NENA/APCO

Best Practices Model for Third Party Emergency Medical Dispatch Services and PSAPs

Operations Information Document (OID)

NENA/APCO Best Practices Model for Providing Emergency Medical Dispatch Services OID
NENA 56-509, Version 1, June 13, 2011

Prepared by:
National Emergency Number Association (NENA) and the Association of Public Safety Communications Officials (APCO) PSAP Operations, Emergency Services Provider Work Group

Published by NENA
Printed in USA
NENA
INFORMATION DOCUMENT

NOTICE

This Information Document is published by the National Emergency Number Association (NENA) as an information source for the voluntary use of communication centers and is provided as an example only. It is not intended to be a complete operations directive.

The National Emergency Number Association (NENA) publishes this document as an information source for the designers and manufacturers of systems, 9-1-1 Administrators and 9-1-1 Authority Managers to be utilized for the purpose of processing emergency calls. It is not intended to provide complete design specifications or parameters or to assure the quality of performance for systems that process emergency calls.

NENA reserves the right to revise this Information Document for any reason including, but not limited to:

- conformity with criteria or standards promulgated by various agencies
- utilization of advances in the state of the technical arts
- Or to reflect changes in the design of network interface or services described herein.

NENA reserves the right to revise this for any reason including, but not limited to, conformity with criteria or standards promulgated by various regulatory agencies, utilization of advances in the state of operations techniques or services described herein.

It is possible that certain federal, state or local regulations may restrict or require modification of the recommendations contained in this document. Therefore, this document should not be the only source of information used. NENA members are advised to contact their legal counsel to ensure compatibility with local requirements.

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

NENA’s Committees have developed this document. Recommendations for change to this document may be submitted to:

National Emergency Number Association
1700 Diagonal Road
Alexandria, VA 22314
800-332-3911
or: commleadership@nena.org
Acknowledgments:
The National Emergency Number Association (NENA) / Association of Public Safety Communications Officials (APCO) EMD Service Provider Work Group for development of this document.

NENA/APCO recognizes the following industry experts and their companies for their contributions in development of this document.

**Version 1 Approval Date, June 13, 2011**

<table>
<thead>
<tr>
<th>Members</th>
<th>Company/Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collet Crabill, ENP</td>
<td>Jefferson County Communications, WV</td>
</tr>
<tr>
<td>PSAP Operations Committee Chair</td>
<td></td>
</tr>
<tr>
<td>Mark Rector, EMD Service Provider Co-Leader</td>
<td>Priority Dispatch Corp, UT</td>
</tr>
<tr>
<td>Cathy McCormick, EMD Service Provider Co-Leader</td>
<td>OnStar, MI</td>
</tr>
<tr>
<td>Dick Solie</td>
<td>Profile Evaluations, Inc., FL</td>
</tr>
<tr>
<td>Dorothy Williams</td>
<td>Hughes Telematics, GA</td>
</tr>
<tr>
<td>Frank J. Kiernan</td>
<td>City of Meriden, CT</td>
</tr>
<tr>
<td>Gary Wallace</td>
<td>ATX, TX</td>
</tr>
<tr>
<td>Greg Scott</td>
<td>National Academy of Emergency Dispatch, UT</td>
</tr>
<tr>
<td>Jayne Nantkes</td>
<td>Akimeka LLC, HI</td>
</tr>
<tr>
<td>Jerry P. Pollock</td>
<td>Clearfield County Emergency Management, PA</td>
</tr>
<tr>
<td>Jerry Turk</td>
<td>Powerphone, CT</td>
</tr>
<tr>
<td>Jim Lanier</td>
<td>Manatee Co Public Safety, FL</td>
</tr>
<tr>
<td>John A. Cassin</td>
<td>Rochester-Monroe County NY 9-1-1</td>
</tr>
<tr>
<td>John Korman</td>
<td>Fairfax County VA – Department of Public Safety Communications</td>
</tr>
<tr>
<td>Kathy McMahon</td>
<td>APCO International, FL</td>
</tr>
<tr>
<td>Pam Kaufman</td>
<td>APCO International, FL</td>
</tr>
<tr>
<td>Rick Jones</td>
<td>NENA, VA</td>
</tr>
<tr>
<td>David Rivers</td>
<td>State of NH State of New Hampshire, NH</td>
</tr>
<tr>
<td>Diana Chun</td>
<td>City and County of Honolulu, Emergency Medical Services Division, HI</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

