

Assessment of Notification Tools (Messaging) Communications Plan

Notification: term used to describe the dissemination of emergency messages

<u>Tools</u>	<u>Use</u>	<u>Advantages</u>	<u>Disadvantages</u>
Radio	Notification PAE	Fast -Instant notification to all who are listening Supports detailed up-to-date information Messages can be repeated until emergency has passed Generally accessible to all (most affordable to all) Respected/ credible medium Can be used in or outdoors, in vehicles on land or elsewhere Cheap Supports variety to live and pre-recorded information Generally portable and battery operated	Must be tuned in to receive messages Will also reach people who are not affected Scheduling may limit access Poor service in some areas May not be available during power outages
Television	Notification PAE	Instant communication to all who are watching Supports detailed, up-to-date information Messages can be repeated until emergency has passed Can reach people indoors Generally universal even although not everyone has access Respected/ credible medium Allows use of visuals to explain complex issues Poor reception in some areas Supports variety to live and pre-recorded information Supports message crawls	Expensive Must be turned on to receive messages Generally not accessible outdoors Will reach people who are not affected Not available during power outages
VHF or Amateur Radio	Notification	Can be used as back up communications tool between community and Emergency Centre during and after events Portable and operates on multiple frequencies Allows for notification as well as confirmation Generally easy to access from a number of sources Inter-operable with other equipment	Volunteers not always on hand Roles for amateur operators in the EOC system not defined Operators must hold certificates of proficiency VHF coverage may be limited in some jurisdictions

Assessment of Notification Tools (Messaging) Communications Plan cont'd

Tools	Use	Advantages	Disadvantages
Cable Television System	Notification PAE	<p>Widely available for indoor use</p> <p>Formatting provides opportunity to PAE tools</p> <p>Detailed up-to-date information</p> <p>Messages can be repeated until emergency has passed</p> <p>Supports variety of live and pre-recorded information</p> <p>Supports message crawls</p>	<p>Community must have cable TV</p> <p>Receiver must be turned on</p> <p>Must be tuned to specific channels</p> <p>Unsuitable for initial alerts</p> <p>No available during power outages</p> <p>Programming staff not always accessible</p> <p>No coverage in areas with no access to cable</p>
Internet, Social Media	Notification/ PAE	<p>Generic infrastructure make it accessible everywhere</p> <p>Able to function on multiple platforms including cell phones</p> <p>Low cost</p> <p>Access to many applications and media</p> <p>Possibility for automation</p> <p>Proven tool for coordination, relief distribution in large scale and international events</p>	<p>Some applications require high-quality networks and possibly experts</p> <p>Not generally available during power outage</p> <p>Not generally available during service outage</p> <p>May require the installation of software on multiple computers to make them compatible</p> <p>Servers and server management may be required</p> <p>Firewall issues may prevent sending or receipt of messages</p> <p>Warnings will be received only upon checking</p> <p>Credibility, Trust Issues HIGH</p>

Assessment of Notification Tools (Messaging) Communications Plan cont'd

Tools	Use	Advantages	Disadvantages
Telephone (landlines)	Notification	<ul style="list-style-type: none"> Multi-purpose Supports pre-recorded or pre-scripted messages Can operate during times of limited power outages Can be supported by cellular and satellite phones Can be targeted to specific geographic locations Supports multiple languages Allows grouping of stakeholders for recorded messages Can operate 24/7 Allows for logging of non-responsive individuals and schedule call backs 	<ul style="list-style-type: none"> Cannot reach people without telephones Generally cannot reach people outdoors Cannot notify people unless they answer the phone Not available during service outages Speed is determined by message length Cannot verify and those receiving calls understand the messages Congestion of telephone networks reduces delivery time.
Email	Notification (longer term)	<ul style="list-style-type: none"> Easy interface for senders and receivers Supports delivery to multiple users Graphics can be attached to explain complex issues Confirmation easy Widely supported on both computer and mobile phones Can operate even in low quality conditions Can easily be interfaced with other systems 	<ul style="list-style-type: none"> May require central email servers Public email limits the number of addresses in one email No guarantee of delivery time Requires operating network return path for forward delivery ISP security, reliability not guaranteed Low security and can be easily faked Credibility issues due to large amount of spam emails

