

Cyber-investigation Analysis Standard Expression (CASE) Open Source Community Bylaws

Date of Last Revision: 24 JUNE 2020
(Reference Jira Ticket CS-152)

Original Ratification Date: 15 NOVEMBER 2018

Change Register:

Change	Ratification Date
Administrative Change by Community Secretary: Added Presiding Director and Community Secretary names at the end of the document after the initial Governance Committee election.	22 January 2019
Administrative Change by Community Secretary: Re-ordering of articles and updates to the Acceptance of Bylaws article to reflect the initial ratification of these bylaws.	22 January 2019
Re-ordered the primary motivation of CASE in Article 2 to present the analytic focus of CASE ahead of influencing interoperability between tools across the digital investigation domain.	24 July 2020
Updated bylaws to reflect current CASE Ontology Committee operating needs as realized in 2019 and 2020 since inception of the Community. Updated CASE Technical Director role (6.5 Section E) and responsibilities with respect to the technical committee management, and their specific roles within the technical committees.	24 July 2020
Made distinction between the roles and responsibilities of the CASE Technical Director and Ontology Committee Chair.	24 July 2020
Added Adoption Committee (Article IX) to reflect the Governance Committee's vote to charter the CASE Adoption Committee as a standing committee.	24 July 2020
Removed membership rules that only applied to initial members of the CASE Community.	24 July 2020
Global replacement of the term "industry" with the term "for-profit" to represent the actual name of the "for-profit" class of membership.	24 July 2020
Redefine the term "active member" and inclusion of language to give the Governance Committee authority to remove active members (5.10 Section 1).	24 July 2020
Redefine the role of the Secretary (6.7 Section G) and define the	24 July 2020

optional role of Assistant Secretary.	
Added Section 12.3 to account for the possibility of the Governance Committee choosing to align the CASE Community under an established non-profit that is not a traditional standards body.	24 July 2020
Inclusion in Article XIII of language indicating the order of precedence of committee meeting rules as established in governing documents.	24 July 2020
In Section 5.7, change 180 days to 45 days for the required Community comment period for proposals having to do with aligning the Community under another standards organization or to incorporate the community as a non-profit.	24 July 2020
In Section 5.4, updated the role of the Secretary and moved the role of the UCO Community Representative Direction to subsection (h), and moved the language for the appointment of a non-voting Director by the Presiding Director to subsection (g).	24 July 2020
In Section 5.6 (a)(ii), updated the Governance Committee's responsibilities to include the maintenance of the Community's Privacy Policy.	24 July 2020
Throughout the document where we previously referred to the Ontology Committee in addition to any other future technical committee, we replaced that reference with "all chartered technical committees".	24 July 2020
Made many small edits to improvements to overall readability and clarity of the document.	24 July 2020

Article I: Name

The name of the organization shall be the Cyber-investigation Analysis Standard Expression (CASE) Open Source Community. The short name “CASE Community” shall be used synonymously.

In the remainder of this document, “Community” refers to the CASE Community.

Article II: Purpose

The Community is organized with the purpose of developing and promoting the adoption of the Cyber-investigation Analysis Standard Expression (CASE) as a Community-developed specification language. The primary motivation for CASE is to lessen the analytic burden of government and non-government cyber investigators and influence interoperability that will advance the efficient and accurate exchange of cyber-investigation information between tools and organizations. . CASE is intended to serve the needs of a broad range of cyber-investigation domains, including digital forensic science, incident response, counter-terrorism, criminal justice, forensic intelligence, and situational awareness. CASE aligns with and extends the Unified Cyber Ontology (UCO).

Article III: Individual Members

3.1 Section A: Eligibility

An individual may join the Community by submitting a completed membership request form to the CASE Community Governance Committee via the community’s website for approval.

3.2 Section B: Dues

A membership fee schedule may be implemented by the Governance Committee as described in Article V, Section G.

3.3 Section C: Member Classes

There are four classes of members based on the type of organization with which the member is affiliated. Qualifications for Member Class affiliations are described below.

Affiliation is determined by the member's primary employer alignment, except in the case of independent contributors, who are assigned an affiliation as described below in item (b).

Every member is affiliated with a member class. In the cases that a member has multiple employers of different types or where the member may not represent their primary employer, the applicant may self-identify, and the final determination shall be made at the time of membership approval. Class affiliation shall be reviewed, and may change, when a member's employment changes.

(a) For-profit: Members affiliated with the For-profit class must be employed by a for-profit company that has a business license recognized by the local government of the geopolitical region in which they are headquartered. The company must sell a product (*i.e.*, good or service) to the digital investigation community for the collection, analysis, and dissemination of trace cyber evidence. For-profit companies that open-source their digital investigations product will belong to the For-profit class.

(b) Academia: Members affiliated with the Academia class must be employed by an institution of higher learning or must be independent (*i.e.*, otherwise unaffiliated) contributors. The academic institution may be a for-profit or not-for-profit institution of higher

learning. The academic institution must have at least one regional accreditation within the country in which it is headquartered. Professional staff of the academic institution must have published an article in a peer-reviewed journal or conference proceedings on the general topic of digital investigations within the previous two years of Community member affiliation. Members who are prohibited to represent their employer(s) may be identified as independent. Independent digital investigation researchers and tool developers shall be affiliated with the Academia class following review and approval by the Presiding Director regarding the independent status of the member.

(c) Government: Members affiliated with the Government class must be employed by a local, tribal, state or regional, national, or international governmental body (e.g., federal investigative agency, national standards agency, INTERPOL, government computer forensics laboratory, district attorney's office).

