another TCCN officer, will chair the meetings. Any TCCN member can suggest items for the agenda. The TCCN Secretary will take the minutes. These minutes should be made available within one month of the meeting. Their availability is announced on the TCCN mailing list. Minutes are posted on the TCCN website and are open to public.

Should voting other than the TCCN officers election occur at the TCCN meeting, only members physically present or attending by teleconference have voting rights, and simple majority rules applies. If voting involves changes to the Policies and Procedures (P&P), then a two thirds majority of TCCN members physically present or attending by teleconference is required.

## **2.5 Maintaining Membership List**

The TCCN Secretary maintains the membership list. Entries in the list are generated from two primary sources: 1) the attendance sign-in list at the TCCN meetings at ICC and GLOBECOM conferences, 2) email received from links on the TCCN website. The TCCN does not actively protect privacy since the membership list is available to all on the TCCN website. Anyone who does not wish to have his or her information listed on the web site may have it removed promptly by notifying the TCCN Secretary. Updates to the list are generated mainly by the same method as the initial entries. Periodically the TCCN Secretary may request assistance from IEEE ComSoc staff to update email addresses through IEEE membership records.

## **2.6 Supporting Activities**

As appropriate, TCCN will be active in all of ComSoc's activities. This will include ComSoc conferences (such as ICC, GLOBECOM, DySPAN, INFOCOM, GreenCom and WCNC, etc.) by providing representatives to their respective Technical Program Committees, by providing for professional review of submitted papers (by soliciting

such assistance from among its membership) and by organizing symposia, workshops, panels, short courses, tutorials, etc., as deemed appropriate by ComSoc and TCCN.

Furthermore, TCCN can individually organize conferences, workshops and even summer/winter schools. Also, because of the broad nature of committee activities, collaborative sessions with other committees will be sponsored and heartily encouraged. As new technologies and application areas emerge, TCCN will seek to address aspects of these topics relative to its charter, and work with both the Strategic Planning Committee and Emerging Technologies Committee.

TCCN will further support ComSoc's journals, magazines, and standards activities by soliciting volunteers as authors and editors, submitting proposals, and identifying committee members from its membership. The committee will seek ways to increase active participation of its members in information exchange related to the charter of TCCN, such as: stimulating Feature Topics and Special Issues of ComSoc journals and magazines; and sponsoring workshops, tutorials, short courses, panel sessions, etc.

TCCN shall also be actively involved with various IEEE standard activities. All members are encouraged to participate the IEEE standard activities. If a TCCN member needs any further information about the IEEE standard activities, he/she could contact the officers of TCCN.

The recognition and proposal of candidates for ComSoc and IEEE Best Paper and Career Awards nominations, as well as distinguished lecturer candidates, and candidates for the election to Senior Member and Fellow degrees is also part of the TCCN activities.

## **2.7 Budget and Expenses**

The annual budget awarded by the IEEE Communications Society (ComSoc) may be spent on:

- dissemination activities (e.g., maintenance of website, newsletter);
- awards;
- showing appreciation for volunteer support;
- other tasks deemed useful to TCCN activities.

## **2.8 Procedures for TCCN Awards**

As a part of the TCCN activities, Recognition Award and Publication Award are established to recognize those ComSoc members who have distinguished record of service to TCCN and/or have made their significant contributions to the technological advancement in the areas of cognitive networks and dynamic spectrum access. Each award will be announced and given during the IEEE ICC, GLOBECOM or DySPAN conferences.

Awardees will be selected by TCCN Award Committees whose chair(s) are appointed by the TCCN Chair. Each Award Committee will be composed of total of five (5) TCCN members, including the Awards Committee Chair(s).

The TCCN Chair appoints the Chair(s) of the committee(s). The Awards Committee Chair may serve a term of up to two years, but no more. The TCCN Chair appoints two of the Awards Committee members including the Chair, and the Awards Committee Chair appoints other serving committee members in consultation with the TCCN Chair. The Awards Committee Chair and members are re-appointed or changed at the same time as the TCCN Chair.

The serving TCCN Chair, Co-Chairs (if any) and Secretary are not eligible for any TCCN award. The TCCN Chair, Co-Chairs (if any) and Secretary, as well as any sitting ComSoc officer (President and VPs) cannot nominate and/or endorse candidates for the award.

Any member of the Award Committee nominated for an award shall not participate in the selection process. Further, all Award Committee members must formally declare any conflict of interest with a nomination and recuse themselves. If due to this rule the number of voting members in the Awards Committee(s) is less than three (3), the TCCN Chair and Awards Committee Chair shall seek replacement members for the committee.

Members of the IEEE Communications Society or any of ComSoc's sister societies are eligible for the award.

The TCCN Award Committee(s) are responsible for indicating the individuals selected to receive the awards to the TCCN Chair. All final decisions shall be made by the Award Committee(s) and approved by the TCCN Chair.

Any amendments to selection criteria and the process shall be established by the TCCN Award Committee Chair(s) in consultation with the respective committee. Each award will have its own nomination and selection procedure. If the Award Committee considers that no candidate fulfils the established criteria, no award will be issued regardless of the call for nomination.

The reviews, voting and any deliberations of the Award Committee will be strictly confidential. Most committee business will be conducted electronically, and the Award Committee Chair will be the sole point of contact for all external communications. No correspondence will be sent to nominated or nominating persons or entertained during the process from any other parties. All questions, suggestions and complaints pertaining to the award selection process should be sent to the Award Committee Chair(s); the TCCN Chair will act as an Ombudsman for all matters that require the chair(s) to be excused and oversee any resolution process.

The TC Chair shall send the Awards Selection Report to the Technical Committees Director for approval. The Technical Committees Director shall approve the Awards Selection Report within two weeks of receipt. If the Director does not approve the report, the TC Chair shall be contacted to discuss the issues raised. A revised report may be submitted to the Director for approval. If the outstanding issues are not resolved between the Director and the TC Chair, the VP-TEA shall bring the matter to the TEA-C for a final decision. The selected award recipient(s) will be informed via email of the selection. In case the selected award recipient(s) declines the award for any reason, the award will not be given that year. If the recipient(s) cannot attend in person to accept the award at the designated TCCN sponsored conference, or cannot nominate someone to receive the award on their behalf, the award will be mailed to them.

## **2.9 Information Dissemination Activities**

TCCN will maintain an Internet website at  
[http://cms.comsoc.org/eprise/main/SiteGen/TC\\_CN/Content/Home.html](http://cms.comsoc.org/eprise/main/SiteGen/TC_CN/Content/Home.html)

The Secretary or other designated member maintains it. This website will be accessible from the main ComSoc web page. Announcements distributed to the TCCN's membership, notably meeting agendas and meeting minutes, opportunities for membership participation in TCCN sponsored activities, as well as election-related issues, will be made available on the TCCN website. TCCN will also provide at least one email exploder as an alternative for timely dissemination of information, and to welcome useful information from others.