

**STATEWIDE EMERGENCY COMMUNICATIONS BOARD  
INTEGRATED PUBLIC WARNING AND ALERT SYSTEM COMMITTEE**

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Thursday, September 15, 2016  
1:00 p.m. – 3:00 p.m.  
Chair: Ulie Seal

WEBEX connection information below:

Meeting number: 746 150 047

Meeting password: password

Call-in toll-free number: 1-888-742-5095

Conference Code: 172 933 5103

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**MEETING AGENDA**

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**Call to Order**

**Approval of Today's Agenda**

**Approval of Previous Meeting's Minutes**

- July 2016

**Reports of Standing Committees**

- Policy – du Bois / McDonald
  - Highlights from the Advanced Warning and Response Network (AWARN)
  - The Federal Communications Commission (FCC) tasked Communications, Security, Reliability, and Interoperability Council (CSRIC) Working Group 3 (WG3) with recommending best practices for the delivery of Multilingual Emergency Alert System (EAS) and emergency information.
- Infrastructure – Dooley
  - Highlight Items that need to be addressed in the next state warning plan
  - Information on the Nationwide EAS test scheduled for 28 September.
- Public Information – Williams
  - Education and Outreach Workgroup under the SECB Steering Committee

**Committee Items**

**Reports**

**Old Business**

**New Business**

**Other Business**

**Announcements**

- Speaking Engagements

**Adjourn**

# STATEWIDE EMERGENCY COMMUNICATIONS BOARD

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## INTEGRATED PUBLIC ALERT AND WARNING SYSTEM

July 20, 2016

### MEETING MINUTES

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#### ATTENDANCE

MEMBERS, REPRESENTING  
PRESENT (Highlighted):

Chair: **Ulrie Seal**, MN Fire Chiefs Association  
Vice Chair: Michael Martin, MN Cable Companies  
**John Dooley**, Committee Coordinator/ HSEM  
**Kate Rush/David Kravik**, BCA  
Dana Wahlberg/Cathy Anderson/**Jackie Mines** DPS/ECN  
**Amber Schindeldecker** – DPS Communications  
Randy Willis, Minnesota Sheriffs Assn.  
**Todd Krause**/Joe Calderone, National Weather Service  
Bill Schmidt/Don Sheldrew, MN Dept. of Health  
Jim duBois/Steve Woodbury, MN Broadcasters Assn.  
Bryan Green/Terry Stoltzman, AMEM  
Amy Hass, Xcel Energy  
Scott Williams, Metro Radio Region/Ramsey County  
Vacant– NE Radio Region  
Nancy Shafer/vacant, NW Radio Region  
**Don Heppleman**/vacant, Twin Cities Public Television  
**Lillian McDonald**, TPT/ECHO Minnesota  
Bryan Gorman – Region 5  
Mike Bromberg – Southeast Radio Region  
Denison Hanson—MPR  
**Patrick Waletzko** – Central MN RAC  
Diane Lind—Dakota County  
BJ Kohlstedt--Lake County Emergency Management  
**Joel Glaser**, Ampers  
Steve Ewing – Southwest ECB  
**Kelly Kukowski, NW**, Kittson County Sheriff's Office  
**Susan Ebnet**, Charter Communications

\*Members attending are marked with yellow highlight.

## **Guests reporting**

<b>Name</b>	<b>Representing</b>
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Carol Salmon, ECN	
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Will Waterman, BCA	
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## **CALL TO ORDER**

Chair Seal calls the meeting to order at 1:01 p.m.

## **AGENDA**

**Lillian McDonald makes a motion to approve the agenda**

**Amber Schindeldecker seconds the motion.**

**Motion carries.**

## **MINUTES**

**McDonald makes a motion to approve the January and March minutes.**

**John Dooley seconds the motion.**

**Motion carries.**

## **REPORT OF STANDING COMMITTEES**

### **Policy (duBois/McDonald)**

Lillian McDonald reports on the FCC - Multilingual Report and Order FCC-16-32A1.

McDonald and Jim duBois are on the Communications Security, Reliability and Interoperability Council (CISRIC) Working Group 3 which is working on multilingual best practices for EAS and emergency information. The group is drafting a best practices policy guide to be submitted to the FCC by early September. Minnesota will be used as a case study. The workgroup includes various interests and it can be challenging to balance all of the interests. The FCC will decide when to put the document on the public record but McDonald is hearing that there is a sense of urgency from the FCC and FEMA.

In September, a Congressional workgroup for IPAWS will be forming and McDonald suspects that this will fall under that workgroup.

Dooley says the committee that is forming for the EAS portion is part of the IPAWS Modernization act of 2015.

McDonald responds that it is a three-year committee and it hasn't been seated yet. Most of the seats will be FCC board members that already have a lot of experience in this. They will be looking at current laws to see what needs to change to move things forward. A final report is due the end of 2018 when it goes to Congress through the FCC.

Chair Seal says if the committee can generate best practices and recommendations then the states can take that up and move it forward.

McDonald adds that there are 20 states that have multi-lingual challenges. Minnesota is ahead of the game compared to other states. She is encouraged that the conversation is happening. This is a complicated issue from a lot of different angles.

### **Infrastructure (Dooley)**

John Dooley reports on the Information on the Notice of Proposed Rulemaking (NPRM) on the EAS System.

He notes that the comment period has ended and the FCC is reviewing the comments. The key elements are that it will likely result in the need for a re-write of our current EAS plan. The FCC wants to standardize the state plans. One of the common requests has been that the FCC create a template for the state plans.

It looks like they are trying to shift the focus from just an EAS plan to a Public Information and Warning Plan. By about November a seventh report and order will come out.

