Working Group Processes and Procedures

Effective Date: 2025-03-21

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1   Introduction: Scope and Purpose

This document describes the Working Group (WG) structures, processes, and procedures used by groups within the Connectivity Standards Alliance (Alliance) to develop, promote, and maintain standards. This includes, but is not limited to, technical development, marketing, Testing, and certification activities. Other deliverables include, but are not limited to, best practices, guidelines, tools, source code, Test Plans, scripts, and other material related to released standards.

For an overview of the Alliance organizational structure, refer to the Alliance Corporate Governance Framework [1].

This document is organized as follows:

- Hierarchy of Rules

  This document exists within a broader framework of rules. This section describes how this document fits within this broader context.

- Working Group (WG)

  This section describes how WGs are formed, who participates in them, their general structure, and how and when they are dissolved.

- Working Group Communication

  This section describes how WG participants communicate with each other and in what kinds of meetings they can participate.

- Elections

  This section describes the process for electing people to leadership positions in a WG.

- Specification Development Process

  This section describes the processes that WGs use to develop Specifications, including their development stages and the approvals needed at each stage.

- Change Control Process for Adopted Specifications

  Changes to an Adopted Specification may be required due to, for example, errors or omissions in the published text. This section describes the process to amend Adopted Specifications based on these changes, as well as when the changes are needed urgently because of certification, interoperability, or security concerns.

- Decision Making: Voting or Consensus

  This section describes who can vote in a WG, how to reach Consensus, how to vote, and how to conduct formal balloting for the approval of Specifications within the WG.

- Appendix A: Appeals Process

  This section describes how Members may appeal decisions they consider have been reached in error.

1.1 References

This document includes the following references.

[1] Corporate Governance Framework

Source Document: https://csa-iot.org/wp-content/uploads/2023/07/Corporate-Governance-Framework-V1.2_2023-05-17.pdf

Effective Date: 2023-05-17

Document Owner: Board of Directors

[2] IPR Policy

Source Document: https://csa-iot.org/wp-content/uploads/2022/09/CSA-IPR-Policy-6.3-Adopted.pdf

Effective Date: 2022-09-07

Document Owner: Board of Directors

[3] Antitrust Guidelines

Source Document:

https://csa-iot.org/wp-content/uploads/2021/12/CSA-Anti-Trust-Policy.pdf

Effective Date: 2010-05-24

Document Owner: Board of Directors

[4] Articles of Incorporation

Source Document:

https://csa-iot.org/wp-content/uploads/2022/02/CSA-Articles-of-Incorporation-CA_07-2022.pdf

Effective Date: 2002-0-/08; Amended and filed 2021-04-15

Document Owner: Board of Directors

[5] Alliance Corporate Bylaws

Source Document:

https://csa-iot.org/wp-content/uploads/2024/01/CSA-Corporate-Bylaws_17-January-2024.pdf

Effective Date: 2024-01-17

Document Owner: Board of Directors

[6] Participant Membership Agreement (General Reference)

Source Document:
https://csa-iot.org/wp-content/uploads/2021/12/csa-participant-member-agreement-v2-3-22-july-2023.pdf

Latest Revision Date: 2023-07-22

Document Owner: Connectivity Standards Alliance

[7] Certification Policy

Source Document: (available to Alliance Members only):

https://groups.csa-iot.org/wg/members-all/document/125

Effective Date: 2024-03-18

Document Owner: Testing and Certification Oversight Committee of the Board of Directors

[8] Robert's Rules of Order – Used as a Reference Guide Only.

Refer to the latest published edition of Robert's Rules of Order.

[9] Connectivity Standards Alliance Code of Conduct

Source Document:

https://csa-iot.org/wp-content/uploads/2024/02/Alliance-Code-of-Conduct-20240110.pdf

Latest Revision Date: Version 001, 17 January 2024

Document Owner: Connectivity Standards Alliance

[10] PICS Tool Webinar

Source Document (available to Alliance Members only):

https://groups.csa-iot.org/wg/members-all/document/23416

Effective Date: 2021-07-14

Document Owner: Alliance Director of Certification

[11] Connectivity Standards Alliance Record Retention Policy

Source Document (available to Alliance Members only):

https://groups.csa-iot.org/wg/members-all/document/24173

Effective Date: 2021-10-13

Document Owner: Alliance Board of Directors

[12] Connectivity Standards Alliance Election Procedures

Source Documents (available to Alliance Members only):

https://groups.csa-iot.org/wg/members-all/document/folder/3859

Effective Date: 2023-11-12

Document Owner: Alliance Board of Directors

2   Hierarchy of Rules

The Connectivity Standards Alliance (Alliance) Antitrust Guidelines [3] apply to, and govern, with no exceptions, all Working Group (WG) activities and meetings.

A hierarchy of rules governs the Alliance standards development, and when conflicts exist, the higher document in the following list takes precedence:

1. Law of the Land where the Alliance is incorporated

2. Corporate Documents (not in order of precedence): Corporate Governance Framework [1], IPR Policy [2], Antitrust Guidelines [3], Articles of Incorporation [4], Alliance Corporate Bylaws [5], Participant Membership Agreement [6], Certification Policy [7], Alliance Code

of Conduct [9], Alliance Records Retention Policy [11], Alliance Election Procedures [12]

3. Working Group Processes and Procedures

4. Working Group Charter

5. Robert's Rules of Order [8] – as a Reference Guide Only.

2.1 Acronyms and Key Terms

The following acronyms are used in this document.

Acronym	Definition
AoE	Anywhere on Earth
AMM	All Members Meeting
ATL	Authorized Test Laboratory
CCB	Change Control Board
CSG	Certification Sub-Group
DUT	Device Under Test
FCR	Feature Change Request
IPR	Intellectual Property Rights
MPSG	Marketing and Product Sub-Group
MRD	Market Requirements Document
NCR	Necessary Claims Review
PICS	Protocol Implementation Conformance Statement
RSG	Regulatory Sub-Group
SC	Working Group Steering Committee
ScVE	Script Validation Event
SG	Sub-Group
SVE	Specification Validation Event

Acronym	Definition
TSG	Technical Sub-Group
TT	Tiger Team
TRD	Technical Requirements Document
WG	Working Group

The following key terms are used and capitalized through this document:

Adopted Specification: A Specification that has been approved by the Alliance Board of Directors (Board). Refer to the Alliance IPR Policy [2] for the controlling definition.

Alliance: The Connectivity Standards Alliance

Alliance Member: Any Promoter Member, Participant, Adopter, Associate, or other class of Alliance member that may be approved by the Alliance Board, collectively or individually, as applicable. Refer to the Alliance IPR Policy [2] for the controlling definition.

Anywhere On Earth (AoE): A calendar designation that indicates that a period expires when the date passes everywhere on Earth. It is a practice to help specify deadlines such as "16 March 2004, End of Day, Anywhere on Earth (AoE) " without requiring timezone calculations or Daylight saving time adjustments.

At-Large Member: Working Group Steering Committee member elected by the Working Group (WG).

Authorized Test Laboratory (ATL): Independent test laboratories authorized by the Connectivity Standards Alliance to administer the Testing associated with the CSA Certified program. The current list of authorized test laboratories is maintained at the Alliance web site: http://www.csa-iot.org. Refer to the Alliance Certification Policy [7] for the controlling definition.

Ballot: Ballots are a special kind of vote. There are two kinds of Ballots (Ratification and Recirculation) and they are conducted in accordance with this document, as established in Section 8.8, Ratification Ballot Process and Procedure.

Board: The Alliance Board of Directors

Certification Program: A well-defined process that approves interpretation, validates conformance and interoperability to a set of Specifications, and when successfully completed, allows the certification authority to issue a certificate. Refer to the Alliance Certification Policy [7] for the controlling definition.

Certified Product: A Product that has been certified under the Alliance Product Certification Program. Refer to the Alliance Certification Policy [7] for the controlling description.

Chair: A Chair is responsible for convening meetings and setting their agendas, declaring consensus or calling for a vote, organizing Ballots (as necessary), and ensuring that other group leadership positions are populated.

Change Control Board (CCB): Used as a synonym for a change request. Also a tool used to process change requests.

Consensus: Consensus is a decision-making method that relies on lack of substantial disagreement rather than on counting votes. Creating consensus means finding a proposal acceptable enough that all of the group's voting members can support it, with no voting member opposing it. When these conditions are satisfied the Chair may declare that Consensus has been reached.

Corporate Documents: See Section 1.1, References, ([1], [2], [3], [4], [5], [6], [7], [9], [11], [12]) which includes a list of corporate documents referenced in this document.

Draft Specification: For New Specifications this is defined as a Working Specification that has been approved by the WG Leadership Body (see Working Group Steering Committee) for distribution to all Members for review during a Necessary Claims Review (NCR) Period, and in the case of an Urgent Change, the proposed modified Adopted Specification. Refer to the Alliance IPR Policy [2] for the controlling definition.

Errata Change: A well-defined set of changes to a Specification which make non-substantive clarifications or fix editing mistakes or editorial errors, such as for formatting, organization, spelling, or grammar. An Errata Change is not a new feature, a change that creates a new technical mechanism, a change that alters the behavior of a device, or a change that materially alters certification tests or requirements. Refer to the Alliance IPR Policy [2] for the controlling definition.

New Feature Request: A process to be followed during the Specification development process to introduce a technical change. Refer to Section 6.3, New Feature Request (NFR) for the controlling definition.