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Tools	Use	Advantages	Disadvantages
Cellular & SMS	Notification	<p>Multi-purpose and widespread coverage</p> <p>Can reach people in a variety of locations</p> <p>Supports pre-recorded and pre-scripted messages</p> <p>Battery operated and portable</p> <p>Allows grouping of stakeholders for recorded or text messages</p> <p>Can be supported by landlines and satellite phones</p> <p>Can be used indoors and outdoors</p> <p>SMS can target specific groups</p> <p>Technology in use by most</p>	<p>Coverage of all islands maybe compromised</p> <p>Congestion may affect delivery</p> <p>Require sturdy operational systems outside of emergency areas to send messages</p> <p>Damage to infrastructure can directly impact service availability or quality</p> <p>Calls between service providers may be affected by challenges on the receivers central switches</p> <p>Not all users use SMS</p>
Cellular SMS Cont'd	Notification	<p>Relatively inexpensive</p> <p>Networks support a variety of different devices</p> <p>SMS can pass messages even when voice systems are down or is congested</p> <p>Can be sent from internet email client, phone or other mobile messaging device</p> <p>Alternate way of reaching hearing impaired</p> <p>Supports multiple languages</p> <p>Can operate 24/7</p> <p>Allows for logging of non-responsive individuals and schedule call backs</p>	<p>Only short messages of 130 or 160 characters can be sent</p> <p>May require pre-registration with service provider to access SMS</p> <p>Difficult for subscribers to differentiate between normal and emergency SMS- may not be read</p> <p>Providers say may not be suitable for fast onset hazards</p> <p>Difficult to identify location of users</p> <p>No priority access for SMS warnings</p>

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Tools	Use	Advantages	Disadvantages
Outdoor or Mobile Video Screens	Notification -type & location relevant PAE	Highly visible, public access Mobile signs can be moved to different locations, ace be easily repeated, updates Remote access Multiple language capability Available 24x7 Cheaper than TV	Weather may impact visibility Distance and speed of vehicles my impact visibility Vulnerability to vandalism
Cellular Broadcast	Notification	Operates below the voice service and is able to broadcast even when voice service is congested Is able to reach multiple users at once Priority over SMS	Only short messages of 130 to 160 characters can be sent Broadcast only available to users of specific service provider. Damage to infrastructure can directly impact service availability or quality Requires cell service provider to access Users may find it difficult to differentiate between usual company adverts and emergency broadcast

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Tools	Use	Advantages	Disadvantages
Mobile Announcement or Town Crier Systems	Notification PAE	<p>More efficient than door-to-door</p> <p>Highly credible if emergency units are used</p> <p>Can be moved from area to area quickly</p> <p>Can target specific areas or homes</p> <p>Can reach people indoors as well as outdoors</p> <p>Messages can be easily changed or repeated</p> <p>Easy to install and fits many types of vehicles</p> <p>Can have hand-free operation</p> <p>Already installed in emergency vehicles – police cars, fire trucks and ambulances</p> <p>Cost – effective for large areas such as public beaches and parks.</p>	<p>Only good if vehicles/ personnel are available</p> <p>Could place emergency crews in danger</p> <p>Road damage by hamper use of vehicle</p> <p>Limited coverage area (approx 1/2km radius)</p> <p>May not work well in areas where homes are setback from the road; hotel districts</p> <p>Limitations of loud speaker systems reduces cone of audio dispersion</p> <p>May require logistical support</p>
Door-to-door	Notification PAE	<p>High degree of credibility</p> <p>Provides all necessary information and instructions</p> <p>Very strategic/direct notification</p> <p>Can reach all people in a specific location</p> <p>Ensures that everyone at the location is notified and understands the necessary actions</p> <p>Cost effective if volunteers are used</p>	<p>Time consuming and slow</p> <p>Places personnel at risk</p> <p>Requires the recruitment and training of large numbers or 24/7 access to mobile unit</p> <p>May require significant logistical support</p> <p>Unable to reach a wide area quickly</p>

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