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June 16, 2020

Via Federal Express Overnight Delivery

Marlene H. Dortch
Secretary
Federal Communications Commission
9050 Junction Drive
Annapolis Junction, MD 20701

Re: *Petition of Certain Members of Competitive Carriers Association for Waiver or, in the Alternative, Declaratory Ruling*, CG Docket No. 16-145, GN Docket No. 15-178

CONFIDENTIALITY REQUEST

Dear Ms. Dortch:

Competitive Carriers Association (“CCA”), on behalf of certain members (the “Petitioning Members”), hereby submit the confidential version of the *Petition of Certain Members of Competitive Carriers Association for Waiver or, in the Alternative, Declaratory Ruling* (“Petition”) in the above-captioned dockets. Consistent with the instructions in DA 20-361,¹ CCA will also provide password-protected electronic copies of the confidential version of the Petition via electronic mail to staff upon request.

These specific materials are confidential, as explained below. As such, CCA requests on behalf of the Petitioning Members that these materials be withheld from public inspection. In support of this request, CCA provides the following information consistent with 47 C.F.R. § 0.459(b).

1. Identification of the Specific Information for Which Confidential Treatment Is Sought (Section 0.459(b)(1))

CCA seeks confidential treatment with respect to the information marked as confidential in the Petition and the individual declarations attached thereto (the “Confidential Information”).

2. Description of the Circumstances Giving Rise to the Submission (Section 0.459(b)(2))

CCA is providing the Confidential Information on behalf of the Petitioning Members to provide factual support for the Petition, which seeks additional time for the Petitioning Members to comply with the deadline to offer real-time-text in lieu of TTY technology. The Confidential

¹ *FCC Provides Further Instructions Regarding Submission of Confidential Materials*, Public Notice, 35 FCC Rcd. 3973 (OGC & OMD 2020).

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Information provides details about each Petitioning Members' experience and challenges in working toward compliance with the RTT requirements.

3. Explanation of the Degree to Which the Information Is Commercial or Financial, or Contains a Trade Secret or Is Privileged (Section 0.459(b)(3))

The Confidential Information contains sensitive commercial information, detailing private discussions with vendors, subscriber counts, compliance strategies, and other information regarding the Petitioning Members' internal decisions and processes.

4. Explanation of the Degree to Which the Information Concerns a Service that Is Subject to Competition (Section 0.459(b)(4))

The wireless voice services at issue are subject to competition from other wireless voice providers, and, in certain locations, other communications platforms such as cable, traditional telephone, and fixed over-the-top voice over Internet Protocol.

5. Explanation of How Disclosure of the Information Could Result in Substantial Competitive Harm (Section 0.459(b)(5))

First, the information regarding subscriber counts could, for those Petitioning Members who have chosen to make that information confidential, reveal specific market share to competitors, allowing those competitors to make more informed decisions about their own marketing strategies in the same areas. Second, the identities of specific vendors are confidential to preserve the confidentiality of private discussions. Disclosure of this information could potentially harm the Petitioning Members' relationships with those vendors or color their discussions with other vendors. Third, the information about specific internal decisions and processes could inform competitors or vendors as to the Members' processes and influence their decisions about marketing or negotiation.

6. Identification of Any Measures Taken by the Submitting Party to Prevent Unauthorized Disclosure (Section 0.459(b)(6))

The Confidential Information has been kept private and internal to CCA, the Petitioning Members, their affiliates, counsel, authorized agents and contractors, and in some cases potential vendors. The Confidential Information is not normally disclosed to other parties.

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7. Identification of Whether the Information Is Available to the Public and the Extent of Any Previous Disclosure of the Information to Third Parties (Section 0.459(b)(7))

The Confidential Information has been kept private and internal to CCA, the Petitioning Members, their affiliates, counsel, and authorized agents and contractors. The Confidential Information is not normally disclosed to third parties.

8. Justification of Period During Which the Submitting Party Asserts that Material Should Not Be Available for Public Disclosure (Section 0.459(b)(8))

CCA requests that the Confidential Information remain unavailable for public disclosure indefinitely. The Petitioning Members' relationships with their vendors and their specific internal processes are not likely to become public through other means, nor are the potential harms describe above and below expected to abate at any particular time.

9. Any Other Information That the Party Seeking Confidential Treatment Believes May Be Useful in Assessing Whether Its Request for Confidentiality Should Be Granted (Section 0.459(b)(9))

The Confidential Information also addresses specific network confirmations, names of equipment manufacturers and vendors, and plans for network changes. If this information were publicly available, it could potentially increase the risk of a breach of security or cyberattack. If such a breach or attack were to occur, it could jeopardize the stability of the Participating Members' networks and potentially put at risk the security of communications.

Please contact me should you have any questions.

Respectfully submitted,



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**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Transition from TTY to Real-Time Text Technology)	CG Docket No. 16-145
)	
Petition for Rulemaking to Update the Commission’s Rules for Access to Support the Transition from TTY to Real-Tim Text Technology, and Petition for Waiver of Rules Requiring Support of TTY Technology)	GN Docket No. 15-178
)	

**PETITION OF CERTAIN MEMBERS OF COMPETITIVE CARRIERS ASSOCIATION
FOR WAIVER OR, IN THE ALTERNATIVE, DECLARATORY RULING**

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June 16, 2020

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Declaration of Lee Thibaudeau, Cellcom

I. INTRODUCTION AND SUMMARY

Competitive Carriers Association (“CCA”), on behalf of participating members, files this request for a temporary waiver of the June 30, 2020 deadline to offer real-time text (“RTT”) in lieu of a TTY technology on their IP-based networks or, in the alternative, an acknowledgement that compliance with accessibility requirements is not readily achievable by the deadline. Each member seeking relief (“Petitioning Member”) has provided a declaration describing its own situation and the obstacles to offering a fully compliant RTT solution. Their declarations are attached to this Petition.

CCA and its members are strongly committed to supporting accessible communications and have been intently focused on implementing support for RTT. While CCA and the Commission expected RTT solutions to be readily available after being developed for Tier 1 providers, this has not been the case. Indeed, the core network upgrades required to support RTT have proven to be substantially more complex than anticipated. Despite their diligent efforts in working with their existing network vendors and exploring third-party options, the Petitioning Members have not been successful in obtaining an RTT solution or have only recently done so and have not yet had time to implement and test the solution. As a result, the Petitioning Members need additional time beyond the current June 30, 2020 deadline to implement RTT as an alternative to TTY technology for IP-based networks, to offer an RTT 911 solution, and to ensure that at least one handset is ready to support RTT. Offering RTT by the current deadline, or complying with legacy accessibility requirements over IP networks, is not readily achievable.

Petitioning Members request that the Commission waive the deadline for each Petitioning Member until one year after that Member executes an agreement with a network vendor for an RTT solution that can be implemented on the Member’s network in full satisfaction of the

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Commission’s RTT requirements. The one-year period should commence when the Member has executed an agreement or once COVID-19 access restrictions that affect implementation are lifted, whichever comes later. As an alternative, the Commission could acknowledge in a declaratory ruling that compliance with the June 30, 2020 deadline is not readily achievable. To provide assurance to the Commission and consumers that the Petitioning Members are working as quickly as possible, the Petitioning Members will file detailed status reports every six months until they have achieved full compliance and will otherwise continue to comply with the conditions of their current waivers.

II. BACKGROUND

The Commission has long been committed to rules and policies that promote functionally equivalent communications services for those with hearing- and speech-related disabilities. CCA and its members strongly support such policies. As carriers began to deploy IP-based services in their mobile wireless networks, however, they found that TTY services were unreliable (as well as antiquated) while RTT had the potential to provide a better solution for those with hearing and speech disabilities. As a result, two things happened: The Commission initiated a rulemaking to consider allowing wireless providers to offer RTT over IP-based networks rather than TTY or other similar solutions, and the Bureaus issued a number of waivers of rules requiring the availability of TTY pending the resolution of that rulemaking proceeding.¹

¹ See *Transition from TTY to Real-Time Text Technology et al.*, Notice of Proposed Rulemaking, 31 FCC Rcd. 6247 (2016) (“*RTT NPRM*”); Petition of AT&T Services, Inc. for Rulemaking, PS Docket Nos. 11-153 and 10-255, WC Docket No. 04-36, CG Docket Nos. 03-123 and 10-213, at 5-11 (filed June 12, 2015) (describing challenges of providing TTY over IP and superiority of RTT); *Petition for Waiver of Rules Requiring Support of TTY Technology*, Order, 31 FCC Rcd. 3778, 3778 ¶ 2 n.3, ¶ 14-21 (CGB, PSHSB, WTB & WCB 2016) (“*CCA Waiver Order*”) (identifying prior waivers of the rules requiring compatibility with TTY technology and granting CCA members similar relief).

