NENA Development Group Organizational Structure and Operational Procedures

1 Executive Overview

The National Emergency Number Association (NENA) is the premier 9-1-1 public safety organization for defining operational and technical issues, recommending processes and procedures for Public Safety Answering Point (PSAP) managers, administrators, and practitioners, defining technical issues, and providing solutions for technology service providers, equipment manufacturers, and other industry-related standard-setting bodies.

This document describes the organizational structure of the NENA Development Group (NDG), and the process and procedures that clearly define the method of developing consensus documents by the NENA Development Group. A requirement of participating in the NDG is to adhere to all procedures outlined in this document and the NENA Development Group Guide. It is intended that NDG leadership and members will work in concert when developing NENA Information, Requirements, Reference, and Standard documents.

This document and other NENA Administrative (ADM) documents are prepared and approved by the Development Steering Council (DSC) after a thorough review by all Committee and Working Group Co-Chairs, with the concurrence of the NENA Board of Directors.

The Committees and Working Groups, as defined herein, develop consensus-driven documents that provide information, establish requirements, and set standards for the Public Safety industry in the areas of emergency communications technology, management, and operations. Such technology is inclusive of the hardware, software, networks, and equipment used for emergency communications.

This document further identifies the roles and responsibilities of the individuals involved in the development, review, and approval process for NENA documents and other published material such as (but not limited to) Information, Requirements, Reference, Standard documents, and website material.

The structure and procedures contained in this document will:

- ensure that all processes and procedures are adhered to in the managing of the NDG,
- allow for operational consistency with the American National Standard Institute (ANSI) accreditation requirements,
- promote a uniform method for establishing NDG Committees and Working Groups,
- promote a uniform method for developing NENA documents,
- promote processes to be followed to allow for Issue Submission and tracking,
- allow all Development Group Committee members to thoroughly understand the Committee process,
- allow all Development Group Committee leaders and members to understand their roles and responsibilities, and
- allow for a smooth referral process to other Standards Development Organizations (SDOs).

As an industry leader in Public Safety and emergency communications, NENA is uniquely qualified to foster and develop documentation that will:

- establish model procedures and guidelines for PSAPs that result in improvements in overall service delivery and have a positive impact on an agency's ability to save lives and protect property,
- enable interoperability among 9-1-1 technologies that may help minimize the costs involved in provisioning and maintaining public safety communications,
- provide PSAP managers and administrators with peer-reviewed, peer-developed, and consensus-driven model procedures, methods, and resources for greater accountability and effectiveness in delivering emergency communications services,
- promote the standardization of critical components of emergency communications administration and management (i.e., policies, procedures, hiring/training),
- increase the effectiveness of 9-1-1 call handling and emergency response.
- promote teamwork among industry providers of public safety products and services,

Recommendations for amending this document are made by the Development Group Administrative Committee's Document Management Working Group via the Development Steering Council to the NENA Board of Directors by providing an Action Item for Board consideration to the NENA CEO.

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ADMINISTRATIVE DOCUMENT
NOTICE

This Administrative Document (ADM) is published by the National Emergency Number Association (NENA) to describe the document development and review process for the benefit of NENA members, partners, and affiliated entities. This process has been developed to clearly define the operational procedures used to develop, review, and approve NENA documents for publication that address the complex operations and technology issues related to the provisioning and management of emergency communications services.

This document has been prepared solely for the use of those individuals and agencies involved in the development and approval of NENA documents. NENA reserves the right to revise this document for any reason.

By using this document, the user agrees that NENA will have no liability for any consequential, incidental, special, or punitive damages arising from the use of the document.

Recommendations for change to this document may be submitted to:

National Emergency Number Association
1700 Diagonal Road, Suite 500
Alexandria, VA 22314
202.466.4911
or: commleadership@nena.org

NENA: The 9-1-1 Association improves 9-1-1 through research, standards development, training, education, outreach, and advocacy. Our vision is a public made safer and more secure through universally available state-of-the-art 9-1-1 systems and better-trained 9-1-1 professionals. Learn more at nena.org.

Document Terminology

This section defines keywords, as they should be interpreted in NENA documents. The form of emphasis (UPPER CASE) shall be consistent and exclusive throughout the document. Any of these words used in lower case and not emphasized do not have special significance beyond normal usage.

1. MUST, SHALL, REQUIRED: These terms mean that the definition is a normative (absolute) requirement of the specification.
2. MUST NOT: This phrase, or the phrase "SHALL NOT," means that the definition is an absolute prohibition of the specification.
3. SHOULD: This word, or the adjective "RECOMMENDED," means that there may exist valid reasons in particular circumstances to ignore a particular item, but the full implications must be understood and carefully weighed before choosing a different course.
4. SHOULD NOT: This phrase, or the phrase "NOT RECOMMENDED" means that there may exist valid reasons in particular circumstances when the particular behavior is acceptable or even useful, but the full implications should be understood, and the case carefully weighed before implementing any behavior described with this label.
5. MAY: This word, or the adjective "OPTIONAL," means that an item is truly optional. One vendor may choose to include the item because a particular marketplace requires it or because the vendor feels that it enhances the product while another vendor may omit the same item. An implementation which does not include a particular option "must" be prepared to interoperate with another implementation which does include the option, though perhaps with reduced functionality. In the same vein an implementation which does include a particular option "must" be prepared to interoperate with another implementation which does not include the option (except, of course, for the feature the option provides.)

These definitions are based on IETF RFC 2119.

Intellectual Property Rights (IPR) Policy

All NENA members and all non-NENA members who participate on NENA Committees & working groups shall comply with the Intellectual Property Rights Policy, https://www.nena.org/page/ipr, as promulgated by the NENA Board of Directors as a condition of membership in the Association, and / or as a condition of participation by any non-NENA members to participate on NENA Committees & working groups.

NOTE – The user's attention is called to the possibility that compliance with this standard may require the use of an invention covered by patent rights. By publication of this standard, NENA takes no position with respect to the validity of any such claim(s) or of any patent rights in connection therewith. If a patent holder has filed a statement of willingness to grant a license under these rights on reasonable and nondiscriminatory terms and conditions to applicants desiring to obtain such a license, then details may be obtained from NENA by contacting the Committee Resource Manager (CRM) identified on NENA's website at https://www.nena.org/page/ipr.

Consistent with the NENA IPR Policy, available at https://www.nena.org/page/ipr, NENA invites any interested party to bring to its attention any copyrights, patents or patent applications, or other proprietary rights that may cover technology that may be required to implement this standard.

Please address the information to:

National Emergency Number Association
1700 Diagonal Rd, Suite 500
Alexandria, VA 22314
202.466.4911
or commleadership@nena.org

Reason for Issue/Reissue

NENA reserves the right to modify this document. Upon revision, the reason(s) will be provided in the table below.

Document Number	Approval Date	Reason for Issue/Reissue
NENA-ADM-001	May 26, 2012	Initial Document for Reorganization of NENA Committee Structure
NENA-ADM-002	May 26, 2012	Initial Document Establishing the Document Development and Approval Process
NENA-ADM-002.1	August 14,2012	Revisions to clarify terms, content, and for compliance with ANSI Essential Requirements
NENA-ADM-001.2-2015	November 12, 2015	Revisions to: • 3.7 Standing Development Committees • 3.7 Process Review Committee • 4.1 Working Group Participation Expectations • 6.5 Committee Resource Manager • 6.7 NENA Style Editor and other administrative changes
NENA-ADM-002.3-2015	November 12, 2015	Complete reissue – many changes & adjustments, and the document number was brought in line with current numbering scheme.
NENA-ADM-001.3-2018	January 15, 2018	Miscellaneous edits and updates to: • NDG Organization Chart • Section 5.4 Established timeframe for outside organizations to designate a joint working group Co-Chair within 30 days
NENA-ADM-002.4-2018	January 15, 2018	Complete review. In addition to minor editorial changes, the following major changes were made: • Definitions added to terms where missing • Simplified Section 3.4 Issue Status Tracking

		• Throughout the document where "Authoring Committee Review" was referenced, it has been modified to reflect the first step in the review process is now "All Committee Review." The "Authoring Committee Approval Ballot" has been moved to occur just before "Stable Form Notice," which is reduced to 30 days. • Section 6.1.1.8 identifies a new Document Correction Form (NENA-ADM-007). Associated instructions are defined in Section 7.3.2.1 and 7.3.2.2. • Section 7.2.5 clarifies informal ballots and formal approval ballots. • Sections 7.3.1.1-7.3.1.4 clarify Maintenance methods of American National Standards • Section 7.5.1 clarifies when WG ballots are required. • Section 7.5.5 changes public review from business days to calendar days. • Section 7.5.6 clarifies Authoring Committee approval ballot for content. • Section 7.5.8 reduces SFN to 30 days. • Section 8.1 table updated to reflect modified approval process steps and changes public review from business days to calendar days.
NENA-ADM-001.5-2019	December 19, 2019	Major rewrite. Combined NENA-ADM-001 and NENA-ADM-002 into one document. Updated to comply with ANSI audit findings. Consensus Body changed to the voting members of the Working Group that developed the document.
NENA-ADM-001.5a-2021	September 14, 2021	Section 3.1.2.1: Modified the numbering scheme for NENA documents to clarify how non-substantive errata changes are reflected in the NENA document number.

NENA-ADM-001.5b-2022	July 19, 2022	Non-substantive edits to Section 3.2.2, Document Numbering Versions & Revisions modified to allow identifying documents that are backward compatible with Minor Versions of a document. Substituted 'Errata' for 'Revisions' in Sections 3.4.2.1 and 3.4.2.2 to maintain consistency in terms used.

2   NENA Development Group Organizational Structure

The NENA Development Group organization consists of the Development Steering Council (DSC), Development Committees, their Working Groups, and the Process Review Committee (PRC).

2.1   NENA Development Group (NDG) Membership

The NENA Development Group consists of the Development Steering Council (DSC), the Development Committees (Standing and Special Purpose, Limited Duration), their Working Groups, NENA staff, and the NENA Board of Directors liaisons.

The NENA Board of Directors manages the business and affairs of the Association, which includes creation and appointment of committees not otherwise created or appointed as specified in the Bylaws. Approval of this document by the NENA Board of Directors established the NENA Development Group as a Special Committee within the meaning of the Bylaws of the Association. All members of the NENA Development Group are subject to the NENA Ethics & Code of Conduct Policy [5] and NENA Intellectual Property Rights Policies, www.nena.org/ipr, as adopted by the NENA Board of Directors.

Coordination of Development Group activities as they impact budgeting and other logistical matters are under the oversight of NENA's Chief Executive Officer (CEO). The CEO has responsibility for the day-to-day operation of the Association. As such, the Development Group reports to the CEO for all such decision making. Policy direction and oversight is provided by the NENA Board of Directors.

2.1.1   Volunteers

Volunteers from all segments of the 9-1-1 community are the members and leaders of the NENA Development Group. This section describes the attributes and processes that apply to all volunteers. For details on specific roles, responsibilities, and requirements for Development Steering Council (DSC), Committee, and Working Group members, see Section 2 NENA Development Group Organizational Structure.

2.1.1.1 General Membership

All those persons having an interest in the production and publication of NENA documents and reference material have the right as participants and shall be afforded the opportunity to provide input, express their opinion, have their position considered, and have a right to appeal. A cross-section of interested parties shall be sought and encouraged to participate in committee work to avoid dominance by any individual, group, or organization and to provide a balance of interests. Participation in the development of NENA documents shall not be restricted to NENA members, but shall be open to all those who are directly and materially affected by the activity in question. When the task assigned to the Committee or Working Group is the development of a NENA document, participation shall be open to any individual with a direct and material interest in the Issue, and there shall be no undue financial or technical barriers to participation. Participants have a right to participate by expressing a position and its basis and having that position considered. They also have a right to participate in voting and to appeal decisions.

To ensure that NENA Standards are developed with openness and balance, each Development Committee or Working Group that begins work on a new or revised Standard shall seek Participants from different interest categories (producer, user, general interest), and where appropriate, additional interest categories should be considered. See interest categories detail in Section 3 Document Development Process.

The NENA Intellectual Property Rights policy shall be followed during all committee work, and all Participants SHALL agree to be bound by this policy. All Participants shall file the applicable Licensing Declaration Form and Patent Information Form as required in NENA's IPR policy.