1  EXECUTIVE OVERVIEW ..........................................................................................................................5

2  INTRODUCTION ..........................................................................................................................................5

2.1 OPERATIONS IMPACTS SUMMARY ............................................................................................................5

2.2 TECHNICAL IMPACTS SUMMARY ..................................................................................................................5

2.3 SECURITY IMPACTS SUMMARY .....................................................................................................................5

2.4 DOCUMENT TERMINOLOGY ............................................................................................................................6

2.5 REASON FOR ISSUE/REISSUE .......................................................................................................................6

2.6 RECOMMENDATION FOR ADDITIONAL DEVELOPMENT WORK ..................................................................6

2.7 DATE COMPLIANCE .................................................................................................................................6

2.8 ANTICIPATED TIMELINE .............................................................................................................................6

2.9 COST FACTORS ...........................................................................................................................................6

2.10 FUTURE PATH PLAN CRITERIA FOR OPERATIONS EVOLUTION .............................................................6

2.11 COST RECOVERY CONSIDERATIONS ...........................................................................................................7

2.12 ADDITIONAL IMPACTS (NON-COST RELATED) .........................................................................................7

2.13 INTELLECTUAL PROPERTY RIGHTS POLICY ............................................................................................7

2.14 ACRONYMS/ABBREVIATIONS ...................................................................................................................8

3  MINIMUM BEST PRACTICES FOR THIRD PARTY EMD SERVICE PROVIDERS ................................9

4  RECOMMENDED READING AND REFERENCES ..................................................................................11

5  EXHIBITS ..................................................................................................................................................11

6  PREVIOUS ACKNOWLEDGMENTS ............................................................................................................11
1 Executive Overview

A considerable number of Public Safety Answering Points (PSAPs) in the United States, Canada, and other nations provide emergency medical dispatch (EMD) service to their callers. EMD is a recognized structured system used to determine the nature and severity of a medical problem, prioritize it so the appropriate level of Emergency Medical Services is dispatched safely, and provide the caller with instructions on how to assist the patient until Emergency Medical Services arrive. However, not all Public Safety Answering Points provide this service.

There are EMD Service Providers who directly deal with members of the public that have recognized this limitation and have initiated steps to provide this service. They include, but are not limited to organizations such as automotive companies, alarm services and technology services. These EMD Service Providers may choose to provide emergency medical dispatch services directly for their clients.

This document is intended to serve as a model best practice guide to both EMD Service Providers and for the Public Safety Answering Points that receive third party calls from the EMD Service Providers and dispatch the appropriate First Responders.

Disclaimer:
This document is intended as an information source for the voluntary use by Public Safety Answering Points and EMD Service Providers and is provided as a model only. It is not intended to be a complete operational directive. It is possible that certain federal, state or local regulations may restrict or require modification of the recommendations contained in this document. Therefore, this document should not be the only source of information used. Users are advised to contact their legal counsel to ensure compatibility with local requirements.

2 Introduction

2.1 Operations Impacts Summary
The information or Best Practices contained in this NENA document are known to have 9-1-1 Center Operations effects, based on the analysis of the authoring group. The primary impacts include:

- Communication methodologies between EMD Service Providers and PSAPs.

2.2 Technical Impacts Summary
N/A

2.3 Security Impacts Summary
N/A
2.4 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", "should" or "preferably".

2.5 Reason for Issue/Reissue
NENA reserves the right to modify this document. Upon revision, the reason(s) will be provided in the table below.

<table>
<thead>
<tr>
<th>Version</th>
<th>Approval Date</th>
<th>Reason For Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original</td>
<td>[06/13/11]</td>
<td>Initial Document</td>
</tr>
</tbody>
</table>

2.6 Recommendation for Additional Development Work
This document contains best practices recommendations and provides the foundation for the development of an American National Standard (ANS). It is recommended that this document be submitted for ANS consideration.

