

APPROVED AND ADOPTED BY THE  
DISABILITY ADVISORY COMMITTEE  
October 8, 2015

Recommendation of the FCC Disability Advisory Committee  
Ad Hoc Real-Time Text Subcommittee  
October 8, 2015

WHEREAS, the FCC has issued a Public Notice (“PN”) seeking public comment on whether the Commission should initiate a rulemaking on modifying its accessibility rules to recognize Real-Time Text (“RTT”) as a replacement for Text-Telephony (“TTY”) technology in the wireless Internet Protocol (“IP”)-based environment; what impact such a modification would have on the deployment of RTT as an accessibility solution and on the advancement of text-to-911 generally; and, consistent with a petition filed by AT&T, the merits of waiving the Commission’s wireless TTY rules for AT&T, and in the alternative, for all entities covered by these rules;<sup>1</sup>

WHEREAS, TTY was developed in the 1960s to enable text-based communications over telephone networks and, in the late 1990s, the FCC required Commercial Mobile Radio Service (“CMRS”) providers and equipment manufacturers to support TTY for general, relay (7-1-1) and emergency (9-1-1) communications; and

WHEREAS, wireline TTY usage has been in steady decline for some time and there is evidence to suggest that wireless TTY usage is extremely limited, but state-operated TTY programs<sup>2</sup> that focus on wireline TTY remain in use, and certain segments of the population (including but not limited to individuals who are deaf, hard of hearing, deaf-blind, or speech disabled, as well as senior citizens, rural residents, and some places of public accommodations) continue to rely on TTYs; and

WHEREAS, the FCC’s Emergency Access Advisory Committee (“EAAC”) stated, among other recommendations, that deployment of a TTY replacement should be encouraged and recommended that the Commission remove the requirement for TTY support for new IP-based consumer devices that “implement IP-based text communications that include at a minimum real-time text or, in an LTE environment, IMS Multimedia Telephony<sup>3</sup> that includes real-time text”<sup>4</sup>; and

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<sup>1</sup> FCC, *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, GN Docket No. 15-178 (rel. July 24, 2015) (“RTT PN”)

<sup>2</sup> “State operated TTY programs” refers to the traffic that goes through state relay programs using TTY equipment.

<sup>3</sup> The 3GPP IP Multimedia Subsystem (IMS) multimedia telephony service allows for multiple media capabilities such as voice, real-time video, text, file transfer and sharing of pictures, audio and video clips.

<sup>4</sup> See Emergency Access Advisory Committee, *Report on TTY Transition*, (Mar. 2013),

[https://apps.fcc.gov/edocs\\_public/attachmatch/DOC-319386A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DOC-319386A1.pdf); EAAC, *Report and Recommendations* (2011),

[https://apps.fcc.gov/edocs\\_public/attachmatch/DOC-312161A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DOC-312161A1.pdf); and 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>

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WHEREAS, the Commission's Disability Advisory Committee ("DAC") has formed an ad hoc subcommittee to evaluate the RTT PN and recommendations from the DAC into the record of the Public Notice would be timely and appropriate,

RECOMMENDED, that the FCC begin a rulemaking to explore if RTT is a solution that meets or exceeds the objectives of the Commission's existing wireless TTY rules, particularly whether RTT better meets the communication and emergency access needs of today's consumers, including individuals who are deaf, hard of hearing, deaf-blind or speech disabled, than does TTY; and

RECOMMENDED further, that in the same rulemaking, the FCC explore whether other next-generation text-based communications solutions, in addition to RTT, can meet or exceed the objectives of the Commission's existing wireless TTY rules and in particular the communication needs of today's consumers, including individuals who are deaf, hard of hearing, deaf-blind, or speech disabled, now or in the future;

RECOMMENDED further, that an FCC rulemaking explore how the Commission's rules enable CMRS providers and equipment manufacturers to meet the Commission's TTY obligations through next-generation text-based communications solutions, such as RTT;

RECOMMENDED further, that the FCC consider the following issues in a rulemaking to determine how to facilitate a smooth transition from TTY to RTT and other next-generation text-based communications solutions that simultaneously ensures the communications needs of consumers with disabilities are met and that CMRS providers and equipment manufacturers can feasibly meet those requirements:

- How, and to what degree, can RTT, and other next-generation text-based communications solutions, meet or exceed the communication needs of consumers?
  - What drawbacks are there to RTT vis-à-vis TTY communications, and how can they be addressed?
  - What service features are necessary for TTY alternative solutions to meet the FCC's TTY requirements?
  - In addition to RTT, what are other next-generation text-based communications solutions that can meet or exceed the features of TTY?
  - Is backwards compatibility between RTT and TTY, and between other next-generation text-based communications solutions and TTY, technically feasible, either through a gateway or other means?
    - If so, how? Should such backwards compatibility be required and for what period of time?
    - What issues could be introduced through backwards compatibility and how, and to what degree, should they be mitigated?<sup>5</sup>

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<sup>5</sup> The State of California, Public Safety Communications Office, released in April 2014 a Report on SMS Text-to-911 in California. Tests of SMS-to-911 support via TTY gateways are described beginning on page 3. Some challenges

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- What are the standard, non-proprietary approaches to enable interoperability for RTT and other next-generation text-based communications solutions?
  - Should there be a requirement for all network or terminal equipment used on SIP or IMS networks to support established RTT standards?
  - Should all SIP and IMS networks be required to support a common standard by a certain date?
  - Would RTT and other next-generation text based communications solutions remain acceptable alternatives to TTY in the absence of conformity of networks and equipment to a common standard?
- Should RTT undergo testing to ascertain whether, and to what degree, it will support the communications needs of the deaf-blind including those who use Braille?
- What are the steps or stages for implementation toward full integration and deployment of RTT and other text-based communications solutions?
- How do RTT and other next-generation text-based communications solutions meet the 9-1-1 emergency communications needs of consumers?
  - Should the FCC waive the TTY obligations for CMRS providers and equipment manufacturers given the increasing availability of Text-to-911?
  - How would deployment of RTT and other next-generation text-based communications solutions impact the nationwide availability of Next Generation 9-1-1 (“NG911”)?
  - Should a transition include public outreach efforts to educate consumers of any potential issues with respect to using RTT and other next-generation text-based solutions for 911 communications?
- How should a transition to TTY alternative solutions, such as RTT and other next-generation text-based communications solutions, be coordinated across the ecosystem of TTY users, such as carriers, relay providers, and equipment manufacturers?
- With respect to AT&T’s request for waiver, to what degree would the granting of the waiver disrupt access to 911 communications, Federal agencies, and private businesses?
  - If a waiver is granted, should manufacturers of wireless devices that contain technology that falls under the term of the waiver be required to advise consumers that the device’s TTY functionality should not be relied upon for 911 communications?

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were identified that were able to be overcome, but others remained that represented a potentially degraded SMS experience in the use of a gateway compared to native SMS support. Similar testing of RTT-to-TTY gateway backwards technology should be undertaken to better understand its limitations. Available at: <http://www.caloes.ca.gov/PublicSafetyCommunicationsSite/Documents/0001-SMSText-to-9-1-1PilotReport145-2-14.pdf>