FEDERAL COMMUNICATIONS COMMISSION

**Misuse of Internet Protocol (IP) Captioned Telephone Service; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities**

CG Docket Nos. 13-24 and 03-123

Comment Submitted By: Ms. Elisabeth Ulmer
eulmer@law.villanova.edu, elisabeth.ulmer@gmail.com

Comment Submitted Electronically on November 18, 2013

Comment Submitted To:
Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th St. SW
Washington, D.C. 20554

fcc@bcpiweb.com

## I. Introduction

I am a third year law student at Villanova University and am commenting in response to the Notice of Proposed Rulemaking that appeared in the Federal Register on September 3, 2013.[1] I am deaf in one ear and have a moderate hearing loss in the other. Although I have never used a captioned telephone service, I am interested in this proposed regulation regarding Internet Protocol (IP) Captioned Telephone Service because I will likely need to use this kind of service in the future.

I welcome the opportunity to comment on this important issue and I applaud the efforts of the FCC in creating access to telecommunications services for those who are hearing or speech-impaired. These efforts will be instrumental in ensuring access to "functionally equivalent" telecommunications services for millions of Americans with hearing and/or speech impairments.

The following Comment first discusses the option of making "captions-on" the default setting for 911 calls and recommends that the FCC extend this setting not only to 911 calls but also to all IP CTS calls. This Comment then suggests that the FCC can use registration and more consumer warnings, such as on websites and on IP CTS phones themselves, to reduce IP CTS use by persons who do not legitimately need this service. Such strategies would better reflect the

[1] FCC, *Misuse of Internet Protocol (IP) Captioned Telephone Service; Telecommunications Relay Services and Speech-to-Speech Services for Individuals With Hearing and Speech Disabilities*, FEDERAL REGISTER, Sept. 3, 2013, https://federalregister.gov/a/2013-21273.

purpose of legislation that mandates access to "functionally equivalent" services and equipment for hearing and speech-impaired individuals.

In Section II, I explain the purpose of Title IV of the Americans with Disabilities Act (hereinafter the "ADA") and Section 225 of the Communications Act of 1934 (hereinafter the "Act of 1934") with respect to access to "functionally equivalent" services and equipment. I then describe Telecommunications Relay Services (hereinafter "TRS") generally and introduce the concerns about default caption settings and their relation to fraud and 911 calls. In Section III, I describe the challenges of calling 911 and the existing but not yet widespread solution of NextGen 911 technology. In Section IV, I analyze the pros and cons of a default captions-on setting for 911 calls. Finally, in Section V, I extend my argument for default captions-on for 911 calls to all calls and suggest that monitoring proper IP CTS use through registration and consumer education would be more in line with the purpose of the aforementioned legislation mandating "functionally equivalent" services for hearing and speech-impaired individuals.

## II. Background

Under Title IV of the ADA, hearing or speech-impaired individuals must have access to "functionally equivalent" telecommunications services.[2] Title IV also added Section 225 to the Act of 1934, which mandates "accessible telecommunications equipment and services."[3] Section 225 specifically requires the FCC "to ensure that interstate and intrastate telecommunications relay services are available, to the extent possible and in the most efficient manner, to hearing-impaired and speech-impaired individuals in the United States."[4]

TRS users include people who have difficulty hearing or speaking on the phone, people whose speech is difficult to understand, and people who use sign language.[5] Several types of relay systems exist, but all of them involve a communications assistant who acts as a go-between for the parties.[6] The communications assistant can convert spoken words into text for a hearing-impaired caller or can read a message from a speech-impaired caller.[7] With IP CTS, speech recognition technology transcribes the communications assistant's words into captions that the hearing-impaired caller can then read on a computer or other web-enabled device.[8]