2.7 Date Compliance
All systems that are associated with the 9-1-1 process shall be designed and engineered to ensure that no detrimental, or other noticeable impact of any kind, will occur as a result of a date/time change up to 30 years subsequent to the manufacture of the system. This shall include embedded application, computer based or any other type application.

To ensure true compliance, the manufacturer shall upon request, provide verifiable test results to an industry acceptable test plan such as Telcordia GR-2945 or equivalent.

2.8 Anticipated Timeline
Deployment or implementation will take place as required.

2.9 Cost Factors
N/A

2.10 Future Path Plan Criteria for Operations Evolution
In present and future applications of operational procedures used for 9-1-1 call management and data delivery, it is a requirement to maintain the same level or improve on the reliability and characteristics inherent in present 9-1-1 services and system design.

New methods or solutions for current and future service needs and options should meet the criteria below. This inherently requires knowledge of current 9-1-1 operation factors and concepts, in order to evaluate new proposed methods or solutions.

Criteria to meet the Definition/Requirement:

1. Reliability/dependability as governed by NENA’s operation standards and other generally accepted base characteristics of 9-1-1 services.
2. Service parity for all potential 9-1-1 callers
3. Operational services that require the least amount of components to achieve desired results.
4. Maximum probabilities for call and data delivery with minimal cost approach.
5. Documented procedures, practices, and processes to ensure adequate implementation and ongoing maintenance for 9-1-1 systems.

This basic operations policy is a guideline to focus development work on maintaining fundamental characteristics of 9-1-1 operations service by anyone providing equipment, software, or services.

2.11 Cost Recovery Considerations
N/A

2.12 Additional Impacts (non-cost related)
N/A

2.13 Intellectual Property Rights Policy
NENA takes no position regarding the validity or scope of any Intellectual Property Rights or other rights that might be claimed to pertain to the implementation or use of the technology described in this document or the extent to which any license under such rights might or might not be available; nor does it represent that it has made any independent effort to identify any such rights.

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 Road, Suite 500
Alexandria, VA 22314
800-332-3911
or: admindoccomments@nena.org
2.14 Acronyms/Abbreviations

Some acronyms/abbreviations used in this document have not yet been included in the master glossary. After initial approval of this document, they will be included. See NENA 00-001 - NENA Master Glossary of 9-1-1 Terminology located on the NENA web site for a complete listing of terms used in NENA documents.

<table>
<thead>
<tr>
<th>The following Acronyms/Abbreviations are used in this document:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acronym</strong></td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td><strong>APCO</strong></td>
</tr>
<tr>
<td><strong>CDE</strong></td>
</tr>
<tr>
<td><strong>EMD</strong></td>
</tr>
<tr>
<td><strong>NENA</strong></td>
</tr>
<tr>
<td><strong>NHTSA</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The following Terms and Definitions are used in this document:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Term</strong></td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td><strong>Agent/Advisors</strong></td>
</tr>
<tr>
<td><strong>Third party Emergency Medical Dispatch Service Provider</strong></td>
</tr>
<tr>
<td><strong>Logging Recorder</strong></td>
</tr>
<tr>
<td><strong>Public Safety Agency</strong></td>
</tr>
</tbody>
</table>
The following Terms and Definitions are used in this document:

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
<th>** (N)ew (U)update</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PSAP</strong></td>
<td>Public Safety Answering Point (PSAP): An entity operating under common management which receives 9-1-1 calls from a defined geographic area and processes those calls according to a specific operational policy.</td>
<td></td>
</tr>
<tr>
<td><strong>Telecommunicator</strong></td>
<td>Person employed by a PSAP and/or an EMD Service Provider qualified to answer incoming emergency telephone calls and provide for the appropriate emergency response either directly or through communication with the appropriate PSAP.</td>
<td>U</td>
</tr>
</tbody>
</table>

3 Minimum Best Practices for Third Party EMD Service Providers

A third party entity which provides Emergency Medical Dispatch Services to a client base or population they will service should comply with the following minimum Best Practices:

