

NENA Changing Role of the Telecommunicator in NG9-1-1

Abstract: This document is intended to give Authorities Having Jurisdiction an understanding of how NG9-1-1 will change the role of the Telecommunicator and guidance to assist with educating stakeholders and decision makers on the changing role of the Telecommunicator.



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1 Executive Overview

In the current 9-1-1 environment, telecommunicators are the first to respond to a caller's request for assistance in an emergency, essentially becoming the incident commander until field personnel arrive on the scene. The telecommunicator processes the request for assistance gathering vital information from the caller to relay to field responders, frequently dealing with highly distressed individuals. Oftentimes the telecommunicator provides instructions to callers, including measures to mitigate the negative effects of the event unfolding, maintaining the caller's safety, providing life-saving medical interventions, and de-escalating volatile situations. These responsibilities, and the skills and knowledge required to perform them, clearly demonstrate that telecommunicators are first responders. Additionally, Telecommunicators are responsible for relaying critical information to field responders accurately in a timely manner and they must respond to requests from field responders in high-risk, high-stress operations, e.g., shots fired, high-speed pursuit, fatality scenes, etc. Failure to do so may have critical consequences to the safety of citizens and field responders. Telecommunicators are frequently subject to listening to people in severe emotional, physical and/or psychological distress, often handling simultaneous events or events in rapid succession, with little or no time to decompress. Studies have shown that Telecommunicators are still very susceptible to the effects of stress and PTSD¹.

The implementation of NG9-1-1 will result in significant impacts and increased stressors on telecommunicators and other 9-1-1 professionals. NG9-1-1 impacts the governance, funding, technology and personnel that operate our more than 6,000 9-1-1 emergency communication centers across the country. Policy makers, PSAP leadership, and the PSAP's stakeholders need to be aware and prepared for how NG9-1-1 will impact telecommunicators and the actions that will be necessary to ensure that their personnel continue to be effective in the NG9-1-1 PSAP. This document is not intended for technical reference but as a roadmap for 9-1-1 directors, trainers and PSAP authorities to plan innovative approaches to recruiting, training and maintaining a workplace environment that is constantly being exposed to evolving technology. Appendix A of this NENA Standard provides 9-1-1 professionals with key talking points when discussing NG9-1-1 and its impacts with policy makers and other stakeholders.

Currently, the recruitment, training and retention of public safety telecommunicators is proven to be extremely difficult. As we transition into the Next Generation of 9-1-1 this will become increasingly more challenging. Most PSAPs today utilize testing methods to measure a candidate's ability to obtain information audibly from a voiced caller. In the NG environment data must be obtained from multiple sources such as text, data, MMS, or from

¹ Pierce, Heather & Lilly, Michelle. (2012). Duty-related trauma exposure in 911 telecommunicators: Considering the risk for posttraumatic stress. *Journal of traumatic stress*. 25. 211-5. 10.1002/jts.21687.

video input from traffic cameras, drones, etc. New pre-employment testing and training methods will need to be implemented to match candidates with the expanded role in the emergency communications response continuum. Examples of the changes they will need to address include increased job qualifications; expanded job skills, knowledge and abilities; and exponentially greater stress-related impacts and virtual trauma conditions, among many others.

Next Generation 9-1-1 can put the telecommunicator virtually "at the scene" experiencing the incident directly through data received from audio, video, both recorded and real-time, text, and graphic photos of the incident. The very nature of the job of a 9-1-1 telecommunicator will change as they interact with new and different forms of information and the need for increased situational awareness as part of their "first on scene and initial incident command" responsibilities. Today, many communication centers split roles of telecommunicators into either call takers or radio operators. In the NG9-1-1 scenario other positions may be required, such as data analysts. A foreshadowing of this may be seen in the real-time crime centers developing across the nation.

The increased information and incident data that NG9-1-1 brings will require current operations to evolve and presents new challenges to managers and leaders as they prepare for impacts on telecommunicators, in addition to human resources professionals, educators, and individuals who support the profession.

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These definitions are based on IETF [RFC 2119](https://www.rfc-editor.org/rfc/2119).