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The Commission completed the first phase of its rulemaking proceeding in 2016. It adopted new rules allowing providers of IP-based wireless voice communications service to offer RTT over IP-based networks in lieu of TTY or other solutions.² Specifically, over IP-based networks, providers may:

- Support 911 access using RTT;³
- Support RTT over telecommunications services and interconnected VoIP services covered by Parts 6 and 7 of the Commission’s rules, if readily achievable;⁴
- Support RTT over interconnected VoIP services covered by Part 14 of the Commission’s rules, unless not achievable;⁵
- Support TRS access, pursuant to Section 64.603 of the rules, through RTT communications, including 711 abbreviated dialing access.⁶

A provider that supports compliant RTT on its IP-based network no longer must support TTY technology on either its IP-enabled or legacy network.⁷

² *Transition from TTY to Real-Time Text Technology et al.*, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd. 13,568, 13,578 ¶ 14 (2016) (“*RTT Report & Order*”); *see also id.* at 13,576-77 ¶ 12 & n.51 (defining the entities covered by the new rules as those “involved in the provision of IP-based wireless voice communication service, and only to the extent that their services are subject to existing TTY technology support requirements under Parts 6, 7, 14, 20, or 64 of the Commission’s rules”). Rule 47 C.F.R. § 20.18(c) has since been moved to 47 C.F.R. § 9.10(c).

³ 47 C.F.R. § 9.10(c).

⁴ 47 C.F.R. §§ 6.1-6.11; *id.* §§ 7.1-7.11.

⁵ 47 C.F.R. §§ 14.1-14.21.

⁶ 47 C.F.R. § 64.603.

⁷ *RTT Report & Order* at 13,583 ¶ 23; 47 C.F.R. §§ 6.3(a)(3) (allowing providers of wireless IP voice services to meet their general requirement to make their service “accessible” by providing RTT in lieu of TTY connectability and signal compatibility); *id.* § 7.3(a)(3) (same, for voicemail and interactive menus); *id.* § 9.10(c) (allowing CMRS providers that provide voice over IP to provide 911 access via RTT in lieu providing 911 access through TTYs or other means); *id.* § 14.21(b)(3) (allowing providers of wireless interconnected VoIP services to support RTT in lieu of TTY connectability and signal compatibility); *id.* § 64.603(a) (allowing CMRS providers to provide 711 dialing code access via RTT in lieu of providing

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The Commission made corresponding changes to the rules requiring manufacturers to ensure that end user devices and equipment are accessible to persons with disabilities.⁸ To be considered compliant, RTT communications must comply with RFC 4103 (or a subsequent version or successor of RFC 4103). This standard was developed by a working group under the auspices of the Internet Engineering Task Force and was most recently updated on December 20, 2018.⁹

The Commission correctly recognized the substantial amount of development and implementation needed before any mobile wireless service provider could take advantage of the option to offer compliant RTT over IP-enabled networks rather than a TTY technology. The Commission therefore established two sets of deadlines – one for providers offering nationwide service (Tier 1), and a later set of deadlines for all other providers.¹⁰ The Commission adopted the later deadline for non-Tier 1 providers because “they serve smaller subscriber populations, have fewer device options, often acquire the latest handset models much later than Tier 1 providers, and have limited influence in the technical ecosystem and standards setting.”¹¹ The compliance deadline for Tier 1 providers was December 31, 2017; for non-Tier 1 providers, the

711 dialing code access to TTY users); *see also* 47 C.F.R. Part 67 (establishing the minimum functionalities for RTT).

⁸ *See supra* notes 4-5.

⁹ *See RTT Report & Order* at 13,586 ¶¶ 30-31; 47 C.F.R. §§ 67.1-67.3; Hellstrom, G. and P. Jones, "RTP Payload for Text Conversation", RFC 4103, DOI 10.17487/RFC4103, June 2005, available at <https://datatracker.ietf.org/doc/rfc4103/> (last visited June 10, 2020) (providing link to document and document history via the “History” tab).

¹⁰ *See RTT Report & Order* at 13,602 ¶¶ 66-67 & n.248 (establishing deadlines and defining Tier 1 service providers).

¹¹ *See RTT Report & Order* at 13,603 ¶ 68 & n.252.

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approaching deadline is June 30, 2020. By that date, a provider opting to support RTT in lieu of TTY technology must:

- (1) offer a downloadable application or plug-in that supports RTT, or
- (2) comply with the following:
 - i. implement in its core network the capability to support RTT;
 - ii. offer at least one new handset that supports native RTT functionality; and
 - iii. for all authorized end user devices specified on or after that date, include in future design specification the requirement to support RTT.¹²

In addition, providers must support all new authorized user devices that are activated on their networks. Tier 1 providers were required to comply by December 31, 2019; non-Tier 1 providers must comply by June 30, 2021. Handset manufacturers were required to provide RTT in IP-capable handsets for all devices manufactured on or after December 31, 2018 (subject to achievability).¹³

As explained in more detail below, the Petitioning Members have worked diligently toward compliance with RTT requirements by the June 30, 2020 deadline and have engaged in extensive and ongoing discussions with their network vendors to develop solutions. Like the Commission, the Petitioning Members expected that vendors of core network equipment and software would develop solutions for Tier 1 providers, then make those solutions available to non-Tier 1 providers. It has recently become clear that this is not the case. Tier 1 providers appear to have implemented in-house solutions that relied only in part on outside vendors, and

¹² *RTT Report & Order* at 13,602 ¶ 66.

¹³ *See RTT Report & Order* at 13,603 ¶ 69.

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those solutions are not available or appropriate for smaller and regional CMRS providers.¹⁴ As a result, the Petitioning Members have been communicating with vendors the need to develop an RTT solution going back several years.¹⁵ These solutions have only recently become available from some vendors, and from other vendors they remain in development.¹⁶ No Participating Member has had access to a solution long enough to have full implementation and testing complete.¹⁷ As a result, the Petitioning Members will not have fully compliant RTT solutions by June 30, 2020.

III. REQUEST FOR WAIVER OF THE JUNE 30, 2020 DEADLINE

As discussed below, the Petitioning Members request a temporary waiver of the June 30, 2020 deadline to offer RTT in lieu of TTY technology for IP-enabled services and networks. Specifically, the Petitioning Members request the following:

- Each Petitioning Member receives a temporary extension of the June 30, 2020 deadline.
- The deadline is extended until the later of two events:
 - The Petitioning Member executes an agreement with a core network vendor after receiving a Statement of Work from the vendor that can be implemented on the Member’s network in full satisfaction of the Commission’s RTT requirements.
 - Any COVID-19 restrictions that limit the ability of the Petitioning Member to implement and test the RTT solution are lifted.

¹⁴ Southern Linc Declaration ¶ 10.

¹⁵ See GCI Declaration ¶ 6; Inland Cellular Declaration ¶ 5; Southern Linc Declaration ¶ 5.

¹⁶ See *****BEGIN CONFIDENTIAL** [REDACTED] **END CONFIDENTIAL*****; Nex-Tech Wireless Declaration ¶ 7; *****BEGIN CONFIDENTIAL** [REDACTED] **END CONFIDENTIAL*****.

¹⁷ See *****BEGIN CONFIDENTIAL** [REDACTED] **END CONFIDENTIAL*****; see also Cellcom Declaration ¶ 7.

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This approach provides each Petitioning Member with a reasonable period of time to achieve full compliance with the RTT requirements, but without providing any Member more time than it needs in its particular situation. To provide assurance to the Commission and the disability community that the Petitioning Members are working as quickly as possible, the Petitioning Members will file detailed status reports every six months until they have achieved full compliance.

In addition, the Petitioning members seek additional time to ensure that all new authorized user devices that are activated on their networks support RTT. The Commission’s original deadline for ensuring that all new devices support RTT is one year after the deadline to ensure that at least one new handset supports RTT.¹⁸ Likewise here, the Petitioning Members request one year after their deadline for general RTT compliance to ensure that all new authorized user devices that are activated on their networks support RTT.

