## THE INTERNATIONAL EMERGENCY MANAGEMENT SOCIETY



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Commissioner Queensland Floods Commission of Inquiry PO Box 1738 Brisbane QLD 4001

## Submission to the Queensland Floods Commission of Inquiry

## **Dear Justice Holmes**

This submission is lodged on behalf of Australia, New Zealand & Oceania (ANZ&O) region of The International Emergency Management Society (TIEMS). TIEMS (ANZ&O) appreciates this opportunity to lodge a public submission to the Queensland Floods Commission of Inquiry.

TIEMS is a not-for-profit organisation registered in Belgium. Membership comprises representatives from police, emergency services, academia and a variety of other organisations involved in emergency / disaster management and related services around the globe.

A number of TIEMS members in the ANZ&O region were involved with the recent disaster events in Queensland, both as members of the affected community and in the operational emergency response following the Brisbane and Rockhampton Floods and Cyclone Yasi disaster events.

It is the considered opinion of TIEMS (ANZ&O) members that a comprehensive review of the adequacy of the communications technology, networks, processes, and applications available to the police and emergency services to support emergency management operations should be included as issues reviewed by the Queensland Floods Commission of Inquiry.

The majority of the police and emergency services radiocommunications networks in Queensland operate on analogue technology, and there is only limited use of digital voice radio, and narrow- and wide-band data.



For disaster response and recovery, and day-to-day operations, analogue technology provide only a basic level of operational capability. Analogue also restricts radio communications operations to the specific geographic areas where the event is occurring, i.e. communications can only be performed from the affected district / region as there is no capability for communications / operations centres geography removed from the event to assist, either partly or in total. This also limits the options for business continuity and redundancy strategies available to the organisations.

Digital communications technology on the other hand, would provide the agencies with the ability to significantly enhance their operations.

Dependent upon the configuration of the digital communications network, communications / operations centres could be connected to form a virtualised state-wide network with the ability to load-share between the centres. Scalability within the radio network could also be provided whereby additional operating channels could be allocated for a disaster / major event as required.

During disaster events, communications in the affected area could be conducted from any part of the state thereby allowing personnel in the affected area to be at home supporting their families should they need to be, or if their property has been affected. Additional resources can also be allocated to disaster communications operations immediately instead of having them transported to and accommodated within the affected area.

Virtualised telephony networks are used extensively in other jurisdictions and the private sector. This would be of benefit not only in times of disaster by providing scalability, but also on a day-to-day basis, particularly in respect to Triple Zero call answering. i.e. the ability to direct an emergency call to an available operator immediately. The Victorian Bushfires in 2009 demonstrated the need to be able to load-share during peak call periods.

Other capabilities that would be available as a consequence of converting communications networks to digital for mobile voice and narrow-band data include:

- automatic vehicle / resource location (which may also be implemented to the officer level through GPS enabled radio handsets and other portable devices) for enhanced service delivery
- digital data transfer for automated dispatching from CAD systems, in-the-field status updating on CAD systems by operational units, and unit-to-unit messaging, all of which will significantly reduce voice radio congestion
- data for network management
- telemetry to provide data for network monitoring, diagnosis and fault correction.

A wide-band data network, such as would be available with a network in the 700 MHz (Digital Dividend) spectrum band, would provide the capability to transmit images and video for rapid damage assessments in the immediate aftermath of an event. Wide-band data capability would also provide the agencies with the ability to implement technologies that would greatly assist in day-to-day operations, for example, in-vehicle camera / video and

searching corporate databases would be of benefit, i.e. pursuit management (police), situational awareness for damage assessment and resource allocation (fire), and field-hospital patient information transfer (ambulance). These capabilities are representative of current best practice in communications capability for law enforcement agencies and emergency management organisations.

TIEMS (ANZ&O) submits that the inclusion of such issues in the Commission's investigations is consistent with the current Terms of Reference.

Increasing the capacity and capability of the communications networks for police and emergency services in Queensland will provide not only an improved operational response capability for the public safety agencies, but also enhance the safety of police and emergency response personnel in-the-field, along with that of the wider community.

Yours Sincerely

MBA Stephen Jenkins, (Deakin), **MPM** (USO), MPolMgt (USQ), MTechMgt(RiskManagement) MCommDev(EmergMangt) (SCU), (Swin), BSocSc(EmergMgt) (CSU), GradDipDisMgt (Swin), DipSustainability (Swin) **Regional Director** Australia, New Zealand & Oceania Region The international Emergency Management Society