

TECHNOLOGY AND DISABILITY POLICY HIGHLIGHTS 10.7

September 2010

Overview

The month of September was highlighted by policymakers' efforts to advance technology access. The Senate passed **S.3828**, to amend and reconcile the House and Senate versions of the **Twenty-first Century Communications and Video Accessibility Act S. 3304**, legislation to improve access for people with disabilities to Internet, telecommunications and video/broadcast applications, services and equipment. S. 3304 amends the Communications Act of 1934, and it anticipates the future of advanced communications technologies. This month's regulatory activities held in theme with the Federal Communications Commission (FCC) adopting a Notice of Proposed Rulemaking to change the telephone numbering system relating to Internet Telecommunications Relay Service (iTRS) and Video Relay Service (VRS) to more accurately reflect the callers geography. This will enable faster and more efficient emergency call response time. The FCC held an open meeting to discuss the state of wireless emergency 911 communications and location retrieving technology and how to better facilitate advancing their deployment. The new role of social media in an emergency capacity was also explored in several counties in New Jersey as steps were taken to streamline emergency alert system management.

Wireless RERC updates include advances in human factoring in mobile emergency alerting. Helena Mitchell, PhD, will be presenting on the results from a survey that collected data on hearing compatibility that has spanned 5 years. This will assist in integrating technology that considers the needs of the disabled. The Wireless RERC also responded to a Public Notice covering Accessible Mobile Phone Options for People Who are Blind, Deaf-Blind, or Have Low Vision. The comments covered areas such as stakeholder participation, the functionality of wireless communication devices, and the placement of accessible cell phone information.

Legislative Activities

Technology Access Bill Awaits Presidential Signature

09.29.2010 – As reported in the summer issue, the **21st Century Communications & Video Accessibility Act [S. 3304]** was passed by unanimous consent. On September 29, 2010, **S. 3828** a bill to make technical corrections and amendments to reconcile the above-referenced legislation with the House version, [**H.R. 3101**], was passed, effectively sending the legislation to the President's desk for signature to become law. The bill amends the **Communications Act of 1934** to be inclusive of current and future advanced communications technologies, namely Internet protocol based and telecommunications technologies, equipment, and services. The legislation is broken into two parts: communications access and video programming access; both regulate devices and services used for two-way communications and receiving or playing video. A few highlights include, (1) televisions delivered over the Internet will require captions (even on small screens), (2) televised emergency information must be made accessible, (3) \$10 million per annum has been allocated to subsidize communications equipment for people who are deaf-blind, (4) hearing aid compatibility is required for VoIP equipment, (5) messaging and e-mail services must be made accessible, (6) establishes an Emergency Access and Real Time Text Advisory Committee to address among other things access by the hearing impaired to 911 via messaging technologies, and many more technology access requirements and implementation procedures. [Source: Library of Congress]

Additional Information:

S. 3828

[<http://thomas.loc.gov/cgi-bin/query/z?c111:S.3828:>]

S. 3304

[<http://thomas.loc.gov/cgi-bin/query/z?c111:S.3304:>]

H.R. 3101

[<http://thomas.loc.gov/cgi-bin/query/z?c111:H.3101:>]

Regulatory Activities

New Emergency Alert System Supported by FEMA

9.30.2010 – The Federal Emergency Management Agency (FEMA) has made headway into the creation of an all-encompassing emergency alert network. The Integrated Public Alert and Warning System (IPAWS) was created to alert as many people as possible to emergencies utilizing as many methods as possible. The traditional system relied heavily on television and radio, whereas this new system will integrate several forms of communication, including mobile phones and computers, to better disseminate alerts. This will foster greater access for the disabled community as they can receive alerts in their preferred modes of communication.

[Source: Federal Emergency Management Agency]

Additional Information:

[FEMA Announces Adoption of New Standard for Emergency Alerts](#)

[<http://www.fema.gov/news/newsrelease.fema?id=52880>]

FCC Hold Open Commission Meeting

9.23.2010 – The Federal Communications Commission held an open meeting with emergency technology on the agenda. One area of focus was the state of wireless emergency 911 communication and location retrieving technology. The main mission for that meeting is to come up with a system of goals in order to create, “a more granular E911 location information at either a county-based or PSAP-based geographic level.” This will assist emergency responders in locating emergency victims.

[Source: Federal Communications Commission]

Additional Information:

[FCC Open Meetings](#)

[<http://reboot.fcc.gov/open-meetings/2010/september>]

FCC Notice of Proposed Rulemaking

9.15.2010 - A notice of proposed rulemaking was adopted by the Federal Communications Commission (FCC) to change the telephone numbering system relating to Internet Telecommunications Relay Service (iTRS) and Video Relay Service (VRS). These systems allow people with speech or hearing related disabilities to communicate by using sign language or texting.

