Recommendation of the FCC Disability Advisory Committee
Prepared by the Pandemic Communication Access Working Group

Concerns and Lessons Learned regarding Communication Access for People with Disabilities During the Pandemic

Adopted by the Disability Advisory Committee September 9, 2021

Introduction

In February 2020, there was a marked increase in the number of COVID 19 cases in the United States. Amid public uncertainty and fear, on Friday, March 13, 2020, President Trump issued a COVID-19 Coronavirus (COVID) National Emergency Declaration https://www.govinfo.gov/content/pkg/FR-2020-03-18/pdf/2020-05794.pdf. The declaration resulted in disruptions to the daily lives of most people, and there were many more questions, resulting in daily public updates from federal, state, and local authorities. Therefore, the need for accessible communication for individuals with disabilities was very important.

Some members of the Federal Communications Commission (FCC) Disability Advisory Committee (DAC) raised concerns that, in the pandemic environment, some FCC-regulated technologies and services could be improved to provide more functionally equivalency for those needing accommodation.

During the COVID pandemic, the FCC and other government agencies took appropriate measures to help all Americans, including individuals with disabilities, and many of these efforts provided relief. However, the types of disruptions caused by the pandemic often raised issues of first impression and incomplete information. Despite the government and private sector efforts to adjust to the changing norms through new approaches and technologies, some advocates for the disability community assert that the community experienced a widening information gap in the workplace, health services, education, and other critical life activities.

With the benefit of hindsight, during the February 2021 full DAC meeting, there was a facilitated discussion on accessible communications for individuals with disabilities during the pandemic. This document identifies experiences and lessons learned during the COVID crisis related to individuals with disabilities, along with recommendations about how the FCC can improve access to communications for the disability community in future national emergencies.

The discussion and recommendations of this paper are limited to items of FCC purview and include:

1. Access to Broadband Connectivity
2. Consumer Digital Readiness
3. Real-Time Text
4. Video Conferencing
5. Video Programming  
6. TRS Waivers  
7. N-1-1 Access Using SMS, RTT, and TRS

As the FCC looks back and considers what worked or did not during the pandemic, the DAC recommends that it continue its ongoing focus on the needs of the disability community. For example, some recommendations may be suitable for further assignment to the DAC or in an FCC Notice of Inquiry (NOI) to build a record allowing implementation before another national emergency declaration occurs.

Many issues raised in this recommendation are the subject of active proceedings before the Commission, and no DAC member’s vote on this recommendation should be construed as conceding any contested issues in an active proceeding.

Access to Broadband Connectivity

Background

The advent of the coronavirus pandemic and attendant physical-distancing policies necessitated moving from face-to-face interactions to virtual settings for many domains and industries, including work, healthcare, education, entertainment, etc. During the pandemic, the internet also became more of a focal point for both market and social activity at unprecedented levels.

This increasing indispensability both underscored and exacerbated the pre-existing problem regarding equity of broadband access as people with disabilities remained disproportionately disconnected or under-connected. Under connected broadband denotes cases where broadband is available, but bandwidth is limited, resulting in insufficient speed to run essential applications, such as video conferencing. This limited bandwidth may be what is available to a person because of their location or related to the service plan subscribed to, which could be impacted due to economic or other factors.

The DAC applauds the Commission for its many initiatives to address these issues, including the recent implementation of the Emergency Broadband Benefit (EBB) program and Connectivity Fund, and encourages the FCC to continue including the disability community in efforts to expand access to broadband.

Consumer Digital Readiness

Background
The ability to access and fully utilize broadband-enabled devices and essential web-based functions such as email, virtual collaboration platforms, and internet messaging constitute Consumer Digital Readiness.

The transition of many spheres of interactions to online spaces highlighted pre-existing disparities in consumer digital readiness.

The COVID transition was easiest for younger people and those with greater exposure to connectable devices, persons in a financial position to afford quality devices and broadband service, and others with neurotypical/physio typical communication and learning modalities (i.e., aural/oral English as a first language). Conversely, seniors, non-technical individuals, indigents, neurodivergent populations, and people with disabilities — specifically individuals who are Deaf, Deaf with mobility disabilities, DeafBlind, Hard of Hearing, Blind, have low vision, and individuals with speech disability — did not fare as well.

