

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

In the Matter of)	
)	
Improving Wireless Emergency Alerts and)	PS Docket No. 15-91
Community-Initiated Alerting)	
)	

**JOINT COMMENTS OF THE
NATIONAL ASSOCIATION OF BROADCASTERS AND NATIONAL PUBLIC RADIO**

I. Introduction and Summary

The National Association of Broadcasters (NAB)¹ and National Public Radio (NPR)² submit these joint comments on the above-captioned Notice of Proposed Rulemaking, in which the Commission proposes steps to strengthen the Wireless Emergency Alert (WEA) service.³ The Commission seeks to improve the usefulness of WEA messages, and thereby entice more Commercial Mobile Service (CMS) providers and state and local public safety authorities to participate in WEA, and dissuade users from opting-out of receiving WEA messages.⁴ As the Commission notes, the public perception of WEA messages as irrelevant

¹ The National Association of Broadcasters is a nonprofit trade association that advocates on behalf of local radio and television stations and broadcast networks before Congress, the Federal Communications Commission and other federal agencies, and the courts.

² NPR is a non-profit membership corporation which produces and distributes news, information, and cultural programming through more than 1000 public radio stations nationwide, operates the Public Radio Satellite Interconnection System, and provides representation and other services to its Members.

³ *Improving Wireless Emergency Alerts and Community-Initiated Alerting*, Notice of Proposed Rulemaking, PS Docket No. 15-91 (rel. Nov. 19, 2015) (Notice).

⁴ *Id.* at ¶¶ 1-2, 62-67.

and impersonal may “contribute to consumer opt-out and to CMS Provider election to participate in WEA.”⁵

Thus, in addition to upgrading WEA geo-targeting, testing and training, the Commission proposes changes designed to enhance the content of WEA messages, including allowing embedded URLs in WEA messages.⁶ However, adding a URL that simply drives users to the Internet will only exacerbate the congestion of wireless networks that already plagues mobile communications and impedes public safety during times of crisis.⁷ Instead, NAB and NPR highlight an option that not only advances public safety, but also helps to address concerns about network congestion. Specifically, the Commission should recognize the consumer benefits of free, over-the-air FM radio and support industry efforts toward increasing the number of mobile devices with activated FM chips. For example, NAB research shows that virtually all smartphones sold in the U.S. during the second quarter of 2015 were equipped with an FM tuner, although FM reception was disabled by phone manufacturers and wireless carriers in 63 percent of these devices.⁸ When activated, this built-in feature provides Americans with convenient access to the comprehensive, ongoing news and information that local radio stations provide before, during, and after an emergency, that consumers would welcome in the remaining universe of smartphones.

As discussed below, this approach is a logical extension of the current practice in which WEA messages are routinely tagged with an instruction to “Check Local Media” for further information about an emergency, specifically local radio broadcast stations. This

⁵ *Id.* at ¶ 66.

⁶ *Id.* at ¶ 25.

⁷ *Id.* at ¶ 23 (noting that wireless networks are already burdened during emergencies by calls for help from police, fire and rescue personnel, as well as to family and friends).

⁸ See <http://www.nablab.org/projects/fm-radio-in-smartphones.asp>.

process has no adverse impact on wireless networks, and even helps to relieve congestion by offloading some communications traffic to the broadcast system. Finally, FM radio in smartphones can help fulfill the Commission's goal of more effective alert message content, enhanced accuracy and completeness of WEA-delivered AMBER Alerts, and improved access to emergency information for persons with disabilities. Radio in smartphones also benefits the public safety of Americans with limited English proficiency, by enabling mobile access to local in-language radio stations in their community.

Commissioner Rosenworcel recognized this symbiosis and its value to the American public's safety in her statement accompanying the Notice. Her call for strengthening our nation's security by encouraging industry efforts toward the activation of FM chips in smartphones recognizes that various industries can work together to enhance consumer welfare.⁹

It is also significant that both Federal Emergency Management Agency Administrator Craig Fugate and U.S. House of Representatives leaders on homeland security issues have endorsed FM radio as a critical public safety feature of smartphones. Mr. Fugate stated that broadcast radio is often the only way to receive emergency information during a disaster because other services are blocked by overuse.¹⁰ Referencing the 2011 earthquake near Washington, D.C., and Hurricane Sandy in 2012, he stated that "streaming devices [which are] dependent upon broadband capabilities are vulnerable in a disaster," adding that during natural disasters, a cellphone without service is no more useful than a "brick." He

⁹ Notice, Statement of Commissioner Jessica Rosenworcel (attached).

