Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Petition For Rulemaking To Update The Commission's Rules For Access To Support The Transition From TTY To Real-Time Text Technology, And Petition For Waiver Of Rules Requiring Support Of TTY Technology	)	GN Docket No. 15-178

To: The Commission

COMMENTS OF CTIA – THE WIRELESS ASSOCIATION®

Thomas C. Power
Senior Vice President and General Counsel

Scott K. Bergmann
Vice President, Regulatory Affairs

Matthew B. Gerst
Director, Regulatory Affairs

Kara D. Romagnino
Director, Regulatory Affairs

CTIA – The Wireless Association®
1400 Sixteenth Street, NW
Suite 600
Washington, DC 20036
(202) 785-0081

August 24, 2015

TABLE OF CONTENTS

I. INTRODUCTION AND SUMMARY 1

II. IT IS TIME FOR THE COMMISSION TO MODIFY THE 20TH CENTURY WIRELESS TTY MANDATE TO RECOGNIZE 21ST CENTURY WIRELESS INNOVATION. 2

A. Today's Deaf, Hard of Hearing, and Speech-Impaired Consumers Have Substantial Choice in Wireless Products and Services to Meet Their Needs. 2

B. The Commission's Wireless TTY Obligations Are Technologically Obsolete and Unnecessary to Meet the Needs of Today's Consumers. 3

III. CTIA SUPPORTS AN EXPEDITIOUS RULEMAKING PROCEEDING TO AFFIRM THE WIRELESS INDUSTRY'S FLEXIBILITY TO OFFER INNOVATIVE ACCESSIBILITY SOLUTIONS, SUCH AS RTT, AS ALTERNATIVES TO WIRELESS TTY. 7

A. The Commission's Rules May Not Provide the Flexibility Necessary for CMRS Providers and Equipment Manufacturers to Offer Innovative Accessibility Solutions as Alternatives to Wireless TTY, Such as RTT. 7

B. The Commission Should Expeditiously Recognize RTT as a Solution that Meets the Commission's Wireless TTY Obligations. 8

C. The Commission Should Not Delay Modifying the Wireless TTY Rules to Affirm the Wireless Industry's Flexibility while RTT is Being Fully Implemented. 9

IV. THE COMMISSION'S RULES SHOULD BE FLEXIBLE AND TECHNOLOGY-NEUTRAL TO SPUR INNOVATION IN ACCESSIBILITY SOLUTIONS. 10

A. Flexible, Technology-Neutral Rules are Essential to Spur Innovative Accessibility Solutions. 10

B. A Flexible, Technology-Neutral Approach to TTY Successor Technologies, Such as RTT, Is Consistent with Section 255, the CVAA, and the EU's Approach to Accessibility. 11

V. CONCLUSION. 13

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Petition For Rulemaking To Update The Commission's Rules For Access To Support The Transition From TTY To Real-Time Text Technology, And Petition For Waiver Of Rules Requiring Support Of TTY Technology	)	GN Docket No. 15-178

To: The Commission

COMMENTS OF CTIA – THE WIRELESS ASSOCIATION®

I. INTRODUCTION AND SUMMARY.

CTIA – The Wireless Association® ("CTIA") respectfully submits these comments in response to the Public Notice in the above-captioned proceeding[1] and urges the Commission to act expeditiously to begin a rulemaking that will modify the outdated, technology-specific rules that require Commercial Mobile Radio Services ("CMRS") and equipment to support text telephone ("wireless TTY") technology. As deaf, hard of hearing, and speech-impaired consumers ("consumers") overwhelmingly adopt innovative wireless services, including Text-to-911, the Commission should not apply antiquated wireless TTY requirements to new wireless networks and products. To be clear, CTIA does not believe the Commission should, at this time, modify the wireless TTY mandate to affect the continued provision of TTY on *existing* CMRS services and equipment. Instead, CTIA believes the Commission should expeditiously affirm CMRS provider and equipment manufacturer flexibility to offer solutions other than TTY on *new* wireless services and equipment.

