

12 CONSIDERATIONS FOR ACCESSIBLE EMERGENCY COMMUNICATIONS

Rehabilitation Engineering Research Center for Wireless Technologies
Atlanta, Georgia, USA

There are 56 million people in America with a disability. Frequently overlooked in emergencies are those with access and functional needs. This document provides key considerations to help guide planning for this population.

TECHNOLOGY CONSIDERATIONS:

1. Develop or provide accessible formats to disseminate alerts and information.

In order for alerts and other emergency information to effectively reach all people it is essential that they be disseminated in a variety of formats (text, audio, video, image) utilizing multiple methods (broadcast, wireless, Internet, social media, apps) to a variety of devices (cell phones, tablet, TVs, radios).

2. Manufacture/procure cost effective, universally designed (UD) and customizable devices to receive emergency communications (EC).

UD and/or customizable communications technologies can reduce the need for high-cost assistive devices. Accessibility solutions should be built into devices so the user is not required to purchase aftermarket software and/or hardware to achieve accessibility.

3. Procure and utilize software/hardware solutions and interoperable networks for (1) receiving alert feeds from multiple sources and (2) transitioning to a next generation 9-1-1 system.

Emergency alerts can be received as text messages, video, voicemails and/or e-mails in accessible formats; emergency managers should adopt wireless emergency alerts (WEAs) as part of their communications plan; Public Safety Answering Points (PSAPs) should upgrade call centers to receive text and video calls for assistance.

POLICY CONSIDERATIONS:

4. Ensure that EC rulemakings consider access and functional needs.

Before deployment of EC systems the FCC releases rulemaking proceedings seeking the valuable insights and comments of stakeholders. Participation in FCC comment periods will facilitate inclusion of stakeholders such as people with disabilities and those with access and functional needs.

5. Ensure responsible federal agencies enforce laws safeguarding people with disabilities.

The FCC and Department of Justice enforcement actions help to ensure industry and government compliance with laws governing access to emergency services and information.

6. Develop EC related policymaking and regulatory initiatives.

The National Council on Disability, the US Access Board, DHS Office of Disability Integration and Coordination and others are a model for organizations that have not yet considered how to address the access and functional needs of people during emergencies.

TRAINING & EDUCATION CONSIDERATIONS:

7. Integrate people with disabilities into emergency planning, exercises and simulations.

8. Educate emergency/public safety personnel, and relevant community entities on how to provide communications to people with different disabilities in emergency situations.

9. Train appropriate emergency personnel in use of accessible communications technologies for emergency alerting, person-to-person communications, and Next Generation 9-1-1.

10. Provide emergency/public safety personnel, and relevant community entities with sensitivity training on the diversity within the population of people with disabilities.

11. Empower end-users by providing information and resources on accessible emergency alert and information options.

12. Convene stakeholders for workshops on inclusive emergency preparedness/communications.

The following is a selected list of web sites with topic specific information:

TECHNOLOGY CONSIDERATIONS:

ATIS – Interim Non-voice Emergency Services Incubator (INES): <http://www.atis.org/ines/>

National Emergency Number Association: <http://www.nena.org/?page=Accessibility>

Wireless RERC Research Brief: Technology Use by People with Hearing and Speech Loss for Communicating with Emergency Response Services: <http://www.wirelessrerc.gatech.edu/content/publications/2013-research-brief-number-01-technology-use-people-hearing-and-speech-loss#sthash.hKcPSf4p.dpuf>

APCO White Paper Text Messages in a PSAP Environment:
http://transition.fcc.gov/pshs/911/Text911/APCO_Emerging_Tech_Text_911.pdf

Integrated Public Alert and Warning System (IPAWS): <http://www.fema.gov/integrated-public-alert-warning-system>

International Journal of Emergency Management (IJEM), Special Issue on Emergency Communications and Alerting:
<http://www.inderscience.com/browse/index.php?journalID=8&year=2010&vol=7&issue=1>

The Carl and Ruth Shapiro Family National Center for Accessible Media:

Access to Emergency Alerts for People with Disabilities: <http://ncam.wgbh.org/alerts/> and www.incident.com/access

Access to Locally Televised On-Screen Information: <http://ncam.wgbh.org/onscreen/>

Captioning Solutions for Handheld Media and Mobile Devices: <http://ncam.wgbh.org/mm>

Wireless RERC Research Brief - FM Radio and RBDS-Based Emergency Alerting: Possibilities and Potholes:
<http://www.wirelessrerc.gatech.edu/content/newsroom/2013-research-brief-number-04-fm-radio-and-rbds-based-emergency-alerting#sthash.h5LLSW6j.dpuf>

POLICY CONSIDERATIONS:

NCD Report - Effective Communications for People with Disabilities: Before, During and After Emergencies:
<http://www.ncd.gov/publications/2014/05272014/>

FEMA, Accommodating People with Disabilities in Disasters: A Reference Guide to Federal Law:
<http://www.fema.gov/news/newsrelease.fema?id=38990>

Scope of the Twenty-First Century Communications and Video Accessibility Act of 2010 Emergency Information Rules: https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-45A1.pdf

FCC Interactive Webpage with Best Practices for Implementing Text-to-911: <http://www.fcc.gov/encyclopedia/best-practices-implementing-text-911>

Wireless Emergency Alert (WEA) System Rules Adopted by the FCC: <http://www.fcc.gov/pshs/services/cmas.html>

FCC Second Report & Order Regarding EAS: http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-07-109A1.doc

TRAINING & EDUCATION CONSIDERATIONS:

The Center for an Accessible Society’s Disaster Mitigation for People with Disabilities:
<http://www.accessiblesociety.org/topics/independentliving/disasterprep.htm>

Community Emergency Preparedness Information Network (CEPIN) at TDI: <http://www.cepintdi.org/>

Office of Disability Integration and Coordination (ODIC): <http://www.fema.gov/about/odic/>

IPAWS Alerting Authority Online Training: <http://training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=IS-247.a>

Apps for Enhancing Wireless Emergency Alerts (WEA) Access: <http://www.cacp.gatech.edu/handouts/apps4wea.pdf>

Need to Know Information about Wireless Emergency Alerts (WEA): <http://www.cacp.gatech.edu/handouts/WEA.pdf>

Common Misconceptions Regarding People who are Deaf & Rely on American Sign Language:
<http://www.cacp.gatech.edu/handouts/asl.pdf>



Contact information:
www.wirelessrerc.org
Phone: 404-894-8297
E-mail: Salimah@cacp.gatech.edu