A. Waiver Standard

Under 47 C.F.R. § 1.3, “[a]ny provision of the rules may be waived by the Commission . . . on petition if good cause therefor is shown.” In *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164 (D.C. Cir. 1990), the D.C. Circuit explained that good cause exists where “special circumstances warrant a deviation from the general rule and such deviation will serve the public interest.” *Id.* at 1166. In other words, the Commission “has authority . . . to waive requirements not mandated by statute where strict compliance would not be in the public interest[.]”¹⁹ In

¹⁸ *RTT Report & Order* at 13,602-03 ¶¶ 66, 69.

¹⁹ *Nat’l Ass’n of Broad. v. FCC*, 569 F.3d 416, 426 (D.C. Cir. 2009).

addition, “the Commission may take into account considerations of hardship, equity, or more effective implementation of overall policy on an individual basis.”²⁰

B. The Lack of Available RTT Solutions for Non-Tier 1 Providers Is Good Cause for a Temporary Waiver

Initially, several Petitioning Members hoped that vendors would develop an “over-the-top” solution for RTT after developing it for the Tier 1 carriers.²¹ Two things become clear, however. First, vendors were not developing an over-the-top solution for the Tier 1 carriers. Second, even over-the-top solutions proved to require extensive upgrades to a carrier’s core network; in other words, the over-the-top approach did not obviate the need for significant physical equipment upgrades and/or custom software within the core of the network.²²

To provide reliable RTT services, the Petitioning Members determined that they needed additional network components and/or software and licenses for components,²³ a 911 solution for PSAPs that do not accept 911 calls via RTT, and a compatible RTT-capable handset that has been activated and successfully tested on the Member’s network.²⁴ We discuss each of these steps and the accompanying challenges below.

²⁰ *Connect America Fund et al.*, Order, 33 FCC Rcd. 8908, 8913 ¶ 21 n.43 (WCB 2018) (citing *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969); *Northeast Cellular*, 897 F.2d at 1166).

²¹ See Nex-Tech Wireless Declaration ¶ 4; Southern Linc Declaration ¶ 4.

²² Cellcom Declaration ¶ 4 (identifying the need for custom software); GCI Declaration ¶ 4 (explaining its assessment that RTT deployment required changes to the core network to transition calls between Voice over LTE and the PSTN); Southern Linc Declaration ¶ 11 (explaining that even an OTT solution would require extensive changes to the network).

²³ Viaero Declaration ¶ 4 (explaining that Viaero would need software and licenses to enable its existing core network IMS platform to support RTT).

²⁴ See, e.g., Inland Cellular Declaration ¶ 4 (listing as necessary to provide RTT: IP Multimedia Subsystem, media gateway, SIP routing capabilities, RTT transcoding and a 911 routing solution).

1. Core Network Changes

Each Petitioning Member faces slightly different circumstances, but there are several recurring reasons why they require additional time to deploy RTT notwithstanding their diligent efforts to date.

Regional and smaller wireless providers rely extensively on third-party vendors for many kinds of network upgrades. The reason for this is straightforward: regional and smaller carriers do not have the resources necessary to design new technology and software every time they need to make a change. Indeed, doing so would be very inefficient. There are scores of non-Tier 1 mobile wireless providers in the United States. Even if each of them had sufficient resources to manage all changes and upgrades in-house, their efforts would be substantially duplicative. Smaller carriers instead tend to rely on third-party vendors to develop products and solutions that the carriers can install and implement to improve their service, keep up with new technology and consumer demands, and meet regulatory requirements. Often, these solutions are first developed for the Tier 1 providers and then also become available to the smaller carriers.

For RTT, however, this has not been the case. The vendors that provide core network hardware and software did not develop a complete RTT solution for the Tier 1 carriers. CCA understands that the Tier 1 carriers have, instead, developed their own RTT solutions, or at least portions of those solutions.²⁵ Although they may have used vendors for some aspects of those solutions, the vendors apparently only developed the portions requested by the Tier 1 carriers. This is not what CCA or the Commission expected to happen. The Commission established its deadlines for non-Tier 1 provider compliance on the assumption that vendors would develop

²⁵ See Nex-Tech Wireless Declaration ¶ 4; Southern Linc Declaration ¶ 10.

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solutions for Tier 1 providers that could later be deployed in the networks of non-Tier 1 providers.²⁶ Because the Tier 1 providers did not go that route, the vendors on which the Petitioning Members primarily rely did not have an “off the shelf” RTT solution for the non-Tier 1 providers once the Tier 1 compliance deadline passed.

The Petitioning Members have been working with their core network vendors to encourage the development of a solution. Several Petitioning Members have been working to encourage the development of an RTT solution since 2017 or earlier.²⁷ In some cases, Petitioning Members have recently reached agreements with vendors to provide RTT solutions or are getting closer to having a binding agreement.²⁸ Getting to this stage has been a long struggle, often requiring discussions with multiple vendors, research and analysis to determine whether a vendor’s solution could be implemented and, if so, would produce a solution compliant with all the FCC’s rules. If not, the search would continue.²⁹

Moreover, many carriers are constrained to use their existing core network vendors to identify RTT solutions. GCI, for example, has found that working with multiple vendors on network changes can reduce reliability of voice services.³⁰ Accordingly, some carriers have determined that it is infeasible to introduce new vendors into their networks, particularly for a

²⁶ See *RTT Report & Order* at 13,603 ¶ 68 (noting that non-Tier 1 providers “have fewer device options, often acquire the latest handset models much later than Tier 1 providers, and have limited influence on the technical ecosystem and standards setting”) (footnote omitted); *id.* at 13,602 ¶ 68 n.250 (citing with approval CCA’s comments, which explained that non-Tier 1 carriers need more time and that development of an RTT solution would be driven by AT&T and Verizon).

²⁷ GCI Declaration ¶ 6; Inland Cellular Declaration ¶ 5; Nex-Tech Wireless Declaration ¶ 7; Southern Linc Declaration ¶ 5.

²⁸ See *supra* notes 16-17.

²⁹ Southern Linc Declaration ¶¶ 5-13.

³⁰ GCI Declaration ¶ 5; see also Nex-Tech Wireless Declaration ¶ 6.

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single function. As a result, several Petitioning Members are working with the core network vendors they already use, rather than seeking solutions from other vendors that might impact overall network performance.

Second, the COVID-19 pandemic has caused delays in developing, implementing, and testing RTT solutions. For example, Nex-Tech Wireless has experienced a large increase in traffic while COVID-19 has forced more individuals to remain at home. Providing uninterrupted service, however, has delayed hardware projects because the number of staff on site has been kept to a minimum.³¹ Similarly, Inland Cellular has experienced delays in shipping, scheduling installation, and obtaining software support due to COVID-19 restrictions, and Nex-Tech Wireless has also found that vendors are not able to travel.³² Southern Linc has been unable to access the data center to perform necessary work due to COVID-19 access restrictions.³³ Similarly, Cellcom has been delayed in testing handsets.³⁴ Physical restrictions intended to prevent the spread of the novel coronavirus have also cut off access to buildings and structures where physical changes to the network must be made and otherwise delayed implementation and testing.

Finally, recently adopted rules to protect national security – while very important – have created an additional hurdle for certain providers newly deploying RTT. Late last year, the Commission adopted rules to prohibit the use of universal service support for equipment from a company determined to pose a national security threat. The new rules went into effect in

³¹ Nex-Tech Wireless Declaration ¶ 9.

³² Inland Cellular Declaration ¶ 7; Nex-Tech Wireless Declaration ¶ 9.

³³ Southern Linc Declaration ¶ 14.

³⁴ Cellcom Declaration ¶ 8.

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January 2020 and extend not only to the purchase of new equipment but also to the maintenance and modification of such equipment.³⁵ While the Commission has not yet finally determined which companies' equipment and services are subject to the ban, Petitioning Members realize that investing in additional equipment or upgrades to such equipment at this time potentially increases their costs in the long run when they are no longer able to use universal service funding to maintain such equipment.³⁶ Smaller carriers do not have the resources to deploy, upgrade, and maintain equipment that they will likely have to replace in the near future.