Golden Unit: A Compliant Platform or Certified Product chosen to be used as part of a Program to test interoperability. Refer to the Alliance Certification Policy [7] for the controlling definition.

IPR Policy: This is an abbreviated name for the Alliance Intellectual Property Rights Policy [2].

Member: Any Promoter Member, Participant, Adopter, Associate or other class of Alliance member that may be approved by the Alliance Board of Directors, collectively or individually, as applicable. Refer to the Alliance IPR Policy [2] for the controlling definition.

Necessary Claims Licensing Exclusion: A Working Group Member's express rejection of a commitment to provide a RANDz License to its Necessary Claim to Members as set forth in Section 3.2(a) of the Alliance IPR Policy. Refer to the Alliance IPR Policy [2] for the controlling definition.

New Adopted Specification: A Specification subject to the procedures set forth in Section 3 of the Alliance IPR Policy [2] that is adopted by the Board after December 15, 2019. Refer to the Alliance IPR Policy [2] for the controlling definition.

New Specification: Means each Draft Specification, Proposed Specification, and/or New Adopted Specification created or finalized on or following December 15, 2019. Refer to the Alliance IPR Policy [2] for the controlling definition.

Parent Group: A group's parent group is the group that formed it. For example, a Working Group's parent group is the Board, and a Sub-Group's parent group is the Working Group that created it.

Proposed Specifications: Draft Specifications that are approved by the Working Group Leadership Body for consideration by the Alliance Board of Directors. Refer to the Alliance IPR Policy for the controlling definition [2].

Protocol Implementation Conformance Statement: Also referred to as a PICS document, means a list of features supported by a device as defined by a technology protocol, standard or specification. Each feature is known as a PICS Item and device implementation is either mandatory or optional. The document is submitted by a device manufacturer as a statement of conformance to a technology standard and is a requirement for all Alliance Product Certification Programs. Refer to the Alliance PICS Tool Webinar [10] for the controlling definition.

Quorum Members: Those Participant Members with voting rights in a group plus Promoter Members who have participated in two of the last three meetings of a group (virtual or face-to-face).

Specification Validation Event (SVE) / Script Validation Event (ScVE): Organized event to test and validate Specification and test script implementations. Refer to the Alliance Certification Policy [7] for the controlling definition.

Specification: Means a document that defines or specifies one or more aspects of an interface. Interfaces may be defined and/or specified by using either message-oriented descriptions or a protocol specification. Test Materials do not constitute Specifications under the Alliance IPR Policy. Refer to the Alliance IPR Policy [2] for the controlling definition.

Steering Committee (SC): See Working Group Steering Committee.

Sub-Group (SG): A Sub-Group is a subset of WG Members who together, for example, develop Alliance Specifications, their supporting Certification Programs, and/or their associated marketing or regulatory requirements and branding.

Technical Change Request: A process to be followed during the Specification development process to introduce a minor technical change. Refer to Section 6.3.1, Technical Change Request (TCR) for the controlling definition.

Test Case: A sequence of designed behaviors to be implemented usually in scripts, that are executed by a Test Harness or Golden Unit. Refer to the Alliance Certification Policy [7] for the controlling definition.

Test Harness: A tool developed for use in executing compliance Testing and approved by the Alliance. Refer to the Alliance Certification Policy [7] for the controlling definition.

Test House: Defined as an Authorized Test Laboratory.

Test House Notification: A notice issued by Alliance staff submitted to Alliance Test Houses providing instructions generated by the Working Group related to updates to Adopted Specifications and their related Test Materials resulting from processing a CCB Request.

Test Materials: Means test plans, test scripts, test software and tools, test specifications, Protocol Information Conformance Statements, interoperability tools and plans, and other

documents and tools associated with the certification Testing process for a Specification. Refer to the Alliance IPR Policy [2] for the controlling definition.

Test/Tested/Testing: The process for verifying conformance to Alliance standards. Refer to Sections 2.2 and 3 of the Alliance Certification Policy [7] for the controlling description.

Test Plan: A document that describes one or more Test Cases, each designed to confirm the correct implementation of a Specification. A Test Plan lists Test Cases to be implemented for one or more Test Harnesses or Golden Units to verify a device for certification compliance.

Refer to Sections 2.2 and 3 of the Alliance Certification Policy [7] for the controlling description.

Tiger Team (TT): A group of interested WG members who work on a particularly narrow issue within a Working Group's Sub-Group.

Urgent Change: means any request determined by the Alliance, in accordance with Alliance policies and procedures, to be urgent and that will result in a modification to any mandatory or optional feature portions of an Adopted Specification. Refer to the Alliance IPR Policy [2] for the controlling definition.

Voting Member: Promoter and Participant Members in good standing who have acquired and maintained voting rights through the required meetings participation as specified in Section 8.3, Acquiring and Maintaining Voting Rights.

Working Group (WG): Per the Alliance IPR Policy [2], means each Alliance group that develops a New Specification. Within a WG there may be other groups defined in this document which are bound by these processes and procedures. Refer to the Alliance IPR Policy [2] for the controlling definition.

Working Group Charter: A document that defines the WG's scope of work and operational rules.

Working Group Leadership Body: means the most senior leadership body (e.g., management committee, management board, steering committee, etc.) of the Alliance Working Group responsible for applicable Specification(s). Refer to the Alliance IPR Policy [2] for the controlling definition. See also Working Group Steering Committee.

Working Group Member: A Member who joins a WG and is recorded and registered as such on the Alliance books and records. Refer to the Alliance IPR Policy [2] for the controlling definition.

Working Group Representative: An individual representative of a Member (for example, an employee or contractor of such Member) participating in a WG who is recorded and registered as such on the Alliance books and records. Refer to the Alliance IPR Policy [2] for the controlling definition.

Working Group Steering Committee (SC): Also known as the Steering Committee, this is the most senior leadership body (that is, management committee, management board, steering committee, etc.) of the Alliance WG responsible for applicable Specification(s). Refer to the Alliance IPR Policy [2] for the controlling definition of a Working Group Leadership Body.

Working Specification: Means a Specification that a Working Group is actively developing prior to such Specification becoming a Draft Specification. Refer to the Alliance IPR Policy [2] for the controlling definition.

Workshops: Meetings that may be held with non-Alliance members (for example, members of third-party organizations, guest speakers) or non-Working Group Members (for example, WG Member Subject Matter Experts that are not registered Working Group Member representatives or to promote membership among all Alliance Members to newly formed Working Groups). No Contributions of Intellectual Property (IP) are allowed during Workshops.

3   Working Group (WG)

The Board creates a Working Group (WG) and approves its Charter. A WG consists of a Steering Committee (SC) and Sub-Groups (SGs). Voting rights in the Sub-Groups are obtained by participation as defined in Section 8.2, Voting Rights.

Alliance Members must follow the onboarding procedures to register their participation as a WG member and register all individuals representing them in the WG.

3.1 Participation in Working Groups (WGs)

Only Promoter and Participant Members (and their representatives) are permitted to join or participate in Working Groups (WGs). To participate in a WG, each Promoter or Participant Member must:

1. Apply in writing to join the specific WG using the applicable Alliance form.

2. Notify the Alliance in writing of each individual person representing such Promoter or Participant Member (that is, each WG Representative) who wants to join the specific WG using the applicable Alliance form.

3. Limit participation in such WG to only the WG Representatives named on the applicable Alliance form (that is, no Participant or Promoter Member, or their representative, may invite any guest to participate in a WG).

Only representatives of registered WG Members can be members of the WG's SG(s).

Individuals registered to represent WG Members have the right to attend all meetings (virtual or in person), be notified of upcoming meetings, send and receive group emails through a reflector, gain voting rights on behalf of the Member they represent, and run for electable positions within the group. In exceptional circumstances the Alliance may close meetings to a limited group due to confidential topics, such as for Test events where only registered participants may attend.

Only one individual representing a WG Member may vote on behalf of the Member in the WG or SG. Each Member receives only one vote on any matter being voted on or balloted.

If a Promoter or Participant Member decides to withdraw from a WG, the Member must submit a notice in writing to withdraw from the specific WG using the applicable Alliance form. If a Promoter or Participant Member decides to withdraw any of its representatives from a WG, the Member must notify the Alliance in writing of each individual representing such Promoter or

Participant Member (that is, each WG Representative) who shall be removed from the specific WG using the applicable Alliance form.

3.2   Formation of New Working Groups (WGs)

The formation of new Working Groups (WGs) is the exclusive domain of the Board of Directors (Board). Members interested in the establishment of a new Working Group (WG) should reach out to the Board to discuss a proposal.

Once the Board has approved the formation of a new WG, approved its Charter, and established an Interim Steering Committee, this document governs how the new Working Group is started up and operates.

3.3   General Working Group (WG) Structure

Working Groups (WGs) have one Steering Committee (SC) and must establish at least one Technical Sub-Group (TSG). The SC may establish additional SGs including Marketing and Product Sub-Groups (MPSGs), Regulatory Sub-Groups (RSGs), Certification Sub-Groups (CSGs), and/or other subordinate groups as needed.

3.3.1   Working Group (WG) Charters

A Working Group (WG) Charter should define the WG's scope of work and operational rules in as much detail as possible.

The WG Charter will include, as applicable:

- A short abstract or high-level summary describing the topic, technologies, and key objectives of the group, as applicable.