---

[1] *See Request for Comment on Petition for Rulemaking to Update the Commission's Rules for Access to Support the Transition from TTY to Real-Time Text Technology, and Petition for Waiver of Rules Requiring Support of TTY Technology*, Public Notice, 30 FCC Rcd 7438 (2015); *see also* Petition of AT&T Services, Inc. for Rulemaking, PS Docket Nos. 11-153, 10-255, WC Docket No. 04-36, CB Docket Nos. 03-123, 10-213 (filed June 12, 2015) ("AT&T Petition").

Specifically, in the near-term, the Commission should acknowledge Real-Time Text ("RTT") as a solution that meets the Commission's existing wireless TTY rules, while affirming that CMRS providers and manufacturers have flexibility to consider any solution that can meet the needs of consumers who may have previously used wireless TTY. The wireless TTY mandate cannot provide a service that is as effective for the deaf, hard of hearing, and speech-impaired community as new wireless technologies will. Ultimately, the Commission should adopt flexible, technology-neutral rules that will best promote innovation and reflect how consumers increasingly use innovative wireless products and services.

II. IT IS TIME FOR THE COMMISSION TO MODIFY THE 20TH CENTURY WIRELESS TTY MANDATE TO RECOGNIZE 21ST CENTURY WIRELESS INNOVATION.

A. Today's Deaf, Hard of Hearing, and Speech-Impaired Consumers Have Substantial Choice in Wireless Products and Services to Meet Their Needs.

The wireless industry is a market leader in offering accessible services and equipment, including a wide array of accessible services and plans and innovative devices and software with a range of low- and high-end features, functions, and prices.[2] As the Commission reported to Congress last year, the wireless industry offers both feature phones and smartphones with a range of accessibility solutions to meet the needs of individuals who are blind or have low vision, who are deaf or hard of hearing, who have dexterity impairments, and who have cognitive disabilities.[3] The wireless industry has also taken great steps to ensure that advanced communications services ("ACS") and the equipment used for ACS are accessible to people with

---

[2] *See, e.g.*, *Implementation of Sections 716 and 717 of the Communications Act of 1934, as Enacted by the Twenty-First Century Communications and Video Accessibility Act of 2010*, Biennial Report to Congress as Required by the Twenty-First Century Communications and Video Accessibility Act of 2010, 29 FCC Rcd 11909, 11931-34 ¶¶ 39-42 (2014) ("*2014 CVAA Biennial Report*"); PN Comments of CTIA – The Wireless Association® on Accessibility of Communication Technologies, CG Docket No. 10-213 (filed July 15, 2014) ("CTIA Biennial PN Comments").

[3] *2014 CVAA Biennial Report* ¶ 40.

disabilities.[4] Moreover, as manufacturers move to a platform-based approach, accessibility features – including options for the deaf and hard of hearing community such as vibrating and visual alerts, captioning, and interoperability with innovative sound amplification devices – are more consistently available on the device models that use a particular operating system, such as Apple's iOS, Google's Android, Blackberry, and Microsoft's Windows Phone.[5]

Wireless service providers and equipment manufacturers have met, and in many cases exceeded, their obligations to offer accessible products and services since passage of the Twenty-First Century Communications and Video Accessibility Act ("CVAA") in 2010 and, to an even greater extent, since passage of the Americans with Disabilities Act 25 years ago. CTIA and its member companies continue to collaborate and build strong relationships with the accessibility community through conferences, meetings, and online resources to ensure that consumers are informed about the diverse wireless offerings.[6] In so doing, the wireless industry is helping to ensure that the accessibility community has "easier access to tools and materials that improve their educational, professional, and personal lives."[7]

B. The Commission's Wireless TTY Obligations Are Technologically Obsolete and Unnecessary to Meet the Needs of Today's Consumers.

TTY is an assistive technology that was developed approximately 50 years ago to enable deaf, hard of hearing, and speech-impaired consumers to communicate over the legacy wireline telephone system.[8] As wireless voice communications were becoming more mainstream in the

---

4 *Id*. ¶ 41.