The biggest push back on the WEA side is that the FCC gave the cell phone companies one year but the companies now want two years. A concern is the shutdown of the 2g and 3g networks. For now the messages are 90 characters but the change to happen around 2018 will be an increase to 360 characters.

Jackie Mines says some of the feedback she has received from the regions is that the limited characters are problematic and they are really looking forward to the longer message.

Discussion about how multilingual messages are sent from wireless devices. This done by typing the message in in different languages. For three languages, it must be typed three times and sent three times. Or if a wireless device is programmed for a different language the message can go out in that language. For example, in Florida messages weather alerts are sent in Spanish. Some places have the capability with dedicated staff and processes. This is part of what is being considered under best practices—what can be done now while waiting for the technology.

On the broadcasters' side there is a box that can be purchased that will implement multilingual messaging. Joel Glaser says the box is in the beta testing stage.

McDonald adds that over the next couple of years there is some shoring up to do of these technology issues and also on policy.

Dooley reports that the

National EAS test which was part of the direction of the IPAWS Modernization Act of 2015 to require testing every two years. This year it will be on September 28, 2016. The FCC is reviewing and if necessary updating state EAS plans. They are telling us the EAS Operating Handbook will be out on the website and people can test it. More on the broadcasters side not so much for public safety to do.

Some Minnesota broadcasters will give a multilingual alert.

Discussion about getting results after the test. Dooley will put out a Survey Monkey survey to solicit feedback. Dooley will talk with McDonald about adding questions about multilingual messaging.

Discussion about updating the EAS plan. Dooley will send out the areas to start working on.

### **Public Information**

Education and Outreach Workgroup under the SECB Steering Committee

Amber Schindeldecker reports that she is keeping the website updated with new versions of IPAWS maps. She worked with Mines and Dooley on the IPAWS handout that Dooley has been using in workshops.

Discussion about training and exercises as a critical part of outreach and in particular along the rail lines. Some regions don't use IPAWS because they don't know how or when to use it. Meeker County recently had an alerting opportunity. This might present an opportunity to follow up as an educational opportunity.

Chair Seal adds the need to focus on reaching out to counties that are not IPAWS capable.

## **OLD BUSINESS**

### **NEW BUSINESS**

Introduction of Kate Rush, who replaces Janell Rasmussen. Rush has been with the BCA for 18 years and is the new AMBER Alert Coordinator. She was working with Rasmussen on missing persons so she was always part of any AMBER Alert that was issued. Chair Seal welcomes Rush.

Mike Martin has announced his retirement as Director of the MN Cable Communications Association but he is working as a contractor until he is replaced. Dooley will put out an appeal for a Vice Chair in the next meeting materials.

### **Work Plan**

Dooley reports that 12 workshops were conducted with a total of 238 people attending. Most of the regions have had at least two workshops.

Dooley displays a map with the counties that are approved alerting authorities or have an application in the process. This is being recorded on a SharePoint tracking system now. Dooley did follow up calls two weeks ago with six counties on their paperwork.

There are only 20 counties left to become alerting authorities out of 87. Chair Seal says that is great. He struggled with the thought that we would ever get 87. Excellent work. Dooley's workshops and outreach is the reason the coverage map looks as good as it does.

Chair Seal would like to add more targeted training for the counties that already are alerting authorities.

Dooley uses the Rochester exercise as a case study in his workshops. Several other counties including Washington, McCloud, Scott and Hennepin are doing required weekly tests.

Discussion about the best way to convince counties that are not alerting authorities. Another tool in the emergency alerting toolbox.

McDonald suggests that when after-action reports come out may be a good time to bring up IPAWS.

Chair Seal says at some point in time we might be able to assist counties with grants if they do not have the bandwidth.

### **Membership**

Carol Salmon reports on vacancies in membership. She will work with Mines on letters to agencies where there has not been representation or where there is no alternate.

## **OTHER BUSINESS ANNOUNCEMENTS**

### **Speaking Engagements**

Dooley will work with Kravik on dates for training.

**McDonald makes a motion to adjourn.**  
**Dooley seconds the motion.**  
**Motion carries.**

## **MEETING ADJOURNS at 2:18**

The next meeting will take place on Thursday, September 15 at 1:00 p.m.

## **2016 Meeting Schedule**

IPAWS meets on the third Thursday of the month at 1:00 p.m. via phone and WebEx.

January 21

March 17

May 19

July 21

September 15

November 10

(Note: The November meeting is one week earlier due to the November holiday and the SECB meeting schedule.)

DRAFT



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September 2016

WORKING GROUP 3  
EMERGENCY ALERT SYSTEM

Final Report – Multilingual Alerting Recommendations

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# 1 Results in Brief

## 1.1 Executive Summary

The Federal Communications Commission (FCC) tasked Communications, Security, Reliability, and Interoperability Council (CSRIC) Working Group 3 (WG3) with recommending best practices for the delivery of Multilingual Emergency Alert System (EAS) and emergency information. Specifically, the scope of work for Working Group 3 was as follows:

*The Working Group will recommend best practices for the delivery of multilingual EAS and emergency information. The Working Group will pay particular attention to how communities determine their multilingual needs, and how individual broadcasters, cable service providers and other EAS Participants (including rural, smaller and less resourced EAS Participants) and their representative organizations address those needs. Areas of interest should include specific technical options ranging from translators on staff to state of the art translation software. The Working Group will keep in mind how these practices can be expanded to include other communities that require enhanced access such as those with disabilities and the functional-needs community.<sup>1</sup>*

While CSRIC Multilingual EAS WG3 did not conduct or commission formal research, some members did conduct discussions with EAS stakeholders including radio and TV broadcasters originating EAS alerts, cultural communities, and reviewed literature on the subject. WG3 has expertise on the technical aspects of EAS and CAP. Much of this expertise is based on experiences and capacity in professional roles.