(d) Non-Profit: Members affiliated with the Non-Profit class must be employed by an organization that is formally established as a non-profit, not-for-profit, or non-governmental organization, or a similarly chartered entity that works in the public interest by engagement in a digital investigation mission, advocacy for digital investigation standards, or releasing digital investigation tools to the public.

3.4 Section D: Member Status

(a) Active Member: An **active member** shall be voted on by a majority of Governance Committee (Article V) Directors for acceptance into the Community. An active member is appointed to and participates in one or more technical committees. Active Members are expected to make regular technical contributions within the technical committee(s) that they have been assigned. Active Members attend monthly committee meetings and

subcommittee meetings if appointed to them by a committee chair. Active Members may serve in appointed leadership positions within the committee(s) they are assigned. Active Members shall provide written notice of absence to the committee or subcommittee chair within 48 hours of the appointed meeting time. The list of active members shall be re-evaluated on an ongoing basis at intervals determined by the Governance Committee (Article V) and at least once annually prior to the opening of nominations for elected Directors.

(b) Emeritus Member: An **emeritus member** is a person who formerly served in one or more Community officer roles for a total of at least three years, who is no longer an active member, and who has retired from their affiliated organization. Emeritus members shall not participate in Community voting. An emeritus member may be restored to active membership at the determination of the Governance Committee.

(c) Observer Member: An **observer member** is a member who has requested observer status in their membership application.. Observers shall not participate in Community voting, including elections for the Governance Committee Directors. Observers may request a transfer to active member status by submitting a new membership application.. Observers only receive occasional updates from the Community.

Article IV: Organizational Memberships

4.1 Section A: Eligibility

Any firm, partnership, Corporation, unincorporated association, academic institution, or governmental entity having an interest in furthering the purposes and objectives of the

CASE Community shall be eligible for membership subject to submission of a completed membership request form, confirmation of eligibility, and the payment of such dues and fees as the Governance Committee may fix from time to time.

4.2 Section B: Representation

Each member organization shall designate, in a manner to be prescribed by policies and procedures adopted by the Governance Committee, at least one person who shall be recognized by the CASE Community as representing that member organization for purposes of participating in activities of the CASE Community.

4.3 Section C: Membership Classes

Each member organization shall be identified as one of the four types described in Article III, Section C. The representative(s) of the member organization shall belong to the member class based on that type.

4.4 Section D: Privileges of Organizational Membership

Each member organization may have privileges as designated by the Governance Committee upon approval of their membership.

Article V: Governance Committee

5.1 Section A: Purpose

The purpose of the Governance Committee is to establish and maintain the governance structure of the Community.

5.2 Section B: Composition

(a) The Governance Committee consists of the Directors of the Community. The Governance Committee comprises five (5) voting positions: a Presiding Director, one For-profit representative, one Academia representative, one Government representative, and one Non-Profit representative. In addition, there are non-voting roles as specified below.

(b) Each representative is responsible for representing the interests of their member class to the Governance Committee. Class representatives shall facilitate this representation through the establishment of sub-committees of class members, as described in Article V, Section F (d).

(c) The Presiding Director may be a member of any class, but the role of Presiding Director cannot be held concurrently with the role of a class representative Director.

5.3 Section C: Meetings

(a) Schedule: The Governance Committee meets at least once each quarter using the Committee-designated virtual platform or in person. The Governance Committee may hold additional meetings.

(b) Voting: Each Governance Committee member is a voting member, except for appointed non-voting Directors. A 60% quorum of eligible voting Directors voting in the affirmative is necessary to record a vote on any topic, with the exception of those for which the bylaws state that a higher quorum is required.

(c) Records: All Governance Committee meeting minutes are recorded by the Community Secretary, approved by the Presiding Director, and posted to the Community website. The

outcomes of all votes taken in Governance Committee meetings are recorded and published to the Community website.

5.4 Section D: Roles

The Governance Committee includes the following voting and non-voting roles:

(a) Presiding Director (voting role): The Presiding Director is a voting member of the Governance Committee and serves as the lead Director of the Governance Committee. The Presiding Director approves the agenda for each Governance Committee meeting and the publication of meeting minutes. The Presiding Director may act on behalf of the Governance Committee on any item where the Committee would have reasonably provided an affirmative vote in a meeting. The Presiding Director appoints the Secretary and the Treasurer. The Presiding Director always votes last in Governance Committee meetings. In votes where only three voting members of the Governance Committee are present, a Presiding Director who is employed by the same employer as another Director cannot cast a vote.

(b) Deputy Presiding Director (voting role): The Deputy Presiding Director is appointed by the Presiding Director from the available Directors with voting privileges to serve for the same calendar year. The Presiding Director may not also serve as the Assistant Presiding Director in the same year. The Assistant Presiding Director fills in for the Presiding Director for any delegated activity. The Assistant Presiding Director may come from the same class of voting Directors as the Presiding Director.

(c) Treasurer (voting role): The Treasurer is appointed by the Presiding Director from the available Directors with voting privileges to serve for the same calendar year. Any Director of the Governance Committee may serve as the Treasurer, except for the Presiding

Director. At such time that the CASE Community has a budget, the Presiding Director and the Treasurer will maintain positive control of the funds in a bank account accessible to both Directors, and the Treasurer will present a budget report at each Governance Committee meeting.

(d) Director (voting role): Voting Directors who represent each of the member classes are elected annually by the election process specified in Article V, Section E.