¹⁰ Mario Trujillo, *FEMA Administrator Warns of Cellphone Vulnerabilities During Disasters*, The Hill (Oct. 20, 2014), available at <http://thehill.com/policy/technology/221301-fema-administrator-warns-of-cell-vulnerabilities-during-disasters>.

continued: “So when you get things where you can start combining functions, like putting FM chips into cellphones, and you start getting radio ... it moves us beyond just streaming.”¹¹

Similarly, the Homeland Security Committee wrote Chairman Wheeler last year to emphasize that 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,” and “ensuring all mobile devices are broadcast-radio capable is a critical component of this country’s safety and homeland security.”¹²

And recently, in the just concluded congressional year, Congress passed and the President signed into law the Emergency Assistance Improvement Act, which clarifies that public broadcasting stations are eligible recipients of federal disaster relief assistance. The principal Senate sponsor, Senator Cruz, remarked, “Public radio and broadcast stations can play a significant role providing critical information during and after natural disasters and terrorist attacks.”¹³ Congressman Steve Palazzo, the primary House sponsor of the legislation, echoed Senator Cruz’ emphasis by saying, “Disasters strike every year in every corner of America. When these disasters strike, our local public radio stations play a vital role in providing information about response efforts.”¹⁴

Given the compelling public safety benefits of enabling radio in smartphones, we respectfully request that the Commission embrace and encourage the activation of FM chips

¹¹ *Id.*

¹² Letter from the Honorable Bennie G. Thompson, Ranking Member, Committee on Homeland Security, and Peter DeFazio, Ranking Member, Committee on Transportation and Infrastructure, to Tom Wheeler, Chairman, FCC (Mar. 3, 2015).

¹³ *Booker, Cruz Emergency Broadcasting Bill Passes Out of House, Heads to President’s Desk*, http://www.booker.senate.gov/?p=press_release&id=347.

¹⁴ *Cruz, Palazzo Pass the Emergency Information Improvement Act*, <http://palazzo.house.gov/news/documentsingle.aspx?DocumentID=398741>.

in more smartphones so the public can readily access additional critical information upon receiving a WEA message.

II. Radio via Smartphones is a Simple and Efficient Option For CMS Providers

WEA messages are emergency notifications sent by authorized government alerting authorities through a consumer's mobile phone carrier. WEA messages provide timely warnings about impending extreme weather, Presidential alerts during a national emergency, and AMBER Alerts,¹⁵ among other exigent situations. However, the text-based nature of WEAs, and Commission rules governing the character length and content of WEAs, limit their usefulness.¹⁶ As a result, most WEAs combine a very brief alert with a message directing users to "Check Local Media" for more information and instructions, specifically, local radio and television stations.¹⁷ This instruction to turn on one's car radio or other receiver has been highly successful, helping to preserve lives and protect property during emergencies over the three-year existence of WEA.

¹⁵ AMBER (America's Missing: Broadcast Emergency Response) Alerts is a nationwide alerting program to help bring missing and abducted children to safety. AMBER Alerts are broadcast through radio, television, road signs, wireless providers and all available technology. The AMBER Alert Program is administered by the National Center for Missing & Exploited Children (NCMEC) in partnership with the U.S. Department of Justice. <http://www.missingkids.com/Amber>.

¹⁶ 47 C.F.R. §§ 10.430, .10.440. The Commission proposes extending the maximum length of a WEA messages from 90 to 360 characters, Notice at ¶¶ 14-16, and allowing URLs in WEA messages. Id. at ¶¶ 23-30.

¹⁷ The Commission envisioned such a process when implementing WEA. *Commercial Mobile Alert System*, First Report and Order, PS Docket No. 07-287, 23 FCC Rcd 6144, 6174 (2008).

Expanding the number of smartphones with activated FM chips would be a straightforward, logical extension of the current practice, and make it even more convenient for Americans on-the-go to access local FM radio stations



during an emergency. This would serve the public interest in public safety, providing more Americans direct mobile access to emergency information about an emergency from a trusted local source. Doing so would also fulfill the goals of both alert originators and the Commission for enhancing the WEA system.

III. Increased Availability of Smartphones with Activated FM Chips Would Facilitate Access to the Critical Emergency Information Provided by Local Radio Stations

Americans have relied on local radio stations for vital emergency news and information for the better part of a century. During this period, broadcasters have repeatedly fulfilled their unique role as America’s “First informers” during times of crisis. The ability of radio broadcasters to reach virtually all Americans with live, on-the-spot news coverage before, during and after an emergency, makes local radio stations indispensable in the distribution of emergency information.

