Cell Broadcast Technology for Public Alerts & Warning: The Central Wisconsin Model

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What is Cell Broadcast? (SMS-CB)

Technology
● Point to Multi-Point (Cell Broadcast)
● Delivers short text message to unlimited number of cellular phones
● Geo-targeted to any desired area

Delivery
● Phone rings with special ring tone to announce message
● Message is displayed immediately -or-
● Message is placed in phone’s inbox

Database-Free
● Phone number is not used for message delivery - Protection!!
● No subscriber database required - Privacy!!
● Area visitors also receive alerts - Penetration!!
“Since 2006, CellCast Technologies has enabled us to deliver vital emergency and life-saving information to our subscribers.

We are proud to be the first wireless carrier in the nation to provide the benefits of Cell Broadcast messaging to our subscribers.”

Greg Selig, Sr. Director - Operations and Engineering
For Wireless Carriers

Cell Broadcasting requires:

• No Additional Spectrum or Bandwidth
• No Hardware / Equipment Changes
• In some cases, the CB software functionality needs to be enabled in the carrier’s Base Station Controller
• In most cases, the functionality is bundled in the switch
• A Cell Broadcast Center to route CAP messages from Emergency Managers and Law Enforcement
• The Aggregator authenticates and prioritizes messages

CellCast designed its system to serve EM & carrier needs
Emergency Applications of Point To Multi-Point

Message Origination

Front End

Government / Public Safety
Emergency Managers

Aggregator/Broker

Middleware

Trust Protocol System™

Authenticate & Prioritize

Reporting and delivery

Aggregator/Gateway Broker™

CAP v1.2

Back End

Carriers

Emergency Broadcast Channels 900 series

Non Cell Broadcast Delivery: SMS Text, fax, landline, email, website, Cell phone call, siren, billboards

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Helping Emergency Managers

Cell Broadcasting

- Offers a new paradigm for mass warning
- Scalable geo-targeted messaging to reach millions
- Delivers instant real time communications
- Provides first responders their own “cell channel”
- Protects against spamming, hacking and spoofing
- Does not overload the carrier network systems
- Has not failed in any operational or test scenarios
- Technology upgraded and ready for LTE, 3G and 4G
First Responder Applications

Closed User Groups

- Secure Channel for designated officials
- Emergency Managers
- Special Agencies
- Law Enforcement
- Border Protection
- Port Security
EM Approval Milestones

- Demonstrated *Alert and Warning Interoperability for CMAS* at OASIS & DHS Interoperability Demo at the NIEM Training Event

- Selected by the *DHS Science & Technology* for the Digital Alert and Warning Systems (DAWS) technology demonstrations

- Registered participant in the *FEMA DM-OPEN* (Disaster Management: Open Platform for Emergency Networks)

- Evaluated by *NIMS STEP* -- the National Incident Management System Supporting Technology Evaluation Program

- Operational on *NOAA National Weather Service HazCollect* - the All-Hazards Emergency Message Collection System

- Adopted usage of *OASIS* Open Standards including *CAP v1.2*
Upcoming Presentations

CellCast Technologies will attend:

- IAEM Expo in Orlando, Nov 2 – 4
- RTG – RICA Conference, Vegas, Nov 18 – 19
- NTCA in San Antonio, Jan 14 – 15
- Technologies for Critical Incident Preparedness in Philadelphia, Feb 2 – 4
Contact Us

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• CellCast Aggregator Gateway™ Broker

• EAGLE Alerts™
(Emergency Alerts for Government and Law Enforcement)