2. 911 Solutions

Carriers opting to offer RTT over their IP-based networks must ensure that calls placed via RTT reach PSAPs in a usable format. If the PSAP is ready to accept 911 calls via RTT and has made a valid request to the provider, the provider must deliver RTT-to-911 within six months.³⁷ This deadline has not been triggered in any of the Petitioning Members' service areas—

³⁵ *Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs*, Report and Order, Further Notice of Proposed Rulemaking, and Order, 34 FCC Rcd. 11,423, 11,433 ¶ 26 (2019); 47 C.F.R. § 54.9; 85 Fed. Reg. 230 (Jan. 3, 2020) (announcing effective date of rules not subject to the Paperwork Reduction Act).

³⁶ Viaero Declaration ¶ 6. On May 1, 2020, the Public Safety and Homeland Security Bureau extended the timeframe to make a final designation of Huawei and ZTE as national security threats to the integrity of communications networks. The Bureau is analyzing the impact of the recently enacted Secure and Trusted Communications Networks Act of 2019 as well as the voluminous record in response to the initial designations made by the full Commission. *Public Safety and Homeland Security Bureau Extends Timeframe for Determining Whether to Finalize Designations of Huawei and ZTE Pursuant to 47 CFR § 54.9*, Public Notice, DA 20-471, PS Docket Nos. 19-351 & 19-352 (PSHSB rel. May 1, 2020).

³⁷ 47 C.F.R. § 9.10(q)(10)(ii) (“Covered text providers must begin routing all 911 text messages to a PSAP by June 30, 2015, or within six months of the PSAP’s valid request for text-to-911 service, whichever is later, unless an alternate timeframe is agreed to by both the PSAP and the covered text provider.”); *id.* § 9.10(q)(10)(iii) (defining “valid request”). The Commission clarified in the *RTT Report & Order* that RTT-to-911 is a form of text-to-911 for purposes of the CMRS 911 rules. *RTT Report & Order* at 13,593 ¶ 45 n.181.

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no PSAP has made a valid request.³⁸ For these PSAPs, the Commission’s rules require that providers’ RTT solutions are backward-compatible with TTY technology, enabling users to place calls to PSAPs over RTT while allowing the PSAPs to read the texts from the callers on their TTY devices.³⁹

No Petitioning Member is aware of a PSAP within its service area that is ready to receive 911 calls via RTT. The Petitioning Members look forward to working with PSAPs as they develop the capability to receive 911 calls via RTT. But the fact that PSAPs are not ready means two things: First, carriers are unable to test their RTT 911 solutions to determine whether they work properly. Thus, the Petitioning Members cannot be confident that they would be able to provide a compliant RTT-to-911 service within six months of a valid request.⁴⁰ And second, until PSAPs are ready to accept emergency calls via RTT, 911 calls made over RTT in the Petitioning Members’ service areas must be converted to display on PSAPs’ legacy TTY equipment.

The Petitioning Members, in some cases, are reliant on 911 solution vendors to provide this backward compatibility, along with their other 911 services, to offer a compliant solution. While 911 solution vendors are apparently working with Tier 1 providers now, vendors either have not yet offered an RTT 911 solution or appear to have only recently offered one that may be

³⁸ Cellcom Declaration ¶ 10; GCI Declaration ¶ 9; Inland Cellular ¶ 10; Nex-Tech Wireless Declaration ¶ 11; Southern Linc Declaration ¶ 21; Viaero Declaration ¶¶ 8-9.

³⁹ *RTT Report & Order* at 13,593 ¶ 46.

⁴⁰ Nex-Tech Wireless Declaration ¶ 11. Nex-Tech Wireless also notes that no subscriber has requested RTT service. Nex-Tech Wireless Declaration ¶ 11.

ready to implement and is consistent with the Commission’s requirements.⁴¹ Some providers, though, understand that 911 solutions are now available.⁴² Once the Members have implemented a general RTT solution, they will also work with vendors to procure, implement, and test services to convert 911 calls made via RTT to messages that can be read on PSAPs’ legacy TTY equipment. Until that time, the Petitioning Members will continue to comply with the customer notice conditions of their original waiver, including the requirement to make clear to consumers that TTY technology will not be supported for calls to 911 over the Members’ IP-based wireless voice services.⁴³

3. RTT-Ready Handsets

An RTT service also requires handsets that are capable of supporting RTT and are compatible with the service provider’s network. There are two key conditions for offering RTT-capable handsets to consumers.

First, the Members will need time to work with handset manufacturers to “turn on” the RTT functionality. Activating that functionality may require firmware updates to the handsets. This process takes time.⁴⁴ Offering RTT-capable handsets to consumers before testing and activation are successfully completed will cause consumer confusion and dissatisfaction and may not provide the features necessary to comply with the Commission’s RTT requirements.

⁴¹ *****BEGIN CONFIDENTIAL** [REDACTED] **END CONFIDENTIAL*****.

⁴² See Cellcom Declaration ¶ 9; Viaero Declaration ¶ 8.

⁴³ *RTT Report & Order* at 13,605-06 ¶ 74 & n.272.

⁴⁴ GCI Declaration ¶ 10.

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Second, handsets marketed as RTT-capable must be tested on the Petitioning Member's network.⁴⁵ Handset testing, though, cannot be completed until providers' networks are capable of supporting RTT.⁴⁶ As a result, no Petitioning Member has yet been able to complete testing of handsets marketed as RTT-capable to ensure that they will function on the Member's network, including for 911.

C. Petitioning Members Need Time for Implementation and Testing

The Petitioning Members recognize that deploying RTT that complies with the Commission's requirements must be a priority project. At the same time, the Members must ensure that implementation is complete and successfully tested before they can offer RTT to consumers. This implementation and testing will take time.

The Petitioning Members request one year to implement and test hardware and software changes to their core networks, implement and test RTT 911 solutions, and ensure that at least one handset provides the full functionality of RTT. This one-year time period cannot start until both the Members and their vendors are ready to implement a solution. That requires two things. First, the Petitioning Member must execute an agreement with a core network provider after that provider offers a Statement of Work with an implementable RTT solution.⁴⁷ Second, the Petitioning Members and the vendors must have physical access to the locations where work must be done and be able to travel to these locations. Once these conditions are met, providers need up to one year to ensure that they can fully implement and test their RTT solutions

⁴⁵ Viaero Declaration ¶ 10.

⁴⁶ GCI Declaration ¶ 10; Southern Linc Declaration ¶ 25; *see also* Nex-Tech Wireless Declaration ¶ 11 (noting that it cannot test RTT to 911 because no PSAPs in its area have the capability to accept RTT).

⁴⁷ To be implementable, solutions must be fairly priced.

(including their 911 solutions) and make any adjustments necessary to achieve full compliance with the Commission’s rules.⁴⁸

For these reasons, the Petitioning Members respectfully request a temporary waiver until they execute an agreement after receiving a satisfactory Statement of Work from their core network vendors, or until any relevant COVID-19 access restrictions are lifted, whichever comes later.⁴⁹ Regarding the deadline to ensure that all new authorized user devices on the Members’ networks are RTT capable, the Petitioning Members request one additional year after the one-year testing and implementation period.

IV. COMPLIANCE WITH THE UPCOMING DEADLINE IS NOT READILY ACHIEVABLE

As a separate basis for relief from the June 30, 2020 deadline, the Petitioning Members seek a declaratory ruling acknowledging that it is not readily achievable either to provide RTT over their IP-enabled networks in the available time or to support TTY technology over IP-enabled networks.⁵⁰

The Commission’s authority to require providers to ensure that their services are accessible to those with hearing and speech disabilities stems from several sources, as the Commission acknowledged in the *RTT Report and Order*. First, Section 255 of the Communications Act requires a telecommunications carrier to “ensure that the service is

⁴⁸ ***BEGIN CONFIDENTIAL [REDACTED] END CONFIDENTIAL***; Inland Cellular ¶ 9; Nex-Tech Wireless Declaration ¶ 9; ***BEGIN CONFIDENTIAL [REDACTED] END CONFIDENTIAL***.

⁴⁹ Specifically, the Petitioning Members seek a further extension of the limited waiver of their TTY support requirements, which the Commission extended through June 30, 2020. *RTT Report & Order* at 13,604 ¶ 71 & n.262.

⁵⁰ 47 C.F.R. § 1.2.

