

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)
)
Public Safety And Homeland Security)
Bureau Seeks Comment On Ways To) PS Docket No. 16-32
Facilitate Earthquake-Related Emergency)
Alerts)
)

Comments of the AWARN Alliance

The Advanced Warning and Response Network (AWARN), utilizing the Advanced Television Systems Committee (ATSC) 3.0 standard, could provide a powerful backbone for delivering earthquake early warnings (EEWs) to the public from terrestrial television stations. Reducing or eliminating latency in current systems to achieve the congressional goal of distribution and receipt of EEWs in fewer than three seconds, however, would require a coordinated exploration among stakeholders. The AWARN Alliance would support this voluntary effort.

AWARN is a next-generation, dual-use, public alert and warning system for a mobile, 21st Century America. AWARN utilizes the nation's existing terrestrial television broadcasting spectrum and infrastructure and leverages advanced emergency alerting and other capabilities that are designed into the ATSC 3.0 "Next Generation TV" standard. AWARN can distribute text and rich media alerts simultaneously to an unlimited number of ATSC 3.0-enabled fixed, mobile, and hand-held devices, indoors or outdoors across an entire metropolitan area.

As noted in the April 13, 2016 *Joint Petition for Rulemaking* for the permissive use of the ATSC 3.0 standard for broadcast transmission:

This new standard will enable life-saving advancements in emergency alerting, which could include:

- *Signaling that permits receivers to alert consumers of an emergency even when the receiver is powered off. This functionality can be used to cause the receiver to "wake up" to process emergency alert information – an invaluable advance, particularly in areas prone to tornadoes, earthquakes and other sudden disasters (in addition to man-made emergencies);*
- *Localization filtering of emergency alerts to tailor information for specific*

*geographic areas.*¹

Organizations supporting AWARN have described its capabilities in a related FCC proceeding.² In April, broadcasters and technology companies formed the AWARN Alliance to support the timely deployment of AWARN as broadcasters voluntarily deploy ATSC 3.0 transmission.³

Conceptually, AWARN could enable EEWs to meet the congressional goal of delivery and reception by the public in fewer than three seconds. Once alerts are transmitted by a broadcast station, they travel at the speed of light and can be received on an unlimited number of ATSC 3.0-enabled consumer and automated devices without any network congestion or delay. Achieving the under-three-second goal for EEW transmission as a practical matter would require a coordinated effort.

Technical, as well as regulatory, solutions to reduce or eliminate latency in current alerting and video encoding technologies and processes would require a high level of voluntary cooperation among broadcasters, allied technology companies, ShakeAlert originators, the Integrated Public Alert and Warning System, and other stakeholders around specific requirements. For this reason, the AWARN Alliance suggests that the Commission convene one or more workshops and/or an advisory committee to assist the Commission in completing its report to Congress, as outlined in the Public Notice. The Alliance stands ready to support the Commission's efforts.

Respectfully submitted,

_____/s/_____

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¹ *Joint Petition for Rulemaking*, In the Matter of Authorization of Next Generation TV for Permissive Use as a Television Standard, by America's Public Television Stations, AWARN Alliance, Consumer Technology Association, and National Association of Broadcasters (filed April 13, 2016)

² See *Improving Wireless Emergency Alerts and Community-initiated Alerting*, Notice of Proposed Rulemaking, 30 FCC Rcd 13781 (2015) (*WEA Fourth NPRM*) (seeking comment on proposed enhancements to Wireless Emergency Alerts)

³ AWARN Alliance members include Airwavz, Capitol Broadcasting Company/WRAL; Digital Alert Systems/Monroe Electronics; GatesAir; LG Electronics/Zenith; Pearl TV; PILOT (formerly NAB Labs); Public Broadcasting Service (PBS); Sinclair Broadcast Group; and Triveni Digital.