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FCC MOVES ON TO ADDRESS TV CAPTION QUALITY

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The image shows a screenshot of the Sprint Relay Store website. The website has a yellow header with the Sprint Relay logo and navigation links: Home, What's New, Relay Services, Relay Store, WebCapTel, 10 Digit Local Number, and Media. A chat bubble in the top right corner says "Chat with VCS". The main content area features a large yellow banner with the text "Sprint Relay Store" and "Data only plan". Below this, there are buttons for "Top Devices", "View products", and "Learn More". A prominent yellow banner across the middle of the website reads "GET A \$100 CREDIT". Two men, Ken Goulston and Art Moore, are standing in front of the website, both giving thumbs up. Ken is on the left and Art is on the right. They are both wearing black polo shirts with the Sprint Relay logo.

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TDI'S MISSION

“TDI provides leadership in achieving equal access to telecommunications, media, and information technologies for deaf and hard of hearing people.”

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Shaping An Accessible World

Board Views



**SHEILA
CONLON-MENTKOWSKI**

*TDI President and
Western TDI Region-Elected
Board Member*

"I almost feel like I need to have my video camera on during the live news/weather broadcast. Recently one captioning error came out as 'buying diapers', which puzzled me until I saw the captioning correction, 'biodiversity'."

Thoughts on Captioning & Quality on Television Broadcasting in my Lifetime

I grew up with TV, from the black and white TV set with three channels, and no remote control, to today's panoply of a huge selection and size of TVs/monitors with an array of remote controls with numerous buttons to push to select the TV program to watch as well as the captions. As a child with a hearing loss I had to rely on family members to tell me what the program was about. I also remember how annoyed I was when I found out that ad space in between the TV shows was called a 'commercial' when my younger hearing sister (by four years) came to the living room to tell me our mother wanted to see me when the commercial came on. Not having heard or seen that word, it dawned on me that my younger sister knew one more long word than I did so that made me read books even more diligently to expand my vocabulary as I sure wasn't growing my vocabulary in my formative years with no captions available. Today, almost everywhere I go, I see captions on TVs from my medical appointment waiting rooms, airport terminals, sports bars and regular bars, my grocery store, and hotels. I have also seen captions on foreign TV screens in Europe so broadcast television captions are obviously proliferating all around the world.

In the USA, at the present time, the FCC is working on consistent captioning standards and best practices in captioning as announced in February 2014. The standards will include accuracy, timeliness, and on screen placement of the captions. Until that is done and the quality caption standards are in place, we will

continue to experience problems such as cutting off the captions prematurely at the end of some programs, delays and lags in transmissions of captions, summaries rather than word for word transmission, errors in real time captioning transmission, and the like.

As I write this, there are elections going on in the USA so we have been seeing a number of political commercials televised daily. Most are not captioned. How do politicians expect deaf, hard of hearing, and deaf blind voters know what their stand is on issues important to us? I have written to politicians in the past that did caption their televised campaign ads to thank them for going the extra mile and including deaf citizens in their campaigns.

When I watch the national and local news, I continue to experience errors in captioning as either the captioner is not familiar with the town, city, or country names that are mentioned in the news or weather broadcasts. While it can be entertaining to see what is typed out, it is annoying to have to endure constant corrections of captioning errors. I almost feel like I need to have my video camera on during the live news/weather broadcasts. Recently one captioning error came out as 'buying diapers', which puzzled me until I saw the captioning correction, 'biodiversity'.

TDI and other organizations of the deaf and hard of hearing are working alongside the FCC, broadcasters, captioners, and others involved in the field to set standards in the accuracy, timeliness, and on-screen placement

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of captions. With pre-programmed broadcasts that are completed ahead of broadcast time, the captions should be in place and error free. With live programming, it is more difficult to have 100% accuracy but with a set of best practices, such as providing the television broadcaster with the vocabulary ahead of time, the caption errors should be greatly reduced. I am reminded of the Olympics, for example, where every four years we have athletes from all over the world, their names may not be familiar to the broadcaster so if athletes' names and their home countries can be given to

the broadcaster ahead of time, this is one example of lessening errors in broadcasting live events.

The FCC Chairman, Tom Wheeler, issued a statement in February 2014 when this FCC Order was first announced. He acknowledged the importance of this captioning proceeding by noting that hearing from a 12 year old girl that developing problem solving skills, talking with her friends, and even learn a new language is dependent on the quality of captioning. He also recalled that Claude Stout at a meeting pointed out that "closed captioning is what allows deaf people to hear." Wheeler went on to say that these stories remind

the FCC and others that "reliable and consistent access to news and information for deaf and hard of hearing communities is a right."

Let's continue to enjoy the captions and work with TDI and other organizations alongside the FCC to improve and enforce the caption quality standards. TDI will provide you with updates and information as this captioning quality process moves forward.

*All for Access,
Sheila Conlon-Mentkowski
President, TDI
Western Region Board Member*

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1-888-225-5322 Voice: toll-free

1-888-835-5322 TTY: toll-free

1-844-432-2275 or 202-810-0444 ASL: via VP

1-866-418-0232 FAX: toll-free

FCC Hours are:

10:00 AM to 5:30 PM Eastern Time

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To write a letter, send to:

Federal Communications Commission

445 12th Street, SW

Washington, DC 20554



More contact information is available at:
<http://www.fcc.gov/contact-us>

Capitol Commentary



BY CLAUDE STOUT
TDI Executive Director

“He came in a year ago with guns blazing, and this really took the world’s attention much to our thrill and delight! Good thing, we have him in this time and age, not during the Wild, Wild West of the 1800’s.”

Here Comes Mr. Wheeler...

A dynamic leader takes the bull by the horns at the Federal Communications Commission

For me in eighteen years at TDI, the best part about working in the nation’s capital is to interact, network, collaborate, and negotiate on a number of policy issues with key authorities in government, industry, consumer advocacy trenches, and academia. A large number of these, , individually and as a group, have a keen sense of commitment and deep appreciation of our access needs in telecommunications, media, and information technology. With deep gratitude to them, we have made a great deal of progress in disability access.

Once in a blue moon, we encounter someone unique who comes across as being special in word, thought, and deed. He/she is in his/her own league, far above from his/her fellow contemporaries, peers, friends, and foes. This person takes very seriously the enormous impact which his/her

position makes for the nation. This person is, who I am proud to call a friend of TDI, Mr. Tom Wheeler, the current Chairman of the Federal Communications Commission. Mr. Wheeler is about to complete his first-year stint at the helm of the Commission at the end of this month.

It is fitting that I write this column about this formidable, dynamic person on the occasion of his first-year anniversary with the Commission. He came in a year ago with guns blazing, and this really took the world’s attention, much to our thrill and delight! Good thing, we have him in this time and age, not during the Wild, Wild West of the 1800’s.

One of his first moves upon assuming his new duties at the Commission was to meet with key leaders of the disability community. In the

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Staff working at Mozzarella pizzeria in San Francisco

CAPITOL COMMENTARY Continued from page 4

inaugural gathering, we recommended that he address three top priorities for us:

- 1.) TV caption quality
- 2.) Relay services
- 3.) Captioning of video clips

In the meeting, he mentioned -t having authored a book on Abraham Lincoln's telegraph messages with his generals during the American Civil War. The book's title is: *Mr. Lincoln's T-Mails: The Untold Story of How Abraham Lincoln Used the Telegraph to Win the Civil War*, (HarperCollins, 2006). I told him TDI got its start in a similar vein, - that in 1968, it was established to publish a national directory of TTY numbers for Americans who are deaf and hard of hearing, and their hearing contacts who have teletypewriters to communicate with each other.

Many years ago, Mr. Wheeler did a commendable thing that others at that time would not dare do. He hired Steven Collins, himself deaf, to work for him as a Computer System Specialist at NuCable. It warms our hearts to know that the Chairman has been a person ahead of his time!

Mr. Wheeler has proven not to be just another steward of the Commission. You would not believe the list of selected accomplishments he and other four fellow Commissioners have produced during his short twelve-month tenure. Here is the list:

1. January 31, 2014: The Commission said that text providers should enable the public to text 911 in an emergency, encouraging providers that have not begun deploying text-to-911 to forge solutions to meet this goal. The Commission also sought further comment on

regulatory proposals to help ensure that Americans will be able to send these texts by December 31, 2014, regardless of which text provider they use, in areas where 911 call centers can receive texts. Chairman Wheeler said, "The unfortunate truth is that, on the whole, PSAPs are not where they should be and need to be on text-to-911. It's been more than a year since the FCC secured a commitment from wireless carriers serving 90 percent of Americans to deploy text-to-911 by 2014. Yet today, only a small fraction of PSAPs are ready to support text-to-911. We've done our part. Now, the PSAPs must do theirs."

2. February 20, 2014: The Commission unanimously approved new, more comprehensive rules for TV closed captioning to ensure that viewers who are deaf and hard of hearing have full access to programming. It resolves decade-long concerns from deaf and hard of hearing communities to improve captioning quality and provides much needed guidance to television programming distributors and programmers. Specifically, the Order adopts quality standards for accuracy, synchronicity (timing), program completeness, and placement of closed captions. Wheeler said, "... reliable and consistent access to news and information for deaf and hard-of-hearing communities is a *right*. ... We all share the same goal: full and equal access to video programming for all Americans. ... Almost all of us in the hearing world have benefited from advancements in audio technology. ... Today, we extend the benefits of new technology and new standards to deaf and hard-of-hearing persons. ... Ensuring universal access is a

critical and enduring value of this Commission."

3. July 11, 2014: The Commission approved new rules that require closed captioning of video clips that are posted online. Specifically, the rules extend the Commission's IP closed captioning rules adopted in 2012, which cover full-length videos online, to video clips if the original programming was shown on television in the United States with captions. The new rules apply to video programming distributors that air programming - including broadcasters and cable and satellite distributors - on television and then post clips of that programming on their own website or via their own mobile app. Wheeler said, "Accessibility of programming must evolve with technology in order for us to maintain our commitment to universal access. When the number of U.S. households viewing TV programming exclusively on the Internet is poised to surpass the number viewing only via antenna, and 77% of Internet users regularly watch video clips online - often to get news, sports, and entertainment programming, it's time to update our closed captioning rules to reflect these changes. Today's order does just that and will ensure millions of Americans who "hear with their eyes" have greater access to video information on the Internet."