---

[2] *Americans with Disabilities Act*, 42 U.S.C. §§ 12101-12213 (2000).
[3] *Communications Act*, NATIONAL ASSOCIATION OF THE DEAF, http://www.nad.org/issues/civil-rights/communications-act (last visited Oct. 13, 2013).
[4] *Communictions Act of 1934*, http://www.house.gov/legcoun/Comps/FCC_CMD.PDF.
[5] *Consumers' Guide to Telecommunications Relay Service (TRS)*, INFORMATION AND TECHNICAL ASSISTANCE ON THE AMERICANS WITH DISABILITIES ACT, http://www.ada.gov/reachingout/telerelay.html (last visited Oct. 13, 2013).
[6] *Id.*
[7] *Id.*
[8] *IP Captioned Telephone Service*, NATIONAL ASSOCIATION OF THE DEAF, http://www.nad.org/issues/telephone-and-relay-services/relay-services/ip-captioned-telephone-service (last visited Oct. 13, 2013).

People who use IP CTS have two options for turning on captions: 1) Picking up the handset, pushing the captioning button, and then dialing the desired number or 2) Picking up the handset, dialing the number, and then pushing the captions on once the connection has been made. One problem with the first option is that, depending on the phone, if the user pushes the captions button on first, the phone sometimes will not connect and the dial tone will be lost. However, a concern with pushing the captions on once the connection has been made is that the captions do not kick in until after the beginning of the call. As a result, the IP CTS user may miss out on important information, including the identity of the caller.

A significant concern for the FCC is that people who are not hearing or speech-impaired are using telecommunications relay services. Such people have a powerful incentive to do so because the services are free, but their improper use is diminishing the resources of the federal Telecommunications Relay Services Fund that pays for IP CTS and other TRS calls. Additionally, some people are using relay service phones to commit fraud by capitalizing on the appearance of credibility.[9] Because communications assistants are not allowed to reveal the origin of calls and because the ADA legally requires that relay service providers transmit all calls and that recipients take them, these relay services are popular among scammers.[10]

Furthermore, because people can use TRS phones with or without captions, it means that people may use the same phone in a household or workplace, regardless of whether they use the relay service. Consequently, some people who were neither hearing nor speech-impaired had been using the service by accident, either because they had forgotten to turn the captions off or because they did not know that the phone was an IP CTS phone. Accordingly, because the FCC decided to change the default setting to captions-off, hearing and speech-impaired individuals must "take an affirmative step" to turn on IP CTS captions.[11]

One of the points that the FCC addresses in its proposed regulation is that this default captions-off setting requirement can interfere with 911 calls. Opponents of this setting argue that when attempting to place an emergency 911 call, individuals, such as seniors, with hearing or speech impairments may not remember or may find it difficult to turn on IP CTS captions quickly.[12] In its proposed regulation, the FCC is seeking comment on whether a valuable and

---

[9] Samar Srivastava, *When Criminals Come Calling*, INC., http://www.inc.com/articles/2007/03/scams.html (last updated March 28, 2007).

[10] David Hayden, *Do Not Fall for These Scams*, THE MANAGER'S OFFICE, June 6, 2011, http://www.themanagersoffice.com/do-not-fall-for-these-scams/2011/06/06/.

[11] *FCC Takes Steps to Protect IP-Based Captioned Telephone Service*, FEDERAL COMUNNICATIONS COMMISSION, Jan. 25, 2913, http://www.fcc.gov/document/fcc-takes-steps-protect-ip-based-captioned-telephone-service.

[12] *Hearing Loss Association of America's Comments on Internet Protocol Captioned Telephone Services*, HEARING LOSS ASSOCIATION OF AMERICA, Feb. 27, 2013, http://www.hearingloss.org/sites/default/files/docs/HLAA_Comments_IP_CTS_NPRM.pdf.

workable alternative would be to have a default captions-on override that would be applied only to 911 calls.[13]

## III. Challenges of Calling 911 and the Solution of NextGen Technology

Former FCC Chairman Julius Genachowski said, "It's hard to imagine that airlines can send text messages if your flight is delayed, but you can't send a text message to 9-1-1 in an emergency."[14] People with hearing or speech impairments have a difficult time calling 911 without the ability to text. Although 911 call centers can respond to teletypewriter (hereinafter "TTY") calls, not everyone carries around a portable TTY in the car. For now, the only options for the deaf or hard-of-hearing are to have a friend call 911 for them or to tell the 911 call center that although they cannot hear, they will give them the essential information that they need to respond to the emergency.

