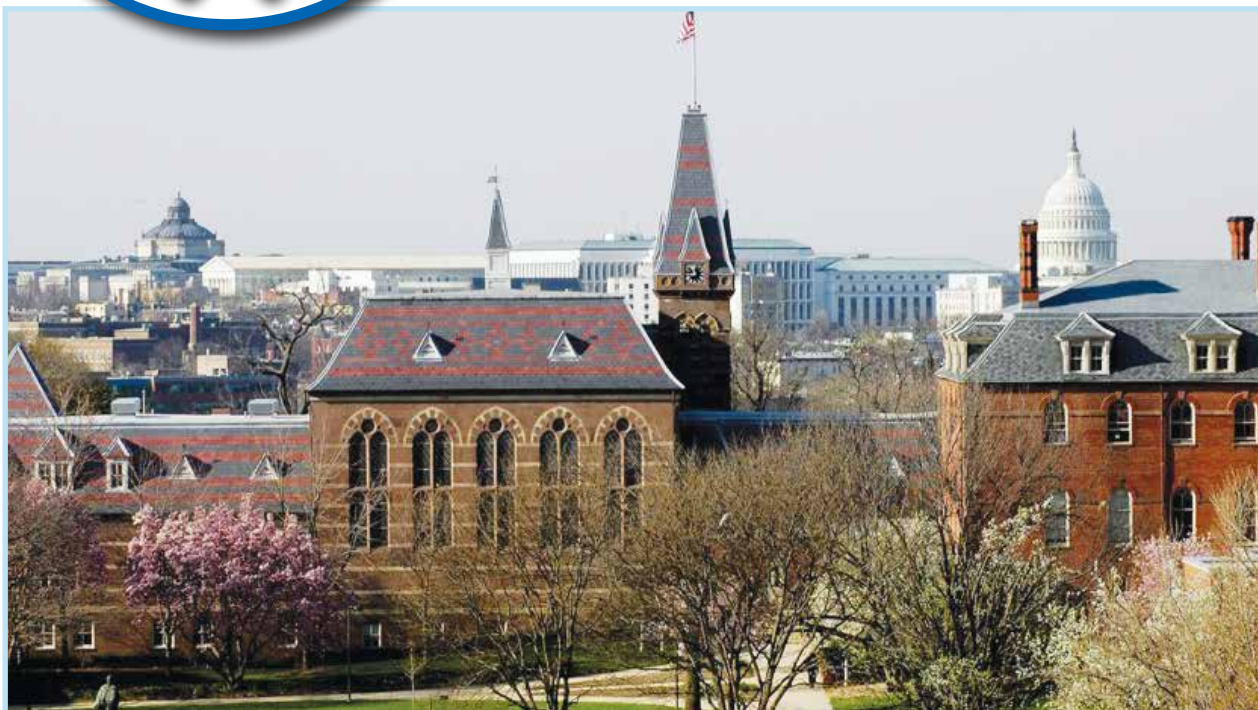




# WORLD

Technology News and Commentary for Deaf and Hard of Hearing People



## 23rd TDI Biennial Conference Highlights

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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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# WORLD

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## Board Views



**SHEILA  
CONLON-MENTKOWSKI**

*TDI President and  
Board Member, West Region*

**“Now that I am off the Board, I intend to be an active TDI consumer member by following telecommunications updates, emergency alert developments, captioning issues wherever they exist.”**



## Last Hurrah

**N**ow, to my last column as President of TDI for the past 6 years and Board member for 8 years. I titled this article my “Last Hurrah” as it is my last article as President of TDI. I am term limited due to a change in the TDI bylaws that state that Board members who serve two four year terms must leave but we can return 4 years later either as an elected regional member or a member at large. It has been a fast 8 years, hard to believe! I am very thankful for my fellow Board members over the years as we worked as a team, particularly when I had to restrict activities for a period of time when I underwent my double lung transplant operation in September of 2016. Andy Lange, then Vice President, stepped in during that period of time and capably led the Board in my absence. Fortunately, I was able to participate in Board meetings remotely via technology so I was always part of the group. A great deal of the Board work ongoing was conducted by email, with documents to review and comment on or approve.

As I type this article, I am extremely busy with assisting Claude Stout

in planning and carrying out the upcoming 23rd Biennial Conference, but as I resume typing, the Conference is a fait accompli as the French would say, done! As you read elsewhere in this issue, it was held on the Gallaudet University campus at the Kellogg Hotel Conference Center. Two of the many highlights during the TDI Conference for me were: the honor of receiving the H. Latham Breunig Humanitarian Award from the TDI Board via Claude Stout and the second was when I introduced President Bobbi Cordano of Gallaudet University during the Opening Ceremony. When she came on stage, we smiled at each other and said, two deaf women lawyers on stage at the same time! Bobbi then asked the audience if there were any other deaf lawyers in the room and two raised their hands, Zainab Alkebsi, Policy Counsel at the NAD, and Debra Patkin, an attorney advisor with the FCC. We all waved our hands and then spotted one more deaf attorney walking into the auditorium, Howard Rosenblum, CEO of the NAD! This was a personal highlight for me as the legal profession was predominantly

**BOARD VIEWS** Continued from page 2

male for many years until around the 1970's when more women were admitted to USA law schools around the country.

Now, back to TDI, we held our TDI Board meeting prior to the TDI Conference and conducted our organizational business. Elections of officers were held and I handed off the Presidential baton to Jan Withers who was our Vice President up until now. The Board is charged with a great responsibility in the time leading up to May 2020 when our long serving and capable Executive Director, Claude Stout, will retire and hand over the reins to the new Chief Executive Officer selected by the Board to lead TDI. I am confident the TDI Board will be able to attract qualified

candidates, interview them and select the most qualified individual.

Now that I am off the Board, I intend to be an active TDI consumer member by following telecommunications updates, emergency alert developments, captioning issues wherever they exist (movies, TV, internet, sports events, weather warnings, transportation alerts in airports, buses, trains), and the like. One issue we have noticed that is cropping up lately and causes my husband and me concern when we travel and stay at hotels is it is not easy to turn the captions on the hotel TVs. Some hotels are easier than others, while a few, we find we need to have the hotel contact the local cable provider to turn on the captions for programming by the cable provider. It

seems there is always an issue or two to continue to work on in daily life. So, while this article is my Last Hurrah I pass the baton of the Presidency to Jan, I am still a consumer advocate at heart and will continue my personal advocacy daily when I encounter barriers that need to be surmounted.

All the best to the TDI Board, Claude, Eric, and staff and volunteers as I depart and become an advocate consumer.

Sayonara,

*Sheila Conlon Mentkowski*  
Advocate Consumer




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## Capitol Commentary



BY CLAUDE STOUT  
*TDI Executive Director*

**“The Conference at Gallaudet University Kellogg Conference Hotel was mentioned in social media to be among the best in TDI’s history.”**

## My Last Time Managing the TDI Conference, the 12th!

If you didn’t participate in the 23rd TDI Biennial Conference in Washington, D.C., I hope this issue adequately fills you in with highlights, information tidbits, and pictures that would make you feel you were with us at the Conference. Thanks to all who attended the 23rd TDI Biennial Conference. And I hope you found the Conference addressing or exceeding your purpose(s) for attending the event. The Conference at Gallaudet University Kellogg Conference Hotel was mentioned in social media (and also our internal evaluation process) to be among the best in TDI’s history.

The Conference was the 12th and the last that I managed as TDI’s Executive Director. I can remember the first Conference I assumed responsibility for in 1997 and it took place in Kansas City, MO. The following ten Conferences took place in: Seattle/Tacoma, WA in 1999, Sioux Falls, SD in 2001, Las Vegas, NV in 2003, New Orleans in 2005, San Mateo, CA in 2007, Washington, DC in 2009, Austin, TX in 2011, Albuquerque, NM (jointly with ALDA) in 2013, Baltimore, MD in 2015, and North Bethesda, MD in 2017. TDI’s biennial Conferences are now regularly held in metro DC area, not elsewhere across America, due to travel budget restrictions with the FCC, and other federal agencies.

The theme of the Conference was: “With Access, Everyone Wins!” When you read this issue, you will see why we had the kind of program for the Conference. We arranged a series of events to meet five main goals:

1) Individually or as a group, we have unlimited possibilities to contribute

to this important multi-dimensional process via technology, policy, program, practice, and belief.

2) This is a critical time to engage in collaborative activities between consumer groups, academia, industry, and government.

3) We strive to experience a prosperous future in which we get to stay a step ahead of communication technologies, rather than play “catch up.” When this happens, everyone wins, not just us deaf or hard of hearing people. We would be more included in the general community, and more fully independent to participate in any life activity.

4) We are impacted equally as other Americans (those without a disability) from events that happen daily in the political climate, and the emerging threats from the Internet, that affect our security and/or privacy.

5) We commit to join forces with industry and government to take advantage of today’s technologies, or to develop plans for future ones to maximize our full participation in society.

During the three days of the Conference, whether we were a consumer advocate, an industry player, or a government policy maker, we made the most out of this unique opportunity to network, share ideas for best practices, and contribute toward shaping an accessible world.

Let’s all give kudos to over 27 corporations and others for their sponsorship of the Conference. We value them immensely as our partners!

**CAPITOL COMMENTARY** Continued from page 4

If not for their full support, we would not be able to cover the expenses of the Conference. They truly care about our ongoing advocacy work in Washington, DC. They actively collaborate with us in between Conferences. Because of these industry players, along with those in government policy-making, our world has become a more accessible place for all Americans. Thank you, thank you to our friends in the marketplace! I would be remiss if I didn't mention the 24 corporations that generously sponsored the Conference. They were: Ultratec, Verizon, NTID/RIT, Sorenson Communications, Netflix, AT&T, CSD, ClearCaptions, Hamilton Relay, Facebook, Comcast, Entertainment Software Association, Gallaudet, CTIA, Amazon, Adobe Systems, Sprint Accessibility, T-Mobile USA, Uber, Microsoft, Charter Communications, VITAC, Consumer Technology Association, and ZVRS/Purple. GlobalVRS helped with an

advertisement in the Conference program book.

We had 12 companies/businesses that had exhibits at the Conference. We appreciated very much their interest and support to introduce to the attendees the latest they have in accessible technology and service. Those who exhibited were: Technology Access Program at Gallaudet, Access256 Productions, Hamilton Relay, MITRE, Sorenson Communications, David Abrams Attorney At-Law, Facebook, TranslateLive, ClearCaptions, Alternative Communication Services, Sprint Accessibility, and Ultratec.

We were elated to have the support we got from 12 companies/businesses that conducted product/service demonstrations at the Conference. They were: ClearCaptions, Hamilton NG9-1-1, CSD (Connect Direct), TranslateLive, uCaption, Facebook (Oculus and Portal), Sprint Accessibility (Sprint IP Relay App),

and ZVRS/Purple (OneVP).