His unique leadership of the Commission reaches further beyond the formal actions during the open meetings with the five-member Commission. He gives full support to the work of Consumer and Governmental Affairs Bureau (CGB), and its unit, the Disability Rights Office (DRO) - (featuring Karen Peltz-

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CAPITOL COMMENTARY Continued from page 5

Strauss, Greg Hilbok, and their team of brilliant, highly-capable attorney advisors) that address disability access issues every day. It would be remiss of me not to recognize the good work of other Bureaus that collaborate with CGB. When it comes to captioning of video programming on television or the Internet, CGB collaborates with the Media Bureau. On Text-to-9-1-1, it partners with the Public Safety and Homeland Security Bureau. (Thanks to all the other Bureaus and offices at the FCC!) Just to give you some instances of the good work of CGB and DRO with support of others within the Commission, here they are:

- A. On June 10, 2014, the Commission launched a video consumer support service, the ASL Consumer Support Line, specifically designed to enable consumers who are deaf and hard of hearing to engage in a direct video call with a consumer specialist at the FCC. The service allows deaf and hard of hearing consumers to communicate in their primary language, American Sign Language (ASL). Until now deaf and hard of hearing consumers only had the option to communicate using relay services or by filing a complaint form online, which could be cumbersome at times due to the interface.
- B. On October 8, 2014, the Commission submitted the Second Biennial Report to the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Energy and Commerce of the House of Representatives in accordance with the Twenty-First Century Communications and

Video Accessibility Act of 2010 (CVAA). The Report presents information and assessments related to the accessibility of telecommunications and advanced communications services and equipment, along with a summary of actions in the last two years as taken by the Commission related to the CVAA.

- C. A number of times during the calendar year 2014, CGB had conducted workshops and forums on a range of related access topics, such as IP-based relay technologies, employment opportunities for individuals with disabilities, and accessible wireless emergency communications.
- D. During 2014, the Commission dismissed a total of 76 petitions from video program producers (such as religious institutions and hunting/fishing commercial entities, etc.) for exemption from its' closed captioning requirements, due to insufficient documentation or grounds to warrant such a decision. The Commission's closed captioning rules allow video programming providers, producers, or owners to obtain an exemption from the closed captioning requirements if they demonstrate that providing captions on their programming would be "economically burdensome."

Just to be fair to him, and the entire mission of the Commission, he won't make decisions in the coming days and months that would go totally our way on a key number of issues. He seeks to make the right decision that would benefit all the stakeholders on any one major issue, such as Net Neutrality, Next Generation 9-1-1, allocation of spectrum, proposed corporate mergers like AT&T and DirecTV, and etc.

He and his staff seek every way to come up with solutions that would benefit both us consumers and industry. For example, we are working to improve the complaint resolution process for TV captioning, and we are considering what it is called, "the shared burden" model. Until now, the total burden has been on the multi-video programming distributor ("MVPD"), like Verizon, Comcast, or DirecTV, to address from the beginning to the end, a complaint about some captioning errors with a certain TV program. But with the new model, if the MVPD finds that the error didn't originate from its network, nor the set-top box that it gave to the customer, and that it came with the program itself, it will coordinate resolving the issue with the program producer, and then get back with a final answer to the consumer who filed the complaint. The Chairman and also his fellow four Commissioners are always looking out for new approaches to resolve issues like this, and others for the general public.

It is always positive to have a dynamic leader leading the Commission; but all the more so when he or she keeps in mind our best interests as people with disabilities on just about every issue that gets the Commission's attention and for its action. We are deeply grateful for the Chairman's extra, special support for us, and his sincere recognition to keep us totally included and involved as first-class Americans. He knows we are not there yet, but he will be with us until we arrive to our final "destination." Thank you, Mr. Chairman!



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FCC Moves On To Address TV Caption Quality



In July 23, 2004, five consumer organizations joined forces and filed a joint petition. Those organizations were:

- Telecommunications for the Deaf and the Hard of Hearing
- National Association of the Deaf
- Self Help for Hard of Hearing People, Inc.
- Association of Late-Deafened Adults
- Deaf and Hard of Hearing Consumer Advocacy Network

The TDI et al. Petition asked that the FCC initiate a rulemaking to make sure that the established closed captioning rules are better implemented using additional enforcement mechanisms, with a result of high quality and reliable closed captioning.

TDI et al. pointed out that simply focusing on the pass-through requirement has not been sufficient to ensure that VPDs take the necessary steps to prevent (as well as quickly fix) technical problems that result in captions

being removed from videos, or otherwise becoming garbled and inaccessible for deaf and hard of hearing viewers. Common problems included:

- Captions turned off 10 minutes before the end of national network programming.
- Captions disappeared one hour into a two-hour movie.
- Captions were absent, in spite of being listed on TV programming schedules as being closed-captioned.
- Captions were illegible, include white boxes, and overtypes.
- Captions appeared on a national program in one locality, but not another.
- Captions were missing from repeats of previously aired captioned programming or had scrambled and unreadable captions.
- TDI et al. also expressed a concern

Definitions

VPD: Video Programming Distributor – “defined as all entities who provide video programming directly to customers’ homes, regardless of distribution technology used”

ENT: Electronic Newsroom Technique – captions that are created from a script that is usually displayed on a teleprompter. This technique is commonly used for live news programs. Only material that is scripted can be displayed as captions using this technique. The “electronic news room” technique does not provide closed captions for spontaneous or unscripted comments, live reports delivered from another location, or breaking news.

Interstitials: An interstitial (something “in between”) is something that is inserted in the normal flow of content, usually before or after a program. This usually is done for the purpose of advertising or promotion, or in the form of a short informational program.

Promotional

Advertisements: Short video segments before or after a program that are intended to promote/advertise a product, event, or service.

Public Service Announcements (PSA):

A typical PSA is part of a public awareness campaign to inform or educate the public about an issue.

Exemption: The process of freeing or state of being free from an obligation or liability imposed on others.

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Definitions

Report & Order: Intended to report on an issue/matter, and also intended to deliver information on changed regulations.

Declaratory Ruling: A decision regarding the validity of a regulation or the applicability of a provision of a statute, a regulation, or a final decision to specific circumstances on a matter within jurisdiction.

Further Notice of Proposed Rulemaking (FNPRM): A follow-up public notice issued by law when one of the independent agencies of the United States government wishes to add, remove, or change a rule or regulation as part of the rulemaking process.

Pre-recorded Programming: Video programming that was recorded and edited well in advance of being aired for consumption.

Live Programming: Video programming that was recorded and transmitted live in real-time for consumption.

Near-Live Programming: Video programming that was recorded close to airing, usually includes minimal editing (if any) before being broadcast for consumption.

Best Practices: Series of recommendations for achieving expectations/obligations.

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noting a trend among providers to include a disclaimer in its broadcast stating that the provider wasn't responsible for the accuracy of captions.

- TDI et al. then asked FCC to do the following:
- Require continuous monitoring of captioning to ensure that technical problems are remedied promptly and efficiently.
- Require VPDs to reformat edited or compressed captioning
- Clarify that incomplete captioning does not qualify as captioned hours
- Not count live programming using the "Electronic Newsroom Technique" (ENT) in terms of measuring compliance with FCC's rules
- Adopt non-technical quality standards to ensure that video programming is "fully accessible" to the deaf and hard of hearing individuals

TDI et al. wrapped up the 2004 petition saying:

"The time is overdue for the Commission to adopt rules as outlined herein to strengthen enforcement mechanisms and establish quality standards to better ensure implementation of the captioning rules in accordance with the mandates of Section 713 of the Communications Act. In particular, the Commission should revise its captioning rules to facilitate the complaint process and strengthen enforcement measures (including quarterly captioning compliance reporting, Commission compliance audits, and the establishment of base forfeiture amounts for violations of the captioning rules); specify procedures for ensuring technical quality; and create standards for non-technical quality. Adoption of the proposals set forth herein will ensure that deaf and hard of hearing individuals who rely on closed captioning in order to have access to video programming will have the access that was intended by passage of Section 713 of the Communications Act. Based on the foregoing, Petitioners respectfully request that the Commission grant this Petition for

Rulemaking."

After seven years of incremental progress, TDI and other consumer organizations filed another petition with FCC on January 27, 2011.

After seven years of incremental progress, TDI and other consumer organizations filed another petition with FCC on January 27, 2011. Eight notable consumer organizations signed the petition. Those organizations were:

- Telecommunications for the Deaf and the Hard of Hearing
- Hearing Loss Association of America
- Association of Late-Deafened Adults
- American Association of the Deaf-Blind
- American Association of People With Disabilities
- Tucson Citizens for Better Captioning
- Deaf and Hard of Hearing Consumer Advocacy Network
- California Coalition of Agencies Serving the Deaf and the Hard of Hearing

The goals the consumers organizations wanted to accomplish via the petition were:

1. Remove the exemption for late night captioning
2. Remove the exclusion for advertisements of 5 minutes or less and require captioning for those
3. Require real time captioning for of all local news broadcasts regardless of market size
4. Provide that locally produced non-news programming, regardless of repeat value, has to be captioned.
5. Require interstitials, promotional advertisements, and Public Service Announcements be captioned in all cases.
6. Remove or reduce the exemption for channels producing revenues in excess of \$3 million.
7. Grant Petitioner's Application for Review and rescind the Angler's Exemption

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Order.

As of February 24, 2014, FCC released a report and order, declaratory ruling, and further notice of proposed rulemaking. In this, FCC says: “The new rules apply to all television programming with captions, addressing quality standards for accuracy, synchronicity (timing), program completeness, and placement of closed captions, including the requirement that captions be:

- **Accurate:** Captions must match the spoken words in the dialogue and convey background noises and other sounds to the fullest extent possible.
- **Synchronous:** Captions must coincide with their corresponding spoken words and sounds to the greatest extent possible and must be displayed on the screen at a speed that can be read by viewers.
- **Complete:** Captions must run from the beginning to the end of the program to the fullest extent possible.
- **Properly placed:** Captions should not block other important visual content on the screen, overlap one another or run off the edge of the video screen.

FCC made it clear that the captions for pre-recorded programming (for ex.: The TV program, Castle on the ABC network on Monday night) must be accurate, synchronous, complete and appropriately placed. In evaluating a VPD’s compliance with the captioning quality standards, the Commission will be considering the challenges in captioning live programming (for ex.: President Obama’s State of the Union address), such as the lack of an opportunity to review and edit captions before the programming is aired on television. However, FCC said that measures can

“Best practices for video programmers and captioning vendors are included in the rules, which promise to improve captioning quality for viewers. For example, video programmers can provide high-quality program audio signals to promote accurate captioning transcriptions. They can also provide captioning vendors with advance access to show scripts, proper names and song lyrics, making it easier to caption live programs. Similarly, captioning vendors can ensure the proper screening, training and supervision of their captioners and take measures to ensure that their technical systems are functional, to prevent service interruptions.

The Commission also adopted measures to ensure that people who are deaf and hard of hearing have greater access to news programming in their local communities. The measures include requiring broadcasters who are permitted under the Commission’s rules to convert teleprompter script into captions to pre-script more of their news programming, including sports, weather, and most late-breaking stories. The pre-scripting requirement will result in captioning for some news programming that previously aired uncaptioned. In addition, the new rules require that crawls and other visual information be used to provide visual access to certain news segments that can’t be pre-scripted.”

Source: <http://www.fcc.gov/guides/closed-captioning>

be taken to ensure that captioning of live programming is sufficiently accurate, synchronous, complete, and appropriately placed to allow a viewer who depends on captioning to understand the program and have a viewing experience that is comparable to someone listening to the sound track.

