NENA TTY/TDD Communications Standard Operating Procedure Model Recommendation

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NENA's Operations Committee has developed this document. Recommendations for change to this document may be submitted to:

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ACKNOWLEDGMENTS

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1 Executive Overview

This document has been developed to serve as a model standard operating procedure for handling TTY/TDD Communication within Public Safety Answering Points (PSAPs). To provide uniformity and consistency in the handling of these calls, the following call-taking standards are recommended:

- Telecommunicator training
- Identification of TTY/TDD calls
- TTY/TDD equipment and operation
- Testing
- Call handling process

In addition, this document provides a description of the variations in communicating with the hearing and speech impaired, such as the acoustic coupler mode, Voice Carry Over, Hearing Carry Over and Relay Service Calls.

2 Introduction

2.1 Purpose and Scope

The purpose of this document is to provide a model recommendation in the form of a standard operating procedure to establish guidelines for the operation of the equipment used and call handling procedures used to provide access for persons with speech or hearing impairment.

2.2 Reason to Implement

This document serves as a Model Standard Operating Procedure for the handling of TTY/TDD 9-1-1 calls to Public Safety Answering Points.

2.3 Benefits

Use of this Model Standard Operating Procedure will standardize the method of TTY/TDD 9-1-1 call handling across jurisdictional boundaries. This will:

- Provide consistency in call handling of TTY/TDD calls
- Improve service to TTY/TDD callers

2.4 Technical Impacts Summary

None

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

The cost factors will be limited to the degree that upgrades or changes are required to provide a TTY/TDD communication device at each phone location at the PSAP. The type of device selected (direct-connect, computer-based, acoustic coupler, etc.) will determine total cost.

2.8 Cost Recovery Considerations

Cost recovery will be dependent upon legislative and regulatory cost recovery mechanisms for compliance with ADA requirements in each state**.**

2.9 Acronyms/Abbreviations

Some of the acronyms/abbreviations used in this document may not have been included in the master glossary. After initial approval of this document, they will be included. Link to the master glossary is located at: http://www.nena.org/9-1-1TechStandards/nena_recommended_standards.htm

The following Acronyms are used in this document:	
ADA	Americans with Disabilities Act
HCO	Hearing Carry Over - when a TTY/TDD caller listens with a telephone receiver rather than read the typewritten message. The caller types their side of the conversation
PSAP	Public Safety Answering Point
TRS	Telecommunications Relay Service – A public or private service that assists speech or hearing impaired persons to communicate with others by relaying the information received via TTY/TDD
TTD/TTY	Telecommunications Device for the Deaf/Teletypewriter
VCO	Voice Carry Over - when a TTY/TDD caller uses their own voice to speak with 911 rather than type.

3 Guidelines for TTD/TTY 9-1-1 Communication

3.1 Purpose

The purpose of this standard operating procedure is to establish guidelines for the operation of the equipment used and call handling procedures used to provide access for persons with hearing or speech impairment.

3.2 Discussion

The Americans with Disabilities Act is federal legislation that every PSAP manager is responsible for understanding and implementing in their communications centers. The United States Congress enacted it on July 26, 1990. It's purpose is "to provide a clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities; to provide clear, strong, consistent, enforceable standards addressing discrimination against individuals with disabilities; to ensure that the Federal Government plays a central role in enforcing the standards established in the Act on behalf of individuals with disabilities; and to invoke the sweep of congressional authority, including the power to enforce the Fourteenth Amendment to regulate commerce, in order to address the major areas of discrimination faced day-by-day by people with disabilities." In this regard, Title II of the ADA mandates access to public services such as telephone emergency services.

It is estimated that approximately 54 million Americans have one or more physical or mental disability. Approximately 28 million are individuals who have hearing impairment.

According to Title II of the ADA, "Telephone Emergency Services, including 9-1-1 services, shall provide direct access to people who use TDDs…". The (insert your department here) 9-1-1 Communications Center recognizes the importance of providing direct access to its services to citizens who use TTY/TDDs that are living in, visiting and traveling through this jurisdiction.

