

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
IP-Enabled Services	)	WC Docket No. 04-36
	)	
Implementation of Sections 255 and 251(a)(2) of	)	WT Docket No. 96-198
The Communications Act of 1934, as Enacted by	)	
The Telecommunications Act of 1996: Access to	)	
Telecommunications Services, Telecommunications	)	
Equipment and Customer Premises Equipment by	)	
Persons with Disabilities	)	
Speech-to-Speech Services for	)	
Individuals with Hearing and Speech Disabilities	)	
	)	
Telecommunications Relay Services and Speech-	)	CG Docket No. 03-123
to-Speech Services for Individuals with Hearing	)	
and Speech Disabilities	)	
	)	
The Use of N11 Codes and Other Abbreviated	)	CC Docket No. 92-105
Dialing Arrangements	)	
	)	

**Reply Comments and Petition for Rulemaking of  
Telecommunications for the Deaf and Hard of Hearing, Inc.;**  
**Association of Late-Deafened Adults, Inc.;**  
**National Association of the Deaf;**  
**Deaf and Hard of Hearing Consumer Advocacy Network;**  
**California Coalition of Agencies Serving the Deaf and Hard of Hearing;**  
**American Association of the Deaf-Blind; and**  
**Hearing Loss Association of America**

Telecommunications for the Deaf and Hard of Hearing, Inc. (“TDI”), through its undersigned counsel, Association of Late-Deafened Adults, Inc. (“ALDA”), National Association of the Deaf (“NAD”), Deaf and Hard of Hearing Consumer Advocacy Network (“DHHCAN”), California Coalition of Agencies Serving the Deaf and Hard of Hearing (“CCASDHH”), American Association of the Deaf-Blind (“AADB”), and Hearing Loss Association of America (“HLAA”) (collectively, the “Consumer Groups”), hereby respectfully submit these comments in response to the Federal

Communications Commission's ("FCC" or "Commission") Order and Public Notice Seeking Comment ("*Public Notice*") in the above-referenced proceeding.<sup>1</sup>

Through various proceedings and orders, the FCC has been working to ensure that deaf and hard of hearing individuals have vital and potentially life saving access to emergency responders and the Consumer Groups applaud those efforts. As part of that ongoing effort and this proceeding, the FCC has inquired about the needs of deaf and hard of hearing individuals who are subscribers to interconnected VoIP telephone services. Specifically, the FCC has asked for information about the needs of TTY users who also use interconnected VoIP, and whether there is a need to automatically connect to the public safety answering point ("PSAP") emergency calls that are dialed using 711, or whether consumers could instead dial 911 directly.<sup>2</sup>

As noted previously by the Coalition of Organizations for Accessible Technology (COAT), Consumer Groups have concerns about waivers that could postpone the ability of people who are deaf or hard of hearing to access 9-1-1 services through the appropriate PSAP, either directly or when using telecommunications relay services ("TRS").<sup>3</sup> People with disabilities must have the same access to emergency services as any person without disabilities, whether they call PSAPs directly, or opt to use one of the many forms of TRS that the Commission has approved, including access to traditional TRS through 711 dialing. This principle must be at the forefront of any action the Commission takes in this and future proceedings.

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<sup>1</sup> *In the Matters of IP-Enhanced Services; Implementation of Sections 255 and 251(a)(2) of the Communications Act of 1934, as enacted by the Telecommunications Act of 1996: Access to Telecommunications Service, Telecommunications Equipment and Customer Premises Equipment by Persons with Disabilities; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Use of N11 Codes and Other Abbreviated Dialing Arrangements*, Order and Public Notice Seeking Comments, FCC 09-749 (April 1, 2009) ("*Public Notice*").

<sup>2</sup> *Id.* at ¶ 14. Even if not automatically connected to the PSAP, emergency 711 calls would still be manually connected to the PSAP.

<sup>3</sup> See Reply Comments of COAT in Response to the Request for a Limited Waiver to Comply with the TRS Provider Obligations (filed December 17, 2007).

This proceeding extended the TRS obligations under Section 225 of the Communications Act to interconnected VoIP services because these “services are increasingly used to replace analog voice service and because consumers reasonably perceive them as substitutes for analog voice service.”<sup>4</sup> There can be no question that consumers who rely on TTYs (either over the PSTN or through an interconnected VoIP service) as their primary mode of telephone communication (either directly or via TRS) must be supported.

Based on the knowledge and information available to the Consumer Groups, there appears to be a relatively small number of TTY users who also utilize an interconnected VoIP service. However, as VoIP services become more available and affordable as part of Internet, cable, and other service packages offered to households and work places, Consumer Groups anticipate that the number of TTY users who utilize an interconnected VoIP service will continue to increase. Nevertheless, deaf or hard of hearing individuals with broadband Internet connections may be more likely to use Internet-based relay services, such as IP text relay (“IP Relay”) or a Video Relay Service (“VRS”), rather than TTYs and traditional TRS to contact emergency assistance.

However, deaf, deaf-blind and hard of hearing consumers who wish to contact 9-1-1 directly currently have no direct 9-1-1 access through an Internet-based communications system other than through the use of a TTY operating through a VoIP system. Therefore, in households and workplaces that have VoIP services, it should be expected that deaf and hard of hearing consumers will continue to use their TTYs to access 9-1-1 services directly and, though to a lesser degree, through 711 TRS. This is particularly true because in an emergency, especially when there is a power outage, emergency 9-1-1 services can be reached through TTYs with battery back-ups and interconnected

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<sup>4</sup> *In the Matters of IP-Enabled Services, Implementation of Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996: Access to Telecommunications Service, Telecommunications Equipment and Customer Premises Equipment by Persons with Disabilities; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; The Use of N11 Codes and Other Abbreviated Dialing Arrangements*, Report and Order, WC Dkt No. 04-36, WT Dkt No. 96-198, CG Dkt No. 03-123, CC Dkt. No. 92-105 (June 15, 2007) (R&O), at ¶ 33.