It was great to work with members of the Conference Program Committee (Sheila, Mark, Matt, and Eric) to make this event possible. At the end of the Conference on Saturday, August 17, we gave out nearly \$6K prizes: an iMac, a MacBook Air, 2- iPads, 2- Apple Watches, 2-Beats wireless headphones, and an Apple TV.

Last, but not least, TDI is forever indebted to having incredible support from a great seven-member TDI Board of Directors, staff, and volunteers. Over 80 individuals from government, industry, academia, and consumer advocacy groups took part in Conference program. We thank CaptionFirst, Diana Markel/Jay Krieger, and Debbie Jones and her colleagues at NVRC immensely for their support with CART, sign language interpreting, support service provider(SSP), and assistive listening system services.



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## Our Quest for Access



BY ERIC KAIKA  
*Managing Editor*

**“Keep your eyes on the 24th TDI Biennial Conference in 2021 - encourage everyone to attend, because it’ll be nothing short of amazing.”**



## What a Conference! I Want to Go Again, Tomorrow and Next Week!

The 23rd Biennial TDI Conference was the second time I attended a TDI Conference, but the first time where I was more hands-on and behind the scenes. Both times I’ve walked away impressed with opportunities TDI delivers at its conference. To me, it felt rare - seeing an event where industry players and deaf and hard of hearing consumers interact and learn from one another. Granted, I may not have attended 500+ conferences, but I do believe TDI is a hidden gem.

Overall, TDI continued to meet the expectations of the attendees, approximately 70% of them found it to be excellent and good in nearly every category (e.g. advertising, registration, networking, programs, etc). Others opting for average. I find that to be highly motivating, as this means there ways to improve and build a more attractive conference for the remaining 30%.

It will be very interesting to see what the next TDI Conference brings in 2021. TDI will have a completely new leadership team armed with good

informative data and suggestions. It’s so exciting I almost cannot wait to register again.

I know the saying is redundant, that technology is changing at a rapid pace. The transformation from analog to digital brought forth a tremendous amount of potential for the disability community to become more inclusive. However, this continued progress is also starting to sideline the community due to the lack of accessibility features within technology. TDI needs to be more vigilant now than ever, to stay on top of the latest developments, growing and maintaining relationships with industry, but more importantly, have a stronger rapport with our community.

We need your stories, your experiences, whether they be constant frustrations or life-saving moments, TDI needs to hear them and harness them into a powerful tool to push for policy change. There’s no better place

*Continued on page 7*



**OUR QUEST FOR ACCESS** Continued from page 6

to start than a TDI Conference. But let's not wait two years, let's start today. Tell your family and friends about the mission of TDI - to advocate for equal access in telecommunications, media and information technology. Have them become members, tag us in their stories on social media, or make a tax-deductible donation.

TDI has the potential to do more. I can envision a TDI Conference with thousands of people registered, networking with industry, and helping shape a more accessible world. TDI can't do it alone, it needs the constant support of its members and community.

Can you imagine a full-scale conference with the latest autonomous vehicle on display for us deaf/hard of hearing people to experience and provide feedback? Using an augmented reality (AR) program on your smartphone while navigating the conference? Perhaps sitting in on a virtual reality gaming, or even getting first-hand experience of new captioning technology. The possibilities are endless, and TDI can make it happen.

Despite the caveat of TDI being a small nonprofit organization, it could also be its greatest strength. It can quickly transform and grow in the right areas to best represent the deaf and hard of hearing community. And it all starts with the community. So let's start today. Share this magazine with your local library, ask all your Facebook friends to follow TDI's page, and keep your eyes on the 24th TDI Biennial conference in 2021 - encourage everyone to attend, because it'll be nothing short of amazing.



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# Opening Ceremony / Welcoming Remarks

by Sheila Conlon-Mentkowski, Roberta Cordano, and Jessica Rosenworcel

BY CLAUDE STOUT

**T**he 23rd TDI Biennial Conference got off to a great start with its Opening Ceremony, emceed by Sheila Conlon-Mentkowski, TDI Board President. She began the ceremony with welcoming remarks to the audience and thanked them for coming to the Conference. She also introduced the TDI Board of Directors, the TDI staff, and its pro bono legal teams. She recognized and thanked the 24 sponsors of the Conference.

President Conlon-Mentkowski introduced Gallaudet University President Roberta Cordano to give greetings on behalf of Gallaudet University. Cordano spoke of how proud Gallaudet was to serve as the site of this Conference. She was wondering how many of us in the audience are Gallaudet alumni, not just those that received a degree or two, but also having taken a class or a few. There was a great show of hands from the audience. She mentioned having recently returned from a trip to Paris, France, where she and over 3,000 delegates attended the World Federation of the Deaf (WFD) Conference. While supporting the TDI Conference theme, "With Access, Everyone Wins!," she said that at the WFD event, they emphasized the importance of the deaf and hard of hearing community having played a huge part of a global economy.

Cordano elaborated more on the "win" part of the Conference theme. She said Gallaudet University was where sign language was discovered as a language. Because of what has been prevalent on its campus inside and outside of the classroom, through research and discovery, Gallaudet had sufficient vibrancy of ASL to recognize



TDI Board President Sheila Conlon-Mentkowski kicks off the 23rd Biennial Conference Opening Ceremony

certain patterns of that language. Those patterns and its existence provided evidence that American Sign Language is a true bona fide language. She remarked it is now the third most popular language being taught in American colleges and universities, and that it is estimated to have created a \$43 million industry just to teach ASL. She asked us what else that has contributed to the economy. She pointed out that we just celebrated the 200th year of deaf education in Connecticut last year, and Gallaudet was founded around forty-five years after the Connecticut school. And that it has led to political activism, civil rights, passage of the ADA and with that, we all have transformed the future of our community and language by demanding that communication access be provided in our mainstream. She praised TDI as being the single most significant influence in shaping and implementing communication access legislation. She estimated the market of communication through sign language is worth \$3 billion, thanks to the support from the FCC and the business community such as Dawn Sign Press, Route 66 Productions, and other deaf-run businesses.



Gallaudet University President Roberta Cordano also shares welcoming remarks

Next on stage was Claude Stout, TDI Executive Director who introduced FCC Commissioner Jessica Rosenworcel. He shared that she has high respect from TDI and its sister consumer groups for their work on disability access. Stout explained that Commissioner Rosenworcel has proven to be a staunch advocate for Americans who are deaf, hard of hearing, late-deafened, deafblind, or deaf with a second disability. Stout pointed out that with those in government, we expect our officials to "walk the talk." He said no doubt, she has done it really well. He praised her on two of her many stances/votes for the Commission's regulatory decisions in disability access, one for captioning of video clips in February 2014, and another one for the reforms for IP-CTS in June 2018.

After thanking Stout for the introduction, Commissioner Rosenworcel began her address by mentioning how proud she is of a framed legislation piece about the 21st Century Communications and Video Accessibility Act that is hung on the wall outside her office at the FCC.

Continued on page 9



TDI Executive Director Claude Stout introduces the Keynote Speaker



Keynote Speaker Commissioner Jessica Rosenworcel introduces herself by fingerspelling "Hi my name is Jessica."

#### OPENING REMARKS Continued from page 8

She walked us through some history of other disability access legislation, starting with the biggest change in 1990 -- the Americans with Disabilities Act. She pointed out that it was 29 years ago when this law laid the foundation for the meaningful inclusion of 60 million Americans with disabilities in all aspects of modern life. Title IV of the Americans with Disabilities Act (ADA) became part of the Communications Act. It tasked the FCC with making sure that telecommunication relay services are widely available. A few years later, in the Telecommunications Act of 1996, the FCC was tasked by Congress with improving access to communications equipment, ensuring it is designed, developed, and accessible for those with disabilities. She concluded the historical background, indicating how important the CVAA is helping us reach new heights as we access the Internet.

She proudly identified the Commission's follow-up activities on the CVAA. Its creation of the National Deaf-Blind Distribution Program to assist low-income individuals who are deaf-blind with access to equipment for phone and internet services. Updates of its hearing aid policies put us on a pathway to have 100% of mobile phones hearing aid compatible. It reinstated its video description rules and updated its closed captioning rules, increasing

access to television content. The FCC also established new and streamlined procedures to handle complaints about accessibility matters.

She said, it was a good thing we passed the law back then. She referred to the changes we experience today such as artificial intelligence, augmented reality, virtual reality, automatic speech recognition, and the Internet of Things.

She suggested that there are three values at the heart of the ADA and its successors, the Twenty-First Century Communications and Video Accessibility Act. She said these values have brought us this far, carry us into the future, and serve as guideposts for what comes next and how we navigate accessibility for all. The three values are the principles of non-discrimination, functional equivalency, and inclusion. She said the ADA was expressly designed "to establish a clear and comprehensive prohibition of discrimination on the basis of disability." She contended that under the ADA, functional equivalency has been the foundation of our telecommunications relay service policies. She said that the FCC has done significant work in closed captioning to promote inclusion.

She commended the work of Gallaudet University and the national consumer advocacy groups for their current efforts to address much needed higher standards for caption quality.

She recognized a grant award that Gallaudet University received from the Department of Health and Human Services to study the feasibility of consumer-based metrics for caption quality. She applauded the recent effort from a coalition of disability rights organizations, including TDI, asking the FCC to conduct a rulemaking to develop metrics for captioning live television programming.

She closed her address by giving an example of how all three values are at work. One morning she joined a group of advocates for the deaf and hard of hearing at a coffee spot. She observed with interest that when she entered in the coffee shop, that instead of the usual noise and shuffle, it was all quiet inside. This was because this location is the first signing coffee store in the US designed for and staffed by those who are deaf and hard of hearing. She said, "What a perfect place to sit with a tall, steaming cup of coffee and discuss the promise of new technologies and the opportunities to bring those with disabilities deeper into our civic and commercial life, because that promise was all around us."





Audience member (Andrea Saks) asking a question to the FCC panel



## FCC Town Hall Meeting

*with Suzy Rosen Singleton, Eliot Greenwald, Theodore Marcus, and Debra Patkin*

BY SHEILA CONLON MENTKOWSKI

**T**hursday morning, August 15th, 2019 in the Swindell Auditorium, Sheila Conlon Mentkowski moderated this panel. Diane Burstein, the Deputy Chief, Policy, Consumer and Governmental Affairs, FCC, was unable to present due to an emergency family situation. The other panelists were all from the Disability Rights Office, Consumer and Governmental Affairs of the FCC: Suzy Rosen Singleton, Chief, Eliot Greenwald, Deputy Chief, Theodore Marcus, Deputy Chief, and Debra Patkin, Attorney Advisor.