(e) Secretary (non-voting role): The Secretary records the minutes and the outcomes of all votes from each meeting to the Community website. The Secretary maintains the lists of all community members, their committee appointments and their voting privileges. . The Secretary shall contribute Governance Committee approved content to the Community websites. Any Director may fill the Secretary role and maintain their voting membership if approved by the Presiding Director. The Governance Committee may select an Assistant Secretary. The Assistant Secretary is a non-voting role unless the person holding the role is also an elected voting member of the Governance Committee.

(f) UCO Representative Director (non-voting role): The Presiding Director shall appoint a representative recommended by the Unified Cyber Ontology (UCO) Community to a non-voting Director role on the Governance Committee to ensure collaboration activities between CASE and UCO communities. This UCO representative may be a Community member with voting privileges on any committee if they fulfill the requirements of those positions.

(g) CASE Technical Director (non-voting role): The CASE Technical Director will attend each meeting of the Governance Committee as a non-voting member unless also serving in a voting Director role. The Technical Director may not serve simultaneously as the

Presiding Director. The Technical Director will provide regular updates to the Governance Committee on the technical goals and achievements of all chartered technical committees.

The Technical Director is a voting member on all chartered technical committees.

(h) The Presiding Director may appoint any person to a non-voting Director role for 1 year to conduct any work deemed necessary.

5.5 Section E: Term, Nomination, and Election of Governance Committee Members

(a) Term: All Governance Committee roles are held from January 1 through December 31. Each elected Director serves for a term of 1 year and may be re-elected to the same position for no more than 3 consecutive years. Directors may be returned after an absence of 1 year if elected by the community members.

(b) Annual Nomination and Election of Governance Committee Directors (voting): The Presiding Director will appoint two representatives to facilitate the annual election of Governance Committee Directors. The Presiding Director will allow for a 30-day nominating period prior to holding the elections. At the start of the nominating period, the two representatives will publish a call for nominations for each Governance Committee Director role, together with the date of the election.

(i) Any active member of the Community may nominate any active member (including self-nomination) to any Director role representing the member class aligned with the nominee's professional employment or affiliation as an independent contributor within the academia class.

(ii) Nominees for Presiding Director must have served one full year, within the previous 7

years, as a voting member of the Governance Committee prior to taking office as the Presiding Director.

(iii) The same person may be nominated to both the Presiding Director and a representative Director role; however, those roles cannot be held concurrently.

(iv) The CASE Technical Director is nominated and elected at the same time as the voting Governance Committee Directors.

Before the end of the nominating period, the Secretary will publish to the Community website the names, employers, member class, and short biographies of all candidates who have accepted a nomination. The election shall be held no less than one week, and no more than three weeks, after the close of the nominating period. Elections shall be completed before October 15 of the election year. Community members will vote by secret ballot for a single nominee to represent each member class; for the Presiding Director; and for the CASE Technical Director. The representatives will provide the voting mechanism (e.g., website or email voting). Nominees with a simple majority of votes will win the vote for that position. In the case of a tie, there shall be a run-off election between the tied candidates until a single candidate has a majority of the votes. If a nominee to both the Presiding Director and a representative Director position has received the majority of votes for both positions, then the nominee will choose which position to hold. The nominee with the next highest number of votes for the remaining position will hold that position. The election results will be certified in writing by the two representatives, and this certificate will be retained as a record by the new Governing Committee. Election results will be published

to the Community website by the Secretary. The outgoing Presiding Director shall organize and hold a transition meeting with the incoming Governance Committee Directors. New Directors will take their positions on January 1 of the following year and serve until December 31 (unless re-elected to their position).

5.6 Section F: Governance Committee Responsibilities

(a) Areas of Responsibility: The Governance Committee shall establish and maintain the Community's:

- (i) bylaws,
- (ii) code of conduct and privacy policy,
- (iii) budget,
- (iv) calendar,
- (v) strategy,
- (vi) websites,
- (vii) repositories,
- (viii) professional affiliations, contracts, and memorandums of agreement,
- (ix) licensing strategy for re-use of CASE and protection of contributors' intellectual property, and
- (x) other necessary business activities.

(b) Record of Directors: The Secretary will record the names, roles, and professional affiliations of each member of the committee to the Community website. The Secretary will publish the names and employer affiliation of all non-voting Directors to the Community website unless the Governance Committee votes to retain those names and affiliations from

public view.

(c) Meetings: The Governance Committee conducts meetings as specified in Article V, Section C.

(d) Establishment of Member Class Advisory Committees: Each voting Director representing a Member Class shall establish an advisory committee to support their representation of the perspective and concerns of their member class to the Governance Committee. Appointed advisory committee members do not have voting rights on the Governance Committee. Each advisory committee shall consist of the voting Director and active members in that class, according to the following guidelines:

- i. For-profit advisory committee: The voting Director from For-profit shall appoint advisory committee members to ensure representation from each of the following three types of For-profit organizations: tool vendors, digital investigation service providers, and government contractors.
- ii. Academia advisory committee: The voting Director from Academia shall appoint advisory members to ensure representation from each of the following two types of entities: traditional academia (*e.g.* college and university), and independent researchers and/or developers.
- iii. Government advisory committee: The voting Director from Government shall appoint advisory members to ensure representation from each of the following four types of organizations: National, sub-national, international, and law enforcement (*e.g.*, international law enforcement or national government(s) other than one already represented).
- iv. Non-Profit advisory committee: The voting Director from Non-Profit shall appoint advisory members to ensure representation from more than one non-profit, not-for-profit, or

non-governmental organization.