All members of the NENA Development Group, the Development Steering Council, and any other body constituted herein shall be reminded, annually, at the first meeting of each such body following the Joint Committee Meeting (or its successor), of their obligations under paragraphs 6 and 13 of the NENA Ethics & Code of Conduct Policy [5] to "Encourage the free expression, through proper channels and means, of opinions held by others" and to "Remain professional, respectful, and protective of NENA, its brands, services, and reputation in all communications...."

NDG Members who are not a member of at least one active Working Group SHALL be removed from the NENA Development Group.

2.1.1.2 NENA Development Group Leaders

This section describes the attributes and processes that apply to all NDG leaders. For details on specific roles, responsibilities, and requirements for Development Steering Council (DSC), Committee, and Working Group leaders, see Section 2 NENA Development Group Organizational Structure.

2.1.1.3 Appointments

The processes below describe how each of the NENA Development Group leadership roles is filled annually, or when unexpected vacancies occur.

On an annual basis at the first DSC meeting following the NENA Annual Conference, the DSC Co-Chairs will hold an organizational meeting to review Committee leadership assignments.

2.1.1.4   Handling Leadership Vacancies

When vacancies occur in a NENA Development Group Committee or related external organization liaison positions, the same procedures used for the annual appointments (shown above) will apply.

2.1.1.5   Concerns or Complaints Regarding NENA Leadership

NENA strongly encourages any NENA member with a concern or complaint about the incumbent leadership of a Development Committee or an associated Working Group to attempt to resolve the matter between the involved parties. If that does not result in a satisfactory outcome, the member shall contact the NENA Development Steering Council (DSC) Co-Chairs.

Concerns or complaints from any NENA member about the incumbent leadership of the DSC (the Co-Chairs), and any unresolved complaints related to the NENA Development Group shall be referred by the member to the NENA Board of Directors Liaison.

2.1.1.6   NENA Development Group (NDG) Role Assignment Appeals

Procedural appeals regarding the assignment of NDG leadership roles can be made by any interested person who may have directly and materially affected interests and who have been or will be adversely affected by any procedural action or inaction concerning the assignment of NDG leadership roles.

Procedural appeals include whether an assignment was afforded due process according to the applicable sections of this document. The Appeals Process consists of the following steps:

2.1.1.6.1   Pre-Appeal Resolution

Before submitting a formal Complaint (described below), the appellant shall attempt to resolve the matter directly with the NDG leadership involved in the offending situation. If that fails to resolve the situation to the appellant's satisfaction, they may choose to file a formal Complaint.

2.1.1.6.2   Complaint

A written request by the concerned party shall be emailed to the NENA Committee Resource Manager (CRM) (crm@nena.org) within 10 business days of the action that is objected to, or any time in cases of inaction. An appeal must include a clear description of the action or inaction being appealed, citing any previous attempt at resolution. The CRM shall forward the Complaint to the DSC Co-Chairs for a response. In the event the complaint is due to a decision made by the DSC Co-Chairs, the CRM shall forward the complaint to the NENA President for a response.

2.1.1.6.3   Response

A written response will be emailed to the appellant within fifteen (15) business days, addressing the stated concerns and making reasonable attempts for resolution, specifically addressing each allegation of fact in the complaint, in consultation with the involved NDG Co-Chairs and others who may have relevant knowledge.

2.1.1.6.4   Role Assignments Appeal Hearing

If a resolution is not achieved through the Complaint and Response steps (above), or upon expiration of the allotted response interval, the written appeal and related documentation shall be forwarded by the CRM to the NENA President. The NENA President shall form an Appeals Panel, with input from the appellant.

The appeals panel shall consist of at least three individuals with a working understanding of the NDG Leadership Role Assignment procedures in this document, and who do not have demonstrably real or apparent conflicts of interest with the subject of the appeal or the person filing the appeal. The NENA President shall NOT be a voting member of the Appeals Panel but may attend or preside over the Appeals Panel activities.

The appellant must demonstrate adverse effects, improper actions, or inactions, and the efficacy of their requested actions. The Appeals Panel is authorized to seek information from any source and shall have access to all relevant NENA files, tools, archives, and records.

The Appeals Panel must respond to the complaint within fifteen (15) business days, stating its conclusions.

2.1.1.7   Roles and Responsibilities of Development Group Leaders

The Development Group leadership consists of the Development Steering Council Co-Chairs, Committee Co-Chairs, and Working Group Co-Chairs. Some common attributes of all leadership roles are:

- Each Development Group Leader shall be a NENA member in good standing for the duration of their term and shall possess meeting facilitation and project management skills. NOTE: The membership requirement for Co-Chairs may be waived on an "as needed" basis by the DSC Co-Chairs. Working Groups that are "joint" in nature with external entities may be an example of when the NENA membership requirement could be waived.
- Co-Chairs, for any given Committee or Working Group, should normally not be employed by the same employer. While discouraged, this requirement may be waived on an "as needed" basis by the DSC Co-Chairs.
- One of the Co-Chairs should represent the private sector, and one should represent the public sector, if possible.
- The Development Group Leaders shall not impose undue influence on the direction or disposition of Issues and events based on their leadership position but should use their position to direct and expedite the process in order to achieve consensus as required.

2.1.2   NENA Staff

NENA staff members are assigned to the NENA Development Group by the NENA CEO. The Technical Issues Director and 9-1-1 PSAP Operations Director shall be voting members of the DSC. Other assigned staff members include the Committee Resource Manager, who is a non-voting DSC member, and a Style Editor who may be a voting member of a Working Group and if a Committee Co-Chair, a voting member of the DSC.

2.1.2.1   Technical Issues Director and 9-1-1 PSAP Operations Director

The Technical Issues Director and 9-1-1 PSAP Operations Director act as liaisons between the DSC and other NENA staff and industry professional organizations. Other responsibilities of these directors are described in the NDG Guide [13] .

2.1.2.2   Committee Resource Manager

The Committee Resource Manager (CRM) may be a NENA staff or contractor position. The CRM role provides administrative support to the DSC volunteer leadership and the Process Review Committee (PRC). Support details and other responsibilities of the CRM are described in the NDG Guide [13] .

2.1.2.3   Style Editor

The NENA Style Editor may be a NENA staff or contractor position. The Style Editor is responsible for reviewing NENA documents that are intended for external publication, to ensure they have a consistent look and feel, which will render a professional level of grammatical quality for all NENA documents. The Style Editor will apply generally accepted grammar techniques, as well as ensuring that a proper explanation of acronyms is present in the Acronyms & Abbreviations table if applicable, or within the body text where they are first used. The Style Editor can also propose text changes for readability, but it is up to the Working Group to accept them.

The Style Editor will also be responsible for applying the same techniques to the NENA templates as needed.

2.1.2.4   NENA Public Internet Web Administrator

The NENA web site (nena.org) [2] contains the published NDG documents and information about the NDG Committees, including Working Group application forms that are used by anyone wanting to join a Working Group. The NENA CEO assigns staff personnel to administer the NDG pages on the public site.

2.1.3   NENA Board of Directors Liaisons

The Board of Directors Liaisons are responsible for attending the NENA Standards & Best Practices Conference (SBP) and staying involved in the DSC process. They may attend any NDG meetings in a non-voting observer role or join Working Groups in a voting capacity.

2.2 Development Steering Council (DSC)

The DSC acts as a steering and alignment body for the Development Committees. It is led by two Co-Chairs, one appointed from the "Private Sector" membership classification and one from the "Public Sector" membership classification. They are voting members of the DSC. Appointment of the DSC Co-Chairs is recommended by the NENA President and approved by the NENA Board of Directors annually, and they serve at the pleasure of the NENA Board of Directors. The NENA Board of Directors also retains authority over those who serve in all other subordinate DSC roles such as the Committee Resource Manager and Style Editor.

2.2.1 DSC Leadership (Co-Chairs)

2.2.1.1 Appointment of NENA Development Steering Council (DSC) Co-Chair Positions

Each year the incoming NENA President may consult with the NENA CEO and nominate two (2) Development Steering Council (DSC) Co-Chairs subject to approval by the NENA Board of Directors.

In performing the above assignments, the NENA President shall select candidates from within existing committee membership, preferably from within the leadership ranks.

2.2.1.2 DSC Co-Chair Responsibilities

The DSC Co-Chairs are appointed by the NENA President (and approved by the NENA Board of Directors) annually, and they serve at the pleasure of the NENA Board of Directors. The DSC Co-Chairs' responsibilities are described in the NDG Guide [13] .

2.2.2 DSC Membership

In addition to the DSC Co-Chairs, the DSC consists of the following members:

- Two voting Co-Chairs from each of the Standing Development Committees.
- At the discretion of the DSC Co-Chairs, it may also include Special Purpose, Limited Duration Committee Co-Chairs.
- Two voting NENA Staff representatives; the Technical Issues Director and 9-1-1 & PSAP Operations Director.
- Non-voting NENA Committee Resource Manager.
- Non-voting NENA Board of Directors Liaison(s). NENA Board of Directors member(s) (normally including the Second Vice President) shall be appointed by the NENA President with the approval of the NENA Board of Directors. These Board Members shall be responsible for attending the NENA Standards & Best Practices Conference (SBP) and staying involved in the DSC process. Additionally, these Members should attend all meetings of the DSC. This will ensure that when Committee matters come before the Board, there will be a committee-knowledgeable person on the NENA Board of Directors.

2.2.3 Development Committees

In general, the development work of NENA is accomplished within Standing or Special Purpose, Limited Duration Committees within the NENA Development Group.

Standing Development Committees and are established to address the complex operations and technology issues related to the provision and management of emergency communications services in specific topical areas.

Special Purpose, Limited Duration Development Committees within or affiliated with the Development Group may be established from time to time to address a specific Issue, or they may be established by the DSC or by NENA for a limited duration and will be decommissioned upon completion of their defined task(s).

A complete list of these committees may be found at https://www.nena.org/ [2] .

2.2.3.1 Development Committee Leadership (Co-Chairs)

Development Committee Co-Chairs are voting members of the Development Steering Council (DSC) and are responsible for the activities of their Committee's Working Groups.

2.2.3.1.1 Appointment of NENA Development Group Committee Co-Chair Positions

Each year the Development Steering Council (DSC) Co-Chairs shall appoint two Co-Chairs for each of the Development Group Committees. This shall be completed within 45 calendar days of the appointment of the DSC Co-Chairs.

Candidates for these NENA Development Group Committee Co-Chair positions shall be solicited from within existing NENA Development Group membership and may include incumbents in the positions. Consideration shall also be given to applications on file (NENA-ADM-009) [11]

The final decision-making authority and responsibility for the appointment of the two Co-Chairs for each of the Development Committees is reserved for the DSC Co-Chairs, without the need for DSC consensus or approval.

2.2.3.1.2 Development Committee Co-Chair Responsibilities (Standing and Special Purpose, Limited Duration)

The Development Committee Co-Chairs will be responsible for appointing Working Group (WG) Co-Chairs, and other subject matter experts as appropriate for problem-solving teams, with approval of the DSC Co-Chairs.

Each Development Committee Co-Chair is expected to attend DSC meetings and calls and vote as a member of the DSC on matters that come before it or must provide notice to the DSC Co-Chairs and their Co-Chair. If a Development Committee Co-Chair will not be able to attend a DSC meeting, they SHOULD appoint a qualified delegate in advance as their substitute. At least one Co-Chair or substitute SHALL attend DSC meetings and calls. The Development Committee Co-

Chairs preside over their respective Committees and shall coordinate their team efforts. The details of their duties and responsibilities are described in the NDG Guide [13] .

2.2.3.2   Working Groups

Working Groups are typically created under a Development Committee to address a specific issue and to develop a specific Deliverable by a specific date based on an approved Charter. Once that task is done or abandoned, the Working Group is dissolved.

Working Groups may also be formed by Committee Co-Chairs to perform long-term Committee activities such as strategic planning or leadership mentoring.

If the specific Deliverable is a NENA document, participation shall be open to any Entity (organization, company, government agency, etc.) or individual with a direct and material interest in the issue. Participants have a right to participate by expressing a position and its basis and having that position considered. They also have a right to participate in voting and to appeal decisions. Any membership disputes may be appealed in accordance with Section 2.1.1.6.