Suzy Rosen Singleton led the Town Hall by giving an overview of what had happened since the prior TDI Conference in 2017. She reviewed the

FCC's official regulatory decisions and proceedings related to key non-TRS issues impacting the needs of the deaf and hard of hearing, deafblind, deaf and have an additional disability such as mobility constituents in America. Eliot provided a briefing of the efforts since the 2017 TDI Conference on the FCC's regulatory decisions and proceedings related to key TRS issues impacting the need of the deaf and hard of hearing, deafblind, and those who have an additional disability to deafness. Theodore Marcus gave an overview of the outreach activities of the DRO since the 2017 TDI Conference. Debra Patkin spoke on the purpose, membership, activities and results of the FCC's Disability Access Committee since the 2017 TDI Conference. As moderator, I was pleased to see a coordinated flow

of information from the FCC DRO staff on their ongoing efforts to ensure regulatory proceedings and related matters would provide access in telecommunications, TV broadcasting, emergency alerts, and the like to our constituency throughout the USA.

We thanked the FCC for their remarks and also for last May 2019's workshop at the FCC on local TV stations' obligations to provide ENT captioning of their local news, weather, and sports shows. We commended the FCC DRO staff on its work on the National DeafBlind Equipment Distribution Program (NDBEDP) which is an ongoing effort with the 50 states to provide equipment every state's deafblind community needs for use of the telecommunications network in the USA.



Apple Director of Global Accessibility, Sarah Herrlinger

## Apple Accessibility: The Power of Designing with Everyone in Mind

*with Sarah Herrlinger*

BY JAN WITHERS

**G**iven Apple Corporation's long-standing commitment to accessibility and diversity, it made perfect sense that one of the keynote addresses on the first day of TDI's 2019 Biennial Conference would be presented by Sarah Herrlinger, Director of Global Accessibility Policy and Initiatives, Apple Corporation. Jan Withers, President of TDI's Board of Directors, introduced Ms. Herrlinger, and noted her address was entitled, "Apple Accessibility: The Power of Designing with Everyone in Mind."

Ms. Herrlinger remarked that for many years, Apple has made a point to



consider accessibility in all aspects of their product development, including the development of concept, design, and end-user testing. Apple also has a history of engaging Deaf, Hard of

Hearing, and DeafBlind individuals throughout the process of developing their products, including soliciting feedback on their experiences with their products for further refinement and improvement.

In Ms. Herrlinger's address, she cited several examples of Apple's engagement with consumers with diverse capabilities. One example is Apple's work with the California School for the Deaf's football team and how their products had a role in the success of CSD's team. Another example cited by Ms. Herrlinger is the recent opening of the Apple Carnegie Library store, not far from Gallaudet University, and the hiring of 22 deaf employees to work at this location.



Matt Gerst, CTIA's  
Vice President of  
Regulatory Affairs

# Wireless Advances Accessibility

With Matt Gerst

BY CM BORYSLAWSKYJ

**M**att Gerst presented about the next wireless generation, 5G that has been expanded to 29 cities now, and next to 79 more cities soon across this country. Thanks to the CVAA that made this wireless advances ahead possible, there are some possibilities for the deaf and hard of hearing people to access the networks up to 100 times faster than 4G and up to five times more responsive, and video conferencing as well as increasing usage of point to point videophones including mobile.

## 1. How long will 5G be completed across this country?

There are some comments that what took the wireless industry too long to expand 5G? It should originally be done by now. Answer: It depends on local or state governments to decide how much to invest in the wireless infrastructure. Some residents complain about cell towers installed too close to their home. This is ongoing major issue. Be encouraged to contact local homes to support the wireless.

## 2. What about smart cities?

It will be upcoming, but it is not yet in

final stage right now, and some cities are in experimental progress.

## 3. What about free vs paid wireless connections?

Free wireless is called a hotspot which you can access at no cost and however hotspots are growing faster and becoming available in most places like hotels, and coffee shops etc. Paid wireless is decided by phone carriers or Internet providers that may offer prices depending on their coverage availability areas.

See more info at the link: <https://www.ctia.org/news/making-wireless-Accessible-for-all-americans>



## Breakout Workshop



Motion Light Lab's Melissa Malzkuhn speaks while panelists Sean Rajjib (WB Games) and Delara Derakhshani (ESA) listen

# Gaming Systems: What Will Happen in the Near Future

*With Delara Derakhshani, Sean Rajjib, Melissa Malzkuhn, and Jason Lamberton*

BY ERIC KAIKA

**T**he first parallel breakout workshop of the Conference discussed gaming, paneled by Delara Derakhshani of Entertainment Software Association, Sean Rajjib of Warner Brothers Games, Melissa Malzkuhn and Jason Lamberton of Motion Light Lab at Gallaudet University.

Delara shared some of the latest progress made with gaming accessibility. She explained that because CVAA requires advanced communication services be accessible, and since gaming uses a lot of text and voice chats - the industry's awareness regarding gaming accessibility is greater than ever before. Although there are still technical challenges, the industry's culture has shifted from top down and progress is being made. There is a concerted effort to

ensure accessibility, especially in the beginning stages of design, testing and research.

Sean shared some of WB Games accessibility progress in making sure their games are accessible for everyone. They brought on several people with disabilities as part of their beta testers, where they share concerns, ideas, or improvements to their games. They also publish an accessibility features support page online detailing all the features available in the game. There's even an email address for gamers to contact WB regarding accessibility concerns. And finally, they also have a Summit School internship program for students with special needs to visit the WB studio, test games and learn other skills.

Melissa explained they initially started out developing language access literary works for children to help

them become literate in text. Their first material was a bilingual app incorporating ASL, visual and audio languages. This story rapidly grew into 17 books world wide with several more books in the works. They are now trying to fine-tune their avatar's signing by using virtual reality and motion capture technology, which Jason elaborated on.

Their MoCap Lab has 16 cameras in a 360 radius, the camera technology is identical to Hollywood's! They are able to capture all sides of hand movements by using little markers to capture the fine motion of finger movements and facial expressions. After a brief video demo the audience was amazed at how real a cartoon character was able to sign flawlessly in ASL.

In closing, there was no doubt left in everyone's mind that there's a huge future in gaming accessibility. And it all started here, at TDI's Conference.

## Breakout Workshop



Laurie Flaherty of US Dept Transportation explaining about emergency locating services. Seated (L-R) Toni Dunne and Wrentree Kelly-King

# The Latest with Emergency Communication, and What the Future Holds for Us

*With Laurie Flaherty, Wrentree Kelly-King, Toni Dunne, Donna Platt, and Jeffrey Beatty*

**T**he TDI biennial conference packed the room for two sessions addressing topics related to 9-1-1. The first was focused on The Latest in Emergency Communications, moderated by Laurie Flaherty of the National 9-1-1 Program with the U.S. Department of Transportation, panelist included Wrentree Kelly King retiree from Fairfax County 911, Toni Dunne with Hamilton NG911, Jeffrey Beatty from Canada, and Donna Platt of the Division for the Deaf and Hard of Hearing in North Carolina.

Following an enlightening discussion on the history of 9-1-1 services, TDI participants were provided insight on where we are today in emergency communications. 9-1-1 providers are in the process of replacing our 50-year-old analog legacy infrastructure and moving to a digital Internet model. This transformation touches all three areas of processing emergency calls – from the consumers' call to receipt of

the call (9-1-1/Dispatch) to the first responders in the field answering the call for help. It is a huge undertaking and it is moving slowly. But once in place, much more becomes possible such as text, real-time text, photos, video and more. It provides for better connectivity between 9-1-1 call centers and will also allow for more data enriched information, such as better location detail. All of this can contribute to improved outcomes. However, there are issues that slow down or block this progress - governance and funding which are quite diverse across the country.

We are seeing some advancements such as SMS Text-to-911 and Real-Time Text (RTT) as the first step. While SMS has been very slow to be adopted in 9-1-1 over the past 10 years (approximately 29% from the FCC voluntary text registry), RTT has quickly been adopted by wireless carriers. This has started the process for 9-1-1 service providers

to also develop RTT capabilities, with only 2 solutions to date. We need BOTH to ensure full access. With technology change also comes operational concerns such as keeping staff trained on the various modes of communication used by their callers. There are also concerns for consumers who live in rural areas of our country that don't have broadband services or cellular networks. While there is no deadline for the U.S. to complete this transition, the Canadian Radio and Telecommunications Commission (CRTC) has, in fact, mandated NG9-1-1 by 2020 and will have SMS and RTT available to their citizens.

Next Generation is really NOW Generation. But it is not a flip of a switch. It is evolutionary. The session wrapped up with discussions on how consumers can advocate for equal access by partnering with state 9-1-1 agencies and local 911 centers. We need collaboration to make this transition successful!



Moderator John Wyvill, Executive Director for Nebraska Commission for the Deaf and Hard of Hearing

## The Untapped Potential of State Agencies: Opportunities for Collaboration

*with John Wyvill, Virginia Moore, Steve Florio, Annie Urasky, and Jan Withers*

John Wyvill, the Vice President of the National Association of State Agencies of the Deaf and Hard of Hearing (NASADHH) and the Executive Director of the Nebraska Commission for the Deaf and Hard of Hearing, informed the audience that due to American Airlines' snafu the other day, Sherri Collins, the President of NASADHH was unable to attend, she sent her apologies, and he was taking her place, moderating the discussion. He then introduced the four panel members: Virginia Moore, Executive Director of the Kentucky Commission on the Deaf and Hard of Hearing; Jan Withers, Director, North Carolina Division of Services for the Deaf and Hard of Hearing; Steve Florio, Commissioner of the Massachusetts Commission for the Deaf and Hard of Hearing; and Annie Urasky from Michigan Division on Deaf, DeafBlind, and Hard of Hearing which is housed under the Michigan Department of Civil Rights.

Each of the state leaders briefly explained their respective state commission or division and services to their constituency. Michigan appeared to be one of the oldest established commissions for the deaf, deafblind, and hard of hearing while Massachusetts and North Carolina appeared to have the largest staff on hand.

There was a time after each state representative gave an overview of their states' services for the audience to either ask questions or provide comments on the commissions. Some of the questions ranged from length of time of requesting interpreter services or not obtaining interpreter services and where to file a concern; others were on state distribution of telecommunications equipment and other similar devices.



NASADHH panel: (L-R) Anne Urasky (MI), Steve Florio (MA), Virginia Moore (KY), and Jan Withers (NC)



NC Executive Director Jan Withers explaining her state's services while the other state Executive Directors watch



## President's Reception



Karen Peltz Strauss exchanges greetings with Claude Stout

President Jan Withers explaining about the  
TDI's CEO Search Committee



Jan Withers presenting Sheila Conlon Mentkowski with a service plaque recognizing her years of service to TDI as a Board member



Jacob Salem accepting service award on behalf of Jarvis Grindstaff.



