

NENA

Communications Center/PSAP Disaster and Contingency Plans Model Recommendation



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Operational Standard/Model Recommendation

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1. Executive Overview

This document is provided as a Model Recommendation for the creation of the Disaster and Contingency Planning section of a Standard Operating Procedure (SOP) for use by Communications Centers and/or PSAPs as guidance in the formulation of an agency SOP. Each agency is unique in its resources and operations. This document is a Model Recommendation and should be changed to meet the requirements of differing modes of operations.

The unique nature of Communications Centers/PSAPs requires that daily operations continue regardless of circumstance. It is therefore imperative that PSAPs have plans and procedures for circumstances that have the potential to adversely affect the ability of the staff to perform their duties.

This document includes guidelines and procedures on:

- Staffing
- IT Security
- Redundant Systems
- Situations requiring evacuation
- Evacuation Procedures
- Return to Normal Operations

2. Introduction

2.1 Purpose and Scope

The purpose of the NENA Model Recommendation for Disaster and Contingency Plans is to provide general guidelines for circumstances that may adversely impact the Communications Center/PSAP personnel to receive, process, dispatch and monitor emergency calls for assistance.

As each agency has unique resources and circumstances, this document should be changed to meet the individual needs of the Communications Center/PSAP as required to plan for disaster operations.

2.2 Reason to Implement

The NENA Model Recommendation for Disaster and Contingency Plans has been developed to provide standardized guidelines for use during disaster situations that may impact the Communication Center's/PSAP's ability to maintain normal operations.

2.3 Benefits

Implementation of this Model Recommendation as a Standard Operating Procedure will:

- Prepare Communications Centers/PSAPs for disaster situations.
- Provide guidelines for the orderly evacuation of the Communications Center.
- Provide guidelines for the return to normal operations.
- Increase the probability of maintaining functionality during a disaster situation.

2.4 Technical Impacts Summary

In the event of an evacuation of the Communications Center/PSAP, alternate means of call receipt, entry, dispatch and monitoring must be available. The technical impact will vary greatly dependent upon the size and complexity of the center. At a minimum the phone service provider, radio and Computer-Aided-Dispatch vendor should be consulted to review options for alternate call taking and dispatching services.

2.5 Document Terminology

The terms "shall ", "must " and "required" are used throughout this document to indicate required parameters and to differentiate from those parameters that are recommendations. Recommendations are identified by the words "desirable" or "preferably".

2.6 Reason for Reissue

NENA reserves the right to modify this document. Whenever it is reissued, the reason(s) will be provided in this paragraph.

2.7 Cost Factors

It is recommended that a back-up facility be adequate to meet the basic needs of the system. It need not be a fully redundant, mirror of the primary Communications Center. The cost of this recommendation will vary greatly depending on the size and complexity of the system. Cost will include reoccurring and nonrecurring expenses, which will likewise be dependent upon the system.

Wherever feasible, a back-up facility should be dual use. An example of dual use is a back-up facility that is also used for telecommunicator training.

2.8 Cost Recovery Considerations

Cost Recovery will vary greatly depending on the jurisdiction of the Communication Center/PSAP. Administrators are urged to review their cost recovery legislation and apply for all available funding.

2.9 Acronyms/Abbreviations

The acronyms/abbreviations used in this document have been approved. The master glossary is located at http://www.nena.org/9-1-1TechStandards/nena_recommended_standards.htm

3. Disaster and Contingency Plans

3.1 Staffing

The supervisor is responsible for assuring that minimum staffing levels are met for each duty assignment. Minimum staffing means the predefined minimum number of staff required per shift. If minimum staffing levels are not being met the supervisor shall make every effort to complete staffing with overtime personnel who are fit for duty. If off duty personnel are not available and minimum staffing has not been met then the supervisor shall require that on duty personnel remain on duty until minimum staffing can be met or they reach maximum hours worked. Maximum hours worked is the predefined maximum allowable hours a telecommunicator is permitted to work between 8 hours of rest. If qualified telecommunicators are not available then off duty supervisory personnel shall fill positions to meet minimum staffing requirements.

- 3.1.1** During times of inclement weather telecommunicators should plan accordingly. This includes planning to arrive at work on time and preparing to stay for an extended time if required.
- 3.1.2** Safe transportation should be considered if travel conditions warrant.
- 3.1.3** Sleeping accommodations should be available for all staff staying at the Communications Center during disaster operations.
- 3.1.4** Food and comfort facilities should be available for all staff during disaster operations.

Commentary:

The safety of Communications Center staff will dictate both travel and the requirement to remain at the center. Staff who are not comfortable driving in certain weather conditions should make prior arrangements to arrive at work on time and, if necessary, remain at the Center for extended periods.