In general, WG3 found that multilingual capabilities, especially in the area of message origination, are still in the early stages. The experience pool is too shallow to inform Best Practices. As such, it is too early to consider any additional regulation or requirement pertaining to multilingual alerting.

WG3 evaluated whether there are any regulatory barriers to multilingual alerting in the current FCC EAS rules and concluded there apparently are none.

Subsequent to the chartering of CSRIC V, the Commission released the Report and Order in EB Docket No. 04-296, which mandates new reporting requirements regarding multilingual EAS alerting capabilities and establishes the Commission's current policy on multilingual EAS alerting. Accordingly, this Report and Order would seem to substantially supersede our assigned task to "recommend best practices for the delivery of multilingual EAS and emergency information" since it establishes new reporting rules and recognizes that perhaps the best practice is to simply gather further information regarding current EAS multilingual capabilities. Nevertheless, WG3 herein offers some additional insight into the current state of multilingual EAS.

WG3 would like to acknowledge that much has been done to advance technology and delivery

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<sup>1</sup> CSRIC V Working Group Descriptions and Leadership <https://www.fcc.gov/about-fcc/advisory-committees/communications-security-reliability-and-interoperability#block-menu-block-4>

systems to improve EAS delivery of emergency messaging reaching unique populations due to language, culture, contextual, disability currently not part of today's EAS system. The use of CAP, as mandated by the FCC in 2012 for EAS Participants, has provided a set of tools that can be used to advance the information flow to wider populations. Essentially, "all crisis starts at the local level" and as a result, WG3 believes collaborations considerate of localized needs as supported by each community combined with state and federal guidance with consideration given to some or all of the recommendations collected in this document will advance a more inclusive warning and alerting information flow as it evolves in each jurisdiction.

Additionally, WG3 believes life-saving messaging needs to be supported by proactive pre-event public information programs so recipients are aware of local resources as well as the individual and community capability and responsibility for preparing and responding to life-threatening situations.

## 2 Introduction

CSRIC V Working Group 3 was established to make recommendations for the CSRIC's consideration in three major areas related to the continued improvement and development of the Emergency Alert System (EAS) as a secure, effective alerting tool for the American public: (1) EAS Security; (2) the provision of EAS in languages other than English; and (3) the development of an operational handbook for individual broadcasters, cable service providers and other EAS Participants.

In order to address the relevant issues, a diverse team of subject matter experts including EAS were recruited to participate in the multilingual subgroup:

- Message Originators: FEMA; NWS; Other federal agencies (e.g. United States Geological Survey), State & Local Emergency Managers; State EAS Networks
- EAS Participants: Radio; TV; Cable TV; Satellite TV; Satellite Radio; Wireline Video/IPTV
- EAS Equipment Manufacturers
- State Emergency Communications Committee Chairs and Members
- EAS Experts and Consultants

CSRIC Working Group 3 is divided into three sub-groups:

- **EAS Security** – Recommend steps for assessing any barriers to the adoption of the CSRIC IV best practices, make recommendations on incentives, both regulatory and non-regulatory for affected stakeholders to adopt the best practices, and recommend methods by which other EAS stakeholders may gain assurance that the best practices are being implemented.
- **Multilingual EAS** – The Working Group will recommend best practices for the delivery of multilingual EAS and emergency information.

- **Updating the EAS Operating Handbook** – Update and modernize the EAS Handbook, which states in summary form the actions to be taken by personnel at EAS Participant facilities upon receipt of an EAN, tests, or State and Local Area alerts.

## 2.1 CSRIC Structure

Communications Security, Reliability, and Interoperability Council (CSRIC) V									
CSRIC V Steering Committee									
Chair(s): WG # 1	Chair(s): WG # 2	Chair(s): WG # 3	Chair(s): WG # 4	Chair(s): WG # 5	Chair(s): WG # 6	Chair(s): WG # 7	Chair(s): WG # 8	Chair(s): WG # 9	Chair(s): WG #10
Susan Sherwod	Francisco Sanchez	Steven Johnson	Kent Bressie Catherine Creese	Rod Rasmussen	Brian Scarpelli	Bill Boni Drew Morin	William Reidway	Brian Daly	John Kimmis
Jeff Cohen	Farrokh Khatibi	Kelly Williams	Jennifer Manner	Christopher Boyer Brian Allen	Joel Molinoff	Thomas Anderson			Danny McPherson
WG # 1:	WG # 2:	WG # 3:	WG # 4:	WG # 5:	WG # 6:	WG # 7:	WG # 8:	WG # 9	WG # 10
Evolving 911 Services	Emergency Alerting Platforms	Emergency Alert System	Communications Infrastructure Resiliency	Cyber-security Information Sharing	Secure Hardware & Software	Cyber-security Workforce	Priority Services	Wi-Fi Security	Legacy Systems and Services Risk Reduction

Table 1 - Working Group Structure

## 2.2 CSRIC V Working Group 3 Team Members

Working Group #3 members are listed below. EAS Multilingual Alerting Subgroup members are identified with an asterisk (\*).