VoIP systems that continue to function for some period of time following a power outage. As is true for voice telephone users, these individuals will perceive no distinguishable difference between their former PSTN and current VoIP service, and therefore have every expectation that when they place a call to 9-1-1 or 711 TRS over VoIP, it will work just like it had over the PSTN.

Although direct 9-1-1 communication may be preferred – because it may reduce delays in responding to emergency calls – there are undoubtedly TTY users who will continue to connect to emergency services through 711 TRS for a variety of reasons, including lack of awareness that direct 9-1-1 dialing is possible, or out of the belief that TTY communication will be understood better by a trained TRS Communications Assistant than a PSAP operator. Therefore, Consumer Groups urge the Commission to do what is necessary to ensure that all consumers, including deaf, deaf-blind and hard of hearing individuals who use TTYs over interconnected VoIP and 711 TRS, are able to reach the appropriate PSAP in as timely a manner as is feasible.

If the Commission determines that it would be an inefficient use of resources to require TRS providers to substantially change or alter their platforms in order to accommodate automatic routing of 711 emergency calls from TTYs used over interconnected VoIP services, at a minimum, the Consumer Groups request that the Commission take the following actions:

1. Continue to require TRS providers to ensure that 711 emergency calls dialed from TTYs connected to VoIP be manually connected as efficiently as possible to the appropriate PSAP.<sup>5</sup>
2. Require TRS providers to administer educational efforts to encourage TTY users to “dial 911,” rather than 711, in an emergency because dialing 911 will result in the call being automatically connected to the appropriate PSAP.

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<sup>5</sup> *In the Matters of IP-Enabled Services, Implementation of Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996: Access to Telecommunications Service, Telecommunications Equipment and Customer Premises Equipment by Persons with Disabilities; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; The Use of N11 Codes and Other Abbreviated Dialing Arrangements*, Order, WC Dkt No. 04-36, WT Dkt No. 96-198, CG Dkt No. 03-123, CC Dkt. No. 92-105 (April 4, 2008), at ¶ 17.

3. Initiate a rulemaking proceeding to develop a real-time text standard for use by the large and growing population using IP and other networks. Transmitting TTY tones over the Internet has significant drawbacks, often leaving users with conversations that are garbled or missing information.<sup>6</sup> Consumer Groups believe that it is high time that the Commission take significant and comprehensive steps to enable the use of real-time text technology to enhance communication during emergency situations by people who are deaf or hard of hearing or who have a speech disability. Such technology would be capable of both transporting conversational text natively as data (rather than tones) over IP networks, and one that enables the provision of gateways at the edges of those networks to allow for interoperable and reliable connections by TTY users (until such time as TTYs may be phased out entirely). This type of system would allow text communications to be sent directly to PSAPs as part of the next generation 9-1-1 system.

The key benefit to real-time text delivery is that each letter or keystroke of the message would be sent to the PSAP operator, and vice versa, as the message is being typed, similar to what occurs when using a TTY, but without the need for regimented turn-taking that is characteristic of the half-duplex mode by which TTYs still operate. There are considerable benefits to having the PSAP operator see exactly what the caller is typing as he or she is typing it, as compared to receiving “type and send text” typical of IM, chat, and pager transmissions. For example, an emergency communication may begin when the caller is still capable of typing a few words, but may be interrupted if the caller is experiencing a medical emergency, such as a heart attack or stroke or has been in an accident. In that situation, even if the caller would not have had sufficient time to press the “send” key, the PSAP operator may have received enough information from the initial keystrokes of the caller to send out the appropriate emergency assistance. In other situations, if a person is reporting a suspected home intrusion or robbery, they may only be able to send a few urgent words

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<sup>6</sup> TTY tones must be converted to electrically represented sound, then into digital form that is transmitted, and then converted back into electrical representation of sound, and then back into tones at the receiving end. This process can result in garbled or missing text.

requesting assistance. Also, if the user loses a wireless signal or loses control of the telephone or messaging device while writing the message, the ability to send real-time text would ensure that at least part of the message would be received by the PSAP. On the other hand, without real-time text messaging, if the caller never has a chance to hit the “send” button, the PSAP will not even receive a partial message. In this manner, real-time text messaging would greatly improve emergency response communications for people who are deaf, deaf-blind or hard of hearing or who have a speech disability, as well as for all other people who may be using text messaging to place an emergency call.

### **Conclusion**

The Consumer Groups emphasize the need to require emergency 711 calls placed from a TTY over an interconnected VoIP service to be rapidly connected to the appropriate PSAP. If the Commission determines that mandating an automatic connection would be an inefficient use of resources, the Commission must take other steps to ensure that such calls will be manually connected as efficiently as possible to the appropriate PSAP, ensure continued efforts to educate TTY users of interconnected VoIP services about the availability of 9-1-1 direct dialing, and initiate a rulemaking proceeding for the development of a real-time text standard in the IP environment for emergency communications.

Respectfully submitted,

/s/Tamar E. Finn

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