- Intentions to provide Emergency Medical Dispatch services to a client base or population they serve.
- A licensed physician with the appropriate qualifications should serve as Medical Director for the program.
- A logging recorder capable of recording all audio and/or multimedia related to the EMD process should be utilized. All recordings should be retained for at least ninety days. A written policy for retaining records as needed beyond ninety days should be adopted.
- A telephone and/or communication system capable of conferencing multiple parties on the same call with minimal delays should be utilized.
- The provider should utilize an EMD program that meets the established EMD practice Standards (outlined in the NHTSA Standard Practice for Emergency Medical Dispatch Management document) for initiating an EMD training program that incorporates core components of an EMD service. This includes certification, recertification, Continuing Dispatch Education (CDE), training, materials, and quality assurance processes.
- An internally developed EMD program must meet or exceed Federal DOT and NHTSA Guidelines. An externally developed EMD program that lacks appropriate medical oversight and does not comply with these guidelines is discouraged.
- EMD Service Providers should implement Standard Operating Procedures.
- The Third Party Call Center should ensure that employee’s receiving calls be certified to provide EMD.
Third party EMD providers must have the capability to identify the appropriate PSAP to be notified and should be capable of conferencing all parties with the appropriate PSAP within a reasonable timeframe.

Use of plain language at all times during the EMD process is critical, and considered standard procedure. Use of codes, acronyms, slang, medical terminology, and abbreviations is not advised.

The EMD Service Provider must be capable of initiating contact with a PSAP without interrupting the provision of EMD to the caller. (For additional information and operational standards, please refer to Section 4 of this document, Recommended Reading and References).

When a PSAP is contacted by an EMD Service Provider, the telecommunicator should expect to be connected with the initial caller upon request. In addition, the PSAP telecommunicator may be advised that the emergency medical dispatch process has been initiated by the EMD Service Provider. At a minimum, the following information should be provided to the PSAP:

- The location of the emergency
- A brief description of the emergency
- The number of patients (if known)
- Known scene safety concerns
- Have the ability to conference the caller to the PSAP via conference bridge
- The chief complaint of the patient(s)
- The stage in the EMD process that the EMD Service Provider has reached. The stage should be characterized in language that all PSAP personnel will easily understand
- If present, any coding related to the EMD services, abbreviations and other related information (medical terminology, street, highway, hazardous material signage, etc,) using plain language description of any related abbreviations and coding
- Use of plain language for all information transfer and communications
- Changes in patient conditions

This list is not intended to address all information sets; any and all other pertinent information should be shared between the parties.

Consistency is a critical component in the delivery of medical pre-arrival instructions. It is therefore acknowledged that the hand off between an EMD Service Provider and a PSAP will require cooperation and collaboration to assure the most successful outcome for the patient. Many PSAPs and first response agencies rely on the emergency medical dispatch process to triage calls for help and to determine the appropriate resources to be sent. As a best practice, the person asking the systematic interrogation questions should be the same person giving the medical instructions to the caller.¹
There may be circumstances where the person asking the systematic interrogation questions is not
the operator providing pre-arrival medical instructions. In this event, the respective agencies must
establish a clear and concise process to ensure that the transfer between operators maintains
continuity of care and prevents unnecessary repetition of information by the caller.

It is possible however that there could be a delay in transferring a call to a PSAP (PSAP with calls in
queue, connection issues etc.) in which case EMD may have significantly progressed. In these
cases, the EMD Service Provider should maintain control of the call and complete the pre-arrival
instructions. The PSAP should carefully consider the circumstances of each situation before
deciding to interrupt in-progress EMD instructions before requesting the taking control of a call.

EMD Service Providers serve a critical role providing life saving instructions to callers and
obtaining appropriate emergency response services. Performing EMD services and implementing
industry EMD best practices is strongly encouraged.

4 Recommended Reading and References

For additional information and operational standards the documents listed below can be used as
reference:

NENA 56-005: Call Answering Standard/Model Recommendations
NENA 56-006: Emergency Call Processing Protocol Standard
NENA 57-501: Wireless Phase I & II Features and Functions Operational Information Document
Recommendations
NHTSA: Standard Practice for Emergency Medical Dispatch Management
APCO: Recommended Best Practices PSAP/Telematics Call Processing
APCO: ANSI 3.103.1-2010 Minimum Training Standards for Public Safety
Telecommunicators

5 Exhibits

6 Previous Acknowledgments

None

1 ASTM. Standard Practice for Emergency Medical Dispatch. Designation: F 1258-00: pp 623-629