Name	Company or Organization
Chair WG3 - Kelly Williams	National Association of Broadcasters
Chair WG3 – Steven Johnson	Johnson Telecom
Lillian McDonald *(Multilingual Co-Chair)	Twin Cities Public Television & Emergency, Community, Health and Outreach (ECHO)
Jim du Bois * (Multilingual Co-Chair)	Minnesota Broadcasters Association
Gary Timm	Wisconsin EAS Broadcast Chair, WI SECC
Adrienne Abbott-Gutierrez *	Nevada EAS Chair, NV SECC
Mark Annas *	Riverside (CA) Fire Department
John T. Archer *	SiriusXM
John E. Benedict	CenturyLink
Benjamin Brinitzer	iHeart Media and Society of Broadcast Engineers
Robert Bunge	NOAA NWS
Kay Chiodo*	Deaf Link, Inc.
Greg Cooke	FCC
Edward Czarnecki *	Monroe Electronics

Clay Freinwald	Washington State University, WA SECC
Daniel Geist	Cox Communications, Inc.
Suzanne Goucher	Maine Association of Broadcasters, Maine SECC
Neil Graves	SNR Systems
Ricardo Guerrero *	AT&T
Ryan Hedgpeth	DHS OEC
Craig Hodan *	NOAA NWS
Steven C. Johnson *	Johnson Telecom
Al Kenyon *	DHS FEMA
Jim Klas	Wisconsin Educational Communications Board
Wayne Luplow	LGE/Zenith Electronics
Brian Murray *	Houston Urban Area Security Initiative’s Emergency Public Information Work Group
Dan O’Callaghan	Verizon
Brian Olinger	Hubbard Radio
Jerry Parkins	Comcast
Harold Price *	Sage Alerting Systems, Inc.
Austin Randazzo	FCC
Richard Rudman	Broadcast Warning Working Group, CA SECC
Francisco Sanchez	Harris County Office of Homeland Security & Emergency Management
Bill Schully	DIRECT TV
Timothy Schott *	NOAA NWS
Andy Scott *	National Cable & Telecommunications Association
Gary A. Smith *	Cherry Creek Radio
Jeff Staigh *	Univision
Matthew Straeb	GSS/ALERT FM
Mike Talbert	Verizon
Leo Velazquez	AT&T
Larry Walke	National Association of Broadcasters
Herb White	NOAA NWS (contract support)
Stephen Woodbury *	Minnesota Broadcasters Association
Gregory Zwicker *	NOAA NWS

Table 2 - List of Working Group Members

## 3 Objective, Scope and Methodology

### 3.1 Objective

The CSRIC Multilingual EAS WG3 Subgroup was tasked to “recommend best practices for the delivery of multilingual EAS and emergency information.” Therefore, the Federal Communications Commission (FCC) invited recommendations from a coordinated workgroup process, enabled by CSRIC-V WG3, which appointed a subgroup to identify multilingual warning and alerting best practices collected from case studies, pilot-programs, or other attempts to reach English as a Second Language (ESL) populations efficiently with culturally contextual emergency messaging.

### 3.2 Scope

This document addresses the request for multilingual best practices by addressing the following scope:

*The Working Group will recommend best practices for the delivery of multilingual EAS and emergency information. The Working Group will pay particular attention to how communities determine their multilingual needs, and how individual broadcasters, cable service providers and other EAS Participants (including rural, smaller and less resourced EAS Participants) and their representative organizations address those needs. Areas of interest should include specific technical options ranging from translators on staff to state of the art translation software. The Working Group will keep in mind how these practices can be expanded to include other communities that require enhanced access such as those with disabilities and the functional-needs community.*

Members of the WG3 Multilingual EAS subgroup relied on input shared with us by stakeholders with experience or from case studies where jurisdictions are experimenting with the potential delivery of emergency information to increasingly diverse populations. Members of WG3 or other stakeholders include the following areas of expertise:

- Emergency Management
- EAS State Emergency Communications Committee (SECC) Chairs and Members
- Cultural and Community-Based agencies working with ESL Populations
- Radio and TV Broadcasters
- Cable TV Providers
- Satellite Radio Providers
- Satellite TV Providers
- Wireline/IPTV System Providers
- EAS Equipment Manufactures
- CAP Authoring Tool Vendors

- NOAA / NWS
- FEMA

Additionally, WG-3 Multilingual EAS subgroup members considered the following logistical and technical challenges regarding the development and distribution of multilingual messaging:

- CAP vs. Legacy EAS activations
- Human vs. Machine (automated or software) linguistic context and translations
- Pre-recorded vs. linguistically mapped vs. combined linguistic translations
- Site-based delivery of translated messaging vs. inherited and relayed delivery of translated messaging
- "Attended" vs. "Unattended" broadcast, cable and IPTV operation
- Automatic vs. Manual mode operation of EAS equipment
- Mixed use of part-time Automatic/part-time Manual operations of EAS equipment
- Decoder-only operations at Low Power broadcast stations
- Variations in EAS equipment operation
- Potential future technology and/or “information flow processes” changes currently on the horizon but not legally mandated for use (CAP, IPAWS, 3.0, etc.)
- Impacts that the cost of future technology improvements will have on EAS Participants and ultimately the public

### **3.3 Methodology**

The WG3 EAS Multilingual Subgroup met through weekly conference calls in May, June, July and August, 2016. A wide range of topics were discussed and available public data and case studies were reviewed, moderated and documented by co-chairs Lillian McDonald (Twin Cities PBS and Emergency, Community, Health, and Outreach [ECHO] Minnesota) and Jim du Bois (Minnesota Broadcasters Association). In addition to sharing experience and data for the compilation of this report, a glossary of terms is also provided to clarify acronyms used to clarify concepts (see Appendix).

## **4 Background**

The Federal Communications Commission (FCC) and Emergency Alert System (EAS) participants have been challenged to advance the EAS warning and alerts best practices to adapt to an increasingly diverse population and evolving technology so ESL communities receive, comprehend, and respond to life and property-saving messages during emergencies. After Action Reports (AAR) following natural disasters such as Katrina (2005) and California wildfires (2015) document the need to address public information inclusively by developing strategies to reach

ESL populations with educational and emergency messaging<sup>2</sup>. This is in addition to U.S. citizens with little or no understanding of the English language.