5 *See* CTIA Biennial PN Comments at 9-10; *2014 CVAA Biennial Report* ¶ 25.

6 CTIA Biennial PN Comments at 26-33.

7 Jamal Mazrui, Director, FCC Accessibility and Innovation Initiative, *The Accessible Technology Challenges Facing Millennials*, FCC Blog (May 6, 2015), https://www.fcc.gov/blog/accessible-technology-challenges-facing-millennials.

8 *See Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Memorandum Opinion and Order, 12 FCC Rcd 22665, 22667, n.3 (1997) ("*E911*

late 1990s, and text-based wireless communications were nascent, the Commission imposed obligations on CMRS providers and equipment manufacturers to support TTY, specifically for purposes of 9-1-1 emergency calls and 7-1-1 Telecommunications Relay Service ("TRS") calls.[9]

Despite significant and on-going investments by CMRS providers and manufacturers to support TTY on wireless handsets and over wireless networks, there is minimal evidence to suggest that consumers have adopted and used TTYs with wireless equipment and services since the Commission imposed this technology-specific mandate.[10] Indeed, the Commission's Emergency Access Advisory Committee ("EAAC") found in 2013 that wireless TTY usage "is *close to zero*."[11] Unsurprisingly, consumers have opted for innovative wireless services, including SMS, instant messaging, email, IP relay, and various social media applications, rather than wireless TTY.[12] Both the Commission and advocates for deaf and hard of hearing consumers have acknowledged this trend.[13]

Reconsideration Order") (noting that the "old and slow," but "dependable" TTY was developed in the mid-1960s).

[9] *See Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 18676 (1996), *recon.*, 12 FCC Rcd 22665 (1997) (noting the importance of 9-1-1 access to the millions of Americans with hearing and speech disabilities and, accordingly, requiring wireless carriers to transmit TTY calls to 9-1-1 services); *The Use of N11 Codes and Other Abbreviated Dialing Arrangements*, First Report and Order and Further Notice of Proposed Rulemaking, 12 FCC Rcd 5572, 5606 ¶ 55 (1997); *The Use of N11 Codes and Other Abbreviated Dialing Arrangements*, Second Report and Order, 15 FCC Rcd 15188, 15201-02 ¶¶ 26-28 (2000); *see also* 47 C.F.R. §§ 6.3(b), 7.3(b), 20.18(c), 64.603.

[10] *See* Emergency Access Advisory Committee, *Report on TTY Transition*, 11-13 (Mar. 2013), https://apps.fcc.gov/edocs_public/attachmatch/DOC-319386A1.pdf ("EAAC TTY Report") (finding that wireless TTY is "very little used" and that overall TTY use is declining by approximately 10 percent each year – figures that do not distinguish between users of wireline and wireless TTY).

[11] *Id*. at 43 (emphasis added).

[12] *See, e.g.*, John Morris, Ph.D, *et al*., *Wireless Technology Uses and Activities by People with Disabilities*, 34 (2014), http://www.wirelessrerc.org/sites/default/files/content/newroom/Wireless%20Technology%20Uses%20and%20Activities%20by%20People%20with%20Disabilities.pdf (finding that 95 percent of deaf individuals who own or use a cellphone or tablet send and receive text messages); Wireless RERC, *Technology Use by People with Hearing and Speech Loss for Communicating with Emergency Response Services*, 4 (2013),

Further demonstrating the shift to modern technologies is the fact that state equipment distribution programs, whose missions include providing eligible deaf, hard of hearing, and speech-impaired consumers with TTY equipment, are shifting to meet the demands of their consumers by offering new and innovative products, including wireless. For example, both the Colorado Telecommunications Equipment Distribution Program and the Texas Specialized Telecommunications Assistance Program distribute or reimburse for the purchase of mobile devices.[14] Additionally, Missouri is piloting a Telecommunications Access Program that provides iPhones and iPads with pre-installed accessibility apps, among other devices.[15] Programs such as these recognize that consumers require a *variety* of solutions beyond antiquated TTY technology.

