

For immediate release: June 2014 Emergency Alert System using FM radio

A simple and self contained Emergency Alert System with its own FM radio station has been developed by



Satellite Television and Radio Australia.

And, in the recent budget, the Queensland State Government committed \$51 million to fund disaster resilience projects.

The biggest problem during times of disaster is contacting people who may be at risk. There are various systems in place to do this but all have their limitations. The most common strategies have been SMS, social media and door-to-door.

However, mobile telephone coverage can be patchy in rural areas and not everyone uses social media – particularly the elderly.

Typically people do tend to tune into the local FM radio station. However, rural communities are often listening to rebroadcasts of national radio services that do not carry local messages.

Simple in operation yet incorporating the latest cutting edge digital technology, the system designed by Satellite Television and Radio Australia does not require mobile telephone coverage. It allows emergency information to reach residents and travellers who are out of mobile coverage areas. It will warn if roads are inaccessible or evacuation is required. It can even trigger its own Wi-Fi hotspot* so isolated residents can send and receive messages which can dramatically assist emergency and rescue workers who may have no other way of contacting people who have been cut off.

John Deakin, Technical Director at Satellite Television and Radio Australia explains their new FM Emergency Alert System. "At several local government conferences over the past couple of years we have been asked if we could build a radio alert system that could reach everybody. While it is not realistic to say absolutely everybody will hear a message, it is possible to make it easier and more convenient to receive. As almost every car, truck, home, office and work place has an FM radio it is the obvious media to use for emergency alerts", says Mr Deakin.

"Our system does not just broadcast in times of emergency and it does not rely on announcers or the discretion of station managers. It is always on and always providing information about rainfall, cyclones, bushfire and all weather conditions. It's not just local rainfall that will cause a flood it can be rainfall anywhere upstream in the same catchment area. Our system is constantly monitoring river heights, rainfall, bushfire conditions, prevailing wind, weather forecasts, road and river crossing conditions and converting all that information to voice, and broadcasting it on its own dedicated FM radio station for rural and isolated communities to hear.

As many rural and even some regional areas have radio black spots, our system also offers a 'satellite' service. That means there can be one parent Emergency Alert transmitter site in the area and several 'satellite' repeaters that ensure that the message is received in radio black spots", says Mr Deakin



"The advantage of always being on means that residents and travellers can always know what the prevailing conditions are and what circumstances will change safe conditions to threatening or dangerous in a particular area. It's not a loop of information as the source information is always changing so too does the broadcasted information. The system compiles relevant and localised information from many electronic sources including council's own Guardian software, and web sites such as the Bureau of Meteorology, Metro & Country Fire Service, SES and converts this information to transmitted voice announcements.

Our system does have some pre-recorded messages. In the event the system reads dangerous conditions the system triggers relevant messages interweaved with the continuous situation updates. These messages can include information like evacuation centres, emergency services phone number, mustering points, detours etc. Our council clients can even log into their local Emergency Alert System and update messages instantly.

As each area is different we design these Emergency Alert Systems specifically for the area and the communities they serve. Before we build a new EAS system we conduct topography and broadcast coverage pattern studies. We liaise with the local disaster management committee and local council and conduct radio frequency studies to avoid interference and cross talk with other radio stations. We liaise with the Australian Communication and Media Authority to ensure the system goes live as soon as possible – hopefully before the next major weather event", explained Mr Deakin.

Satellite Television and Radio Australia maintain remote management of every EAS site and can update information remotely 24 hours a day 7 days a week. High visibility signage is supplied for placement along roadways and public areas with every system so residents and motorists know what FM frequency to tune into or how to log in on-line for their local Emergency Alert Broadcasts.

Satellite Television and Radio Australia's new Emergency Alert System is a very practical, self contained, high tech solution to an all too regular problem in flood, cyclone and bush fire prone regions. This is exactly the type of system that Disaster Resilience funding should be invested in", insists Mr Deakin.

For further information about an Emergency Alert System please call:

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