Sheila Conlon Mentkowski and Claude Stout greeting guests (Brenda Frey Kelley) as they arrive to the President's Reception



President Reception guests





Monica Desai, Facebook's Director of Accessibility Policy, talks about how connecting everyone, benefits everyone

## Connect Everyone, Benefit Everyone

*with Monica Desai*

BY JOHN KINSTLER

**D**o you ever wonder where we are in these rapid changes of today's technology with social media, making sure that we, the people of disabilities, are benefitting from Facebook's current and latest features? Although social media companies strive to attract their consumers on their latest features it is still our responsibility to test their product/features, provide feedback, educate and remind them about inclusion for people with disabilities. Is everyone connected? Is everyone benefitting from social media regardless of our disability?

We were fortunate to have Monica Desai, Director of Facebook's Global Connectivity and Accessibility Policy to speak with us and give us the latest that Facebook has and are working on to ensure inclusion for people with disabilities. With a well packed and interested audience, Ms. Desai explained that her job focuses on working to improve the accessibility of their products, as well as increase diversity and inclusion in our workforce. She pointed out that Facebook Global Connectivity and Accessibility Policy's mission is to, "Give people the power to build community and bring the world

closer together; that means everyone... accessibility is truly fundamental to getting Facebook's mission right." There are hundreds of millions who need or are choosing to use accessibility tools and options to experience the information and connections that happen on Facebook.

Ms. Desai presented what the Facebook Accessibility Team is doing to focus on accessibility and they are:

**Real Time Video and Live-streaming Captioning** - Facebook is investing in artificial intelligence technologies to enable automated captioning for videos as well as making it easier for users to add captions.

**Facebook Tool for Blind Users** - using artificial intelligence and machine learning to build a tool to help people who use screen readers understand more about what is in photos of Facebook using Automatic Alt Text and face recognition are tools.

**Expanding Access to Virtual Reality** - Facebook's Oculus produces VR headsets and equipment brings accessible experiences to life such as audio option for visually impaired and virtual access for those who are unable to use the stairs.

Facebook Accessibility Team focuses on working with people who have hearing loss, low vision, cognitive disabilities and others who might influence interactions with their technologies.

Facebook is hiring people with disabilities. Facebook can learn from people with disabilities, their experiences as well as get advice and input to help their products and programs to be accessible for people with disabilities.

### How can we/TDI help Facebook on Accessibility?

We are the "Movers and Shakers" when it comes to ensuring accessibility, it starts with us. We are living the life and it is our responsibility to educate and share what we need with Facebook so they can take them into consideration when improving their product.

In closing, as I said before that technology is changing rapidly and it is hard to trust that with change or emerging technologies that it will be accessible for people with disabilities. It is our job to ensure that it is and TDI can help accomplish this. Let TDI know of any issues and we will help fight this. This is how we connect and everyone benefits!



## Breakout Workshop



Leaders from the Captioning industry talking about automated speech recognition (ASR),  
L-R: Mike Kralec, Joshua Pila, Richard Pettinato, John Capobianco, Heather York, and Darlene Parker

## Captions for TV, Internet, and other Video Programs

*With John Capobianco, Heather York, Darlene Parker, Joshua Pila, Mike Kralec, Richard Pettinato, and Blake Reid*

BY CM BORYSLAWSKYJ

**A** major issue is the quality of captioning. There is lack of captioning measurement standards as well as what is involved in the best practices of live or automated closed captioning. An increasing number of vendors offer artificial intelligence (AI) -enabled voice recognition software for live captioning. The panelists agreed that ASR (Automated speech recognition) will stay today and in the future, regardless of any protests or ineffectiveness of closed captioning standards. We learned that the

five-year research project began in October 2018 at Gallaudet University to evaluate, develop, and provide captioning quality metrics. Attendees brought up some concerns about poor quality of closed captioning:

1. Why don't the vendors clean up the closed captioning at final stage? **Answer:** it may take more than five hours and is costly.
2. Repeated wrong placement on the screen like ABC, CBS and NBC. **Answer:** there is almost no one who can screen out the errors. For example, the stations use ASR as

they thought it works on own, but they did not realize that it caused more errors. Therefore, they should not neglect their duty to watch afterwards.

3. Uppercase vs lowercase letters, or who will speak next turn? Confusing speakers. **Answer:** one panelist suggested using "&gt;" as greater than sign as a symbol to indicate the person's name whose speaking. It was suggested that we should wait for the project to be completed by Gallaudet as the final result for the captioning quality metrics.

## Breakout Workshop



Above: Part of the DeafBlind panel  
(L-R) Randy Pope and Rene Pellerin

Bryen Yunashko explaining about technology  
and access for DeafBlind

# Technology and the DeafBlind Community

*With Bryen Yunashko, Art Roehrig, Jamie Pope, Randy Pope, and Rene Pellerin*

BY JOHN KINSTLER

**W**ith five DeafBlind panelists and a meeting room full of service providers, members of the FCC and friends, a lot of information was exchanged in this 1 hour and 15-minute session. After the general scope of what the panelists explained how they use technology today, they explained that although it is there, it is dated. There were many topics where the panelists brought to light that they are still being oppressed, denied and are being underserved even with today's rapid development in telecommunications

not being "current" to the DeafBlind's telecommunication needs.

Technology is there but it is old and not up to standards as sighted deaf people. After so many years using TTY and Telecommunication Services, Deaf sighted people now can use Videophones/VRS service to communicate using their primary language ASL, but the DeafBlind are still using TTYs or teletypewriters to communicate (TTY to TTY or TTY to IP Relay) or they are using VRS but with the assistance with an SSP. GlobalVRS CEO, Angela Roth talked about how deeply the DeafBlind people are underserved and

mentioned that Global VRS is the only VRS company to provide Video Relay Service for people who are Deaf Low Vision and those who are DeafBlind to use their service independently – without an SSP.

Suzy Rosen Singleton, Chief Disability Rights Office of the Consumer and Governmental Affairs of the Federal Communication Commission (FCC) mentioned that she sympathizes with the panelists and stressed that the DeafBlind community needs to bring their concerns and issues of being underserved to the FCC. They need to file a complaint so it becomes a part of the docket and the FCC can review.

## Product/Service Demo



Toni Dunne demonstrating Hamilton's Next Generation 911

## Hamilton NG9-1-1

With Toni Dunne and Seth Marks

BY MARK SEEGER

**H**amilton showcased Customer Provided Equipment (CPE) which is RTT enabled that allows TTY users as well as RTT users to access 911 communications through a Public Safety Answering Point (PSAP) Administrative Line. A live demonstration of RTT from a mobile device (using RTT) to the administrative handset (designed for PSAP use only) was displayed. Audience members were able to see how RTT communications were displayed on the Administrative Console and how additional location data was displayed when available on the PSAP device for the 911 call taker to more accurately locate the inbound caller.



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## Motivational Luncheon



Ryan Maliszewski, Director of Gallaudet Entrepreneurship Program keynoting the Motivational Luncheon



# Deaf Entrepreneurship: Shifting Gears in a New Economy

*With Ryan Maliszewski*

BY MATT MYRICK

**T**his summary captures an energetic and outgoing presentation led by Ryan Maliszewski, Director of Innovation and Entrepreneurship Institute, Gallaudet University in Washington, DC.

“Shifting Gears in a New Economy” led by Ryan Maliszewski showed us an opportunity to empower those who are looking for new ways to enter the world of entrepreneurship and start-ups to better understand what resources it takes to arrive and achieve those goals. He delivered

invaluable information that we wanted our audience to take and run with and understand those elements and possibilities that are involved with entrepreneurship.

Maliszewski went on to talk about the endeavors one would take to succeed such as, having a vision, the risk, new ideas and innovation, taking leadership, initiating start-ups, collaboration, attitude, management, owning it, understanding venture capital, planning and identifying solutions and resources. Incorporating all of this is no easy feat; as entrepreneurs you must recognize

when you’re doing wrong, there are key elements that can help them for greater success. The four key elements are perseverance, managing cash flow, become an influencer and don’t do it alone. Entrepreneurship is to build block by block to achieve your desired goal.

Maliszewski adds “Entrepreneurship is a skill that can be taught, not a talent that belongs to only a few. Entrepreneurship is about value creation, therefore, anyone with entrepreneurial thinking has something to contribute towards a greater good.”

## Breakout Workshop



Leaders from the Captioning industry talking about automated speech recognition (ASR)  
L-R: Christopher Engelke, Cristina Duarte, Bruce Peterson, Mike Strecker, Linda Kozma-Spytek

## IP-CTS at Crossroads

*With Lise Hamlin, Dixie Ziegler, Dennis Selznick, Christopher Engelke, Cristina Duarte, Bruce Peterson, Mike Strecker, and Linda Kozma-Spytek*

BY MARK SEEGER

**W**hat is going on with qualitatively measuring IP CTS performance and establishing new minimum standards with the FCC for IP CTS?

There is an industry working group that has been formed with all the IP

CTS providers which meets monthly to try and tackle the variety of possible IP CTS measures. Some challenges include the wide variety of call types and coming to an agreement on the types of measures that would reasonably be used for such call types (one size does not fit all). The FCC has also contracted with Mitre (Gallaudet

University Research Center) to help recommend reasonable metrics from scripted calls. Consumers and industry continue to monitor the use of Automated Speech Recognition within IP CTS operations – it was agreed upon that quality and user experience is exponentially impacted if accuracy declines.

## Breakout Workshop



Half of the VRS panel shown (L-R) Charity Warigon, Angela Roth, Greg Hlibok, Lance Pickett, and Mark Hill

## VRS at Crossroads

*With Zainab Alkebsi, Greg Hlibok, Jeff Rosen, Lance Pickett, Angela Roth, Mark Hill, Charity Warigon, and Bryen Yunashko*

BY SHEILA CONLON MENTKOWSKI

**V**RS at a Crossroads was moderated by Sheila Conlon Mentkowski and discussed by a panel comprised of Zainab Alkebsi, Policy Counsel of the National Association of the Deaf; Greg Hlibok, Chief Legal Office for ZVRS; Jeff Rosen, General Counsel for Convo Relay; Lance Pickett, Vice President of Corporate Marketing for Sorenson VRS; Angela Roth, CEO, ASL Services (Global VRS); Mark Hill, President, Cerebral Palsy and Deaf Organization (CPADO), Charity Warigon, Interim CEO, Registry of Interpreters for the Deaf (RID), and Bryan Yunashko,

President, Access256 Productions, LLC.