More recently, the Commission and relevant standards organizations have taken steps that inherently recognize the limited utility of maintaining the existing wireless TTY mandate,

---

http://www.wirelessrerc.gatech.edu/sites/default/files/publications/Research_Brief_Tech_Hearing_and_Speech_Loss_911_2013-04-04_Final%5B1%5D.pdf (finding that only two percent of deaf respondents to a Wireless RERC survey, zero percent of hard of hearing respondents, and one percent of respondents with difficulty speaking have *used* mobile TTY to contact emergency services).

[13] *See, e.g.*, *Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications*, Further Notice of Proposed Rulemaking, 27 FCC Rcd 15659, 15701 ¶ 110 (2012) (explaining that "new digital technologies, more mobile and less expensive, had caused most TTY users to migrate away from use of these devices as their primary communication mode" by mid-2002); *Implementation of Sections 716 and 717 of the Communications Act of 1934 as Enacted by the Twenty-First Century Communications and Video Accessibility Act of 2010*, Notice of Proposed Rulemaking, 26 FCC Rcd 3133, 3166 ¶ 88 (2011) ("[W]e understand that a sizeable majority of consumers who previously relied on TTYs for communication are transitioning to more mainstream forms of text and video communications."); Comments of Telecommunications for the Deaf and Hard of Hearing, Inc., *et al.*, PS Docket Nos. 11-153 and 10-255, at 2 (filed Dec. 12, 2011) ("The widespread availability, ease of access and practicality of text-capable communications devices has fostered a rapid migration away from specialized legacy devices such as TTYs in the deaf and hard of hearing community.").

[14] *See* Colorado Commission for the Deaf and Hard of Hearing, Telecommunications Equipment Distribution Program, http://www.ccdhh.com/tedp/tedp.aspx (last visited Aug. 19, 2015); Texas Department of Assistive and Rehabilitative Services, Specialized Telecommunications Assistance Program (STAP), FY 2015 Voucher Values, http://www.dars.state.tx.us/dhhs/vouval.shtml (last visited Aug. 19, 2015).

[15] *See* Missouri Assistive Technology, TAP Wireless Pilot, http://at.mo.gov/telecom-access-program/tap-wireless.html (last visited Aug. 19, 2015).

even for emergency purposes. For example, the Commission mandated that CMRS providers offer Text-to-911 – an interim solution for consumers to directly reach 9-1-1 until Next Generation 9-1-1 ("NG911") services are available.[16] Standards organizations, such as 3GPP and the Alliance for Telecommunications Industry Solutions ("ATIS"), are also integrating more IP-friendly text communication technologies that obviate the necessity of wireless TTY support, especially for NG911.[17]

Finally, Congress, in the CVAA, specifically encouraged the Commission to sunset the TTY mandate by directing the EAAC to consider the issue and granting the Commission authority to act on EAAC recommendations through "achievable and technically feasible" rules.[18] Among other things, EAAC stated that deployment of a TTY replacement should be

---

[16] *See Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications*, Report and Order, 28 FCC Rcd 7556 (2013) (requiring covered text providers to provide consumers attempting to send a text to 9-1-1 with an automatic bounce-back message when the service is unavailable); *Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications*, Second Report and Order and Third Further Notice of Proposed Rulemaking, 29 FCC Rcd 9846, 9855 n.54 (2014) ("*Text-to-911 Second Report and Order*") ("[W]e believe that the adoption of a text-to-911 requirement provides an important interim step in responding to the emergency access needs of people who are deaf, hard of hearing, or speech disabled.").

[17] For instance, 3GPP has completed work on RTT, and ATIS has completed, though not published, work on RTT for network-to-network interface and also is working on a project for RTT device behavior specification. *See* 3GPP Specification Detail, Global Text Telephony ("GTT"); Stage 2, http://www.3gpp.org/DynaReport/23226.htm (last visited Aug. 19, 2015); ATIS, Wireless Technologies and Systems Committee ("WTSC") Issues, http://www.atis.org/0160/issues.asp (last visited Aug. 19, 2015). The 3GPP and ATIS work is based on the RTT/GTT building blocks (wireless/broadband access independent) defined in the Internet Engineering Task Force ("IETF") and the International Telecommunication Union Telecommunication Standardization Sector ("ITU-T"). *See* IETF, RTP Payload for Text Conversation (June 2005), https://tools.ietf.org/html/rfc4103; ITU-T Recommendations, ITU-T T.140 (02/1998), http://www.itu.int/ITU-T/recommendations/rec.aspx?rec=4211.