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accessible to and usable by individuals with disabilities, *if readily achievable*.”⁵¹ Second, the Twenty-First Century Communications and Video Accessibility Act of 2010 (“CVAA”) granted the Commission authority to adopt rules to implement the recommendations of the Emergency Access Advisory Committee as well as other requirements to ensure “access by individuals with disabilities to an Internet protocol-enabled emergency network, *where achievable and technically feasible*.”⁵² Similarly, providers of advanced communications services, including interconnected VoIP, must ensure that their subject services “are accessible to and usable by individuals with disabilities, *unless the requirements of this subsection are not achievable*.”⁵³ If it is not achievable, then providers must ensure compatibility “with existing peripheral devices or specialized customer premises equipment commonly used by individuals with disabilities to achieve access, *unless the requirement of this subsection is not achievable*.”⁵⁴ The other sources of authority cited in the *RTT Report and Order* do not require implementation of specific solutions that are not readily achievable.⁵⁵

The Commission faithfully adhered to these limitations when it adopted rules to require voice providers to support accessibility for persons with disabilities. First, providers of telecommunications service and interconnected VoIP must ensure that their services are

⁵¹ 47 U.S.C. § 255(c) (emphasis added). Section 255 refers to the definition of “readily achievable” in 42 U.S.C. § 12181(9).

⁵² 47 U.S.C. § 615c(g) (emphasis added).

⁵³ 47 U.S.C. § 617(b)(1) (emphasis added).

⁵⁴ *Id.* § 617(c) (emphasis added).

⁵⁵ *RTT Report & Order* at 13,578-81 ¶¶ 16-18 (referring to 47 U.S.C. §§ 251(e)(3), 255, 301, 303(r), 615-615(b), 615a-1). Section 225 requires the Commission to make TRS available to hearing- and speech-impaired individuals, but to do so “to the extent possible and in the most efficient manner.” 47 U.S.C. § 225(b)(1).

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“accessible to and usable by individuals with disabilities, if readily achievable.” If it is not readily achievable, then providers must ensure that their services are “compatible with existing peripheral devices” or commonly used specialized CPE, but only “if readily achievable.”⁵⁶

Similarly, providers of advanced communications services, including interconnected VoIP, must ensure that services are “accessible to and usable by individuals with disabilities, unless the requirements of this paragraph are not achievable.”⁵⁷

It is not readily achievable for the Petitioning Members to offer either TTY technology or RTT for their IP-based voice services by June 30, 2020. With regard to RTT, the reasons stated above in support of a waiver likewise support a declaration that it is not readily achievable to offer RTT by the upcoming deadline. None of the Petitioning Members has had access to a satisfactory RTT solution long enough to implement, test, and offer it to consumers.

Nor is it readily achievable for the Petitioning Members to provide accessibility through support for TTY over IP-based networks. As the Commission acknowledged in the *RTT Report & Order*, IP networks are ill-suited to support TTY technology owing to “susceptibility to packet loss, compression techniques that distort TTY tones, [] echo or other noises that result from the transmission of the Baudot character strong,” resulting in an unreliable service.⁵⁸ The Petitioning Members cannot change the nature of IP technology.

⁵⁶ 47 C.F.R. § 6.5(b) (requiring voice service accessibility or compatibility with specialized equipment only when readily achievable); *id.* § 7.5(b) (requiring voicemail systems and interactive voice response systems to be accessible or compatible with specialized equipment only when readily achievable). The Part 6 rules apply to providers of telecommunications service and interconnected VoIP, and the Part 7 rules apply to providers of voicemail and interactive menu service. *Id.* § 6.1(a), (c), (d); § 7.1(a).

⁵⁷ 47 C.F.R. § 14.20(a)(2).

⁵⁸ *RTT Report & Order* at 13,574 ¶ 8 (footnote omitted).

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The Petitioning Members remain committed to ensuring that 911 calls complete successfully and to the appropriate PSAPs. While neither a TTY nor RTT solution is readily achievable by June 30, there are other options available. For example, in some cases, members offer text-to-911, or calls to 911 over IP-based networks fall back to the 3G network for completion. In other cases, consumers may choose to use VRS or other applications on their devices. Similarly, most consumers do not use 711 to reach TRS, relying instead on other methods. (Indeed, some members have seen no 711 calls on their networks in some time, other than test calls.) The Petitioning Members urge the Commission to agree that compliance with the June 30, 2020 deadline is not readily achievable.⁵⁹

V. THE PETITIONING MEMBERS WILL SUBMIT DETAILED STATUS REPORTS UNTIL THEY ACHIEVE FULL COMPLIANCE

Since 2016, CCA members and other waiver recipients have reported to the Commission every six months on their progress in implementing RTT on their IP-based networks.⁶⁰ The Petitioning Members propose to submit reports every six months until they offer a fully compliant RTT solution to consumers. Specifically, the Petitioning Members would submit reports containing the following information:

- Progress in working with core network and 911 solutions vendors to execute a Statement of Work that is implementable on the Member's network;
- Progress in procurement and installation of core network elements;
- Progress in procurement and implementation of a 911 solution;
- Progress in obtaining, updating, and testing RTT-capable handsets;

⁵⁹ To the extent that the Commission finds that any of the relevant requirements are not subject to an achievability or ready achievability standard, the Petitioning Members request a waiver of the relevant rule per Section III.

⁶⁰ See *CCA Waiver Order* at 3784-85 ¶ 18; *RTT Report & Order* at 13,605 ¶ 74 (extending waiver conditions until full implementation of new RTT rules).

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- Details regarding any COVID-19 access restrictions that are delaying full compliance; and
- Any other circumstances affecting the Member's ability to offer a fully compliant 911 solution.

In addition, the Petitioning Members will continue to comply with the other conditions of their original waivers. These other conditions require Petitioning Members to notify customers of the absence of TTY capabilities for 911 calling over IP-based networks; informing consumers of alternative means of reaching 911; and making available to consumers the progress reports filed with the Commission.⁶¹

VI. CONCLUSION

The Petitioning Members cannot comply with the upcoming June 30, 2020 deadline, despite their diligent efforts. The Members respectfully request a waiver of the upcoming deadline while they continue their efforts to offer fully compliant RTT solutions to their customers or an acknowledgement that compliance by the upcoming deadline is not readily achievable.

Respectfully submitted,



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June 16, 2020

⁶¹ See *CCA Waiver* at 3785 ¶ 18; *RTT Report & Order* at 13,605-06 ¶ 74 & n.272.

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ATTACHMENTS

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**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Transition from TTY to Real-Time Text Technology)	CG Docket No. 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 Wavier of Rules Requiring Support of TTY Technology)	GN Docket No. 15-178
)	

DECLARATION OF ARNOLD F. AGCAOILI

1. My name is Arnold F. Agcaoili. I am the Chief Technical Officer/Chief Information Officer for NE Colorado Cellular, Inc., d/b/a Viaero Wireless (“Viaero”). I have been with the company for 16 years. I am in charge of overseeing the network, engineering and information technologies at Viaero. My responsibilities, among other things, include managing the day-to-day field and network operations.

2. Viaero offers voice and mobile broadband services to approximately 110,000 subscribers, together with fixed broadband services to approximately 12,000 subscribers throughout the rural United States consisting of the Eastern half of Colorado, Nebraska, and Northwestern Kansas, together with a small portion of Southeastern Wyoming and Southwestern South Dakota.

3. Our network for these services utilizes Internet Protocol (“IP”)-based technologies, including the radio access network (“RAN”) technology.

Core Network

4. To provide RTT on Viaero’s network, Viaero determined that we need an IP Multimedia Subsystem (“IMS”) platform. We currently have IMS in our network, but it is provided by Huawei and it would need software upgrades and licenses to enable this feature. At the time of the rip and replacement of the Huawei equipment, we will need to replace all existing hardware and software components to implement IMS capable of supporting RTT.

5. Currently, while Viaero has two core networks deployed within its network for redundancy and fail over purposes; both of those are currently Huawei.

6. Viaero has also had to put deployments that would make the RTT solution capable on hold due to the requirement of removing and replacing equipment manufactured or provided by Huawei. Viaero has been working with multiple vendors during this transition process, which will be RTT capable. However, until the existing core and RAN are replaced, we cannot move forward with a different vendor.

911

7. Challenges that we are facing are i) the existing equipment being Huawei, 2) third party services being required, iii) and the devices being capable.

8. In April of 2020, we received a presentation from *** BEGIN
CONFIDENTIAL ██████████ END CONFIDENTIAL***. If necessary,
since no PSAPs in Viaero’s service are ready to accept RTT 911 calls at this time, *** BEGIN
CONFIDENTIAL ██████ END CONFIDENTIAL*** would be able to convert RTT
messages to be displayed on PSAPs legacy TTY equipment.