As for near-live programming, (for ex.: the David Letterman show on the CBS network near midnight during the week) which is programming that is performed and recorded within 24 hours prior to when it is first aired on television, will be evaluated under the same standards the Commission applies to live programming, although it encourages measures that can be taken prior to the program’s airing to improve its captioning quality. The Commission will require VPDs to make best efforts to obtain a certification from video programmers either 1.) That their programming complies with the captioning quality standards; 2.) Adheres to the Best Practices for video programmers set

out in this Report and Order; or 3.) Is exempt from the closed captioning rules under one or more properly attained and specified exemptions.

FCC adopted additional requirements for broadcasters who utilize Electronic Newsroom Technique (ENT) to ensure that most news programming, including sports, weather, and most late-breaking news is scripted for the teleprompter and therefore captioned. In addition, the Commission requires that crawls and other visual information be used to provide visual access to those segments where ENT is not used. If there is a Commission investigation into non-compliance with the new procedures, broadcasters adhering to these procedures will be able to fall under a “compliance ladder” that provides them with opportunities to take corrective action prior to enforcement action by the Commission.

The Commission codified the requirement that VPDs monitor and

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Text of TDI Executive Director Claude Stout's Remarks

TDI Executive Director Claude Stout shared some remarks during the historic February 20 open Commission meeting:

On the Occasion of the Commission's Action with its TV Caption Quality Report and Order, Declaratory Order, and Further Notice of Proposed Rulemaking

Mr. Chairman, Commissioners, and staff of Consumer & Governmental Affairs Bureau, FCC,

Thank you for inviting us consumers to be on the panel this morning. You are about to produce a historical first with this pivotal action on TV caption quality. Mr. Chairman, this would not have taken place today without your visionary leadership and steadfast resolve. Thank you, Mr. Chairman.

We want to thank some in the industry for their commitment and leadership in providing quality captioning with certain television programming. We look forward to a future where there will be minimal errors in off-line and real-time captioning. Over the years, we have endured errors such as misspelled words, garbled lines, captions disappearing before the program ends, and jumpy lines scrolling up on the screen. Across the country we have thousands of viewers struggling to comprehend the daily news because of unacceptable captions during breaking news, on-the-street interviews, weather, and sports segments. Other quality issues slip by such as severe lag time where the captions show up seven to ten seconds behind the spoken word.

Let me share my personal experiences with erroneous delivery or lack of captioning. When I was about ten years old, I often joined my parents watching episodes of "I Love Lucy", "The Ed Sullivan Show," "The Red Skelton Show," and "The Jack Benny Show." I never could lip-read what they were saying on TV. Anyway, just last week, I read an article about Jack Benny's hilarious monologues that included several transcripts. Can you imagine? I had to wait nearly fifty years to finally enjoy Mr. Benny's performance. A few months ago, I finally watched with captions on Lucy and Ethel struggling to devour as many candy pieces from the moving assembly line.

Another program back then was the Dating Game, with



host Jim Lange. If it had come with captions, maybe I would have done better much earlier to become sweethearts with Judy, who is now my wife.

It was not until when I attended Gallaudet in the mid-1970 that we finally got open captioning. We would tune in at eleven thirty p.m. to watch a rerun of the national ABC News with open captions. At that time, only one other

program had open captions, a PBS gourmet-cooking program with Julia Child.

Judy and I have lived in the D.C. area for about thirty-four years. One of the most frightening moments for us was the sniper shootings that took place in late 2002, mostly in Montgomery County, MD. Local stations showed breaking news on the latest developments, and they were not captioned. We felt trapped and helpless.

With countless programs, our children Abby and Ty, both hearing would tell us about how far behind the spoken word is when the captions appeared on the screen. Often, they would laugh or react first before we could understand why. It is not fair for parents like us to be at a disadvantage with our kids.

Like many of you who are watching TV, we also vote for our leaders and decide on issues that matter to our communities in the electoral process and pay our fair share of taxes. As part of our efforts to stay informed, we pay the same subscription fees to access and share what we know on television and the Internet, interacting with others where we live and work. Good captions on TV programs do keep us informed and in the loop with the rest of the community. This is a basic civil right enshrined in the Telecommunications Act of 1996 and the Twenty-First Century Communications and Video Accessibility Act of 2010.

High quality captions on television are crucial not just for viewers like us who are deaf or hard of hearing. There are literacy benefits for people of all ages learning to read, and for those who speak English as a second language as well. This will create a ripple effect for the rest of our families, coworkers and friends at home, in the workplace, in nightclubs, transportation hubs, and other public places in America.

This is a great day for us today. And with your support and commitment, the Commission is building a brighter future for us. Thank you very much.

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maintain their equipment and take any corrective measures necessary to ensure that such equipment is in proper working order, as part of their obligation to ensure that the captioning included with video programming reaches consumers. FCC also adopted a new rule requiring VPDs to perform technical equipment checks in a manner that is sufficient to ensure that captions are passed through to viewers intact. Additionally, it requires VPDs to keep records of their activities related to the maintenance, monitoring and technical checks of their captioning equipment.

FCC went one step further to establish expectations in their declaratory ruling such as clarifying that a.) all new bilingual English and Spanish language programming and 75% of pre-rule bilingual English and Spanish language programming not subject to an exemption must be closed captioned. b.) small, discrete portions of English or Spanish segments that account for only a small percentage of an otherwise non-English or non-Spanish program, respectively, need not be captioned. c.) all VPDs are required to make contact information available to consumers and the Commission. d.) "on demand" programming not subject to an exemption must comply with the requirements to caption 100 percent of all new English, Spanish and bilingual English and Spanish language programming and 75 percent of pre-rule English, Spanish and bilingual English and Spanish language programming.

The rules distinguish between pre-recorded, live, and near-live programming and explains how the new standards apply to each type of programming, recognizing the greater hurdles involved with captioning live and near-live programming.

FCC also asked the public in a FNPRM to comment on the following issues for the purpose of further enhancing accessibility to television programming and improving the Commission's procedural rules. Some selected issues they asked about were: a.) whether the Commission should impose some responsibilities for compliance with the Commission's closed captioning quality rules on video programmers and other programming entities. b.) whether the Commission should require specific measures to ensure program completeness and synchronicity for live and near-live programming and how the Commission should define near-live programming. c.) whether the Commission should require the use of offline captioning or other measures to achieve improved accuracy, synchronicity, placement and program completeness of the captions prior to the re-airing of live and near-live programming first shown after the effective date of any such rule. d.) whether the Commission should provide a public "dashboard" containing information about captioning complaints.

The Commission asked about the extent to which it should take action on January 2011 proposals from a coalition of consumer groups to eliminate the exclusion from captioning requirements of advertisements of five minutes duration or less and to eliminate the following self-implementing exemptions from the closed captioning requirements: late night programming, locally produced and distributed non-news programming with no repeat value, interstitials, promotional announcements, and public service announcements that are 10 minutes or less in duration, and channels producing revenues under \$3 million. It gave some attention on

the extent to which technical standards adopted by the Commission for the display of closed captions, which allow control over caption features such as size, font, background and foreground colors, are being met and effectively improving the captioning experience for viewers.

The FCC Chairman and Commissioners also issued statements during the open meeting. Selected quotes from the statements are as follows:

STATEMENT OF CHAIRMAN TOM WHEELER



Today's item on Closed Captioning offers a great example of why what we do at the FCC matters – how our work has a meaningful impact on the lives of the American people.

We've heard from 12-year-old Tai Jensen, who described how her ability to develop problem-solving skills, talk with her friends, and even learn a new language is dependent on the quality of captioning on television. Claude Stout spoke about how closed captioning impacts everything from relating to his children to deciding whom to vote for. As Claude said in one of our meetings – "Closed captioning is what allows deaf people to hear."

Their stories remind us that reliable and consistent access to news and information for deaf and hard-of-hearing communities is a right.

Members of the deaf and hard-of-hearing community, alongside industry—NCTA, NAB, and MPAA—stepped up to the plate to help craft a set of rules that moves us toward improving captioning quality, while also assuring that vital news and

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other types of programming provide captioning.

Almost all of us in the hearing world have benefited from advancements in audio technology. Today, we extend the benefits of new technology and new standards to deaf and hard-of-hearing persons.

Ensuring universal access is a critical and enduring value of this Commission. I am excited and hopeful for the future as we continue to take steps to advance this mission.

STATEMENT OF COMMISSIONER MIGNON L. CLYBURN



Three weeks ago, our nation reached an historic high mark when the first legally deaf offensive player in the NFL took the field in Super

Bowl 48. Derrick Coleman's debut as fullback for the Seattle Seahawks was yet another breakthrough for full and equal inclusion of those who are deaf and hard of hearing. Coleman's battle for parity with hearing players on the football field represents a hard earned victory, of which we are all proud. Not only is he a champion on the field, Coleman is a champion and role model off the field for many who face similar challenges in their lives.

Today, the quest for parity remains in other arenas. One comes in an area most of us take for granted — and that is watching television. Our communications laws require that communications providers make greater efforts to provide the 54 million Americans who live with disabilities access to video services and programs, especially as video programming plays an increasingly important role in our homes, schools and businesses.

It is hard to believe, but it was

only sixteen years ago when the Commission adopted its first set of closed captioning rules. For the hearing impaired, our work back then was long overdue.

But much has changed since then, and today, it is only right and just that we refresh those rules to reflect the technological and societal changes which have transpired. The deaf and hard of hearing community has waited a long time for the Commission to play catch up and address some basic concerns, which seemed to have gone unheard since the captioning rules were enacted.

STATEMENT OF COMMISSIONER JESSICA ROSENWORCEL



Over the next several years, television will change more than over the last several decades. The way we watch will change—when we watch,

where we watch, and how we watch. Families huddling together in one room basking in the glow of a single screen will give way to gatherings with many screens and multiple programs. I know. It is already happening with my family, in my home.

But as opportunities to view video expand, old problems can linger. Today we address one of those problems. We address closed captioning.

It has been more than a decade and a half since the Commission adopted its first rules governing the provision of television closed captioning. These rules, put in place in the aftermath of the Telecommunications Act of 1996, sought to make widespread access to technology that facilitates television viewing by the deaf and hard of hearing. Over time, however, captioning quality was uneven and our enforcement was limited. So a decade

ago a group of advocates representing individuals who are deaf or hard of hearing filed a petition for rulemaking and asked us to fix these problems.

That is what we do, at long last, today. Our new rules put in place captioning standards for accuracy, synchronicity, program completeness, and placement. We establish best practices for video programmers and captioners. We update policies involving live programming and Electronic Newsroom Technique. And we seek comment on a range of issues to further enhance accessibility and improve our procedural rules.

Going forward, I believe we also have other promises to keep. Today we address the closed captioning problems that plagued us in the past. But we also must address the way we will watch going forward. Television viewing is changing fast, our policies must keep pace.