(e) Technical Direction: The technical direction of the CASE Community is established by the CASE Technical Director with inputs from all chartered technical committees

(f) Support to the Technical Director: The Governance Committee may charter other technical committees as necessary to provide specific inputs to the Technical Director. The Governance Committee shall publish the charter of new technical committees, and if necessary, establish a completion date for each committee.

5.7 Section G: Powers

(a) Business Actions and Affiliations: To maintain or improve the effectiveness and broad adoption of the CASE specification language globally, the Governance Committee may take actions necessary for the Community to join an established standards body or another non-profit entity or to incorporate the CASE Community as a non-profit entity, following a vote that meets the following requirements:

i. At the direction of the Governance Committee, a proposal shall be drafted and the Secretary shall publish to the CASE Community website a notice of the proposal to join an established standards body or to incorporate as a non-profit entity, allowing a comment period of 45 days prior to a vote on the proposal by the Governance Committee.

ii. At the end of the comment period, the Governance Committee shall record a unanimous vote in favor of the proposal from all voting Directors on the Governance Committee.

After those requirements are met, the Presiding Director may initiate actions to join the established standards body or to incorporation. In case of incorporation as a non-profit, the

Governance Committee shall have authority to obtain Director and Officer Insurance to protect individuals who assume roles on the Governance Committee.

(b) Dues and Fees: The Governance Committee may implement a membership fee schedule, with the approval of 80% of the Governance Committee voting in the affirmative. Consecutive increases in fees shall not exceed 10%.

(c) Payment of Expenses: The Governance Committee may pay for (i) services of supporting professional entities such as lawyers or consultants, (ii) insurance for directors and officers, or (iii) operational expenditures (e.g., website hosting fees, postage) after an affirmative vote of 60% of the eligible voting members and concurrence from the Treasurer that funds are available.

(d) Appointment of Non-voting Directors: The Presiding Director may appoint additional non-voting Directors as necessary to a term of one year.

(e) Establishment of Committees: The Governance Committee may establish other committees as necessary.

(f) Disestablishment of Committees: The Governance Committee can disestablish any committee, in accordance with the procedures stated in Article X, Section C.

(g) Amendment of Bylaws: The Governance Committee may change any part of these bylaws, in accordance with the procedure stated in Article XV, Section A.

5.8 Section H: Remuneration

Directors of the Governance Committee shall not be paid for their work until such time that this Community may incorporate as a non-profit entity. Governance Committee Directors are responsible for gaining ethics and/or legal approval from their employer and securing

funding for their time from their employer. Directors who donate their time, in lieu of using funds from their employer, will still represent the member class based on their employer's category.

5.9 Section I: Removal and Replacement of Governance Committee Directors

(a) Removal for Cause: The Governance Committee may remove any Director who misses three consecutive scheduled committee meetings or violates the Community Code of Conduct. The Governance Committee may take this action up for vote at the meeting following the two previously missed meetings or at a meeting convened for this purpose exclusively. Removal of the Director shall require a majority affirmative vote with an 80% quorum of the eligible voting members of the Governance Committee. The Secretary will remove the names and professional affiliation of any removed Director from the Community website on the day of their removal.

(c) Vacancies: Vacancies in the elected Governance Committee roles (whether resulting from removal, resignation, or death) shall be filled as follows, either at the next scheduled meeting after the vacancy occurs, or at a meeting convened specifically for this purpose:

(i) Presiding Director: The Governance Committee shall promote one of their own members into the Presiding Director role by a simple majority vote of the eligible voting members of the Governance Committee. The new Presiding Director shall appoint a replacement to represent their member class. The new Presiding Director will complete the term of the former Presiding Director.

(ii) Representative (voting) Directors: The Presiding Director, with consultation from the Governance Committee, shall appoint a replacement Director with voting privileges from the

member class represented by the former Director (*i.e.*, Academia, For-profit, Government, or Non-Profit).

(iii) CASE Technical Director: The Presiding Director, with consultation from the Governance Committee, shall appoint a replacement CASE Technical Director.

5.10 Section I: Removal of Members

(a) Removal for Cause: The Governance Committee may remove any Active member who misses three consecutive monthly committee meetings or violates the Community Code of Conduct. Each committee chair shall present the three unannounced absence dates to the Technical Director who may choose to refer the member for removal to the Governance Committee. The Governance Committee may take this action up for vote at the monthly meeting following the three previously missed monthly meetings or at a meeting convened for this purpose exclusively. Removal of the active member shall require a majority vote of the Governance Committee Directors. The Secretary will remove the names and professional affiliation of any removed Director from the Community roles on the day of their removal.

Article VI: Officers

6.1 Section A: Officers

The officers of the organization are a presiding director (of the Governance Committee), an assistant presiding director (of the Governance Committee), four representative directors (one voting director from each of the four Member classes), a CASE technical director, a

treasurer, and a secretary. Offices which may not be held concurrently are identified below.

6.2 Section B: Presiding Director

The Presiding Director is a voting member of the Governance Committee and serves as its lead Director. Specific duties are described in Article V (Governance Committee), Section D. The Presiding Director is elected according to the rules set forth in Article V, Section E, for the Governance Committee elections process.

6.3 Section C: Deputy Presiding Director

The Assistant Presiding Director is appointed by the Presiding Director to serve for the same calendar year as a substitute for the Presiding Director for any delegated activity. The role of Presiding Director and the role of Assistant Presiding Director may not be held concurrently by the same individual.

6.4 Section D: Representative Directors

Voting directors who each represent a class of members (as described in Article V) are elected annually by the process specified in Article V, Section E.