[18] *See* CVAA, Pub. L. No. 111-260, 47 U.S.C. § 615c(a) (providing the FCC Chairman with authority to establish the EAAC to make recommendations to the Commission on achieving equal access to emergency services "as a part of the migration to a national Internet Protocol-enabled emergency network"); *id.* § 615c(c)(6) (explicitly providing for consideration of "the possible phase out of the use of current-generation TTY technology to the extent that this technology is replaced with more effective and efficient technologies and methods to enable access to emergency services by individuals with disabilities"). *See also* EAAC, *Report on Emergency Calling for Persons with Disabilities Survey Review and Analysis 2011* (July 2011), https://transition.fcc.gov/cgb/dro/EAAC/EAAC-REPORT.pdf

encouraged[19] and recommended that the Commission remove the requirement for TTY support for new IP-based consumer devices that implement IP-based text communications.[20]

For all of these reasons, CTIA believes the time is right for the Commission to initiate a rulemaking that affirms the wireless industry's ability to transition away from yesterday's wireless TTY obligations to more flexible, technology-neutral solutions that meet the needs of today's deaf, hard of hearing, and speech-impaired consumers.

III. CTIA SUPPORTS AN EXPEDITIOUS RULEMAKING PROCEEDING TO AFFIRM THE WIRELESS INDUSTRY'S FLEXIBILITY TO OFFER INNOVATIVE ACCESSIBILITY SOLUTIONS, SUCH AS RTT, AS ALTERNATIVES TO WIRELESS TTY.

A. The Commission's Rules May Not Provide the Flexibility Necessary for CMRS Providers and Equipment Manufacturers to Offer Innovative Accessibility Solutions as Alternatives to Wireless TTY, Such as RTT.

Several Commission rules specifically require CMRS providers and manufacturers to support TTY technology, including: Section 20.18(c), regarding TTY access to 9-1-1 services; Section 64.603, regarding support for toll-free dialing to relay services via the 7-1-1 dialing code; and a variety of rules implementing Sections 255 and 716 of the Communications Act requiring TTY support where "readily achievable" or "achievable," respectively.[21] In this era of rapid innovation, the Commission should initiate a rulemaking to update and clarify the existing wireless TTY obligations and affirm the wireless industry's flexibility to offer innovative wireless solutions to meet the needs of all consumers.

(conducting a national survey consisting of 12,766 fully- and partially-completed surveys of people with disabilities on the most effective and efficient technologies and methods to enable next-generation 9-1-1).

[19] *See generally* EAAC TTY Report.

[20] *See* EAAC, *Report and Recommendations* (2011), https://apps.fcc.gov/edocs_public/attachmatch/DOC-312161A1.pdf.

[21] 47 C.F.R. §§ 6.3(b), 7.3(b), 20.18(c), 64.603.

B. The Commission Should Expeditiously Recognize RTT as a Solution that Meets the Commission's Wireless TTY Obligations.

RTT is a promising, and potentially superior, technology to TTY, which is not only generally acknowledged to be obsolete for wireless consumers but may also be technically infeasible to support in rapidly evolving wireless networks and equipment.