Three years ago, Congress passed the 21st Century Communications and Video Accessibility Act. Among other things, this law directed the Commission to require closed captioning of IP-delivered video programming that is also available on television. That means programming that is aired on television and later available online also comes with closed captioning. We made good on this promise for full-length programming, but we fell short for television video clips. I think this is something we need to fix. Because our accessibility policies must be about more than just how we watch now—they must be about the future. And the future of viewing, for all of us, including the deaf and hard of hearing, will involve more than gathering around the traditional television screen for programs of uniform 30- or 60-minute length. It will involve many screens, with more television programming sliced and diced into smaller increments, for later viewing online.

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STATEMENT OF COMMISSIONER AJIT PAI



[...] Tai Jensen's testimony illustrates the critical role captioning plays in bringing the universal medium of television to those who are

hearing impaired. For the medium is universal only, if captions actually work to make video programming accessible.

Today's item is a solid step towards improving captioning. First, the industry-derived best practices set high expectations for video programming, and I hope they will make superior captions the norm rather than a pleasant surprise. Second, the rules recognize the limited ability of video programming distributors to control caption quality and focus their energy on ensuring those parts of the captioning process that are under their control work. Third, the item also helps bring our captioning rules into the 21st century by requiring that petitions for exemptions, along with comments on those petitions, be filed electronically. This is a big step forward for

transparency.

STATEMENT OF COMMISSIONER MICHAEL O'RIELLY



Video programming plays an important role in our daily lives. It provides entertainment, influences our culture, and, most

importantly, informs us. In fact, this medium can be a valuable public safety tool. For example, I remember as a kid relying on blizzard and frostbite warnings during the winter months from our local television station. And that mattered not just for me, but for the thousands of people in our town who worked outside, as my dad often did, who was extremely hard of hearing.

For those in our country who are deaf or hard of hearing—a population that is growing as the baby boomers age—this tool can be limited without effective closed captioning to timely and correctly relay what is being said on the screen. We are fortunate that our current technological capabilities readily enable this service. With this in mind, Congress required closed captioning in the Telecommunications

Act of 1996 so that television content would be made more accessible to all Americans. For over sixteen years, the Commission has implemented such rules, and today we build upon this foundation to better ensure that television captions are of sufficient quality, without putting undue burden on providers.

Earlier in this article, the topic of best practices as outlined by FCC was briefly touched. We will elaborate on those at this point.

While Section 713 of the Act authorizes FCC to ensure the provision of closed captioning of video programming “by providers and owners of video programming”, FCC chose to make VPDs exclusively responsible for compliance with closed captioning requirements because they’re ultimately the ones responsible for making sure of the delivery of programming to customers. This will help increase the availability of captioned video programming and focus responsibility of compliance on a single entity. This makes it easy for consumers to know who to contact for captioning issues.

This however doesn't let producers off the hook; FCC has noted that closed captioning is most likely done

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at the production stage or prior to distribution. So FCC agrees with NCTA that “the creation & delivery of good quality captions isn’t solely within the control of any one entity and often requires coordination [...] among many connected parties in the video delivery chain.” As a result, in the FNPRM, FCC explores changes in the way the captioning rules should divide up responsibilities for meeting the new obligations for ensuring captioning quality between VPDs and video programmers.

As per FCC’s implementation of the CALM Act, FCC allows the use of widely available certifications to make individual contractual certifications unneeded. This will greatly reduce the burden on both VPDs and programmers. This means if the programmer supplies certification to one VPD, this certification can be reused for all other VPDs with the same level of assurance.

Those requirements will become effective on a specific date FCC will announce via a public notice published in the Federal Register as soon as the Office of Management and Budget approves it.

FCC is pleased that VPDs, video programmers, captioning vendors, and consumers have seen fit to propose best practices to ensure caption quality. Those parties include: NCRA, a coalition of captioning vendors, including CaptionMax, NCI, VITAC, and WGBH/NCAM (collectively Captioning Vendors), NCTA, and Consumer Groups.

FCC has noted Consumer Groups expressing concern about reliance on these Best Practices to ensure quality captions. The consumer groups pointed out: “the ultimate quality of captions delivered to consumers, and not the process by which they are created, is the only logical and acceptable metric for the Commission

to review” and that entities that “follow some particular process to create captions for a program cannot cure the program’s inaccessibility if the process ultimately results in poor-quality captions. . . .”

FCC responded saying: “Although we agree on the importance of delivering high quality captions to viewers, we expect that adherence to the Best Practices identified below will advance this objective because this approach is designed to both provide the captioning industry with concrete steps it can take to achieve quality captions and to ensure that caption quality problems that do arise are quickly resolved. One year after implementation of the rules we adopt herein, we will assess the extent to which our prediction about the effectiveness of these Best Practices has been accurate. If we find that this approach is not effective in ensuring the production and distribution of good quality captions, we will revisit these rules to the extent necessary.”

VPD Best Practices:

To satisfy the requirement to exercise best efforts to obtain a certification from each of its video programmers, a VPD must request in writing a certification attesting that the programmer either:

1. Complies with the captioning quality standards adopted herein;
2. Adheres to the Best Practices for video programmers as set forth;
3. Or is exempt from the closed captioning rules under one or more properly attained exemptions – but if this is used, the programmer must identify the specific exemption claimed.

The VPD also must request in writing that the programmer make such certifications widely available within 30 days after getting a written request from the VPD. VPDs will further have the obligation to check whether

their programmers have certified their compliance in a public location, such as on their websites. If the VPD finds out via the public location that the programmer has certified their programming, then the VPD is in compliance even if they didn’t inform the programmer of the need for the certification. VPDs that fail to exercise best efforts to obtain the certification noted above are subject to enforcement action.

If a video programmer doesn’t provide certification, and the VPD accepts and distributes the programming anyway, it will be obligated to report the non-certifying programmer to FCC. FCC will compile a list of those programmers, which will be available in a public database maintained by FCC. This will help keep FCC and the public informed of noncompliance and help FCC in their evaluation of the effectiveness of their rules. As long as the VPD uses their best efforts to obtain the certifications, and reports to the FCC the identity of any programmer who has refused (whether intentionally or not) to certify the programming, no sanctions will be imposed on the VPD as a result of any captioning violations beyond the control of the VPD.

VPDs will now need to seek certification from video programmers that they will adhere to the following practices:

- Agreement with captioning services – video programmers will now need to establish performance requirements for good quality captioning, verify compliance with those performance requirements, and ensure all involved staff have sufficient training. Oversight must exist to verify performance requirements are being met.
- Operational best practices such as preparation materials and

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quality audio be provisioned to captioning vendors to ensure accurate captioning and reduce it being out of sync with audio:

There are exceptions in regards to captioning for pre-recorded programming:

- The presumption is that pre-recorded programs (not including programs that initially aired with real-time captions) will be captioned offline before air, except:
- If the media is too close to initial air time to be captioned, require editorial changes up to air time (i.e. news content, reality shows), was delivered late, had technical problems, last minute changes, proprietary/confidentiality considerations, or networks/channels with a high percentage of time-sensitive programming that rely on real time captioning.
 - o However, the programmer is expected to make reasonable efforts to employ live display captioning instead of real-time captioning for pre-recorded programs where possible. Video Programmer Best Practices:

Video programmers as part of their certifications will also need to take the following actions to improve prompt identification and correction of captioning errors as they occur:

- Monitor media in advance of airing (or for real time captioning, at time of air) to ensure captioning is there.
- Have a troubleshooting protocol in place to be able to coordinate in solving problems, ensure everyone has the needed contact information to be able to coordinate, and keep a detailed log of any problems.

- Accuracy spot checks: within 30 days of notification of a pattern or trend of complaints from FCC, conduct spot checks of captions to assess quality and fix any problems.

Video programmers will certify to VPDs that they adhere to all of the best practices for video programmers, and make the certifications widely available to VPDs, such as posting on affiliate websites.

Captioning Vendor Best Practices:

Captioning vendors must have agreements with certifying video programmers that include performance requirements that are comparable to the Captioning Vendor Best Practices as set forth by FCC. These practices, based in large part on a proposal by a coalition of four captioning vendors that provide captioning services for a significant percentage of video programming nationwide, are intended to result in high quality captions and ensure that captioners have adequate training and oversight. These Best Practices for Captioning Vendors are divided into three sets of practices – first, for captioning vendors, second, for individual captioners who generate real-time captions, and third, for the generation of offline captioning.

Best Practices for Real-Time (Live) Captioning Vendors:

Real-Time (live) captioning vendors are being asked to create and use metrics to assess accuracy, synchronicity, completeness, and placement of real-time captions. To achieve that, the vendors need to establish minimum acceptable standards based on those metrics, while working to exceed them.

They're also asked to use an unit of measurement in where they consider "accuracy" of captions to be a measurement of the percentage of correct words out of total words in the

program, calculated by subtracting number of errors from total number of words in the program, dividing that number by total number of words in the program and converting that number to a percentage.

Here's an example of how that'd work: if there were 7,000 total words in the program, and there were 70 errors, that'd be 6,930 correct captions. If you divide that by 7,000, it tells the vendor that the program is 99% accurate. Of course, that depends on what is defined as an error; vendors are told to consider at a minimum mistranslated words, incorrect words, misspelled words, missing words, and incorrect punctuation that impedes comprehension, and misinformation as errors.

Vendors are also expected to ensure captions are as near-verbatim as possible while retaining the intended message in a clear manner. This also applies equally to music lyrics and artist performances. Like the other best practices, good placement of captions on screen to avoid obscuring information/graphics are expected.

Lastly, vendors are expected to ensure that technical systems are functional and allow for fastest possible delivery of caption data, provision failover systems to avoid service interruptions, regularly review discrepancy reports to correct issues and avoid future issues, respond to concerns raised by video programmers or viewers in a timely manner, and to alert video programmers immediately if there is a technical issue.

Best Practices for Real-Time (Live) Captioners:

Real Time (live) captioners are expected to caption as accurately, synchronously, completely, and appropriately placed as possible. They also are expected to be technically

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proficient with a highly reliable infrastructure (reliable high speed internet, multiple functioning telephone lines, etc.). Captioners are expected to file detailed discrepancy reports with the captioning vendor in a timely manner. Captioners are to make sure that real time captions are complete when the program ends and to engage the command that allows captions to pass at commercials and conclusion of broadcasts. Most importantly, captioners should monitor captions to be able to immediately correct errors as well as prevent errors via frequent and regular self-evaluations, and by keeping captioning equipment updated as well as in good working shape.

Best Practices for Offline (Pre-recorded) Captioning Vendors and Captioners:

Offline (pre-recorded) captioning vendors and captioned should ensure offline captions are verbatim & error-free, and are punctuated correctly – as

well as synchronized with the audio of the program. The captions need to remain on screen long enough to be read completely, and shouldn't obscure the visual content. The caption should also identify speakers and non-speech information.

They are also expected to establish a manual of style to make sure that the display style always look the same. This is in addition to the expectation that they should employ frequent and regular evaluations to ensure standards are maintained.

Video programmers should be kept up to date of appropriate uses of real time and offline captioning. It should be always striven to provide offline captioning for pre-recorded programming well in advance of the need.