The voting members of a Working Group that develop an American National Standard are the designated NENA "Consensus Body."

2.2.3.2.1   Working Group Leadership

Working Group leadership includes one or more Chairs or Co-Chairs as well as Note Takers and Document Editors, all of which are necessary for the effective operation of the Working Group.

2.2.3.2.1.1   Appointment of Working Group Co-Chairs

When a Working Group is formed as a result of the assignment of an Issue, the Development Committee Co-Chairs shall appoint Working Group Co-Chairs. The Committee Co-Chairs shall evaluate the Working Group Co-Chairs on a periodic basis or no less than once annually.

Candidates for these NENA Development Group Working Group Co-Chair positions shall be solicited from within existing NENA Development Group membership. Consideration shall also be given to applications on file (NENA-ADM-009) [11]

The decision-making authority and responsibility for these appointments is reserved for the DSC Co-Chairs, without the need for DSC consensus or approval.

The NENA Board of Directors retains the right to override any NENA Development Group Committee leadership appointments.

2.2.3.2.1.2   Working Group Co-Chair Responsibilities

Working Group Co-Chairs are appointed by the Development Committee Co-Chairs and approved by the DSC Co-Chairs. These Co-Chairs should be well versed in the subject matter and shall have facilitation skills and project management skills. Co-Chairs SHALL preside over their Working Groups and determine the voting designation for entities. Since the WGs are formed to address technical and operational Issues, the WG leader shall convey to their Committee Co-Chairs when

any policy matter inhibits progress on technical or operational topics. Anything that might constitute a significant policy matter, or affect NENA policy or NENA's financial resources, shall be escalated to the Committee Co-Chairs for resolution with DSC and NENA staff.

Details of the duties and responsibilities of Working Group Co-Chairs are described in the NDG Guide [13] .

2.2.3.2.2 Openness and Balance

Historically the criteria for balance are that a) no single interest category constitutes more than one-third of the membership of a consensus body dealing with safety-related standards or b) no single interest category constitutes a majority of the membership of a consensus body dealing with other than safety-related standards.

The interest categories appropriate to the development of consensus in any given standards activity are a function of the nature of the standards being developed. Interest categories shall be discretely defined, cover all materially affected parties and differentiate each category from the other categories. Such definitions shall be available upon request. In defining the interest categories appropriate to a standards activity, NENA uses the following:

- Producer
- User
- General Interest

The standards development process should have a balance of interests. Participants from diverse interest categories shall be sought with the objective of achieving balance. If a Consensus Body lacks balance in accordance with the historical criteria for balance, and no specific alternative formulation of balance was approved by the ANSI Executive Standards Council, outreach to achieve balance shall be initiated by Working Group Co-Chairs through the Committee Resource Manager.

To ensure that NENA Standards are developed with openness and balance, each Development Committee or Working Group that begins work on a new or revised Standard shall seek Participants from different interest categories; where appropriate, additional interest categories should be considered. See interest categories detail in Section 3 Document Development Process.

The leadership of the committee shall ensure that the document development process is not dominated by any individual or organization. If an interested party expresses a concern in writing that the process is dominated or influenced to the exclusion of fair and equitable consideration of other viewpoints, such concern shall be addressed in accordance with Section 3.7 Document Development Procedural Appeals.

The NENA Intellectual Property Rights policy, https://www.nena.org/page/ipr, shall be followed during all committee work, and all Participants shall agree to be bound by this policy. All Participants shall file the applicable Licensing Declaration Form and Patent Information Form as required in NENA's IPR policy.

2.2.3.2.3   Working Group Participation Expectations

It is the responsibility of the WG Co-Chairs to ensure all prospective WG members are advised of the expectations for membership outlined below.

All Committee and Working Group members are required to actively participate in all calls and, when eligible, to participate in all ballots. Working group members will indicate their agreement or disagreement with a given subject on a ballot by casting their vote using the NENA Workspace (NWS) [3] ballot process. Participating entities are only allowed one vote per ballot, regardless of the number of representatives the entity has on a given Committee or Working Group. The working group Co-Chairs will query the members of the Participating Entity to identify which individual will be the primary voting representative and which individual will be the alternate voting representative.

At the discretion of the Working Group Co-Chairs, those members who miss three (3) consecutive meetings without notifying the Working Group Co-Chair(s) or fail to respond to ballots may be dropped from the roster and minutes distribution. Ballots, to attain official approval, require consensus and active timely participation from a majority of working group members registered within a specific NWS working group. Working Group Co-Chairs have the discretion to remove or adjust a voting member's rights within their Working Group when a member has demonstrated a lack of response to previous ballots issued within NWS for the working group.

WG members are expected to contribute ideas, text, and review effort toward the goals of the WG. If the WG Co-Chairs determine that they are not receiving these contributions in a timely manner, they shall identify this situation to the Committee Co-Chairs as soon as possible. The Committee Co-Chairs will attempt to rebalance the efforts of existing volunteers and seek out new resources.

Development Committee Co-Chairs, NENA staff, and Board members may attend working group meetings and calls. Others may also attend, as approved by the Committee Co-Chairs, subject to the IPR rules and guidelines contained within this document.

2.2.3.2.4   Joint Working Groups formed with an outside (non-NENA) organization

For Joint Working Groups formed with an outside (non-NENA) organization, a written agreement will be negotiated between NENA and the other organization describing the terms and conditions of the operations of the joint Working Group, including details of the how the publication will be produced, managed, and updated.

When NENA chooses to appoint a Co-Chair or representative to serve on a Working Group in an external organization, the appointment shall be made by the DSC Co-Chairs.

2.3   Process Review Committee

The Process Review Committee is an independent body that oversees document development to ensure processes are followed. Typically, the NENA Board of Directors' immediate past president

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will serve as the Process Review Committee (PRC) Chair. Another Board member may be assigned at the discretion of the incoming NENA President, with the concurrence of the NENA Board of Directors.

Each year the PRC Chair appoints six voting members from a nomination list provided by the DSC: two voting members from the producer interest category, two voting members from the user interest category, and two voting members from the general interest category to serve as members of the Process Review Committee. Any PRC member who is a Committee or Working Group Co-Chair SHALL recuse themselves from voting on documents originating from their group. They must be NENA members in good standing and must be from different Participating Entities. Additionally, the DSC Co-Chairs and NENA Staff members serve as non-voting PRC members. PRC membership is limited to no more than four consecutive years.

The Process Review Committee certifies that the NENA development processes and procedures were adhered to and that content consensus was attained by the Consensus Body (voting members of the Working Group). The PRC consists of balanced representation from at least three interest categories: users, producers, and general interest. See interest categories detail in Section 3 Document Development Process. The PRC advises the NENA Board of Directors that the NENA processes have been followed during the document approval process.

PRC members will have a thorough knowledge of the NENA ANSI document approval process. As part of their duties, the PRC shall:

- verify that the Working Group satisfactorily addressed all comments and concerns received during the document approval process, and all comments were adjudicated,
- verify that an "Approval Ballot" was conducted by the Consensus Body before Stable Form Notice was issued, and
- determine if all document development processes have been followed, and so advise the NENA Board of Directors.

   NOTE: This committee is not permitted to comment on the merits of any document during the PRC review. PRC members are to submit comments on any document during the regular approval process steps.

The PRC Chair is responsible for providing written advisement (via the CRM) to the NENA Board of Directors that the document has been through the approval process and is ready for the NENA Board of Directors review and approval. The written advisement should affirm that the development and approval processes were followed or detail the processes that were not followed. The determination of a gap in adherence to the development or approval processes may indicate a need for the PRC to recommend that the NENA Board of Directors not support publication of the document. Alternatively, the PRC may choose to work with the DSC to have any identified gaps corrected, if possible, so that the document may ultimately be considered for approval and publication by the NENA Board of Directors.

When necessary, the PRC forms the document Appeals Panel as outlined in Section 3.7.

3   Document Development Process

With the exception of work performed under the annual or biennial basis (3.8) or special unforeseen circumstances, NENA document development normally begins with the acceptance of a formally submitted Issue Submission & Charter Form (ISF) (NENA-ADM-003) [6] described in Section 3.1.1.1.3.

The creation of a NENA Issue is the mechanism by which work is initiated in the NENA Development Group and any associated Working Group (WG). An Issue may be thought of as similar to a project proposal, where the problem or opportunity and proposed resolution are defined, and a suggested timeline for completing the Issue resolution is developed. The details, steps, and forms used in the DSC process are described in the NDG Guide [13] .

Once an Issue has been assigned to the most appropriate Development Committee, the Development Committee Co-Chairs assign the Issue to a Working Group (existing or new), where work begins on resolving the Issue. The DSC, the Development Committees, and the Working Groups shall prioritize work to ensure efficient and timely completion of assignments. When establishing Working Group schedules, consideration must be given to inter-Committee resource impacts to minimize overlapping work schedules to the extent possible.

To ensure that NENA Committee Documents are developed with **openness and balance**, each Committee or Working Group that begins work on a new or revised document shall seek Participants from different interest categories. This may require Working Group leadership to specifically seek out specific interest categories in order to try to achieve a balanced group. This can be accomplished by creating a draft notice for the CRM to have published in a NENA public notice, notice to a specific interest group, and in ANSI Standards Action "Call for Members." The relevant interest categories and their definitions shall be documented, and consideration shall be given to at least the following categories:

- Producer: Developers or providers of 9-1-1 related products or services.
- User: Those who utilize 9-1-1 related products or services.
- General Interest: Other interested parties who do not fit in the User or Producer category.

The NENA Development Group processes conform to the American National Standards Institute (ANSI) Essential Requirements [4] document, which serves as the authoritative source.

3.1   NENA Development Group Published Material

3.1.1   NENA Document Types

NENA reserves the right to revise NENA documents for any reason, including but not limited to conformity with criteria or standards promulgated by various regulatory agencies or advances in the state of operational techniques or services. It is possible that certain federal, state, or local regulations may restrict or require modification of the recommendations contained in these

documents. Therefore, they should not be the only source of information used. NENA members are advised to contact their legal counsel to ensure compatibility with local requirements.

NENA documents are developed according to the Issue Process as defined in Section 3.1 and numbered in accordance with the NENA Document Numbering Scheme shown in Section 3.1.2.

Drafts of NENA documents during their development phase should not be used to support business claims of NENA compliance for procedures, processes, or products. This concept is captured in the templates as follows:

> *This DRAFT document is not intended for distribution beyond the groups developing or reviewing the document. The document is also not intended to be used or referenced for development or procurement purposes until final publication. All draft material is subject to change, and it is possible that the document itself may never be approved for publication.*

Documents in development are the responsibility of the assigned Working Group. The scope of the document must be within the charter of that Working Group. The document editor is appointed by the Co-Chairs of the Working Group and may be replaced by the Co-Chairs at any time. Such an action is appealable. The editor maintains a working copy of the document in accordance with the consensus of the Working Group, which shall be posted to NENA Workspace as described above. The Working Group owns the document (not the editor or any original submitters). The editor must always reflect the consensus of the Working Group when editing the document.

3.1.1.1   NENA Administrative Documents (ADM)

NENA Administrative Documents provide for the organizational structure of the association and its committees, establish the process of document development and approval and provide the appropriate forms to document committee work.

3.1.1.1.1   NENA Master Glossary of 9-1-1 Terminology (NENA-ADM-000) [1]

This document is a guide for readers of NENA publications and a tool for members of the NENA Committees that prepare them. It defines the terms, acronyms, and definitions associated with the 9-1-1 industry. Intended users of this document are any person needing NENA's definition or description of a 9-1-1 related term.

3.1.1.1.2   NENA Development Group Organizational Structure and Operational Procedures (NENA-ADM-001)

This document describes the Organizational Structure and Operational Procedures of the NENA Development Group. It defines the role, function, and relationship of the NENA Development Committees that address the complex operations and technology issues related to the provision and management of emergency communications services. This document also describes the process and procedures that apply to the NENA Development Group. These procedures have been

developed to comply with ANSI Essential Requirements and to clearly define the method of developing consensus documents by the NENA Development Group to provide information, define requirements, and develop NENA standards for the public safety industry.