Each panelist was introduced and all gave their perspective as either a representative from a national organization such as NAD, CPADO, Access256, RID, or as a business providing VRS, Sorenson, Global VRS, ZVRS, Convo Relay. One highlight for me was the concept of content expert interpreter services through the VRS, an example being: a consumer calling a lawyer's office and requesting an interpreter who is legally certified or a similar specialized service a deaf person might need and would request an interpreter who specializes

in that vocabulary. Another concept discussed was a hard of hearing person who might want to use the VRS and speechread the interpreter as well as read captioning of the conversation as the conversation unfolded. Using Deaf Certified Interpreters and Support Service Interpreters for consumers also came under discussion. Concern was also evident at the FCC's ongoing efforts to reduce the rates paid for the VRS programs over the years.

I was pleased to see that a wide range of topics in VRS were discussed but there actually didn't seem to be sufficient time allotted to discuss the various topics that surfaced.



## Product/Service Demo



Craig Radford explaining CSD's Connect Direct

## Customer Experience Innovation through Connect Direct

*With Craig Radford and Vannessa LeBoss*

BY CM BORYSLAWSKYJ

**C**onnect Direct is a new idea to replace third party call such as video interpreter (VRS). Deaf customers will be able to click "ASL Now" icon directly to any business to reach its customer service. The demonstration showed a short video of how it works.

Deaf representatives will be hired by the business to be trained for customer service job positions. Some corporations may resist against this idea due to inside trade

secrets or confidentiality issues. For example, Wells Fargo and Bank of America are competitors and may think hiring deaf or any representatives using ASL may not be able to work for two bank competitors at the same time. Comcast will be willing to give a try by offering Connect Direct to include ASL Now icon on its website available soon next month. There will be three companies upcoming anytime later this year.

*More info at the link:  
<https://www.csd.org/whatwedo/connect-direct/>*

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## Breakout Workshop



Panelists (L-R) Corey Burton, Elvia Guillermo, and Michael Catron

# Technology and Minorities in the Deaf and Hard of Hearing Community

*With Elvia Guillermo, Michael Catron, and Corey Burton*

BY JAN WITHERS

**T**he Technology and Minorities in the Deaf and Hard of Hearing Community forum was held on Friday, August 16 and drew a full and engaged audience. Jan Withers moderated the panel discussion. The panelists were Elvia Guillermo, International Students Program, Gallaudet University; Michael Catron, CSD; and Corey Burton, ZVRS/Purple.

The discussion opened with the panelists identifying the minority groups they represent within the Deaf and Hard of Hearing community.

According to the panelists, the keys to being empowered through technology are access to the internet and the various types of devices and services, including smart phones, relay services, emergency communication, and Internet of Things, and having the skills to use them effectively. All agreed that having access to technology and possessing the skills to use them effectively contribute to a more inclusive and equitable society. Barriers include lack of broadband access in rural areas, high cost of technological services and devices, and lack of skills to use them. Elvia noted that a major barrier for the undocumented Deaf immigrant

group is the fear that use of Video Relay Services, including registering with a VRS company for a telephone number, might expose them to ICE, thereby inhibiting their access to the telecommunications system.

The discussion concluded with the message that for Deaf and Hard of Hearing minorities to achieve full inclusion and equity in all aspects of society, early intervention programs, family and social services, K-12 educational institutions, colleges/universities, and businesses must make inclusion and equity a priority as they incorporate technology in their programs and services.

## Breakout Workshop



Making the Transition to Real Time Text with 9-1-1 workshop

# Making the Transition to RTT in 9-1-1

*With Toni Dunne, Michael Scott, Seth Marks, Drew Morin, Christy Williams, and Donna Platt*

**T**he second topic was Making the Transition to RTT and 9-1-1 was moderated by Toni Dunne with Hamilton NG911. The panelist included Christy Williams with the North Central Texas Emergency Communications District, Michael Scott with the FCC, Drew Morin of T-Mobile, Seth Marks of Hamilton Innovations, and Donna Platt of the Division for the Deaf and Hard of Hearing in North Carolina.

In December of 2016, the FCC released a report and order that allowed Real-Time Text (RTT) to be provided over wireless providers' IP-based networks in lieu of supporting TTY based technologies. The main reason for this is because TTYs do not work as well over IP-based technology. As of today, three of the four Tier I wireless carriers are supporting RTT and handset manufacturers have begun to build RTT into their wireless devices. By

2021, all wireless carriers are to have RTT on ALL new phones.

There are advantages with RTT such as faster transmission with a full character set, and both parties can type simultaneously. This advancement in technology allows texting to be more conversational in nature. RTT co-exists with the voice path, allowing audio and text at the same time! However, the consumer must have a voice plan to use RTT, and both parties must have RTT capability to realize the full benefits. In the interim, wireless carriers are converting RTT to TTY when one party does not have RTT capability.

What does this mean for 9-1-1 and emergency communications? Today RTT calls are being delivered as TTY calls to 9-1-1 until they have upgraded their networks and call handling equipment to include this capability. Once they have IP capability and

RTT, they must request each carrier to deliver RTT calls to the 9-1-1 center. The carriers then will have up to 6 months to meet that request. There are benefits for native end-to-end RTT to 9-1-1 such as the ability to listen to background noise while texting. This also allows for Voice Carry Over (VCO) and Hearing Carry Over (HCO) on a wireless call. Additionally, the caller's location from the wireless carrier will be delivered, and if the center is using supplemental location data greater accuracy can be obtained.

The panel wrapped up discussions and invited the audience to participate with a hands-on demonstration of how to set up RTT on their phone and then make an RTT call. The session ended with a call for action to work with consumers and service providers to ensure everyone understands the capabilities of RTT today and what we can expect in the future.





Elliott Richman, Vice Chair of Deaf Wireless Canada Consultative Committee



Frank Folino, President of Canadian Association of the Deaf

## Telecommunications Accessibility Milestones in Canada

*With Lisa Anderson, Elliott Richman, and Frank Folino*

BY SHEILA CONLON MENTKOWSKI

**T**elecommunications Accessibility Milestones in Canada moderated by Sheila Conlon Mentkowski, presented by a panel from Canada, Lisa Anderson, Chair, Deaf Wireless Canada Consultative Committee; Elliott Richman, Vice Chair, Deaf Wireless Canada, and Frank Folino, President, Canadian Association of the Deaf.

Lisa Anderson, from Vancouver, British Columbia, started off the presentation by providing statistical information related to the number of Deaf, hard of hearing, and Deaf-Blind Canadians. She is a member and Chair of the Deaf Wireless Canada Consultative Committee (DWCC) and explained its mandate to advocate for accessible wireless communications equality for DDBHH Canadians. This Committee has 25 members which includes ASL and LSQ (French Sign Language) groups, Deaf-Blind, diverse geographical regions, and youth. Nationwide surveys in four languages (ASL, LSQ, English, and French) and



Lisa Anderson, Chairperson of Deaf Wireless Canada Consultative Committee

Deaf-Blind surveys were gathered for various Canadian proceedings in telecommunication arenas which resulted in 99 total recommendations. The DWCC committee looked at pricing, data plans, accessibility, with telecommunications services.

Frank Folino, the President of the Canadian Association of the Deaf, explained his involvement and participation in various regulatory procedures. He addressed Act: Recognition of Sign Languages and its goals. One policy success is ASL and

LSQ videos display at telecom stores for promoting rights and awareness of the internet code.

Elliott Richman, a Human Rights Advocate from Nova Scotia, explained his advocacy which took 12 years through Nationwide Petitions, Nationwide Rallies, and letters to politicians as all worked together to request and establish VRS services in all of Canada.

The panelists showed the current Canadian Infrastructure, collaboration, funding, and contract requirements, as well as the SRV Canada VRS Ecosystem. Live Customer support is provided in ASL and LSQ. They also explained there were issues and barriers in some situations, of the 99 recommendations, 16 were accepted and 83 were not. The panel ended with questions and answers for the audience. I thought the presentation was well prepared and researched, using the PowerPoint slides to show how VRS was founded and established in Canada, involving a wide constituency from all of Canada.



Mark Seeger (TDI Board) Introducing the Transportation Forum panelists (L-R): Lindsey Teel, Malcom Glenn, David Bahar, and Blake Reid

## Transportation Forum

*With Lindsey Teel, Malcom Glenn, Blake Reid, and David Bahar*

BY MARK SEEGER

**L**indsey's presentation about self-driving and autonomous mobility indicated that while we would begin to see the introduction of autonomous vehicles within the near future, the ubiquitous large and full-scale deployment of such vehicles is still many years away. Lindsey discussed various ways that consumers and industry can provide

# Uber

input to ensure inclusive design. Malcom's presentation about Uber's Work with the Deaf and Hard of Hearing Community focused on how modifications to Uber's App to make the design more inclusive

actually benefited all users of the Uber Platform, not only Deaf and HoH users. David and Blake's presentation addressed a petition to Federal Aviation Administration (FAA) for Deaf Pilots, after demonstrating that rules and regulations that prevent Deaf Pilots from having access were promulgated prior to laws requiring accessibility and therefore should be opened up for discussion about compliance with current law.

## Awards Dinner



Emcee CM Boryslowskyj welcoming everyone to the Awards Dinner



Guests enjoying dinner before the Ceremony



Art Roehrig receives I. Lee Brody Lifetime Achievement Award (co-recipient)



Brenda Kelley-Frey receives I. Lee Brody Lifetime Achievement Award (co-recipient)



Lise Hamlin (R) receives Karen Peltz Strauss Public Policy Award from Karen Peltz Strauss (L) and Sheila Conlon Mentkowski (M).



Netflix (Erica Kram Hereford) receives Andrew Saks Engineering Award



## ***Congratulations to the Award Winners!***



Susan Mazrui receives Robert Weitbrecht Telecommunications Access Award (co-recipient)



Robert Engelke receives Robert Weitbrecht Telecommunication Access Award (co-recipient)



Sheila Conlon Mentkowski receives the H. Latham Breunig Humanitarian Award



Starbucks (Margaret Houston & Matthew Gilsbach) receive James Marsters Promotion Award (co-recipient)



Microsoft (Hemant Pathak) receives James Marsters Promotion Award (co-recipient)



ZVRS/Purple (Greg Hlibok) receives James Marsters Promotion Award (co-recipient)

## Product/Service Demo



Conference attendees experiencing Facebook's Oculus

## Oculus & Portal

*With Lonnie Ko*

BY MARK SEEGER

### Questions:

The Portal doesn't have an adequate alert device tethered to it so that D/HoH consumers are aware that someone is calling on the video. What plans do you have to make the device more accessible? The Oculus requires voice interaction from an party outside of the Virtual Reality to

help guide and train the user on how to use the service – are instructions available in Sign Language or text to assist the D/HoH user with the set up of the Virtual Reality experience?