- A description of the proposed work's purpose and why it is necessary, including the specific needs it plans to address, the specific market space it will occupy, and in as much detail as possible, the scope of the proposed work and any out-of-scope areas.

- A description of the potential benefits of the proposed work, considering that the Charter has the dual purpose of guiding the WG's work and of attracting Members to participate in it or adopting its output.

- A description of unique ways of working that are otherwise undefined, optional or recommended by documents above its level in Section 2, Hierarchy of Rules.

- A description of the scope and objectives of its Sub-Groups (SGs), their expected deliverables, and any deviations from the defaults found in this document, such as minimum number of Voting Members needed or its leadership term of office length.

- The length of a SC Member's term of office. Otherwise, the term shall be two years.

- The proposed meeting schedule both for virtual and face-to-face meetings.

The operational rules established by the Charter cannot contradict any of the operational rules established above it in Section 2, Hierarchy of Rules.

All Alliance Members may discuss and suggest changes to a Working Group Charter. Changes to a Working Group Charter must be approved by its SC and then by the Board of Directors (Board).

3.3.2 Working Group Steering Committee (SC)

A Working Group Steering Committee (SC) is created and initially populated by the Board of Directors (Board) to manage the Working Group's projects and deliverables.

The SC is the highest oversight group within a Working Group (WG). For SC decisions, each SC Member has a responsibility to act in the best interest of the WG, and not to further the interests of the Member they may otherwise represent.

The SC has the following responsibilities, among those described in the Alliance Corporate Governance Framework [1]:

● Publish and maintain the Working Group Charter.

● Implement and maintain the WG's Board-approved roadmap.

● Develop and manage project schedules and budget.

● Serve as the Working Group Leadership Body, defined by the Alliance IPR Policy [2] (for example, approves and initiates Necessary Claims Review (NCR) Periods, approves and recommends Proposed Specifications for Board approval).

● Manage the schedule of events, such as for Testing, education, marketing, etc.

● Make requests and regular status reports to the Board.

● Form, disband, and manage Sub-Groups (SGs).

● Approve procedures for operation of SGs.

● Approve Specifications, Test Plans, and other conformance documents.

● Inform the Sub-Group Chairs about decisions and other information from the Board and other committees.

● Ensure WG compliance with the Alliance procedures for establishing Alliance positions, obligations, and outbound communications.

A SC or SG may define its own supplemental processes to the Alliance and define procedures and milestones so long as they do not contradict or conflict with the processes set forth in this document. For example, the group could define interim milestones for members to meet before moving ahead on new features.

3.3.2.1   Steering Committee (SC) Composition

A Working Group Steering Committee (SC) is comprised of:

- The Board-Appointed Steering Committee Representatives (number as defined in the Working Group Charter).

- The Chairs of each of the Working Group Sub-Groups, elected by the Working Group Members.

- The At-Large Member Steering Committee Representatives (number as defined in the Working Group Charter), elected by the Working Group Members.

The Board of Directors (Board) appoints its representatives on the formal (non-interim) SC. Generally, the appointment is done such that all new SC members are seated at the same time.

Following the election and seating of the SC members, the SC will elect its Chair. (See Section 3.3.3, Working Group Leadership Guidelines.)

3.3.2.2   Interim Steering Committee (SC)

Once the Board of Directors (Board) has appointed the Interim Steering Committee (SC) for a new Working Group (WG) and the Interim SC has elected its Chair, the following applies:

- The Interim SC is intended to last only three to six months. Its primary purpose is to reach out to the membership to educate and gather interest, and to manage the WG elections for new Sub-Group (SG) Chairs and SC At-Large Members.

- The Interim SC must approve and publish minutes to the WG Members.

- After the announcement of a new WG, the Interim SC may hold Workshops or meetings at any time. No votes or decisions may be taken in such meetings.

- The Interim SC must hold one or more Workshops for all Alliance Members and their representatives, regardless of whether the Members or their representatives have joined the new WG.

- Workshops for a new WG must not discuss technical issues nor start writing Specifications. They are intended to help members and prospective members understand the Charter and suggest any changes, as well as discuss the logistics for the WG, and a proposed timeline to achieve its purpose.

- Meetings of the new WG may be held at any time, including while the WG has an Interim SC. These meetings must adhere to the WG meeting rules in Section 4.3, Working Group Meetings.

- The Interim Steering Committee establishes the timeline for the election of Sub-Group Chairs and At-Large members and announces this to all WG members. Concurrently, the Board runs an election to appoint representatives to the permanent Steering Committee.

3.3.3 Working Group (WG) Leadership Guidelines

The Working Group Charter defines the leadership term in office. The recommended term is two years. When a Chair steps down, a new election shall be held by the group to fill the position for the remainder of the term.

The Working Group Steering Committee (SC) or Sub-Group (SG) Chair may appoint a Vice-Chair or initiate an election for the Vice-Chair position. The Vice-Chair will serve as the Chair pro tem in the absence of the Chair. The Chair may vote in the case of a tie.

Any complaints against a Steering Committee (SC) Chair can be reported to Alliance staff and/or the Board of Directors (Board) if other efforts have failed to remedy such complaints. If there are complaints against a SC Chair outside the normal conduct of the group and reflecting a conflict of interest or other concerns, they should be reported to and investigated by the Alliance staff privately in a timely manner and reported to the Board and/or Chair of the Board as appropriate for a determination.

In the unlikely event that a SG Chair is not meeting their responsibilities, (for example, has violated the Alliance Code of Conduct), the SC may vote to remove the SG Chair, install an interim one, and/or call for the election of a new SG Chair. Removal of a Chair is a serious action and should be taken only in extreme circumstances after other actions have failed to remedy the situation. Any complaints against the SG Chair can be reported to the SC.

3.3.4 Summary Outline of New Working Group (WG) Formation

1. Board of Directors (Board) establishes a new Working Group (WG).

2. Interim Steering Committee is appointed by the Board for the new WG.

3. The new WG is formally announced to all Members.

4. Any Participant or Promoter Member and their representatives may join the new WG and are granted initial voting rights. For more information, refer to Section 8.1, Establishing Initial Voting Rights.

5. The Interim Steering Committee and new WG members perform outreach to gather additional Member interest.

6. The Interim Steering Committee drafts the proposed Working Group Charter and submits it to the Board for approval.

7. The Interim Steering Committee works with Alliance staff to initiate the election process for Sub-Group Chairs and At-Large Members.

8. The Board appoints Representatives to the formal (non-interim) Working Group Steering Committee

9. The election concludes, Chairs and At-Large Members are confirmed, and the initial voting rights acquisition period ends.

10. Formal (non-interim) Working Group Steering Committee members are seated, replacing the Interim Working Group Steering Committee

11. Formal (non-interim) Working Group Steering Committee members elect their Chair from the group of Board-Appointed Representatives.

12. New Working Group Sub-Groups schedule their first meeting.

3.3.5 Sub-Groups (SGs)

3.3.5.1   Formation of Sub-Groups

A Sub-Group (SG) is composed of Member representatives that produce, vote, comment, and approve deliverables, including documents and Specifications through the Ballot process described in this document. (See Section 8, Decision Making: Voting or Consensus.) Voting rights are gained and maintained through attendance as defined in this document. (See Section 8.3, Acquiring and Maintaining Voting Rights.)

A Working Group's (WG's) Steering Committee (SC) must approve the establishment of a new SG and set the timeline for the election of its Chair. The Working Group's Charter must be updated to reflect the new SG and sent to the Board for approval. The Working Group Charter may define the minimum number of Voting Members the SG needs to maintain for it to continue functioning. Otherwise, the minimum needed is five Voting Members.

Initial voting rights for the new SG participants are established in the same manner as a new WG. After the announcement of the new SG, any Working Group Member may ask for and be granted initial voting rights in the new SG. Once the election of the Sub-Group Chair has concluded, the initial voting rights acquisition period ends. Afterwards, all Working Group Members must meet the standard rules for gaining or maintaining voting rights. (See Section 8.3, Acquiring and Maintaining Voting Rights, Section 8.4, Tracking Voting Rights, and Section 8.5, Acquiring Voting Rights by Exception.)

3.3.5.2   Technical Sub-Group (TSG)

A Technical Sub-Group (TSG) is a Sub-Group (SG) working on a particular technical problem, project or functional area within a Working Group (WG). A WG may have more than one TSG.

Each TSG has the following responsibilities, including but not limited to:

- Completing work according to the scope provided by the Working Group Charter and submitting it to its Steering Committee (SC) for approval.

- Managing its Ratification Ballots.

- Responding to requests from its SC.

- Making requests to its SC, for instance:

  o Raising important decisions (for example, release of a new development or extension).
  o Requesting a change of scope and any resulting updates to the Working Group Charter as required.
  o Requesting a change in deliverables.

- Making regular status reports to the SC.

- Publishing its approved meeting minutes.

In general, each TSG works to a defined set of deliverables and the schedule provided at the creation of the group, updated as necessary by its SC. Deliverables typically are a new version of a Specification, an extension of a Specification, a document related to the Specification (such as compliance and interoperability requirements).

3.3.5.3   Certification Sub-Group (CSG)

A Certification Sub-Group (CSG) is a Sub-Group (SG) responsible for the development of Test Materials for a Working Group (WG). This group also coordinates with the Director of Certification to ensure that Authorized Testing Laboratories (ATLs) are prepared and available for certification Testing.

