



**CDMPS**



MELBOURNE  
SCHOOL OF  
ENGINEERING



## Meeting 29 September 2016 Activities Update

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# Australian Mission Critical Public Safety Communications

## Key Principles:

- **Policy and Regulation Frameworks:**

Agile, dynamic, informing regulatory regimes with minimal prescription, maximum certainty and clarity to drive innovation meeting needs of future users .

- **Stakeholder Identification:**

Clearly identifiable and transparently involved in policy development and regulation.

- **Technology:**

The Emergency Management Sector has to be able to identify a need for a technology capability based upon open standards, data interoperability and spatial enablement.

- **Leadership:**

The identification of Leaders able to achieve the significant culture change required.

# Collaboration



- NPSTC-CDMPS MOU executed March 2015



- P25 Steering Committee
- P25 Technology Interest Group



- **Research Roadmapping**
- Location Based Services
- Data Analytics
- User Interface/Experience



- **Conference participation**
- Emergency Services Network
- Public safety apps
- NG999
- eCall



- **Conference participation**
- NG911
- P25



- Connected vehicles



[www.arcia.org.au](http://www.arcia.org.au)

**Australian Radio Communications Association**



**CommsConnect Conference Organiser**



**Centre for Spatial Data Infrastructure and Land Administration**

## Barriers to Collaboration:

- **Distance**
- **Time**

# Research

## Current CDMPS Ph.D. Research Projects:

- Integrated 3D Indoor and Outdoor Situational Awareness for Emergency Management.
- 3D Indoor Visualisation systems for monitoring and guiding victims and staff during an evacuation on mobile devices.
- Supporting natural disaster management utilizing real time information.
- Crowd sourced geographic information for emergency response.
- Next generation disaster management
- Optimising Diversion Costs in Road Network Recovery.
- Fire Incident Reporting Visualisation.

These Research Projects are supported by the Integrated Disaster Decision Support System (iDDSS) Platform developed by the Centre.

# Informing and Influencing

Australian Government Department Discussion Papers:

Submissions made in response to Discussion Papers:

- Productivity Commission Inquiry into Public Safety Mobile Broadband  
Awaiting response to recommendations.
- Next Generation Triple Zero  
Tender deferred for two years
- SMART ICT Inquiry  
Recommended that the Australian Government recognise public safety mission critical communications as “critical infrastructure and continue to support the development of these systems, including funding research, promoting implementation, and providing national coordination.
- Spectrum Review.
- Radio Communications Bill

Submissions currently being Worked on:

- Compatible – Intelligent Transportation Systems (C-ITS)
- Expression of Interest for Location Based Services for Triple Zero.

CDMPS is analysing submissions to Government to clearly identify the stakeholder group

# The Road Ahead

## 2018 - 2025



# A New Business Model

## Research Competitive Challenges – being used to drive innovation

**Crowdsourced Research**

(\$US 300M for R&D for FirstNet)



\$US150M

Public Safety Communications  
Research Laboratories

Centre of Excellence for  
Collaborative Innovation

### Problem Definition

- Location Based Services
- Data Analytics
- User Interfaces

Problem Statement

Challenge Design

Problem Solutions

MIT Study found 70% of solutions  
come from outside industry

**Could crowdsourced research  
Be used for NG Triple Zero?**

# Thank you for your attention

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