6.5 Section E: CASE Technical Director

The Technical Director is elected annually through the process specified in Article V, Section E, along with the Governance Committee Directors. Any Community member may self-nominate for this position. The Technical Director may serve concurrently as a voting member of the Governance Committee if they are also voted into that position during the annual elections; however, the Technical Director may not serve concurrently as the

Presiding Director. The CASE Technical Director position may not be held by the same person for more than two years consecutively, however, that person may return to the position after a one-year absence if they are elected. Duties and responsibilities of the CASE Technical Director with respect to CASE technical committees are addressed in the committee charters.

Community Technical Oversight: The Technical Director establishes and maintains a 3-year plan for the technical direction of the Community. The Technical Director shall present this plan annually to the Governance Committee. The Technical Director may delegate responsibilities for execution of the plan to appropriate CASE technical committees. The Technical Director shall present significant updates to the plan at Governance Committee meetings. The Technical Director may request that the Governance Committee allot additional resources for technical support (e.g., for repository development and maintenance).

The Technical Director ensures that the CASE Ontology and documentation are current on the Community website. The Technical Director ensures that repositories for CASE application software and documentation are current and consistent with CASE technical requirements. The Technical Director may delegate these responsibilities to appropriate CASE technical committees or parties identified by the Governance Committee.

The Technical Director serves as an independent leader by not actively promoting their employer's position. The Technical Director strives to achieve a balanced position between the demands of all technical committee members.

6.6 Section F: Treasurer

The Treasurer is appointed by the Presiding Director from the available Directors of the Governance Committee with voting privileges to serve for the same calendar year. Specific duties are described in Article V (Governance Committee), Section D. The role of Treasurer and the role of Presiding Director may not be held concurrently.

6.7 Section G: Secretary

The Presiding Director appoints the Secretary from the Community's active membership.

The Presiding Director may appoint a Governance Committee Director and that person will retain their voting rights as a Director, however, the role of Secretary by itself is a non-voting role. Specific duties are described in Article V (Governance Committee), Section D. See 5.4 Section D(e) for Assistant Secretary appointment authority.

Article VII: Meetings

7.1 Section A: Regular Meetings

Regular meetings of the CASE Community shall be held at dates and times specified by the Governance Committee.

Regular meetings of the Governance Committee will be held as specified in Article V, Section C.

Regular meetings of the chartered technical committees will be held as specified in Article VIII, Section A, and Article VIV, Section A, respectively, and in the committee's Operations

Guide.

7.2 Section B: Annual Meetings

Annual meetings of the CASE Community may be held at dates and times specified by the Governance Committee.

7.3 Section C: Special Meetings

Special meetings of the CASE Community may be held at dates and times specified by the Governance Committee.

7.4 Section D: Time, Notice, and Call of Meetings

Announcement of meetings of the whole Community shall be posted to the Community website, including time, place, remote connection information, and agendas.

7.5 Section E: Meeting Minutes

Meeting minutes for the record from the previous meeting shall be reviewed for acceptance at the start of the next formal meeting. Minutes of meetings of the Community at large shall be published on the Community website.

Article VIII: CASE Ontology Committee

8.1 Section A: Purpose

The CASE Ontology Committee shall be a standing committee established for the purpose of developing and publishing CASE. The CASE Ontology Committee is empowered to

address all aspects of development, standardization, and documentation of the CASE Ontology. This includes the CASE Ontology design, specific content of the ontology (e.g., classes, properties, and value types), selection of representation language(s), approval of all change requests, review of mappings, and determination of requirements for ontology metadata and documentation.

8.2 Section B: Ontology Committee Composition

(a) Members: The Ontology Committee consists of the CASE Technical Director and additional members, who are all appointed by the Technical Director in accordance with guidelines specified later in this Article.

(b) Ontology Committee Chair and Assistant Chair: The Technical Director shall appoint the Ontology Committee Chair to conduct the business of the Ontology Committee, with responsibilities as specified in the Ontology Committee Charter. The Ontology Committee Chair shall appoint an Assistant Chair to fill in when the Chair is absent. The Chair and Assistant Chair may be in the same class of members.. The Ontology Committee Chair is appointed by the Technical Director elected for the same year and subsequently appoints their Assistant Chair.

(c) Voting and Non-voting Members: Ex officio, the Technical Director is a voting member of the Ontology Committee. Other members have either voting or non-voting status on the Ontology Committee as determined by the Technical Director at the time of their appointment and that status is subject to change by the Technical Director . All committee members may attend general meetings of the Ontology Committee. Only voting members may vote on measures before the committee.

(d) Leadership: The Ontology Committee is led by the Ontology Committee Chair.

(e) The Technical Director appoints all members of the Ontology Committee in accordance with the following guidelines:

(i) The Technical Director shall appoint at a minimum two voting members from each member class (For-profit, Academia, Government, and Non-Profit).

(ii) The Technical Director shall appoint at least one For-profit representative from a company whose principal business activity is tool sales and at least one Industry representative from a company whose principal business activity is offering digital investigation services.

(f) The Technical Director shall appoint no more than two voting members who have the same employer.

(g) There is no limit to the number of Ontology Committee members that the Technical Director may appoint.

(i) The Technical Director may appoint technical contributors as non-voting committee members.

(ii) The Technical Director may change the status of an Ontology Committee member from voting to advisory and *vice versa* after presenting written notice to the member.

(iii) The Technical Director shall appoint at least one representative from Law Enforcement within the Government class. Appointment of a law enforcement representative(s) with voting rights is left to the discretion of the Technical Director.