Nevertheless, several snags could occur if the 911 caller is forced to rely solely on this type of one-way communication. First, the 911 call center may have a difficult time hearing the 911 caller. If the 911 caller is on a cell phone, the service may not be very good. Even if the 911 call center is aware of the need to speak up with a person who is hard-of-hearing, the poor cell phone service alone may prevent the 911 call center from being able to communicate that the relevant information should be repeated. Also, without the 911 call center being able to confirm the location or other necessary information, this information may be incorrect. Even if the 911 caller repeats it multiple times, the 911 call center still may not be able to confirm. Second, the 911 caller may not know exactly where he or she is or may be too disoriented to relay the proper information. Thus, back and forth communication, particularly during an emergency, is essential, particularly if the 911 call center needs to ask the caller questions to ascertain the location or the specific nature and level of urgency of the emergency.

Unfortunately, the 911 systems in the United States continue to be "based on last century telephone-centric technology."[15] A public-safety answering point (hereinafter "PSAP") is a call center that is responsible for answering 911 calls.[16] Even if carrier networks could support texts to 911, most call centers currently lack the technology to accept them.[17] Next Generation 911 means that PSAPs will soon be able to take texts or video relay calls from 911 deaf or hard-of-

---

[13] FCC, *Misuse of Internet Protocol (IP) Captioned Telephone Service; Telecommunications Relay Services and Speech-to-Speech Services for Individuals With Hearing and Speech Disabilities*, FEDERAL REGISTER, Sept. 3, 2013, https://federalregister.gov/a/2013-21273.
[14] *Next Generation 9-1-1*, HEARING LOSS ASSOCIATION OF AMERICA, Aug. 19, 2011, http://www.hearingloss.org/content/911.
[15] *Little By Little, 911 Centers Receive Emergency Texts*, NPR, July 1, 2013, 4:00 A.M. http://www.npr.org/2013/07/01/197525605/little-by-little-911-centers-receive-emergency-texts.
[16] *Next Generation 9-1-1*, RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION, http://www.its.dot.gov/ng911/index.htm (last visited Nov. 8, 2013).
[17] *Little By Little, 911 Centers Receive Emergency Texts*, NPR, July 1, 2013, 4:00 A.M. http://www.npr.org/2013/07/01/197525605/little-by-little-911-centers-receive-emergency-texts.

hearing callers.[18] This system is still in progress, however, and is only currently available statewide in Iowa, Maine, and Vermont, as well as in certain counties in Maryland, New York, North Carolina, Ohio, Pennsylvania, Texas, and Virginia.[19] As the latest city to take on such an initiative, Denver recently created a **special number** that any deaf or hard-of-hearing Denver resident can text to be connected to a Denver 911 call center and receive emergency assistance.[20]

## IV. Pros and Cons of Default Captions-On for 911 Calls

Although the NextGen technology is a promising alternative, because it will not be available nationwide for at least a few years, we must examine how to provide hearing and speech-impaired people access to 911 services now. Although it seems that the default captions-off requirement is hurting people who need the IP CTS service more than it is protecting the service from people who do not need it, I do understand that the FCC implemented this requirement because of concerns about improper use.

Nonetheless, until the NextGen technology can be widely used with IP CTS, I believe that there should be, at the very least, a default captions-on requirement for 911 calls. In an emergency, it should be as simple as possible to get the assistance required. Adding an extra step of turning on IP CTS captions is not conducive to this goal. Even if it is not difficult to turn on the captions, consider the typical panicked atmosphere of emergencies. Under such conditions, it would be more likely that the person in need of assistance would either forget to or would make a mistake in turning on the captions. When the person in need is a senior citizen, this likelihood rises because "[s]cience has shown that aging decreases mental efficiency and memory decline is the number one cognitive complaint of older adults."[21] Many people who require the use of TRS technology are senior citizens whose hearing has worsened later in life.[22]