In the Report and Order in EB Docket No. 04-296<sup>3</sup> released on March 30, 2016, the Commission reaffirmed its “commitment to promoting the delivery of Emergency Alert System alerts to as wide an audience as technically feasible, including those who communicate in a language other than English or may have a limited understanding of the English language.” The FCC is requiring state EAS plans to include information about how EAS participants may provide alert messages to non-English speakers. EAS participants who provide alerts in languages other than English must provide information on their use of non-English alerts to their respective State Emergency Communications Committees (SECC). The Commission has made it clear that providing messages in languages other than English is strictly voluntary. The EAS Multilingual Subgroup is charged with recommending best practices for the dissemination of emergency messages in non-English languages according to the needs of local emergency managers.

## 5 Analysis, Findings and Recommendations

### 5.1 Analysis

#### 5.1.1 Need

The expertise of the committee did not extend to the challenge of determining need or scope. The fact that there is a need is obvious however what’s unclear is how to determine breadth, depth, and scope. While one source gives the number of immigrants living in the U.S. in 2014 as 42.2 million, the raw figure does not provide insight into how many immigrants speak little or no English. In fact, the number of immigrants who live in homes where only English is spoken, or where English is spoken very well is 49.1% overall, and 72.9% for persons younger than 18<sup>4</sup>.

#### 5.1.2 Technical issues

Today’s technology allows delivery of alerting authority originated multilingual messages to the public via IPAWS CAP. A capability for multilingual message delivery through use of multiple block elements in a Common Alerting Protocol (CAP) message was incorporated into the standards that define CAP as it is used in the FCC rules:

- Organization for the Advancement of Structured Information Standards (OASIS) standard *Common Alerting Protocol Version 1.2*<sup>5</sup>
- The FEMA initiated IPAWS profile, *Common Alerting Protocol, v. 1.2 USA Integrated*

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<sup>2</sup> WG3 is aware that organizations representing community based groups, including the MMTC, have petitioned the commission and other parties to consider the special needs of multilingual communities in the alerting process.

<sup>3</sup> [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-16-32A1\\_Red.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-16-32A1_Red.pdf)

<sup>4</sup> Pew Research Center. “Statistical Portrait of the Foreign-Born Population in the United States”, April 19, 2016. <http://www.pewhispanic.org/2016/04/19/statistical-portrait-of-the-foreign-born-population-in-the-united-states/>

<sup>5</sup> <https://docs.oasis-open.org/emergency/cap/v1.2/pr03/CAP-v1.2-PR03.pdf>

*Public Alert and Warning System Profile Version 1.0*<sup>6</sup>

- and Section 3.7 of the EAS CAP Industry Group (ECIG) *Recommendations for a CAP EAS Implementation Guide*<sup>7</sup>

Real-world functional capability of this multilingual message delivery capability has been demonstrated through the IPAWS/EAS Regional testing effort, and will again be present in the national NPT scheduled for September 28, 2016.

### 5.1.3 Regulatory issues

The FCC has introduced guidelines for delivering messages “beyond English” supporting multilingual EAS messaging including FCC Part 11, the FEMA IPAWS CAP profile, and the EAS-CAP Industry Guidelines. Accordingly, the FCC has noted in its EAS rules:

- §§ 11.55(a)(4) and 11.55(d)(2): “EAS Participants providing foreign language programming should transmit all EAS announcements in the same language as the primary language of the EAS Participant.”

In addition to abiding to FCC EAS guidelines, some emergency alert originators and/or EAS participants may choose to voluntarily provide emergency alerts in English and additional languages of which they are capable of delivering, as needed.

### 5.1.4 Use Case: Minnesota IPAWS/Multilingual Project

A multilingual EAS project in the state of Minnesota provides a recent example of how both alert originators and EAS Participants can voluntarily collaborate to serve non-English speaking populations in their area. The pilot project successfully demonstrated a CAP-based alert with four languages: Spanish, Hmong, Somali, and English. Important to its success was the accompanying community engagement campaign, designed to ensure that the targeted populations understand how to access emergency information and act upon it.<sup>8</sup>

## 5.2 Findings

The committee separated its discussion into three parts, message origination, message transport, and message delivery to the audience. The committee made the following observations:

### Message origination

- Message origination tools, that is, the ability to encode CAP messages with multiple languages, including text and audio, exist. The problem is in acquiring the multilingual content. WG3

<sup>6</sup> <http://docs.oasis-open.org/emergency/cap/v1.2/ipaws-profile/v1.0/cap-v1.2-ipaws-profile-v1.0.pdf>

<sup>7</sup> [http://www.eas-cap.org/ECIG-CAP-to-EAS\\_Implementation\\_Guide-V1-0.pdf](http://www.eas-cap.org/ECIG-CAP-to-EAS_Implementation_Guide-V1-0.pdf)

<sup>8</sup> Additional project information can be found at Ellen Shelton and Thalia Hall, “Real-Time Warnings and Alerts for Non-English Speaking Communities: Evaluation of Best Practices in Community Outreach and Engagement in the Minnesota Multi-Language Messaging Initiative, July 2015.

<https://www.wilder.org/Wilder-Research/Publications/Studies/ECHO%20Minnesota%20-%20Minnesota%20Multi-Language%20Messaging%20Initiative/Real-Time%20Warnings%20and%20Alerts%20for%20Non-English%20Speaking%20Communities.pdf>

finds, based on daily experience with the CAP system, that message origination, even in English, is still a work in progress. Providing text, properly formatted for a Radio/TV/Screen audience (with careful use of abbreviations and jargon) requires training. Adding the additional complexity of providing translations to alternate languages adds additional barriers to adoption of multilingual alerting.