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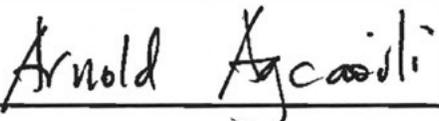
9. At this time, to the best of my knowledge based on our dealings with the local PSAPs in the implementation of 911 and public safety network services, I am not aware of any PSAP in Viaero's service area that is ready to accept 911 calls made using RTT.

Devices

10. At this time Viaero's OEM's handset software is being reconfigured to allow RTT capability, and we have been in communications with all of the vendors. However, one of the challenges is that the out of the box devices have not gone through Viaero's technical testing to ensure that they will be compatible with our network. Full testing of these handsets cannot be completed until we have installed the hardware and software necessary to support RTT.

I declare the foregoing to be true and correct to the best of my knowledge, under penalty of perjury.

Arnold F. Agcaoili



Date 06/12/2020

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**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Transition from TTY to Real Time Text Technology)	CG Docket No. 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 Wavier of Rules Requiring Support of TTY Technology)	GN Docket No. 15-178

DECLARATION OF MIKE BLY

1. My name is Mike Bly. I serve as Senior Vice President of Business Operations at Inland Cellular. I have been with the company for 23 years. I am in charge of compliance. My responsibilities, among other things, include working with our team to come up with new services that are cost efficient. I was a key decision maker in researching and selecting our IP Multimedia Subsystem (“IMS”), core, Voice over LTE (“VoLTE”) and related services vendors. This includes real time text (“RTT”).

2. Inland Cellular offers mobile voice, mobile data, and fixed wireless internet services in north central Idaho and eastern Washington. We have approximately 38,000 subscribers.

3. Our network for data services utilizes Internet Protocol (“IP”) based technologies; however, none of our network currently supports IP voice services.

9. Inland Cellular reached an agreement with *** BEGIN CONFIDENTIAL

END CONFIDENTIAL*** to provide an RTT solution for 911 the week of *** BEGIN CONFIDENTIAL END CONFIDENTIAL***. However, implementation of this solution requires extended implementation time and testing after the IMS core is fully functional; we believe 60 90 days.

10. At this time, there are no PSAPs in our service area that support RTT, and none have indicated that an RTT solution is in process.

Devices

11. Our handset vendors assure us that RTT is available in the handsets we sell. There will be software updates and testing that needs to be done. That testing will take additional time once network modifications are complete. The amount of time necessary depends in part on the timing of when handset manufacturers release software updates.

I declare the foregoing to be true and correct to the best of my knowledge, under penalty of perjury.


Mike Bly


Date

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**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
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Transition from TTY to Real-Time Text Technology)	CG Docket No. 16-145
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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 Wavier of Rules Requiring Support of TTY Technology)	GN Docket No. 15-178
)	

DECLARATION OF KRISTIN DIAL

1. My name is Kristin Dial. I am the Manager of External Affairs and Compliance at Southern Communications Services, Inc. d/b/a Southern Linc (“Southern Linc” or the “Company”). I have been with the Company for six (6) years. My responsibilities, among other things, include coordinating implementation of new regulatory requirements within Southern Linc.

2. Southern Linc operates a commercial digital 800 MHz ESMR system to provide interconnected voice, dispatch, push-to-talk, text and picture messaging, internet access, and data transmission services over the same handset. Southern Linc provides these services over a 127,000 square mile territory covering Georgia, Alabama, southeastern Mississippi, and the panhandle of Florida. Southern Linc offers comprehensive geographic coverage, serving the extensive rural territory within its footprint as well as major metropolitan areas and highway corridors. Because of its expansive rural coverage and history of reliability, Southern Linc’s service is widely used by state and local public safety agencies, school districts, rural local

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governments, public utilities, and other emergency responders. It is also used by other commercial entities in both urban and rural areas.

3. Our Long Term Evolution (“LTE”) network for these services utilizes Internet Protocol (“IP”)-based technologies across our footprint. The LTE network was designed and constructed during 2015-2018. Prior to converting our commercial base to the LTE network in 2019, Southern Linc operated an Integrated Digital Enhanced Network (“iDEN”) network that supported Text Telephony (“TTY”) capabilities.

4. Southern Linc began internal briefings regarding Real-Time Text (“RTT”) in April 2016, followed by updates upon the Commission’s adoption of requirements in December 2016. To provide RTT on Southern Linc’s network, Southern Linc initially determined implementation would occur in two stages, as contemplated by the FCC’s rules. Prior to enabling native RTT functionality, the Company expected to be able to leverage an over-the-top (“OTT”) RTT application that would likely be available following implementation of RTT by Tier 1 carriers. The OTT application would be an interim solution prior to implementing full native RTT functionality. Three (3) components of RTT are necessary to enable native RTT functionality: (1) core network functionality, (2) Public Safety Answering Points (“PSAPs”) connectivity via our 911 services vendor, and (3) RTT dialer integration on our devices.

Core Network

5. In August 2016, Southern Linc discussed RTT functionalities with its network vendor, *****BEGIN CONFIDENTIAL [REDACTED] END CONFIDENTIAL*****, at IP Multimedia Subsystem (“IMS”) core design meetings, and RTT was expected to be included in the roadmap

pending finalization of RTT standards. The RTT-to-RTT functionality (with no TTY backwards compatibility) could likely be achieved pre-standards.

6. In November 2017, Southern Linc continued discussions with *****BEGIN CONFIDENTIAL [REDACTED] END CONFIDENTIAL***** about the need for native RTT functionalities in the network design for Southern Linc's new LTE network and IMS. However, *****BEGIN CONFIDENTIAL [REDACTED] [REDACTED] [REDACTED] END CONFIDENTIAL*****.

7. Over the past several years, Southern Linc explored whether an OTT RTT application was available to provide RTT to its customers and meet FCC requirements. During this time and to date, while there are RTT-to-RTT applications, there are no off-the-shelf OTT RTT applications that meet FCC requirements, particularly for 911 connectivity and backwards TTY compatibility.

8. After experiencing difficulties identifying RTT solutions vendors in 2018 and the first half of 2019, Southern Linc began reaching out to other carriers as well as its wireless trade associations beginning early 2019. By August 2019, Southern Linc received a suggestion to contact *****BEGIN CONFIDENTIAL [REDACTED] [REDACTED] END CONFIDENTIAL*****. Southern Linc *****BEGIN CONFIDENTIAL [REDACTED] [REDACTED] [REDACTED] END CONFIDENTIAL*****.

9. *****BEGIN CONFIDENTIAL [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] END CONFIDENTIAL*****.

10. It appeared that Tier 1 carriers designed and implemented much of their RTT solutions in-house; thus, full RTT solutions were not readily available in the marketplace for regional carriers as is usually the case with new solutions to meet regulatory mandates. This explained our difficulty in identifying solutions.

11. Pursuing either *****BEGIN CONFIDENTIAL** [REDACTED]
[REDACTED]
[REDACTED] **END CONFIDENTIAL***** to implement. Furthermore, the OTT application solution was revealed to be more robust and time-consuming than originally expected for an interim solution. The changes to the network would be as extensive to enable an application as enabling native functionality, so the expected interim OTT application solution was no longer a viable option absent introduction of a new OTT RTT application meeting FCC requirements.

12. With positive developments on the device side as detailed below and the June 2020 implementation deadline approaching, Southern Linc continued its search for a network solution to enable native RTT functionality. In *****BEGIN CONFIDENTIAL** [REDACTED]
[REDACTED]
[REDACTED] **END CONFIDENTIAL*****.

13. Planning commenced to incorporate the *****BEGIN CONFIDENTIAL** [REDACTED]
[REDACTED]
[REDACTED] **END CONFIDENTIAL*****. With robust remote working capabilities, much of the project implementation has progressed during the current COVID-19 pandemic, but we are experiencing delays.

14. Due to COVID-19 pandemic travel restrictions and company data center security facility access restrictions in place since *****BEGIN CONFIDENTIAL** [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] **END CONFIDENTIAL*****.

911 Connectivity

15. Southern Linc had conversations with our 911 services vendor, *****BEGIN CONFIDENTIAL** [REDACTED] **END CONFIDENTIAL*****, in the beginning stages of RTT development and learned that *****BEGIN CONFIDENTIAL** [REDACTED]
[REDACTED]
[REDACTED] **END CONFIDENTIAL*****. However, the 911 RTT solution could not be fully developed until after standards were finalized.