Collaboration is Key

FCC also agreed with NCTA's proposal that trade associations sponsor an annual conference with VPDs, programmers, captioning vendors, representatives of the deaf and hard of

hearing communities, FCC, and other interested parties to review the state of caption quality on television, and to discuss developments in captioning technology and other issues of concern.

FCC also encouraged industry and consumers to engage in frequent discussions so that the myriad of issues associated with captioning can be resolved to the mutual satisfaction of industry and consumers on an ongoing basis.

If you see any TV program that you know should have been captioned, or if you see any public service announcements on TV without captioning, or any video unit that doesn't support captioning – don't just sit there and wring your hands! Do something! Get in touch with us at TDI either by email or writing us! Also get in touch with FCC to let them know of the issue so they can follow up on it!

Accurate and Top Quality TV Captioning: it isn't just the best thing to do; it's the right thing to do!

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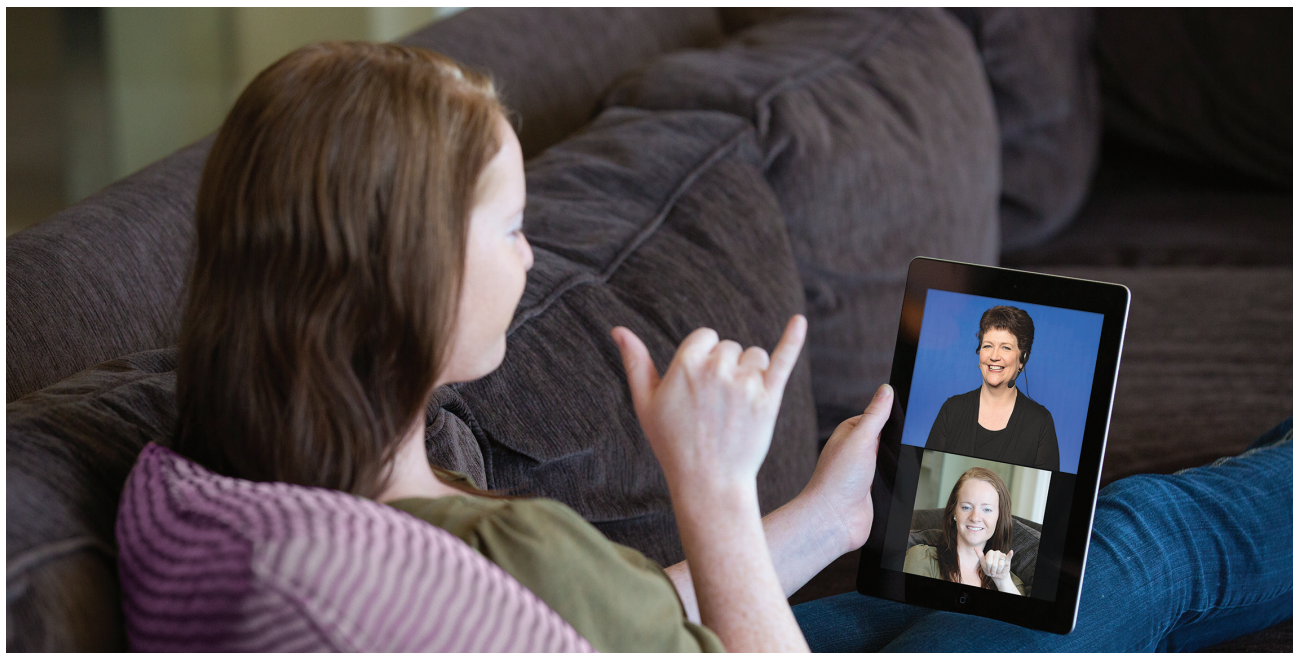
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Tech Bytes



DON CULLEN

Managing Editor, TDI World

Welcome to our
Tech Bytes section!
This section is TDI's
opportunity to share bite-
sized chunks of awesomely
interesting tech, apps,
and services that
we think you'd love
to know about!

Watching TV Online – Is It Really Easy?

Is it really easy? It can be!

First things first: don't feel like you have to give up your precious television subscription. Watching TV online is simply one of the many options available to you for getting your entertainment fix.

The two most popular options for watching TV online is Netflix and Hulu. As you may recall, in October 2012, National Association of the Deaf and Netflix settled a lawsuit NAD had filed against Netflix. This resulted in Netflix agreeing to caption all movies by 2014. Guess what year it is: 2014! Then there's Hulu; Hulu has been the leader in captioning their media for a pretty long time.

"But Don, why would I watch TV on my computer?"

Excellent question, perhaps because watching it on your computer isn't the option! You can watch Netflix/Hulu on your smartphone, tablet, or you can watch it on your TV.

"Wait Don, did you just say I can watch Netflix/Hulu on TV?"

That's right, you can! This is made possible by a media streamer, such as Apple TV, Roku, etc. Personally, I use the Apple TV because I like being able to control it either with the remote, or from my iPhone. The Apple TV was affordable for me, as it only cost \$99 through Apple.com. I used to pay over \$150 for a full TV subscription, but since I ended my TV subscription and started watching TV through Netflix/Hulu exclusively, I save \$70 per month, which translates to a savings of \$840 annually. I don't know about you, but I sure can think of plenty of things I can apply the extra \$70 per month towards!

"Yeah, well, it's hard to set up the streamer."

Really? Let's use the Apple TV as an example here. Here's the set up steps! Assuming you have an Apple TV freshly bought from the store, here's how it'd be done:

1. Plug in the Apple TV to the power outlet in your wall. The other end goes into the back of your Apple TV.
2. Plug in the HDMI wire from your TV to the back of your Apple TV.
3. Plug in the Apple TV to your internet router.

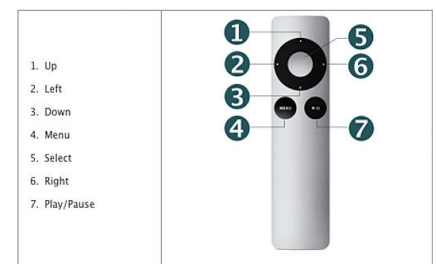
It's pretty much the same for the Roku and most other media streamers.

"Wait, that's it? What about the software, it's complicated, right? You'd have to configure it and stuff like that!"

It's about as complicated as making a sandwich. Here's how it would be done: go into the kitchen, make a sandwich, then sit down and watch TV. Yes, it's that easy; the system will configure itself, then when it's done, it's ready to be used.

"I'm sure the remote's complicated."

You sure about that? Take a look at this:



TECH BYTES Continued from page 20

Still think it's complicated? If you look at the picture, there's only four main controls. Compare that to the gazillions on most remotes out there.

"Wow! So simple! So how do I watch TV?"

Now here's the thing –

"I knew it, there's always a catch!"

-- hang on, hang on. Stay with me here. The catch is that you'll need to be either an active Netflix or Hulu subscriber before you'll be able to make use of Netflix/Hulu.

"OF course, I'd have to be. So tell me again, how's that better than having a cable subscription?"

Well, you have to pay for your cable subscription to be able to watch your channels, right? This is no different. Hulu costs about \$8, while Netflix costs about \$9. Let's say you decide to try Hulu. Take the remote, navigate to Hulu on the TV, and hit the **select** button (the silver button in the middle of the circle) on the button. Hulu will ask if you want to log in or sign up. If you don't already have an account, hit sign up and go through the process – it's pretty short and painless. Once it's done, Hulu is all set and ready for you.

Netflix has the same process if you decide to opt for Netflix.

"Okay, nifty. I set up Hulu for your sake. I'm staring at my TV and haven't the slightest idea what to do. Now what?"

Well, what TV shows do you like? For example, let's say you like to watch Hell's Kitchen. You'd use the remote to navigate to the top menu bar, to the 'Search' option and press select on the remote. Now it's asking you what you want to search for. Using the remote, start typing Hell's Kitchen. You'll see that when you typed the first few letters (HEL), it displayed a list at the right with TV shows matching that. You should be seeing Hell's Kitchen in that list right now. Using the remote, navigate to the right to the list, then press select on Hell's Kitchen.

Now it's showing you information about that show, along with a list of episodes for the TV show. It's even showing seasons. Usually it'll show the most recent season/episode at the top of the list. Let's say you want to watch that; navigate to it, and press select. It'll start playing.

What do you think?

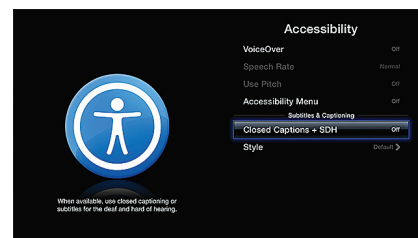
"Wait, before I start it, how do I know it's captioned?"

Usually Hulu makes sure their shows are captioned. But you bring up a good point; we need to enable captioning before watching anything. Let's go to the main screen (also known as the home screen). Do this by pressing MENU and holding down MENU on the remote. After a few seconds, you'll be at the home screen. Navigate to the box that has a picture of machine

gears on it; that's the Settings. It looks like this:

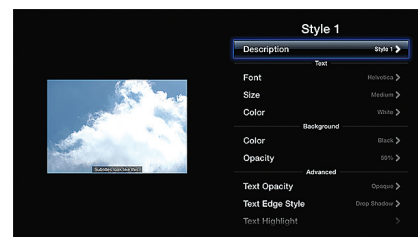


Now you've selected Settings, select General. Now select Accessibility. You should see something like this:



Select Closed Captions + SDH, and press SELECT. Turn it on.

Did you know you even can change the style of the captioning? Press Style, choose custom, and you'll see this:



The sky's the limit! Tweak the captions to however you like it!



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TECH BYTES Continued from page 21

“Okay fine, I’ve gotten the captions on, now how the heck do I get back to Hulu?”

Just press and hold down the menu button for a few seconds, and it’ll send you back to the home screen. Navigate and choose Hulu, and you’re back in Hulu. Find your show and start it. Captions should be working great.

What do you think?

Hello?

“What? Sorry, I was watching Hell’s Kitchen, did you say something?”

Glad you’re getting the hang of it!

“This looks interesting. What

happens if I call my provider and tell them I only want internet, and don’t want my TV subscription anymore? Will I still be able to use Netflix/Hulu?”

Absolutely! The only thing Apple TV needs is the internet, and it’s good to go! If you decide to keep your subscription, you’ll be able to take advantage of channels supported on Apple TV by your cable provider.

Apple TV was designed to be easy, so it’s easy to use!

“Too bad I can’t watch this on the go.”

That’s the beauty of it; once you have either Netflix or Hulu, you can watch either one on your smart phone by

simply downloading their app, logging in, then watching it!

“With captions?”

Yep, just make sure you go into your phone’s accessibility settings and turn on captioning!

“Too cool! What if I have problems?”

Just contact Hulu, Netflix, or Apple with your situation, and they’ll be happy to assist! Or write us at TDI and we’ll be pleased to help you however we can!

