



October 18, 2021

via ECFS

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

RE: EX PARTE PRESENTATION
GN Docket No. 21-304 – *Alarm Industry Communications Committee Petition for
Emergency Relief related to 3G Transition;*
WC Docket No. 18-89 – *Protecting Against National Security Threats to the
Communications Supply Chain Through FCC Programs*

Dear Ms. Dortch:

The Rural Wireless Association, Inc. (“RWA”) files this written ex parte to apprise the Commission of the results of RWA’s member survey concerning the ongoing impact of the 3G sunset on rural consumers, and of the need for the carriers to implement Voice over Long-Term Evolution (“VoLTE”) roaming before 3G is shutdown nationwide.

While the three nationwide carriers have indicated their intent to shut down their 3G networks at varying times in 2021 or 2022,¹ rural Americans served by RWA members are already experiencing the effects of these shutdowns. RWA carrier members across the country are receiving reports from their rural customers of degraded or nonexistent 3G coverage in advance of these 3G sunset deadlines announced by the nationwide carriers. In response, RWA initiated a survey to determine the extent and severity of these 3G network issues.

RWA conducted its membership survey during the second and third quarters of 2021. RWA asked members if their rural customers had experienced 3G service degradation when leaving their home networks and roaming on other carriers’ networks. Members responded that their customers have indeed experienced these issues for both voice and data all across the country, including in: Wichita, KS (Sprint); Philadelphia, PA (Sprint); Oklahoma City, OK (Sprint); Atlantic City, NJ (Sprint); Denver, CO (Sprint); San Antonio, TX (AT&T and T-Mobile); Dallas, TX (AT&T and T-Mobile); downtown Birmingham, AL (Sprint); Vernal, UT (Sprint and Verizon); Craig, CO (Sprint and Verizon); Tulsa, OK

¹ See, e.g., AT&T, *Act now - 3G is going away in 2022*, <https://www.att.com/support/article/wireless/KM1324171/> (last visited Oct. 13, 2021) (describing AT&T’s 3G Sunset in February 2022); Mike Haberman, Verizon, *3G CDMA Network Shut off date set for December 31, 2022* (Mar. 30, 2021), <https://www.verizon.com/about/news/3g-cdma-network-shut-date-set-december-31-2022> (announcing Verizon 3G Sunset on December 31, 2021); T-Mobile, *T-Mobile Network Evolution*, <https://www.t-mobile.com/support/coverage/t-mobile-network-evolution> (“As of January 1, 2022 Sprint’s older 3G (CDMA) network will be retired,” “As of June 30, 2022 Sprint’s LTE network will be retired,” “As of July 1, 2022 T-Mobile’s older 3G UMTS network will be retired”).

(Verizon); Henderson, NV (Verizon); Colorado (generally) (Verizon); Texas (generally) (Verizon); Central Oklahoma (AT&T, Sprint, and T-Mobile); and New Jersey (AT&T, Sprint, and T-Mobile).

RWA's survey found that these 3G shutdowns have a particularly harmful impact on certain categories of subscribers, namely, ranchers and farmers traveling to larger market areas outside of their home carrier's service areas, and senior citizens who have not upgraded their handsets due to fixed incomes when they travel beyond the reach of their home carrier's network.

Rural carriers must implement VoLTE roaming before these 3G networks sunset due to the continued need for 3G Circuit Switch Fall Back ("3G CSFB"), also known as 3G voice fall back. 3G CSFB delivers voice and SMS ("Short Message Service") to LTE via 2G and 3G.² 3G CSFB occurs in networks supporting LTE data but not supporting VoLTE, the LTE voice call standard,³ or in networks not permitting VoLTE roaming by outside subscribers. When a subscriber places or receives a call or SMS message using an LTE device, "the device 'falls back' to the 3G or 2G network to complete the call or to deliver the SMS text message."⁴

In rural areas, 3G CSFB allows rural customers without VoLTE-compatible devices to call and text over existing 3G networks, and allows subscribers with LTE devices to stay connected in the many areas where rural carriers do not have VoLTE roaming agreements with the three nationwide carriers. Terminating 3G service will mean these rural customers will no longer be able to place calls over LTE networks due to device unaffordability or an inability to roam on VoLTE networks for those customers that can afford LTE devices due to delays in the coordination and implementation of VoLTE roaming with the three nationwide carriers.

The Supply Chain Reimbursement Program should speed up rural carriers' transition away from 3G, as reimbursement applicants seek to use Reimbursement Program funds to replace legacy 3G Covered List equipment with LTE and 5G-ready equipment and services including VoLTE. However, the Commission has regrettably decided to not reimburse carriers for the cost of replacing VoLTE non-compatible handsets.⁵ This will cause hardship to low-income rural Americans and cause them to fall further behind in adopting LTE and 5G technology, potentially leaving them unconnected.

As was the case with their transition from analog cellular and 2G, these rural customers need additional time to transition from 3G to VoLTE. The transition cannot take place without roaming testing and coordination among the nationwide carriers and rural carriers. RWA requests the FCC to take these factors into consideration especially when considering the public safety aspects associated with E-911 and emergency voice calls. RWA supports the relief requested in the Alarm Industry

² See Carritech Telecommunications, *CSFB (Circuit-Switched Fall-Back): Explained*, <https://www.carritech.com/news/circuit-switched-fall-back-explained/> (last visited October 13, 2021).

³ See *LTE to 3G circuit switched fallback — CSFB*, <https://medium.com/long-term-evolution/lte-to-3g-circuit-switched-fallback-csfb-74dc5a322d53> (last visited Oct. 13, 2021).

⁴ Carritech Telecommunications, *CSFB (Circuit-Switched Fall-Back): Explained*, <https://www.carritech.com/news/circuit-switched-fall-back-explained/> (last visited October 13, 2021).

⁵ RWA is seeking reconsideration of this decision. Petition for Reconsideration of The Rural Wireless Association, Inc., WC Docket No. 18-89 at 8-10 (filed Sep. 22, 2021), [https://ecfsapi.fcc.gov/file/1092230276702/RWA%20Petition%20for%20Reconsideration%203d%20RO%20\(9.22.21\)%20\(FINAL\).pdf](https://ecfsapi.fcc.gov/file/1092230276702/RWA%20Petition%20for%20Reconsideration%203d%20RO%20(9.22.21)%20(FINAL).pdf)

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Communications Committee's ("AICC") emergency petition,⁶ and adds that the Commission mandate that *all three nationwide carriers* delay their planned 3G sunset until December 31, 2022. By granting AICC's request, both the alarm industry and rural carriers serving rural Americans will have more time to transition.

RWA thanks the FCC for its attention to 3G network shutdowns and looks forward to providing additional information on these network shutdowns and the challenges they pose to rural carriers and their rural customers.

Respectfully submitted,

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⁶ See *generally* Petition for Emergency Relief of Alarm Industry Communications Committee, GN Docket No. 21-304 (filed May 10, 2021), <https://ecfsapi.fcc.gov/file/108170823729015/AICC%20Petition%20for%20Emergency%20Relief%205-10-21%20FINAL.pdf> (asking the FCC to delay AT&T's 3G sunset until Dec. 31, 2022).