A WG can choose to merge the CSG and Technical Sub-Group (TSG) functions within the same SG. This needs to be specified in the Working Group Charter.

The CSG coordinates with the Board's Testing and Certification Oversight Committee on Testing policies and procedures.

3.3.5.4   Marketing and Product Sub-Group (MPSG)

A Marketing and Product Sub-Group (MPSG) is a Sub-Group (SG) working on product and marketing requirements, marketing playbooks and assets, branding, and other product/marketing activities for a particular area. Usually, a Working Group (WG) has only one MPSG. The MPSG is responsible for developing the Marketing Requirements Document (MRD) for a Specification.

3.3.5.5   Regulatory Sub-Group (RSG)

A Regulatory Sub-Group (RSG) is a Sub-Group (SG) that is responsible for reviewing and recommending global regulatory requirements to be incorporated into a Specification by reference. Such requirements may serve as baseline technology for technical requirements and Certification Programs in alignment with the Working Group Charter and those initiatives delegated to it by the Working Group Steering Committee. This group collaborates with the External Affairs and Marketing Committees of the Alliance Board, as well as any Alliance staff regulatory groups and/or experts to develop regulatory recognition of the Working Group Certification Program. This work may include development of relevant trademarks and logos, and educating regulatory agencies about the Working Group Certification Programs.

3.3.5.6   Tiger Team (TT)

Any Working Group Sub-Group may form one or more Tiger Teams (TTs), typically comprised of subject matter experts, for work on a particularly narrow issue within the Sub-Group's (SG's) scope. A TT typically exists for a limited time. The TT scope document should define a specific scope of work, expected duration, reference to the appropriate documents detailing the requirements for the work, any impact on other groups, and requirements for interoperability and backward compatibility, as applicable. The Parent Group should regularly review the TT scope document and progress and decide whether the TT should continue its work.

The deliverables from a TT are approved by its Parent Group. If there are any other groups that need to approve deliverables, then the scope document should also include which group(s) will approve the TT's deliverables.

Any decisions that cannot be resolved via consensus of the TT shall be raised to, and resolved in, the Parent Group. The TT cannot hold formal votes but may conduct straw polls and issue recommendations back to the Parent Group. Attendance at TT meetings does not count toward voting rights status within the Parent Group.

A TT's lead(s) may be appointed by the Chair of its Parent Group. If a TT's work is expected to continue for more than six months, the Parent Group will schedule an election for the TT lead seat within the TT membership.

TTs may not form other TTs.

3.4 Dissolving a Working Group (WG) or Sub-Group (SG)

Only the Board of Directors (Board) can dissolve a Working Group (WG).

A Steering Committee (SC) can dissolve a SG.

WGs or SGs may be dissolved based on any of the following criteria, or at the discretion of the deciding Parent Group:

- The group has completed its assigned goals, and no new goals are to be assigned.

- It does not have enough support or Voting Members to complete its goals.

- Its goals are no longer valid.

If at any time the Chair of an SG or a member of its Parent Group feels that it should be dissolved based on the above criteria, that person may present their request to the Chair of the Parent Group. The Parent Group's Chair will then take a vote to dissolve the group in question. If approved, the Parent Group's Chair will notify the group's Chair, who will notify all registered members of the group of the decision to dissolve.

If the Sub-Group's number of Voting Members is consistently less than five members, or the number specified in the Working Group's Charter, the Group Chair must notify the Parent Group.

If the Parent Group votes against dissolving the group, the Parent Group's Chair may recommend an action to the group's Chair to remedy the situation. The Parent Group may elect to put a group into hibernation until the Parent Group revives it for a given purpose (such as maintenance). A hibernating SG does not have a voting seat on its Parent Group.

Dissolving a Tiger Team (TT) does not require such a process, as these groups are intended to form and finish quickly. TTs dissolve upon any of the following:

- The end date in their scope document is reached and the end date has not been extended.

- The work in their scope document has been completed.

- The TT itself or its Parent Group decides to dissolve it.

4   Working Group Communication

4.1 Mailing Lists

All Working Groups (WGs), Sub-Groups (SGs), and Steering Committees (SCs) have an Alliance mailing list (reflector), and each of them can do business on-line using their respective mailing lists. Only registered Member Representatives to a given WG can be added to a mailing list for that WG (or its SC or any of its SGs). Alliance email must be used for all official notifications (meeting notices, ballots, votes, etc.).

4.2 Additional Communication Tools

All Working Groups (WGs), Sub-Groups (SGs) and Steering Committees (SCs) may use additional communication tools based on their preference. These tools must be approved and managed by the Alliance, meet security/privacy policies, and be available to all Member representatives participating in the specific group or committee.

4.3 Working Group (WG) Meetings

All Working Groups (WGs), Sub-Groups (SGs), and Steering Committees (SCs) may hold virtual meetings (via phone calls or other electronic means) as directed by their Chair. Normally, weekly or biweekly meetings are held at a standing time and by virtual means to facilitate participation by the member companies. These meetings may rotate times in order to accommodate different time zones.

For in-person and virtual meetings, the Chair should publish a draft agenda to the WG's electronic mail list as far in advance of the meeting as possible, ideally at least four calendar days in advance of the meeting.

WGs and their SGs require published minutes. It is the responsibility of each WG and SG's Chair to ensure that minutes are taken and published for each meeting. The minutes for each group meeting shall include attendance, agenda, main discussion points, action items, motions, and Consensus agreement or voting results.

All in-person and virtual meetings must start with displaying or reading the Alliance Policy Notice. All participants in WG meetings must be registered Member representatives.

4.4 Workshops

Workshops are for information only and are not Working Group Meetings. There must not be any technical contributions discussed. Attendance at Workshops does not count toward Voting Member status.

At the discretion of the Alliance group hosting the Workshop, attendees may include Alliance Members and their representatives, and/or non-members and their representatives. For example, an outreach-style Workshop may be hosted by an Alliance group to solicit participation in a Working Group (WG). Alternatively, a Workshop may be hosted by an Alliance group to

facilitate the exchange of ideas with non-Member expert(s). At the opening of a Workshop, the host must present the Alliance Workshop Reminders and Disclaimers Notice.

4.5   Guidelines for Recorded Meetings

The decision to record a meeting is at the discretion of the Chair. At the beginning of any recorded Meeting, a verbal notice shall provide the information required by the Alliance to all attendees, and a notice shall be displayed stating that the Meeting will be recorded in accordance with the Alliance Meeting recording policy and that any Meeting attendee who is unwilling to be recorded has the option to leave the Meeting, not speak during the Meeting, or speak only while the Meeting recording is paused.

> **After the notice is presented, anyone who is unwilling to be recorded will have the option to leave the meeting, not to speak, or request that the recording be paused while they speak in the meeting. Anyone speaking in the meeting who does not request that the recording be paused is deemed to have consented to being recorded.**

During any recorded Meeting, the recording indicator must be visible to all attendees throughout the Meeting.

After the close of the recorded Meeting, a link to that file must be published to the Meeting attendees before the end of business of the following day.

All Meeting recordings will be retained by the Alliance in accordance with its Records Retention Policy [12].

5   Elections

Working Group (WG) leadership positions are elected positions, including the Chair roles, At-Large Members, and Board-Appointed Steering Committee (SC) Members. Refer to the Alliance Election Procedures [12].

The process to elect one or more people to a position includes the following:

- Only a group's Voting Members can vote.

- The election is announced at least one month before the start of the nomination period. The minimum period for nominations and voting shall be 10 calendar days each.

- The nomination and voting schedule are established by the group holding the election.

- Neither the candidate nor the nominator is required to be part of the voting pool but must be registered group Members.

- Alliance staff is responsible for administering WG leadership elections.

- The nominee names are released at the close of the nomination period. If the number of nominees for a position does not exceed the number of open seats for it, the nominees for those positions shall be elected by acclamation.

- Nominees are encouraged to submit to Alliance staff a candidate statement describing their

goals and capabilities for the position by the close of the nomination period. Alliance staff will publish candidate statements to the group holding the election.

- At the close of the nomination process, the call for a vote is issued, including the following:
  - Description of the position
  - The deadline for voting
  - The name and affiliation of each candidate, and links to the candidate statements
  - Instructions on how to vote
  - Where to return a vote

Elections employ an approval voting methodology. Approval voting ballots show a list of all the candidates running and each voter indicates support for as many candidates as they see fit. Final tallies confirm how many votes each candidate received and the winner is the candidate with the most support. When there is more than one position open, the positions are filled by those receiving the most votes.

The voting totals are not published, only the results are published. There is no minimum number of votes that must be returned for the vote to be valid.

If there is a tie that would approve more candidates than there are open positions, the group holding the vote will determine how to proceed.

6 Specification Development Process

Specification development starts when the Board of Directors (Board) creates a new Working Group (WG) as discussed in the Corporate Governance Framework [1], or when it approves a change of scope to a Working Group Charter.

6.1 Market Requirements Document (MRD)

Upon approval of the formation of a new WG or change in a WG Charter's scope, the WG Marketing and Product Sub-Group (MPSG) fills out the Market Requirements Document (MRD) template provided by Alliance staff based on the proposal and the WG's charter.

The MRD must be within the scope of the WG's charter.

