



DIRECTOR'S STATEMENT

Title:	Emergency Mobile Alert Device Standards
Date:	7 December 2017

Purpose

1. The purpose of this Statement is to define desired mobile device standards for the support of Cell Broadcast for emergency alerting in New Zealand. This is known as Emergency Mobile Alert (EMA) in New Zealand.

Audience

2. This Statement is intended for mobile network operators, virtual mobile network operators, suppliers of mobile devices to the New Zealand market and any related Original Equipment Manufacturers, distributors, sales and support organisations.

Objective

3. The objective of EMA is to enable government agencies to effectively warn at-risk communities of critical adverse events that are threats to life, health and property.
4. To achieve this objective, all suppliers of mobile devices marketed in New Zealand need to enable Cell Broadcast on new and supported mobile devices in New Zealand based on the standards defined in this Statement.

Standards

5. The Ministry of Civil Defence and Emergency Management (MCDEM) standards are based on the United States Commercial Mobile Alerting System (CMAS) standard and the following relevant implementation standards:
 - 3GPP – Third Generation Partnership Programme <http://www.3gpp.org>
 - 3GPP TS 23.041: Technical realization of Cell Broadcast Service (CBS)
 - 3GPP TS 44.012: Short Message Service Cell Broadcast (SMSCB) support on the mobile radio interface
 - ATIS – Alliance for Telecommunications Industry Solutions <http://www.atis.org> and TIA – Telecommunications Industry Association <http://www.tiaonline.org>
 - ATIS-TIA-J-STSD-100 Joint ATIS/TIA CMAS Mobile Device Behaviour Specification
6. The above standards are used to define EMA, the New Zealand implementation of Cell Broadcast, with modifications to specific elements as defined below:

Element	New Zealand Modification	Rationale
Alert Level Names – “Presidential Alert”	Rename “ <i>Presidential Alert</i> ” to “ <i>Emergency Alert</i> ”. This includes the banner and any other references (e.g. if it is shown in the Settings Menu) for channel 4370.	New Zealand does not have a president, so using this alert level name would be confusing to the public.
Alert Length	The maximum length of alerts will be 10 pages of 93 English characters per page.	The existing CMAS standard includes backwards compatibility for 2G (which has a lower character limit). Only 3G and later will be supported in New Zealand. 3GPP supports 15 pages but testing has proven that performance is better on 3G with 10 pages or less.
Phone number and/or URL in alert	Allow phone numbers and/or URLs to be included in all alert messages. Allow phone numbers and/or URLs to be included in all alert messages. These should be “click-through” for the user.	Directing the public to other official information channels will allow for more detailed information to be available.
Silent over-ride	When EMA messages are received, user-specified silent or low-volume settings are to be over-riden and the alert is to sound at maximum volume.	EMA messages will only be sent in critical situations and obtaining the attention of the public is crucial, including when they are asleep.
Accessibility Options	When Accessibility Options are enabled the device behaviour when receiving EMA messages is to be: <ul style="list-style-type: none"> • Vibrate: devices that support vibration alerts must vibrate when an alert is received in line with the cadence specified in ATIS-TIA-J-STSD-100 • LED flash – devices that support LED flash must flash at least 6 times • Speech to text – devices that support text-to-speech as an accessibility feature must enable this for EMA alerts. 	Accessibility options must support EMA.
Emergency Calls Only Mode	If a phone is in “Emergency Calls Only” mode, it must still display the EMA message to the user, the same as if it was in regular mode.	The service will only be used for serious hazards that involve threats to life, health or property, or in some cases for test purposes, and should therefore function correctly if there is mobile service available, regardless of the subscriber’s commercial arrangements.

Settings	Under the relevant settings section, display the option to receive alerts on channel 4370 (the highest alert level) as a label "Emergency Alert" with the toggle or equivalent permanently on and greyed out.	This helps clarify for the owner of the phone that in New Zealand this service is available and cannot be disabled. Other channels can be seen to be opted out of.
Display	In addition to the banner reading "Emergency Alert", it should show a timestamp for the receipt of the message. The only other information that should be displayed is the message content itself. Other information that can potentially be derived from the message channel should not be displayed.	In New Zealand we are aiming to leverage and align with the international CMAS and Common Alerting Protocol implementations but want to keep the information presented as simple as possible with all detailed information being specified by the alerting agency, not derived from the channel the message is sent on. Some early implementations have displayed the CMAS label, e.g. Extreme or Severe based on the channel number the message was received on (4370-4378), at the bottom of the message which can confuse the reader when compared to the message text itself.
Unused Channels	No requirement to activate channels 4379-4395.	New Zealand does not use the AMBER alert, test, or multi-lingual channels so device manufacturers are free to disable these if they wish.
Repeated Alert Reminders	Device specific settings to repeat the alert must not take effect if the end user has acknowledged the alert. Repeat reminder settings should default to 'none' or 'off'.	The alert is to be attention grabbing, but once it has completed the alert it should not be unduly intrusive so the public can take action.
Notifications	The device must display an indicator if the Emergency Alert has not been acknowledged by the user.	This makes the user aware that a message has been received on the device and should be read to clear the notification.

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