Do you have suggestions for technology to be featured in Tech Bytes? Do you have feedback you’d like to share? Feel free to contact Don Cullen via email at dcullen@tdiforaccess.org, or call TDI at (301) 563-9112.

Keep in touch.



Visit TDI’s new, interactive website at **www.TDIforAccess.org**
And help us shape an accessible world.

Noteworthy News

APP TURNS A SMARTPHONE INTO A SPEECH TRANSLATOR FOR THE DEAF

Even deaf people who excel at lip reading need a bit of help when it comes to meetings or group conversations. The developers of a new app called Transcense claim it's the hearing impaired's answer to understanding hard-to-follow chit-chats where everybody's talking almost all at once. How? Well, Transcense can translate speech into written words and transcribe it on screen in near real time. To make that possible, the app connects to several phones and activates their mics to capture what everyone's saying, then it uses voice recognition to assign each person in the group a color for their speech bubbles. Also, the user can ask the program to speak for him using a digital voice or get everyone's attention through the app when he wants to say something.

The software's currently in private beta for Android devices, but its developers (including one who's deaf and another born into a deaf family) have launched an Indiegogo campaign to raise 25 grand for its continued development. They hope to use the money to create an iOS and a web version, in order for more people (both the deaf and their friends/co-workers) to be able to use it.

Transcense joins other ongoing projects and products already out on the market meant to help make communication easier for the hearing impaired. These include MotionSavvy, a gesture control-enabled tablet that can translate sign language, and SpeechTranslate, an app similar to Transcense meant for Windows mobile devices.

Article Text from: "App turns a smartphone into a speech translator for the deaf" By Mariella Moon of Engadget (<http://engt.co/1u6AqrN>)



NEW SMS SERVICE TO PROVIDE DEAF WITH ROADSIDE ASSISTANCE

A new service launched [in Israel] this week by Nati Roadway Services aims to allow hard of hearing people the possibility of calling for help via SMS.

"There are many deaf people who cannot speak or that are hard to understand them. We communicate via SMS or email. So we have to receive help from a third party to call the service center for us. Beyond the difficulty, there is often a reluctance to help at the call centers, sometimes they even hang up on us, and this is very frustrating," said Ben Zion Hen, chairman of the Association of the

Deaf in Israel.

To date, a deaf person would be unable to telephone for help should they require roadside assistance. The idea for the service came following a request from a hard of hearing client who explained the urgent need of such a service and the difficulties and miscommunications experienced when he requested roadside assistance.

The service, entitled SOS by SMS will allow the deaf and hard of hearing population in Israel roadside and towing assistance by allowing them to send an SMS from their cell phones to call for help. The service is available to the hard of hearing 24 hours a day and

seven days a week at a cost of NIS 300 per year.

Article Text from: "New SMS service to provide deaf with roadside assistance" by Lidar Grave-Lazi of The Jerusalem Post (<http://bit.ly/1sOhRcI>)

THE MAN WHO HEARS WI-FI: DEAF MAN USES HIS HEARING AID TO LISTEN TO INVISIBLE NETWORKS

- Frank Swain, a journalist in London, began losing his hearing at 20



Frank Swain

- In an art project, he created a tool that allowed him to hear Wi-Fi sounds
- Sound of each network is heard originating from the router's location
- It produces clicks whose frequency rises with the signal strength
- He has created a map that shows what the internet sounds like in central London, on a route around BBC Broadcasting House

When Frank Swain began losing his hearing at 20, he decided he would use his new reliance on technology to hear something others couldn't: the sound of Wi-Fi. The London-based writer teamed up with sound designer Daniel Jones to build a tool that translates Wi-Fi networks into sounds that could be picked up through his hearing aids.

Now, Mr Swain has created a map and audio file that reveal what the internet sounds like, during his walk around BBC Broadcasting House in central London.

The sound of each network is heard originating from the router's geographical location, producing clicks whose frequency rises with the signal

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strength — akin to a layered series of Geiger counters. Pictured is how the internet sounds at the BBC in London, close to Oxford Circus.

The sound of each network is heard originating from the router's geographical location, producing clicks whose frequency rises with the signal strength — akin to a layered series of Geiger counters. Pictured is how the internet sounds at the BBC in London, close to Oxford Circus.

In a feature for the New Scientist, Mr Swain describes the sounds he hears from public internet data using his new hacked hearing aid.

'As I approach Turnpike Lane tube station and descend to the underground platform, I catch the now familiar gurgle of the public Wi-Fi hub, as well as the staff network beside it,' he writes.

'On board the train, these sounds fade into silence as we burrow into the tunnels leading to central London.'

'You expect it to be really strange, but it very quickly becomes ordinary,' Frank Swain (pictured) said.

The project, dubbed Phantom Terrains,

works by translating the language of a wireless network into sounds.

Each Wi-Fi element — such as router names, data rates and encryption modes — are assigned their own tones, which are sent to a phone and picked up using his hearing aids.

The foreground and background layer of sound are built up through the strength of the signal, direction, name and security level on these networks.

For instance, distant signals sound like click and pops, while stronger networks play a looped song.

'You expect it to be really strange, but it very quickly becomes ordinary,' Mr Swain told MailOnline.

'It was a big blow to find I was losing my hearing, so it was nice to have my expectations turned around, to think instead of it being a disability it could be an enhancement.'

Article Text from: "The man who HEARS Wi-Fi: Deaf man uses his hearing aid to listen to invisible networks" by Ellie Zolfagharijard of Mail Online [Science and Tech] (<http://dailym.ai/110JqEu>)

DEAF [IN AUSTRALIA] FEAR LOSS OF TV CAPTIONS

DISABILITY advocates are concerned the government is paving the way for broadcasters to stop providing closed captioning services.

UNDER proposed laws before parliament, free-to-air networks will no longer have to provide annual reports to show they are complying with captioning obligations.

Some in the deaf community fear that could be the first step in watering down their requirement to provide 100 per cent captioning from 6am to midnight on primary channels.

It could also mean poorer-quality captions, South Australian Dignity for Disability MP Kelly Vincent says.

"This is where the watering down starts — if people don't have to report to

government about how they comply, of course there's going to be less pressure on them (to provide captions)," she told AAP on Tuesday.

Ms Vincent has launched two petitions — one to senators and another to Communications Minister Malcolm Turnbull — to ensure captioning services are untouched.

The government insists the fears are unfounded because there are no avenues in the proposed laws that allow broadcasters to stop captioning services.

A spokesman for Mr Turnbull pointed to the minister's speech in parliament in which he said licensees would still have to provide the same level of captioning. It is a condition of a broadcast license to provide captions.

Article Text from: "Deaf fear loss of TV captions" by Rashida Yosufzai of News.com.au (<http://bit.ly/1tNd9Yf>)

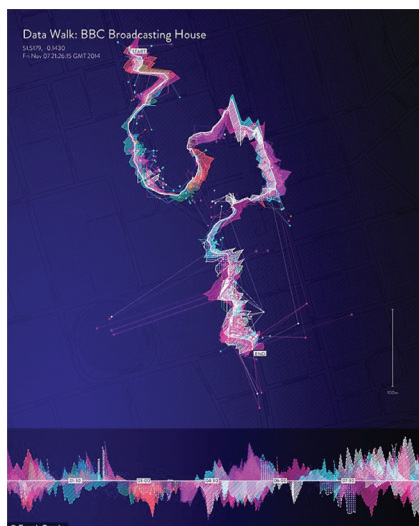
DEAF AND HARD OF HEARING NOVA SCOTIANS WILL SOON BE ABLE TO TEXT 911

HALIFAX — Nova Scotia is getting set to roll out a new service that will make it easier and faster for people who are deaf, hard of hearing or speech impaired (DHHSI) to contact 911.

Emergency call operators are receiving training on the program, which is expected to roll out across the province in January 2014.

"It's really a service that's complementary to the core 911 services," said Paul Mason, director of emergency services for the Nova Scotia Emergency Measures Organization (EMO).

Currently, residents who are deaf or hard of hearing can call 911 using a landline phone through a teletypewriter (TTY). However, if they are not near a landline, they must use a relay service or contact a third person via text to call 911 on their behalf.



Sounds of Wireless Networks Visualized

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"If you're at home, it's fine. But if you're out away from home, it's difficult — it's an issue," said Frank O'Sullivan, executive director of the Society of Deaf and Hard of Hearing Nova Scotians, through an interpreter.

O'Sullivan said the community has been waiting several years for the texting option and are looking forward to its implementation.

"There are many benefits," he said. "It's improving access, independence, safety as well (as) accommodation and equality."

In order to qualify for text 911, people must first sign up their cellular phone numbers with the program.

During an emergency, they will still have to place a voice call into 911 in order to initiate the texting process. By calling in, operators are able to access valuable information ranging from the callers' coordinates to their billing addresses.

Callers are encouraged to stay on the line while texting with the operator.

"For the 911 call operators it's a big advantage for them to be able to hear what's happening in the background," said 911 training officer Colleen Currie.

"We're texting back to the person but we still have that advantage of hearing background noises so we can assess if there is a scuffle happening ... or something happening in the background."

Text 911 is offered in parts of British Columbia, Alberta, Manitoba and Ontario, however, Nova Scotia will be the first province-wide jurisdiction to offer the service.

Mason said texting is just a part of their operation's upgrades in recent years, to coincide with changes in technology and the marketplace.

"When 911 was first initiated here in

Nova Scotia back in 1997, it was all landline phones," Mason said.

"Just in the past year or so, the number of calls we receive at 911 have crossed over the 50 per cent mark for cellular phones. We're seeing a large increase in the number of cellular calls that come through and of course this service here for texting will be cellular-based."

Article Text from: "Deaf and hard of hearing Nova Scotians will soon be able to text 911" by Rebecca Lau of Global News (<http://bit.ly/1EHbATY>)

THEATERS PLEDGE TO IMPROVE MOVIE ACCESS FOR DEAF AND HEARING-IMPAIRED

The nation's theater owners have agreed to make their cinemas more accessible to deaf and hard-of-hearing patrons.

The National Assn. of Theatre Owners has reached an agreement with the Alexander Graham Bell Assn. and other advocacy groups on a new set of recommendations to the Department of Justice, which is conducting a review of guidelines under the Americans with Disabilities Act.

Among other things, the recommendations would require all digital movie theaters nationwide to install closed-captioning and audio description equipment. The agreement also establishes minimum closed-captioning device requirements and a system for tracking how many patrons use the equipment.

The agreement followed weeks of discussions and represents a compromise over an issue that has sparked clashes in the past.

Over the years, advocacy groups have sued theater chains, alleging they were not doing enough to make their theaters accessible to the deaf and hard-of-hearing community. For their part, theater owners have previously complained about the high costs of installing the equipment, which can range from \$3,000 to nearly \$40,000, depending on the size of the theater.

"These joint comments are the result of decades of efforts from A.G. Bell's members and other deaf advocates to attain captioning access in movie theaters," said John F. Stanton, chairman of the public affairs council of A.G. Bell. "Today is truly a landmark day in captioning access history."