3.1.1.1.3   NENA Issue Submission & Charter Form (ISF) (NENA-ADM-003) [6]

The NENA Issue Submission & Charter Form allows anyone to bring a subject to the attention of experts participating within the NENA Development Group. When properly executed, the form provides the Development Steering Committee (DSC) with sufficient information to identify the subject needing attention, the NENA Committee/Working Group best equipped to handle the Issue presented, and the submitter's suggested approach to resolving the Issue. See Section 3.1 above.

3.1.1.1.4   NENA Liaison (External) (NENA-ADM-005) [7]

Liaisons are used by the DSC, Committees, and Working Groups as a means of relaying a NENA position on a particular subject, or to request specific information from or action by an outside entity. The NENA External Liaison form (NENA-ADM-005) [7] is used to track the progress of a request made between NENA and outside entities to ensure the matter is not forgotten or unduly delayed. Such entities may include other Standards Development Organizations (SDOs), Government agencies, etc. It is not necessary to use an external liaison form for situations that can be easily handled through other forms of communications, such as email, phone call, etc. The details, steps, and forms used for External Outgoing Liaisons are described in the NDG Guide [13] .

3.1.1.1.5   NENA Development Committee Scopes & Goals Document (NENA-ADM-006) [8]

The NENA Scopes & Goals document provides a common format for *NENA Committees* and their Working Groups to inform others of the tasks they are engaged in and other pertinent plans. In order for it to be an effective tool, it must be kept up to date by each Committee Co-Chair team.

The "NENA INDIVIDUAL DEVELOPMENT COMMITTEE SCOPES AND GOALS" (NENA-ADM-006)[8] , published by a Development Committee Co-Chair for their respective Committee, is used to report the current status of all activities underway within each Committee. A monthly reminder notice will be generated by the CRM via NENA Workspace with a note indicating the reports are due within five business days to the Committee Resource Manager for posting within one business day of receipt to the http://www.nena.org/ web page. A Development Committee Co-Chair will email the monthly report to the CRM, who will update management reports and upload the document to NENA Workspace.

3.1.1.1.6   NENA Document Correction Form (NENA-ADM-007) [9]

The NENA Document Correction Form, NENA-ADM-007, is used to identify errors outside of the review period in any published document, including schemas and registries. Corrections may be needed when a revised version is not forthcoming within a reasonable timeframe and the

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information is essential to communicate to the 9-1-1 Community. The correction will be incorporated into the existing document with a notice of what was changed in the "Reason for Reissue" section and then posted on the NENA website. Anyone requesting an error correction to a published NENA document must complete this form for their correction to be considered.

3.1.1.1.7   NENA Agenda & Notes Document (NENA-ADM-008) [10]

The NENA Agenda & Notes document provides a common format for NENA Committees and their Working Groups to establish meeting agendas and render pertinent notes during meetings. The use of the agenda is mandatory for meetings that involve activities that are intended to result in a NENA publication or deliverable. It is also the means by which NENA memorializes significant actions taken during the development of a NENA publication or deliverable, which enables NENA to meet ANSI requirements for such records.

Meetings shall be conducted, and notes taken in accordance with the NENA Agenda and Notes Document (NENA-ADM-008) [10] .

3.1.1.1.8   NENA Development Group Committee Leadership Application (NENA-ADM-009) [11]

The NENA Development Group Committee Leadership Application form is used by any NENA Member willing to volunteer to take on the responsibilities associated with NENA Development Group leadership roles.

Any Member interested in serving in a Committee Leadership position, whether a vacancy exists or not, may submit a NENA Development Group Committee Leadership Application (NENA-ADM-009) [11] to indicate their interest and their qualifications.

3.1.1.2   NENA Information Document (INF)

NENA Information (INF) documents are published to distribute information on a particular subject to the public safety community. Information documents may contain background information, best practices, checklists, and other material representing the collective knowledge and experiences of the NENA community. These documents do not contain normative statements and are not intended to be used to establish conformance requirements in procurement or development activities.

The NENA INF Template may be downloaded from the Administrative Procedures & Templates Documents Page [14] on NENA Workspace.

3.1.1.3   NENA Requirements Document (REQ)

NENA Requirements (REQ) documents are published as an information source primarily for use by *NENA Committees* and working groups as guides for their development of NENA Standards. The contents of NENA Requirements documents are derived from a combination of the expressed needs of public safety agencies and the capabilities of the vendors of equipment and services. Requirements documents are not intended for use in development or procurement processes

because their content does not include standard methods, processes, or specifications needed to support interoperability among the various 9-1-1 system elements.

The NENA REQ Template may be downloaded from the Administrative Procedures & Templates Documents Page [14] on NENA Workspace.

3.1.1.4   NENA Standard Document (STA)

NENA Standard (STA) documents are published for the use of the public safety community. A NENA Standard is intended to describe methods, processes, and specifications that, if implemented as specified, should result in the successful operation of the 9-1-1 emergency call and incident processing system. Most importantly, independent implementations that conform to NENA STA documents should interoperate with each other, providing seamless 9-1-1 emergency call and incident processing within a jurisdiction using multiple vendors and between jurisdictions that use different vendors. NENA STA documents may be used by system developers, service providers, public safety agencies, regulatory authorities, and others for the purposes of development, procurement, and management of 9-1-1 emergency call and incident processing products and services. Some NENA Standard (STA) documents may be published as American National Standards (ANS) [15] . The STA document may include sections on the NENA Registry System and Schema Considerations, if applicable.

The NENA STA Template may be downloaded from the Administrative Procedures & Templates Documents Page [14] on NENA Workspace.

3.1.1.5   NENA Reference Publication (REF)

A NENA-authorized Reference Publication may consist of material in a variety of forms, including (but not limited to):

- NENA Knowledge Base Article
- Flyer
- White Paper
- Checklist
- Brochure
- NENA.org Web Site Content
- PowerPoint Presentation
- Video
- Microsoft Word Document
- PDF Document

NENA Reference material may be published with an expedited process approved by the DSC.

The Reference Material Tracking Form may be downloaded from the Administrative Procedures & Templates Documents Page [14] on NENA Workspace.

3.1.2 Document Numbering and Revisions

Documents frequently must be reissued due to experience implementing new industry developments, user experience, or new requirements. The NENA document numbering schema below describes "Version Numbers" and "Errata Level." "Version" is a release of new information, where substantial effort will be needed by implementers to modify existing implementations to conform to a new Version. "Version" has two components, the "Major" Version number and the "Minor" version number. Implementations at different major versions are not expected to interoperate. Implementations of any minor version within a major version are expected to interoperate with each other. Version numbers start at 1 for the first release of a document. The first minor version of that would be Version 1.1.

Note: The document development and review process are not different for minor version changes and major version changes. This is a document naming convention and does not affect the process in any way.

"Errata Level" indicates small changes made under the non-substantive error correction process that do not materially affect the content and can be only be published to correct errata, which include scrivener's errors such as typos, grammatical errors, style or numbering errors, and incorrect references or links to documents.

The first release of a new version will not have an Errata Level, and the first revision of that version will carry an Errata Level of a.

For documents published in a joint effort with other organizations, the process for updating and approving Versions and Errata Levels are determined by the written agreement between NENA and the participating organization that is described in Section 2.2.3.2.4.

3.1.2.1 Document Numbering Schema

Per Section 3, Document Development Process, the CRM assigns the document number (if applicable) in accordance with the numbering schema as outlined in this section. AAA-XXX.Y.Zr - yyyy

Where:

AAA = Document Type: STA (Standard) or INF (Information) or REQ (Requirements) or REF (Reference) or ADM (Administrative). If additional document types are created, they will follow this 3-character naming format.

XXX = Document Sequence Number with each Document Type starting with 001.

Y = Major Version Sequence Number starting with .1 for the ORIGINAL.

Z = Minor Version Sequence Number starting with .1 for the first minor version release of the major version. The Minor Version Sequence number, and the separating period, do not appear in the first Major version of a document

r = Errata Level suffix starting with "a" for the first non-substantive error correction.

yyyy = The year the document or an update was approved.

Examples:

The first Standard document would be NENA-STA-001.1-2014.

The second major version of NENA-STA-001.1-2014 would be NENA-STA-001.2-2016.

The first minor version release after the initial document release of NENA-STA-001.1-2014 would be NENA-STA-001.1.1-2015.

The first minor version of NENA-STA-001.2-2016 would be NENA-STA-001.2.1-2017.

The first non-substantive error correction of NENA-STA-001.1-2014 would be NENA-STA-001.1a-2014.

The second non-substantive error correction of NENA-STA-001.2.1-2017 would be NENA-STA-001.2.1b-2017

All published documents shall show the document number in the upper right corner of each page as follows:

Document Title

NENA-AAA-XXX.Y.Zr-yyyy, Month Day, Year (based on approved date)

If the document is being drafted as an American National Standard, the DRAFT cover page shall include the word "ANS CANDIDATE" in front of the regular document numbering. That designation is removed prior to publication.

Where possible, any Reference materials should be numbered by the CRM for identification and tracking.

3.1.2.2   Plan for renumbering existing (old) NENA Documents

Existing NENA documents will be renumbered as they are updated or changed. To provide a cross-reference capability to ensure that old document numbers can still be found as they become known by a new number on the nena.org webpage, and on the document cover page, the existing (old) number will continue to be listed with a hyperlinked reference to the new document until the new document is subsequently revised. At that time, the old number will be removed.

3.1.3   Document Publication Rules

3.1.3.1   Use of Templates

All NENA documents shall adhere to the appropriate NENA template, which can be obtained from NENA Workspace, Administrative Procedures & Templates Documents Page [14] .

3.1.3.2 Sequencing of publication of material

Publication of any materials that are dependent upon each other must be coordinated to ensure timely availability. Examples include but may not be limited to NENA Schemas or Registries (NENA-STA-008) [12] , which must be available for review during the approval process to accommodate publication coincident with the associated Standard. Changes to an associated NENA Registry or Schema may require an update of the associated NENA Standard.

3.2 Due Process

Essential requirements for the development of NENA documents include due process, consensus, and openness. Accordingly, the following requirements apply to the adoption, review, and revision of all NENA documents. The Essential Requirements of the American National Standards Institute (ANSI) [4] serve as a model for this process.

Due process means that any Entity (for example, organization, company, government agency) or individual with a direct and material interest has a right to participate by:

- expressing a position and its basis,
- having that position considered, and
- having the right to appeal.

Due process allows for equity and fair play. The following constitute the minimum acceptable due process requirements for the development of consensus.

3.2.1 Openness and Balance

Historically the criteria for balance are that a) no single interest category constitutes more than one-third of the membership of a consensus body dealing with safety-related standards or b) no single interest category constitutes a majority of the membership of a consensus body dealing with other than safety-related standards.

The interest categories appropriate to the development of consensus in any given standards activity are a function of the nature of the standards being developed. Interest categories shall be discretely defined, cover all materially affected parties and differentiate each category from the other categories. Such definitions shall be available upon request. In defining the interest categories appropriate to a standards activity, NENA uses the following:

- Producer
- User
- General Interest

The standards development process should have a balance of interests. Participants from diverse interest categories shall be sought with the objective of achieving balance. If a Consensus Body lacks balance in accordance with the historical criteria for balance, and no specific alternative formulation of balance was approved by the ANSI Executive Standards Council, outreach to

achieve balance shall be initiated by Working Group Co-Chairs through the Committee Resource Manager.

All those having an interest in a NENA document have the right to participate in its development and shall be afforded the opportunity to provide input, express their opinion, have their position considered, and have a right to appeal. A cross-section of interested parties shall be sought and encouraged to participate in committee work to avoid dominance by any individual, group, or organization and to provide a balance of interests. Participation in the development of NENA documents shall not be restricted to NENA members but shall be open to all those who are directly and materially affected by the activity in question. Participation by non-members having specialized knowledge on an "as needed" basis may be sought to support development activity, as approved by the Development Committee Co-Chairs, with notice given to the DSC Co-Chairs. When the task assigned to the Committee or Working Group is the development of a NENA document, participation shall be open to any individual with a direct and material interest in the Issue, and there shall be no undue financial or technical barriers to participation. *Participants* have a right to participate by a) expressing a position and its basis, b) having that position considered, c) consensus voting, and/or d) having the right to appeal.

