## **Industry Standards and Best Practices Contributions**

Mission Critical Partners aligns our technical solutions with operational requirements. In addition to our incorporation of industry standards in our work, MCP is also proud of our leadership, participation and contributions to applicable standards development organizations (SDOs) such as the Association of Public-Safety Communications Officials (APCO), the National Public Safety Telecommunications Council (NPSTC), the National Emergency Number Association (NENA), the Alliance for Telecommunications Industry Solutions (ATIS), the Emergency Services Interconnection Forum (ESIF), SAFECOM, and the First Responder Network Authority (FirstNet).

MCP has supported many initiatives to develop standard operating procedures (SOPs) and best practices. Our team is well versed in pertinent industry standards applicable to 911 communications for municipal and county governments.

Most of the standards highlighted in the table below are approved by the American National Standards Institute (ANSI), which works to ensure standards meet the requirement for openness, consensus, and fairness to ensure the development of a voluntary national standard.

Industry Body	Mission Critical Partners' SME Industry Contributions
APCO Committee	Standards Document
Standards Development Committee (SDC)	<ul> <li>ANS 2.103.1-2012 Public Safety Communications Common Incident Types for Data Exchange</li> <li>APCO/CSAA ANS 2.101.1-2008 Alarm Monitoring Company to PSAP CAD External Alarm Interface Exchange</li> <li>APCO/NENA ANS 1.102.2-2010 PSAP Service Capability Criteria Rating Scale</li> <li>ANS 1.115.1-2018 Core Competencies, Operational Factors, and Training for Next Generation - Technologies in Public Safety Communications</li> <li>ANS 1.108.1-2018 Minimum Operational Standards for the use of TTY/TDD or similar device in the Public Safety Communications Center</li> <li>ANS 1.111.2-2018 Public Safety Communications Common Disposition Codes for Data Exchange</li> <li>ANS 3.108.2-2018 Core Competencies and Minimum Training Standards for Public Safety Communications Instructor</li> </ul>
Communications Center Standard Committee (CCSC)	<ul> <li>ANS 3.101.3-2017 Core Competencies and Minimum Training Standards for Public Safety Communications Training Officer (CTO)</li> <li>ANS 3.102.2-2017 Core Competencies and Minimum Training Standards for Public Safety Communications Supervisor</li> <li>ANS 3.107.1.2015 Core Competencies and Minimum Training Requirements for Public Safety Communications Technicians</li> </ul>



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	<ul> <li>ANS 3.103.2.2015 Minimum Training Standards for Public Safety Telecommunicators</li> <li>ANS 3.109.2.2014 Core Competencies and Minimum Training Standards for Public Safety Communications Manager/Director</li> <li>ANS 3.104.2-2017 Core Competencies and Minimum Training Standards for Public Safety Communications Training Coordinator</li> </ul>
CCSC & SDC	ANS 3.106.2-2017 - Core Competencies and Minimum Training Standards for Public Safety Communications Quality Assurance Evaluators (QAE)
APCO Wireless 9-1-1 Deployment Work Group	ANS 3.103.2-2013 - Wireless 9-1-1 Deployment and Management Effective Practices Guide
UCAD Project Committee	ANS 1.110.1-2015 - Multi-Functional Multi-Discipline Computer Aided Dispatch (CAD) Minimum Functional
NENA Committee/ Subcommittee/Working Group	Contribution to Standards Document
Agency Systems Committee  - NG9-1-1 Call Processing Metrics Working Group  - Document Review Working Group  - NENA/APCO NG9-1-1 PSAP Working Group	<ul> <li>NENA-STA-019.1.2018 NG9-1-1 Call Processing Metrics Standard ANSI Accredited</li> <li>NENA-INF-024.2-2018 PSAP Site Characteristics Information Document</li> <li>NENA-INF-029.2-2018 Integrating Applications on Intelligent Workstations Information</li> <li>NENA-STA-026.5-2016 PSAP Master Clock Standard</li> <li>NENA-STA-027.3-2018 E9-1-1 PSAP Equipment Standards</li> <li>NENA-STA-028.2-2018 RECOM Generic Standards for E9-1-1 PSAP Intelligent Workstations</li> <li>NENA/APCO-REQ-001.1.2-2018 NG 9-1-1 Public Safety Answering Point Requirements</li> </ul>
ALEC/PS Technical Committee - ALEC Sub-Committee	NENA-06-001 Standard for Local Service Provider Interconnection Information Sharing
Nontraditional Communications Technical Committee - ACN Sub- committee	NENA-07-504 Technical Information Document on Automatic Collision Notification & Vehicle Telematics
Network Technical Committee - Migration Working Group	NENA-08-501 Technical Information Document on Network to IP PSAP Interface
Joint Data Technical/Operations - VDB MSAG Working Group	NENA-02-013 Data Standards for Provisioning & Maintenance of MSAG Files to VDBs & ERDBs
VoIP/Packet Technical Committee  - Long Term Definition Working Group  - Location Working Group	<ul> <li>NENA-08-001 v2 Interim VoIP Architecture for Enhanced 9-1-1 Services (i2)</li> <li>NENA-08-002 Version 1.0 Functional and Interface Standards for Next Generation 9-1-1</li> </ul>