As AT&T explains, TTY is "slow and requires dedicated network resources, a separate assistive device, and significant network bandwidth" and does not facilitate conversational communications.[22] The Baudot character string, "which can appear as an echo or unvarying noise when transmitted over IP networks," and the tonal susceptibility to packet loss cause transmission problems and may lead to a TTY character error rate above acceptable levels.[23] Indeed, the wireless TTY rules themselves are premised on the use of analog and 2G wireless networks.[24]

RTT, on the other hand, "is a native IP technology designed for today's packet-switched network environment."[25] RTT offers an expanded array of features to enable more robust user conversations, including real-time editing of text and full-duplex functionality (*i.e.*, both parties can communicate simultaneously).[26] Because RTT allows consumers to use standard keyboards on their devices or access RTT via Bluetooth, RTT is less expensive and easier for consumers to use.[27] RTT is also more spectrally efficient than TTY, as it uses less network resources.[28]

---

22 AT&T Petition at 6.

23 *Id*. at 6-7; EAAC TTY Report at 16-18.

24 *See Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Fourth Report and Order, 15 FCC Rcd 25216, ¶¶ 3, 9, 20, and n.36 (2000); *E911 Reconsideration Order* ¶ 56 (noting that digital wireless systems are less compatible with TTY than analog wireless systems).

25 AT&T Petition at 5.

26 *Id*. at 9.

27 *Id*.

Moreover, RTT is often cited as a potential text-based alternative to voice communications for IP-enabled services.[29] And, as AT&T explains, RTT can meet the Commission's TTY obligations.[30] The Commission should therefore initiate a rulemaking, as proposed by AT&T, and recognize RTT as one solution that any CMRS provider or manufacturer could use to meet the FCC's wireless TTY obligations.

C. The Commission Should Not Delay Modifying the Wireless TTY Rules to Affirm the Wireless Industry's Flexibility while RTT is Being Fully Implemented.

Although, as previously noted, standards bodies have taken action around text based IP-services, the complete interoperability and integration of RTT across wireless networks and equipment will require further standards development and implementation. However, the Commission should not delay initiating the rulemaking and affirming wireless industry flexibility to transition away from the outdated wireless TTY mandate as it deploys new wireless networks and equipment.

Specifically, affirming that the wireless TTY mandates are flexible and recognizing RTT as one alternative to TTY in the short term should not affect consumers' access to 9-1-1, 7-1-1, or other essential services. The Commission has expanded the scope of federally funded and supported relay services beyond traditional TTY-based TRS to include video, IP relay, and captioned telephone service.[31] As TRS users can access these relay services via wireless handsets and networks, the Commission can modify the wireless TTY mandate without

---

[28] *Id*.

[29] *See, e.g.*, *Text-to-911 Second Report and Order* ¶ 132; *Information and Communication Technology Standards and Guidelines*, Notice of Proposed Rulemaking, Docket No. 2015-0002, 80 Fed. Reg. 10879, 10900 (Feb. 27, 2015) ("Access Board NPRM"); EAAC TTY Report at 4-5, 7, 26.

[30] AT&T Petition at 11-13.

[31] *See generally Telecommunications Relay Services and Speech-to-Speech for Individuals with Hearing and Speech Disabilities*, Report and Order and Declaratory Ruling, 22 FCC Rcd 20140 ¶¶ 3-7, 19 (2007).

impacting wireless consumer access to relay services. Likewise, the Commission affirmed that Text-to-911 is an alternative to TTY and interim solution to NG911 for deaf, hard of hearing, and speech-impaired consumers to directly access 9-1-1.[32] Given the increasing availability of Text-to-911 and modern TRS services, the Commission should affirm CMRS provider and equipment manufacturer flexibility under the wireless TTY mandate while RTT and other solutions are being developed as interoperable, integrated solutions.

IV. THE COMMISSION'S RULES SHOULD BE FLEXIBLE AND TECHNOLOGY-NEUTRAL TO SPUR INNOVATION IN ACCESSIBILITY SOLUTIONS.

A. Flexible, Technology-Neutral Rules are Essential to Spur Innovative Accessibility Solutions.

The current wireless TTY mandate is a product of adopting a regulation based on wireless technology as it existed almost 20 years ago. Instead of retaining this outdated mandate, the Commission should adopt flexible, technology-neutral rules that permit the wireless industry to offer innovative solutions to meet accessibility needs. Adopting a flexible approach, rather than mandating a particular means of implementation, allows manufacturers and service providers to deploy new technologies to implement and update technologies as they evolve.