### Take Away:

Members of the audience provided Lonnie and Krista with several suggestions about how they could make the Portal Device more

accessible to people who are D/HoH including information about how to link into the services/support available through Gallaudet University Research Center and other consumer based organizations that would be able to suggest design modifications (such as light signaling through Philips Hue, text messaging to signal incoming calls, etc).

## Product/Service Demo



Eric Kaika demonstrating TDI's latest product: uCaption.

## uCaption

With Eric Kaika

BY SHEILA CONLON MENTOWSKI

**P**roduct/Service Demonstration uCaption by Eric Kaika. I introduced Eric and he gave a demonstration of uCaption and explained how it works and how it is different from other captioning applications.

uCaption is a web-based platform, compatible with any hardware, any web-browser, and any operating system. There is no app to download, just log onto the website and start using it. It can be used on a smartphone, laptop/desktop, and some SmartTVs.

It is free to use and plugs into



# uCaption

your hardware's automated speech recognition (ASR) software and captions spoken language into real-time text, while allowing live text editing. The text editing allows a speaker to continue their speech while the ASR transcribes it in text. If there are any errors, another person can make live edits. Edits appear in real-time across all devices.

uCaption supports multiple languages

and can be shared with participants in remote locations, but it does not translate, i.e. Mandarin to English. Transcripts can be saved on the account or downloaded as a .txt file. You can be speaking in Australia, have a caption editor in Canada, and your audience reading your captioned text in Japan. uCaption was developed by TDI and the IDEAL Group, thanks to a grant from the Google Foundation.



## Forum



Technology and Youth Forum panelist (L-R): Charles McFadden, Norman Williams, Linda Kozma-Spytek, Raja Kushalnagar, Pablo Jakubowicz, and Joseline Garcia

# Technology and Youth Forum

*With Charles McFadden, Norma Williams and Linda Kozma-Spytek, Dr. Raja Kushalnagar, Pablo Jakubowicz and Joselin Garcia, and Craig Radford*

BY JAN WITHERS

**T**he Technology and Youth Forum was held on Saturday, August 17 in the Swindells Auditorium. Jan Withers moderated the series of presentations. Providing the opening presentation, entitled Engineering Technological Innovations with a Deaf Lens, was Charles McFadden, Chief Technology Officer, CSD. McFadden eloquently established that the key to a future where all aspects of society are accessible to Deaf and Hard of Hearing people is to consistently apply a Deaf Lens to the conceptualization, design, and production of technological services and devices.

Norman Williams and Linda

Kozma-Spyteck of Gallaudet University's Technology Access Program presented on The Latest with Gallaudet Technology Access Program; they reviewed the various studies and grant-funded projects which contribute to the enhanced understanding of how to ensure technology is fully accessible.

Dr. Raja Kushalnagar, Director of Information Technology Program at Gallaudet University, and his two students, Pablo Jakubowicz and Joseline Garcia, shared with the audience the results of Captioning Metrics and Usability: A Five-Year Project Under Disability and Rehabilitation Research Projects (DRRP). They demonstrated the various methods of displaying captions

and shared feedback from participants in the study on the efficacy of each method. The goal is to ensure that the best method is used to ensure equal access to information being presented.

Finally, Craig Radford, Director of Connect Direct, CSD, presented on Innovative Solutions to Achieve Customer Intimacy. Radford noted that a common complaint of Deaf and Hard of Hearing people is the lack of direct access to businesses and agencies and that there are limitations to telecommunications relay services. So, he shared with the audience a proposed technological solution called Connect Direct that has the potential to connect customers directly with their businesses and agencies.



Mark Balsano, Charter Communications Chief Accessibility Officer

## On the Horizon with Internet of Things, Artificial Intelligence, and 5G Technology

*with Linda Vandeloop, Joel Moffatt, and Mark Balsano*

BY MARK SEEGER

**A**fter presentations from AT&T, Comcast and Charter Communications, members of the Audience lined up to ask questions that ranged in scope from the impact of 5G technology on the internet of things addressed by Linda at AT&T, to additional steps Comcast was taking to address accessibility of products and services on Xfinity answered by Joel, and examples of the incorporation of Universal design shared by Mark at Charter. There were some discussions about how low income and low income consumers needing broadband access can currently access discounted services.



Joel Moffatt, Comcast Principal Product Manager



Linda Vandeloop, AT&T Assistant Vice President of Federal Regulatory

## Product/Service Demo



Corey Burton (ZVRS) demonstrating the OneVP

# OneVP: The Ultimate Experience

*With Corey Burton*

BY JOHN KINSTLER

**C**orey gave an update on ZVRS/Purple's latest technology showing how easy it is to use their webcam and settings on TV and how to use on laptop. Corey answered audience questions and new customers were interested in learning more by signing up for a representative to come out to install ZVRS/Purple webcams.





## Product/Service Demo



Angela Officer of Sprint Relay shows how to use the Sprint IP Relay app

## Sprint IP Relay App

with Angie Officer

BY CM BORYSLAWSKYJ

**T**here were four short films about the customers who enjoy using IP relay app. Depending on the location to reach wireless availability coverage, one example is that a guy travels in the forest park and may not be able to access video due to poor connection and however, regardless of low

connection bar, he was able to use IP relay to ask for permission to use the drone for taking pictures on specific areas at the park. Another example is that a dog walker relies on calls for scheduling dog walks and often walks outside with some dogs. She was able to use IP relay to keep track of scheduling and accepting incoming calls while holding the dog leashes in

her other hand.

See more info at the link: <https://www.sprintrelay.com/iprelay>

Be aware that once you register at the Sprint IP Relay web site to download the app, if you do not use it within the next 12-months and your 10-digit number for this service will be removed.

## Stakeholder Engagement Session



Handon and McConnell leading the community engagement session

# Accessible Communications for Everyone: A Community Undertaking

*with Robert McConnell and Dwight Handon*

BY MATT MYRICK

**S**takeholder Engagement Session: Accessible Communications for Everyone (ACE) – A Community Undertaking was presented by two individuals - Robert McConnell, Telecommunications Accessibility Specialist at the Disability Rights Office, Federal Communications Commission in Washington, DC and Dwight Handon, Principal Systems Software Engineer, The MITRE Corporation.

McConnell puts the spotlight on why we need an accessible platform for everyone to communicate with no barriers. His work goes above and beyond by breaking down these barriers by collaborating with technology and software developers, engineers, disability organizations, businesses and People with Disabilities (PWD) communities.



Left: Dwight Handon, MITRE Principal Systems Software Engineer



Right: Robert McConnell, FCC's Telecommunications Accessibility Specialist

The purpose of the initiative is to educate and provide business solutions to build a more robust call center platform that will allow telecommunication relay services (TRS) and video relay services (VRS) to have equal access while conducting business, make calls with friends, family and government services in a way that the customer care teams can convey sign language users to use their native language. These initiatives are

garnering ways to improve businesses that are looking to enhance their call centers using an open-source platform to improve their customer experience and user experience (UX).

McConnell and Handon collaborate closely by using metrics to evaluate the Quality of Service (QoS) and understand where the gaps and issues are related to interoperability and services.



## Exhibits



Clockwise, from Top Left: Facebook Oculus; Guests trying Facebook Oculus; Lonnie Ko (Facebook) chatting with TranslateLive's Peter Hayes and two other guests; Sorenson; Ultratec; Sprint; Registration Desk; and Hamilton

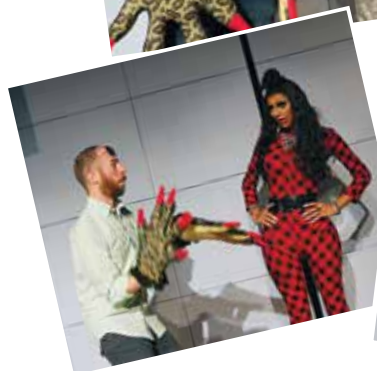


## Closing Ceremony Entertainment

# Deafies in Drag



DEAFIESINDRAG@GMAIL.COM





## Deafies in Drag

BY JOHN KINSTLER

**T**he final event of TDI 2019 Conference ended with an audience full of laughter and tears.

Both talented Casavina and Selena shared their humorous obstacles deaf people face on a daily basis, especially when it comes to accessibility. They showed videos of problems where we deaf and hard of hearing people face when it comes to technology, accessibility, communication in general etc. Several members of the audience were invited to the stage to participate in a communication obstacle game which brought the house down with laughter.

@DEAFIESINDRAG







# Individual Membership Application Form

As a TDI Member, you will automatically receive a copy of the Blue Book, our quarterly TDI World, and e-Notes. You can opt-out of any of these subscriptions at anytime, just let us know by emailing: [PubRel@TDIforAccess.org](mailto:PubRel@TDIforAccess.org)

Save time and postage! Renew online: [TDIforAccess.org/eMembership](http://TDIforAccess.org/eMembership)

**Bold** indicates *required* information.

**Name** (first, middle, last): \_\_\_\_\_

**Mailing Address:**

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(street) (city) (state) (zip code)

**Email Address:** \_\_\_\_\_ **Fax:** \_\_\_\_\_

Home Phone: Web:

Mobile Phone: Birthdate:

Alternate Phone: \_\_\_\_\_

**Check items you permit to be listed in the TDI Blue Book**

- ☐ Name
 ☐ Home Phone
 ☐ Fax  
☐ Mailing Address
 ☐ Mobile Phone
 ☐ Website  
☐ Email Address
 ☐ Alt. Phone  
☐ *Unlisted (Name, Address, etc. will not be published)*



| <b>Membership fees</b>                                  | <b>1-Year</b> | <b>2-Year</b> | <b>Lifetime</b> |
|---|---------------|---------------|-----------------|
| <b>Regular:</b>   | <b>\$40</b>   | <b>\$75</b>   | <b>\$1000</b>   |
| <b>Senior Citizen (60+)</b><br>birthdate field required | <b>\$30</b>   | <b>\$55</b>   | <b>\$1000</b>   |

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***Thank you for supporting TDI !***





# TDI In Action

March – May 2019

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.  
 SoA = Speed of Answer  
 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

## Telecommunications Relay Services

■ Comments - In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities • Truth-in-Billing and Billing Format • CG Doc CG Docket No. 03-123 CG Docket No. 98-170

(March 18) NAD, ADARA, DSA, HLAA, CCASDHH, TDI, CPADO, ALDA, AADB, GUAA, NVRC, RID, and NASADHH submitted these comments in response to comments filed with the FCC concerning the petition filed by ITTA - The Voice of America's Broadband Providers seeking a declaratory ruling that carriers can list Telecommunications Relay Services (TRS) along with other regulatory fees in a line item on customer bills. The Consumer Groups, in reaffirming its historical stance, expressed its opposition to ITTA's proposal and urged the FCC to deny the petition. Consumer Groups have previously pointed out, TRS is an equal access service that, like other equal access services, should not be singled out as an extra cost. Identifying the cost of TRS on consumer bills in the form of a fee, surcharge, or line item will lead to unwarranted backlash towards our community. In reality, costs for access are mandated by the Americans with Disabilities Act (ADA) as part of business operations for everyone, just like the cost of building curb cuts on city sidewalks or providing TRS for everyone to be able to call each other. The ADA has many provisions mandating funding of certain access, and at no time are those access services ever itemized on anyone's bills in any industry. In its 2005 Report and Order, the Commission already addressed the application of the Truth-in Billing rules to TRS charges and noted that it has prohibited line items for TRS costs.

