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ALERT

FCC Seeks Comment on Proposed Transition from TTY to Real-Time Text Technology

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The Federal Communications Commission (FCC or Commission) has published a notice of proposed rulemaking (NPRM) proposing a transition from text telephony (TTY) technology to real-time text (RTT) technology to enable communications over Internet Protocol (IP) based networks by people who are deaf, hard of hearing, speech disabled, and deaf-blind. RTT is a text-based communication technology that transmits text in real time as it is created, and is designed to operate reliably over IP-based networks and services. Comments on the NPRM are due by July 11, 2016, and reply comments are due by July 25, 2016.

This NPRM follows a petition filed by AT&T in June 2015 requesting that the Commission initiate a rulemaking to explore transitioning from TTY to RTT for communications over IP-based networks. AT&T also filed a petition seeking waiver of several of the FCC's rules to allow it to offer IP-based services that would not support TTY functionality while it implemented RTT functionality in its network. The Commission released a Public Notice inviting comment on AT&T's requests and in October 2015, it granted AT&T a temporary waiver. It subsequently granted comparable waivers to other wireless carriers that petitioned for similar relief.

The push to transition to RTT is driven by the technical limitations of using TTY in the IP environment. The NPRM summarizes the evidence presented by commenters that, when used on IP-based communication networks and platforms, TTY experiences "susceptibility to packet loss, compression techniques that distort TTY tones, and echo or other noises that result from the transmission of the Baudot character string," which can "degrade quality, augment error rates, and hurt the reliability of telephone communications." The

Authors

Sara M. Baxenberg
Partner
202.719.3755
sbaxenberg@wiley.law

Practice Areas

Telecom, Media & Technology

NPRM further acknowledges that because of these limitations, TTY use has declined steadily in favor of other forms of text communication. Accordingly, the NPRM tentatively concludes that "the technical and functional limitations of TTYs make this technology unsuitable as a long-term means to provide full and effective access to IP-based wireless telephone networks"; that a "superior accessibility solution" is needed for the IP environment; and that "RTT can best achieve this goal."

Requirements for Service Providers and Device Manufacturers. The NPRM proposes to amend several FCC rules to require IP-based wireless services and devices to support RTT. First, the proposed rules would establish new requirements for service providers offering IP-based calling: (i) wireless VoIP service providers would be required to provide and support RTT; (ii) wireless interconnected VoIP service providers would be required to support TRS access, including 711 dialing, using RTT technology; and (iii) providers of terrestrial mobile service enabling two-way real-time voice communications that transmit over IP facilities would be required to support 911 calling using RTT. In addition, manufacturers of wireless handsets and other text-capable user devices used with wireless VoIP services would be required to ensure that covered devices have the ability to send, receive, and display RTT. To the extent a wireless service provider issues design specifications, purchases devices for resale to customers, or otherwise authorizes use of new handsets, the provider similarly would be required to ensure that the devices support RTT. The NPRM seeks comment on the extent to which wireline IP networks can support TTY communications, and whether the Commission should place comparable responsibilities to support RTT on providers and manufacturers of wireline VoIP services and equipment.

Each of these requirements would be subject to the applicable "achievability" limitation that governs existing accessibility requirements. Where RTT obligations are not sufficiently achievable, the provider or manufacturer would be required to ensure the device or service is compatible with peripheral RTT-equipped devices or software, subject to the same achievability limitation. The NPRM tentatively concludes that using over-the-top (OTT) applications or plug-ins would be permissible to achieve compliance, at least as of the initial compliance deadline, but asks whether permitting OTT RTT solutions presents any drawbacks compared with requiring RTT to be a native functionality of a device.

Specific RTT Functionalities. The NPRM seeks comment on a number of proposed requirements relating to the functionality of RTT, including the ability to initiate RTT communications using the same telephone number as voice services, the ability to transmit and receive RTT communications to and from any 911 Public Safety Answering Point (PSAP), latency and error rate requirements, the ability to transmit text and voice simultaneously via a single device, the ability to transmit RTT with other media that is supported simultaneously with voice, the ability to transmit emoticons and other graphic symbols using RTT, and the ability to control text settings such as font size and color. In addition, the NPRM proposes to classify RTT as an "electronic messaging service" subject to the requirements of the Communications and Video Accessibility Act (CVAA), and therefore would need to be accessible, usable, and compatible with other assistive technologies.

Interoperability, Backward Compatibility, and Device Portability. The NPRM tentatively concludes that RTT should be interoperable across networks, service providers, and devices, so that "RTT users can make calls regardless of telephone system or carrier, can reach every telephone number, and can enjoy the same

flexibility and choices as everyone else." The NPRM proposes to adopt IETF RFC 4103 as a safe harbor standard to satisfy interoperability requirements and certain RTT performance objectives. In addition, the NPRM proposes to mandate backward compatibility with TTY technology, and seeks comment on appropriate technical standards and how long such a requirement should remain in effect. Finally, the proposed rules would require service providers to ensure that devices are portable between technologically compatible networks for RTT services to the same extent they are portable for voice communications, and seeks input on appropriate technical standards or performance criteria.

Implementation Timeline. Under the proposed rules, device manufacturers and Tier I (nationwide) wireless service providers would be required to comply with the RTT requirements by December 31, 2017. As manufacturers would be required to support RTT only on new devices, the NPRM seeks input on whether devices already in service as of the deadline should be required to add RTT capability at "natural opportunities" such as product redesign, new software version releases and other upgrades. It also seeks comment on the period of time, if any, that OTT applications or plug-ins for RTT should be permitted as an interim measure to achieve RTT compliance. The NPRM tentatively concludes that non-Tier I providers should have an additional period of time to achieve compliance, and asks whether compliance deadlines should coincide with the dates such carriers begin offering IP-based voice services. Finally, under the proposed rules, any covered provider or manufacturer that supports RTT prior to the compliance deadline would be exempt from requirements to provide TTY.

For further information or assistance filing comments in this proceeding, please contact one of the attorneys listed.