- The selection of which communities to serve, who is responsible, and who pays, is a very local issue. The greatest possible latitude should be given to originators in how this is accomplished. The FCC can have little direct control over how or if this occurs. The commission’s role, at this early stage of adoption, would be to assure that the rules allow for a variety of presentation methods, and in particular, to continue to support the concept of allowing the use of CAP to providing alternate languages, but to allow the presentation of those languages to take place outside of the strict EAS format of header, audio, and end of message, and to use the header, audio, end of message, then alternate language(s) concept.
- The EAS Participants, in their role as a conduit between originators and the audience should be encouraged, but not required, to participate in local efforts to use multilingual text and audio when available.
- The cost of always-available (24-7-365) human translation, on a station by station basis, is a staffing model and logistical expense that are not affordable or implementable at this time for individual EAS Originators. Additionally, the technology for statistical machine translation remains under development making it problematic as an emergency application at this time. The use of pre-translated, pre-recorded messages based on event type is an alternative that has been used in some cases with customized messaging. However, the committee did note the existence of message origination tools in initial deployment that provide ability to transcode EAS messages into multiple languages, as well as other tools with the capability to deliver American Sign Language (ASL) or multilingual content in alternative delivery methods such as the internet or social media as separate ventures from EAS origination. WG3 is also aware that the automated NOAA Weather Radio (NWR) programming system supports Spanish language broadcasting and the delivery of EAS information: Five Weather Forecast Offices (via seven transmitters) currently use Spanish language as the primary broadcast in areas with large Spanish-speaking populations and other Offices can choose to add Spanish language information, to supplement the delivery of information on English-language NWR stations.

#### Transport Technology

- The Common Alerting Protocol (CAP), where available, provides a sufficient mechanism for transporting multilingual content from alert originators to EAS participants.
- FEMA IPAWS can pass multilingual CAP messages from alert originators to EAS participants. FEMA has originated several messages, including recent regional “National Periodic Test” alerts, where alerts are available in English and Spanish versions.
- Other originators at the state and local level have conducted multilingual tests through the IPAWS system, including a four-language test in Minnesota.

### Delivery to the audience

- Multilingual support, in particular the delivery of text and provided audio, is a capability of much of the CAP/EAS equipment in the field. When alternate language text and audio is provided, the role of the CAP/EAS device is simpler – select the proper text and audio file, and display/play. The current IPAWS implementation of CAP supports the use of a limited set of UTF-8 characters in text elements. However, display of particular languages is limited to the character sets supported by the display devices.
- Use of Text to Speech (TTS) with multiple languages is supported by some devices, and with some languages. Users must typically load the alternate languages they intend to use into the device – not all languages/dialects are available on all devices, and some languages aren't available on any device.
- Some CAP/EAS equipment permits the EAS participant to replace the incoming audio with other audio, possibly in a different language, allowing for local replacement of one language with another.
- Multilingual support using universal intermediary devices (CAP converters) is problematic because the EAS device controls the output but receives only EAS data from the converter. There is no multilingual support in the legacy EAS protocol so a CAP converter/Legacy EAS pair does not have the ability to carry more than one language.
- Less-resourced, or even adequately resourced, EAS participants are in general unable to bear the cost of human language translation services in the context of CAP/EAS. Participants should be encouraged, but not required, to relay alerts in the languages of their choosing, based on their audience, when the desired languages are available. If a required alert is not available in their desired alternate language, the English version must be played. If the Participant is able to provide the emergency information in an alternate language or format, but is unable to do so within the context of EAS (for technological or infrastructure reasons) they should be encouraged to provide the information as part of their regular broadcast.

### Trends

FEMA reports increasing numbers of emergency management organizations are signing up for access to the IPAWS system. Some are beginning to use CAP message generation tools. While some of the origination software systems include multilingual message preparation, FEMA does not currently track the number of originators that use that capability. For its part, FEMA has used two languages in recent regional National Periodic Test messages, providing both English and Spanish text and audio.

### 5.3 Recommendations

Many states are facing challenges with reaching ESL populations; demographics in the United States indicate continued growth in ESL residents. More technology is becoming available to accommodate ESL and disability alert and warning recipients.

The technology to transport and deliver multilingual messages, though evolving, exists today. The FCC, FEMA, and EAS Participants need to perform additional outreach, both outward toward the community and alert originators, and inward, to assure EAS Participants that there are low cost and low effort ways to accomplish multilingual EAS alert delivery.

However, technology is only a small part of the problem. The amount of actual experience from alert origination and alert delivery is growing, but is still very small. Based on current activity, WG3 notes that implementations of multilingual EAS messaging is dependent on resources and collaboration as prioritized by each community. With this as a general backdrop, WG-3 offers the following recommendations:

- WG3's primary recommendation is that the Commission refrain from creating additional regulations pertaining to multilingual alerting.
- The use of non-English (or multi-lingual) alerting should remain voluntary for EAS Originators and EAS Participants.
- The Commission remains technologically neutral and continues to allow, but not require, experimentation and development by EAS stakeholders on all types of multilingual functionality with collaborative leadership determined by local communities.
- The multilingual challenge cannot and need not be solved in a single, initial implementation.
- To facilitate multilingual emergency messaging for ESL populations, consideration could be given to a community-based approach with consideration of the current ESL population in each jurisdiction by verifying demographics from authoritative sources.
- Government partners should continue to make state and local emergency managers aware of CAP technology and its capabilities.
- Alert originators should leverage CAP for multilingual support.
- The FCC should allow, but not require, CAP devices to immediately survey IPAWS upon receipt of a broadcast EAS message, in order to determine whether a matching CAP message exists with ESL content, and use that CAP message instead. Doing so, would create negligible delay, with the benefit of more informative messaging as a broadcast EAS message is received first.