Anna Gilmore Hall, executive director of the Hearing Loss Assn. of America, called it a historic agreement that is a "Welcome Back" banner for people who had given up going to the movies simply because they could no longer hear."

The Assn. of Late Deafened Adults and the National Assn. of the Deaf also were part of the agreement with the theater owners' trade group.

More than 38 million Americans live with some sort of hearing disability, and only one third of them go to a movie theater at least once a year. That compares with about 70% of Americans overall who went to the movies at least once in the last year, according to industry surveys.

The nation's largest theater chain, Regal Entertainment, has invested more than \$10 million in glasses developed by Sony Electronics Inc. that use holographic technology to project closed-caption text that appears inside the lenses, synchronized with the dialogue on the screen.

"This partnership between deaf and hard-of-hearing advocates and the movie theater industry has been remarkably productive and promises to yield results that will benefit our patrons and expand access to movie theaters in a real, practical and measurable way," said John Fithian, president of the National Assn. of Theatre Owners.

Article Text from: "Theaters pledge to improve movie access for deaf and hearing-impaired" by Richard Verrier of L.A. Times (<http://lat.ms/1um9cdm>)



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Editor's Note: TDI frequently works with sister consumer organizations. Their acronyms are spelled out here, along with other commonly used abbreviations.

AADB: American Association of the Deaf Blind

ALDA: Association of Late Deafened Adults, Inc.

ASDC: American Society of Deaf Children

CC: closed captioning

CCASDHH: California Coalition of Agencies Serving Deaf and Hard of Hearing, Inc.

CGB: Consumer and Governmental Affairs Bureau

CPADO: Cerebral Palsy and Deaf Organization

CTS: Captioned Telephone Service

DHHCAN: Deaf and Hard of Hearing Consumer Advocacy Network

DRO: Disability Rights Office

E-911: Enhanced 911

FCC: Federal Communications Commission

FNPRM: Final Notice of Proposed Rulemaking

HLAA: Hearing Loss Association of America

IP: Internet Protocol

NAD: National Association of the Deaf

NBDA: National Black Deaf Advocates

NG-911: Next Generation 911

RERC-TA: Rehabilitation Engineering Research Center on Telecommunication Access

SCAT/SCABT: Speech Communications Assistance By Telephone, Inc.

TAP: Technology Access Program at Gallaudet University

TDM: Time Division Multiplexing, a method of handling electronic communications

TIA: Telecommunications Industry Association

TLPC: Samuelson-Glushko Technology Law & Policy Clinic

TRS: Telecommunications Relay Service

VRS: Video Relay Service

VRS, Rates, and Industry Reform

- Filed reply comments opposing FCC proposal to auction certain VRS minutes to establish per minute compensation rate for VRS CA services. Filed letter supporting a temporary, one-year waiver of the daily measurement of the speed of answer ("SoA") requirement and associated penalties for noncompliance for Video Relay Service ("VRS") providers, during which time (1) the current penalties for noncompliance with the existing two-minute SoA requirement with monthly measurement will apply; (2) the new thirty second SoA requirement with daily measurement will apply effective January 1, 2014, but without penalty, as a testing phase for one year and (3) providers and the Commission will work diligently together to establish reasonable rates that adequately cover the thirty second SoA and daily measurement requirements before the end of the year.
- On November 4, TDI and NAD met with FCC staff to discuss the effects of recent FCC decisions on VRS and IP Relay service. <http://apps.fcc.gov/>

[ecfs/document/view?id=7520956281](http://apps.fcc.gov/ecfs/document/view?id=7520956281)

- On December 28, TDI, NAD, ALDA, CPADO, AADB, CCASDHH submitted a letter in qualified support of the Collective Providers' Letter requesting a temporary, one-year waiver of the daily measurement of the speed of answer requirement and associated penalties for noncompliance for VRS providers, scheduled to take effect on Jan 1, 2014. <http://apps.fcc.gov/ecfs/document/view?id=7521064216>
- On March 4, TDI, CCASDHH, NAD, AADB, CPADO, HLAA met with the FCC to discuss TRS issues and VRS reform. <http://apps.fcc.gov/ecfs/document/view?id=7521088859>
- On April 8, TDI, CCASDHH, NAD, AADB, CPADO, HLAA met with the FCC to discuss VRS reform. <http://apps.fcc.gov/ecfs/document/view?id=7521097767>

IP CTS

- Filed comments asking FCC to adopt exceptions to its rules to address the needs of low income consumers, establish mandatory minimum service standards, oppose collection of the last four digits of a

customer's social security number, and keep funding IP CTS through the federal fund rather than transferring to the states.

- On November 4, HLAA, TDI, DHHCAN, CPADO, AADB, Mill Neck Services, Inc, NAD, ALDA submitted a comment to the FCC on IP CTS. <http://apps.fcc.gov/ecfs/document/view?id=7520955620>
- On February 11, TDI, NAD, HLAA, TLPC discussed Miracom's application for mobile captioned telephone relay service, the need for indoor 911 localization technology, and the need for coordination among bureaus on TRS, with several Commissioners offices. <http://apps.fcc.gov/ecfs/document/view?id=7521072523>. <http://apps.fcc.gov/ecfs/document/view?id=7521073307>

IP Relay

- Supported Petition for Reconsideration of the IP Relay rate, asking the FCC to suspend its new rate structure for IP Relay, reinstate the prior compensation rate of \$1.2855 and adopt a compensation rate that will ensure the remaining IP Relay service providers have an

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incentive to remain in the market while delivering high-quality services that strive to meet the functional equivalence requirement. Comments also asked FCC to evaluate the performance of IP Relay providers under the ADA's functional equivalence standard.

- On November 4, TDI and NAD met with FCC staff to discuss the effects of recent FCC decisions on VRS and IP Relay service. <http://apps.fcc.gov/ecfs/document/view?id=7520956281>
- On December 5, TDI, NAD, ALDA, DHHCAN, CCASDHH, CPADO submitted a comment in support of Sprint's petition for reconsideration of IP Relay rates. <http://apps.fcc.gov/ecfs/document/view?id=7520960918>

TRS

- Filed comments in iTRS National Outreach Program; participated in monthly meeting with TDI and FCC staff to address TRS issues including functional equivalency, roles and responsibilities of involved FCC divisions, ensuring ADA mandated access is not undermined to reduce fraud, the role of the TRS Fund Advisory Council, concerns about eligibility verification and other topics specific to various TRS programs.
- On February 11, TDI, NAD, HLAA, TLPC discussed Miracom's application for mobile captioned telephone relay service, the need for indoor 911 localization technology, and the need for coordination among bureaus on TRS, with several Commissioners offices. <http://apps.fcc.gov/ecfs/document/view?id=7521072523>. <http://apps.fcc.gov/ecfs/document/view?id=7521073307>
- On March 4, TDI, CCASDHH, NAD, AADB, CPADO, HLAA met with the FCC to discuss TRS issues and VRS reform. <http://apps.fcc.gov/ecfs/document/view?id=7521088859>
- On May 27, NAD, DHHCAN, CCASDHH, CPADO, AADB filed a comment in response to the FCC Public Notice on the Interstate TRS Fund administrator's proposed provider compensation rates, funding requirement, and carrier contribution factor for July 1, 2014 through June 30, 2015. <http://apps.fcc.gov/ecfs/document/view?id=7521151513>
- TDI filed the consumer expectations document and a procedural motion on NAB's motion to extend—the sum total of which led to the FCC's Quality Order. TDI also filed comments and reply comments on the Order's FNPRM on CC responsibility.
- October 22: DHHCAN submitted a letter of support of the efforts of Montgomery County, MD, the United States Conference of Mayors, et al, which have called on the Commission to require onscreen video programming guides to carry program information for all programming, including programming developed by local communities for their public, educational, and government ("PEG") access cable channels. <http://apps.fcc.gov/ecfs/document/view?id=7520949587>
- October 23: TDI spoke with Chairwoman Clyburn's office about the closed captioning quality petition and the need for accessible user interfaces. <http://apps.fcc.gov/>

[ecfs/document/view?id=7520950312](http://apps.fcc.gov/ecfs/document/view?id=7520950312)

- November 4: TDI, NAD, HLAA, ALDA, CPADO, AADB, CCASDHH, DHHCAN, TAP submitted a comment to the FCC on making sure apparatuses render captions according to included timing data as well as explaining that DVD and Blu-ray players need to render closed captions. <http://apps.fcc.gov/ecfs/document/view?id=7520955715>
- December 4: TDI, NAD, HLAA, ALDA, CPADO, AADB, DHHCAN, Gallaudet TAP submitted a reply to comments on IP video programming related to having a synchronization requirement for apparatuses and that subtitles should not be an alternate means of compliance. <http://apps.fcc.gov/ecfs/document/view?id=7520960495>
- December 6: TDI, NAD, HLAA, DHHCAN, TAP, TLPC discussed captioning quality issues with the FCC. <http://apps.fcc.gov/ecfs/document/view?id=7520961342>
- December 11: TDI, NAD, DHHCAN, ALDA, HLAA, CCASDHH, CPADO submitted a second reply to a second response from Amazon.com regarding the Consumer Groups' December 20, 2012 informal complaint alleging violations of the Commission's IP closed captioning rules. <http://apps.fcc.gov/ecfs/document/view?id=7520961650>
- December 24: TDI, NAD, HLAA, DHHCAN, TAP, TLPC met with the FCC and members of the industry to discuss closed captioning quality standards. <http://apps.fcc.gov/ecfs/document/view?id=7521063958>
- Dec. 30, 2013 – Jan. 27, 2014:

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Drafted and filed oppositions to several petitions for waiver of the FCC's closed-captioning rules.

