



FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, DC 20554

August 30, 2022

Robert G. Morse
Associate General Counsel
Verizon
1300 I Street NW, Suite 500 East
Washington, DC 20005
Via Email: Robert.Morse@verizon.com

William H. Johnson
Senior Vice President, Federal Regulatory and Legal Affairs
Verizon
1320 North Courthouse Road, Ninth Floor
Arlington, VA 22201
Via Email: will.h.johnson@verizon.com

Re: Localized, End-to-End Wireless Emergency Alert Performance Testing with Geo-Targeting Enabled

Dear Messrs. Morse and Johnson:

Wireless Emergency Alerts (WEA) provide important and potentially life-saving information to the public in the event of a natural disaster or other critical situation. As a WEA provider, Verizon plays a key role in the alerting process, which is vital for emergency managers to help keep the public safe. Thank you for your voluntary participation in this important program. The development and successful implementation of WEA requires cooperation and collaboration between the Federal Communications Commission, the Federal Emergency Management Agency (FEMA), public safety officials, and the wireless industry.

Verizon supported the 2021 nationwide WEA test by submitting answers to questions from the Public Safety and Homeland Security Bureau (PSHSB) related to its performance of the test. The Commission conducted the 2021 nationwide WEA test through a first-of-its-kind partnership with 11 federal, state, and local emergency management agencies,¹ and used a "State/Local WEA Test Alert" to assess WEA's performance during a nationwide activation. PSHSB's Report on the 2021 nationwide WEA test found that, on the whole, WEA performed reliably, but there was room for improvement.² PSHSB recommended additional localized testing to confirm WEA's demonstrated nationwide performance in local alerting jurisdictions.³ PSHSB also committed to conducting WEA tests in the future that evaluate WEA's performance with enhanced WEA geo-targeting enabled and that address

¹ FEMA; the National Weather Service; the Alabama Emergency Management Agency; Harris County (Texas) Office of Homeland Security & Emergency Management; City of Los Angeles (California) Emergency Management Department; New York City (New York) Emergency Management; Mendocino County (California) Office of Emergency Services; Ohio Emergency Management Agency; Oklahoma Department of Emergency Management and Homeland Security; City of Philadelphia (Pennsylvania) Office of Emergency Management; and the Utah Department of Public Safety.

² PSHSB, *Report: August 11, 2021 Nationwide WEA Test, Wireless Emergency Alerts*, PS Docket No. 15-91, at 3 (2021), <https://docs.fcc.gov/public/attachments/DOC-378907A1.pdf>.

³ See *id.* at 25.

challenges that volunteer nationwide test survey respondents had with opting in to receive State/Local WEA Test Alerts.⁴

Building upon this history of collaboration, PSHSB now seeks Verizon's cooperation in evaluating WEA's performance during WEA performance testing to be conducted by 42 alert originators in accordance with the schedule published in PSHSB's 2022 WEA performance test waiver order.⁵

These tests will be used to measure WEA's end-to-end performance with enhanced WEA geo-targeting enabled. For each of these WEA tests, PSHSB requests that Verizon provide, in writing, responses to the following inquiries regarding the performance of Verizon's network:

1. Did Verizon receive the test message and transmit it to its subscribers within the geo-targeted area?
2. At what time (to the closest millisecond, if available) did Verizon's gateway/Cell Broadcast Entity receive the alert from FEMA's Integrated Public Alert and Warning System (IPAWS)?
3. At what time (to the closest millisecond, if available) did Verizon transmit the alert to subscribers?
4. How much time (to the closest millisecond, if available) did Verizon's network require to complete each of the following steps?
 - a. For the gateway/Cell Broadcast Entity to process and send the alert to the Cell Broadcast Center.
 - b. For the Cell Broadcast Center to process and send the alert to its Radio Network Controllers/Mobility Management Entities/Access and Mobility Function?
 - c. For the Cell Radio Network Controllers/Mobility Management Entities to process and send the alert to its NodeBs/eNodeBs/gNBs/gNodeBs?
 - d. For the NodeBs/eNodeBs to process and send the alert to Verizon's subscribers?
5. What, if any, of the NodeBs/eNodeBs/gNBs/gNodeBs used to transmit these alerts were not capable of supporting enhanced WEA-geotargeting?
6. Describe any complications with alert processing or transmission that Verizon observed or became aware of on WEA test day that may have delayed or prevented one or more of its subscribers from receiving the test alert.
7. Describe any steps that Verizon has taken or is taking to address any complications identified above, or any other complications that arose during the test.
8. Describe any other efforts that Verizon conducted to observe and evaluate WEA performance during the test, including any efforts to determine whether consumer handsets successfully displayed the alert.

Please provide your responses, in writing, by September 30, 2022. The Bureau asks that Verizon please respond via the FCC's Electronic Comment Filing System (ECFS) in PS Dockets 22-160, 15-91, and 15-94.⁶ Comments may be filed electronically using the Internet by accessing ECFS:

⁴ See *id.*

⁵ *Wireless Emergency Alert Performance Testing, Wireless Emergency Alerts, Amendments to Part 11 of the Commission's Rules Regarding the Emergency Alert System*, PS Docket Nos. 22-160, 15-91, and 15-94, Order, DA No. 22-901, at Appx. A (PSHSB Aug. 30, 2022).

⁶ Parties wishing to file materials with a claim of confidentiality should follow the procedures set forth in Section 0.459 of the Commission's rules. Casual claims of confidentiality are not accepted. Confidential submissions may not be filed

<http://apps.fcc.gov/ecfs/>. If you have any questions, please contact James Wiley, Deputy Chief of the Cybersecurity and Communications Reliability Division, at James.Wiley@fcc.gov.

Thank you for your continued efforts to ensure that the public receives life-saving WEA messages.

Sincerely,

Debra Jordan
Chief
Public Safety and Homeland Security Bureau

cc: Nicole McGinnis, Deputy Chief, Public Safety and Homeland Security Bureau
Austin Randazzo, Associate Chief, Public Safety and Homeland Security Bureau
Rochelle Cohen, Communications Director, Public Safety and Homeland Security Bureau
Erika Olsen, Acting Chief, Cybersecurity and Communications Reliability Division
James Wiley, Deputy Chief, Cybersecurity and Communications Reliability Division
David Kirschner, Attorney Advisor, Cybersecurity and Communications Reliability Division

via ECFS but rather should be filed with the Secretary's Office following the procedures set forth in 47 CFR § 0.459. Redacted versions of confidential submissions may be filed via ECFS. Parties are advised that the FCC looks with disfavor on claims of confidentiality for entire documents. When a claim of confidentiality is made, a public, redacted version of the document should also be filed. *See*, Enforcement Bureau Reminds Public that Requests for Confidentiality Must Cover Only Material Warranting Confidential Treatment Under the Commission's Rules, Public Notice, DA 20-579 (June 18, 2020).