3.2 IT Security

Today's Public Safety Answering Points (PSAPs) face more threats than ever before. From hackers to intruders to inadvertent user error PSAPs must carefully protect their information technology components. The availability of a PSAP can be directly impacted by any of the aforementioned threats and as such an in-depth approach to IT Security is required.

IT Security can be defined as "the protection of information systems against unauthorized access to or unauthorized modification of information whether in storage, processing or transit, and against the denial of service to authorized users, including those measures necessary to detect, document and counter such threats" [Source: Department of Defense "Information Assurance Policy and Technology" Computer Based Training CD, Version 1.0, October 2003]

Any Contingency or Disaster Recovery Plan should include appropriate IT security measures. Please refer to an upcoming Technical Information Document from the NENA Security Working Group that addresses IT Security as it relates to the PSAP in greater detail.

3.3 Redundant Systems

Component failure is inevitable. Any issue which hinders the ability to receive, process, dispatch and monitor emergency calls must be quickly handled with minimal disruption. Redundant systems are needed to continue operation when a failure causes the loss of a needed resource. These systems include but are not limited to:

3.3.1 Electrical power

- 3.2.1.1** The Communications Center will have at least one back-up generator with the capacity to operate all essential electrical components of the system.

3.2.1.2 All console equipment and radio equipment shall have Uninterrupted Power Supply.

3.2.1.3 Back-up power supply will have the ability to run indefinitely so long as fuel is available.

3.3.2 Telephone service

3.3.2.1 The Communications Center shall have a procedure to reroute emergency phone calls in the event of a failure of the primary phone system. This may be accomplished by several means:

- Advance Intelligent Network which directs calls to back-up numbers. These numbers may terminate at the console or at a secondary site.
- Transfer calls to an alternate PSAP. The alternate PSAP can be another jurisdiction or a back-up facility.

3.3.2.2 The Communications Center shall have access to the Emergency Alert System (EAS) to notify citizens in the event that 9-1-1 cannot be dialed. The notification shall have procedures for reporting emergencies.

3.3.3 Public Safety Radio Network

3.3.3.1 The Communications Center shall have a means of alerting and communicating with emergency responders in the event of a failure of the Public Safety Radio Network.

3.3.3.2 The back-up radio system should be readily available and routinely tested to ensure operational functionality.

3.2.4 Computer-Aided-Dispatch

The Communications Center shall have a procedure to maintain operations in the event that the Computer-Aided-Dispatch system fails.

Commentary:

The method of redundancy will vary between Communications Centers. It is desirable to have at least two layers of redundancy for each major component of the system. All redundant systems should be tested for operability no less than monthly.

3.4 Rationale for Evacuation

Relocation of personnel may be required for many specific reasons. The two main factors requiring evacuation of the PSAP are:

- Uninhabitable environment
- Infrastructure failure

3.4.1 Uninhabitable Environment

Situations which make the Communications Center unsafe for personnel to continue daily operations. These conditions may include but are not limited to:

- Bomb Threats/Found
- Fire/Smoke Condition
- Gas leak
- Hazardous Materials
- Structural damage

3.4.2 Infrastructure Failure

Situations during which technical components of the system fail - within or leading to the Communications Center. These conditions may include but are not limited to:

- Phone service outage
- Radio component damage

Commentary:

The reason for the need to evacuate is unimportant except for the urgency of removing personnel from a hazardous situation. It is desirable, if primary infrastructure is intact, that it be used during evacuation.

3.5 Evacuation Procedures

The Director or Designee shall have the authority to activate all or any part of the Disaster and Contingency Plan.

3.5.1 On Duty Supervisor

- Notify off duty staff to respond to alternate site
- Direct non committed personnel to evacuate to alternate site
- Notify telephone company and when appropriate activate contingency routing of emergency phone calls. Ensure that routing includes both 9-1-1 trunks and other emergency lines.
- Notify radio contractor
- Ensure alternate PSAP is staffed/notified of evacuation
- Notify other PSAPs of evacuation and termination of direct lines

- Alternate Route Law Enforcement Terminals
- Notify Nuclear facilities of evacuation
- Ensure all emergency responders are notified of evacuation
- Ensure the evacuation of all staff
- Confirm routing of emergency calls and ability to communicate with emergency responders

3.5.2 On Duty Telecommunicators

- Maintain operations until directed to evacuate
- Notify emergency responders of relocation
- Evacuate and report to assigned duty station as directed by supervisor

3.5.3 Off Duty Telecommunicators

- Report to assigned duty station as directed by supervisor

Commentary:

Evacuation procedures and duties must be adapted to the individual circumstances of the implementing agency. PSAPs should establish procedures which provide for a quick transfer of operations from one location to another. Intermediate evacuation steps such as a mobile communications vehicle with phone and radio communications to maintain operations until the back up site is staffed will enhance the system and maintain service.