- The FCC and FEMA should collaborate on a process to keep alerting originators and government (content creators) partners informed of multilingual capabilities in the existing EAS system.
- The FCC should use the tools and capabilities that exist to facilitate the delivery of multilingual alerts on a voluntary basis, noting that the current EAS system has the capability to release multilingual messaging and that these services continue to be voluntary.

## **6 Conclusions**

Though it is premature to promulgate a set of Best Practices because work to date remains in early stage, WG3 concludes that CAP does offer sufficient multilingual transport capabilities and should be leveraged to provide multilingual EAS. Further, IPAWS provides sufficient support for multilingual CAP to be used as a base for multilingual EAS. Participation in multilingual alerting should remain on a voluntary basis for EAS Participants, and the current Part 11 rules are sufficient to allow multilingual EAS to grow.

## Appendix: Definitions of Terms

*Definitions of the following terms are meant as guidance for SECCs in applying the use of these terms in the drafting of State EAS Plans, in order to gain uniformity in the understanding and application of such terms across all State EAS Plans. The inclusion of definitions of these terms in this report should not be construed as a recommendation for their inclusion in the FCC EAS Part 11 rules. These definitions are presented here solely as a guideline for SECC use.*

Activate	<i>(verb)</i> Describes the process of originating the transmission of the EAS header codes, attention signal, emergency message and EOM code that also complies with the visual message requirements of 47 CFR. § 79.2(a)(2).
Authority	<i>(noun)</i> Describes the source of responsibility and the right to activate or request activation of an emergency alert on the relay network, utilizing the traditional or legacy EAS dissemination or the Common Alerting Protocol. The source of authority for EAS resides with federal, state, county and local emergency management and public safety officials as outlined in EAS plans.
Capability	<i>(noun)</i> An attribute describing the technical ability of an entity, possessing the equipment to activate code and voice a legacy EAS or CAP message, upon the request of an authorized entity, on the relay network. This ability may reside with a government agency, a CAP vendor who provides this service or a broadcast entity. This relationship structure is outlined in the EAS plan.
Closed Circuit Test	<i>(noun)</i> Tests that do not reach the public, but do allow for reception by EAS participants for logging and evaluation.
Gatekeeper	<i>(noun)</i> The entity, as identified in the EAS plan, having ultimate authority to request activation (e.g. state/local emergency management, state police and local public safety) and the responsibility to insure that the requested activations meet the standards of acceptability as to not saturate the system with unwarranted activations.
Initiate	<i>(verb)</i> To begin an action that results in activation for legacy EAS or CAP messages, by or at the request of federal, state, county and local emergency management and public safety officials as outlined in EAS plans.
Multi-Lingual	<i>(noun)</i> An attribute describing the ability to use more than two languages for communication, or (of a thing) written or spoken in more than two different languages.
Multi-Platform	<i>(noun)</i> The secure delivery of media, information and applications to any device, regardless of transport, distribution system or user interface, providing the consumer with seamless, integrated and interactive access and management of communication services.

Originator	<i>(noun)</i> Refers to the authorized party who requests the activation of the legacy EAS or CAP message. It specifically refers to the ORG code outlined in 47 C.F.R. § 11.31.
Relay Network	<i>(noun)</i> Describes the links and paths from warning origination points to EAS Participants for legacy EAS and CAP messages.
Response	<i>(verb)</i> A descriptive for the actions an emergency management asset brings to bear to manage an emergency to a quick and successful outcome.
Translation	<i>(verb)</i> The act or process of translating something into a different language. The act or process of changing something from one form to another.

Subject: Upcoming changes to the State Plan

Amendment of the Emergency Alert System – Dealing with Multi-Lingual EAS reporting

<https://www.gpo.gov/fdsys/pkg/FR-2016-05-06/pdf/2016-09059.pdf>

See the attached .pdf with the highlighted areas for more detail.

Amendment of Part 11 of the Commission’s Rules Regarding the Emergency Alert System (PS Docket No. 15-94) and Wireless Emergency Alerts (PS Docket No. 15-91)

Reference to pages in the document are to the following link unless noted in the foot note section;

[https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-16-5A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-16-5A1.pdf)

Although the FCC is still going over comments on this EAS NPRM the following items can be addressed with certainty that they will be items that will be included in the next EAS and WEA Report and Order’s that are anticipated to be public this winter. Each area has a workgroup assigned some several workgroups working together may be required (i.e. Infrastructure comes up with the best practice and Policy tweaks to make it work as best as possible).

(Starts out / ends up with)

### **Infrastructure / Policy**

For the next state plan have in plain language the definitions for the following: Commission’s rules define EAS Participants as (specifically who are they (EXAMPLES of for reference) and “an estimate” of how many exist within Minnesota) (See page 2 and Appendix B sub-paragraph c 7 through c 38 for reference)

1. radio broadcast stations, including
  - a. AM,
  - b. FM, and
  - c. low-power FM stations;
  - d. digital audio broadcasting stations, including digital AM, FM, and
  - e. low-power FM stations;
2. Class A television and low-power TV stations; television broadcast stations, including digital Class A and digital low-power TV stations;
3. cable systems;

4. wireline video systems;
5. wireless cable systems;
6. direct broadcast satellite service providers; and
7. digital audio radio service providers.