Broadcasters often make heroic efforts to stay on-air to deliver around-the-clock news coverage to their communities during emergencies, and these efforts are appreciated. For example, during Hurricane Sandy, radio listenership skyrocketed in the New York metro

area, despite the widespread loss of power.¹⁸ The news and instructions provided by radio broadcasters were particularly vital during this storm, as more than 25 percent of cell sites in 158 counties in all or part of ten states and the District of Columbia were disabled, leaving millions of residents without reliable or continuous access to mobile wireless communications throughout the storm and its aftermath. Indeed, several counties had outages more than double the 25 percent figure, and for the State of New Jersey, aggregated cell site outages were on the order of forty percent.¹⁹

Fortunately, radio is always on the air, available to anyone with a radio in their home, office or automobile. The equipment and process used for broadcasting are typically well-protected in a centralized location, secure from any tampering or accidental disruption. Moreover, the network architecture of radio is relatively simple to deploy, operate and maintain, requiring little more than a transmitter and receiver. Radio broadcasting is also easily operated on local power, with continuous service assured by a back-up generator and reserve fuel.²⁰ Radio stations also have contingency plans for antennas or studio facilities

¹⁸ Ben Sisario, New York Times, *Media Decoder: After Hurricane Sandy, People Flock to Radio for Information* (Nov. 19, 2012), available at <http://mediadecoder.blogs.nytimes.com/2012/11/18/after-hurricane-sandy-people-flock-to-radio-for-information/?r=0>. Recent data from the NextRadio app confirms this trend, indicating that during an emergency weather situation the number of NextRadio listeners increases an average of more than 2.5 times and the number of listening sessions increase by 4 times. See <http://www.emmis.com/data-supports-consumers-are-tuning-to-nextradio-during-weather-emergencies/>.

¹⁹ *Improving the Resiliency of Mobile Wireless Communications Networks Reliability and Continuity of Communications Networks, Including Broadband Technologies*, PS Docket Nos. 13-239 and 11-60, Notice of Proposed Rulemaking, (rel. Sep. 27, 2013).

²⁰ We note that, contrary to wireless providers, radio broadcasters have never balked at a public service obligation to maintain sufficient back-up power. See e.g., Ambreen Ali, *Storm Clouds Hang Over Cellphone Backup Rules*, Roll Call (Dec. 3, 2012) (describing Commission efforts following Hurricane Katrina to mandate sufficient backup generators for cellphone towers to which the wireless industry objected based on cost considerations and ultimately successfully sued to overturn), available at http://www.rollcall.com/news/storm_clouds_hang_over_cellphone_backup_rules-219615-1.html.

that could be impaired during a significant event. In addition, as part of FEMA's Primary Entry Point (PEP) program, FEMA partners with various radio stations to "harden" their facilities with back-up equipment and emergency power generators to allow the President to communicate with the public in case of a national catastrophic event. Currently, radio stations participating in the PEP program can provide direct broadcast coverage to over 90 percent of the US population.²¹

Moreover, local radio stations have unique resources that allow them to deliver trustworthy, comprehensive news and information, including without interruption for hours or even days at a time during significant events.²² Radio stations employ experienced, credible anchors, field reporters, meteorologists, and studio analysts, with intimate knowledge of the local geography, weather, and population. It is common for these professionals to have well-established relationships with local police, fire, medical services, and government agencies. Indeed, many emergency officials themselves take advantage of radio's resources, often placing radio receivers in police, fire and other first responding offices, hospitals, and electric utility offices.

The Commission appropriately summarized the value of radio's emergency service in its report on the derecho that devastated the Midwest and Mid-Atlantic regions of the United States in June 2012:

"The key role broadcasters played during and following the derecho should also be recognized. As in many times of crisis, broadcasters served as 'first informers,' providing the public with information on the storm's path, the damage it caused, and its effects on other communications services. Even

²¹ Fact Sheet, *Primary Entry Point (PEP) Stations*, FEMA, available at www.fema.gov.

²² See, e.g., Statement of David L. Donovan, New York State Broadcasters Association, *In the Eye of the Storm: New York's Broadcasters Provide a Bright Line on a Dark Night*, available at http://www.nab.org/documents/newsRoom/pdfs/103112_NY_broadcasters_Sandy.pdf.

where citizens affected by the storm lost commercial power, many could still receive radio and television broadcasts on battery-powered devices.”²³

IV. **Radio-Enabled Smartphones Help to Address the Commission’s Goals for Enhanced WEAs**

Among the specific objectives to strengthen the WEA system established for this proceeding, the Commission seeks to avoid wireless network congestion during emergencies, while enhancing the effectiveness of WEA messages.²⁴ Activated FM chips in mobile devices help to accomplish both of these objectives.