After the MPSG approves the MRD and, if applicable, the TSG approves the corresponding Technical Requirements Document (TRD), the SC reviews and approves the MRD and notifies the Board of the approved MRD

6.2 Technical Requirements Document (TRD)

Once the MPSG finalizes the MRD, the relevant Technical Sub-Group (TSG) determines, based on the MRD use cases, whether a Technical Requirements Document (TRD) is required. If so, the TSG, using a form provided by Alliance staff, develops a TRD.

A TRD derives technical requirements and details from the use cases detailed in the MRD, further defining them as appropriate.

If the TSG decides that no TRD is required, the TSG starts development of a Working Specification based on the MRD.

If a TRD is required, it is voted on by the TSG that created it, and then sent to the Steering Committee (SC) for approval. Once approved, the TSG starts development of a Working Specification based on it.

The Working Specification is developed with all expected features and functions included in the MRD and TRD (if required), and with mandatory and optional features clearly defined.

6.3 New Feature Request (NFR)

During development the Specification may undergo as many changes as needed and the MRD may be changed through New Feature Requests (NFRs) as needed.

This process needs to be followed for any technical revision, change, or addition to a Specification at any stage of its development, except as indicated in Section 6.3.1 Technical Change Request.

One or more WG Members can propose an NFR by filling out the NFR form provided by Alliance staff. The NFR must be within the scope of the WG's Charter. The SC reviews and approves the NFR.

When an NFR's proposed changes are incorporated into a Specification, the Specification reverts to the pre-0.7 status. (See Section 6.4.1, Stage 0.7 of the Specification.)

6.3.1 Technical Change Request (TCR)

It is possible to introduce minor technical changes to the Specification (as well as Errata Changes) with the approval of the TSG Chair without writing an NFR. The TSG Chair will notify the TSG Members of such changes. If any TSG Voting Member disagrees with the TSG Chair's decision, then the decision is referred for review to the SC which must verify that the proposed minor change(s) do not exceed the scope of the WG as defined in its charter or its MRD. If the SC does not agree with the TSG's Chair's decision it sends the proposed modifications to the MPSG to initiate an NFR or MRD process as appropriate.

6.4 Specification Development Stages

A Specification must reach three stages before it can be sent to the Board of Directors (Board) for final approval. For historical reasons, the stages are named "0.7", "0.9", and "1.0" and defined as:

- 0.7 is the first feature complete stage suitable for implementation.

- 0.9 is used for formal interoperability, SVE or ScVE Testing.

- 1.0 is ready for SC approval to send to the Board for final approval.

All Specifications must have successfully completed a Ratification ballot at the 0.7 stage in accordance with [Section 8.8, Ratification Ballot Process and Procedure](#). A Ratification Ballot at the 0.9 stage is at the discretion of the Working Group Steering Committee (SC).

The following describes the steps to be completed before a Specification can be approved by the SC to advance from one stage to the next.

It can also be useful for the TSG to determine whether the Specification is ready for submission to the SC.

6.4.1 Stage 0.7 of the Specification

1. The Marketing and Product Sub-Group (MPSG) fills out the Marketing Requirements Document (MRD) template.

2. The Technical Sub-Group (TSG) determines whether a Technical Requirements Document (TRD) is required.

3. The TSG fills out the TRD template, if required.

4. The SC reviews the MRD and TRD and comments on them.

5. The SC approves the MRD and TRD.

6. The TSG develops a Specification which:
   - Includes all expected features and functions in enough detail to allow for its full implementation.
   - Is aligned with the MRD and the TRD.
   - Clearly defines mandatory vs. optional features.

7. A security review is completed, and any comments are resolved.

8. The TSG conducts a Ratification/Recirculation Ballot cycle with comment resolution.

9. The TSG submits the approved 0.7 Specification to the SC for approval together with:

   - A clean and a redlined copy of the revised draft
   - A detailed listing of all comments and their proposed resolution
   - The number of positive, negative and abstaining votes

10. It is recommended the TSG submit the Specification to the SC for its approval as a Draft Specification and distribution for an appropriate Necessary Claims Review (NCR) Period in accordance with the Alliance IPR Policy [2], which may be run concurrently with the Ratification / Recirculation Ballot. The timing for the Necessary Claims Review is determined by the SC.

11. If a Necessary Claims Licensing Exclusion is submitted during the Initial NCR Period, the WG must address it in accordance with the Alliance IPR Policy [2].

12. If the Draft Specification is revised in response to such NCR Exclusion, a Subsequent NCR Period pursuant to the Alliance IPR Policy [2] is initiated.

6.4.2 Stage 0.9 of the Specification

1. The Certification Sub-Group (CSG), or relevant Technical Sub-Group (TSG) with SC approval, develops test materials and a test plan, a Protocol Implementation Conformance Statement (PICS), and a PICS-to-test-plan mapping, if appropriate.

2. Any sections of the Specification and / or test materials that have not yet been fully validated are clearly marked as "provisional".

3. The Specification and Test Materials are presented to the SC for review and its comments are resolved.

4. A security review is completed and comments are resolved.

5. The CSG and TSG conduct a Ratification / Recirculation Ballot cycle if required by the SC.

6. It is recommended the CSG and TSG submit the Specification to the SC for its approval as a Draft Specification and distribution for an appropriate NCR Period in accordance with the Alliance IPR Policy [2] which may be run concurrently with the Ratification / Recirculation Ballot. The timing for the Necessary Claims Review is determined by the SC.

7. If a Necessary Claims Licensing Exclusion is submitted during the NCR Period, the WG must address it in accordance with the Alliance IPR Policy [2].

8. If the Draft Specification is revised in response to such NCR Exclusion, a Subsequent NCR Period in accordance with the Alliance IPR Policy [2] is initiated.

9. A Specification Validation Event (SVE) is conducted under the direction of Alliance Certification staff if appropriate.

10. The TSG submits the Specification and Test Materials to the SC for approval, including:

    - A clean and a redlined copy of the revised draft
    - A detailed listing of all comments and their proposed resolution
    - The number of positive, negative and abstaining votes
    - Results of the SVE, if any

11. If at any time features are added or deleted since 0.7, because of Ratification / Recirculation comment resolution, test and certification comment resolution, or MRD update, Security Review, or Necessary Claims Exclusions, the Specification is returned to the pre-0.7 Stage. (See Section 6.4.1, Stage 0.7 of the Specification.)

6.4.3   Stage 1.0 of the Specification

1. The TSG and CSG submit the 1.0 package to the SC, containing:

- ○ A summary of major changes with respect to the last Adopted Specification, and a clean and, if possible and applicable, a redlined copy of the Specification.
- ○ A detailed listing of all comments received and their proposed resolution.
- ○ The number of positive, negative and abstaining votes
- ○ Publishable, readable Specification documents, including a device library, if applicable (in PDF).
- ○ Publishable, Readable Test Materials
- ○ A recommendation for a grace period to accept new certifications under any prior Adopted Specification from which the current version of the Specification may be derived.
- ○ A prepared Steering Committee motion, including the recommendation for a grace period.

2. The SC approves the 1.0 package as a Proposed Specification package.

3. After SC approval, the SC ensures that the Alliance IPR Policy [2] with respect to NCRs has been followed as required.

4. If a Necessary Claims Licensing Exclusion is submitted during the NCR Period, the WG must address it in accordance with the Alliance IPR Policy [2].

5. If the Draft Specification is revised in response to such NCR Exclusion, a Subsequent NCR Period pursuant to the Alliance IPR Policy [2] is initiated.

6. The SC submits the Proposed Specification package to the Board for approval as an Adopted Specification, containing:

- ○ A summary of major changes with respect to the last Adopted Specification, and a clean and, if possible and applicable, a redlined copy of the Specification.
- ○ Publishable, readable Specification documents, including a device library, if applicable (in PDF).
- ○ Publishable, Readable Test Materials
- ○ If applicable, a recommendation for a grace period to accept new Certifications under any prior Adopted Specification from which the current version of the Specification may be derived.
- ○ A prepared Board motion, including the recommendation for a grace period, if applicable.

7. The Board reviews the Proposed Specification package.

8. The Board approves the Proposed Specification package as an Alliance Adopted Specification.

9. The Adopted Specification is published on the Alliance website.

6.5 Versioning

Every Proposed Specification presented to the Board for approval to become an Adopted Specification must carry a version number.

Version numbers are represented by the character 'V' prepended to a numeric string composed of digits from 0 to 9 and periods, conforming to the patterns V#.# or V#.#.#, or V#.#.#.#, where each '#' represents a decimal number (for example, V1.0, V1.11, V2.1.2, V25.2.18, V1.2.3.1).

Every time an Adopted Specification is backward-incompatible with the previous version of that Adopted Specification, the major version number (the digit appearing to the left of the left-most period) must be increased by one, and all minor version numbers appearing to the right of the left-most period must be collapsed into a 0 (zero). For example, if the version following Spec V1.22.2 were to be backwards-incompatible with it, it must become Spec V2.0 when presented to the Board of Directors (Board).

Major version numbers may also be increased if there is a major change to the Adopted Specification, (as in the case of two Adopted Specifications being merged into one, or part of one being incorporated into another one).

Minor version numbers—those to the right of the first period in the sequence—only signify that the Adopted Specification has undergone some changes. It is up to the Steering Committee (SC) to decide (taking into consideration the Technical Sub-Group (TSG) recommendation, if any) what version the document sent for Board approval will carry in those cases.