8.3 Section C: Ontology Committee Voting

(a) Ontology Committee voting: For a measure before the full Ontology Committee (*e.g.*,

ontology change request, committee process change) to pass, three of the four classes must vote in the affirmative for the ballot item with more than 50% of the voting members in each class, who are present for the meeting, voting in the affirmative for the ballot item. The Ontology Committee operations guide shall stipulate the required notice to be given for each meeting where a measure to be voted on will be presented.

(b) Subcommittee voting: Voting procedures for measures before subcommittees of the Ontology Committee shall be determined by the Technical Director or the procedure decision will be delegated by the Technical Director to the designated lead for that subcommittee.

(c) Record keeping: The Ontology Committee Chair shall record all votes of the Ontology Committee and provide those records to the Secretary for inclusion in the Community record.

8.4 Section D: Ontology Committee Member Responsibilities and Review

(a) Contributions: Ontology Committee members shall function in at least one of the contributor roles (*e.g.*, ontologists, mappers, adopters) as described on the Community website.

(b) Review: The Technical Director appoints members to the Ontology Committee based on their ability to contribute to and/or adopt the CASE specification language. Member appointments will be reviewed by the Technical Director to ensure that committee members are contributing to development of CASE. Non-contributing members will be removed from the Ontology Committee by the Technical Director.

8.5 Section E: Technical Director Responsibilities with Respect to the Ontology Committee

(a) Planning: The Technical Director establishes the general direction of the Ontology Committee under the 3-year technical plan (section 6.5). The Technical Director shall report the progress of the Ontology Committee with respect to this plan to the Governance Committee. (b) Governance Committee Updates: The Technical Director shall present regular updates on the progress of the Ontology Committee to the Governance Committee.

8.6 Section F: Ontology Committee Chair Responsibilities

(a) Neutrality: The Ontology Committee Chair conducts activities of the Ontology Committee with neutrality to allow the achievement of a balanced position between demands of all Ontology Committee members.

(b) Planning: The Ontology Committee Chair shall develop specific steps to achieve the goals of the Technical Director's CASE 3-year technical plan pertaining to the Ontology Committee. The Ontology Committee Chair shall update the Technical Director about the activities of the Ontology Committee on a regular basis.

(c) Meetings: The Ontology Committee Chair schedules and leads regular meetings of the Ontology Committee to conduct technical activities on at least a monthly basis. The Chair may call additional meetings of the Ontology Committee if they are required to address a particular issue that cannot be considered during regular meetings due to urgency, complexity, or other extraordinary factors. The Chair ensures the publication of the meeting minutes to the CASE Ontology website or folder, and the posting of meeting summaries to

the Community website. The Chair may arrange other CASE-centric engagements with Community members globally (e.g., conference workshops).

(d) Ontology Committee Operations Guide: The Ontology Committee Chair shall execute the operations of the committee using rules and processes established in the Ontology Committee Operations Guide. The Operations Guide shall document the policies and standing operations procedures (SOP) of the Ontology Committee, including guidelines for the following activities:

(i) Process steps, including documentation required for submission of CASE ontology change requests.

(ii) Process steps and schedule by which the Ontology Committee Chair or designee shall accept, reject, refer for requirements analysis and technical review, and/or vote on all CASE ontology change requests.

(iii) Process steps by Ontology Committee Chair shall provide notifications on CASE ontology change requests to submitters and to the Community.

(iv) Process steps and guidelines for prioritization of CASE ontology change requests.

(v) Specification of a review and comment process to collect feedback, including about dependencies and impact of the ontology change requests.

(vi) Review shall focus on maintaining backward compatibility, to the extent possible and practical, to minimize lifecycle adoption costs of the CASE specification language.

(vii) Process steps and schedule by which approved change requests shall be integrated into a new CASE ontology release after approval by the Ontology

Committee.

(d) Delegation of Work: The Ontology Committee Chair may establish subcommittees of the Ontology Committee to facilitate the work of the committee.

Article IX: CASE Adoption Committee

9.1 Section A: Purpose

The purpose of the Adoption Committee is to serve as a community-based forum to support the adoption of CASE as a technical standard for groups of people, systems, and software tools to automatically normalize, exchange, combine, correlate, validate and analyse cyber-investigation information. In order to do this, the Adoption Committee shall function

as:

(a) the working group for providing conditions and guidance for CASE compliance,

(b) the coordinating body for the CASE Community to address all aspects of CASE adoption (e.g., mapping, importing, exporting, training aids and workshops, supporting framework tools and software integration), and

(c) a technical advisory group to the CASE Technical Director for CASE adoption matters.

Specific Adoption Committee activities include coordinating all aspects of supporting framework tools, including application programming interfaces (APIs), validation tools, and proofs-of-concepts (POCs), as well as collaborating with CASE adopters to generate change proposals to be addressed by the Adoption Committee or for submission to the

CASE Ontology Committee.

(d) In order to establish CASE as a global standard, the mission of the Adoption Committee is to promote and ease the adoption of the CASE Ontology by creating software and documentation, providing guidance, and running tutorial workshops to support CASE Adopters worldwide.

(e) Adoption Committee members shall, individually and collectively, provide CASE Adopters with the pros/cons of different adoption approaches, allowing them to select the appropriate one(s) based on their requirements and use cases. The Adoption Committee works to fill gaps in requirements based on the needs of the community's adopters.

9.2 Section B: Adoption Committee Composition

(a) Members: The Adoption Committee consists of the CASE Technical Director and additional members, who are all appointed by the Technical Director in accordance with guidelines specified later in this Article.