A. Activated FM Chips Help to Preserve Wireless Network Capacity

The Commission proposes to eliminate the current prohibition against including URLs in WEA messages, and seeks comment on the costs and benefits of this approach.²⁵ NAB and NPR agree that doing so will advance public safety by improving access to additional information during an emergency. However, including in WEA messages a URL that simply drives users to the Internet will further exacerbate the congestion of mobile wireless networks that are already overwhelmed during many emergencies.²⁶ Instead, the Commission should encourage access to FM radio in smartphones as such an approach would have zero negative impact on cellular networks,²⁷ and in fact, could alleviate wireless network congestion during emergencies.

Built-in FM radio within a smartphone uses a completely different network architecture than wireless broadband communications, which means several benefits for

²³ Report, *Impact of the June 2012 Derecho on Communications Networks and Services*, Public Safety and Homeland Security Bureau (Jan. 2013), at 14, available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-318331A1.pdf.

²⁴ Notice at ¶¶ 2, 23-28.

²⁵ *Id.* at ¶ 25.

²⁶ *Id.* at ¶ 26.

²⁷ *Id.* at ¶ 28.

public safety. Most importantly, consumers receive uninterrupted information about an ongoing emergency because radio always remains on-air, even when mobile networks fail. For example, even the relatively robust mobile broadband network in Boston jammed up and blocked calls after two improvised explosive devices were detonated during the 2013 Boston Marathon, as the mobile carriers simply could not cope with the surge in call volume.²⁸ Similar network disruptions occurred after the 2011 earthquake in the Washington, DC area,²⁹ and other events.³⁰ Also, since radio does not depend on an Internet connection, there is no buffering or related risk to the continuous availability of news and emergency response information.

In addition, users who turn to built-in radio within a smartphone during an emergency actually help to reduce cellular network congestion by off-loading traffic to broadcast systems during emergencies, thereby facilitating mobile communications and public safety efforts. Moreover, listening to radio via the built-in radio in smartphone uses less than 10 percent of the data needed to stream similar content over the Internet.³¹ As a result, consumers in peril are better able to preserve their data usage, and avoid unwelcome

²⁸ Neil Ungerleider, *Why Your Phone Doesn't Work During Disasters – And How To Fix It*, Fast Company (Apr. 17, 2013), available at <http://www.fastcompany.com/3008458/tech-forecast/why-your-phone-doesnt-work-during-disasters-and-how-fix-it> (noting similar problems during Hurricane Sandy and the 2007 earthquake in San Francisco).

²⁹ Cecilia Kang and Ylan Q. Mui, *Cellphone Service Falls Short After Earthquake*, Washington Post (Aug. 23, 2011), available at https://www.washingtonpost.com/business/economy/cellphone-service-falls-short-after-earthquake/2011/08/23/gIQAml52ZJ_story.html.

³⁰ Jon Van, *As Bridge Failed, So Did Phone Network*, Chicago Tribune (Aug. 5, 2007), available at http://articles.chicagotribune.com/2007-08-05/news/0708040444_1_cell-phone-messages-service-providers (referencing the 2007 collapse of a major Minnesota bridge).

³¹ Richard Gray, *The FM Radio Hidden in Your Smartphone*, Daily Mail (Apr. 27, 2015), available at <http://www.dailymail.co.uk/sciencetech/article-3054299/The-FM-radio-hidden-SMARTPHONE-Mobile-manufacturers-denying-users-chance-listen-radio-free.html>.

financial penalties imposed by mobile providers as an unintended consequence of an emergency.

Finally, expanded access to emergency news via built-in FM radio in a smartphone would help to address the Commission's concerns regarding the battery life of mobile devices.³² Specifically, listening to audio content that is streamed over the Internet drains the battery life of a smartphone three to five times faster than listening to the exact same content via an FM chip, and is more energy efficient than accessing news from a web-based source. Battery life is of course essential during an emergency, when any number of obstacles may hinder recharging a smartphone, such as a loss of electricity, lack of access to a charging cord or outlet, or if a traveler's car runs out of fuel. Accordingly, the most efficient way to maximize a user's access to critical news and instructions during an emergency is a built-in radio within a smartphone.