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Reason for Issue/Reissue

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

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NENA-STA-017.1-2022	03/14/2022	Initial Document

2 The Telecommunicator in NG9-1-1

2.1 Telecommunicator Roles in the PSAP

The job duties of a 9-1-1 Telecommunicator are not exclusive to the title of Telecommunicator. PSAPs use a variety of job titles to describe those individuals that are tasked with receiving emergency calls from citizens and dispatching appropriate field responders. Additionally, job duties within a PSAP may be assigned to more than one (1) employee in order to share workload or are used to backfill those duties in the case of the primary assigned employee is not available to perform the tasks. While some of the tasks in Figure 1 below may fall within the assigned responsibilities of specific roles in a traditional organizational structure where a clear delineation of duties is feasible, e.g., shift supervisor or operations manager, the 24/7/365 nature of PSAP operations may require a more flexible assignment of duties to ensure an efficient operation. For example, a Communications Manager may need to answer emergency calls during a short-staffed scenario or when an influx of calls necessitates temporary additional staffing or a night shift Telecommunicator may have to make supervisory decisions in time-sensitive scenarios. This requires a Telecommunicator to have a broad body of knowledge of the agency's operations in order to effectively provide service to the public.

2.2 Functional Areas Within a PSAP

The four (4) critical areas of a PSAP's operations are: Operations, Training, Management and Technology (Figure 1). Within these critical areas, a Telecommunicator may perform one or more tasks in the discharge of his/her daily duty assignment in order to support the PSAP's operation. These critical areas are broken down further to identify the Telecommunicator's role, possible job titles, and required knowledge and skills needed in a NG9-1-1 environment. While many of the responsibilities and knowledge can be applied to non-emergency and administrative call taking and dispatch operations within a PSAP, this NENA Standard is intended to specifically address emergency call handling.



2.2.1.1 Operations

At the operations level, Telecommunicator/Front-line personnel are primarily responsible for the day-to-day operations in the PSAP.

- Employee Roles
 - Call Handling/Intake
 - Call Dispatching/Output
 - Resource Allocation/Unit Tracking
 - Data Monitoring/Triage
 - Supporting Field Operations
- Job Classifications
 - Telecommunicator (or industry equivalent Position title)
 - Communications Training Officer (CTO)
 - First-Line Supervision:
 - Operations Leader
 - Shift Leader
 - Management:
 - Training Coordinator
 - Quality Assurance Coordinator/Supervisor
 - Operations Manager
 - Communications Manager/ Assistant Director
- The position of Telecommunicator in an NG9-1-1 PSAP SHOULD include the following responsibilities:
 - Ability to work in a team environment and assist others with call processing.

- Ability to communicate critical information in a concise, clear, efficient and effective manner.
- Ability to maintain a calm demeanor while effectively managing stressful situations.
- Ability to process all calls received from a variety of communication mediums.
- Ability to interpret data by applying judgement, reasoning and training and relay information accurately.
- Telecommunicators in an NG9-1-1 PSAP SHOULD possess the following:
 - Knowledge of equipment used in operations on a day-to-day basis, e.g., Radios, Computer Aided Dispatch (CAD), Telephone Systems, etc. This includes third-party applications from devices that interface with the PSAP.
 - Knowledge of agency's policies and procedures.
 - Must be familiar with jurisdictional boundaries and have advanced knowledge of local geography, i.e., significant landmarks, major streets, limited access highways, major bodies of water, parks, public facilities such as courthouses and hospitals, schools, and sites of large public gatherings such as places of worship, malls, theme parks, etc. Knowledge of PSAP's contingency plan(s) to handle extraordinary events, e.g., extreme weather events, disasters, system failures, etc.
 - Understanding of radio communication networks
 - Knowledge of the agency's policy regarding the dissemination of sensitive information.
 - Common understanding of NCIC, IPAWS, EAS, reverse 911, and other public notification devices implemented with NG 911
 - Understanding of Mobile Incident Command and how to operate an ICP/EOC/joint-operations incident
 - Common understanding of MMS, SMS, and social media
 -
- Telecommunicators in an NG9-1-1 PSAP SHALL possess the following Skillsets/Traits:
 - Ability to work effectively in a team environment
 - Ability to adapt quickly to a changing environment, e.g., fluctuations in workload, severity of calls, etc.
 - Flexibility to adjust to changes in operational processes and policies, i.e., implementation of new technology
 - Ability to remain focused and detail oriented in a distractive environment
 - Ability to think calmly and act quickly and decisively
 - Ability to speak clearly and distinctly
 - Situationally Aware

- Ability to demonstrate guidance and leadership with co-workers
- Ability to provide emergency and non-emergency public safety support in a professional, empathetic and courteous manner under routine and challenging circumstances

2.2.1.2 Training

NG9-1-1 Training for Telecommunicator SHOULD encompass all necessary education and training, related to the equipment and skills required to perform basic and commonly required job tasks in a Public Safety Answering Point (PSAP) or Emergency Communications Center which has implemented NG9-1-1 technologies. In addition, this training SHOULD provide a conceptual understanding of the operational enhancements associated with an NG9-1-1 environment, as well as high level concepts regarding new technological integrations as well as the development and support of additional methods for the public to interact with 9-1-1 and the improvements in 9-1-1 resiliency and reliability inherent in NG9-1-1 systems.