### **Infrastructure**

Further define the requirement for the CAP interface for Presidential Alerts (see pages 3 and 4)

### **Infrastructure**

Educate committee on how the Alert Gateway interface works and in simple language / diagrams how the message makes it way to the public (See Page 8 – figure 3 for an example)

### **Infrastructure / Policy**

Get someone with Social Media experience to further illustrate crowd sourcing, automatic translation, hash tagging and other items to get the first responders up to speed on this (See Page 9 foot notes 36 through 39)

### **Infrastructure / Policy**

State EAS deployment and best practices on the delivery of a Presidential Alert (See Page 23 Paragraph 40)

### **Infrastructure / Policy**

Bring up for discussion “Expanded Emergency Alerting” (See Page 24 and 25 Paragraph 43 through 45) lay out what value each of these methods would add (if any) or potentially conflict with current state laws)

### **Infrastructure**

Prepare for revision of how we current have our monitoring assignments set forth in the current plan compared to the recommendation set forth in the WORKING GROUP 3 Emergency

Alert System, Final Report, CSRIC WG3 State EAS Plans Subcommittee Report<sup>1</sup> Page 25 of this report for the example.

### **Infrastructure / Policy**

Testing Procedures – further define what requirements are mandatory and what makes common sense to do. (See Page 28)

Required testing;

NPT – National Periodic Test (new) with the “000000” code

RMT – Required Monthly Test; Coordinated as to simulate a national activation, expanding the origination of to both public safety, PEP station, and State Primary to insure that the “over the air - daisy chain” is functioning properly.

Will have to wait to see what rule changes come about on WEA testing weather it will stay at the federal level or states will be allowed?

Weekly Testing;

EAS Participants – still a requirement to do themselves.

Public Safety – not required by rules but good test that their process works and makes it to the monitoring stations in their area (EAS Participants receive as log only and does not go out over the participant’s stream)

Live Code testing requirements – (See Page 30 through 32)

### **Public Information**

Outreach PSA’s and announcements (See Page 33)

### **Infrastructure / Policy**

Cyber Security Recommendations as pertaining to the EAS Participants monitoring equipment. (See Page 29 Paragraph 58)

Securing EAS (see Page 44 through 54) developing best practice guidance for the following;

Patch Management

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<sup>1</sup> [https://transition.fcc.gov/pshs/advisory/csric4/CSRIC\\_IV\\_WG3\\_EAS\\_Plans\\_Final\\_Report\\_032514.pdf](https://transition.fcc.gov/pshs/advisory/csric4/CSRIC_IV_WG3_EAS_Plans_Final_Report_032514.pdf)

Segmentation

False Alert Reporting

Alert Authentication (from an over the air source i.e. public safety radio frequency)

Preserving EAS Defense through Planned Diversity (See Pages 68 and 69)



## **AWARN: A Powerful New Companion to EAS Webinar Event – Tuesday September 13, 2016, 2 – 3pm ET**

[Join WebEx meeting](#) | Meeting number (access code): 730 060 853  
Join by phone: **1-855-797-9480** US Toll Free | **+1-415-655-0045** US Toll  
Can't join the meeting? [Contact support.](#)

The Advanced Warning and Response Network (AWARN) will provide broadcasters with a powerful new tool for distributing geo-targeted rich-media alerts to enabled fixed, mobile, and hand-held devices. At the invitation of NASBA, members of the AWARN Alliance will conduct an exclusive webinar for NASBA members, stations, and SECC's. This one-hour webinar will provide a one-stop overview of AWARN's advanced alerting capability based on the new ATSC 3.0 standard, also known as Next Generation Television.

### **Agenda**

**Welcome** – Suzanne Goucher, President & CEO, Maine Association of Broadcasters

**AWARN Overview** – John Lawson, Executive Director, AWARN Alliance

- ATSC 3.0 video (3 minutes)
- AWARN video (1.65 minutes)

**ATSC 3.0 and AWARN** – Jay Adrick, Technology Advisor, Gates Air

**AWARN and Legacy EAS** – Ed Czarnecki, Senior Director – Strategy & Global Affairs, Monroe Electronics

**AWARN Alliance and the Broadcaster Agenda** – John Lawson

**Q&A Session**

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### **Background**

The Advanced Warning and Response Network (AWARN) will provide broadcasters with a powerful and *unique* new tool for distributing geo-targeted rich-media alerts simultaneously to

an unlimited number of enabled fixed, mobile, and hand-held devices, indoors or outdoors. AWARN will utilize existing television broadcasting spectrum and infrastructure and leverage Advanced Emergency Alerting capabilities that are designed into the Physical Layer of the IP-based Next Generation Television broadcasting standard (ATSC 3.0). AWARN alerting will far exceed any other warning and disaster recovery communications capabilities available to the American public today.

Emergency information remains a core public service of broadcasters. AWARN will bring features that make emergency information – including EAS – more attractive for television broadcasters and more useful for their audiences. AWARN will enable NASBA and their station members to extend their vital public service mission for a mobile, connected 21st Century America.

AWARN will open new service and product opportunities for television stations. AWARN will not only enhance stations' presence in their communities by helping safeguard lives and property, but this advanced public service will also strengthen broadcasting's regulatory and policy support. AWARN also will help promote the reception of broadcast signals on the widest range of consumer devices, including PC's, tablets, and smart phones.

Current members of the AWARN Alliance are Airwavz.TV, Sinclair Broadcasting Group, Pearl TV, Capitol Broadcasting Company/WRAL, Digital Alert Systems/Monroe Electronics, Gates Air, LG Electronics/Zenith, ONE Media, National Association of Broadcasters, PBS, and Triveni Digital.