To ensure that NENA Standards are developed with openness and balance, each Development Committee or Working Group that begins work on a new or revised Standard shall seek Participants from different interest categories; where appropriate, additional interest categories should be considered. See interest categories detail in Section 3 Document Development Process.

The leadership of the committee shall ensure that the document development process is not dominated by any individual or organization. If an interested party expresses a concern in writing that the process is dominated or influenced to the exclusion of fair and equitable consideration of other viewpoints, such concern shall be addressed in accordance with Section 3.5 Appeals.

The NENA Intellectual Property Rights policy shall be followed during all committee work, and all Participants shall agree to be bound by this policy. All Participants shall file the applicable Licensing Declaration Form and Patent Information Form as required in NENA's IPR policy https://www.nena.org/page/ipr.

3.2.2   Issues Notice

Notice of all Issues that are assigned to a Development Committee and/or Working Group in accordance with this process shall be posted on the public section of the NENA collaboration website.

A link to the Issues will also appear on https://www.nena.org/ [2] .

3.2.2.1   Standards Development Notice

Once a Development Committee and/or Working Group with the concurrence of the DSC has determined that their output may result in a NENA Deliverable (of any type), notice shall be given

by the CRM to ANSI in accordance with the ANSI Essential Requirements [4] , Section 2.5: Due process requirements for American National Standards (current edition).

3.2.2.2 Discontinuance of ANSI Standards Action

In the event it is determined that NENA will no longer pursue the development of an American National Standard, a Project Initiation Notification System (PINS) withdrawal notice shall be given to ANSI in accordance with ANSI Essential Requirements [4] . Justification for such withdrawal shall be provided upon request, and may include:

- A determination that the "proposed" standard duplicates or conflicts with an existing American National Standard (ANS) or a "candidate" ANS that has been announced previously in Standards Action,
- inability to achieve consensus in accordance with the procedures defined herein, or
- the DSC decides not to publish the document as an ANS for any reason.

3.2.2.3 Consensus

Consensus is the method used by the NENA Development Group to reach a resolution of issues, unless specifically otherwise provided for in these procedures.

Consensus means that substantial agreement has been reached by directly and materially affected interests. This signifies the concurrence of more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered and that a concerted effort be made toward their resolution. Since a Participant's silence may be perceived as agreement by the committee and its leadership, if Participants do not agree, they should be encouraged to speak up and voice their opinion. Consensus requires that all views and objections be considered and that a concerted effort be made toward their resolution. Under some circumstances, consensus is achieved when the minority no longer wishes to articulate its objection. In other cases, the opinions of the minority should be recorded with the report of the substantial agreement, or consensus, of the majority. All determinations of consensus are made by the meeting leader and shall be recorded in meeting notes. If consensus is uncertain, the meeting leader may use the collaboration chat function to document the opinions of the participants in order to indicate consensus.

When there are questions or disputes regarding consensus, leaders or Participants should ask an objecting Participant(s) to state the rationale for the objection and provide an opportunity for full discussion aimed at achieving full understanding and consideration of the objection.

Consensus requires:

- at least half of the eligible voters of record to vote (counting any abstentions) to establish a valid vote process, and
- when two-thirds of those casting ballots cast a vote to approve it (not counting abstentions).

3.2.2.4   Consensus Body

The Consensus Body is the group that approves the content of a standard and whose vote demonstrates evidence of consensus. The voting members of the Working Group developing an American National Standard are the Consensus Body. Consensus is documented by a formal approval ballot.

3.2.2.5   Use of a Ballot to Determine Agreement

If the meeting leader is unable to determine preference on a call or if the non-trivial issue requires a decision from the entire Working Group, he or she will initiate a ballot (using the Workspace "Add Ballot" function). Such ballots are limited to the eligible voters, one (1) vote per Participating Entity. The Co-Chairs shall propose language to appear on such ballots, which must be discussed, and a decision obtained by the Working Group. If the Working Group is unable to determine preference on the wording of such ballots, the Co-Chairs shall document the problem, the various positions on the ballot language, and the DSC shall determine the wording of the ballot (Workspace "Add Ballot").

Ballots require at least half of the eligible Participating Entities to vote to be considered a valid ballot (counting abstentions).

If more than two options appear on the ballot and no one position gains two-thirds of the votes, the top two options determined by the votes cast will be used in a second ballot.

When a ballot includes only two options, the goal is for one option to gain two-thirds of the votes cast. If a two-thirds consensus is not reached, the ballot process should be run again, starting by reviewing the pros & cons of each option. If after it is run again, and two-thirds is still not achieved, the matter may require further WG discussion before subsequent ballots.

For trivial matters that do not affect the content of a document under development, see the NENA Development Group Guide [16] .

3.2.3   Balloting Documentation

During any Development Committee or Working Group balloting process, informal or formal, for document development and approval, a Participating Entity is given a single vote. A Participating Entity is defined as any entity, including its affiliates that employ or control a Participant who participates in a NENA Working Group; therefore, if there are multiple working group members from the same employer or commercial entity, only one vote by that entity is permitted.

The DSC designated balloting tools will be used for all ballots.

Surveys may be taken during calls using the informal join.me collaboration system's Chat Box survey function; however, results only represent the opinions of the meeting's participants.

For issues that require agreement by the entire Working Group, an informal or opinion voting process (the "Add Ballot" function on NENA Workspace) will be used for gaining agreement on

issues. This is a less formal, but more flexible ballot for identifying the preferences of group members.

3.2.4   Use of the Approval Ballot

The approval of a document REQUIRES a formal Approval Ballot using the Workspace "Create an Approval Ballot" function from the document page (see Sections 3.2.3, 3.3, and 3.4). Each Participating Entity shall have one vote cast by their designated Participant. An Approval Ballot is considered to be valid when at least half of the eligible Participating Entities have voted (counting abstentions).

An Approval Ballot is considered to be approved when at least two-thirds of those casting ballots (not counting abstentions) vote "yes."

Eligible voters are REQUIRED to vote in all ballots. See Section 3.3.2.1.

Voting for the approval of a document may be obtained by letter, fax, recorded votes at a meeting, or electronic means, with the assistance of the CRM, if necessary. All Participating Entities shall have the opportunity to vote in accordance with Sections 3.2.3 and 3.4. When recorded votes are taken at meetings, members who are absent shall be given the opportunity to vote before, or for a reasonable time after the meeting.

When the Working Group votes to approve a final draft after ALL previous comments have been adjudicated, a formal voting process (the "Add Approval Ballot" function on NENA Workspace) managed by the CRM will be used.

The criteria for consensus determination shall be as specified in Section 3.2.2.3 above.

The balloting options for a formal ballot (the Approval Ballot function on NENA Workspace will be:

- Affirmative, comments optional,
- Negative, comments required (the reasons for a negative vote shall be given and if possible, should include specific wording or actions that would resolve the objection), or
- Abstain, comments optional.

Members will be provided NENA Workspace balloting process instructions as a document is routed through the approval process.

3.3   Document Approval and Publication Process

The following steps constitute the approval process for Information (INF), Requirements (REQ), Standards (STA), and Reference (REF) documents developed under these procedures, as indicated in the chart below.

Standards seeking an ANS designation must also meet all of the requirements in ANSI Essential Requirements, Due process requirements for American National Standards [4] , (current edition).

3.3.1 Document Approval Process Summary Chart

At each approval step, CRM shall ensure ANSI processes are being followed so that info is available for PRC when they do their review.

Step	Brief Description	Section #
1.	Working Group works the Issue, creates the appropriate document and edits as necessary throughout the approval process. The voting members of the Working Group (the Consensus Body) vote on ballots as required by the process (10 business days).	3.3.2.1
2.	During the initial consensus body ballot to move the document to All Committee Review, the Style Editor reviews the document for style edits only.	3.3.2.2
3.	Development Steering Council reviews and authorizes the CRM to proceed to the ALL Committee Review.	3.3.2.3
4.	CRM distributes the document to NENA Development Committee members. All Committee Review will run for a minimum of 10 business days.	3.3.2.4
5.	Development Steering Council reviews and authorizes the CRM to proceed to Public Review,	3.3.2.3
6.	CRM distributes the document for Public Review for 30 or 45 calendar days, depending on circumstances. See Section 4.5.2.3 for details.	3.3.2.5
7.	Development Steering Council reviews and authorizes the CRM to proceed to Stable Form Notice.	3.3.2.3
8.	CRM issues the IPR Stable Form Notice (SFN) for 30 calendar day IPR Any IPR forms received will be handled according to Section 3.3.2.6.	3.3.2.6
9.	CRM forwards the document and supporting materials to the Process Review Committee (PRC) for a five business-day review and approval ballot to certify to the NENA Board that all processes have been followed.	3.3.2.7
10.	The CRM forwards the document to the NENA Board of Directors for approval.	3.3.2.8
11.	If the document is a Candidate American National Standard (ANS), the CRM will complete and submit a BSR-9 to ANSI.	3.3.2.9
12.	The final document is published on http://www.nena.org/ by the CRM.	3.3.2.10
13.	CRM updates NENA Registry System, if applicable.	3.3.2.10
14.	NENA promotes published document, according to standard Headquarters procedures.	3.3.2.10

3.3.2   Document Review Stages

Any Deliverable (a draft Standard, Requirements, Reference or Information document or other written product that results from working an Issue) requires review before it is published. There are multiple categories of document review listed below. For each review step, the document must be stored in NENA Workspace, and the reviewers must use the Comment Manager tool in NENA Workspace to post review comments. At each review, all comments must be individually considered by the Working Group, and a response to the comment must be agreed to, documented, and provided to the commenter in writing with reasons stated. All comments must be reviewed, responded to by the Working Group, and accepted or rejected by the commenter.

If the commenter rejects the Working Group's disposition, the Working Group will attempt to reconcile the comment. However, the Working Group retains the right to override any commenter's objection to the Working Group disposition of their comment. If a commenter fails (for any reason) to respond to the Working Group disposition of their comment within 10 business days, the Working Group's resolution is considered to be accepted for purposes of the approval process steps. This applies throughout this document wherever there is a reference to the need for the commenter to accept or reject results.

Any unresolved objections along with attempts at resolution and any substantive changes shall be provided to the Consensus Body via a recirculation ballot in order to afford all Consensus Body members the opportunity to respond, reaffirm, or change their votes. Commenters with an unresolved objection will be informed in writing of the right to appeal.

Unless a continuing objection to a comment or specific text is received by a specific date, the comment will be considered resolved. Unlike votes for consensus body members, a public review commenter who has received a formal response from NENA may be considered resolved if no continuing objection is received. Any continuing objections received should be handled in accordance with clause 2.6, Consideration of Views and Objections, of the ANSI Essential Requirements [4] and be provided to the members of the Consensus Body with an opportunity to respond, reaffirm, or revise the original Approval Ballot.

The Development Committee Co-Chairs shall keep the CRM updated on the status of Deliverables on the monthly Scopes & Goals Report (NENA-ADM-006) [8] .

The Working Group creates a draft of a new document or a revised published document.

3.3.2.1   Working Group (Consensus Body) Approval Ballot

When the Working Group completes work on an original draft of a deliverable or completes substantive modifications as a result of comments received in any of the other reviews, the Working Group Co-Chairs shall conduct an Approval Ballot of the eligible voters on NENA Workspace. The Approval Ballot is a consensus-driven process that invites comments from many parties, allows for comment resolution, and ultimately seeks to move a document to the next steps for eventual publication. The Co-Chairs make the determination to conduct an Approval Ballot by Consensus (See Section 3.2.4).