This document also describes the potential operational enhancements that may permit a more cohesive and less complex flow of information associated with the 9-1-1 call answer and dispatch process in a post NG9-1-1 implementation environment.

- Employee Roles:
 - Basic Training
 - Advanced/Continuing Education Training
 - Mentoring/Peer Support
- Job Classifications
 - Public Safety Telecommunicator(s);
 - Public Safety Communications/Dispatch Supervisor(s);
 - Public Safety Communications Training Staff (including CTO); Managers, Directors, and other oversight positions in the Public Safety Communications environment (PSAP);
 - Those responsible for human resources processes associated with Public Safety Telecommunicators
 - Educators responsible for developing and providing education to potential and current public safety communications personnel in a college or similar setting.
 - Field Responders served by an agency that has transitioned to NG9-1-1
- Responsibilities:
 - PSAP Authorities SHALL ensure that NG9-1-1 implementation includes training for all PSAP personnel. Training SHOULD include:
 - A basic understanding of how NG9-1-1 enhances the existing E9-1-1 legacy environment. Trainers may need to adapt training delivery

- methods to accommodate different types of learners within their agency.
- Any new applications contained in the NG9-1-1 solution implemented by the local agency.
 - Any changes to mapping and GIS to the NG9-1-1 environment, e.g., presentation of Z coordinates.
 - Characteristics of wireless/data connected device locations in NG9-1-1 and related impacts on call-routing
 - Any changes/enhancements to the 9-1-1 system and how to use the features, such as new information contained in ANI/ALI displays or changes in confidence/uncertainty measures associated with wireless 9-1-1 requests for service.
 - The location challenges and concepts of receiving messages from mobile and data connected devices included but not limited to Text-to-911, RTT, and future technology.
 - Enhancements in NG9-1-1 call management including concepts such as:
 - Smart Call Queue Management
 - Rollover to Alternate PSAPs
 - Instant Retrieval Recording (IRR) Messages in any format
 - Emerging technologies such as video, images, and additional data that may be received by the PSAP.
 - Ability to interact/interconnect with 3rd party technologies such as traffic cameras, sensors, smart city devices, smartphone applications, etc.
 - Improvements to service delivery options
- Knowledge:
 - Basic Level:
 - Trainee:
 - PSAPs SHOULD refer to the Recommended Minimum Training Guidelines as a baseline guide for entry level Telecommunicator training.
 - Advanced: (Entry level management and advanced training team)
 - Recommended to have taken a professional course regarding training focused towards new employees such as Communications Training Officer (CTO)
 - Courses in Stress Management/Critical Incident Stress (CIS)
 - Courses in adult learning to also include differential cultural/generational differences

- NG9-1-1 vendor-specific training that covers implemented solution(s)
- CAD vendor-specific training, e.g., Train-the-Trainer
- Multi-agency response plan training
- Emergency Operations Center (EOC) /NIMS-ICS training
- Specialized: Any additional equipment, DOT cameras/Jails/Parks/SWAT/NLETS-NCIC-CJIS Security training
- Skills:
 - Demonstrates strong leadership qualities, to include. honesty, integrity, accountability, decision making skills, and diversity.
 - Demonstrates a strong structured understanding of policy and guidelines for operations in the PSAP
 - Demonstrates ability to proficiently use technology during routine business as well as special event operations
 - Present with excellent documentation skills and is an innovative contributor to the training group.
 - Understand the field responder's responsibilities as well as an insight of industry partnerships and vendors that are served with and by the PSAP as they are involved in the PSAP employee's job position.

2.2.1.3 Management

Management in a PSAP can be fluid, i.e., there may be circumstances where a Telecommunicator may need to step into the role of a Supervisor or Manager temporarily in the absence of management in order to maintain order, efficient and effective PSAP operations. In this capacity, the Telecommunicator becomes an influence on fellow employees and can affect service level outcomes. Consistent with the National Incident Management System (NIMS), PSAPs SHOULD develop a policy outlining chain of command procedures in the absence of a succession plan.

