

Comtech Trusted Alerting System

The Company

Comtech provides comprehensive location and messaging solutions supporting mobile network operators, enterprises, and end-consumers globally. The company is actively involved in Wireless Emergency Alert (WEA) standards working groups and is an established WEA provider with multiple mobile carriers. Its WEA solution has been tested and certified by the U.S. Federal Emergency Management Agency (FEMA).

The Challenge

Meeting government mandates and deploying a Commercial Mobile Service Provider (CMSP) Gateway can be extremely challenging. Since WEA is a mission critical application, emergency alerts need to be delivered to the public over the cellular networks in a matter of seconds and without affecting on-going services. Extreme threats to lives and properties such as the 9/11 attack, tornadoes, and earthquakes are a few examples that require emergency alerts to be disseminated to the public quickly.

In response to these needs, the U.S. enacted the legislation known as the Safe Port Act to allow for the creation of WEA service. As a result, the Integrated Public Alerting and Warning System (IPAWS) architecture was developed, and the first WEA service went live in 2012. In 2014, Canada also adopted the technology, developed, and deployed the Canadian version of WEA called Wireless Public Alert Service (WPAS) in April 2018. WEA and WPAS are geo-targeted alerting systems which result in delivering alerts to a targeted area under threat only. Using cell broadcast technology, anyone with the WEA or WPAS – enabled device would be able to receive the alerts if they are situated within the targeted area during the time when the alerts are still active.

Comtech's Approach

The Comtech Trusted Alerting System (CTAS) provides an effective way for operators and public safety officials to send emergency alerts to the public quickly based on cell broadcast technology. Using the cell broadcast technology avoids network congestion, which results in no disruption to text, calls, or data sessions.





The Solution

The Comtech Trusted Alerting System (CTAS) provides a CMSP gateway and Cell Broadcast Center (CBC) for WEA service. First deployed in 2012, Comtech's solution platform is compliant to the standards developed in the U.S. and can be adapted as



needed for each country, region and operator. As a member of the Telecommunications Industry Association (TIA) and Alliance for Telecommunications Industry Solutions (ATIS) standards bodies, Comtech has been actively involved in WEA-related standards working sessions since January 2008. Customers benefit from our field hardened Dynamic Cloud Platform (DCP) supporting emergency alert and wireless public safety, which is engineered for seamless integration between carriers and the Federal Alert Gateway.

Customer Benefits

- DCP cloud-native platform allows applications to share the same resource reducing CAPEX, OPEX and implementation costs
- Unique capabilities
 - Comprehensive GUI based test tool to test each RAN element
 - Comprehensive Logging/Reporting Tool Ready for FCC/FEMA Eventual Audit
 - Consolidated Alert Report per Alert via email or GUI
 - Automated processing of cell site data changes
 - Commercial cell broadcast capability for monetization
- High availability, 99.999% up time
- Full standard interface compliance
- Supports all RAN types

- Enterprise and carrier grade
- Flexible deployment, operations, and business models as per the providers' requirements
- Robust security
- Easy deployment for Tier-1, Tier-2, and Tier-3 mobile operators
- In-network or hosted in modern data centers
- 24x7x365 operational support
- Advanced geo-targeting
 - Precise geo-targeting with sub-cell shapebased (polygon, circle) targeting based on RF-coverage data shapefiles
 - Cell coverage and impacted alert target area viewing

About Us

Comtech Telecommunications Corp. is a leading global technology company providing terrestrial and wireless network solutions, next-generation 9-1-1 emergency services, satellite and space communications technologies, and cloud native solutions to commercial and government customers around the world. Our unique culture of innovation and employee empowerment unleashes a relentless passion for customer success. With multiple facilities located in technology corridors throughout the United States and the world, Comtech leverages its global presence, technology leadership and decades of experience to create the world's most innovative communications solutions.

Contact Us and Schedule a Demo

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