The persistence of these disparities is especially concerning because these populations are uniquely susceptible to the consequences: isolation, lack of access to services and records, and unequal access to education and employment.

**Recommendation**

The DAC recommends that the Commission explore the barriers to accessing broadband for individuals with hearing, speech, vision, cognitive, and mobility disabilities and ways to improve such "individuals" ability to access and utilize broadband-enabled devices, including consideration of ways to incentivize technical research and development (R&D) and training inclusive of diverse communication/learning modalities.

**Real-Time Text**

**Background**

The telecommunications industry is transitioning to modern digital technology. As telephone service providers continue to phase out analog-based networks and replace them with IP-based communication networks, traditional TTY users may experience difficulties on some networks that do not accommodate these analog TTY signals.

Real-Time Text (RTT) is a digital, IP-based communication protocol that adds a text component to telephone calls and transmits text immediately as the characters are typed. RTT allows for conversational bi-directional communication that includes simultaneous voice and special characters.

In recognition of the challenges of TTY communication and the benefits of RTT on IP-based networks, the FCC has permitted wireless carriers to provide RTT functionality on their wireless devices in lieu of TTY functionality. The DAC applauds the FCC and wireless industry for the work that it has done in the area of RTT.
There is more work needed in this area, especially in light of the Covid-19 pandemic. During the February 2021 full DAC meeting, DAC members flagged that, during the pandemic, communication accessibility gaps existed in the area of RTT as our culture shifted to a virtual environment. As a result, people with hearing loss rely even more so on text-based communications. Consumer groups have also filed comments on this matter, imploring the Commission to address the communications needs of Americans who are Deaf, DeafBlind, Deaf with mobility disabilities, Hard of Hearing, and individuals with speech disabilities. Several areas of concern that could be addressed are that RTT is not yet available with some small wireless carriers; RTT is not available on wireline networks; there is a need for people to communicate via RTT to relay; there is a need for people to communicate via RTT to 911.

**Recommendation**

The DAC recommends that the Commission should refresh the record on the availability of RTT on wireline networks and the integration of RTT with Telecommunication Relay Service (TRS).

**Video Conferencing**

**Background**

At the onset of the emergency declaration, many non-essential workers stopped going into physical workspaces, shifting to telecommuting. Schools shut their doors and moved students to remote education. Many traditional face-to-face interactions ceased.

Technologies to support the shift in communication emerged and were used at unprecedented levels. For example, video conference products became a significant part of the technology solution replacing in-person meetings, conference calls, and traditional classroom instruction. However, some members of the DAC indicated accommodations provided in face-to-face settings such as captions and ASL interpreters were often not available in video conferencing solutions, thus increasing the gap of functional equivalency.

It was noted that the primary method of access for video conference meetings should be appropriately qualified interpreters or high-quality captions provided by the entity that organizes the meeting and that TRS should only be used when the meeting organizer fails to produce an acceptable accommodation.

As more people had access to video conferencing, traditional conference call meetings that formerly used telephone access to voice bridges were occasionally replaced with links to IP-based video conferences. Moreover, video conferencing services offer participation to the general public, making them available for calls among families and friends, including individuals with hearing and speech disabilities. Multiple video conference platforms do not provide the option to access the meeting through a dial-in voice connection, making it impossible for qualified users of the disability community to use TRS as their accommodation. In addition, some video conferencing solutions
provide no access to captions or provide low-quality captions inhibiting the participation of Deaf or Hard of Hearing individuals. In traditional voice-only conference calls, users of relay services could fully participate through TRS, while their needs are frequently unmet in video calls without dial-in options. Some providers of TRS have indicated that they would attempt to develop IP-based technical solutions for TRS users to access video calls without a dial-in voice connection if the service were compensable.

Some DAC members indicated that individuals who are blind or have low vision experience difficulty accessing video conferencing when using screen readers on platforms that do not adhere to accessibility guidelines. Further, they reported that information displayed using the "screen share" feature is often not accessible to screen readers and suggest the information should be transmitted in other formats.