- Role:
 - Advisory/Advocate for the Telecommunicator to help educate external decision makers or entities on the Telecommunicator's role in the PSAP and the impact of NG9-1-1 on PSAP operations
 - Facilitator/Developer for updating policies and procedures for an evolving PSAP environment
- Job Titles:
 - Manager
 - Director
 - Supervisor
- Responsibilities:

- Setting up support networks to address psychological impacts of NG911 on Telecommunicators, including but not limited to, implementation of a critical incident stress management program. Managers SHOULD refer to NENA-STA-002.1-2013 NENA Standard on 9-1-1 Acute/Traumatic and Chronic Stress Management.
- Human Resources:
 - Identify new hiring criteria
 - PSAP managers SHOULD work with their psychological exam providers to evaluate current psychological exams to determine if changes are necessary to appropriately assess candidates for a NG9-1-1 environment, e.g., assessing the ability to manage stress as a result of viewing graphic imagery that may be received by the PSAP.
 - Skillsets needed to process the various types of data being handled by NG9-1-1. As new technologies are developed, skillset requirements for new personnel may need to be established.
 - On-going assessment of skillsets needed for existing personnel as new technologies are implemented.
 - Identify new screening tools for testing potential candidates
 - Test candidates' ability to identify pertinent details in images or video that may need to be relayed to field responders as well as assess candidates' behavioral response to handling images or video.
 - Test candidates' ability to interpret emergency situations in the absence of audio cues, such as emotion and background noise in data-only exchanges with callers, e.g., Text-to-911.
 - Develop operational policies for employees that incorporate NG9-1-1 implementations and distribute to all PSAP personnel.
- Industry Partners
 - Work with vendors to deploy solutions that minimize the impact of technology on the Telecommunicator's workloads
 - Develop business rules on data management of NG911
- Knowledge:
 - Knowledge of PSAP systems and its interaction with other connected systems
 - Knowledge of data privacy rules and chain of custody of communications center records
 - Basic understanding of the PSAP's operational policies and procedures

- Comprehension of factors involving human interaction, the dynamics of communication, and the understanding of group dynamics, i.e., how PSAP crews work together and socially interact within the work environment
- Knowledge of local, state and federal employment laws and human resource best practices applicable to PSAP employees
- Knowledge of 9-1-1 industry best practices/standards, e.g., NENA, APCO, NFPA, etc.
- Skills:
 - Communication skills; i.e., be able to communicate the policy issues to stakeholder's/policy makers on NG9-1-1 implementation
 - Interpersonal skills i.e., ability to comprehend the changes in the PSAP environment and their effect on the Telecommunicator
 - Effective writing and presentation skills; ability to. advocate for the Telecommunicator; communicate ideas, plans, and concepts to stakeholders/policy makers and PSAP staff on the impacts of NG9-1-1
 - Problem-solving, knowledge of change management practices; i.e., how best to incorporate new technology into existing operations; how to adapt to changing environments and circumstances
 - Conflict resolution skills, i.e., vendors, employee unions, agency personnel, staff

2.2.1.4 Technology

Telecommunicators are responsible for notifying appropriate supervision when critical equipment is not working as expected. As such, they must have high level working knowledge of the solutions in the PSAP to determine appropriate escalation procedures to continue fluidity of operations. Additionally, Telecommunicators are subject-matter experts and can provide valuable input into the implementation of technology solutions into PSAP operations.

- Role:
 - Evaluate existing technology environment, i.e., how current equipment/technology interface with each other
 - Gather, prepare and evaluate requirements for NG9-1-1 solutions
 - Recommend new and/or upgraded solutions to stakeholders/PSAP personnel
 - Data management, security and storage
 - Work with solution providers to maintain system integrity
- Job Titles:
 - Dispatcher/telecommunicator, CTO, Shift leader, QA Manager, IT Systems Administrator, GIS, CPE contractor, Director/Admin
- Responsibilities:

- Monitor and maintain systems, may include escalating to solution provider for issue resolution
- Prepare analytical reports, e.g., storage, security logs
- Knowledge:
 - The ability to interact with various aspects of the NG9-1-1 solution to recognize both inputs and outputs.
 - How to escalate to external parties/vendors for troubleshooting.
 - Understanding system security, how to spot potential threats, and appropriate procedures to report and respond to an identified threat.
 - Understanding data (potentially live data) when making command decisions.
- Skills:
 - Ability to use GIS tools used by NG9-1-1 solution.
 - Ability to recognize internal and external networking abnormalities.
 - Ability to interpret geographical services data, e.g., wireless location trace or IP address routing.
 - Ability to troubleshoot using internal systems logs.
 - Ability to integrate external systems with PSAPs systems, e.g., CCTV control, monitoring, and recording.
 - Strong skills and understanding of general computer use e.g., ability to recognize abnormalities without assistance in emergency situations and report to appropriate IT personnel.

2.3 Human Resource Practices

Agencies SHOULD review existing human resource practices to determine if changes are necessary with the implementation of NG9-1-1. While there may be some changes in specific practices, the recommendations within this standard are not intended to be fully encompassing of all human resource practices.

The NENA [Acute Traumatic & Chronic Stress Management Standard](#) established best practices elements of a local 9-1-1 employee stress management program that human resource managers and/or PSAP managers can utilize to implement programs related to critical incident stress or trauma related the handling of emergency dispatch incidents.

Pre-Employment

- Psychological Screening - A telecommunicator may be exposed to stressful or traumatic events, e.g., pictures and/or videos of violent crimes or injuries. Assessing a candidate's reactions to these types of events will be crucial in determining how a candidate may react when handling emergency calls or dispatching incidents. Assessment results may be an indicator of suitability for employment in a PSAP.

- Vision Exams – In NG9-1-1, a telecommunicator may be required to view pictures and/or videos and extrapolate information and relay to field responders. Candidates may perceive visual information differently than others, e.g., colors, that may impact their ability to relay information accurately.
- Aptitude Testing – PSAPs SHOULD implement testing specific to the telecommunicator role in the agency due to the ever-changing environment and advancements in technology that are expected with NG9-1-1 deployments. Telecommunicators will need to adapt to new technologies, new protocols and procedures at a more significant pace than today. Adaptability will become necessary for a candidate to be a successful employee in the PSAP.
- Skills Assessment – Pre-employment testing to measure a candidate’s skills to perform in a PSAP by large will not change with a NG9-1-1 deployment except for the following areas that SHOULD be considered:
 - Video/Image Interpretation – candidates MAY be assessed for their ability to interpret body language and articulate visual information without bias or assumption.
 - Text to 9-1-1 – non-formal communications such as texting/SMS messaging do not use traditional written language. Candidates MAY need to be assessed for their ability to interpret messages accurately in order to identify the nature of the emergency and dispatch appropriate responders.
 - Operational/Tactical Scenario Testing – any skills assessment testing SHOULD ensure that operational/tactical scenario testing includes all forms of communication, e.g., verbal and nonverbal, that the PSAP is capable of providing to the public.
- Interview with PSAP Manager/Supervisor
 - PSAP Managers/Supervisors should determine the value of expanding interview questions to include:
 - Has the candidate previously viewed images of crimes or traumatic events? How did they react to this?
 - Has the candidate personally experienced a crime or traumatic event? How did they react to this?
 - Expectations SHOULD be set with the candidate that they will be responsible for handling audio, video, and imagery that may be traumatic for the employee. Resources available to assist employees with psychological stress SHOULD be discussed. Candidates may be asked if he/she would feel comfortable reaching out to supervisors or available resources if help was needed.

Onboarding of new employees

- Introduction to PSAP Operations, e.g., sit-along and observing operations,

- PSAPs MAY require new employees to complete ride-alongs with field responders as part of their onboarding and/or training program. First-hand observations of public safety responses may provide insight into the employee's responsibilities and potential exposure to graphic imagery that may be experienced in NG9-1-1.
- Introduction to Emergency Communications Technology that includes NG9-1-1 solutions implemented by the PSAP.
- Employee orientation SHOULD include information on the types of incidents and data that the employee will be exposed to during his/her employment to include photos and videos. Orientation SHOULD include available employee resources to help them manage stress and critical incident trauma. management, e.g., critical incident stress debriefings and Employee Assistance Programs (EAP).