These are the primary review steps of the balloting process by a Working Group:

- The Co-Chairs announce an Approval Ballot via the Working Group email list, which contains all eligible voters. All eligible Working Group voters are REQUIRED to vote on the ballot. Failure to respond to ballots may cause a participant to be dropped from the Working Group.
- A document MUST have at least one Approval Ballot before it is approved for publication by the DSC. If there are substantive changes at any subsequent stage in the document's approval process, another Consensus Body Approval Ballot will be taken.
- The Working Group Co-Chair will ballot eligible voting members using NENA Workspace "Approval Ballot" established procedures. (See Section 3.2.3, Balloting Documentation).
- Each Approval Ballot must be circulated to eligible voters for a minimum of 10 business days, but the Co-Chairs are free to extend the review period if the document is large and/or there are many comments submitted during the ballot process.
- Three (3) reminder emails are sent by NENA Workspace to all eligible voters who have not yet cast their votes on an approval ballot.
- After the ballot closes, the Working Group members review any comments received and resolve all such comments in a consensus manner, and the consensus decision is communicated in writing to the original commenter for acceptance.
- If the Working Group determines that the changes to the document are substantive, the CRM issues a Working Group Consensus Body Recirculation Approval Ballot for a minimum of 10 business days.
- If the results of the Recirculation Approval Ballot indicate an absence of consensus, the Co-chairs will have the document remain in the Working Group for further revision or consensus discussions, with the intent to forward the document to the CRM with another recirculation ballot for eventual DSC approval once consensus has been reached.
- Any unresolved objections from recirculated Approval Ballots along with documentation of attempts at resolutions for any substantive changes shall require another Ballot in order to afford all consensus body members the opportunity to respond, reaffirm, or change their votes. Commenters with unresolved objections will be informed in writing of the right to appeal final decisions from the consensus body. The CRM will forward all information from the final recirculation ballot with all decisions and attempts to reconcile objections to the DSC where a decision to publish the document will be made with an understanding there may be appeals.
- If the results of all the Approval Ballots indicate consensus, and all non-substantive comments are considered resolved by the Co-Chairs, the Working Group Co-Chairs will forward the "final" draft document to the CRM along with a copy to the appropriate Committee Co-Chairs for presentation to the DSC for approval to the next review step identified in the Document Approval Process Summary Chart (3.3.1).

3.3.2.2   Style Editor Review

During the initial consensus body ballot to move the document to All Committee Review, the Style Editor reviews the document for style edits only. The style edits will be returned to the Working Group with tracked changes made to a clean draft.

A final Style Editor review will be completed prior to IPR Stable Form Notice. The CRM will review that edits are strictly for style. Any concerns will be referred to the WG Co-Chairs.

3.3.2.3   Development Steering Council Review

The Development Steering Council shall consider the Deliverable upon completion of each review stage and determine the next appropriate step.

Ideally, the Development Group Administrative Committee will review the terms and definitions during the All Committee Review and submit recommendations via Comment Manger during the review stage. If necessary, the review may be completed during Public Review.

3.3.2.4   NENA Development Group All Committee Review

In the case of a Standard, Requirements, or Information Document, the CRM announces an All Committee review via the email lists of all NENA development working groups. The review and comment period is a minimum of 10 business days, but the DSC is free to extend the review period if the document is large or there are many revisions to review. All members of all NDG Working Groups are eligible to review the Deliverable and submit comments via the NENA Workspace Comment Manager. See Section 3.6 for guidance on comment resolution.

Presentation and review of a REF or ADM document by any group other than the DSC are optional and at the sole discretion of the DSC.

3.3.2.5   Public Review

In the case of an Information, Standard, or a Requirements document, the CRM posts the Deliverable for review and comment by the public. The CRM SHALL work with NENA Staff to announce on the NENA public web site [2] when such documents are available for commenting. Such an announcement may take the form of NENA internal and external electronic communications (i.e. News Brief, Press Release, etc.).

For the Public Review of all Candidate ANSI standards, the CRM SHALL submit a BSR-8 form. Public Review SHALL be conducted in accordance with the most current version of the _ANSI Essential Requirements: Due process requirements for American National Standards_ [4] . The review period is a minimum of 45 calendar days, but the DSC may extend the review period.

Following the resolution of comments from Public Review, if the Working Group Co-Chairs determine that substantive changes were made, another Public Review will be conducted.

The comment period shall be one of the following:

- A minimum of thirty calendar days if the full text of the revision(s) can be published in *Standards Action Report* (in November 2019 the limit is 5 pages);
- A minimum of forty-five calendar days if the document is available in an electronic format, deliverable within one day of a request, and the source (e.g., URL or an email address) from which it can be obtained by the public is provided to ANSI for an announcement in *Standards Action Report.*

See Section 3.6 for guidance on comment resolution.

3.3.2.6 Stable Form Notice Period

Once all comments are adjudicated, and the Consensus Body Approval Ballot passes for Standards, Information and Requirements documents per NENA's Intellectual Property Rights Policy https://www.nena.org/page/ipr, a Stable Form Notice will be posted to https://www.nena.org/ and included in the bi-weekly NENA Newsletter. Additionally, all Development Group members are notified (via Workspace). The NENA Intellectual Property Rights ("IPR") Policy, available at https://www.nena.org/page/ipr, requires Participants in a NENA Committee to complete this Licensing Declaration Form for any known patent IPRs within 30 calendar days after receiving a Stable Form Notice.

If any Licensing Declaration Forms are received, before any additional work can be performed, the document and forms MUST be processed according to the NENA IPR Policy https://www.nena.org/page/ipr.

If Licensing Declaration Forms or Patent Information Forms are received, the CRM will forward those forms along with the document to the PRC.

3.3.2.7 Process Review Committee (PRC) Period

Once a Standards, Information, or Requirements document has completed the review process steps and the Stable Form Notice period has ended, the NENA CRM shall prepare an approval ballot for the document being approved by the PRC. The ballot shall also include references to a spreadsheet of all comments/resolutions, the Document Tracking spreadsheet, and all IPR Patent Information Forms or Licensing Declaration Forms. Additionally, all PRC members will have access to all documentation developed by the community. The PRC shall have five business days to review all documentation and vote on the ballot indicating that all processes were followed in the development of the document. When determining whether the processes were complied with, each PRC Participant shall have one vote and will use the same voting criteria, as shown in Section 3.2.2.3.

If the Process Review Committee determines that the process was not followed, the Process Review Committee Chair will notify the DSC Leadership and will provide the reasons for their decision. The DSC Leadership shall refer the matter to the Committee Co-Chairs for resolution and resubmittal.

After the PRC approves a document, the CRM notifies the NENA CEO.

3.3.2.8   NENA Board of Directors Approval Period

Once the PRC has approved a Standards, Information, or Requirements document, the CRM will create a Board Action Item along with the draft document, all comments, and the document tracking spreadsheet for consideration by the NENA Board of Directors. The Action Item will be considered at the next Board meeting to gain final approval, and the CRM will be notified by the Board or their designated representative.

3.3.2.9   ANSI Process Approval

If the document is a candidate American National Standard, the CRM will complete and submit a Board of Standards Review form (BSR-9) to ANSI. ANSI indicates approval by email notification to CRM and NENA Staff Contact as well as making a public announcement in the weekly ANSI *Standards Action* report.

3.3.2.10 Public Release

After the document or deliverable has been fully approved, it shall be posted to the NENA website with an announcement on NENA's homepage, in NENA's newsletter, and updating the NENA Registry System, if applicable.

3.3.2.11 Updating the NENA Master Glossary of 9-1-1 Terminology

Once a NENA document has completed all necessary approval steps and has been approved for publication by the NENA Board (if applicable), the Committee Resource Manager will copy all new or revised Acronyms, Abbreviations, and Definitions to the next version due for release of the NENA Master Glossary of 9-1-1 Terminology [1] . The approved copy will be posted to NENA's public website [2] , and a working copy will be posted to NENA Workspace [3] .

3.4   Published Document Review/Reconsideration

3.4.1   Timely Review of Published Documents

Prior to Stable Form Notice, the next review date will be recommended by the Working Group, and once approved, the date will be identified on the cover page of the document.

On the previously established basis, at the determination of the Development Committee Co-Chairs, or upon receipt of a viable request to the DSC, a review of published Administrative (ADM), Information (INF), Requirements (REQ), Standard (STA), and Reference (REF) documents will be undertaken by the Working Group (or an alternate group determined by the DSC Co-Chairs) to ensure their continued applicability, relevance, and completeness in light of the following events:

- National legislative or regulatory changes that require 9-1-1 system or operational changes
- technology changes that significantly affect/expand system capabilities
- standards or changes from other Standards Development Organizations (SDOs) that affect 9-1-1 functionality or capability

- new originating services or changes to current ones that require new or different 9-1-1 system or operational capabilities
- changes to an associated NENA Registry or Schema
- other unforeseen impacts

When the review date arrives, a reminder will be issued to the Committee Co-Chairs via NENA Workspace to determine if the document needs to be updated. The review activity shall include a validation that all external References and hyperlinks are still valid. If the document requires substantive changes, the updating process shall be initiated using a NENA-ADM-003 ISF & Charter form [6] .

Upon completion of the review or update work, a new review date shall be recommended by the Working Group, and once approved, the date will be identified on the cover page of the document.

Exception: The review of ANSI documents is governed by the ANSI Essential Requirements timeframes, which is a maximum of 5 years.

3.4.1.1   Maintenance of American National Standards

American National Standards shall be kept current and relevant by means of timely revision, reaffirmation, or action to stabilize. Obsolete standards shall be withdrawn. Except in the case of the national adoption of ISO and IEC standards as American National Standards, when the maintenance provisions contained in the ANSI Procedures for the National Adoption of ISO or IEC Standards as American National Standards shall apply, standards developers are permitted three options – periodic maintenance, continuous maintenance or stabilized maintenance – as outlined below.

3.4.1.2   Periodic maintenance of American National Standards

Periodic maintenance is defined as the maintenance of a standard by review of the entire document and action to revise or reaffirm it on a schedule not to exceed five years from the date of its approval as an American National Standard. In the event that a PINS or Board of Standards Review form (BSR-8) has not been submitted for an American National Standard within five years after its approval, the standards developer may request an extension of time to reaffirm or revise the standard or shall withdraw the standard. The request for an extension of time shall be submitted to ANSI via a Board of Standards Review form (BSR-11) within thirty days following five years after the approval date of the American National Standard. Requests for extensions shall provide the program and schedule of work that will lead to revision, reaffirmation, or withdrawal. The extension may be granted by the ANSI Executive Standards Council or its designee. No extension of time beyond ten years from the date of approval shall be granted for action on a standard. Except in the case of a national adoption, an ANS maintained under the periodic maintenance option shall not retain its status as a current American National Standard beyond ten years from the date of approval. Such approval automatically expires on the tenth anniversary date of approval as an American National Standard. In the event that an American National

Standard approved by a standards developer who has been granted authority to designate its standards as American National Standards is not reaffirmed, revised, or withdrawn within five years after its approval, the standards developer shall follow its own procedures to ensure that work is proceeding and shall retain confirming documentation. Except in the case of a national adoption, an ANS maintained under the periodic maintenance option shall not retain its status as a current American National Standard beyond ten years from the date of approval. Such approval automatically expires on the tenth anniversary date of approval as an American National Standard. This is the typical option that NENA uses for American National Standards and other NENA documents.

3.4.1.3 Review American National Standards under Continuous Maintenance

Continuous maintenance is defined as the maintenance of a NENA Standard by consideration of recommended changes to any part of it according to a documented schedule for consideration and action by the consensus body. A documented program for periodic publication of revisions shall be established by the standards developer. Processing of these revisions shall be in accordance with ANSI Essential Requirements. The published standard shall include a clear statement of the intent to consider requests for change and information on the submittal of such requests. Procedures shall be established for timely, documented consensus action on each request for change, and no portion of the standard shall be excluded from the revision process. In the event that no revisions are issued for a period of four years, action to revise, reaffirm, or withdraw the standard shall be initiated in accordance with the procedures contained herein. In the event that a Board of Standards Review form (BSR-8) has not been submitted for an American National Standard under continuous maintenance within five years of its approval:

- a standards developer that does not hold the status of Audited Designator may request an extension, but shall then maintain the ANS under periodic maintenance; or
- a standards developer that holds the status of Audited Designator is not required to request an extension, but shall notify ANSI in a timely manner (or within thirty days following five years after the approval date of the ANS) that the ANS will be removed from continuous maintenance and maintained under periodic maintenance.

The following is an example of how Continuous Maintenance is defined by the ANSI Essential Requirements, as "the maintenance of a standard by consideration of recommended changes to any part of it according to a documented schedule for consideration and action by the consensus body."