As a first step – but by no means a last step – towards this goal, the Commission should affirm RTT as one alternative to TTY, while also affirming CMRS provider and equipment manufacturer flexibility to consider any solution that can meet the needs of deaf, hard of hearing, and speech-impaired consumers who may have previously used wireless TTY. However, the Commission should refrain from considering only a single, proprietary RTT implementation or standard as satisfying the TTY rules as there are a number of possible implementation solutions

[32] *See supra* note 13 and accompanying text.

for RTT. In fact, several technical standards could be used to implement an RTT solution, some of which have been around for years and others which are not yet finalized or widely adopted.[33]

B. A Flexible, Technology-Neutral Approach to TTY Successor Technologies, Such as RTT, Is Consistent with Section 255, the CVAA, and the EU's Approach to Accessibility.

The Commission's accessibility rules for Section 255 and for ACS follow the same approach, and it has worked: describing performance objectives rather than prescribing solutions. For instance, Section 716 of the Communications Act, added by the CVAA, provides for industry flexibility and innovation. This provision requires equipment used for ACS to be "accessible to and usable by individuals with disabilities."[34] ACS equipment manufacturers can satisfy obligations through flexible, demand-driven solutions, such as third-party applications, peripheral devices, software, hardware, or customer premises equipment.[35] Indeed, in implementing this statutory provision, the CVAA specifically barred the Commission from prescribing regulations that mandated particular technical standards.[36] In addition, the U.S. Access Board's TEITAC Report, recommending how to update communications and technology standards and guidelines, takes a flexible approach that references functional performance

---

[33] Access Board NPRM at 10900-01; Telecommunications and Electronic and Information Technology Advisory Committee, U.S. Access Board, *Report to the Access Board: Refreshed Accessibility Standards and Guidelines in Telecommunications and Electronic and Information Technology*, at 6-A.2.c Note 1 (Apr. 2008), http://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/background/teitac-report/6-the-recommendations ("TEITAC Report").

[34] CVAA, 124 Stat. at 2755, codified at 47 U.S.C. § 617.

[35] *Id*. at 2756; *see also* 47 C.F.R. Part 14.

[36] CVAA, 124 Stat. at 2756-57, codified at 47 U.S.C. § 617 ("[T]he Commission shall . . . not mandate technical standards, except that the Commission may adopt technical standards as a safe harbor for such compliance if necessary….").

criteria that describe the use cases for technologies rather than adopting a technology-specific mandate.[37]

Similarly, all three European standards organizations – the European Committee for Standardization ("CEN"), the European Committee for Electrotechnical Standardization ("CENELEC"), and the European Telecommunications Standards Institute ("ETSI") – have adopted EN 301 549, which allows the use of multiple standards for RTT.[38] While the specific standards enumerated in EN 301 549 may or may not be applicable to the American experience, the Commission should nevertheless similarly permit a variety of technical standards to inform the U.S. wireless consumer's experience.

---

[37] TEITAC Report at 6-A.2.c Note 1.

[38] ETSI Technical Committee Human Factors, *et al*., *Accessibility Requirements Suitable for Public Procurement of ICT Products and Services in Europe*, 29 (EN 301 549 v1.1.1 (2014-02)), http://www.etsi.org/deliver/etsi_en/301500_301599/301549/01.01.01_60/en_301549v010101p.pdf.

V. CONCLUSION.

Accordingly, for the reasons discussed above, the Commission should act expeditiously to initiate a rulemaking that affirms the wireless industry's flexibility to offer innovative accessibility solutions, such as RTT, as alternatives to wireless TTY.

Respectfully submitted,

By: */s/ Matthew B. Gerst*

Matthew B. Gerst
Director, Regulatory Affairs

Thomas C. Power
Senior Vice President and General Counsel

Scott K. Bergmann
Vice President, Regulatory Affairs

Kara D. Romagnino
Director, Regulatory Affairs

CTIA – The Wireless Association®
1400 Sixteenth Street, NW
Suite 600
Washington, DC 20036
(202) 785-0081
www.ctia.org

August 24, 2015