

Received & Inspected BENNIE G. THOMPSON, MISSISSIPPI FCC Mail Room

One Hundred Fourteenth Congress U.S. House of Representatives Committee on Homeland Security

Washington, DC 20515

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March 3, 2015

The Honorable Tom Wheeler Chairman Federal Communications Commission 445 12th Street, S.W. Washington, DC 20554

## Dear Chairman Wheeler:

As Members of Congress charged with ensuring that the public is prepared to take action when disaster strikes, we are convinced that early, effective, and informative alerts and warnings play an essential role in saving lives. Accordingly, we urge you to take every possible action to ensure that the public has every tool in the public alerts and warnings toolbox at its disposal, including access to FM radio through the activation of radio chips already built in to almost all smart phones.

In 2012, cellular carriers voluntarily began broadcasting Wireless Emergency Alerts (WEA) to customers in targeted areas to provide notice of severe weather or other emergency conditions, America's Missing: Broadcast Emergency Response (AMBER) Alerts, and Presidential Alerts during National Emergencies. We applaud the cellular carriers for agreeing to voluntarily leverage their networks' capabilities to help keep the public safe. That said, while we agree that WEAs are an important layer to our emergency alerts and warnings capabilities, it should not be the only capability available to warn the public on smartphones when technology that could supplement WEAs exists.

As you know, WEA messages are limited to 90 characters. Accordingly, the information that can be supplied in that space is limited. Recognizing that, the text of WEAs typically directs consumers to check local media for additional information. In light of that directive, it is unclear to us why the radio chips that are already in most smartphones are deactivated, preventing the public from immediately taking the very action the WEAs prescribe.

Moreover, the Administrator of the Federal Emergency Management Agency (FEMA), Craig Fugate, recently acknowledged: "A lot of our tendency to use streaming devices to be dependent upon broadband capabilities are vulnerable in a disaster." Administrator Fugate recalled that after the 2011

<sup>&</sup>lt;sup>1</sup> For example, one recent WEA sent to customers in the Washington Metro Area read: "Tornado Warning in this area til 1:00 PM EDT. Take shelter now. Check local media. - NWS."

<sup>&</sup>lt;sup>2</sup> Mario Trujillo, "FEMA Administrator Warns of Cellphone Vulnerabilities During Disaster," The Hill (Oct. 20, 2014), available at http://thehill.com/policy/technology/221301-fema-administrator-warns-of-cell-vulnerabilities-during-disasters.

earthquake in Washington, D.C., the cellular network became so overwhelmed by demand that it could not provide service and "[a]ll of a sudden your cell phone became a brick." FM radio, he said, is an important layer in providing essential information to the public during a disaster, and could provide critical redundancy if cell towers are taken offline.<sup>4</sup>

Finally, a study on smartphone battery life indicates that using such a device to listen to FM radio only – no data required – achieves six times longer battery life when compared to streaming the same local radio station over a wireless data network. As we have learned in disasters from Hurricane Sandy to Hurricane Katrina, cell phones are lifelines. Extending the life of cell phone batteries is critical to those who have survived disasters, particularly when electricity has been knocked out and recharging the device is not possible.

Virtually all smartphones are manufactured with a radio chip capable of receiving over-the-air radio stations, and ordinary earbuds are sufficient to serve as an antenna. Additionally, the required software to enable the radio chip to work is available. In fact, we understand that the software is currently deployed on the smartphones from one major carrier, and that has been received well by the nearly 10 million customers who now have access to the service. We are concerned that not every American smartphone owner has been afforded the same opportunity – particularly given the important role emergency alerts and warnings play in public safety.

Radio is a proven lifeline in times of emergency, connecting consumers to the information they need to stay safe. During times of emergency, it is critically important that Americans have access to broadcast radio, which would provide instant emergency, lifesaving information on-the-go. For the benefit of the American public, ensuring all mobile devices are broadcast-radio capable is a critical component of this country's safety and homeland security. To this end, we are asking you to do everything in your power to make certain that every American consumer has access to the FM radio chip in their smartphones today.

Thank you for your consideration. We look forward to working with you to make certain all mobile telephone handsets are equipped with an activated radio chip. If you have any questions, please contact Hope Goins, Chief Counsel for Oversight at (202) 226-2616 or Arlen Weiner, Legislative Assistant at (202) 225-6416.

Sincerely,

BENNIE G. THOMPSON

Ranking Member

Committee on Homeland Security

PETER DEFAZIO

Ranking Member

Committee on Transportation and

Infrastructure

<sup>&</sup>lt;sup>3</sup> DSlyer, "What to do When Your Cell Phone Becomes a Brick," *Radio and Television Business Report* (Oct. 20, 2014), <a href="http://rbr.com/what-to-do-when-your-cell-phone-becomes-a-brick/">http://rbr.com/what-to-do-when-your-cell-phone-becomes-a-brick/</a>.

<sup>&</sup>lt;sup>5</sup> See table attached. These tests compare favorably with others conducted in Europe showing similar results.

## Comparison of FM radio listening with online streaming, showing up to 6x battery-life savings using FM

| USAGE                     | AVG. POWER CONSUMPTION | EXPECTED BATTERY LIFE |
|---------------------------|------------------------|-----------------------|
| FM Radio                  | 0.21 Watts             | 36.16 hrs             |
| Spotify IP Streaming      | 1.32 Watts             | 6.04 hrs              |
| Pandora IP Streaming      | 1.01 Watts             | 7.90 hrs              |
| TuneIn Radio IP Streaming | 1.27 Watts             | 6.26 hrs              |

Source: Sprint/NextRadio joint lab tests (on HTC One M8 phone in 3G mode running native FM app), July 2013.