7 Change Control Process for Adopted Specifications

The Marketing Requirements Document (MRD) and Feature Change Request (FCR) processes described in Section 6.1, Market Requirements Development (MRD) and Section 6.3, Feature Change Request (FCR) respectively are used for the development of new Specifications and new features to Adopted Specifications. Corrections to Adopted Specifications are handled using the Change Control Process through the Change Control Board (CCB) tool and are the responsibility of the appropriate Steering Committee (SC) to manage.

The Change Control Process is only intended for corrections to Adopted Specifications.

The process is initiated by an Alliance Member entering a change request (known as a "CCB request") in the online CCB tool. The CCB request must describe the location and nature of the issue as well as a detailed suggestion on how to resolve it. A CCB request can be classified according to its type, namely Editorial, Technical, Clarification, or Urgent.

An Urgent CCB (also called an "Urgent Change" in the IPR Policy [2]) request is exclusively reserved for issues holding up the completion of a certification attempt, a field interoperability issue, or a critical security issue. An Urgent CCB request must not be used under any other circumstances. Urgent CCB requests are completed in an expedited manner.

The Working Group's SC or Technical Sub-Group (TSG) evaluates the CCB request, considering its CCB type, viability, impact, and accuracy. The purpose of this evaluation is not

to attempt to solve the CCB but rather to make an initial high-level assessment. If the SC considers the CCB to be valid, it assigns it to the most appropriate Sub-Group.

Sub-Groups discuss CCBs assigned to them, prepare proposed changes as needed, and review them. If the group gives preliminary approval of the proposed changes, the CCB is passed to the next stage.

For Urgent CCB requests, the Sub-Group assigned to the CCB request creates a Test House Notification document, which gives guidance to Test Houses on how to resolve the issue. The resolution to the Urgent CCB is then reviewed by the SC and, if approved, the CCB is passed to the Director of Certification who distributes the associated Test House Notification documents to all Test Houses. The process for provisional resolution of Urgent CCBs if the SC determines a provisional solution is urgently required is described in Section 7.2 Urgent Change Control Processing and Provisional Resolution.

For non-Urgent CCBs, the associated proposed changes are queued for the next release of the Adopted Specification, as and when the group decides it should be released. Once the next version of the Adopted Specification is approved, any associated CCBs are closed.

7.1 Process and Guidelines for Changes to Adopted Specifications

These guidelines are to be used for revisions to Adopted Specifications where the issues around backward compatibility must be considered. Note that these guidelines only apply to changes made to Adopted Specifications which may have field-deployed products, and therefore changes must be more carefully reviewed and considered.

Changes to Adopted Specifications that impact backward compatibility or known field issues should be developed and proposed as soon as practical. The proposed changes should identify the Adopted Specification or test changes and instructions to Test Houses. The proposed changes must be approved by the appropriate Steering Committee (SC), and then issued as an advisory to Alliance Members and the Test Houses.

There are several types of changes that can be made to Adopted Specifications. They are categorized as follows:

- **Category 1:** Editorial changes that clarify the meaning of the Adopted Specification and do not change the behavior or operation of the Golden Units, approved Test Harness/scripts, or deployed products.

- **Category 2:** Changes where the Adopted Specification is unclear and further definition is necessary, but the Golden Unit or Test Harness/script behavior is consistent with the change and need not be modified.

- **Category 3:** Changes where the Adopted Specification is unclear and further definition is necessary, and one or more of the Golden Unit or Test Harness/script behavior varies and is/are not consistent with the change.

For those changes under Category 1 or 2, the change can be processed as a simple editorial change.

For those changes in Category 3, further consideration is necessary before a change can be introduced. It should be noted that in these situations speed may be of the essence. The Alliance may choose to issue a mandatory advisory if changes are required to provide guidance before all documents and test plans are updated. The following guidelines should be used:

1. A change impacting the behavior or interoperability of devices in the field (deployed devices) should be highlighted to the Certification Sub-Group (CSG) and Technical Sub-Group (TSG) involved, and expedited processing should occur, if possible, to minimize the impact of the interoperability issue. In particular, the CSG should notify the appropriate TSG and SC of any field interoperability issue. It is the responsibility of the SC to prepare notifications to the Alliance.

2. No assumption can be made as to the upgradeability of deployed devices, and therefore any changes must specifically consider the behavior of deployed devices with such a change. Field upgrade of devices cannot be required as part of the Adopted Specification change without agreement of the appropriate TSG and SC.

3. Since the behavior of deployed device(s) is known to vary, any suggested change should consider accommodating behavior both before and after the upgrade. It may not always be possible to make a change that accommodates both behaviors. In such a case, the TSG should recommend the change considered least disruptive to deployed devices. Specific Tests to validate the changed behavior should be created if necessary.

4. A TSG's response to a CCB request for a change must address how backward compatibility could be achieved. Changes impacting backward compatibility must be agreed upon by the Marketing and Product Sub-Group (MPSG), if there is one, and the SC.

5. The change should be processed as quickly as possible, and a Test House Notification should be issued to correct the behavior as quickly as possible. Alliance Members that have Certified products impacted by the change should also be notified of the change.

6. If Golden Unit or Test Harness behavior must be changed, every effort should be made to update test materials as quickly as practical. The Alliance may issue a mandatory advisory to the Test Houses to respond to the expected changes to Adopted Specifications or Test Plans.

7.2 Urgent Change Control Processing and Provisional Resolution

This section addresses the time constraints imposed by urgent CCBs, which, as explained above, can only be raised against Adopted Specifications and are **exclusively** reserved for issues that prevent the completion of a current certification attempt or represent a field interoperability and/or security issue.

The following process addresses the scenario where one or more Members file an urgent CCB while certification Testing is underway and a permanent resolution of the CCB will take more

time than is reasonable. In that case, the following process can be used to issue a provisional resolution to provide interim respite to the Members undergoing certification Testing and to give the Working Group(s) time to specify and approve a permanent resolution.

While a provisional resolution is being determined, the WG may temporarily suspend parts of a Test script or step(s) in a Test Case. The following steps describe the process:

1. **The WG Specifies the Provisional Resolution:**
   a. If Test scripts are used, the WG may provide a revised Test script and/or Test Case specification.
   b. If Golden Units are used, the WG may amend or modify the Test Case.
   c. The Test script or Test Case steps are marked as provisional.
2. **Urgent Change Notification:** The WG provides a Test House Notification detailing the changes and the Alliance distributes it. If the urgent CCB is resolved with a provisional resolution, then on issuance of the Test House Notification, the urgent CCB is closed.
3. **Permanent Resolution**: It is the responsibility of the affected WG(s) to determine how to attain a permanent resolution.
4. **Device Under Test (DUT) Provisional Testing:** While the provisional resolution is in effect, all affected implementations undergoing certification Testing must attempt to execute the Testing specified in the provisional resolution.
5. **DUT Provisional Success:** If an implementing DUT passes the provisional resolution, then it is deemed to have passed the affected test script and/or Test Case changes.
6. **DUT Provisional Failure:** If an implementing DUT fails a provisional Test Case and/or test script, then:
   a. If it is confirmed that the failing part of the provisional Test Case and/or test script does not apply to the affected DUT, then the DUT is deemed to have passed the affected test script and/or Test Case. Further, a CCB must be raised by the Member and/or the Test House with a proposed resolution to this issue.
   b. If the Director of Certification or the responsible WG determines that the failure was due to the behavior of the DUT and not the provisional resolution, then the DUT is deemed to have failed the provisional Test Case and/or test script.
7. **Provisional to Permanent:** If the provisional resolution is Tested successfully on three independent implementations during certification Testing or Specification Validation Event (SVE)/Script Validation Event (ScVE), then the provisional resolution may become the permanent resolution, with the Steering Committee's (SC's) approval. A DUT for certification may count as an independent implementation to satisfy this requirement. Alliance Certification staff must confirm whether a provisional resolution has passed the threshold of three successful tests.
8. **Provisional to Permanent Notification:** When a provisional resolution becomes a permanent resolution, Alliance Certification staff shall issue a Test House Notification indicating that the associated Tests have been updated from provisional to permanent and shall notify the responsible SC. The responsible SC must update all associated documents.

8   Decision Making: Voting or Consensus

A Consensus model of decision making is preferred and is the normal mode of operation. In this model, after extensive discussion in the group, in which everyone may express their opinion, the Chair can declare Consensus. Similarly, a group Member can move that Consensus be declared.

Only a Voting Member can formally declare the Member's sustained opposition.
In the absence of Consensus, a vote may then be called for.

8.1 Establishing Initial Voting Rights

When a new Working Group (WG) is announced, an initial voting rights acquisition period starts. At that time, any Promoter or Participant member may formally join the Working Group (WG) and appoint their representative(s) to it. Participant Members that have joined the WG during this initial acquisition period gain voting rights and may cast their votes during this period. Promoter Members can always vote in whatever WGs they join.

The initial acquisition period ends when the election for Sub-Group Chairs is closed. From then on, voting rights can be maintained and acquired by following the rules described below.

8.2 Voting Rights

Voting rights among Working Group (WG) and Sub-Group members vary by membership level:

- Promoter members can always vote.

- Participant members gain and maintain voting rights based on attendance in virtual or in face-to-face meetings.

- No other Members are eligible to vote.

Voting rights are established and tracked by Member, not by individuals. Members have a single vote in any Ballot or vote, or a single voice in determining Consensus. If conflicting votes are received from a Member's Registered Representatives, the Member must be contacted to resolve the issue.