Years 1 – 5

- As the PSAP implements NG9-1-1 solutions, the following SHOULD be considered:
 - Training Telecommunicators on handling Text-to-911 calls that included multi-media, e.g., pictures
 - Training Telecommunicators on emerging technologies that require training to be developed that is not already captured in other minimum training requirements, e.g., new communications mediums that will communicate with the PSAP such as Internet of Things (IoT) and biometric devices.
 - Ongoing in-service training on implemented NG9-1-1 technologies when changes are made

Years 5 – End of Employment

- Ongoing in-service training on implemented NG9-1-1 technologies when changes are made
- Career Development training
 - Training senior personnel on the business practices associated with the administrative use of NG9-1-1 data:
 - The PSAP's access and use policies
 - The PSAP's data storage and retention policies
 - The PSAP's public record release policies
- Succession Planning
 - PSAPs SHOULD consider incorporating available standards and training on NG9-1-1 to facilitate knowledge transfer to those employees with a long-term career path with the PSAP.
 - PSAPs MAY encourage employees to become involved in industry groups, e.g., NENA, APCO etc. to stay abreast of emerging NG9-1-1 technologies that may impact operations.

Remote Employees

With NG9-1-1, a PSAP is no longer required to be in a specific single-site physical location. NG9-1-1 presents a unique opportunity in that a PSAP's employees, or at least some of them, also do not need to be in a single physical location.

PSAPs that will utilize remote/virtual employees in a NG9-1-1 environment SHOULD develop pre-defined deployment plans to address:

- Approved locations
- Network and database security
- Minimum equipment standards
- Operational/Contingency policies

Challenges with utilizing remote employees may include:

- Additional/Different types of training will be needed such as how to VPN into local networks
- Reduced situational awareness of events actively being worked by the PSAP
- Reduced communications between co-workers, e.g., ability to quickly communicate information verbally to co-workers.
- Resources that may only be available in the PSAP, e.g., call monitoring dashboards, access to information that may be restricted
- Worker efficiency may be reduced with how systems are used vs. standardized workstations with monitors and equipment.
- Management of equipment – department issued, kept up to date with security patches, group policies; support of remote equipment by IT staff
- Security –
 - Networks – connectivity from a remote location to a PSAP SHOULD be dedicated to public safety operations
 - Access to secure databases may need to be limited while working in a remote capacity
 - Personnel and equipment outside of a controlled environment SHALL maintain compliance with security policies
- Personnel Management
 - The availability of audio recordings will impact Quality Assurance (QA) reviews of call processing if remote locations are not recorded
 - Delivering procedural training and shift briefings to remote employees
 - Effectively evaluating employees when their performance cannot be observed physically or audio reviewed to evaluate against general agency performance criteria, e.g., attendance, working with others, etc. In general, CALEA, civil service regulations, city/county human resource policies reference evaluating employees on the same criteria consistently.

- Identifying those employees that are professional and responsible, good candidates for working remotely. Not all employees may be good candidates for remote work assignments.
- Inability to monitor the psychological health of the remote employee, e.g., handling stressful calls; being aware of the context of the calls they have taken, thus may require alternative methods of monitoring employees by the supervisor/manager
- General availability of employees, e.g., reporting for duty, breaks, calling out ill mid-shift
- Manager monitoring employee activity, e.g., are they answering calls, sitting in an unavailable status, are the employees 'present'

2.4 NG9-1-1 Impacts on Telecommunicator Personnel

NG9-1-1 will evolve PSAP operations from its historical perception of primarily answering voice calls to a much more data-centric, multimedia environment that will impact Telecommunicator personnel in the following ways:

- The presentation, processing and management of new sources of data related to an emergency call will add increased workload and complexity to the tasks. This will require a more advanced skillset to triage multiple data sources to determine what is meaningful to affect the appropriate response. This elevates the role of the Telecommunicator to include tasks that are analytical in nature.
- NG9-1-1 may include the ability to receive pictures, video recordings and/or streaming media that will increase the employee's risk of psychological trauma. PSAPs should be prepared to experience an increased number of employee assistance program (EAP) referrals, critical incident stress debriefing (CISD) sessions and absenteeism.
- PSAPs will need to be proactive and develop a health and wellness strategy to address increase PSAP personnel reliance on one another to help work through their implementation of NG9-1-1. There are available resources that PSAPs will have access to via NENA's Health and Wellness Committee.
- Supervisors/Managers may require training on how to identify indicators of psychological distress and diffusion techniques in order to assist employees more proactively.
- NG9-1-1 has the capability to place the Telecommunicator 'on-scene' of an emergency in a virtual capacity, ostensibly becoming an eyewitness to an incident. This will be a contributing factor into the Telecommunicator's decision making on the appropriate actions to responding to an incident. This defines the role of a Telecommunicator as a first responder.