While unaware consumers will mistake TRS line items as being solely for deaf and hard of hearing individuals, the reality is that TRS serves everyone including the businesses that benefit from sales made over the telephone with deaf and hard of hearing consumers. ITTA had asserted that the current rules require Commission interpretation but the Commission has been unambiguous. Since 1991, the FCC has issued eight rulings prohibiting common carriers from recovering the cost of TRS as a fee, surcharge, or line item on their customers' bills. We applauded the Commission for its clarity and consistency.

[https://ecfsapi.fcc.gov/file/1031860787957/FINAL\\_Consumer%20Groups%20Comments\\_TRS%20Line%20Item\\_FCC.pdf](https://ecfsapi.fcc.gov/file/1031860787957/FINAL_Consumer%20Groups%20Comments_TRS%20Line%20Item_FCC.pdf)

■ Ex Parte Filing - Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities • CG Docket No. 03-123 Misuse of Internet Protocol (IP) Captioned Telephone Service CG Docket No. 13-24

(March 19) TDI, HLAA, NAD, and CCASDHH submitted an ex parte to the FCC to support the proposal of the Joint Providers of IP CTS—Hamilton Relay, Sprint, CaptionCall, and Mezmo Corp.—to extend the interim IP CTS compensation rate of \$1.75 per minute through the 2019-2020 Fund Year. The Commission should reimburse IP CTS providers at a rate sufficient to ensure a robust and competitive marketplace of providers that will ensure a high level of service quality for people who rely on captioning



# TDI In Action

## March – May 2019

Continued from page 43

when placing important phone calls, including emergency calls. The Joint Provider proposal advocates for extending the interim rate of \$1.75 per minute until June 30, 2020, when the Commission should reconsider the appropriate compensation rate. The iTRS Advisory Council supports this proposal, recommending it as the best solution for IP CTS consumers.

<https://ecfsapi.fcc.gov/file/10319635915284/2019.03.19%20Consumer%20Groups%20Interim%20Rate%20Extension%20Ex%20Parte.pdf>

■ **Ex Parte Filing - VRS Access Technology Reference Platform and RUE Profile CG Docket No. 03-123 - In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; CG Docket No. 10-51 – Structure and Practices of the Video Relay Service Program**

(March 22) TDI, NAD, AADB, DSA, CPADO, RID, GUAA, HLAA, ADARA, NVRC, and RERC-DHH submitted an ex parte letter to clarify our stance on the VATRP, the RUE Specification, and the NANC IVC working group, further to our October 31, 2018 letter. Consumer Groups and the RERC wish to reiterate in the strongest terms that the VATRP App and the RUE Specification should continue, once concerns about process and direction have been addressed. Consumer Groups and the RERC wish to again point out that the current mechanisms for developing the VATRP App and the RUE specification do not yet meet the above-referenced promise. Since the termination of the ACE App, key stakeholders have been frozen out of the process, with minimal opportunities for input and steering the process. As a result, there has been an apparent mismatch between consumer priorities, features that have been deemed important in the RUE Specification by its developers, and features that have been deemed important by the providers, as per their October 17, 2018 letter. To reiterate some specific examples of the mismatch, call security and encryption are a top priority for Consumer Groups and the RERC, and we agree with the approach taken in the RUE Specification. Concurrent registration was highlighted as a key feature in an ex parte filing by Columbia University on March 19, 2019, whereas Consumer Groups and the RERC considered it a lower priority feature that should be evaluated on a case-by-case basis and proposed as more critical the issues of 9-1-1 geolocation and address book portability. NG9-1-1 compatibility is another key

area, and Consumer Groups and the RERC believe that the VATRP will serve as an important tool for interoperability testing against the NENA i3 Solution. Consumer Groups and the RERC wish to reiterate that the VATRP App and RUE Specification need to take place under an appropriate inclusive body of governance. In our October 31, 2018 filing, we suggested several standards organizations, together with rulemakings and DAC as possible venues. In light of the practical challenges associated with split governance, Consumer Groups and the RERC would like to make the following proposal: Consumer Groups and the RERC propose that governance for the VATRP App and the RUE be put under a consortium whose idea was first raised by the FCC in August 2016, and for which considerable planning and dialogue has ensued. Gallaudet University, which hosts the RERC, along with its sister Consumer Groups and other academic institutions have already developed proposed plans for its governance, following inclusive design principles. They stand ready to assist the FCC, providers, and standards bodies in the transition, and coordinate with the North American Numbering Council (NANC) Interoperable Video Calling (IVC) working group recommendations. Analogously, Consumer Groups and the RERC believe that a collaborative consortium constitutes the best approach for equitable representation of all stakeholder concerns, ensure that the FCC can initiate consensus-based rulemakings, and above all ensure that the VATRP App and RUE Specification are finally able to meet its promise.

<https://ecfsapi.fcc.gov/file/10322442117117/Consumer%20Groups-RERC%20March%202019%20FCC%20Ex%20Parte%20Letter%20re%20VATRP%20App%20and%20RUE%20Profile.pdf>

■ **Comments - In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities • Structure and Practice of the Video Relay Service Program • CG Dockets No. 03-123 and No. 10-51**

(April 8) TDI, NAD, ALDA, HLAA, CPADO, and AADB submitted these comments in response to the Public Notice issued by the FCC's CGB on Sprint's Petition for Interim Waivers. Relay services enable individuals who are deaf, hard of hearing or DeafBlind or who have a speech impairment to communicate through the telephone system with another person in a manner that is functionally equivalent to the ability of persons without these hearing



# TDI In Action

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and/or speech impairments. One form of TRS is IP Relay, which allows “an individual with a hearing or a speech disability to communicate in text using an Internet Protocol-enabled device via the Internet, rather than using a text telephone (TTY) and the public switched telephone network.” The Commission has implemented a flexible and broad approach to determining the services eligible for TRS funding, recognizing that “the provision of TRS has evolved as new forms of technology have been developed and as consumers have identified the particularized needs of persons with hearing and speech disabilities.” Indeed, Section 225 explicitly directs the Commission to refrain from regulation that “discourage[s] or impair[s] the development of improved technology.” Consistent with the direction of Congress, the Commission has long recognized that there is no one-size-fits-all form of TRS that meets the needs of all users. Indeed, the Commission has encouraged innovation in the provision of relay services. <https://ecfsapi.fcc.gov/file/10408254177099/Consumer%20Groups%20Comments%20on%20Sprint%20Waiver%20Petition.pdf>

■ Comments - Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities • Misuse of Internet Protocol (IP) Captioned Telephone Service • CG Dockets No. 13-24 and 03-123

(April 15) HLAA, TDI, NAD, ALDA, CPADO, AADB, DSA, CCASDHH, DHH-RERC, and IT-RERC submitted comments to the FCC for its Further Notice for Proposed Rulemaking on IP-CTS. Many people who are deaf, hard of hearing, and DeafBlind find that IP CTS meets their needs better than any other form of TRS. The Commission has not established that there is waste, fraud, and abuse in the IP CTS program. Without empirical evidence that consumers have misused IP CTS, Section 225 mandates the Commission maintain the ease of registering for and using IP CTS and enable consumer choice by facilitating competition among providers. Aggregate data on IP CTS gathered via the User Registration Database can help the Commission confirm that there is little evidence of waste, fraud, and abuse in the IP CTS program. However, the Commission must be thoughtful and conscientious as it balances the need for important data with the privacy of hundreds of thousands of Americans. The Commission should not infringe on users’ privacy rights by requiring that providers submit the unique account identifier with call detail reports and should consider a privacy protective

alternative. Rather than tying the call detail reports back to the URD, providers should submit an anonymized number that the Commission can deanonymize if it suspects a user of acting fraudulently. The Commission should also permit providers to continue providing IP CTS service while user registration is pending. Because providers will not be compensated for minutes used by people whose registration is not ultimately verified, this does not burden the TRS Fund for people who need the service. Doing so will ensure that people who need IP CTS when using the telephone have access when they need the service. Finally, the Commission should reconsider its proposed changes to rules requiring CA involvement in 9-1-1 calls. These changes risk imposing significant delays in reconnecting IP-CTS users to 9-1-1 that may lead to life or death consequences.

<https://ecfsapi.fcc.gov/file/104160181304548/2019.04.15%20Consumer%20Groups%20IP%20CTS%20User%20Registration%20Database%20FNPRM%20Comments%20final.pdf>

■ Ex Parte Filing - In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities – Structure and Practices of the Video Relay Service – CG Dockets No. 10-51 and 03-123

(April 25) TDI, NAD, AADB, CPADO, and HLAA submitted an ex parte letter to urge the FCC to promptly approve GlobalVRS’ application for certification to provide VRS and the applications for full certification filed by certain other entities which currently hold only conditional certifications to provide VRS. GlobalVRS delivers service offerings that are tailored to meet the needs of users with competence in both Spanish and English, and, to Consumer Groups’ knowledge, is the only provider with a strong record of serving this niche market today. Similarly, GlobalVRS is the only VRS provider that provides fully accessible VRS to DeafBlind users. Other providers’ videophones are only designed to support those DeafBlind with a high degree of sight. The loss of GlobalVRS as a VRS provider would result in an immediate loss of access for consumers who rely on Real Time Text (“RTT”) for braille and low-vision text access to VRS. Any unnecessary delay in approving GlobalVRS’s application could delay these benefits for consumers. Currently there are a limited number of VRS providers in the market: Sorenson VRS, ZVRS/Purple, Convo Relay, and GlobalVRS. GlobalVRS is a small provider when





# TDI In Action

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compared to the other VRS providers. The Commission should pursue policies that avoid placing undue burdens on providers and enable providers both large and small to participate in the VRS market, including in the context of approving certification applications. Moreover, Consumer Groups support prompt action on the currently pending full VRS certification applications, as amended, by Purple, Sorenson, and ZVRS. In some cases, their full certification applications have remained pending for multiple years. Prompt action on the full certification applications will provide needed certainty for the VRS providers, which ultimately will foster competition and innovation to the benefit of VRS users.