Certainly, some IP CTS users may in fact rather not have default captions on for IP CTS. In an emergency situation, they could prefer to have a direct, quick connection to 911 services. Because the use of IP CTS captions can mean that a call will take longer, it might be advantageous not to have captions and instead simply give the 911 call center the necessary

---

[18] *Next Generation 9-1-1*, RESEARCH AND INNOVATIVE TECHNOLOGY ADMINISTRATION, http://www.its.dot.gov/ng911/index.htm (last visited Nov. 8, 2013).
[19] *Text-to-911 Deployments*, FEDERAL COMMUNICATIONS COMMISSION, Oct. 29, 2013, http://transition.fcc.gov/cgb/text-to-911-deployments.pdf.
[20] *Text-to-911 Service Available for Deaf and Hard of Hearing in Denver*, JAYHAWKEDITOR, Nov. 8, 2013, http://jayhawkeditor.com/2013/11/08/text-to-911-service-available-for-deaf-and-hard-of-hearing-in-denver/.
[21] *Boomers, Seniors Vastly Improve Memory, Brain Function, Physical Fitness with Aerobic Exercise*, SENIOR JOURNAL, Nov. 12, 2013, http://seniorjournal.com/NEWS/Aging/2013/20131112_Boomers_Seniors_Vastly_Improve_Memory.htm.
[22] *Programmatic Access Bulletin: Telecommunications Relay Services*, SAN FRANCISCO MAYOR'S OFFICE ON DISABILITY, http://www.sfgov2.org/ftp/uploadedfiles/mod/programmatic/access_bulletins/RelayServicesFinal.doc (last visited Nov. 14, 2013).

information and let them know that you will not be able to hear them well. If the 911 caller knows exactly where s/he is located and is in fact able to relay the pertinent information without the 911 call center needing clarification, it might indeed be better not to have the captions turned on. Accordingly, it would be wise to give consumers the option of overriding a default captions-on setting for outgoing emergency calls, but the default setting for all calls in general should still be captions-on.

## V. Switching Back to Default-On Captions

In Section IV above, I argued in favor of a default captions-on setting for 911 calls for a variety of reasons. For instance, 911 call centers may not be able to respond to emergency calls from the deaf and hard-of-hearing if these callers do not have easy access to captions. 911 callers may be too panicked to remember to turn on the captions. Furthermore, if those who are deaf and hard-of-hearing have been using the IP CTS service for a number of years with the default captions-on setting, they are more likely to be confused about the change or to have forgotten it. Accordingly, they are even less likely to remember to turn the captions on manually.

Many of these arguments also support a general argument that captions-on should be the default setting for all IP CTS calls, regardless of whether they are 911-related. The impetus behind many of my arguments with respect to default captions-on for 911 calls focused on the emergency nature of such calls. However, I would like to return to the meaning of Title IV of the ADA and Section 225 of the Act of 1934. These pieces of legislation mandate that hearing or speech-impaired individuals must have access to "functionally equivalent" telecommunications equipment and services, and I do not believe that the FCC's default captions-off setting fulfills these requirements for the following reasons.

First, adding an extra step of turning on IP CTS captions does not seem to be in the nature of giving deaf and hard-of-hearing consumers the ability to communicate on incoming calls in a manner that is "functionally equivalent" to the ability of a hearing individual. If people miss part of an important conversation because they now have to remember to turn on the captions that have been defaulted to "on" for many years, it would not meet this "functionally equivalent" requirement. Second, someone who is using the service for the first time may expect captions to be on because of the target audience of telecommunications relay services, and that person may miss part of the conversation during the first few calls until s/he grows used to it. Third, having captions defaulted to "on" for incoming calls and to "off" for outgoing calls, as Ultratec suggests in its Comment, would indeed be even more confusing because people would have to remember which is which.