No portion of the standard under continuous maintenance is excluded from the revision process. Accordingly, recommended changes to any portion of the standard may be submitted for consideration using one of two methods. An Issue Submission Form (ISF) may be submitted in accordance with the NENA Issue Process described in Section 3 of this document, or an e-mail may be sent to commleadership@nena.org outlining the proposed changes. These suggested changes shall be considered, reviewed, and published in accordance with these procedures.

Each published standard under continuous review SHALL include the following statement of the intent to consider requests for change and information on the submittal of such requests:

> *This document is open for continuous review, and NENA will consider requests for recommended changes. Such requests MUST be submitted via a NENA Issue Submission Form (NENA-ADM-003).*

When received, each request for change shall be individually considered per the established NENA-ADM-001 steps for handling ISFs, in a timely manner, and no portion of the standard shall be excluded from the revision process.

Cumulative approved changes shall be published in a timely manner, but in no event shall be later than the end of the calendar quarter following their approval.

In the event that no new versions are issued for a period of four years, action to revise, reaffirm, or withdraw the standard shall be initiated in accordance with the ANSI procedures.

3.4.1.4 Stabilized maintenance of American National Standards

A standard that is maintained under the stabilized maintenance option shall satisfy the following eligibility criteria:

- the standard addresses mature technology or practices, and as a result, is not likely to require revision; and
- the standard is other than safety or health-related; and
- the standard currently holds the status of American National Standard and has been reaffirmed at least once; and
- at least ten years have passed since the approval or last revision of the standard as an ANS; and
- the standard is required for use in connection with existing implementations or for reference purposes.

The due process and consensus requirements defined herein apply to the decision to maintain an ANS under the stabilized maintenance option. A developer who wishes to maintain one or more ANS under the stabilized maintenance option shall include a provision or notification to this effect in its accredited procedures. An ANS maintained under the stabilized maintenance option is not required to be revised or reaffirmed on a routine 5-year cycle; however, it shall be subject to review of such status by the sponsoring standards developer on a 10-year cycle. If it is determined in connection with this review that the standard shall continue to be maintained under the stabilized maintenance option and as such does not require revision or withdrawal, then this shall be communicated to ANSI by the standards developer, and a related announcement shall be made in *Standards Action*. Notification to ANSI shall be accomplished via the submittal of an informational announcement if the standard will continue to be maintained under the stabilized maintenance option or will be withdrawn, or via a PINS, if the standard will be revised. If a recommendation is made at any time by a materially affected and interested party that a standard maintained under the stabilized maintenance option requires revision or should be withdrawn,

then that recommendation shall be considered in the same manner as a new proposal but within a maximum of 60 days from receipt. A recommendation should include a rationale to begin a revision and shall not be dismissed due to the fact that it does not necessarily suggest a specific revision. The submitter of such a recommendation shall be responded to in writing by the standards developer within 60 days of the receipt of the recommendation and advised of the decision relative to the maintenance status of the standard. An ANS that is maintained under the stabilized maintenance option shall include a clear statement of the intent to consider requests for change and information on the submittal of such requests. The decision to maintain an ANS under the stabilized maintenance option and the process by which it is maintained shall be subject to appeal to the standards developer. A subsequent appeal to ANSI may be made to the ANSI Executive Standards Council based on a claim of procedural non-compliance.

3.4.1.5 Withdrawal of an American National Standard

NENA shall comply with ANSI Essential Requirements Section 4.2.1.3 titled, "Criteria for Withdrawal," [4] which documents the four elements of ANSI's withdrawal criteria:

- Administrative withdrawal: An American National Standard shall be withdrawn five years following approval if the standard has not been revised or reaffirmed unless an extension has been granted by ANSI.
- Withdrawal by ANSI-Accredited Standards Developer
- Discontinuance of a standards project
- Withdrawal for Cause

3.4.2 NENA Document Correction Process for Published Documents

This section refers to errors identified by the receipt of NENA-ADM-007 [9] . The CRM will forward each form to the DSC for disposition. If the document being updated is joint with another organization, the joint entity SHALL be notified and invited to participate in the discussions surrounding the substantive and/or non-substantive edits and given an opportunity to comment.

3.4.2.1 Non-Substantive Error Correction Process

Once an individual identifies an error in a published NENA document, they may submit the Document Correction Form (NENA-ADM-007). Once the form is completed, it is submitted to the Committee Resource Manager CRM). In the event an informative error (for example, scrivener's errors, typos, grammatical errors, style/numbering errors, and incorrect hyperlinks, alignment of a term with the approved Master Glossary) in a published document is brought to the attention of the Committee Resource Manager outside of the review period, the CRM may correct such errors without requiring WG participation and may be implemented by the CRM with concurrence of the Development Steering Council, Committee and Working Group Co-Chairs. Section 2.5 of the subject document shall be updated with the Reason for Re-issue, and the document number shall be amended to reflect the Errata Level in accordance with Section 3.1.2. In any event, the entity reporting the error will be notified by the CRM of the disposition of the reported error.

Once a non-substantive correction has been approved, the CRM will be responsible for posting the updated document on the NENA website.

For documents published in a joint effort with other organizations, the process for updating and approving Versions and Errata Levels are determined by the written agreement between NENA and the participating organization that is described in Section 2.2.3.2.4.

3.4.2.2   Substantive Error Correction Process

In the event the errors identified in NENA-ADM-007 are more substantial than scrivener's errors, typos, grammatical errors, style/numbering errors, and incorrect hyperlinks, the CRM will forward the request to the appropriate Committee Co-Chairs who will determine that the submission is a substantive error. The Committee Co-Chairs shall assign the correction task to the Working Group if active, or another appropriate Working Group to review and validate the requested correction. When the review and validation are completed, the Committee or assigned Working Group leadership will complete and return the Document Correction Form (NENA-ADM-007) to the CRM for normal review processes specified in this document. The DSC will direct the CRM to post the corrected and approved version on the NENA website where appropriate. The corrected version will be numbered in accordance with the NENA Document Numbering Scheme shown in Section 3.1.2. In any event, the entity reporting the error will be notified by the CRM of the disposition of the reported error.

For documents published in a joint effort with other organizations, the process for updating and approving Versions and Errata Levels are determined by the written agreement between NENA and the participating organization that is described in Section 2.2.3.2.4.

3.4.2.3   Document Archiving

In the event any NENA Document is superseded by an American National Standard or becomes obsolete or is superseded by one or more NENA Documents, the Document shall be archived on the NENA public website.

3.5   Documenting Treatment of Comments

When NENA documents are to be reviewed by the Working Group, NENA Development Group, or Public review stages, all comments received will be treated according to this section.

NENA's established process for reviewing a NENA deliverable (Section 3.3.2) is an open, incremental consensus process that gathers input in the form of written Comments from various stakeholders with interest in the deliverable. The working group is responsible for responding to each individual comment during the review process in a manner that clearly documents a reasonable and complete treatment of the comment including feedback to the comment submitter.

The preferred method for submitting comments is through NENA Workspace Comment Manager. Submitters may contact the NENA CRM if they want to submit comments using some other method.

Each Commenter will be afforded:

- a complete and open discussion of the Comment by the working group in a timely fashion,
- thorough documentation of the substance of the discussions on the Comment,
- a consensus decision and documentation on how the Comment is Resolved, and
- the opportunity to respond with acceptance or rejection of the resolution.

3.6   Comment Process States and Resolution Tracking

Working Group Co-Chairs or their designee assigned to document the resolution of a Comment on a NENA deliverable, as well as Comment submitters, are given responsibilities within the NENA Workspace (NWS) [3] Comment Manager tool to select a value within the drop-down menus of the NWS tool to track where a Comment is in its lifecycle toward a final resolution. Some "States" and "Resolution" indicators are default values assigned by the Comment Manager tool. As a Comment progresses through the comment process review, it is incumbent on the Working Group Comment Manager to pick the most accurate "State" or "Resolution" indicator within the tool that relates to their current action on the numbered Comment under consideration. The Comment Submitter is required to accept or reject the comment resolution by a specified date via the NENA Workspace Comment Manager tool or an email to the Co-Chairs.

In summary, the goal of the comment resolution process ensures that NENA, as a Standards Development Organization (SDO), has a complete self-contained record of how a comment was submitted, discussed, responded to, and finally resolved. It is always hoped consensus can be achieved by the commenter responding with acceptance to the Working Group's decision. If a commenter fails (for any reason) to respond to the Working Group disposition of their comment within 10 business days, the Working Group's resolution is considered to be accepted for purposes of the approval process steps.

3.7   Document Development Procedural Appeals

Procedural appeals regarding the development of a document deliverable can be made by any interested person who may have directly and materially affected interests and who have been or will be adversely affected by any procedural action or inaction with regard to the development of a proposed Standard or the revision, reaffirmation, or withdrawal of an existing Standard. Procedural appeals include whether an Issue was afforded due process. The Appeals Process consists of the following steps:

1. **Complaint.** A written request by the concerned party shall be emailed to the NENA Committee Resource Manager (CRM) within 30 calendar days of the action that is objected to, or anytime in cases of inaction. An appeal must include the name of the document

deliverable and the specific issues, citing any previous attempt at resolution. The CRM shall forward the Complaint to the Working Group and the appropriate Committee Co-Chairs for a response, with a copy to the Development Steering Council (DSC) Co-Chairs.

2. **Response.** A Working Group Co-Chair shall respond to the appellant within 30 calendar days, addressing the stated concerns and making reasonable attempts for resolution, in writing, specifically addressing each allegation of fact in the complaint.

3. **Appeal Hearing.** If a resolution is not achieved through reasonable efforts or in the case of inactivity by the Working Group, the written appeal and related documentation shall be forwarded to the Process Review Committee (PRC). The Process Review Committee shall form an Appeals Panel, with input from and/or agreement by the appellant.

The appeals panel shall consist of at least three individuals knowledgeable as to the policy and other concerns related to the appeal who do not have demonstrably real or apparent conflicts of interest with the subject of the appeal or the person filing the appeal. If the appellant and the Process Review Committee cannot agree on the composition of the panel within 15 business days from the start of the selection process, the NENA President may appoint the panel. Members of the Working Group are permitted to participate in the Appeals hearing.

At the appeal hearing, the appellant must first demonstrate adverse effects, improper actions, or inactions of the Working Group. Working Group Participants may address the panel to express their concerns, reasons for action or inaction, and steps taken to resolve the issue. The Appeals Panel is authorized to seek information from any source and shall have access to all NENA files, tools, archives, and records. The Appeals Panel must respond to the complaint within 30 business days of the hearing, stating its conclusions.

If the appellant(s) are not satisfied with the decision of the Appeals Panel, he or she may escalate the issue to the NENA Board of Directors.

3.8   Development Group Meetings

Meetings, whether face-to-face or virtual via conference call, are scheduled as required by Committee and/or Working Group Co-Chairs on an as-needed basis based upon the Committee and/or Working Group workload and industry priorities. Meetings shall be conducted in accordance with the NENA Agenda & Notes Document (NENA-ADM-008) [10] as described in Section 3.10.1. A meeting leader shall be one of the Co-Chairs or their designee. The leader is responsible for conducting the meeting, making the required IPR and minutes announcements, adhering to the agenda, and determining consensus of those present.

The Development Committees conduct an annual meeting (NENA Standards & Best Practices Conference) during which all Development Committees participate, and all members are strongly encouraged to attend. The Development Committees may also meet during the NENA Annual Conference and during the Joint Committee Meeting, as appropriate.

The Development Steering Council generally meets in person each year to prepare for the NENA Standards & Best Practices Conference and the NENA Annual Conference.

3.8.1   Meeting Notices

Where possible, all face-to-face meetings shall be announced via email and posted to NENA Workspace no less than 30 calendar days prior to the meeting date.

All Development Committee meetings, including virtual meetings and conference calls, are scheduled on an as-needed basis and should be announced via email and posted to NENA Workspace no less than five calendar days prior to the meeting. Special exceptions may be made as appropriate. When an exception is necessary, the Development Committee will announce the meeting as soon as practical.

Working group meetings are held on an as-needed basis as scheduled by the WG leader in a manner that accommodates maximum WG member participation. To comply with NENA's IPR policy, the meeting agenda must be distributed through NENA Workspace before the meeting, at least 24 hours in advance, and agreed to by the group at the beginning of each meeting.