3.3 Policy

It shall be the policy of the (insert department name here) 9-1-1 Communications Center to provide telephone emergency services to individuals with disabilities that are as effective as those provided to others. In accordance with the requirements of Title II of the Americans with Disabilities Act, the (insert department name here) 9-1-1 Communications Center will not discriminate on the basis of disability in our services, programs, or activities. Individuals who use telecommunications devices for the deaf, also known as TTY/TDDs, will be provided direct access to our telephone emergency services, including 9-1-1 services.

4 Administrative Procedures

4.1 Telecommunicator Training. All telecommunicators shall receive training in accordance with NENA TTY Training Operational Standard 52-001.

4.2 TTY/TDD Equipment and Operation

4.2.1 The (insert department name here) 9-1-1 Communications Center shall be equipped with one TTY/TDD located at each emergency answering position (one per telephone location).

4.2.2 At a minimum, every TTY/TDD shall be preprogrammed with both the Standard English and American Sign Language (ASL) messages contained in Exhibit A.

4.2.3 Procedures for activation of these messages shall be posted at all TTY/TDDs.

4.2.4 In the event a TTY/TDD malfunctions, the telecommunicator should use a backup device located (specify such as on the Supervisor's console). Any equipment malfunctions must be brought to the attention of the 9-1-1 Coordinator for repair or replacement.

4.2.5 In the event of a power failure, the TTY/TDD equipment shall operate on uninterruptible power supply or by using the department's power failure contingency plan. Measures shall be taken to ensure that the TTY/TDD remains functional throughout the power failure.

4.3 Testing

4.3.1 All TTY/TDD equipment shall be tested at least once per shift and that testing shall be documented. Documentation shall include:

4.3.2 Name & Title of employee conducting the test call

4.3.3 Date & Time

4.3.4 Silent Call and/or beeping tones

4.3.5 Time required to establish contact

4.3.6 Initiated from internal (inside center) or external (from field) location

4.3.7 Format of Call (English vs. American Sign Language)

4.3.8 Copies of TTY/TDD printout shall be attached to documentation as evidence of the testing procedure.

5 TTY/TDD Call Handling Process.

5.1 Identification of Incoming TTY/TDD Calls.

5.1.1 Telecommunicators should be aware that TTY/TDD users may be deaf, deaf-blind, hard-of-hearing, speech impaired or other persons.

5.1.2 When initially answering the emergency calls, telecommunicators shall follow the established phone answering procedures. However, if the telecommunicator is unable to immediately (within two attempts by voice) establish voice communications, but determines the line is silent (or open), or the telecommunicator hears beeping tones, they should immediately initiate a TTY/TDD call response.

5.1.3 Likewise, when a telecommunicator hears a voice recording that advises with a message that this is a TTY/TDD call, the telecommunicator should immediately respond by initiating a TTY/TDD call response.

5.1.4 Automatic call detection equipment will only detect when TTY/TDD tones are present. Accordingly, all silent calls should be challenged with a TTY/TDD.

5.2 Initiating a Response to an Incoming TTY/TDD Call.

5.2.1 Direct Connect Mode or Integrated System

5.2.1.1 When initiating a response with a TTY/TDD which is directly connected to a phone line or integrated in computer-based system, the telecommunicator should respond by turning on the TTY/TDD (direct connect) or opening the TTY/TDD screen, and send a pre-programmed message or type an approved greeting such as 911 GA.

5.2.1.2 The telecommunicator should then handle the call in accordance with established procedures for that call type.

5.2.2 Acoustic Coupler Mode

5.2.2.1 When initiating a response with at TTY/TDD that is not directly connected to a phone line, the telecommunicator should respond by placing the handset in the acoustic coupler (rubber cups on top of TTY/TDD) making sure that the handset is positioned correctly (typically with the cord to the left of the equipment). It may be helpful to label the couplers “mouthpiece” and “earpiece” in advance to expedite this process.

5.2.2.2 The telecommunicator should then turn the TTY/TDD power button on and send the pre-programmed greeting.

5.2.2.3 Once the TTY/TDD caller responds, the telecommunicator should continue to follow the procedures for handling the call in accordance with established procedures for that call type.