To answer the FCC's query, it would accordingly be better for the FCC to leave the setting as default captions-on in general and to find another way to reduce use, whether for innocent or fraudulent purposes, by persons who do not have a hearing or speech impairment, such as through user registration and large warnings on websites and in brochures. The ultimate goal of IP CTS and related services is "functionally equivalent" service, and requiring people to take the extra step of turning on IP CTS captions does not seem conducive to this end.

A. Fraud Concerns

The concerns about fraud are valid. Because the costs of TRS calls are paid through the TRS Fund and are thus free for consumers, overseas scammers have long been keen on using them to defraud American merchants.[23] Even domestically, scammers target establishments such as restaurants.[24] Scammers "use a computer to simulate the TTY equipment, call a restaurant or business, place an order and provide a credit card number for payment."[25] Then, the caller creates an excuse to overpay and asks for the overcharge to "be returned or wired to the phony courier service."[26] Even if the restaurant or business recognizes the scam in time to avoid wiring the money, it has probably lost precious hours spent on then wasted food or products.[27] Because TRS calls are made through a communications assistant, the calls themselves last longer than normal ones do, which adds to scam concerns.[28]

Scammers target many kinds of businesses. For example, one glass company received a call from a scammer who used a telephone relay service to order $4,000 worth of glass and "requested that the glass company wire payment to a shipper after deducting the amount from the credit card number provided." The glass company did not wire any money to the shipper scammer because it found the real owner of the stolen credit card, but the company had already lost the $4,000 that it had spent on the glass.[29]

As noted in the Background of this Comment, although some businesses have asked TRS providers not to call them, the FCC has said that fraudulent IP relay calls cannot be blocked because of Article 225 in the Act of 1934.[30] Even if TRS operators suspect a scam, they must "relay the call without interfering."[31] Although it is not possible to avoid taking the call, some ways to avoid such scams are to request the caller's U.S. contact telephone number and address, the credit card verification number, and the name of the bank that issued the card.

---

[23] Bob Sullivan, *Con Artists Target Phone System for Deaf*, NBC NEWS, April 20, 2004, http://www.nbcnews.com/ID/4781806#.UnilPygeZgt.
[24] Thomas C. Weiss, *Service for Hearing Impaired Scam Affects Businesses*, DISABLED WORLD, Aug. 3, 2009, http://www.disabled-world.com/editorials/tty-scam.php (last updated: April 7, 2011).
[25] *Id.*
[26] *Id.*
[27] *Id.*
[28] David Hayden, *Do Not Fall for These Scams*, THE MANAGER'S OFFICE, June 6, 2011, http://www.themanagersoffice.com/do-not-fall-for-these-scams/2011/06/06/.
[29] *BBB Warns Small Business Owners to Beware of Telephone Relay Fraud*, BETTER BUSNIESS BUREAU NEWS CENTER, April 7, 2009, http://www.bbb.org/us/article/bbb-warns-small-business-owners-to-beware-of-telephone-relay-fraud-9867.
[30] *FCC Says IP Relay Scam Calls Can't Be Blocked*, The Body Shop Business, June 24, 2009. http://www.bodyshopbusiness.com/Article/59257/fcc_says_ip_relay_scam_calls_cant_be_blocked.aspx.
[31] Bob Sullivan, *Con Artists Target Phone System for Deaf*, NBC NEWS, April 20, 2004, http://www.nbcnews.com/ID/4781806#.UnilPygeZgt.

As recently as two months ago, the FCC reported a new means of using TRS fraudulently, where scammers have called IP CTS users to inform them that a FCC employee would visit the consumer's home to discuss the consumer's IP CTS phone.[32] This most recent method illustrates that the IP CTS fraud problem is prevalent and ongoing, with scammers constantly inventing new means of effectuating it. Nevertheless, user registration and consumer education are better ways than a default captions-off setting to reduce illegal and inappropriate use because they will help to alleviate this concern without unduly burdening people who legitimately need IP CTS.