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	<ul> <li>NENA-08-752 Recommended Method(s) for Location         Determination to Support IP-Based Emergency Services          Technical Information Document</li> <li>NENA-08-505 Recommended Method(s) for Location          Determination to Support IP-Based Emergency Services</li> </ul>
SOP Committee - Human Resources Sub-Committee - Daily Operations Working Group	NENA-54-001 Communications Center/PSAP Daily Personnel Model Recommendation Original
PSAP Operations & Next Generation Integration Committee  - Wireless/Wireline/VoIP Quality Assurance Working Group  - Next Generation Data Development Working Group  - Policy Rules Working Group	<ul> <li>NENA-57-501 Wireless Phase I &amp; II Features and Functions Operational Information Document</li> <li>NENA-57-002 Wireless Maintenance Call Routing &amp; Testing Validation Standard</li> <li>NENA-57-002 J Wireless Maintenance Call Routing &amp; Testing Validation Standard</li> <li>NENA-57-503 Procedures for Notification of ERDB &amp; VPC OPR of ESN Changes by 9-1-1 Administrator</li> <li>NENA-71-501 Information Document for Synchronizing GIS databases with MSAG &amp; ALI</li> <li>NENA-71-502 Overview of Policy Rules for Call Routing and Handling in NG9-1-1</li> </ul>
Wireless Operations Committee  – Wireless Phase I & II Features and Functions Working Group	<ul> <li>NENA-57-501 Wireless Phase I &amp; II Features and Functions Operational Information Document</li> <li>NENA-57-502 Wireless Phase I/II Planning and Implementation Checklist and Modules Document</li> </ul>
Operations Committee - NG Requirements Work Group	NENA-57-750 NG9-1-1 System and PSAP Operational Features and Capabilities Requirements
Next Generation 9-1-1 Transition Planning	NENA-INF-008.2-2013 NG9-1-1 Transition Plan Considerations
PSAP Operations Committee  - PSAP Operations Standard Operating Procedures Subcommittee  - Railroad/PSAP Interaction Working Group  - Contingency Planning Subcommittee, Succession Planning Document Review Working Group  - Text Message Working Group Working Group  - Call Blocking Working Group	<ul> <li>NENA-STA-013.2-2016 Public Safety Communications &amp; Railroad Interaction Standard Operating Procedures</li> <li>NENA-INF-010.2-2018 Succession Planning Information Document</li> <li>NENA-INF-017.3-2018 Communications Center/PSAP Disaster and Contingency Plans Model Recommendation</li> <li>NENA-INF-026.2-2018 Drills and Exercises Information Document</li> <li>NENA-INF-012.2-2015 Inter-Agency Agreements Model Recommendations Information Document</li> <li>NENA-INF-019.2-2016 Resource, Hazard and Vulnerability Analysis Information Document</li> <li>NENA-INF-025.2-2017 Virtual PSAP Management Information Document</li> </ul>