Voting rights are tracked by Alliance staff to establish the pool of eligible Voting Members for any given vote.

8.3 Acquiring and Maintaining Voting Rights

This section applies only to Participant Members because Promoter Members always have voting rights in those groups of which they are registered Members, and Adopter Members cannot acquire voting rights.

Once the initial voting rights acquisition period has ended, Participant members must fulfill attendance requirements within a particular Sub-Group (SG) to acquire voting rights in it. To acquire voting rights in individual SGs, the same process must be followed for each SG.

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A Member that has attended two out of the last three Sub-Group (SG) meetings (virtual or face-to-face) acquires (and maintains) voting rights, irrespective of whether the meetings were quorate. Given that attendance is tracked by Member rather than by individual, different Member representatives may attend those two out of three meetings. Note: A Member that attends any WG SG meeting during an All Members Meeting (AMM) is credited with attendance at all such WG SGs.

For the purpose of attendance, the chair may announce in advance any meeting in a designated set to count for attendance such that the whole set is counted as a single meeting and attendance at any one meetings in the set satisfied the attendance.

8.4   Tracking Voting Rights

Voting rights are assessed at the end of each meeting and become effective at the beginning of the next meeting.

Alliance staff is responsible for minuting and tracking Sub-Group (SG) session attendance, and Members' voting rights. The Voting Members list is included in the minutes following each Sub-Group (SG) meeting. It is the responsibility of Members to check the minutes to ensure their attendance is registered correctly and report any problems to Alliance staff.

If a Member feels there are issues with their voting rights, they may request a resolution through Alliance staff or the SG Chair.

8.5   Acquiring Voting Rights by Exception

Upon request of a Member to acquire voting rights by exception, a Sub-Group (SG) Chair who believes it is in the SG's best interest may request that the Steering Committee (SC) grant voting rights to such Member. Maintaining its voting rights is the Member's responsibility.

8.6   Quorum for Meetings

A quorum is the minimum number of qualified Members that need to be present at a meeting for a group to be able to declare Consensus, or vote. A group may continue non-binding discussion without quorum.

A meeting is quorate if a majority of its Quorum Members is present at the beginning of the meeting.

Once a quorum has been declared by the Chair, immediately after the names of the Members present at the meeting have been recorded in the minutes, the Members' voting rights are in effect. Voting rights are established and maintained in accordance with Section 8.1, Establishing Initial Voting Rights and Section 8.3, Acquiring and Maintaining Voting Rights. Note, a Member that will obtain voting rights by their participation in a meeting, does not have Voting Rights in that meeting.

Quorum is automatic in All Member Meetings (AMM) as well as in any electronic voting or Ballot that is conducted in accordance with the notification rules established in this document.

8.7   General Voting Rules

When Consensus cannot be reached on a variety of issues outside of Ratification Ballots, a vote is called for. These votes do not follow the rules for Ratification Ballots. Instead, the following applies:

1. Votes may be conducted at meetings, on calls, or through electronic means.

2. To allow Member participation, the membership should be given advance notice that a vote will occur. Ten calendar days' notice of a vote should be provided.

3. A quorum is required to hold a vote or to declare a Consensus.

4. Members may vote 'YES,' 'NO,' or 'ABSTAIN.' Only 'YES' and 'NO' votes are counted to determine if the motion passes. 'ABSTAIN' votes are ignored.

5. Any vote to advance a Specification requires a two-thirds or greater percentage of 'YES' votes to pass. All other votes require a simple majority of 'YES votes to pass.

For items that may impact multiple Sub-Groups (SGs), the Steering Committee (SC) may decide that a larger voting pool be formed by including in it all the Members from the Sub-Groups in question. In such cases, each Member receives a single vote in the voting pool.

8.8   Ratification Ballot Process and Procedure

The decision to submit a Specification or Test Materials to the Steering Committee (SC) must be confirmed by a Ratification Ballot.

A Ratification Ballot may be conducted across one or more Sub-Groups (SGs) of the Working Group (WG) at the discretion of the SC. In such a case, each Voting Member receives a single vote in the voting pool.

8.8.1   Who May Vote

Only Members that have voting rights in the Sub-Group(s) conducting the Ballot may vote. In the case of a WG-wide Ratification or Recirculation ballot, and only in that case, any Voting Member of any SG in that WG is also a WG Voting Member and can participate in the ballot.

A Ratification Ballot must present three choices:

1. **Approve (Affirmative):** This vote **may** be accompanied by comments suggesting corrections and improvements. Action on such comments is left to the discretion of the group.

2. **Do Not Approve (Negative):** This vote **must** be accompanied by comments providing sufficient detail so it can be readily determined what changes would cause the negative Voting Member to change its vote to "Approve."

3. **Abstain:** A reason must be given for this vote.

A two-thirds or greater approval vote of the Ratification Ballot is necessary for it to pass. The two-thirds approval figure is computed only from the "Approve" and "Do Not Approve" votes. 'Abstain' votes are ignored for this purpose.

 If the Ballot does not pass, further disposition of the document is the responsibility of the SG.

It is in the interest of the participating members that the voting process be as open and clear as possible. The Chair is responsible for widely distributing a clear and concise Ballot about the vote, who is eligible to vote, and the closing date and time Anywhere on Earth (AoE) for the Ballot.

Those not eligible to vote are encouraged to also submit comments on the Ballot.

The Chair is responsible for publishing a tally of total votes (Approve, Do Not Approve, and Abstain) and a consolidated comment spreadsheet. Individual voters' names are not published as part of the tally.

Ratification Ballots are conducted by electronic means. The duration of the Ratification Ballot is up to the group. The response time typically is 30 calendar days for a large or complex Specification. However, for Recirculation Ballots, and for less complex Specification changes, the response time is at least 10 calendar days. A Recirculation Ballot should be conducted if technical changes have been made as part of comment resolution.

Ratification Ballots run for the exact time indicated in the Ballot invitation and cannot be extended.

The final tally must count only those votes that have been returned within the Ballot voting period.

If a Member withdraws from the Alliance after the initial Ballot closes and before any Recirculation Ballot is opened, the Member is deemed unavailable for Balloting purposes and should not be sent any further Balloting material. Negative comments received before the Member withdraws are to be treated normally, but confirmation of resolution is not expected. No previous result should be revisited and recalculated, taking into account the removed Member, including Ballots, abstention rate, return, or approval rate.

8.8.2   Recirculation Process

Once the Sub-Group (SG) has examined, resolved, and responded to all comments, the SG shall decide whether changes to the document were sufficiently substantive to warrant a Recirculation Ballot.

Members of the group(s) who participated in the Ratification or Recirculation Ballot(s) and who have voting rights can examine the revisions to the document and determine whether they want to maintain their vote. However, voters should only change their vote based on the **changed** portions of the Specification.

Recirculation Ballots normally do not take as long as regular Ballots but allow for at least 10 calendar days' response time. If the document is large and the number of Ballot comments and changes commensurately dense, the group may choose to make the Recirculation Ballot period longer. However, the group should aim for a rapid completion of the Recirculation Ballot.

Voting Members are not required to respond to Recirculation Ballots. Unless they want to change their votes, their previous votes or abstentions still stand.

8.8.3 Comment Resolution

After a Ratification Ballot or Recirculation Ballot is complete, a Ballot review team formed by volunteers from among the Voting Members of the group(s) that participated in the Ballot is responsible for resolving and responding to comments received at the close of the Ballot. Upon receiving approval from the Alliance Board of Directors (Board), a Working Group (WG) may decide to solicit comments from entities outside of the WG and Alliance.

Comments may be accepted, revised, or rejected.

Comments must be designated by the submitter as editorial (E), technical (T), or Technical Required (TR). A NO vote **must** be accompanied by at least one comment. If a YES Ballot is received with a TR comment, the comment will be treated as a T.

The Ballot review team must document the following during the comment resolution process:

- All substantive technical changes that were made in the final draft to resolve comments, objections, and negative votes.

- All unsettled negative votes, together with the reasons given by the negative voter and the rebuttal by the Ballot review team.

This provides each member a basis to change or reaffirm their vote later if there is a Recirculation Ballot. The Ballot review team must consider (including accept or reject) all comments as follows:

- **Technical comments:** The Ballot review team shall consider all such Technical comments and document their resolution. Any changes, if made, constitute technical changes to the document and must be clearly identified as such in the Recirculation Ballot draft.

- **Editorial comments:** The Ballot review team shall consider all such Editorial comments and document their resolution. Any changes, if made, do not constitute technical changes to the document and do not trigger a Recirculation Ballot.

- **TR comments:** TR comments must include specific reasons for why the comment is issued and what wording change would be needed for the commenter to withdraw the comment. The Ballot review team should take special care in considering all such Technical Required comments and document their resolution.

  - If the Ballot review team accepts the commenter's proposed change as is, then the objection is considered resolved, and the change must be incorporated in the draft.
  - If the Ballot review team does not accept the commenter's proposed change as is, it must try to negotiate an acceptable change with the commenter. Any resolution must be incorporated in the draft.
  - If a comment cannot be resolved to the satisfaction of the commenter, the Ballot review team must formally inform the commenter as to the rationale for the rejection of their proposed change.

- If the proposed change is absent or is not sufficiently clear, the Ballot review team must contact the commenter formally. If the reason for the TR comment is still unspecified after the follow-up inquiry, the comment is resolved as 'Rejected.'