B. Increased Numbers of Radio-Enabled Smartphones Would Help to Fulfill the Commission's Goal for More Effective WEA Message Content

The Commission proposes to eliminate the current prohibition against including URLs in WEA messages as a means of providing Americans with additional information about an emergency.³³ NAB and NPR agree this would be an important step, albeit limited for the reasons described above related to network congestion. On the other hand, built-in FM radio would substantially address the Commission's goal. Radio provides the most reliable, comprehensive news reporting about emergencies of any communications outlet, with experienced professionals on staff who are familiar with the local area and community.

³² Notice at ¶ 28.

³³ Notice at ¶¶ 25-26.

For example, radio access from a smartphone improves the reach and effectiveness of AMBER Alerts.³⁴ Broadcasters originally created the AMBER Plan in 1996 with the assistance of law enforcement agencies in the Dallas/Fort Worth area. Since the program's inception, radio stations have routinely interrupted regularly scheduled programming to notify the public that a child abduction has taken place, broadcasting essential information to enable the public to provide the extra eyes and ears that would increase the likelihood that a child abductor could be caught in the short period of time in which apprehension is often most critical.³⁵ No other media outlet has more experience and success in helping to recover children via AMBER Alerts, which now totals 772 recoveries since inception of the program.³⁶

Radio access provides consumers with timely, convenient access to more complete information about an AMBER Alert. Indeed, radio is the most efficient method for timely broadcasting this information, particularly to travelers in their cars who may be more likely to see a fleeing suspect. Thus, while NAB and NPR agree with NCMEC that the most important step the Commission can take is to mandate that all WEA-delivered AMBER Alerts include a telephone number,³⁷ we submit that expanding the universe of radio-enabled mobile devices would also improve the prospects for the safe recovery of missing or abducted children.

³⁴ *Id.* at ¶ 27.

³⁵ As the Commission notes, the wide dissemination of descriptions of the missing child, the suspected abductors, and their vehicle, are critical during the first three hours of an abduction. Notice at ¶ 27.

³⁶ See <http://www.missingkids.com/KeyFacts>, (last visited January 5, 2016).

³⁷ *Id.*

Doing so would also address the Commission's goal of enhancing the accessibility of emergency information for people with disabilities and persons with limited English proficiency.³⁸ Radio is inherently a useful option for blind and visually impaired people, as the use of and radio's longstanding commitment to radio-reading services have demonstrated. Directing these individuals to a web site would not serve their needs, especially if congested broadband networks impede access. With only a couple of clicks on their smartphone, this growing segment of the population would be able access the critical, aural information that local radio stations provide during emergencies.

Similarly, more radio-enabled smartphones would allow more persons with limited English proficiency convenient access to their preferred in-language, local radio station. We agree with the Commission that all Americans should have access to emergency information,³⁹ regardless of the language they speak, and submit that access to the radio already built into most smartphones is an excellent option for fulfilling this goal. Virtually all markets in the country have at least one foreign language radio station, and the overwhelming majority of markets that contain at least one non-English station contain multiple non-English stations.

In fact, nearly 90 percent of the Hispanic population in Arbitron markets resides in markets with three or more Spanish language stations, and over 81 percent of the Hispanic population located in Arbitron markets receive six or more Spanish programmed stations.⁴⁰ Hundreds of other stations broadcast in other languages, depending on the needs and

³⁸ Notice at ¶ 29.

³⁹ *Id.* at ¶ 33.

⁴⁰ These figures were determined as of 2012. BIA Kelsey, *Over-the-Air Radio Service to Diverse Audiences – 2012 Update* (Feb. 22, 2012).

interests of their local communities, including Chinese stations in New York,⁴¹ Hmong stations in Fresno and the Twin Cities,⁴² and Korean stations in Los Angeles,⁴³ among many others across the nation. As a result, nearly all Americans would be able to access information in their preferred language during an emergency, via the built-in radio in smartphones. Given the growing diversity of our nation's population, easy access to in-language non-English emergency news and information is increasingly important.

V. Conclusion

For the reasons set forth above, NAB and NPR request that, through this important proceeding, the Commission strongly encourage industry efforts toward increasing the number of smartphones that do not disable the FM chips already included in their devices. The result of such a development would be advanced public safety by providing Americans

⁴¹ See <http://www.chineseadvertisingagencies.com/mediaguide/Chinese-radio-stations-New-York.html>.

⁴² See <http://900hmongradio.com/index.php>; <http://hmongradioam690.com/>.

⁴³ See <http://annyong.net/Korean%20TV%20Radio%20Stations%20in%20America>.

with convenient access to the in-depth, ongoing information provided by local radio stations during times of crisis, without further burdening already congested mobile broadband networks or impeding public safety communications.

Respectfully submitted,

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