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Accessibility Committee - VRS – IP	<ul> <li>NENA-STA-009.2-2015 Mutual Aid Standard/Model Recommendation</li> <li>NENA-INF-019.2-2016 Resource, Hazard and Vulnerability Analysis Information Document</li> <li>NENA-INF-020.2-2017 PSAP Survivability Information Document</li> <li>NENA-INF-007.1-2013 Information Document for Handling Text Message Calls to 9-1-1 in the PSAP</li> <li>NENA-INF-023.1-2017 Call Blocking Information Document</li> <li>NENA-INF-013.2-2015 Video Relay Service &amp; IP Relay Service</li> </ul>
Relay PSAP Interaction  Core Services Committee  NG Data Management Sub-Committee  Site/Structure Address Points Policy Routing Rules Working Group  Data Structures Subcommittee NENA Registry System Working Group Civic Location Data Exchange Format  Data Management Subcommittee Next Generation Data Management	<ul> <li>NENA-INF-014.1-2015 Information Document for Development of Site/Structure Address Point GIS Data for 9-1-1</li> <li>NENA-STA-003.1.1-2014 Standard for NG9-1-1 Policy Routing Rules</li> <li>NENA-STA-008.2-2014 Registry System Standard</li> <li>NENA-REQ-002.1-2016 Next Generation 9-1-1 Data Management Requirements</li> <li>NENA-STA-004.1.1-2014 NG9-1-1 the United States Civic Location Data Exchange Format Standard</li> </ul>
Data Management Committee  – Provisioning & Maintenance of GIS Data to ECRF/LVFs	NENA-STA-005.1.1-2017 Standards for the Provisioning and Maintenance of GIS data to ECRF/LVFs
Data Structures Committee  - Next Generation 9-1-1 (NG9-1-1) GIS Data Model	NENA-STA-006.1-2018 Standard for NG9-1-1 GIS Data Model
Interconnection and Security Committee  - NG9-1-1 Architecture Subcommittee  • Emergency Serv. IP Network Design  • i3 Architecture Working Group	<ul> <li>NENA-INF-016.2-2018 Emergency Services IP Network Design Information Document</li> <li>NENA-STA-010.2-2016 Detailed Functional and Interface Standards for the i3 Solution</li> </ul>
CPE Committee and the Next Generation Integration (NGI) Committee - Security for NG9-1-1 Working Group	NENA-75-001 Security for Next-Generation 9-1-1 Standard (NG-SEC)



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Operations and Technical Committee Chairs  – Joint Technical and Operations Security for NG 911	NENA-75-502 NG-SEC Audit Checklist
Public Education & PSAP Training - NG9-1-1 Education & Training	<ul> <li>NENA-REF-003.1-2015 Text-to-9-1-1 Public Education</li> <li>PSAP Interim Text-to-9-1-1 Support Documents</li> <li>Interim SMS Text-to-9-1-1 Information and Planning Guide</li> <li>Public Education Clearinghouse Form</li> <li>Public Education Funding &amp; Resources</li> </ul>
Standard Operating Procedures / Joint Steering Committee  - Call Center BPS's Cases of Missing & Exploited Children	NENA-56-505 Guidelines for Handling Calls Regarding Missing & Exploited Children Op Inform.
Regulatory/Legislative Committee	NENA-60 - 601 Model Baseline Guidelines for Drafting Statutes or Rules Associated with Prepaid Wireless Service and 9-1-1 Emergency Service Fees Regulatory/Legislative
Federal Communication Commission (FCC) Council/Committee	Working Group
<ul> <li>Communications Security         Reliability and Interoperability         Council (CSRIC) II</li> <li>FCC CSRIC III</li> <li>FCC CSRIC IV</li> <li>FCC Emergency Accessibility         Advisory Committee (EAAC)</li> <li>FCC Task Force on Optimal PSAP         Architecture (TFOPA)</li> </ul>	<ul> <li>Working Group 4B "Transition to NG9-1-1"</li> <li>Working Group 4C "Technical Options for 9-1-1 Location Accuracy"</li> <li>Working Group 3 "E9-1-1 Location Accuracy"</li> <li>Indoor Location Accuracy Test Bed Building Selection Committee</li> <li>Working Group 1 "Next Generation 9-1-1"</li> <li>Working Group 1 "Text-to-9-1-1"</li> <li>Working Group 1 "Interim Solutions for Text to 9-1-1"</li> <li>Working Group 3 "Optimal Resource Allocation"</li> </ul>
Additional SDO's	Contribution to Standards
National Public Safety Telecommunications Council (NPSTC)	<ul> <li>Public Safety Broadband Requirements</li> <li>LTE Radio Console Requirements</li> <li>Radio Interoperability Best Practices Work Group</li> </ul>
Alliance for Telecommunications Industry Solutions (ATIS) Emergency Services Interconnection Forum (ESIF)	Emergency Incident Data Document (EIDD) Incident Information Sharing Standard and Next Generation 9-1-1 PSAP Technical Requirements Development Project
SAFECOM	Technology and Policy Committee
FirstNet	Public Safety Advisory Committee (PSAC)