3 Impacts, Considerations, Abbreviations, Terms, and Definitions

3.1 Operations Impacts Summary

This NENA Operational Standard identifies how the role of the 9-1-1 public safety telecommunicator will evolve as PSAPs implement NG9-1-1.

3.2 Technical Impacts Summary

This NENA Operational Standard does not impact any existing technical standards; however, it is believed that the evolution of NG9-1-1 technology will impact the systems and data that Telecommunicators will interact with in their everyday duties.

3.3 Security Impacts Summary

Security impacts related to this NENA standard are associated with the availability and security of PSAP data and its networks. While access to data, systems and networks can be better controlled from within the PSAP environment, there may be greater risk to security if remote employees connect to a PSAP via networks external to the agency. PSAP managers SHOULD review applicable PSAP security documents available on the NENA website.

3.4 Recommendation for Additional Development Work

No additional development work is expected at this time.

3.5 Anticipated Timeline

Changes to the role of the Telecommunicator will take place as required in parallel with NG9-1-1 deployments or implementation by the 9-1-1 authority.

3.6 Cost Factors

As agencies begin to deploy NG9-1-1 technologies, additional funding for PSAPs will be a priority. In addition to the cost of NG9-1-1 solutions, there are indirect costs associated with implementation that are not always apparent and should be included, e.g., training of personnel on new systems, personnel overhead costs such as overtime to backfill positions while employees are in training.

3.7 Cost Recovery Considerations

Normal business practices shall be assumed to be the cost recovery mechanism.

3.8 Additional Impacts (non-cost related)

Certain information or requirements contained in this NENA document are known to have 9-1-1 Center operations impacts, and others are not expected to have 9-1-1 Center operations impacts. At the date of publication of this document, some development work had begun.

- Additional development topics concerning health and wellness of telecommunicators to include acute trauma and psychological stress are currently being identified by the NENA Wellness Committee.

3.9 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
First Responder	A first responder is someone designated by a public safety agency that is charged with responding to emergency service requests, including emergency communications professionals, police, fire and EMS personnel who operate in the field.

4 Recommended Reading and 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.

5 Appendix A

Talking Points for Stakeholder Education

- What is NG911?
 - A secure IP-based, open-standards system comprised of hardware, software, data, and operational policies and procedures that
 - (A) provides standardized interfaces from emergency call and message services to support emergency communications;
 - (B) processes all types of emergency calls, including voice, text, data, and multimedia information;
 - (C) acquires and integrates additional emergency call data useful to call routing and handling;
 - (D) delivers the emergency calls, messages, and data to the appropriate public safety answering point and other appropriate emergency entities based on the location of the caller;
 - (E) supports data, video, and other communications needs for coordinated incident response and management; and
 - (F) interoperates with services and networks used by first responders to facilitate emergency response.
- What are the benefits?
 - Improved flexibility, resiliency and survivability of 9-1-1 systems
 - Modern methods to communicate emergencies to PSAPs, e.g., text, video, smartphone apps, biometric and IoT devices
 - An emergency communications system capable of dynamic call-routing based upon several factor including PSAP availability and network status
 - Reduced cyber vulnerabilities to 9-1-1 systems
 - Reduced long-term cost burdens of operating costly and obsolete legacy technology
- Telecommunicator today vs. NG911
 - Handles emergencies from limited types of devices/data vs. will handle emergencies from an unlimited type of devices/data
 - The telecommunicator transitions from an “ear witness” to an “eyewitness” to emergency incidents

- Potential increase in telecommunicator psychological stress
- Job description and skillsets will become more complex and specialized, further differentiating them from non-public safety call center personnel
- How can stakeholders/decision-makers support NG911 implementation?
 - Become educated about 9-1-1 and NG911
 - NENA – www.nena.org
 - The National 911 Program – www.911.gov
 - NG911 NOW Coalition – www.ng911now.org
 - Implement new and/or refine current funding mechanisms to ensure that NG911 funds are sufficient, available, cost effective and sustainable
 - Support updated training programs and curriculum for NG911 services
 - Encourage/allocate sufficient operational funding to ensure PSAPs are sufficiently staffed and fully trained on NG911 technologies and capabilities
 - Implement governance structures, policies, and regulations that facilitate NG911 planning, transition, implementation and operations

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