(i) Voting and Non-voting Advisory Members: Ex officio, the Technical Director is a voting member of the Ontology Committee. Other members have either voting or non-voting status on the Adoption Committee as determined by the Technical Director at the time of their appointment and subject to change. All committee members may attend general meetings of the Adoption Committee. Only voting members may vote on measures before the committee.

(b) Adoption Committee Chair and Assistant Chair: The CASE Adoption Committee Chair

("Chair") and Assistant Chair ("Assistant Chair") are appointed by the CASE Technical Director ("Technical Director") for a one-year term. The Chair and Assistant Chair may be re-appointed for subsequent years, or removed, at the discretion of the currently elected Technical Director. The Chair shall lead the Adoption Committee by facilitating the work of the working groups to engage with CASE Adopters worldwide, coordinating with the Ontology Committee Chair, and by implementing the CASE Technical Director's strategy. The Assistant Chair shall assume the role of the Chair during their absence or upon their resignation. The Chair shall report to the Technical Director on the progress of the Adoption Committee at least monthly. The Chair is responsible for the publication of products, maintaining product version control, and documentation produced by the committee. The Chair may appoint a product manager and a committee coordinator at their discretion and upon availability of committee members to fill these roles. To be successful, the Chair must be in regular communications with the Ontology Committee Chair and the Technical Director.

(d) Leadership: The Adoption Committee is led by the Adoption Committee Chair.

(f) The Technical Director appoints all members of the Adoption Committee in accordance with the following guidelines:

ii. The Technical Director shall appoint at a minimum two voting members from each member class (For-profit, Academia, Government, and Non-Profit).

iii. The Technical Director shall appoint at least one For-profit Industry representative from a company whose principal business activity is tool sales and at least one Industry representative from a company whose principal business activity is offering digital investigation services.

1. The Technical Director shall appoint no more than two voting members who have the same employer.

iv. There is no limit to the number of Adoption Committee members that the Technical Director may appoint.

1. The Technical Director may appoint technical contributors as non-voting (i.e., advisory) committee members.

vii. The Technical Director may change the status of an Adoption Committee member from voting to advisory and vice versa.

viii. The Technical Director shall appoint at least one representative from Law Enforcement within the Government class. Appointment of a law enforcement representative(s) with voting rights is left to the discretion of the Technical Director.

9.3 Section C: Adoption Committee Voting

(a) Adoption Committee voting: For a measure before the full Adoption Committee (e.g., change request, committee process change) to pass, three of the four classes must vote in the affirmative for the ballot item with more than 50% of the voting members in each class, who are present for the meeting, in each class voting in the affirmative for the ballot item. The Adoption Committee operations guide shall stipulate the required notice to be given for each meeting where a measure to be voted on will be presented.

(b) Subcommittee voting: Voting procedures for measures before subcommittees of the Adoption Committee shall be determined by the Adoption Committee Chair or delegated to the subcommittee leader.

(c) Record keeping: The Adoption Committee Chair shall record all votes of the Adoption

Committee and provide those records to the Secretary to add to the Community record.

9.4 Section D: Adoption Committee Member Responsibilities and Review

(a) Contributions: Adoption Committee members shall function in at least one of the contributor roles (e.g., developer, mappers, adopters).

(b) Review: The Technical Director appoints members to the Adoption Committee based on their ability to adopt the CASE specification language or contribute to other member's adoption needs. Member appointments will be reviewed by the Technical Director to ensure that committee members are contributing to development of CASE adoption processes and technologies.

9.5 Section E: Technical Director Responsibilities with Respect to the Adoption Committee

(a) Planning: The Technical Director establishes the general direction of the Adoption Committee by maintaining a 3-year technical plan (section 6.5) for the committee. The Technical Director shall report the progress of the Adoption Committee with respect to this plan annually to the Governance Committee.

(b) Governance Committee Updates: The Technical Director shall present regular updates on the progress of the Adoption Committee to the Governing Committee.

9.6 Section F: Adoption Committee Chair Responsibilities

(a) Neutrality: The Adoption Committee Chair conducts activities of the Adoption Committee with neutrality to allow the achievement of a balanced position between demands of all Adoption Committee members.

(b) Planning: The Adoption Committee Chair shall develop specific steps to achieve the

goals of the Technical Director's CASE 3-year technical plan pertaining to the Adoption Committee. The Adoption Committee Chair shall update the Technical Director about the activities of the Adoption Committee on a regular basis.

(c) Meetings: The Adoption Committee Chair schedules and leads regular meetings of the Adoption Committee to conduct technical activities on at least a monthly basis. The Chair may call additional meetings of the Adoption Committee if they are required to address a particular issue that cannot be considered during regular meetings due to urgency, complexity, or other extraordinary factors. The Chair ensures the publication of the meeting minutes to the Community internal website or folder, and the posting of meeting summaries to the Community website. The Chair may arrange other CASE-centric engagements with Community members globally (e.g., conference workshops).

(d) Adoption Committee Operations Guide: The Adoption Committee Chair shall execute the operations of the committee using rules and processes established in the Adoption Committee Operations Guide. The Operations Guide shall document the policies and standing operations procedures (SOP) of the Adoption Committee, including guidelines for the following activities:

(i) Process steps, including documentation required for submission of adoption tool and process change requests.

(ii) Process steps and schedule by which the Adoption Committee Chair or designee shall accept, reject, refer for requirements analysis and technical review, and/or vote on all change requests.

(iii) Process steps by which the Adoption Committee Chair shall provide notifications on change requests to submitters and to the Community.