In situations where a qualified individual used IP Captioned Telephone Service (CTS) during a video call, it was unclear if the captions could be shared with all on the call, both people with a hearing loss and those without a disability.

Contrary to FCC Public Notice DA 04-1716 (https://apps.fcc.gov/edocs_public/attachmatch/DA-04-1716A1.pdf), issued in 2004, some DAC members indicated that when using TRS, they were denied access to telehealth because of Health Insurance Portability and Accountability Act (HIPAA) concerns raised by health care providers related to the involvement of the sign language interpreter or communication assistant. It is noteworthy that the Public Notice names many forms of TRS but omits IP CTS and analog CTS.

**Recommendation**

The DAC recommends that the Commission do the following:

- For situations where the meeting organizer fails to provide an acceptable accommodation, and there is not a dial-in option, the FCC should consider providing guidance that for video conference services with IP-based connections, but without a dial-in option, qualified users of relay services may access the video conference services using TRS and that the calls would be compensable from the Interstate TRS Fund.
- The FCC should consider providing guidance that qualified TRS consumers on a video conference call are permitted under TRS privacy or other rules to share generated text, e.g., from IP CTS, with other participants in the same video call, and explore technical options for enabling access to said captions for DeafBlind users.
- The FCC should consider providing guidance on conference protocols to ensure accessibility and full inclusion for participants who are blind or have low vision, particularly participants using screen readers.
- The FCC should consider updating DA 04-1716 and specifically include references to CTS and IP CTS and all other forms of TRS.

**Video Programming**
Background

In addition to its general entertainment and informational functions, video programming emerged during the pandemic as a primary vehicle for both real-time and pre-recorded official/expert communication, i.e., "governors" press conferences and CDC updates. The COVID-related video programming was made available to the public both through the internet and television programming.

Captioning, audio description, image description, on-screen ASL interpreting, and embedded data streams (for braille display access) provide effective alternative modes of access to video programming for the viewers who are Deaf, DeafBlind, Deaf with mobility disabilities, blind, have low vision, and individuals with several other disabilities.

However, during the COVID period, some disability advocates shared that they either lacked access to the needed accommodation or the quality of these alternatives was inconsistent, resulting in experience and knowledge gaps. Industry representatives note that video distributors were forced to operate under severe COVID-related restrictions, including staff shortages, remote operations and social distancing, and often faced significant challenges to enlisting live captioners, that sometimes affected their ability to ensure that last-minute COVID-related news and information was provided in an accessible manner. Nevertheless, some disability advocated indicated press conferences sometimes had live ASL interpreters present and near the presenter, but the broadcasts of the events omitted the interpreter from the video transmission. Industry representatives explain that, in most such instances, the presence or location of an interpreter on-screen was controlled by the government entity producing the event, and outside the control of the broadcaster or video provider. For example, in some cases, the broadcast feed of the event was produced and provided by the government entity itself. In all such cases, video distributors worked to the best of their ability to encourage the relevant government entity to provide an interpreter and locate the interpreter on-stage to allow for their inclusion on-screen.

The DAC acknowledges the Commission's work in soliciting stakeholder comments and issuing guidance related to the availability and quality of these alternate modes of access for video programming.

Recommendation

The DAC recommends that the Commission explore ways to convene stakeholders to discuss lessons learned during the pandemic, perhaps with a focus on outreach to state and local authorities on issues such as further ensuring the presence of ASL interpreters during important public information events and procedures that helped states to improve access during pandemic-related events, as well as reviewing technologies and procedures to facilitate braille display access to existing captioning streams for DeafBlind individuals.

TRS Waivers
Background

COVID introduced operational challenges to providers of TRS because of increased call volumes and employee outages, which threatened meeting the FCC’s minimum standards for qualifying for compensation from the Interstate TRS Fund.

After the National Emergency Declaration, virtually overnight, demand for TRS increased to unprecedented levels. Coupled with the sharp increase in demand, record numbers of employee callouts decreased the communication assistant capacity. In some forms of TRS, such as IP CTS, the average speed-of-answer (ASA) for callers increased.

