Discussion Guide

Next Generation 9-1-1 Systems: Impact on the Deaf Community

Focus Group with NTID Community

Date: April 4, 2011
Time: 12:00-1:00pm
Location: NTID SDC–1310

I. Introduction

A. Welcome and introductions by E. William Clymer, James J. DeCaro, and Gary Behm
B. Describe purpose and outcomes including grant from Cisco
C. Remind participants of communication guidelines

Note: Department of Justice, Civil Rights Division is seeking public comment with regard to title II of the Americans with Disabilities Act (ADA) “to address in what manner public entities that operate 9-1-1 call-taking centers (also known as Public Safety Answering Points (PSAPs)) should be required to make changes in telecommunication technology.” Many of the questions and background information in this guide were obtained directly from the Department of Justice, Civil Rights Division Website.

http://www.ada.gov/anprm2010/nextgen_9-1-1%20anprm_2010.htm

II. Direct, Equal Access to NG 9-1-1

A. What modes of communication (e.g., voice, text, video, or data) do (or will) deaf and hard-of-hearing individuals use to make direct calls to a PSAP, and from what types of devices (e.g., cell phones, internet) would the calls be made?
a. Text communications

IP allows several formats of text communications, divided into two types: real-time, and non-real-time. Real-time text communications refer to those that are sent and received on a character-by-character basis; the characters are sent immediately once typed and also displayed immediately to the receiving person. In an emergency, sending text communications to a PSAP in real-time may save valuable time that is needed to effectively respond to the emergency. Non-real-time communications rely on messaging capabilities where users “type-enter-wait-read-respond-reply”—e.g., short messages service (SMS) texts, multimedia messaging service (MMS), instant messaging (IM), text chat, and email. When this type of messaging is used, messages can overlap one another. In an emergency, this could result in the caller or PSAP personnel responding to each other out of the order in which their communications were sent, creating some confusion or delay. The agenda for the FCC’s National Broadband Plan states that this year, the FCC will open a proceeding to identify a reliable, interoperable, real-time text standard to enable consumers to communicate in a digital and IP-based environment. Broadband Action Agenda, http://www.broadband.gov/plan/national-broadband-plan-action-agenda.pdf at 4.10 (last visited July 12, 2010).[10]

Currently, telephone 9-1-1 technologies support TTYs, which provide text communications in an analog environment. Using IP-based devices, PSAPs would require a text gateway in order to converse with individuals using analog-based devices.

1. Should there be a requirement for NG 9-1-1 technologies to support text communications along with analog-based TTY communications? If so, should NG 9-1-1 text technologies be backward compatible with analog-based TTYs or should the two communication methods be available side-by-side?

2. Which, if any, of the following text options should be designated as essential accessibility features of NG 9-1-1 to be incorporated into the initial deployment of an NG 9-1-1 system to assure access to emergency call-taking centers for deaf and hard-of-hearing individuals?
   i. Real-time text
   ii. Short message service (SMS)
   iii. Instant messaging (IM)
   iv. Email
   v. Analog gateway
   vi. Other modes of text communication

The Department recognizes that all of these text options will benefit not only individuals who are deaf or hard of hearing, but also individuals with other disabilities who require an alternative mean to making a voiced 9-1-1 call due to their disabilities. The Department recognizes that a State or local government’s NG 9-1-1 system may eventually provide all of these options in the future. However, the Department is interested in learning how each of the options would benefit individuals with
disabilities in order to determine whether they should be designated as "essential" to providing access to NG 9-1-1.

Individuals with disabilities are increasingly using smart phones since they are currently the only accessible mobile devices available for text messaging (e.g., email, SMS, or IM). Until NG 9-1-1 services are implemented, PSAPs will not be able to receive text messages sent directly to 9-1-1 from these devices.

3. **For this period, should a PSAP develop and implement an interim plan to receive text messages directly or via a third party? How should a PSAP develop an interim plan? What solutions should PSAPs consider as part of their interim plan?**

4. **Are there significant issues related to the interoperability of messages sent by text that need to be addressed in an final regulation?**

b. **Video**

A technology that has emerged since publication of the original title II rule allows individuals who use sign language to communicate by video. An individual who communicates by American Sign Language (ASL) may use a videophone or other video device (e.g., a web cam connector to a computer) to directly communicate in sign language with either another videophone user or a voice telephone user. In the latter case, videophones can be used to make TRS calls (Video Relay Service) or to use remote sign language interpreting services (video remote interpreting or VRI) when an in-person interpreter is not available. VRI is generally a fee-based service. NG 9-1-1 technologies will allow video phone users to make direct video calls to a PSAP and allow the callers and the emergency personnel to engage in virtual face-to-face communication.