Previously, individuals with speech or hearing related disabilities were unable to fully access toll-free phone numbers. This new ten digit phone numbering system would be more geographically suitable to the individual's location. Toll-free iTRS numbers have created issues in that they increase misunderstanding during an emergency phone call. The new 10-digit numerical system is more conducive to making sure that emergency calls that are placed are routed to the appropriate Public Safety Answering Point, in order to dispatch the closest first responders. The FCC's adoption of the above referenced rulemaking is a step towards parity in 9-1-1 service for people with and without hearing limitations. Under **Section 225** of the **Telecommunications Act of 1996**, people who have hearing or speech related disabilities are entitled to TRS or a service of equal standing to be widely accessible. [Source: Federal Communications Commission]

Additional Information:

[Federal Communications Commission Notice of Proposed Rulemaking 10-161](#)

[http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0917/FCC-10-161A1.pdf]

Other Items of Interest

Social Media's Place in Emergency Alert Systems

9.9.2010 – The role of social media is ever expanding and evolving to take part in new and unanticipated arenas. One such arena is in emergency alert system management. Failures in the past in emergency alert systems during Hurricane Katrina and recent storms have raised questions as to whether the current emergency alert systems are all encompassing in their scope. Morris County, New Jersey, is trying to improve current circumstances by creating a shared network that will enable several counties to share news and information about major storms that strike in that area. The vehicle for this information exchange is the utilization of social media such as YouTube, Twitter, and Facebook. This links the counties into one network through social media and should be beneficial in alerting residents of approaching storms. Any system that builds upon and diversifies the modes of communicating emergency information and alerts before, during and after a disaster can potentially increase the likelihood that people with disabilities are able to receive timely emergency information in a format and via a device that is accessible. [Source: Emergency Management: Strategy and Leadership in Critical Times]

Additional Information:

[Emergency Alert System in Morris County, N.J. to Link 39 Cities via Social Media](http://www.emergencymgmt.com/safety/Emergency-Alert-System-Social-Media.html)

[<http://www.emergencymgmt.com/safety/Emergency-Alert-System-Social-Media.html>]

Tufts University Students Create New Tool

9.1.2020 – Students studying Human Factors at Tufts University were faced with a new challenge in how to create a new medical device for the aged. The main idea was to create a device that would be useful and beneficial to the elderly while factoring in the special accommodations necessary that would make the device fully functional for them. The students created a small round object to be worn around the neck to record data such as medicine dose records, viewing medications, and medical reminders. It was created in a Baby Boomer-friendly manner and is applicable to the needs of some people with disabilities, as well as the aged. [Source: Converge Magazine]

Additional Information:

[Tufts Students Design Medical Technology](http://www.convergemag.com/college-career/Tufts-Students-Medical-Technology.html)

[<http://www.convergemag.com/college-career/Tufts-Students-Medical-Technology.html>]

[Tufts School of Engineering – Faculty Research Areas](http://engineering.tufts.edu/me/research/)

[<http://engineering.tufts.edu/me/research/>]

Wireless RERC Updates

Wireless RERC Weighs in on Accessible Mobile Phones Options

The Wireless RERC filed reply comments in Public Notice [CG 10-145] seeking comment on Accessible Mobile Phone Options for People who are Blind, Deaf-blind, or Have Low Vision. In the initial comment period, the FCC sought input on six questions that addressed the technical feasibility of accessibility solutions, features currently on the market place that are not accessible, cost of implementation, cost as an obstacle, and guidance on technical and policy solutions that would reduce barriers to mobile phone technology, service and information. The Wireless RERC replied to comments filed by CTIA – The Wireless Association, the American Foundation for the Blind, AT&T, and a consumer who identified himself as being blind. The comments, among other things, supported stakeholder involvement and awareness campaigns on accessible mobile phone options, recommended that information on accessible phone models be placed on the home page of companies' websites, and addressed the impact that inaccessible cell phone features could have on the accessibility of the forthcoming Commercial Mobile Alert System. They also recommended that the software that provides voice control, speech-to-text, and text-to-speech/screenreader functionality become part of the standard (out-of-the-box) suite of capabilities of all wireless communication devices. Reply comments were filed on September 30, 2010, and will be available via the FCC's Electronic Comments Filing System the first week of October.

Additional Information:

[Wireless RERC Reply Comments](#)

[<http://gullfoss2.fcc.gov/ecfs/document/view?id=7020914812>]

[Public Notice \[10-145\]](#)

[http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0722/DA-10-1324A1.pdf]

SUNspot - Preliminary Data Analysis for People with Hearing Impairment

The Wireless RERC is continuing to collect data for the Hearing Aid Compatibility survey. The current survey runs through October 31, 2010. This is the 5th year we have run the survey. Results from the previous two years show a jump in overall cellphone satisfaction by people who use hearing aids and cochlear implants over previous years. Nevertheless, continuing high percentages of respondents report difficulty finding a compatible phone. The 2010 Hearing Aid Compatibility Survey can be found at: <http://www.wirelessrerc.org/news/take-the-2010-hac-survey>. The 2006-2008 HAC Survey report can be found at: http://www.wirelessrerc.org/publications/HAC-Report_2008_2009-06-10.docx/view.