5.2.3 Voice Carry Over (VCO) / Hearing Carry Over (HCO) Mode - Telecommunicators must be prepared to handle calls received via the TTY/TDD in which the caller requests communications to be in either the VCO or HCO format.

5.2.3.1 Voice Carry Over

5.2.3.1.1 VCO is an acronym representing when a TTY/TDD caller uses their own voice to speak with the telecommunicator rather than type. The caller reads the reply from the telecommunicator on the TTY/TDD screen.

5.2.3.1.2 When a caller requests this format for their communications, the telecommunicator must listen to the caller speak, but then use the TTY/TDD to respond.

5.2.3.1.3 This method requires the telecommunicator to switch from voice to TTY mode on a single call.

5.2.3.2 Hearing Carry Over

5.2.3.2.1 HCO is an acronym for Hearing Carry Over when a TTY/TDD caller will listen with a telephone receiver rather than read the message. The caller types their side of the conversation.

5.2.3.2.2 When a caller requests this format for their communications, the telecommunicator must use the TTY/TDD to receive the caller's message but should speak to the caller instead of typing.

5.2.3.2.3 This method requires the telecommunicator to switch from TTY to voice mode on a single call.

5.2.4 Relay Service Calls

5.2.4.1 On occasion, a TTY/TDD caller may contact our services through the use of a Telecommunications Relay Service (TRS). PSAPs are prohibited from requiring callers go through a third party (such as the TRS) to gain access to our services, however, if telecommunicators receive a call via a TRS it should be handled according to established procedures for that call type.

5.2.4.2 Telecommunicators should follow the established protocol of the TRS by speaking to the relay operator as if speaking to the caller directly (communicating in first person) and the relay operator will type exactly what the telecommunicator speaks.

5.2.4.3 Prior to disconnecting from the TRS operator, advise the caller that they may contact our department directly in the future by dialing 9-1-1.

5.3 Disconnected Calls

5.3.1 If, during the course of receiving an emergency call the call is disconnected, the telecommunicator shall implement established call-back procedures.

Comment: *If the telecommunicator has already established contact with the TTY/TDD caller but loses the connection, the telecommunicator shall immediately request that emergency services be dispatched to the location (if they have not already) and shall attempt to call the TTY/TDD caller back by using the TTY/TDD equipment.*

5.4 TTY/TDD Etiquette - Telecommunicators shall use proper TTY/TDD etiquette/protocol while communicating using a TTY/TDD. Proper etiquette or protocol is as follows:

5.4.1 It is extremely important to type the term GA when you are through with your statement and want a response from the person on the other end of the line. The term GA means go ahead, it's your turn to talk.

5.4.2 Tone of voice is not transmitted on a TTY/TDD, so it is necessary to type the letter Q (or QQ) when asking a question (plus GA to request a response).

5.4.3 When getting ready to end the conversation, a caller may type GASK, which means I am through, do you have anything else to say?

5.4.4 SKSK means, bye, I am hanging up now. Telecommunicators shall stay on the line with the TTY/TDD caller as long as it is safe for the caller to do so. If it becomes unsafe for the caller to stay on the line ask them to lay the receiver down and exit the area/building.

6 References

Generally, the reference section of a document will be located at or near the end of the document, and will probably not be section 3 as it is in this Template. It will list all documents or other media used in development of this NENA Standard. Some NENA Standard documents will also include an Exhibits Section, which will come after the References Section if applicable. And some NENA Standard documents will contain an Appendix Section, which would come last if applicable

7 Exhibits

Exhibit A. Pre-programmed statements.

Standard English	**American Sign Language**
911 WHERE DO YOU NEED HELP Q GA	911 HERE PROBLEM WHERE Q GA
WHAT IS YOUR PHONE NUMBER Q GA	UR PH NBR Q GA
WHAT YOUR EMERGENCY Q GA	PROBLEM WHAT Q GA
WHAT IS YOUR ADDRESS Q GA	LIVE U WHERE Q GA