16. Southern Linc met with *****BEGIN CONFIDENTIAL** [REDACTED] **END CONFIDENTIAL***** in April of 2018. *****BEGIN CONFIDENTIAL** [REDACTED] **END CONFIDENTIAL***** gave a presentation detailing the complexities of RTT 911 call flows and the multiple use cases for a caller's interactions with PSAPs. At the time, standards were still not yet finalized, and there was no solution yet available for non-Tier 1 carriers. However, *****BEGIN CONFIDENTIAL** [REDACTED] **END CONFIDENTIAL***** agreed to contact Southern Linc after it had completed testing with Tier 1 carriers.

17. Standards were eventually finalized in late 2018, but vendors were understandably preoccupied with Tier 1 solutions considering Tier 1 carriers had an earlier implementation deadline of December 2019.

18. Southern Linc spoke with *****BEGIN CONFIDENTIAL** [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] **END CONFIDENTIAL***.**

19. In *****BEGIN CONFIDENTIAL** [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] **END CONFIDENTIAL***.**

20. Given the manner in which RTT integrates with other 911 call flows and leverages existing 911 infrastructure, a carrier must *****BEGIN CONFIDENTIAL** [REDACTED]
[REDACTED]
[REDACTED] **END CONFIDENTIAL***.**

21. Southern Linc reached out to *****BEGIN CONFIDENTIAL** [REDACTED] **END CONFIDENTIAL***** and the NextGen 911 solutions vendor utilized by many PSAPs within Southern Linc's service area regarding expected support of RTT 911 calls by PSAPs. *****BEGIN CONFIDENTIAL** [REDACTED] **END CONFIDENTIAL***** indicated that it is aware of

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just a couple PSAPs making preparations for RTT; however, those PSAPs identified are outside of our service area. The NextGen 911 vendor indicated that RTT 911 is not on the roadmap for its supported PSAPs in our service area, as the current focus areas are the transition to NextGen 911 and continued adoption of Text-to-911.

22. By comparison, initial interest of PSAPs in enabling Text-to-911 was strong within our footprint. Southern Linc stands ready to deploy Text-to-911 upon request by PSAPs. As of June 8, 2020, Southern Linc has timely deployed Text-to-911 with 114 PSAPs (with 16 in progress), out of over 400 PSAPs within our service area. While progress has been made on Text-to-911 adoption, there is still ample room for improvement to make Text-to-911 more widely available for the accessibility community.

Devices

23. Southern Linc has been coordinating RTT development with *****BEGIN CONFIDENTIAL [REDACTED] END CONFIDENTIAL*****, our handset device manufacturer, since early 2017 and is currently working with *****BEGIN CONFIDENTIAL [REDACTED] END CONFIDENTIAL***** on enabling native RTT functionality in our handsets. *****BEGIN CONFIDENTIAL [REDACTED] END CONFIDENTIAL***** previously implemented RTT functionality in its handsets to meet the specifications of at least one Tier 1 carrier.

24. Southern Linc issued RTT functionality requirements to *****BEGIN CONFIDENTIAL [REDACTED] END CONFIDENTIAL***** in early 2018. Additional work has been required to meet Southern Linc's RTT solution requirements and to enable RTT functionality in Southern Linc handsets. We have been testing handsets since early 2020 to the extent possible in

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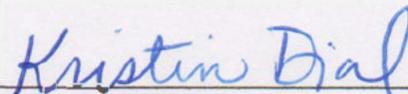
advance of installation of the network and 911 components and reporting to *****BEGIN**

CONFIDENTIAL [REDACTED] **END CONFIDENTIAL***** all outstanding issues that need to be addressed.

25. Completion of RTT feature release for Southern Linc is scheduled for *****BEGIN CONFIDENTIAL** [REDACTED] **END CONFIDENTIAL*****. However, a certified end-to-end solution with full native RTT functionality, including RTT 911 calling, is dependent upon further testing with the core network and 911 connectivity components as previously detailed above.

26. Southern Linc continues to work with *****BEGIN CONFIDENTIAL** [REDACTED] **END CONFIDENTIAL***** and other device manufacturers to ensure that our handset offering meets both the rugged functionality our customers demand as well as the needs of the accessibility community.

27. I declare the foregoing to be true and correct to the best of my knowledge, under penalty of perjury.



Kristin Dial
Manager, External Affairs & Compliance
Southern Linc

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**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
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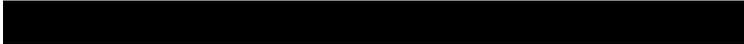
DECLARATION OF JOHN MYHRE

1. My name is John Myhre. I serve as Vice President, Wireless Technology at GCI Communication Corp. (“GCI”). I have been with the company for 5 years. I am in charge of the network components that are associated with new wireless products, services, and network designs. My responsibilities, among other things, include spectrum acquisition, hardware acquisition, network design, and implementation of network changes.

2. GCI offers mobile voice and data services in the State of Alaska.

3. GCI’s IP Multimedia Subsystem (“IMS”) network utilizes Internet Protocol (“IP”)-based technologies for voice calls over LTE (“VoLTE”). VoLTE is currently deployed in

*****BEGIN CONFIDENTIAL**



END

CONFIDENTIAL*.**

Core Network

4. GCI initially hoped that an over-the-top solution for providing Real Time Text (“RTT”) would become available, perhaps after being developed for the nationwide carriers. However, GCI determined that an exclusively over-the-top solution would not work because changes to our core network were required in order for RTT-capable devices to complete calls via RTT on the network. Specifically, network elements need to be installed into the IMS core of GCI’s network in order to transition calls between VoLTE and the PSTN.

5. GCI works exclusively with *****BEGIN CONFIDENTIAL [REDACTED] END CONFIDENTIAL***** on changes to its core network. In GCI’s experience, working with additional vendors on network changes can have detrimental impacts to the entire network, and negatively impact reliability. The network changes required to implement RTT could fundamentally affect the reliability of voice calling services, so GCI is particularly cautious with the solution in this case. By using one vendor, GCI seeks ensure that *****BEGIN CONFIDENTIAL [REDACTED] END CONFIDENTIAL***** is solely responsible for interoperability of RTT between VoLTE and the PSTN, rather than having to coordinate multiple vendors to accomplish the same goal, which can often result in complications and failure.

6. GCI asked *****BEGIN CONFIDENTIAL [REDACTED] END CONFIDENTIAL***** to provide a solution to enable RTT through GCI’s network. GCI first requested RTT solutions from *****BEGIN CONFIDENTIAL [REDACTED] END CONFIDENTIAL***** in 2017. In 2019, *****BEGIN CONFIDENTIAL [REDACTED] END CONFIDENTIAL*****¹ That solution would *****BEGIN**

¹ ***** BEGIN CONFIDENTIAL [REDACTED] END CONFIDENTIAL*****.

CONFIDENTIAL [REDACTED] END CONFIDENTIAL***.

GCI determined that ***BEGIN CONFIDENTIAL [REDACTED]
[REDACTED] END CONFIDENTIAL***. To date, ***BEGIN CONFIDENTIAL [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] END CONFIDENTIAL***.

7. Once GCI ***BEGIN CONFIDENTIAL [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] END CONFIDENTIAL***.

911

8. Until GCI completes its core network changes, a customer will not be able to dial 911 via RTT. Once GCI completes implementation of a core network solution for RTT, GCI understands that customers will be able to dial 911 via RTT. For PSAPS without RTT functionality, an RTT call will be received by the PSAP as a TTY call.

9. GCI is not aware of any PSAPS in its service area that are prepared to accept RTT 911 calls.

Devices

10. Certain devices already on GCI's network and/or available for purchase in its stores may be capable of RTT functionality. But, device availability requires extensive testing that cannot occur until core network changes are implemented. And, once tested, GCI will be required to work with handset manufacturers to turn on that functionality, which could include software updates to existing handsets on the network. Such software updates must be pushed to

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existing devices on the network, which requires negotiation with OEMs and advance time to schedule it.

I declare the foregoing to be true and correct to the best of my knowledge, under penalty of perjury.