Human Factors Considerations in Mobile Emergency Alerting

Helena Mitchell, PhD, will present *The Human Side of Regulation: Emergency Alerts*, at the 8th @ WAS International Conference on Mobile Computing and Multimedia (MoMM2010) in Paris, France,

November 8-10, 2010. Since 2001, entities in the U.S. have encouraged the development of emergency communication technologies that serve both the general population and people with disabilities. Since 2004, regulatory initiatives by the Federal government have addressed the development of next-generation warning systems that integrate technologies and consider the needs of persons with disabilities. This paper discusses how regulations and societal issues can complement each other to ensure accessible alerting in next-generation, mobile emergency alerting systems.

Additional Information:

[MoMM 2010](#)

[<http://www.iivas.org/conferences/momm2010/>]

Upcoming Events

ATIA Webinar Series

On **October 7, 2010**, the Assistive Technology Industry Association will host a webinar entitled "Self-Operated Accessible Text and E-Reading on iPods with Free Software." The webinars will be presented by Daniel G. McNulty, the site coordinator for the Promoting Achievement through Technology and Instruction for all Students (PATINS) Project. The presentation will include how to use devices such as iPods to disseminate assignments in the classroom more effectively. This is heavily based on software that is predominately free for users. Links to the software will be available.

Additional Information:

[Abstract for "Self-Operated Accessible Text and E-Reading on iPods with Free Software"](#)

[<http://www.atia.org/i4a/pages/index.cfm?pageID=3855>]

VIC 2010

The inaugural event Visions of an Inclusive Community, will be held in **Tampa, Florida, on October 14-16, 2010**. VIC2010 is designed to bring together members of the design/build community, the healthcare industry, the disabled community, aging in place advocates and governmental agencies to facilitate the transfer of knowledge that will build empathy and identify opportunities for more inclusive design of products and spaces.

Additional Information:

[VIC 2010](#)

[<http://www.vic2010.com/>]

Abilities Expo 2010

The Abilities Expo will be in **Atlanta, Georgia**, for its second consecutive year at the Cobb Galleria Convention Center, **October 15-17, 2010**, and will feature an Assistive Technology Pavilion. Free

workshops are a great addition to the show and will focus on everything from tips for traveling with a disability and home modifications to the steps to getting the best accessible vehicle. Learn about the many new ways to exercise with a disability and improve your health and find out how standing is benefitting people with spinal cord injuries. Admission is free!

Additional Information:

[Abilities Expo](#)

<http://www.abilitiesexpo.com/atlanta/index.html>

AAPD Annual Compendium of Disability Statistics

The American Association of People with Disabilities is holding their Second Annual Compendium of Disability Statistics to aggregate the statistical data that is produced by different government agencies. A new addition to this is additional financial statistics that show the amount of government money that is spent on disability related issues. This will be held on Capitol Hill in the Senate Visitors Center on **October 27, 2010**.

Additional Information:

[RSVP Information](#)

[<http://jfactivist.typepad.com/jfactivist/2010/09/youre-invited-latest-disability-statistics-to-be-released.html>]

2010 NCTI Technology Innovators Conference

The 2010 NCTI Technology Innovators Conference will be held in **Washington, DC** on **November 15-16, 2010**. The theme is Breakthrough Learning – Transform the Future, focusing on emerging ideas, solutions, and public policy initiatives in inclusive technology to enable and empower all students to reach their potential.

Additional Information:

[Conference Website](#)

[<http://www.nationaltechcenter.org/index.php/conf10-registration/>]

Accessing Higher Ground: Accessible Media, Web, and Technology Conference

The 13th Annual Accessing Higher Ground: Accessible Media, Web, and Technology Conference will cover topics such as disability policy issues, technology accessibility, and legal issues. The main topic areas focus on access within a campus, workplace and public context. One area of special attention will be accommodations on university campuses and how to better facilitate improved accommodation measures. The keynote speaker will be George Kerscher, PhD, the Secretary General of the DAISY Consortium. The conference will take place on **November 15 – 19, 2010** in **Westminster, Colorado**.

Additional Information:

Conference Website

[<http://www.colorado.edu/ATconference/registration2010.html>]

Technology and Disability Policy Highlights reports on national and local public policy events and recent wireless technological advances and political activities; and tracks emerging issues of interest to individuals with disabilities. *Technology and Disability Policy Highlights* is published monthly by the Wireless RERC. The Wireless RERC is a research center promotes universal access to wireless technologies and explores their innovative applications in addressing the needs of people with disabilities. For more information on the Wireless RERC, please visit our web site at [<http://www.wirelessrerc.org>].

For further information on items summarized in this report, or if you have items of interest that you would like included in future editions, please contact this edition's editors, Christina McMillian [christina@cacp.gatech.edu], Salimah LaForce [salimah.laforce@cacp.gatech.edu], or Nathan Moon, Ph.D., CACP, Research Scientist [nathan@cacp.gatech.edu].

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