3.5 Return to Normal Operations

Prior to a return to normal operations; the Communications Center should be thoroughly assessed to ensure that it is safe for personnel to return. If the event was an infrastructure incident then all technical contractors should assess their equipment for operational functionality. When the Communications Center has been assessed and all components found to be in normal working order the authorization to return to normal operations will be given

3.5.1 On Duty Supervisor

- Notify designated staff to return to Communications Center
- Ensure staffing of a back-up site until Communications Center is prepared to resume normal operations
- Notify telephone company and when appropriate activate normal routing of 9-1-1 trunks and other emergency phone lines
- Notify radio contractor

- Notify other PSAPs of return to normal operations and resumption of direct lines
- Reverse alternate routing of Law Enforcement Terminals
- Notify Nuclear facilities of return to normal operations
- Ensure all emergency responders are notified
- Ensure all personnel are accounted for
- Confirm routing of emergency calls and ability to communicate with emergency responders
- Release off duty Telecommunicators

3.5.2 On Duty Telecommunicators

- Maintain operations until directed return to Communications Center
- Notify emergency responders of relocation
- Report to assigned duty station as directed by supervisor

3.5.3 Off Duty Telecommunicators

- Maintain operations until directed to cease as directed by supervisor

Commentary:

Return to Normal Operations procedures and duties must be adapted to the individual circumstances of the implementing agency. PSAPs should establish procedures which provide for a quick transfer of operations from one location to another. Intermediate relocation steps such as a mobile communications vehicle with phone and radio communications to maintain operations until the primary site is staffed and ready will enhance the system and maintain service.

4. References

Not applicable

5. Exhibits

- A. Evacuation checklist (sample)
- B. Return to normal operations checklist (sample)

Commentary:

Checklists provide guidelines for tasks that must be completed. Each Communications Center/PSAP should develop checklist unique to their circumstances for evacuation and return to normal operations.

Exhibit A. Evacuation Checklist (sample)

On Duty Supervisor

- _____ Off Duty Staff notified (Page group)
- _____ Priority Radio and MDT message
- _____ Phone Company Special Circuits (XXX) XXX-XXXX notify only
- _____ Radio Contractor (XXX) XXX-XXXX (Page Group)
- _____ ARES/RACES (Page Group)
- _____ Other County PSAPs
- _____ Local Emergency Management (such as municipal, county and/or parish)
- _____ State Emergency Management
- _____ Law Enforcement Terminal (Alt. Route to XXXXXXXX)
- _____ Remote Site Operational
- _____ Contingency route 9-1-1 and emergency lines
- _____ Relocate unassigned personnel
- _____ Account for personnel

Director

- _____ Commissioners/Staff Notified
- _____ Supervisors Checklist reviewed
- _____ Technician response
- _____ Administrative staff response
- _____ PIO response
- _____ Remote sites notified/staffed/operational
- _____ Radios/pagers tested
- _____ CLEAN terminal forwarded
- _____ Contingency call routing directed
- _____ Staff Accounted for and assigned

Technical Manager

- _____ Technical staff responding
- _____ Radio Techs responding
- _____ Phone Techs responding
- _____ Radios operational
- _____ Phones Operational
- _____ Pagers operational
- _____ Contingency routing directed (Director)

Exhibit B. Return to Normal Operations Checklist (sample)

On Duty Supervisor

- _____ Assign staff to return to Communications Center
- _____ Priority Radio canceled and MDT message
- _____ Phone Company Special Circuits (XXX) XXX-XXXX notify only
- _____ Radio Contractor (XXX) XXX-XXXX
- _____ ARES/RACES
- _____ Other County PSAPs
- _____ Local Emergency Management (such as municipal, county and/or parish)
- _____ State Emergency Management
- _____ Law Enforcement Terminal (Reverse Alt. Route to XXXXXXXX)
- _____ Cancel contingency routing of 9-1-1 and emergency lines
- _____ Release unassigned personnel
- _____ Account for on duty personnel

Director

- _____ Ensure safety of Communications Center
- _____ Technical Manager ensures system operational
- _____ Commissioners/Staff Notified
- _____ Supervisors Checklist reviewed
- _____ Communications Center notified/staffed/operational
- _____ Radios/pagers tested
- _____ Reverse Law Enforcement Terminal Alternate Routing
- _____ Cancel contingency call routing directed
- _____ Staff Accounted for and assigned or released
- _____ Remote site re-supplied and operational
- _____ After-action report completed

Technical Manager

- _____ All systems operational
- _____ Notify Director that Communications Center Operational
- _____ Release technicians