B. Registration

I respond positively to the FCC's query of whether "to require each IP CTS provider to give users the capability to register with that provider as the user's 'default provider,' to populate the TRS-URD with information about each user, and to query the database to ensure each user's eligibility for each call." The FCC should apply the same centralized registration and verification process that it adopted for Video Relay Service (hereinafter "VRS") to IP CTS because this user registration database and these eligibility verification requirements would strengthen controls over fraud and inappropriate use. The FCC should, however, make sure that this registration process is smooth and not too burdensome. For example, the service provider should not take advantage of the user's email address to send daily emails. Otherwise, I believe that the benefits of requiring each IP CTS user to register and self-certify his or her need for the service do outweigh the burden that doing so would place on those with hearing or speech impairments.

C. Consumer Notification and Education

Furthermore, while it probably would not reduce fraud, placing large warnings on websites, in brochures, and on IP CTS phones themselves would cut down on accidental and inappropriate use of IP CTS. As mentioned in the Background of this Comment, some people, such as those who live or work with someone who has an IP CTS phone had accidentally been using this service if they had forgotten to turn the captions off. Others might use an IP CTS phone if it is the nearest phone and they do not realize that the service is paid through a federal fund. Therefore, if the FCC changes the default setting back to captions-on, notifying and educating consumers will become essential.

If people do not understand the purpose of the TRS federal fund, it will not be as clear to them why they should ensure that captions are turned off before they use an IP CTS phone. Thus, I strongly agree with the following proposition from the FCC:

> [A]ll IP CTS provider Web sites, advertising brochures and other advertising and consumer education and informational materials, including provider-supplied literature and user manuals, [should] contain clear and prominently located statements and

[32] *Notice to Caution IP CTS Consumers about Possible Calling Scam*, NORTHERN VIRGINIA RESOURCE CENTER, Sept. 30, 2013, http://www.nvrc.org/2013/09/notice-to-caution-ip-cts-consumers-about-possible-calling-scam/.

information (1) that the captions on captioned telephone service are provided by a live communications assistant who listens to the other party on the line and provides the text on the captioned phone, and (2) that the cost of captioning each Internet protocol captioned telephone call is funded through a federal program.

It would also be beneficial to include specific warnings about the scams that have been perpetuated against restaurants and businesses so that people understand that this concern is real. Furthermore, if the FCC does adopt the default captions-on setting with respect to 911 calls but leaves the general default setting as captions-off, it should include in these general advertising and informational materials a warning about the differences in caption settings.

Particularly because fraud is such a pervasive concern, I also concur with the FCC'S suggestion of requiring that all IP CTS provider websites, advertising brochures, and other advertising and consumer education and informational materials display the following language: "FEDERAL LAW PROHIBITS ANYONE BUT REGISTERED USERS WITH HEARING LOSS FROM USING IP CAPTIONED TELEPHONES WITH THE CAPTIONS TURNED ON." Such a warning would address concerns about both the inappropriate and fraudulent use of IP CTS. An additional way that IP CTS providers may prevent people from buying their products to commit fraud is to have them sign an acknowledgement and agreement before purchase that they will not use the products for fraudulent purposes.

## VI. Conclusion

The potential costs from unauthorized IP CTS use must be weighed against the benefits of allowing hearing and speech-impaired individuals to enjoy unimpeded access to IP CTS technology. In terms of having a default captions-on setting for 911 calls, I believe that the scale tips heavily in favor of the benefits to people who genuinely need this option. I also understand the importance of ensuring that only consumers who need IP CTS actually use it because of the concerns about depleting the TRS fund and reducing fraud. Nevertheless, I believe that the FCC would moat closely follow the dictates of the ADA and Section 225 of the Act of 1934 if it were to restore the general default captions-on setting and to employ registration and consumer education to reduce fraudulent and inappropriate IP CTS use. The likelihood of a default captions-off setting deterring determined scammers is not high enough to outweigh the benefits of a default captions-on setting for the hearing and speech-impaired. Labels on IP CTS phones, as well as other consumer education methods, should aid in reducing accidental use.

I reiterate my appreciation of the FCC's efforts to facilitate access to telecommunications services for those who are hearing or speech-impaired, and I thank the FCC for its consideration of my Comment.

Respectfully Submitted,
Elisabeth Ulmer