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June 16, 2016

*Electronic Submission*

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, SW  
Portals II, Room TW-A325  
Washington, DC 20554

**Ex Parte Submission**

**RE: Transition from TTY to Real-Time Text Technology, GN Docket 16-145; 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**

Dear Ms. Dortch:

On June 14, 2016 Aaron Bangor of AT&T presented the attached information during a panel at the M-Enabling Summit in Arlington, VA. FCC members were present.

In accordance with section 1.1206(b)(2) of the Commission's rules, this letter is being filed electronically with your office. Please feel free to contact me if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Linda Vandeloop". The signature is written in a cursive style and is positioned to the right of a vertical blue line.

cc: Suzanne Singleton  
Karen Peltz Strauss

# 2016 M-Enabling Summit: Global Opportunities for Real-Time Text

Aaron Bangor, Ph.D., CHFP

Lead Accessible Technology Architect

AT&T Corporate Accessibility Technology Office

June 14, 2016

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## Real-Time Text Standards

### Established Standards

- **2007** – 3GPP TS 26.114 “IP Multimedia Subsystem (IMS); Multimedia telephony; Media handling and interaction”
- **2009** – 3GPP TS 23.226 “Technical Specification Group Services and System Aspects for Global Text Telephony (GTT) Stage 2”
- **2011** – National Emergency Number Association “Detailed Functional and Interface Standards for the NENA i3 Solution”
- **2014** – ETSI / CEN / CENELEC – EN 301 549: “Accessibility requirements suitable for public procurement of ICT products and services in Europe”

### Developing US Standards

- **2015** US Access Board NPRM
  - 410.6: Real-Time Text Functionality
- **2015-2016** ATIS (Alliance for Telecommunications Industry Solutions) is developing American national standards for RTT:
  - ATIS-1000068 (published Oct-2015): “Support of TTY Service over IP using Global Text Telephony” (i.e., requirements for the network)
  - In development: “Real Time Text Mobile Device Behavior Specification” (i.e., requirements for the phone)
  - In development: “Real Time Text End-to-End Service Description Specification” (i.e., requirements for interoperability between providers)

## Moving Toward Realization of Real-Time Text (RTT)

- May 2015, AT&T conducted public **Proof-of-Concept demonstrations** for wireless industry representatives, the public safety community, regulators, and disability groups showing how:
  - Two RTT users could efficiently communicate using RTT
  - A landline TTY user could communicate with an RTT user
  - A wireless (3G) TTY user could communicate with an RTT user



## Near Future for RTT

### Upcoming

- **2H16** – AT&T expects to receive initial versions of software for:
  - network elements to support RTT
  - TTY-RTT interworking function
  - RTT over-the-top app
- **2017** – AT&T expects to complete testing and roll out RTT in our network and the OTT app
- **2018** – AT&T hopes to begin receiving mobile devices from manufacturers with native RTT capability (dependent on ATIS standards)

### Expected Benefits for Users...

- Keeps the good features of TTY
- Allows for simultaneous voice and text (not alternating)
- Does not require additional equipment/cost
- Offers expanded character sets and languages

### ...Operators

- Robust and efficient performance on new network technologies
- New voice services and devices are not limited by TTY compatibility issues
- Meets disability access needs

### ...Society

- Fosters direct communication among voice and text users