/s/ John Myhre

6/16/2020

REDACTED - FOR PUBLIC INSPECTION

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)
)
Transition from TTY to Real-Time Text) CG Docket No. 16-145
Technology)
)
Petition for Rulemaking to Update the) GN Docket No. 15-178
Commission’s Rules for Access to Support the)
Transition from TTY to Real-Time Text)
Technology, and Petition for Wavier of Rules)
Requiring Support of TTY Technology)

DECLARATION OF NATHAN SUTTER

1. My name is Nathan Sutter. I serve as the Director of Network Operations and Engineering for Nex-Tech Wireless (“Nex-Tech”). I have been with the company for 10 years. I am responsible for all aspects of network engineering including regulatory compliance. My responsibilities, among other things, include evaluating, researching and implementing new technologies as well as ensuring regulatory compliance therein.

2. Nex-Tech offers voice, and mobile broadband services to *****BEGIN CONFIDENTIAL**  **END CONFIDENTIAL***** subscribers in 40 Counties in Kansas.

3. The Nex-Tech Wireless network utilizes Internet Protocol (“IP”)-based VoLTE to provide this service to 94 percent of our service area, and more than 50 percent of all calls on our network utilize our IMS (IP Multimedia Subsystem) voice services over Internet Protocol.

Core Network

4. Nex-Tech Wireless installed Voice over LTE (“VoLTE”) in 2017 choosing *****BEGIN CONFIDENTIAL**  **END**

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CONFIDENTIAL***. At that time, Nex-Tech Wireless believed that it would be able to utilize an over-the-top solution to implement real-time text (“RTT”) in compliance with the Commission’s requirements once vendors had developed such a solution for the Tier 1 providers. However, it became clear that no vendor developed such a solution for the Tier 1 providers, which I understand have implemented substantially proprietary solutions.

5. To provide RTT on Nex-Tech Wireless’s network, Nex-Tech Wireless worked closely with its primary network vendor *****BEGIN CONFIDENTIAL [REDACTED] END CONFIDENTIAL*****, handset providers, and 911 service provider *****BEGIN CONFIDENTIAL [REDACTED] END CONFIDENTIAL***** to determine what changes would be required to support this initiative.

6. It is Nex-Tech Wireless’ policy to only use solutions either provided by or supported by our primary network vendor to ensure interoperability with core functions and to maintain reliability.

7. As Nex-Tech Wireless was preparing for the implementation of our IMS network in 2016 it posed questions regarding support of many ancillary features including RTT and TTY to the primary network vendor *****BEGIN CONFIDENTIAL [REDACTED] END CONFIDENTIAL***** to ensure compatibility with current and future mandates. As the implementation pressed on, we were continually assured that RTT support would be forthcoming once the Tier 1 providers had standardized upon and developed a solution. As we began to draw closer to the expiration of the existing waiver for smaller providers we began to press in earnest for a solution. In October of 2019 we formally requested a solution from our primary handset vendor and primary network vendor. Our primary handset vendor worked with Nex-Tech Wireless and delivered a test client on May 7, 2020; this is currently under test for mobile-to-

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mobile RTT, and there is a possibility this functionality could be finalized prior to June 30, 2020. As of this writing, the primary network vendor has yet to deliver a quote or a scope of work detailing the costs, time to implement, and specific hardware/software solutions required to support this initiative.

8. Nex-Tech Wireless' IMS core was built with the framework and flexibility to be able to support all current and future requirements and mandates with relation to IP voice networks. We are currently very close to being able to support mobile-to-mobile RTT. The implementation of RTT to 911 and voice interrupt are pending a solution description, pricing and a scope of work from our primary network vendor.

9. Nex-Tech Wireless experienced extreme traffic increases due to the shelter-in-place orders in our state. This traffic increase combined with a drastically reduced staffing presence has had an impact on all current projects. Nex-Tech Wireless was able to meet the demands placed on the network and provided uninterrupted service to our customers including school districts and emergency services. The impact to projects and timelines has been significant. Throughout much of April and May, the number of staff onsite was kept to a minimum, and as such hardware projects were not able to proceed as planned. Even currently, vendors are not being allowed to travel, and out-of-state visitors are not being allowed access to critical network facilities. Without knowing when some of these restrictions will be lifted or if there will be recurrence of mandatory shelter in place orders, it is difficult to estimate a timeline for implementation of any hardware, including that required for RTT.

911

10. Nex-Tech Wireless is currently unable to provide mobile-to-PSAP RTT due to hardware and software limitations on its network. It has worked closely with its primary

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network vendor to determine when this functionality will be available but has not been given these needed answers to date.

11. No PSAP in Nex-Tech Wireless's coverage area is currently able to support RTT, and none of the PSAPs we have spoken with has a roadmap to be able to support it in the near term. This presents a significant problem with implementation. Even if a solution were in place that worked with the handset, and the network and the 911 provider, there would be no way to ensure that the solution worked as we have no way to test it with a PSAP. Further, a review of TTY traffic (the currently supported 911 contact method for those who are hearing impaired on the Nex-Tech Wireless network) showed that the only calls that have been made to the service in the last 12 months were the test calls the engineering team made to ensure that the service was working. We have not received a single request for this service from any of our *****BEGIN CONFIDENTIAL [REDACTED] END CONFIDENTIAL***** subscribers, and the currently available solution is not being utilized.

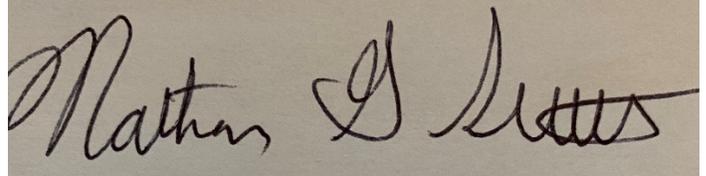
Devices

12. Nex-Tech Wireless currently has 1 handset manufacturer that has provided a test software load that enables RTT. We have tested RTT in a mobile-to-mobile environment and are

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very close to having it working. We cannot test RTT to 911 as there is no PSAP in our area that has the capability, and our network is not yet able to pass the call from the handset to the PSAP.

I declare the foregoing to be true and correct to the best of my knowledge, under penalty of perjury.

A rectangular area containing a handwritten signature in black ink on a light-colored background. The signature is written in a cursive style and reads "Nathan G Sutter".

Nathan G Sutter

6/12/2020

Date

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**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Transition from TTY to Real-Time Text Technology)	CG Docket No. 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 Wavier of Rules Requiring Support of TTY Technology)	GN Docket No. 15-178
)	

DECLARATION OF LEE THIBAudeau

1. My name is Lee Thibaudeau. I serve as Chief Technical Officer and Vice President of Engineering for Cellcom. I have been with the company for 12 years. In my role I am accountable for engineering, operations, construction, field operations and our network management center.

2. Cellcom offers nationwide voice and mobile broadband services to subscribers in Wisconsin and Upper Michigan.

3. Our network for these services utilizes Internet Protocol (“IP”)-based technologies for Cellcom’s LTE cellular network.

Core Network

4. To provide RTT on Cellcom’s network, Cellcom has determined that custom software developed for IP Multimedia Subsystem (“IMS”) support and RTT/TTY interworking is necessary.

5. Cellcom uses multiple vendors for the core network based on service needs.

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6. Cellcom included the RTT solution in its IMS RFP and has entered into an agreement with its vendor.

7. Cellcom's biggest challenge is TTY interworking. Cellcom currently has one outstanding issue that prevents the core network from being RTT compliant. That issue is currently being reviewed with vendors. There is currently no estimated date when this issue will be resolved, but it is being actively investigated. The outstanding issue occurs when a VoLTE LRA customer enters a 3G-only environment; the terminating device can connect to a 711 relay center but does not receive a response.

8. COVID-19 did cause delays in implementation. Specifically, implementation was delayed by an inability to distribute handsets for testing in a timely manner. With its device engineering team working from home, Cellcom was forced to secure additional handsets for use by team members working under the State's Safer at Home order. In addition, Cellcom was forced to enable and extend its lab environment so that personnel could connect to the LTE environment remotely.

911

9. Cellcom is preparing to support RTT to 911 through its partnership with vendor, Comtech. Cellcom will rely on Comtech's expertise to transit the 911 call to the PSAP in the proper format.

10. There are currently no PSAPs in the Cellcom service area that have indicated they are preparing to upgrade or trial RTT to 911. Cellcom is anticipating that the earliest PSAPs in the service area will be prepared to accept RTT 911 calls in mid-2021.

Devices

11. Cellcom has at least one device in service that supports RTT to 911. Device specifications were updated in December 2019 to require RTT support in future device launches.

I declare the foregoing to be true and correct to the best of my knowledge, under penalty of perjury.



Lee Thibaudeau



Date