The Commission worked with providers to understand the challenges and issued a 60-day waiver on March 16, 2020, that allowed TRS providers to continue offering service without the threat of missing minimum standards that could not be met. The waivers were extended multiple times and remain in effect through August 31, 2021. However, each time a waiver neared expiration, the uncertainty of provider compensation returned.

TRS providers and users may benefit from having national emergency-related waives remain in effect until the Commission provides a notice of at least 60 days indicating the end date for the waiver. Additionally, it might be beneficial to have predefined waivers start when a National Emergency Declaration is issued until the FCC defines specific waivers related to the emergency.

Recommendation

The DAC recommends that the Commission do the following:

- The FCC should develop contingency planning for national emergencies that include expedited processes for obtaining waivers, including for TRS rules, to maintain the availability of relay service during emergencies
- Consider automatic waivers of certain standards, e.g., speed of answer, in the event of a National Emergency Declaration with an end date defined by a certain number of days after the declaration is withdrawn to give time for winding down.

N-1-1 Access Using SMS, RTT, and TRS

Background

The ability to call N-1-1 numbers, such as 2-1-1, 3-1-1, 5-1-1, 9-1-1, and 9-8-8, has been made available to the general public as a means to provide easy-to-remember numbers for contacting non-emergency and emergency services.

The FCC administers N-1-1 code assignments assigned as follows:

- 2-1-1 ~ Community, Health, and Disaster Information (24-hour)
- 3-1-1 ~ Non-Emergency, Police, and Other City Government Services
• 5-1-1 ~ Traffic Information - All modes, including travel conditions and public transit
• 9-1-1 ~ Emergency services
• 9-8-8 ~ National Mental Health Crisis and Suicide Prevention

State and local government emergency management agencies are the focal point for coordination of emergency planning, response, and recovery efforts before, during, and after major disasters such as pandemics, fires, floods, earthquakes, hurricanes, tornadoes, evacuations, pandemics, spectator events, and other natural or man-made disasters. When one of these events occurs, state and local governments may communicate that they are available to serve citizens through collaboration with 2-1-1, 3-1-1, 5-1-1, 9-8-8, and other various municipal service agencies. It is necessary to ensure that communication with people with disabilities is equally as effective as communication with people without disabilities.

Access to these services can prove to be problematic for people who are Deaf, DeafBlind, Deaf with mobility disabilities, Hard of Hearing, or have speech disabilities. This struggle became pronounced during the pandemic due to the increased need for N-1-1 and 9-8-8 services.

The disability community uses text-based communications, including SMS and RTT, and TRS for N-1-1 access. During the COVID crisis, it was reported by some members of the disability community that they were unsuccessful in effectively reaching local 2-1-1, 3-1-1, 5-1-1, 9-8-8 using SMS, RTT, and TRS. Many of the end-points served by N-1-1 calling were not prepared to process inbound calls using text-based communications.

Next Generation 9-1-1 (NG9-1-1) provides the ability to communicate more directly with 9-1-1 call centers using various forms of communication devices in addition to voice as well as text-based communications like SMS and RTT, and eventually including video and other data. When NG9-1-1 is deployed, it will give individuals who are Deaf, DeafBlind, Deaf with mobility disabilities, late Deafened, Hard of Hearing, or who have speech disabilities new opportunities to call a Public Safety Answering Point directly. Direct access to NG9-1-1 will also enable multiparty conferencing. This will save time in determining how to communicate with the caller through video, voice, real-time text, and other considerations needed for the user.

The FCC is currently collecting and reviewing comments filed on the FCC's NPRM regarding the implementation of the National Suicide Hotline (9-8-8), including consideration of text-based communication.

**Recommendation**

The DAC recommends that the Commission do the following:

• The FCC should take steps to complete its pending proceeding to ensure that people who use text-based communications and TRS can contact local or regional non-emergency and 9-8-8 services consistent with access to 911 services before, during, and after disasters, including national emergencies, and
• evaluate the need for local or regional non-emergency N-1-1 services to incorporate technologies like SMS, RTT, and TRS.