<https://ecfsapi.fcc.gov/file/10425211351262/FINAL%20-%20Consumer%20Groups%20Support%20for%20GlobalVRS%20and%20Other%20Pending%20Applications.pdf>

■ Reply Comments - Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities • Misuse of Internet Protocol (IP) Captioned Telephone Service • CG Dockets No. 13-24 and 03-123

(April 29) HLAA, TDI, NAD, ALDA, CPADO, AADB, DSA, CCASDHH, DHH-RERC, and IT-RERC submitted reply comments to the FCC for its Further Notice for Proposed Rulemaking on IP-CTS. In the FNPRM, the Commission sought comment on the proposal that providers submit unique account identifiers with call detail reports. Commenters expressed concerns about the privacy and ease of access burdens this proposed method places on consumers, and we suggested a more privacy protective approach that will allow the Commission to achieve its goal of monitoring for wasteful conduct. The Commission also sought comment on whether the TRS Fund should compensate minutes used by new and porting IP CTS users for up to two weeks while user registration is pending. With the exception of a lone commenter who believes this change is unnecessary, this proposal has overwhelming support on the record and will allow people who need IP CTS to access the service as soon as possible with no risk of illegitimately burdening the TRS Fund. Finally, the Commission sought comment on changing the nature of CA involvement during 9-1-1 calls for IP CTS calls that use the Internet, rather than the legacy telephone system. Before the Commission proceeds with adopting the proposals, it should first consult

with providers and consumers to find a solution that does not repeat the problems present during 9-1-1 calls using the VRS program.

<https://ecfsapi.fcc.gov/file/1042985711630/2019.04.29%20Consumer%20Groups%20URD%20FNPRM%20Reply%20Comments%20final.pdf>

■ Ex Parte Filing - In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities • Structure and Practice of the Video Relay Service Program • CG Dockets No. 03-123 and No. 10-51

(May 2) TDI, NAD, CPADO, ALDA, AADB, HLAA, and Gallaudet University submitted the ex parte filing to address the enterprise videophone registration portion of the Draft Report and Order and Further Notice of Proposed Rulemaking. The Consumer Groups and Gallaudet support the modified proposal that ... ensure that deaf and hard of hearing and speech-disabled individuals, regardless of whether they are individually registered in the TRS-URD, will have the same ability to access enterprise videophones as those who are individually registered. The Consumer Groups and Gallaudet also are concerned about what may constitute “reasonable efforts” and ask the Commission to ensure that any examples of “reasonable efforts” do not undermine functional equivalency or infringe on consumers’ privacy rights. Hearing individuals are not required to identify themselves, provide proof of their need to make a telephone call, or be recorded in a log of users of an enterprise phone available for non-employee use. Organizations providing enterprise videophones should not maintain a list of deaf and hard of hearing and speech-disabled users, require proof of registration, or maintain a copy of the user’s request either. Nor should organizations be required to monitor an enterprise videophone to ensure that only deaf and hard of hearing and speech-disabled individuals place VRS calls. The Commission’s rules should encourage enterprises to make videophones available to their employees and non-employee customers or guests. The “reasonable efforts” requirements as drafted also could compromise consumer privacy protections provided by laws like the Health Insurance Portability and Accountability Act of 1996 (HIPPA) and the Children’s Online Privacy Protection Act (COPPA). Although the Commission has adopted measures to protect consumers’ privacy for information collected by VRS providers and



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the TRS-URD, it does not have jurisdiction to mandate the enterprises provide equivalent protections for sensitive consumer information. Given these functional equivalency and privacy concerns, the Consumer Groups and Gallaudet urge the Commission to seek additional comments on what may constitute “reasonable efforts.” Taking more time on this topic, particularly when the Commission plans to seek further comment on individual log-in requirements, should help protect consumers’ privacy rights and ensure that organizations are not discouraged from making enterprise videophones available.

[https://ecfsapi.fcc.gov/file/10502081611934/TDI%20et%20al%20Ex%20Parte%20Letter%20\(050219\).pdf](https://ecfsapi.fcc.gov/file/10502081611934/TDI%20et%20al%20Ex%20Parte%20Letter%20(050219).pdf)

## Emergency Communication

Comments – In the Matter of Improving Wireless Resiliency Cooperative Framework

• PS Docket No. 11-60

(April 30) TDI, HLAA, NAD, CIEP/WASILC, and CCASDHH submitted comments in response to the Public Notice issued by the FCC’s Homeland Security and Public Safety to solicit input regarding the efficacy of the Wireless Resiliency Cooperative Framework. Deaf and hard of hearing individuals, deaf-blind users and users with mobility disabilities have different communications needs and experiences in the context of a disaster which are not sufficiently recognized in the Framework. The harsh reality is that individuals who are deaf or hard of hearing are too often left out of the emergency alerting process. During times of disasters, the deaf and hard of hearing community face significant problems receiving complete and timely communications warning of emergencies and providing important public safety service updates. The community faces challenges such as wireless network outages that inhibit the efficacy of wireless emergency text alerts and the inability for some consumers in the deaf and hard of hearing community to afford both cellular services and broadband (e.g., WiFi). This community typically must rely on multiple sources to piece together complete information about the status of a disaster, sheltering and evacuation instructions, service outages and restoration, etc. Some consumers in the deaf and hard of hearing community cannot afford to subscribe to both cellular services and

broadband. As a result, emergency and disaster information that is inaccessible, incomplete, delayed, or inaccurate puts the safety of individuals in the deaf and hard of hearing community at risk. Accordingly, Consumer Groups urge the Bureau to recommend that the Framework include specific provisions that address the needs of this community with respect to wireless services in emergency and disaster situations and provide suggestions for changes or expansion to the Framework as an extension of the CTIA Best Practices regarding Creating Education Awareness Campaigns to improve the distribution of emergency and public safety information to the deaf and hard of hearing community during times of disasters or wireless network outage.

<https://ecfsapi.fcc.gov/file/10430247040772/Consumer%20Groups%20Comments%20-%20Wireless%20Resiliency%20Framework.pdf>

■ Reply Comments – In the Matter of Improving Wireless Resiliency Cooperative Framework • PS Docket No. 11-60

(May 20) TDI, NAD, HLAA, ALDA, NASADHH, NASRA, and CCASDHH submitted these reply comments in response to the April 1, 2019 Public Notice by the FCC’s PSHSB. These reply comments focus on the importance of expanding the availability of text-to-911 service, a service that is critical to the deaf and hard of hearing community at any time but particularly during natural disasters such as hurricanes that can cause widespread outages or degradation of conventional telephone service and power. ... Text-to-911 remains available only in a minority of areas across the country. The Commission recognizes that “[t]oday most consumers cannot reach 911 by sending a text message from their wireless phone.” This is because Public Safety Answering Points (“PSAPs”) must first be capable of accepting text-to-911 before carriers must enable text-to-911 under the Commission’s rules, and the vast majority of PSAPs lack readiness for receiving text-to-911. According to data maintained by the Commission, as of May 2019, only approximately 30 percent of all PSAPs have reported to the Commission that they are capable of accepting texts-to-9-1-1. The record in this proceeding demonstrates the importance of text-to-911 being available in times of emergency and particularly during widespread voice network outages. For example, text-to-911 remained available in King County, Washington throughout a widespread outage in the Washington 911 network that interfered with the ability for voice calls to reach 911.



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Although text-to-911 may have been available in some areas during Hurricane Harvey, as noted in Consumer Groups' comments, local authorities in at least one other location in Texas had to rely on ad hoc alternatives such as using a personal cell phone number for accessing emergency management via text. Consumer Groups emphasize that ensuring the availability of text-to-911 service and network resiliency are critically important before, during, and after major incidents, not just as part of the restoration process. Consumer Groups are encouraged that some states such as California have proposed deadlines for PSAPs to enable text-to-911, but overall progress toward real-world implementation of text-to-911 has remained slow across the country. ... Consumer Groups recommend that the coordination and education undertaken pursuant to the Framework include discussions with local authorities and PSAPs about challenges they face in implementing text-to-911 capability and developing a reasonable specific timetable for PSAPs to accept text-to-911. This coordination should also involve the Department of Justice given its jurisdiction over PSAPs pursuant to Title II of the Americans with Disabilities Act. Finally, Consumer Groups acknowledge innovative services like mobile applications that are increasingly available to consumers for engaging with emergency services and utilities. However, Consumer Groups caution against concluding that proliferating mobile applications will obviate the need for a continued focus on ensuring increased access to text-to-911 service because it is unclear the extent to which mobile applications are capable – or will at some point be capable – of reaching PSAPs.

<https://ecfsapi.fcc.gov/file/105200511930020/Consumer%20Groups%20-%20Reply%20Comments%20re%20Wireless%20Resiliency%20Framework.pdf>

## Advanced Communication Services

Ex Parte Filing - GM Motion to Withdraw Petition for Exemption of Certain RTT Requirements • GN Docket No. 15-178

(May 8) TDI, NAD, HLAA, ALDA, CPADO, CCASDHH, AADB, AAPD, DREDF, NCIL, PVA, United Spinal Association, IT-RERC and DHH-RERC filed an ex parte with the FCC to support General Motors' motion to withdraw its December petition to waive certain Real-Time Text (RTT) requirements for its upcoming automated ride-

hailing service. We agree that the RTT requirements the petition sought to waive appear, at least at this preliminary stage of the development of GM's service, to be inapplicable to the service. As we understand it, GM plans for the service to be a non-interconnected service with RTT functionality that GM intends to meet the relevant accessibility requirements of Rule 14.21(b). In light of recent discussions with GM and upon review of GM's motion, we support the Commission dismissing the petition without prejudice.

<https://ecfsapi.fcc.gov/file/105082944624861/2019.05.08%20Consumer%20Groups%20GM%20RTT%20Waiver%20Withdrawal.pdf>



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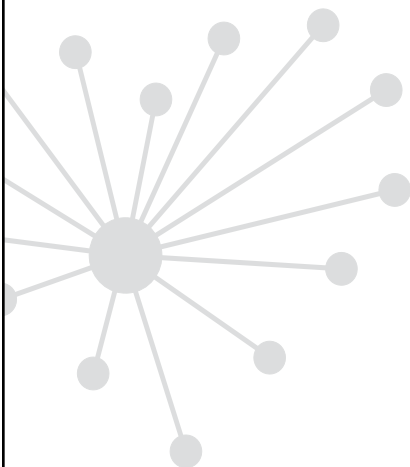
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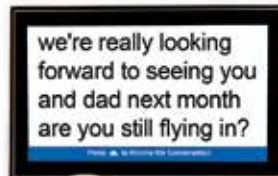
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