The Ballot review team must include the following documentation for new Ratification Ballots for previously failed Ballots or for Recirculation Ballots:

- A clean copy of the draft
- A redlined copy of the revised draft
- A detailed listing of all comments and their proposed resolution

If a Recirculation Ballot results in new comments on any revised text, the Ballot review team must repeat the comment resolution process.

When submitting the Specification to the Steering Committee (SC) for approval, the Ballot review team must include the following:

- A clean copy of the draft
- A redlined copy from the previous version of the Specification, if any
- A detailed listing of all comments and their proposed resolution
- The number of positive, negative, and abstaining votes

Appendix A: Appeals Process

Any member who has been or reasonably may be adversely affected by any group's decision, vote, resolution, action, inaction, approval, ballot process, Recirculation Ballot, comment resolution or other action ("***Group Decision***") has the right to appeal the Group Decision (individually "***Appellant***" and together "***Appellants***"). This includes appeals based on voting rights or other process or procedural issues. The reference to business days in this Section means Monday through Friday, excluding U.S. federal holidays.

The appeals path is as follows and starts at the next group above the group where the appeal originates:

1. Chair of Sub-Group under which appeal is raised

2. Parent Steering Committee under which appeal is raised

3. Governing Committee: only if the appeal relates to governance rules

4. Board of Directors

Appellants are encouraged to first discuss their concerns with the respective Chair of the group under which the issue on appeal originated. The Chair of such group will in turn inform without delay the Chair of the next group in the appeals path, whose Chair shall notify the Alliance Director of Technology, who shall in turn notify without delay the Alliance General Counsel of the appeal.

If the issue is not resolved between the Appellant and the Chair of the group under which the appeal is raised and/or the applicable respondent(s) (collectively, "***Respondent(s)***") during initial discussions, then Appellants may file a written appeal directly with the Chair of the group above the group where the appeal originated. Alliance staff will schedule a hearing with an appeal panel ("***Appeal Panel***", as formulated below) on a date agreeable to all parties, giving at least ten (10) business days' notice. Appropriate notice of the appeal hearing will be distributed to the affected group under which the appeal was raised, the Appellant, any Respondent(s) named in the appeal and the Appeal Panel's participants. The written appeal shall include:

1. The Group Decision and the reason(s) for the appeal.

2. Basis of the grievance.

3. A description of previous efforts to resolve the issue(s) and the outcome of such efforts.

4. Direct objections to any procedural issue(s) pertaining to the Specification or related documents in question.

5. Adverse effects to the Appellant caused by any process or procedural issue.

6. Section of the Alliance Working Group Processes and Procedures or other documents governing the affected group where the appeal originated; and

7. Specific remedial actions that would satisfy the Appellant's concerns.

The Appeal Panel shall consist of three (3) members of the group where the appeal will be heard, and who have knowledge of the matter, but who have not been directly involved in the matter, and who are not employees of entities that may be affiliated with either the Appellant or a Respondent. The Appellant shall appoint one (1) impartial Appeal Panel member. If a Respondent is named in the appeal, they may appoint one (1) impartial Appeal Panel member. If more than one Respondent is named in the appeal, the Respondents will collectively agree on the appointment of a single Appeal Panel member. The Appellant and Respondent(s) must each identify their appointed Appeal Panel member within five (5) business days of the Alliance's notice of an appeal hearing date. The two (2) Appeal Panel members selected by the parties in the appeal shall collectively appoint the third Appeal Panel member and announce the appointment within ten (10) business days of the Alliance's notice of an appeal hearing date. Once the Appeal Panel is convened, and other than during the appeal hearing or related to direct written questions from the Appeal Panel, no party in the appeal shall communicate with any Appeal Panel member regarding the complaint until a decision has been rendered.

Alliance staff will supply each member of the Appeal Panel with a copy of the written appeal, the appeal procedures (see Section A.1, Appeal Hearing Procedures) and any meeting minutes of the group where the appeal originated directly related to the issue. The Appeal Panel may direct written questions to the Appellant and Respondent(s) in advance of the hearing to assist in clarifying the issues. Any answers received will be shared with all parties in the appeal, and brief responses (no more than five pages) to those answers may be submitted in advance of the hearing.

Prior to the appeal hearing, the Appellant and Respondent(s) may be required to sign an NDA, if confidential information may be disclosed during the proceedings. If there are conflicts of interest or other legal considerations not solved by an NDA, then the appeal shall escalate directly to the Board of Directors and the Appellant shall only participate in the parts of the appeal proceedings without legal conflict.

A.1 Appeal Hearing Procedures

The hearing shall be conducted in an informal manner and subject to such reasonable rules as the Appeal Panel may set forth. The Appellant has the burden of demonstrating the alleged adverse effects, improper actions, errant decisions and the expected efficacy of the requested remedial action. The Respondent has the burden of demonstrating that the affected group took all actions in compliance with the Alliance Working Group Processes and Procedures, and/or the governing documents for the group, or that the requested remedial action would be ineffective or detrimental.

The Appellant and Respondent(s) may introduce other pertinent arguments, and members of the Appeal Panel are permitted to address questions to individuals. The Appeal Panel may call on any Member to assist in the appeal proceedings as reasonably requested. Interested third parties (*e.g.,* Board Members or group members not directly involved in the appeal) may attend the hearing as observers, subject to the provisions below.

The Appeal Panel, the Appellant and Respondent(s) shall not be bound by any formal rules of evidence. The hearing shall be limited to no more than three (3) calendar days.

It is at the sole discretion of the Appeal Panel:

1. To close the hearing to third parties when required to protect the confidentiality of sensitive information that may be disclosed at the hearing.

2. To hear and decide related appeals at the same time; and

3. To dismiss an appeal for lack of evidence.

A.2 Decision and Final Report

The Appeal Panel shall render its decision in writing within ten (10) business days of the conclusion of the hearing, stating its findings of fact and conclusions based on the evidence presented by all hearing participants:

1. If finding for the Appellant, the Appeal Panel will remand the action to the affected group where the appeal originated with a specific statement of the issues and facts that led to the decision that fair and equitable action was not taken by the affected group.

2. If finding for the Respondent, the Appeal Panel will provide a specific statement of the facts that demonstrate fair and equitable treatment of the Appellant(s); or

3. If finding that new, substantive evidence was introduced, the Appeal Panel will return the entire action to the affected group for appropriate consideration and further action.

Alliance staff, working with the Chair of the group responsible for addressing the appeal but subject to the suspension provisions below, shall ensure that all decisions and recommendations of the Appeal Panel are implemented and carried out. Further, Alliance staff shall assist the group Chair in preparing a full report of the proceedings and outcome, including the Appellant's acceptance (or lack of it). The report will be shared with the Appeal Panel and hearing participants for a five (5) business day review and comment period. The final report will be published within ten (10) business days of the end of the review and comment period.

A.3 Status of Decision During Appeal Proceedings

The Group Decision being appealed shall not be suspended during the period in which the item is being appealed unless the governing body making the Group Decision authorizes a suspension by majority vote of the members entitled to vote and present at the meeting. Any single member of such governing body can call a meeting (in accordance with these Alliance Working Group Processes and Procedures) for the purpose of determining whether a suspension of the Group Decision should occur, and any approval of such suspension shall require a majority of votes of those voting at such meeting. If suspension is approved, the Group Decision will not be implemented until the appeal is heard and a decision rendered, at which time the governing body will determine whether any further action is required because of the appeal decision. If, after the appeal decision is rendered, the Appellant makes a further appeal, the Group Decision, if previously suspended, will continue to be suspended until there is a final decision on the appeal. Upon a final decision on the appeal, the governing body making the Group Decision will determine whether any further action is required because of the final decision.

A.3.1   Procedures for Appeals

1. Introduction of Appeal by Group Chair – Review of Process and Procedures

    a. Hearing participants: Appellant(s), Respondent(s), and Appeal Panel participants
    b. Observers (if allowed): Group members, Board members
    c. Appellant(s) and Respondent(s) shall be provided with the primary ability to speak and provide opinions and comments and ask questions.
    d. Observers may request to be recognized by the Appeal Panel to participate by providing opinions and comments.

2. Appellant(s) – Read into the record the appeal, or, at Appellant's option, incorporate the appeal into the proceedings (without reading).

3. Appellant(s) shall be provided the opportunity to make an oral presentation to the Appeal Panel.

4. Respondent(s) shall be provided the opportunity to make an oral presentation of its response to the appeal to the Appeal Panel.

5. Q&A between Appeal Panel, Appellant(s) and Respondent(s).

6. At the Appeal Panel's discretion, observers who request to speak may be invited to provide opinions and comments.

7. Closing Statements – by Appellant and Respondent

8. Appeal Panel can elect to deliberate during this session or schedule a future session for internal discussion and decision. At the Appeal Panel's discretion, deliberations may be open or closed session.

9. Upon the rendering of a decision, the Appeal Panel will prepare a copy of its written decision and will provide it to the Chair of the affected group.

10. Alliance staff will assist the group's Chair in preparing a report of the proceedings. In accordance with the Alliance Working Group Processes and Procedures, the report will include a copy of the appeal, describe the process, including the Appellant's acceptance (or lack of it), and the outcome.

11. Alliance staff will publish the report to the Alliance membership within ten (10) days of the final review by the Appeal Panel, group Chair and hearing participants.