- (iv) Process steps and guidelines for prioritization of change requests.
- (v) Specification of a review and comment process to collect feedback, including about dependencies and impact of change requests.
- (vi) Review shall focus on maintaining backward compatibility, to the extent possible and practical, to minimize lifecycle adoption costs of the CASE specification language.
- (vii) Process steps and schedule by which approved change requests shall be integrated into the technology baseline maintained by the Adoption Committee.
- (d) Delegation of Work: The Adoption Committee Chair may establish subcommittees of the Adoption Committee to facilitate the work of the committee.

Article X: Other Committees

10.1 Section A: Special Committees

The Governance Committee may charter special committees as needed.

10.2 Section B: Member Class Committees

A voting Director who represents a member class shall establish a subcommittee to facilitate the representation of the interests of that class, as specified in Article V, Section F.

10.3 Section C: Disestablishment of Committees

The Governance Committee can disestablish any committee by a majority vote of an 80% quorum of the eligible voting members of the Governance Committee, following publication to the Community website of a 90-day written notice of the motion to disestablish.

Article XI: Finances

11.1 Section A: Fiscal Year

The fiscal year of the Community shall be from January 1 to December 31 of each calendar year.

11.2 Section B: Budget

The Community budget for the next fiscal year shall be developed by the Presiding Director and the Treasurer, during the 4th quarter of the preceding fiscal year. The budget shall be approved, or amended and approved, at the first meeting of the Governance Committee in the new fiscal year. The budget may be changed by the Governance Committee as necessary throughout the year, including prior to initial approval. Budget approval and budget modification shall both require an affirmative vote of a 60% quorum of the eligible voting members of the Governance Committee. The Treasurer shall have the budget reporting responsibilities specified in Article V, Section D.

11.3 Section C: Operating Expenditures

The Governance Committee shall pay for services of supporting professional entities after an affirmative vote of 60% of the eligible voting Governance Committee Directors and concurrence from the Treasurer that funds are available, as described in Article V, Section G.

11.4 Section D: Accounts and Recordkeeping

Community bank accounts shall be accessible to both the Presiding Director and the Treasurer. The Treasurer shall keep accurate records of Community bank accounts, and of all disbursements and income and/or credits.

Article XII: External Status and Affiliations

12.1 Section A: Incorporation

The Governance Committee may take business actions including incorporation of the Community as a non-profit entity, under its powers as described in Article V, Section G.

12.2 Section B: Affiliation with Standards Development Organization (SDO)

The Governance Committee may affiliate the Community with a Standards Development Organization (SDO), or another non-profit entity under its powers as described in Article V, Section G.

12.3 Section C: Alignment of the Community Under A Non-Profit Entity

The Governance Committee may align the Community under an existing non-profit entity under its powers as described in Article V, Section G.

Article XIII: Meeting Protocol

The meeting protocol for general meetings of the Community shall be established by the Governance Committee consistent with the Community's bylaws. Meeting protocols for

regular and ad hoc committee meetings shall be established by the person holding the lead role for the committee. All voting protocols across the community functions are defined, in order of precedence, in the (1) Community Bylaws, in the specific (2) Committee Charter, and then in the specific (3) Committee operations guide.

Article XIV: Amendments and Other Provisions

14.1 Section A: Amendment of Bylaws

(a) Amendment Process: The Governance Committee may change any part of these bylaws after an affirmative vote from a 60% quorum of the eligible voting members of the Governance Committee is established. The Governance Committee must propose Community Bylaw changes to the CASE Community by publication on the Community website and allow for a 30-day comment period before taking a vote. The Secretary will publish all changes to the bylaws on the Community website.

Article XV: Conflicts of Interest

15.1 Section A: Avoidance of Conflicts (Voting)

Whenever an officer has a financial or personal interest in any matter coming before the Community and/or the Governance Committee, that officer shall fully disclose the nature of the interest. The Presiding Director can mandate that the Director with the conflict recuse themselves from voting on the specific topic. If the Presiding Director has the conflict, a quorum of two other Directors with voting privileges can mandate the Presiding Director to recuse themselves from voting on the specific topic.

15.2 Section B: Avoidance of Conflicts (Service)

Governance Committee Directors are responsible for gaining ethics and/or legal approval from their employer and securing funding for their time from their employer. Ontology Committee members are responsible for gaining ethics and/or legal approval from their employer and securing funding for their time from their employer. All Community members not affiliated with a committee are responsible for gaining ethics and/or legal approval from their employer and securing funding for their time from their employer.

Article XVI: Dissolution Clause

16.1 Section A: Notice of Proposed Dissolution

Approval of a motion to hold a vote on proposed dissolution of the Community shall require an affirmative vote by 80% of the Governance Committee. If passed, then notice of a vote on dissolution shall be published to the Community website and all Community mailing lists no less than one year (365 days) prior to the final vote.

16.2 Section B: Final Approval of Proposed Dissolution

After the expiration of the one-year period of notice, the vote on dissolution shall be conducted, in which all members of the Governance Committee must vote for approval. Prior to final dissolution, Community property will be donated to another community with similar goals, to a non-profit entity, or to a recognized standards body as identified by the final Governing Committee.

Article XVII: Adoption of Bylaws

These bylaws became effective after 10 active members of the CASE Community voted for them in the affirmative and they were subsequently ratified by the Presiding Director and appointed Secretary on 22 January 2019.

Eoghan Casey, PhD

Presiding Director

Signed 22 January 2019

Cory L. Hall

Community Secretary

Signed 22 January 2019