- Jan. 2, 2014 – Jan. 18, 2014: Drafted letter to FCC asking that Commission improve processing of closed-captioning waiver petitions and allow electronic filing of all waivers and oppositions.
- January 15: TDI, NAD, HLAA, ALDA, DHHCAN, TAP filed an ex parte on closed captioning quality standards. <http://apps.fcc.gov/ecfs/document/view?id=7521065991>
- January 21: TDI, NAD, HLAA supported NAB's motion for extension of time in the IP captioning rules for video clips rulemaking. <http://apps.fcc.gov/ecfs/document/view?id=7521067185>
- January 22: TDI, NAD, ALDA, DHHCAN, AADB, HLAA, CPADO sent a letter to the FCC asking to improve efficiency regarding waivers of closed captioning requirements. <http://apps.fcc.gov/ecfs/document/view?id=7521067308>
- January 22: NAD, TDI, DHHCAN, ALDA, HLAA, CCASDHH,

CPADO, TAP filed a petition for reconsideration of the FCC's User Interfaces order. <http://apps.fcc.gov/ecfs/document/view?id=7521066872>

- January 27: TDI, DHHCAN, CPADO, CCASDHH, NAD, ALDA filed oppositions to six closed captioning exemption petitions. <http://apps.fcc.gov/ecfs/document/view?id=7521069332>
- January 27: TDI, DHHCAN, CPADO, CCASDHH, NAD, ALDA opposed six petitions for exemption from the FCC's closed captioning rules. <http://apps.fcc.gov/ecfs/document/view?id=7521069332>
- January 28: TDI, NAD, HLAA, DHHCAN, TAP, TLPC met with the FCC to discuss closed captioning quality. <http://apps.fcc.gov/ecfs/document/view?id=7521068899>
- Jan. 29, 2014 – Feb. 17, 2014: Assisted NAD with drafting of comments in proceedings modifying the FCC rules for user interfaces for closed-captioning and other accessibility controls.
- February 3: TDI, NAD, HLAA, ALDA, CPADO, DHHCAN, TAP submitted comments to the FCC on

the need to cover video clips under the FCC's IP closed captioning rules. <http://apps.fcc.gov/ecfs/document/view?id=7521070997>

- February 10: TDI, NAD, TLPC, HLAA, DHHCAN met with several Commissioners offices to discuss closed captioning quality. <http://apps.fcc.gov/ecfs/document/view?id=7521072019>
<http://apps.fcc.gov/ecfs/document/view?id=7521071501>
<http://apps.fcc.gov/ecfs/document/view?id=7521073057>
- Feb. 10, 2014 – March 8, 2014: Drafted and filed oppositions to several petitions for waiver of the FCC's closed-captioning rules, including Los Angeles Unified School District.
- February 12: TDI sent a follow-up email to all five FCC Commissioners on closed captioning quality and indoor 911 localization technology. <http://apps.fcc.gov/ecfs/document/view?id=7521073056>
- February 18: NAD, TDI, DHHCAN, ALDA, HLAA, CCASDHH, CPADO, Telecom-RERC filed comments in the FCC user interfaces rulemaking on accessing the closed captioning control. <http://apps.fcc.gov/ecfs/document/view?id=7521073675>
- February 20: Claude Stout gave brief remarks during the Commission's Open Meeting in which it conducted formal action with a Report and Order, a Declaratory Order, and Further Notice of Proposed Rulemaking for TV caption quality. <http://www.fcc.gov/events/open-commission-meeting-february-2014>
- February 25: NAD, TDI, DHHCAN,



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- ALDA, HLAA, CCASDHH, CPADO, TAP filed a reply to our user interface petition for reconsideration oppositions. <http://apps.fcc.gov/ecfs/document/view?id=7521080463>
- March 5: TDI, NAD, HLAA, ALDA, CPADO, DHHCAN, TAP filed reply comments in the FCC IP rulemaking related to video clips. <http://apps.fcc.gov/ecfs/document/view?id=7521088567>
 - March 12: TDI, NAD, DHHCAN, CPADO, CCASDHH filed oppositions to several closed captioning exemption requests. <http://apps.fcc.gov/ecfs/document/view?id=7521091576>
<http://apps.fcc.gov/ecfs/document/view?id=7521091577>
<http://apps.fcc.gov/ecfs/document/view?id=7521091578>
<http://apps.fcc.gov/ecfs/document/view?id=7521091579>
 - March 18: NAD, TDI, DHHCAN, ALDA, HLAA, CCASDHH, CPADO, Telecom-RERC filed reply comments in the user interfaces rulemaking. <http://apps.fcc.gov/ecfs/document/view?id=7521093784>
 - March 26: TDI, CPADO, DHHCAN, CCASDHH, NAD, ALDA, AADB opposed the Ministry of Communications of the Archdiocese of Miami's application for review of their closed captioning waiver request. <http://apps.fcc.gov/ecfs/document/view?id=7521095785>
 - March 26: TDI, NAD, HLAA, TAP, TLPC met with the FCC to discuss reversing the FCC's exemption for video clips from the CVAA. <http://apps.fcc.gov/ecfs/document/view?id=7521095864>
 - March 31: TDI, DHHCAN, CPADO, NAD, AADB, HLAA filed a comment in a rulemaking related to reforming how closed captioning waiver requests are handled. We supported requiring electronic filings of individual exemption requests and increasing the speed and transparency of decision-making. <http://apps.fcc.gov/ecfs/document/view?id=7521096237>
 - March 24, 2014 – March 31, 2014: Drafted comments filed in FCC process improvement docket asking that Commission make decisions on pending closed-captioning waiver petitions.
 - March 24, 2014 – March 31, 2014: Drafted opposition to an Application for Review filed by the Archdiocese of Miami, which sought review of FCC's dismissal of its closed-captioning waiver petition.
 - March 31, 2014 – April 2, 2014: Drafted letter opposition to Application for Review filed by San Fernando Cathedral of San Antonio, which sought review of FCC's dismissal of its closed-captioning waiver petition.
 - April 2: TDI, CPADO, DHHCAN, NAD, AADB opposed an application for review by San Fernando Cathedral of San Antonio (TX) for their captioning exemption request. <http://apps.fcc.gov/ecfs/document/view?id=7521096863>
 - April 28: TDI, NAD, HLAA, ALDA, CPADO, DHHCAN, CCASDHH, AADB, SCT, TAP filed a comment in the FCC closed captioning quality rulemaking. <http://apps.fcc.gov/ecfs/document/view?id=7521100403>
 - May 27, 2014 – May 31, 2014: Drafted opposition to waiver of enhanced Electronic Newsroom Technique rules filed by United Communications Corporation, which sought a one-year delay of implementing ENT because of budget issues.
 - May 27: TDI, NAD, HLAA, ALDA, CPADO, DHHCAN, CCASDHH, AADB, SCT, TAP filed a reply comment in the FCC closed captioning quality rulemaking. <http://apps.fcc.gov/ecfs/document/view?id=7521152476>
 - TDI filed a comprehensive report on the state of online video clips with FCC, along with subsequent reply comment and an ex parte meeting/filing in the spring. On the IP Captioning FNPRM, a motion was filed for extension of time, along with comments and reply comments on caption hardware synchronization and DVD/Blu-ray rendering requirements. TDI also filed a short response to Amazon's reply on the consumer groups' complaint against Amazon.
 - TDI also assisted NAD on user interfaces by helping with the consumer groups' comments and an ex parte meeting/filing.

TDM-to-IP Transition

- On the TDM-to-IP transition, TDI worked with TAP and others in a non-representative / partnering capacity to file comments on the accessibility implications of the Iowa Network trial proposal, which was subsequently withdrawn.
- (December 11) Gallaudet TAP, with support from TDI, NAD, DHHCAN, HLAA, ALDA, CPADO, AADB filed an ex parte explaining the needs of people who are deaf or hard of hearing during the TDM to IP transition. <http://apps.fcc.gov/ecfs/document/view?id=7520961545>

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TDI In Action

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■ (February 25) TDI, NAD, HLAA, ALDA, CCASDHH, DHHCAN, and TAP at Gallaudet filed reply comments on the petitions of AT&T and National Telecommunications Cooperative Association for a rulemaking to promote and sustain the ongoing TDM-to-IP evolution. <http://apps.fcc.gov/ecfs/document/view?id=7022124930>

■ (March 31) Samuelson-Glushko Technology Law & Policy Clinic, TDI, NAD, and RERC-TA filed reply comments on proposal of Iowa Network Services, Inc. for Service-Based Technology Transitions Experiment (related to AT&T petition to launch a proceeding concerning the TDM-to-IP transition). <http://apps.fcc.gov/ecfs/document/view?id=7521096384>

Emergency Accessibility

■ (November 7) NAD, TDI, DHHCAN, ALDA, CCASDHH, RERC-TA submitted a reply to comments on accessibility to the Emergency Alert System. <http://apps.fcc.gov/ecfs/document/view?id=7520956859>

■ (January 16) Claude Stout, TDI gave a testimony for a "Locating 911 Callers in a Wireless World" hearing with the Communications, Technology, and the Internet Subcommittee under the U.S. Senate Committee on Commerce, Science, and Transportation. <http://www.nvrc.org/2014/01/claude-stout-speaks-to-senate-committee-on-wireless-911-calls/> <http://apps.fcc.gov/ecfs/document/view?id=7521073586>

■ (February 11) TDI, NAD, HLAA, TLPC discussed Miracom's

application for mobile captioned telephone relay service, the need for indoor 911 localization technology, and the need for coordination among bureaus on TRS, with several Commissioners offices.

<http://apps.fcc.gov/ecfs/document/view?id=7521072523>

<http://apps.fcc.gov/ecfs/document/view?id=7521073307>

■ (February 12) TDI sent a follow-up email to all five FCC Commissioners on closed captioning quality and indoor 911 localization technology. <http://apps.fcc.gov/ecfs/document/view?id=7521073056>

■ (February 18) TDI filed a copy of Claude's January 16, 2014 Senate testimony on "Locating 911 Callers in a Wireless World" in the FCC docket on indoor 911 localization technology. <http://apps.fcc.gov/ecfs/document/view?id=7521073585> <http://apps.fcc.gov/ecfs/document/view?id=7521073586>

■ (May 5) RERC-TA, TDI, NAD, HLAA, ALDA, CPADO, and DHHCAN filed reply comments on Over-the-Top (OTT) texting-to-9-1-1. <http://apps.fcc.gov/ecfs/document/view?id=7521116639>

■ (May 12) TDI, NAD, ALDA, CPADO, CCASDHH, DHHCAN, TAP filed a comment in the FCC Wireless E911 Location Accuracy rulemaking. <http://apps.fcc.gov/ecfs/document/view?id=7521122957>

Other Issues

■ (December 2) NAD, TDI, DHHCAN, ALDA, AADB, HLAA, CCASDHH, CPADO, RERC-TA submitted a comment on the FCC's Section 504 accommodations. <http://apps.fcc.gov/ecfs/document/view?id=7520959981>

■ (December 23) NAD, TDI, DHHCAN, ALDA, AADB, HLAA, CCASDHH, and CPADO filed comments urging the Social Security Administration to revisit its proposed business process with respect to communicating with deaf and hard of hearing people. http://www.hearingloss.org/sites/default/files/docs/SSA_504_Comment_ConsumerGroups.pdf

■ (February 14) TDI sent a letter each to Chairman Carl Levin and Ranking Member James Inhofe with the U.S. Senate Committee on Armed Services requesting their support for a multi-year demonstration program to assess the feasibility and advisability of permitting individuals with auditory impairments to access as enlisted and officer members of the US armed forces.

■ (May 12) Deaf and Hard of Hearing Alliance, of which TDI is a member of, sent a letter of support for ratification of the Convention on the Rights of Persons with Disabilities to Chairman Robert Menendez and Ranking Member Bob Corker, U.S. Senate Foreign Relations Committee.

■ (May 16) DHHCAN filed a comment in response to the proposed Rehabilitation Engineering Research Centers priorities. <http://www.regulations.gov/#!documentDetail;D=ED-2014-OSERS-0018-0004>

■ (May 16) HLAA filed a comment in response to the proposed Rehabilitation Engineering Research Centers priorities. <http://www.regulations.gov/#!documentDetail;D=ED-2014-OSERS-0018-0004>

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