3.9   Roster and meeting attendance tracking

Rosters and meeting attendance must be maintained in NENA Workspace**,** and the record shall reflect each Participating Entity, Designated Participant, and interest category.

3.10 Draft Document Changes

During the document development process, but before the NENA Review Process begins, and once the first draft document is uploaded to NENA Workspace, all future revisions shall be uploaded by using the "Add a Revision" feature so that the most current draft is the only document seen in the "Draft WG Documents" folder unless a different document is simultaneously being developed. Once the NENA Review Process begins, document updates that result from each review steps' comments shall be posted in the appropriate Review Process folder; i.e., All Committee Review, Process Review Committee, NENA Board of Directors.

Contributions[1] from individuals to the WG should be clearly shown in the WG's draft document as changes or new text using the track changes feature, highlighting, or underlining. The modified draft shall be posted to NENA Workspace as described above. At subsequent meetings, the WG shall review the proposed changes, reach consensus, and accept or reject the proposed changes.

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[1] In this document, the term Contribution (and plural usage) is used in accordance with its definition in the NENA Intellectual Property Rights Policy https://www.nena.org/page/ipr.

Written Contributions shall be submitted by posting to the NENA Workspace "Contributions" folder, or by sending a NENA Workspace email so they can be retained for possible ANSI audit[2].

In addition to retaining agendas and minutes for every Committee and WG meeting, if a draft document is being worked on, an updated copy should be saved after every meeting and posted as a document revision on NENA Workspace. This will ensure that document edits are retained for each meeting should any questions or issues arise in the future.

3.10.1 NENA Agenda and Notes Document (NENA-ADM-008)

NENA Development Committee Leadership, Working Groups Co-Chairs, or their designee shall publish fair, objective, and unbiased meeting notes (NENA Agenda & Notes Document [NENA-ADM-008]) [10] developed by consensus, and ensure they accurately reflect the activities, resolutions, and action items that result from meetings. It is required that all meeting notes, draft document updates, along with the meeting agenda and attendance record shall be filed in the designated storage location following every meeting within five business days. Meeting or call notes must be posted in time to be of value prior to the next call.

Notes for each Committee or Working Group meeting shall be taken.

Meeting notes shall include, at a minimum, the mandatory fields included in the meeting Agenda & Notes Template.

NENA's development processes, in accordance with ANSI requirements, dictate that all meetings must have meeting notes that accurately reflect the activities, resolutions, and action items that result from meetings. That includes noting all issues, consensus agreements, dissenting parties and reason, action items with timelines (if applicable), etc. This doesn't require taking verbatim minutes, nor is that desirable. It does mean that high-level generalities about the outcomes of the meeting are insufficient unless that was truly the outcome. The notes should be a source of how an Issue reached its current state and should provide a memory-jogger for action items.

3.11 Document Retention Guidelines

All NDG documents, contributions, emails, drafts, meeting agendas, and notes, regardless of their age, will be archived on NENA Workspace. Records shall be retained for one complete standards cycle[3] or until the standard is revised. Records concerning withdrawals of all American National

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[2] ANSI conducts periodic audits of the NENA process to ensure compliance with the ANSI Essential Requirements.

[3] An ANSI standards cycle is generally thought of as 5 years. It could be less; it could be more. The goal is to update the standard by its 5th anniversary. If it is not, then a PINS or Board of Standards Review form (BSR-8) should be on file and if not then an extension requested from ANSI, per 4.7.1 above.

Standards shall be retained for at least five years from the date of withdrawal or for a duration consistent with the ANSI audit schedule.

4 Abbreviations, Terms, and Definitions

See the NENA Knowledge Base for a Glossary of terms and abbreviations used in NENA documents. Abbreviations and terms used in this document are listed below with their definitions.

Term or Abbreviation (Expansion)	Definition / Description
ANS (American National Standard)	A standard document approved by the American National Standards Institute (ANSI).
ANSI (American National Standards Institute)	An entity that coordinates the development and use of voluntary consensus standards in the United States and represents the needs and views of U.S. stakeholders in standardization forums around the globe. Please refer to: http://www.ansi.org/
Consensus Body	The group that approves the content of a standard and whose vote demonstrates evidence of consensus. The voting members of the Working Group are deemed to be the Consensus Body for purposes of the document review and approval process. Consensus is documented by a formal approval ballot.
Deliverable	A written output of a NENA Committee. This includes, but is not limited to, reports, information documents, administrative documents, standards, drafts, specifications, software, schema, tables, web pages, slides, emails, or similar materials. All parts of such outputs are Deliverables.
Development Committee	Groups that are established to address the complex operations and technology issues related to the provision and management of emergency communications services in specific topical areas.
DSC (Development Steering Council)	The group that acts as a steering and alignment body for the Development

Term or Abbreviation (Expansion)	Definition / Description
	Committees. It is led by two Co-Chairs, one appointed from the "Private Sector" membership classification and one from the "Public Sector" membership classification. In addition to the Co-Chairs, the DSC consists of the Co-Chairs from each Development Committee, NENA Staff, and a NENA Board of Directors Liaison.
ESIF (Emergency Services Interconnection Forum)	An open, technical/operational forum, under the auspices of the Alliance for Telecommunications Industry Solutions (ATIS), with the voluntary participation of interested parties to identify and resolve recognized 9-1-1 interconnection issues. Please refer to: http://www.atis.org/esif/index.asp

Term or Abbreviation (Expansion)	Definition / Description
IPR (Intellectual Property Rights)	Includes patents, published and unpublished patent applications, copyrights, trademarks, and trade secret rights, as well as any intellectual property right resembling a member of the foregoing list as such right may exist in a particular jurisdiction. www.nena.org/IPR
NDG (NENA Development Group)	The group consisting of all of the NENA Development Committees (Standing and Special Purpose/Limited Duration) that develop Standards and other types of NENA documents. The Development Group is governed by the Development Steering Council (DSC).
NENA (National Emergency Number Association)	A not-for-profit corporation established in 1982 to further the goal of "One Nation-One Number." NENA is a networking source and promotes research, planning, and training. NENA strives to educate, set standards, and provide certification programs, legislative representation and technical assistance for implementing and managing 9 1 1 systems. www.nena.org
NWS (NENA Workspace)	An online collaboration tool used by the NENA Development Group (NDG) Committees and Working Groups for process control, communications and document management.
Participant	A Member who has attended more than one meeting of a particular NENA Committee or Working Group, as reflected in the minutes, and who has not terminated his or her involvement by giving written notice of withdrawal to the Committee or Working Group Co-Chairs or has been removed due to inactivity.

Term or Abbreviation (Expansion)	Definition / Description
Participating Entity	Any entity, including its affiliates that employs or controls a Member who participates in a NENA Committee.
PINS (Project Initiation Notification System)	A web service or equivalent system used by Standards Development Organizations to advise ANSI of the start of standards development activity.
Recirculation Ballot	An extension of a closed approval ballot, which allows the ballot to be recirculated to consider and approve the resolution of comments and negative votes by responding, reaffirming, or changing their votes. If the member is satisfied with the initial vote cast and has no additional comments, another vote is not necessary.
SDO (Standards Development Organization)	An entity whose primary activities are developing, coordinating, promulgating, revising, amending, reissuing, interpreting, or otherwise maintaining standards that address the interests of a wide base of users outside the standards development organization.
Substantive Change	A change in a NENA document that directly and materially affects the use of the standard. Examples of substantive changes are: • "SHALL" to "SHOULD" or "SHOULD" to "SHALL"; • addition, deletion or revision of requirements, regardless of the number of changes; • addition of mandatory compliance with referenced standards.

5   References

[1]   National Emergency Number Association. *NENA Master Glossary of 9-1-1 Terminology*, NENA-ADM-000.24-2021. Arlington, VA: NENA, approved June 22, 2021 and *Online NENA Glossary*.

[2]   National Emergency Number Association. "NENA The 9-1-1 Association." https://www.nena.org/

[3]   National Emergency Number Association. "NENA Workspace." https://dev.nena.org/

[4]   American National Standards Institute. *ANSI Essential Requirements: Due process requirements for American National Standards. New York: ANSI, January 2018 edition.*

[5]   National Emergency Number Association. "Ethics & Code of Conduct." Adopted June 6, 2017.

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[7]   National Emergency Number Association. *NENA Liaison Form (for external use only).* NENA-ADM-005. Arlington, VA: NENA, approved April 10, 2013.

[8]   National Emergency Number Association. *NENA Development Committee Scopes & Goals*. NENA-ADM-006. Arlington, VA: NENA, approved August 11, 2015.

[9]   National Emergency Number Association. *NENA Document Correction Form*. NENA-ADM-007. Arlington, VA: NENA, approved January 30, 2017.

[10]   National Emergency Number Association. *NENA Agenda & Notes Document*. NENA-ADM-008. Arlington, VA: NENA, approved October 12, 2017.

[11]   National Emergency Number Association. *NENA Development Group Committee Leadership Application*. NENA-ADM-009. Arlington, VA: NENA, October 12, 2017.

[12]   National Emergency Number Association. *NENA Registry Standard.* NENA-STA-008. Arlington, VA: NENA, approved April 13, 2018.

[13]   National Emergency Number Association. "NENA Administration Guide," last edited 12 November 2019. https://nenawiki.org/wiki/NENA_Administration_Guide.

[14]   National Emergency Number Association. "Administrative Procedures & Templates & Training Material." https://dev.nena.org/higherlogic/ws/groups/ed9b432e-644e-48be-ab9f-c8cffce3a079/documents?folder_id=0.

[15]   American National Standards Institute. https://www.ansi.org/.

[16]   National Emergency Number Association. "NENA Development Group Guide," last edited 11 December 2019. https://nenawiki.org/wiki/NENA_Development_Group_Guide.

6   Appendices

6.1   Appendix A – NENA Metric Policy

NENA's metrics policy may include "Units of the International System of Units (SI)" and/or "United States Customary System (USCS or USC), as appropriate to the Standard's content.

6.2   Appendix B - NENA Interpretations Policy

All interpretation requests shall be submitted in writing. Responses SHALL be provided to the requestor in writing within 30 business days. Only the NENA Development Steering Council and specific NENA staff members are authorized to interpret NENA's Standards and will do so upon any inquiry about such. NENA complies with the ANSI Essential Requirements statement about Interpretation Policy: "Each ANSI-Accredited Standards Developer shall have on file at ANSI an interpretations policy. Official interpretations of American National Standards shall be made only by the accredited standards developer responsible for the maintenance of that standard. ANSI shall not issue, nor shall any person have the authority to issue, an interpretation of an American National Standard in the name of the American National Standards Institute. Requests for interpretations addressed to ANSI shall be referred to the responsible standards developer."

6.3   Appendix C - NENA Records Retention Policy (ANSI Essential Requirements Section 3.4)

Records shall be retained for one complete standards cycle or until the standard is revised. Records concerning withdrawals of all American National Standards shall be retained for at least five years from the date of withdrawal or for a duration consistent with the audit schedule.

6.4   Appendix D - NENA Commercial Terms and Condition Policy

The ANSI Essential Requirements states: "Provisions involving business relations between buyer and seller such as guarantees, warranties, and other commercial terms and conditions shall not be included in an American National Standard. The appearance that a standard endorses any particular products, services or companies must be avoided."

NENA does not endorse products, services, or companies in general nor in its Standards documents. Such terms and conditions are not involved since NENA does not sell products to other organizations or companies with the exception of the NENA PSAP Registry, a database of PSAP information, which has its own License Agreement that includes disavowal of guarantees and warranties. This instance is entirely separate from the NENA Standards process.

6.5   Appendix E - NENA Patent Policy

NENA's Patent Policy is contained in NENA's Intellectual Property Rights (IPR) Policy https://www.nena.org/page/ipr and above in this document. Additionally, reference is made to

NENA's IPR policy in every Standard, Information, Requirements, and Reference document that NENA publishes.

6.6   Appendix F - NENA Antitrust Policy

NENA's Antitrust Policy is contained in Section 7 of NENA's Intellectual Property Rights Policy https://www.nena.org/page/ipr.

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