The Department is seeking comments on what steps a PSAP, in providing video services, should take to ensure effective communication with a 9-1-1 caller who uses sign language for communication. One possible method of communication for handling a direct video-to-video call between the individual with disabilities and the PSAP would be through the use of VRI. Upon receipt of a request for sign language services, the PSAP would make a call to a VRI service center and connect the interpreter so that the interpreter appears on both the caller’s and PSAP’s video phone screens. The call would then become a 3-way video call between the caller and PSAP, both using the interpreter. The PSAP would see both the interpreter and caller on the PSAP’s screen, and both the interpreter and the caller would see each other on their screens. Using this method, the PSAP would have the ability to "conference in" (virtually instantaneously) a qualified interpreter (in-house or in a remote facility)

1. **In implementing NG 9-1-1, should title II be amended to require PSAP to provide VRI service? If so, how would you suggest it be regulated?**
With NG 9-1-1, call routing allows the sharing of networks to route calls for multiple numbers (e.g., 2-1-1, 3-1-1, 8-1-1, suicide hotline, poison control). Also, NG 9-1-1 enables call access, transfer, and backup between and among 9-1-1 call-taking centers and between these centers and specialized emergency services.

2. **Should a center also be allowed to transfer a caller’s call to a particular center where call takers are trained and fluent in oral/sign language interpreting services or where call takers are trained in working with individuals with speech impairments?**

The title II rule requires that when an oral or sign language interpreter is necessary for effective communication, the interpreter must be "qualified." The rule has defined "qualified interpreter" as "an interpreter who is able to interpret effectively, accurately, and impartially both receptively and expressively, using any necessary specialized vocabulary." 28 CFR 35.104. Although the definition does not require "certified" interpreters, it does require interpreters with the necessary skills to interpret accurately in the particular context.

3. **In the context of NG 9-1-1, should PSAPs only use interpreters who are specifically trained to handle emergency calls in using interpreting services on-site or via VRI?**

One problem with VRS and IP-Relay companies is that they use the street address that is provided by the customer at the time the 10-digit number is assigned to route a call to the proper PSAP. It is the responsibility of the customer to update the 9-1-1 location database every time he/she has a change of address. Additionally, if a customer uses a mobile device away from his/her home, the fixed address will always be incorrect. The mobile caller has to tell the VRS and IP-Relay operator the correct location. In many cases, the caller may not know where she/he is located (e.g., dark rural road). This problem exists for only deaf VRS or IP-Relay callers, and not hearing 9-1-1 callers using this same or similar mobile device.

4. **How do we ensure that VRS and IP-Relay Companies are relaying to PSAPs callers accurate street addresses?**

III. **Performance Standards**

The Department is aware of ongoing efforts by both the National Emergency Number Association (NENA) and the Association of Public-Safety Communications Officials International to develop technical standards for guidance to service providers, equipment manufacturers, and industry-related standard setting bodies. The Department has used the performance standard of "direct access" for PSAPs in enforcing title II.
Consistent with the Department’s existing approach, the Department is considering the use of performance standards, as opposed to technical standards, as new title II requirements for access to NG 9-1-1. Two primary considerations support this approach. First, in light of evolving 9-1-1 technologies, it may not be feasible to have identical scoping and technical specifications nationwide to ensure disability access to NG 9-1-1. Second, performance standards would contain flexibility to allow operational standards, protocols, and best practices to be adopted and implemented to meet unique State and local circumstances and needs.

A. Should any regulatory provision on NG 9-1-1 requirements under title II be performance-based, or should a final rule provide technical specifications for call-taking technology and equipment?

B. What are the technical issues that should be addressed in developing minimum standards?

NENA, a leading professional, nonprofit organization on 9-1-1 services, has actively worked with public safety, industry, and government groups, to develop technical and operational standards for NG 9-1-1 systems and services.

C. Should NENA’s standards be the minimum standards for direct access to NG 9-1-1 services for individuals with disabilities?

IV. RIT/NTID’s Role in NG 9-1-1

Many deaf individuals are not aware of the appropriate resources related to 9-1-1 procedures. Many, particularly the younger generations, have not even given it much thought and view TTYs as last century technology. The procedures on how to contact 9-1-1, taking into consideration various situations and technologies, are not sufficiently communicated to the deaf community.

A. Given current activity related to 911, where should RIT/NTID focus its influence on impending policy?

B. Is there the opportunity for RIT/NTID to develop “Best Practices” with regard to emergency communication systems that could be distributed to other universities throughout the country that serve deaf and hard-of-hearing individuals?

V. Additional Comments and Conclusions

A. Are there any additional issues or concerns that you feel have not been addressed?
B. Would you be interested in participating in the national conference that is scheduled for May 2011?